Project Manual
Volume 1 of 2

HOMEWOOD SUITES by Hilton™

West Monroe, Louisiana
Project # 23-670ND

Owner:
Patel Properties
Monroe, Louisiana 71201

Commission Number:
FAC# 60816

Date:
December 2023

Set Number:

Lonnie E. Patrick, AIA, NCARB
2371 Tower Drive
Monroe, Louisiana 71201
318-388-2492

00 01 05 - CERTIFICATIONS PAGE

OWNER'S AGENT

Patel Properties

Monroe, LA 71201

Jiten Patel

ARCHITECT OF RECORD

Lonnie E. Patrick, Architect
2371 Tower Drive
Monroe, LA 71201

Lonnie E. Patrick, AIA
Architect of Record

STRUCTURAL ENGINEER OF RECORD

David Lane Beaird & Associates, Inc
105 Commercial Parkway
West Monroe, LA 71292

David Lane Beaird, P.E.
Structural Engineer of Record

MECHANICAL (HVAC & Plumbing) ENGINEER OF RECORD

John J. Guth Associates, Inc.
208 Milam Street
Shreveport, LA 71101

John Wilson, P.E.
Michael S. Middleton, P.E.
Mechanical Engineer of Record

ELECTRICAL ENGINEER OF RECORD

John J. Guth Associates, Inc.
208 Milam Street
Shreveport, LA 71101

Pat Foreman, P.E.
Daniel W. Brown, P.E.
Electrical Engineer of Record

CIVIL ENGINEER OF RECORD

David Lane Beaird & Associates, Inc.
1001 Bayou Place
Alexandria, LA 71303

David Lane Beaird, P.E.
Civil Engineer of Record

The documents included in Volume 1 & Volume 2 of these specifications have been provided by the Engineers as noted above.

04-14-2026

END OF SECTION

HOMEWOOD SUITES
By Hilton

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Not Used

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SECTION 01 31 00 - PROJECT MANAGEMENT AND COORDINATION

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Coordination
2. Administrative Procedures
3. Meetings:
    a. Pre-construction Meetings
    b. Progress Meetings
    c. Preinstallation Meetings
4. Coordination Drawings
5. General Installation Provisions
6. Cleaning and Protection

B. Related Sections:

1. Section 01 71 23 - Field Engineering
2. Section 01 73 29 - Cutting and Patching

1.02 REFERENCES

A. NOT USED:

1.03 COORDINATION:

A. Coordinate construction activities included in various Sections of these Specifications to assure efficient and orderly installation of each component. Coordinate construction operations included under different Sections that depend on each other for proper installation, connection, and operation.

B. Where installation of one component depends on installation of other components before or after its own installation, schedule activities in the sequence required to obtain the best results.

C. Coordinate installation of different components to assure maximum accessibility for maintenance, service, and repair.

D. Verify utility requirements and characteristics of operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.

E. Coordinate space requirements and installation of mechanical and electrical work which are indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practicable; place runs parallel with line of building. Utilize space's efficiently to maximize accessibility for other installations, for maintenance, and for repairs.

F. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.

G. Coordinate completion and cleanup of Work of separate sections in preparation for Substantial Completion and for portions of Work designated for Owner's partial occupancy.

H. After Owner occupancy of premises, coordinate access to site for correction of defective Work and Work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

I. Make provisions to accommodate items scheduled for later installation.

1.04 ADMINISTRATIVE PROCEDURES

A. Prepare memoranda for distribution to each party involved outlining required coordination procedures. Include required notices, reports, and attendance at meetings.

1. Prepare similar memoranda for the Owner and separate Contractors where coordination of their Work is required.

B. Coordinate scheduling and timing of administrative procedures with other activities to avoid conflicts and ensure orderly progress. Such activities include:

1. Preparation of Schedules
2. Installation and Removal of Temporary Facilities
3. Delivery and Processing of Submittals
4. Progress Meetings
5. Project Closeout Activities

C. Staff Names: Within 15 days of Notice to Proceed, submit a list of Contractor's staff assignments, including Superintendent and personnel at the site; identify individuals, their duties and responsibilities, addresses and telephone numbers.

1.05 PRE-CONSTRUCTION MEETING

A. Refer to General Conditions for requirements.

B. Agenda:

1. Execution of Owner-Contractor Agreement.
2. Submission of executed bonds and insurance certificates.
3. Distribution of Contract Documents.
4. Submission of lists of Subcontractors, Products, Schedule of Values, and Progress Schedule.
5. Designation of personnel representing the parties in Contract.
6. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
7. Scheduling.

C. Record minutes and distribute copies within one day after meeting faxed to participants, with one copy to Architect, Owner, participants, and those affected by decisions made.

1.06 PROGRESS MEETINGS

A. Refer to General Conditions for requirements.

B. Agenda:

1. Review minutes of previous meetings.
2. Review of Work progress.
3. Field observations, problems, and decisions.
4. Identification of problems which impede planned progress.

5. Review of submittals schedule and status of submittals.
6. Review of off-site fabrication and delivery schedules.
7. Maintenance of progress schedule.
8. Corrective measures to regain projected schedules.
9. Planned progress during succeeding work period.
10. Coordination of projected progress.
11. Maintenance of quality and work standards.
12. Effect of proposed changes on progress schedule and coordination.
13. Other business relating to Work.

1.07 PRE-INSTALLATION MEETINGS

A. When required in individual specification sections, convene a pre-installation meeting at work site prior to commencing work of the section.

B. Require attendance of parties directly affecting, or affected by, work of the specific section.

C. Notify Architect four days in advance of meeting date.

D. Prepare agenda and preside at meeting:

1. Review conditions of installation, preparation and installation procedures.
2. Review coordination with related work.

E. Record minutes and distribute copies within one day after meeting faxed to participants, with one copy to Architect, Owner, participants, and those affected by decisions made.

1.08 COORDINATION DRAWINGS:

A. Prepare Coordination Drawings where close coordination is required for installation of products and materials fabricated off-site by separate entities, and where limited space necessitates maximum utilization of space for efficient installation of different components.

1. Show relationship of components shown on separate Shop Drawings.
2. Indicate required installation sequences.
3. Refer to Division 22 Section "Common Work Results for Plumbing", Division 23 Section "Common Work Results for HVAC", and Division 26 Section "Common Work Results for Electrical", for requirements for plumbing, mechanical and electrical installations.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

3.01 INSPECTION OF CONDITIONS:

A. The installer of each component shall inspect the substrate and conditions under which work is performed. Do not proceed until unsatisfactory conditions have been corrected.

B. Verification of Conditions:

1. Verify that existing conditions, surfaces, and substrates are acceptable for subsequent Work.
2. Verify that field measurements, are as required to receive subsequent Work.
3. Verify that existing substrate is capable of structural attachment of new Work being applied or attached.

4. Examine and verify specific conditions described in individual specification sections.

5. Verify that utility services are available, of the correct characteristics, and in the correct location.

C. Report in writing to the Architect prevailing conditions that will adversely affect satisfactory execution of the Work of this Section. Do not proceed with Work until unsatisfactory conditions have been corrected.

D. By beginning Work, Contractor accepts conditions and assumes responsibility for correcting unsuitable conditions encountered at no additional cost to Owner.

3.02 PREPARATION

A. Clean substrate surfaces prior to applying the next material or substance.

B. Seal cracks or openings of substrate prior to applying next material or substance.

C. Apply any manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying any new material or substance in contact or bond.

3.03 GENERAL INSTALLATION

A. Recheck measurements and dimensions before starting each installation.

B. Install each component during weather conditions and project status that will ensure the best possible results. Isolate each part of the completed construction from incompatible material as necessary to prevent deterioration.

3.04 MANUFACTURER'S INSTRUCTIONS:

A. Comply with the manufacturer's installation instructions and recommendations, to the extent that those instructions and recommendations are more explicit or stringent than requirements contained in Contract Documents.

B. Inspect materials or equipment immediately upon delivery and again prior to installation. Reject damaged and defective items.

C. Provide attachment and connection devices and methods necessary for securing work. Secure work true to line and level. Allow for expansion and building movement.

3.05 VISUAL EFFECTS:

A. Provide uniform joint widths in exposed work. Arrange joints in exposed work to obtain the best visual effect. Refer questionable choices to the Architect for final decision.

3.06 ENCLOSURE OF THE WORK:

A. Coordinate temporary enclosures with required inspections and tests, to minimize the necessity of uncovering completed construction for that purpose.

3.07 MOUNTING HEIGHTS:

A. Where mounting heights are not indicated, install individual components at standard mounting heights recognized within the industry for the particular application indicated. Refer questionable mounting height decisions to the Owner's Representative for final decision.

3.08 CLEANING AND PROTECTION:

A. During handling and installation, clean and protect construction in progress and adjoining materials in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.

B. Clean and maintain completed construction as often as necessary through the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.

C. Limiting Exposures: Supervise operations to ensure that no part of construction, completed or in progress, is subject to harmful or deleterious exposure. Such exposures include, but are not necessarily limited to, the following:

1. Excessive Weathering
2. Excessively High or Low Temperatures or Humidity
3. Water or Ice
4. Chemicals or Solvents
5. Heavy Traffic, Soiling, Staining and Corrosion
6. Contact Between Incompatible Materials
7. Theft or Vandalism
8. Excessive Static or Dynamic Loading
9. Thermal Shock
10. Combustion

END OF SECTION

00 31 13 - FINISH INDEX

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. This Section shall be used in conjunction with the Drawings and with related Sections of the Specifications.

PART 2 PRODUCTS

2.01 GENERAL

A. Attached is the Interior and Exterior Finish Index pages. Refer to individual Specification Sections for further information on listed products.

PART 3 EXECUTION

Not Used

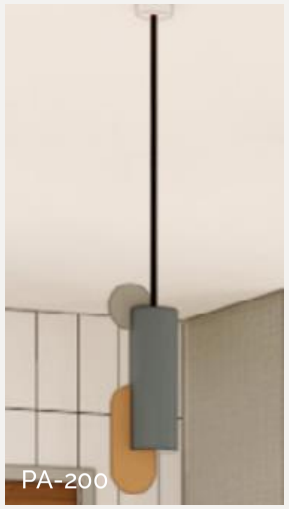
END OF SECTION

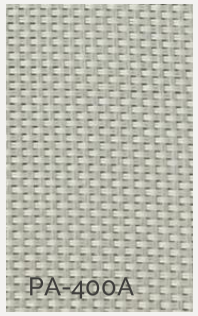
Dusk Scheme

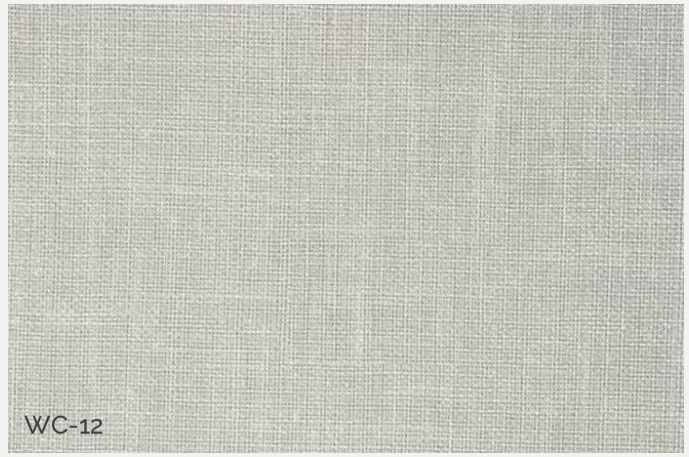
HOMEWOOD SUITES by Hilton™

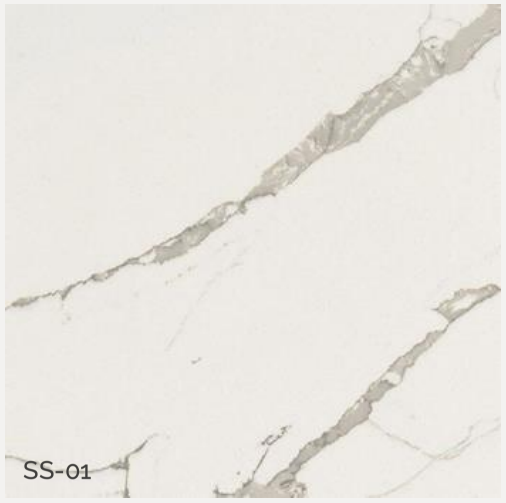
Public Space

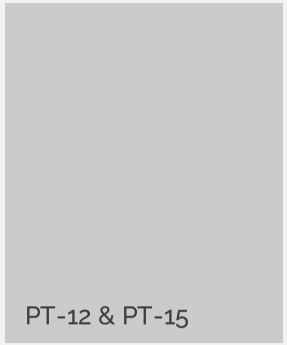
Dusk









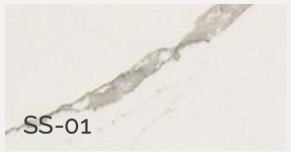


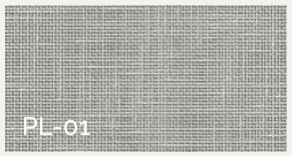
The Arrival

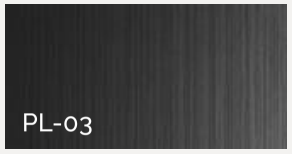
CT-10	Tile at Public Space Floor
CT-13	Tile at Central Hub Retail Wall
PA-111	Bench at Entry
PA-111.1	Fabric at Bench
PA-200	Pendant at Reception
PA-201	Floor Lamp
PA-400A	Fabric at Sheer (Roller Shade)
PL-01	Plastic Laminate – Light Wood
PT-01	Ceilings Throughout
PT-04	Powder Coat Finish
PT-12	Central Hub Exterior Wall
PT-15	Central Hub Base/Hold Open Doors
QT-10	Quarry Tile at Coffee Service Area
SS-01*	Public Space Countertops
WC-12	Wallcovering at Central Hub
WP-01	Lobby Screen Wall

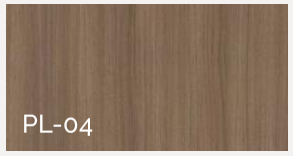
* = Multiple options available.

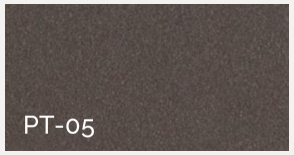
Dusk Scheme

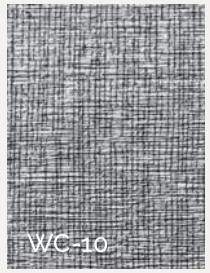


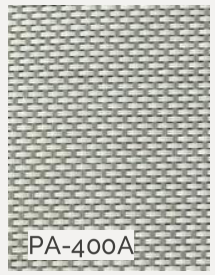


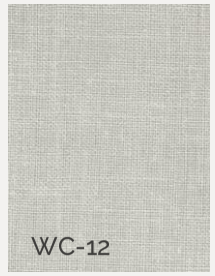


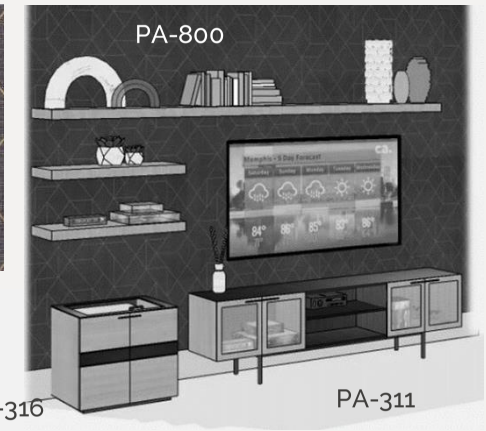


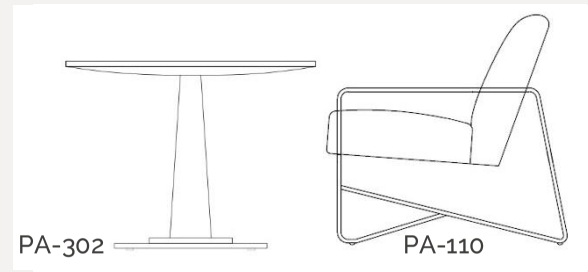


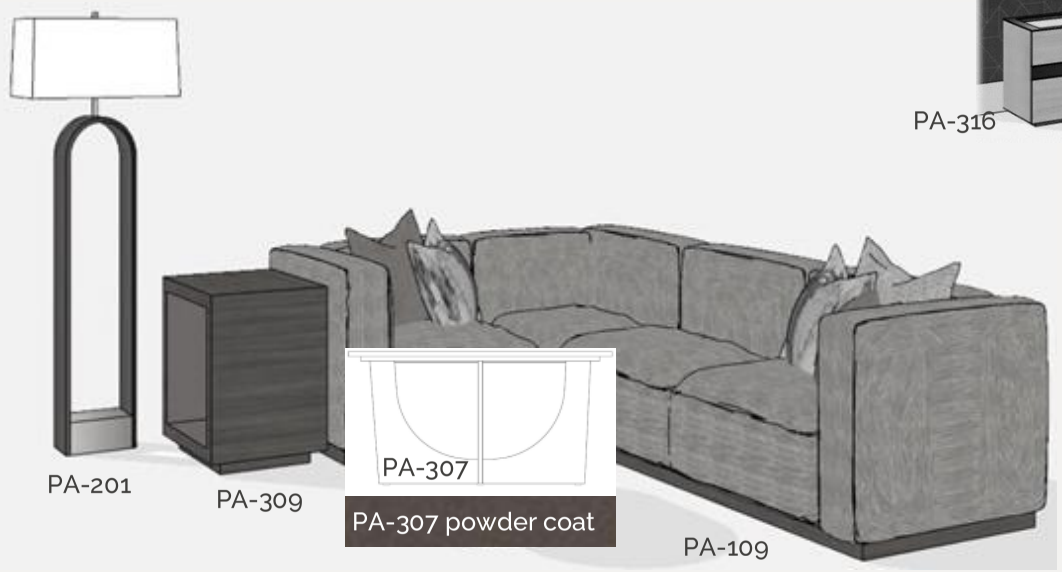


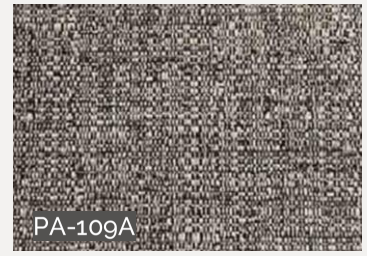


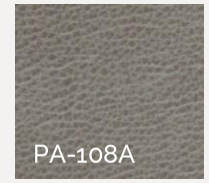


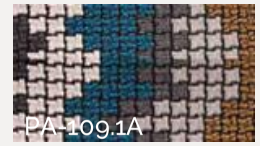


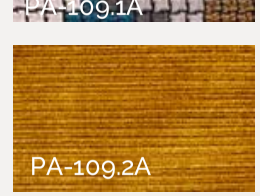


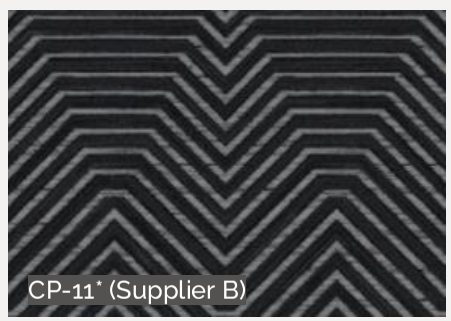










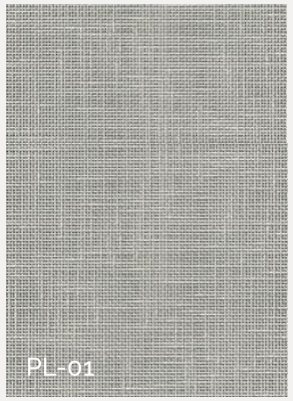


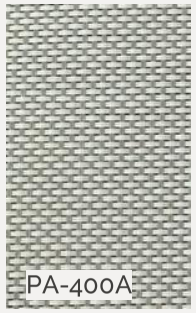
Central Hub: Lounge Seating Group & Entertainment Wall

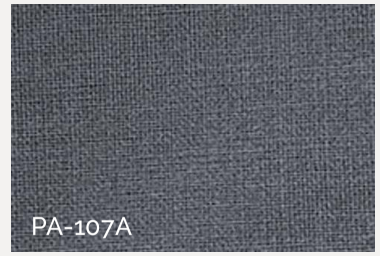
CP-11 *	Inset Carpet at Central Hub – Living Room
CT-10	Tile at Public Space Floor
PA-108	Counter Stool at Communal Table
PA-108A	Vinyl at Counter Stool
PA-109	Sectional
PA-109A	Fabric at Sectional
PA-109.1A	Fabric at Sectional Accent Pillow
PA-109.2A	Fabric at Sectional Accent Pillow
PA-109.3A	Fabric at Sectional Accent Pillow
PA-110	Lounge Chair at Living Room
PA-110A	Fabric at Lounge Chair
PA-201	Floor Lamp
PA-302	Tea Height Table
PA-306	Communal Table at Living Room
PA-307	Cocktail Table at Living Room
PA-309	Side Table at Sectional at Living Room
PA-310	Coffee Station at Living Room
PA-311	Entertainment Console at Living Room
PA-316	Printer Cabinet at Living Room
PA-400A	Fabric at Sheer (Roller Shade)
PA-800	Accessories at Entertainment Wall & Bussing Station
PL-01	Plastic Laminate – Light Wood
PL-03	Plastic Laminate – Light Texture
PT-01	Ceilings Throughout
PT-12	Central Hub Exterior Wall
PT-15	Central Hub Base/Hold Open Doors
SS-01*	Public Space Countertops
WC-10	Wallcovering (at Bussing Station)
WC-11	Wallcovering at Central Hub Accent
WC-12	Wallcovering at Central Hub

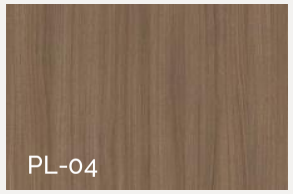
* = Multiple options available.

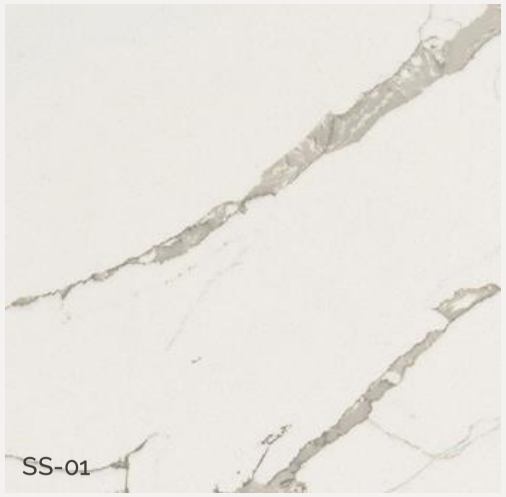
Dusk Scheme









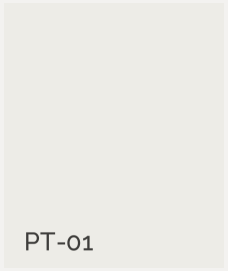


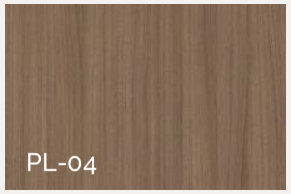
Central Hub: Transitional F&B

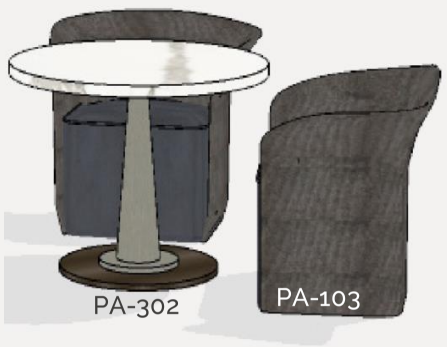
CT-10	Tile at Public Space Floor
CT-12	Tile at Central Hub Tap Wall
PA-107	Counter Stool at Pantry
PA-107A	Vinyl at Counter Stool
PA-202	Pendant at Pantry
PA-314	Screen at Pantry
PA-305	Pantry Induction Table
PA-400A	Fabric at Sheer (Roller Shade)
PL-01	Plastic Laminate – Light Wood
PL-03	Plastic Laminate – Light Texture
PT-01	Ceilings Throughout
PT-12	Central Hub Exterior Wall
PT-15	Central Hub Base/Hold Open Doors
SS-01*	Public Space Countertops
WC-12	Wallcovering at Central Hub
WP-01	Lobby Screen Wall

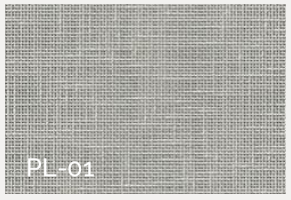
* = Multiple options available.

Dusk Scheme







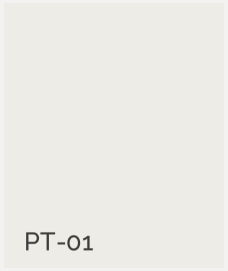


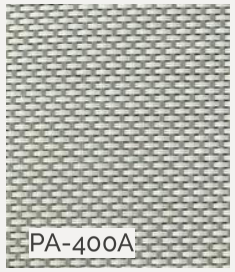
Central Hub: Main Dining

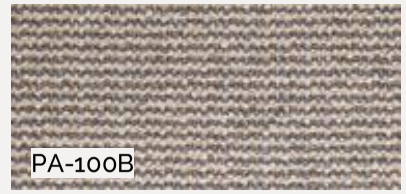
CP-12 *	Inset Carpet at Central Hub – Center Area
CT-10	Tile at Public Space Floor
PA-103	Barrel Back Lounge Chair
PA-103A	Vinyl at Barrel Back Lounge Chair Seat
PA-103B	Fabric at Barrel Back Lounge Chair Shell
PA-104	Lounge Chair at Main Dining
PA-104A	Fabric at Lounge Chair
PA-105	Barstool at Window Seating
PA-105A	Fabric at Barstool at Window Seating
PA-106	Dining Chair
PA-106A	Vinyl at Dining Chair
PA-201	Floor Lamp at Central Hub
PA-302	Tea Height Table
PA-303	Dining Table
PA-304	Communal Table at Windows
PA-400A	Fabric at Sheer (Roller Shade)
PL-01	Plastic Laminate – Light Wood
PL-04	Plastic Laminate – Dark Wood (Dining Table & Chair)
PT-01	Ceilings Throughout
PT-04	Powder Coat Finish (Tea Height Table, Dining Table, Communal Table at Windows)
PT-05	Powder Coat Finish (Lounge Chair)
PT-12	Central Hub Exterior Wall
PT-15	Central Hub Base/Hold Open Doors
SS-01*	Public Space Countertops
WC-12	Wallcovering at Central Hub
WP-01	Lobby Screen Wall

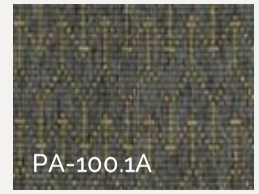
* = Multiple options available.

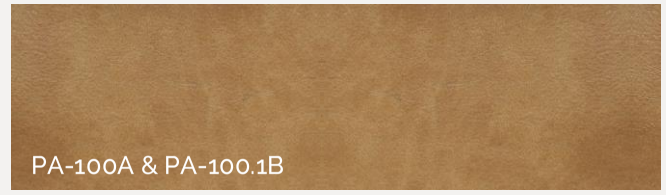
Dusk Scheme

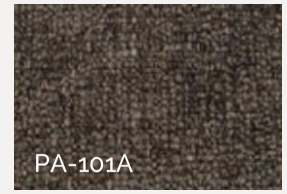


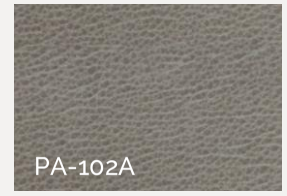


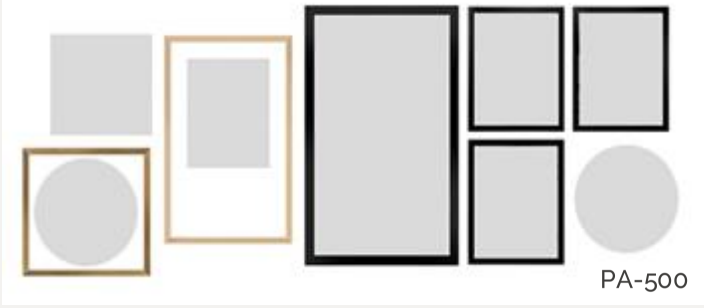


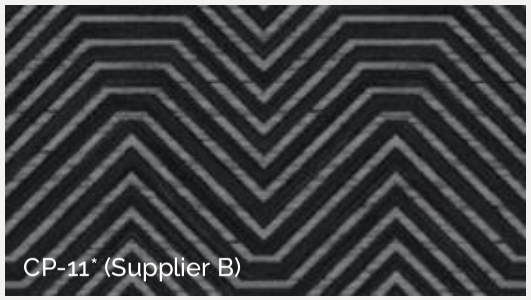


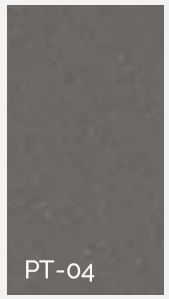










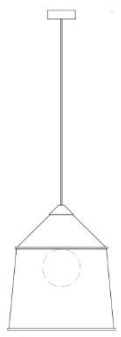


Central Hub: Social Nook

CP-11 *	Inset Carpet at Central Hub – Social Nook
CT-10	Tile at Public Space Floor
PA-100	Banquette
PA-100A	Fabric at Seat Cushion
PA-100B	Fabric at Back Cushion
PA-100.1	Fabric at Lumbar Pillow at Banquette
PA-101	Dining Chair at Banquette
PA-101A	Fabric at Dining Chair
PA-102	Barstool at High Top Dining
PA-102A	Vinyl at Barstool
PA-300	Rectangular Dining Table
PA-301	High 4-Top Dining Table
PA-400A	Fabric at Sheer (Roller Shade)
PA-500	Art Grouping at Central Hub
PL-01	Plastic Laminate – Light Wood (Banquette, Table, High 4-Top)
PL-04	Plastic Laminate – Dark Wood (Dining Chair, Barstool)
PT-01	Ceilings Throughout
PT-04	Powder Coat Finish (High 4-Top)
PT-05	Powder Coat Finish (Dining Table)
PT-12	Central Hub Exterior Wall
PT-15	Central Hub Base/Hold Open Doors
SS-01*	Public Space Countertops
WC-12	Wallcovering at Central Hub

* = Multiple options available.

Dusk Scheme



OF-704

Sling

Frame

OF-702

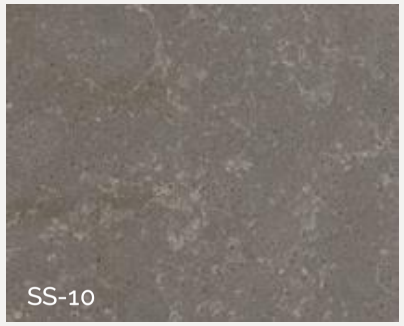
OF-708

OF-700B

OF-700A

OF-700

OF-705



SS-10

CT-14 (Supplier B)

OF-703

OF-703A

Frame

OF-701A

OF-701B

OF-701

OF-707

OF-706

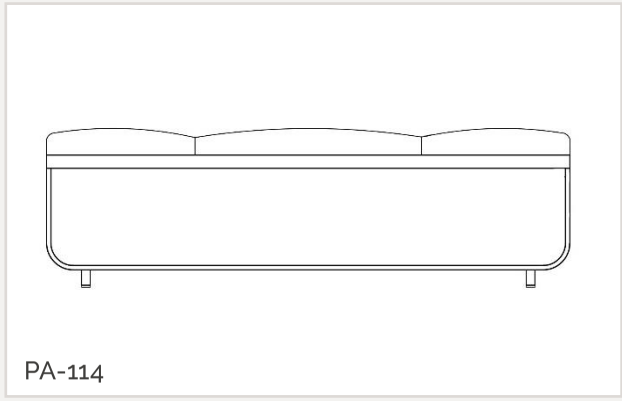
Backyard

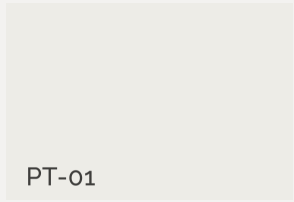
*CT-14	Tile at Backyard Grill Area (Outdoor Kitchen)
OF-700	Outdoor Lounge Chair
OF-700(A)	Seat Cushion at Lounge Chair
OF-700(B)	Accent Pillow at Lounge Chair
OF-701	Outdoor Lounge Chair at Fire Feature
OF-701(A)	Seat Cushion at Lounge Chair at Fire Feature
OF-701(B)	Back Cushion at Lounge Chair at Fire Feature
OF-702	Outdoor Dining Chair
OF-703	Outdoor Counter Stool
OF-703(A)	Seat Cushion
OF-704	Pendant at Backyard Kitchen
OF-705	Outdoor Side Table
OF-706	Outdoor Side Table at Fire Feature
OF-707	Outdoor Large Dining Table
OF-708	Outdoor Dining Table
SS-10	Countertops at Outdoor Kitchen

* = Multiple options available.

Dusk Scheme

SS-01

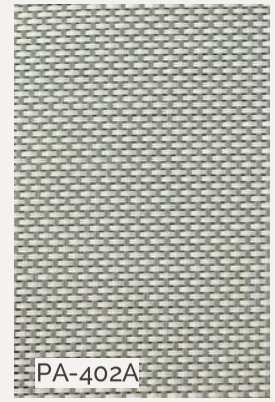

PA-114

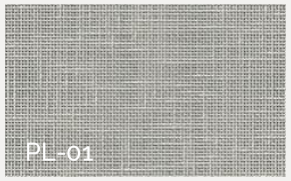

PT-01

PT-11

WC-13

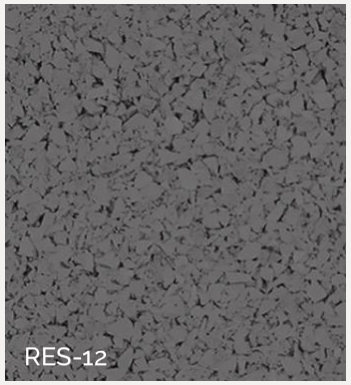
PT-14


PA-402A


PL-01

PL-04

PA-114A


RES-12

RES-10

RB-11 *

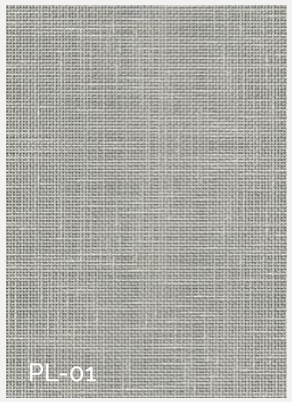
RES-11

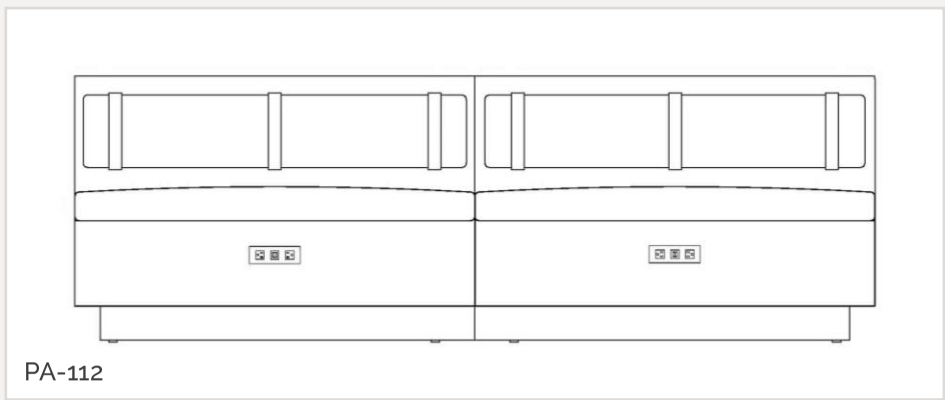
Ancillary Spaces: Fitness

PA-114	Bench at Fitness
PA-114A	Fabric at Bench at Fitness
PA-402A	Fabric at Sheer (Roller Shade)
PL-01	Plastic Laminate – Light Wood
PT-01	Ceilings Throughout
PT-11	Door Trim
PT-14	Fitness Exterior Wall (Paint)
RB-11 *	Fitness Base
RES-10	Fitness Floor (Cardio)
RES-11	Fitness Floor (Strength and Functional)
RES-12	Outdoor Fitness Floor
SS-01*	Public Space Countertops
WC-13	Wallcovering at Fitness

* = Multiple options available.

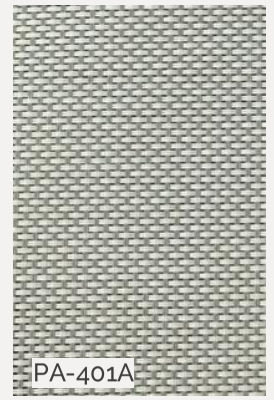
Dusk Scheme


PL-01


PA-112

WC-14

PT-13


PA-401A

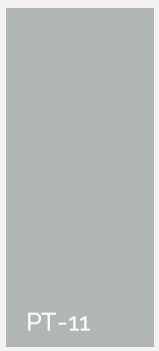
PL-04

PA-112B

PA-112A

CT-10 & CT-10.1

PT-05


PT-11

Ancillary Spaces: Laundry Lounge

CT-10	Tile at Public Space Floor
CT-10.1	Tile Base at Public Restroom & Guest Laundry
PA-112	Banquette at Laundry Lounge
PA-112A	Vinyl at Banquette Seat Cushion and Strap
PA-112B	Fabric at Banquette Back Cushion
PA-308	Table at Laundry Lounge
PA-401A	Fabric at Sheer (Roller Shade)
PA-503	Art at Guest Laundry Lounge

PL-01	Plastic Laminate – Light Wood
PL-05	Plastic Laminate – Texture
PT-04	Powder Coat Finish
PT-11	Door Trim
PT-13	Laundry Lounge Exterior Wall (Paint)
WC-14	Wallcovering at Laundry Lounge

Dusk Scheme

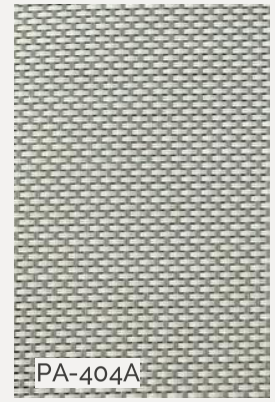
PL-03

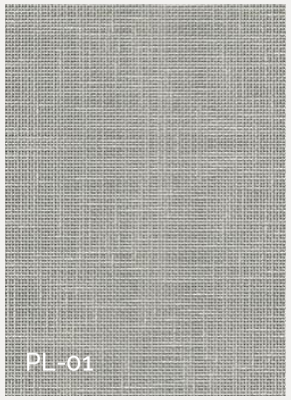
WC-12

PT-01

WC-11

WC-10

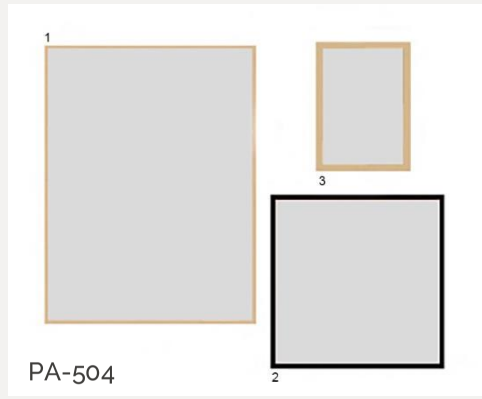

PA-404A


PL-01

PL-04

PA-204

PT-10
PT-11



PA-504

PA-505

CT-10

CP-10 *

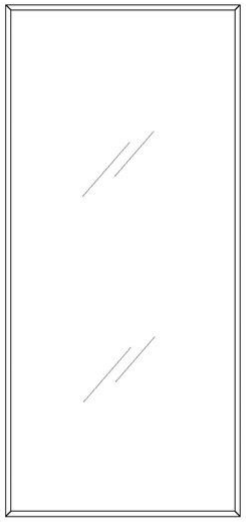
RB-10 *

Guest Corridor, Elevator Lobby, and Guest Storage

CP-10 *	Corridor Carpet (Supplier A)
CT-10	Tile at Public Space Floor
PA-204	Sconce at Guest Corridor
PA-404A	Fabric at Sheer (Roller Shade)
PA-504	Art at Guest Floor Elevator Lobbies
PA-505	Art at First Floor Elevator Lobby (example) "Guest Engagement Moment"
PL-01	Plastic Laminate – Light Wood
PL-03	Plastic Laminate – Light Texture
PL-04	Plastic Laminate – Dark Wood
PT-01	Ceilings Throughout
PT-10	Guest Corridor Exterior Wall
PT-11	Door Trim
RB-10 *	Guest Corridor Base (Supplier A)
WC-10	Wallcovering at Guest Corridor
WC-11	Wallcovering at Guest Corridor Door Drop, Elevator Lobby, and Guest Storage Accent
WC-12	Wallcovering at Central Hub (1st Fl Guest Storage)
608	Guestroom Signage

* = Multiple options available.

Dusk Scheme

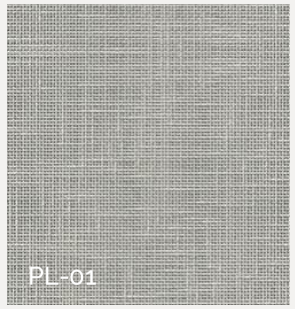


PA-506 & PA-507 (sim)

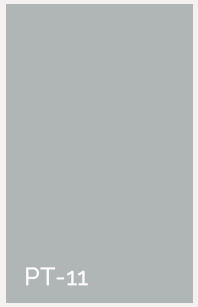
PL-05

PT-01

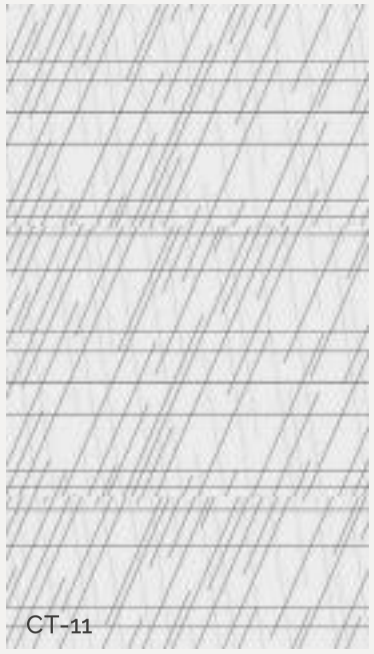
PL-04



PL-01



PT-11

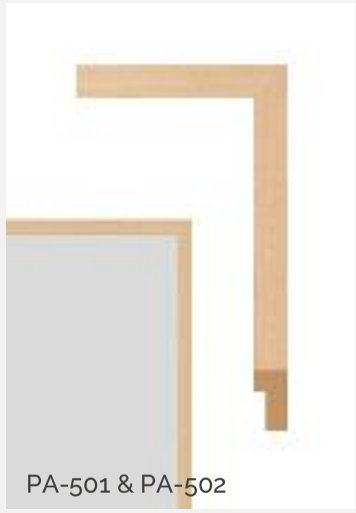


CT-11

WC-15

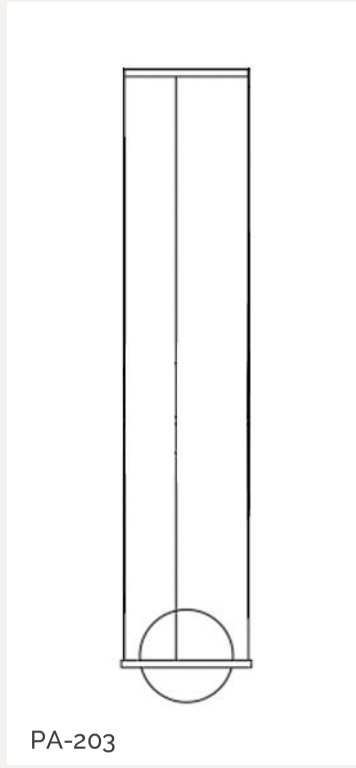
RAL 7031

CT-10 & CT-10.1



PA-501 & PA-502

SS-01



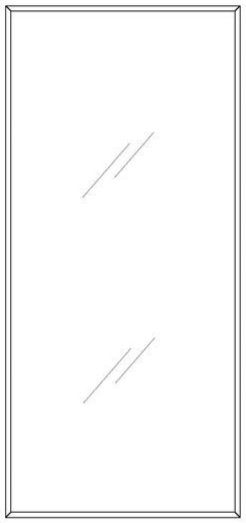
PA-203

Public Area Restrooms

CT-10	Tile at Public Space Floor
CT-10.1	Tile Base at Public Restroom & Guest Laundry
CT-11	Tile at Public Restroom Walls
PA-203	Pendant at Public Restroom
PA-501	Art at Public Restroom (Men's)
PA-502	Art at Public Restroom (Women's)
PA-506	Mirror at Public Restroom Vanity
PA-507	Full Length Mirror at Main Public Restroom
PL-05	Plastic Laminate – Texture (Partitions)
PT-01	Ceilings Throughout
PL-01	Plastic Laminate – Light Wood
PT-11	Door Trim
RAL 3012	Finish at Pendant
SS-01*	Public Space Countertops
WC-15	Wallcovering at Public Restroom

* = Multiple options available.

Dusk Scheme



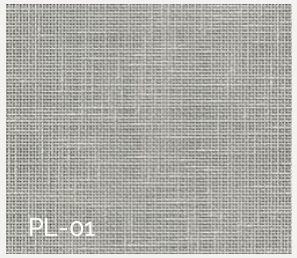
PA-506

RAL 7031

CT-11

PT-12

PT-11



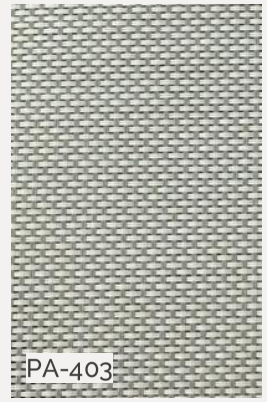
PL-01

PL-04

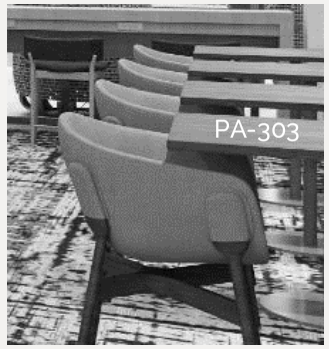
CT-13

PT-03

WC-14



PA-403



PA-303

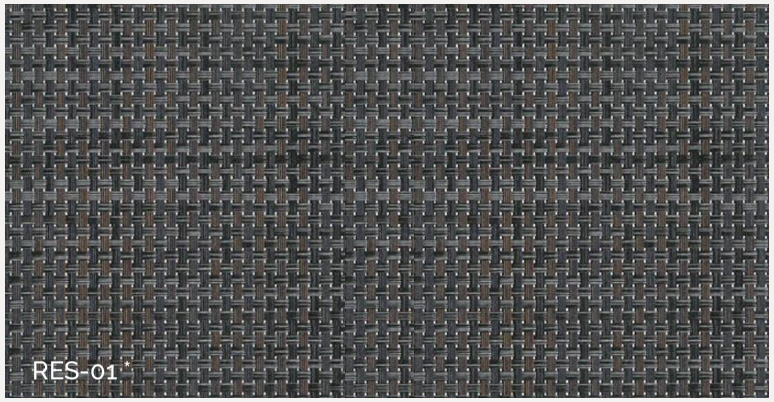
PA-113

PA-312

CT-10

SS-01

RB-01



RES-01*

Back-Of-House: Employee Breakroom and Restroom

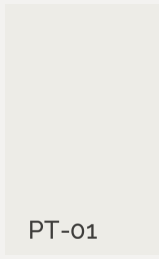
CT-10	Tile at Public Space Floor (Restroom)
CT-11	Tile at Restroom Wall
CT-13	Tile (Breakroom)
PA-113	Dining Chair at BOH Breakroom
PA-303	Dining Table
PA-312	Dining Table at Break Room – ADA
PA-403	Fabric at Sheer (Roller Shade)
PA-506	Mirror at Restroom Vanity
PL-01	Plastic Laminate – Light Wood
PT-03	Paint (Breakroom Door & Trim)
PT-11	Door Trim (Employee Restroom)
PT-12	Wall Paint (Employee Restroom)
RAL 3012	Finish at Vanity Mirror (PA-506)
RB-01 *	Base (Breakroom)
RES-01 *	Flooring at BOH Breakroom
SS-01*	Public Space Countertops (Breakroom & Restroom)
WC-14	Wallcovering (Breakroom)

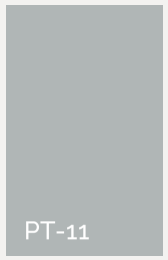
* = Multiple options available.

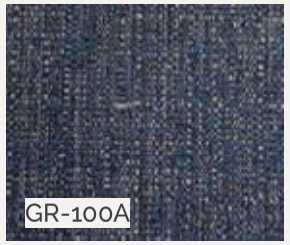
Dusk Scheme

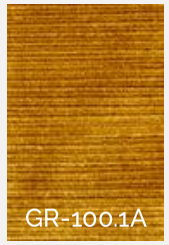
Guest Suites

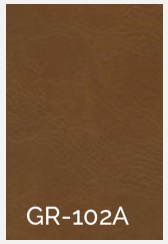
Dusk

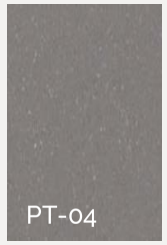


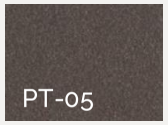


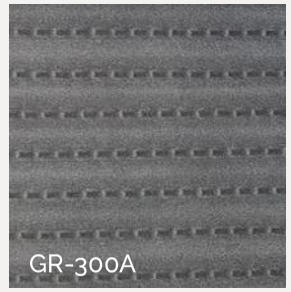


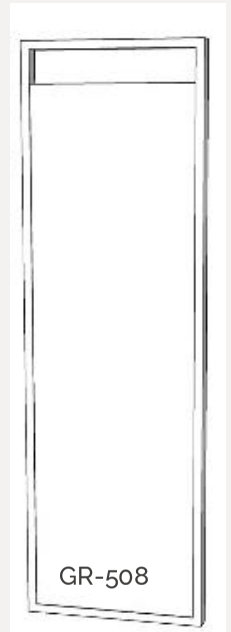


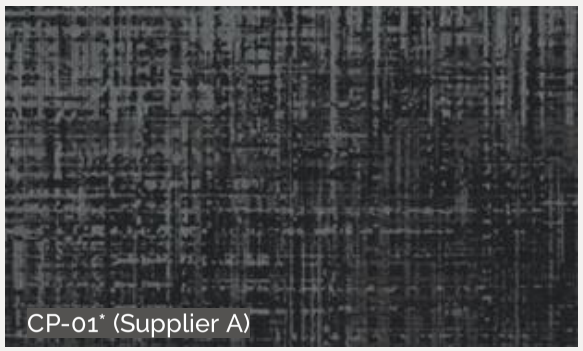


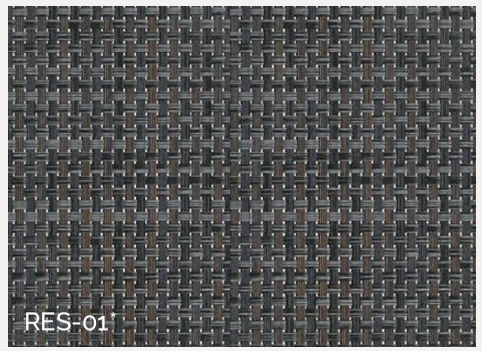










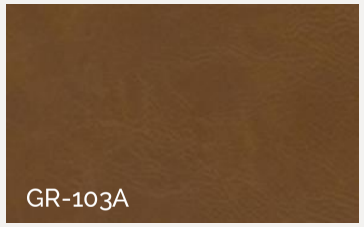


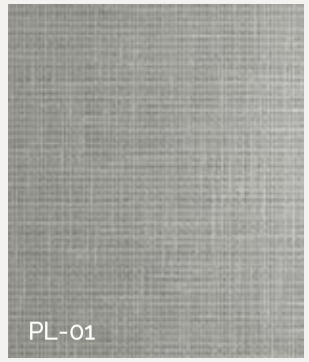
Efficiency Suite

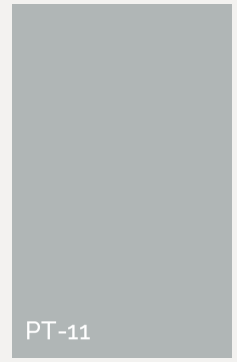
CP-01*	Bedroom Carpet
GR-100	Lounge Chair with Ottoman
GR-100A	Fabric at Lounge Chair
GR-100B	Vinyl at Ottoman
GR-100.1A	Fabric at Accent Pillow
GR-102	Counter Height Desk Chair
GR-102A	Vinyl at Counter Height Desk
GR-200	Pin-Up Sconce
GR-201	Sconce at Nightstand
GR-202	Desk Lamp
GR-300	King Headboard at Low Wall
GR-300A	Vinyl at Headboard Front Panel
GR-300B	Vinyl at Headboard Back Panel
GR-303	King Bed Base
GR-307	Nightstand at Low Wall (similar)
GR-308	Nightstand
GR-310	Counter Height Desk
GR-313	Round Side Table
GR-400A	Fabric at Sheer
GR-400B	Fabric at Blackout
GR-500	Art at Lounge Chair
GR-501	Art Set at Bed – Efficiency Suite
GR-505	Decorative Hooks
GR-508	Full Length Mirror
PL-04	Plastic Laminate - Dark Wood
PT-01	Ceilings Throughout
PT-03	Trim, Valance, Doors, VTAC
PT-04	Powder Coat Finish (Various Furnishings)
PT-05	Powder Coat Finish (Bed Base)
PT-11	Trim (Entry Door)
RB-01*	Guest Suite Base
RES-01	Guest Suite Floor
SS-01*	Countertops
SS-02*	Guest Suite Window Sill
WC-01	Wallcovering at Guest Suite
WD-03	Satin Grade Wood Veneer - Dark

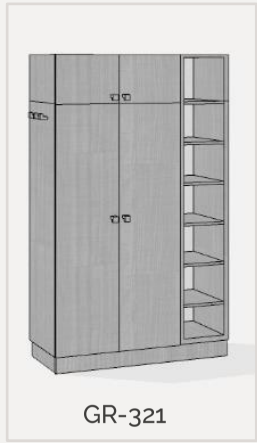
* = Multiple options available.

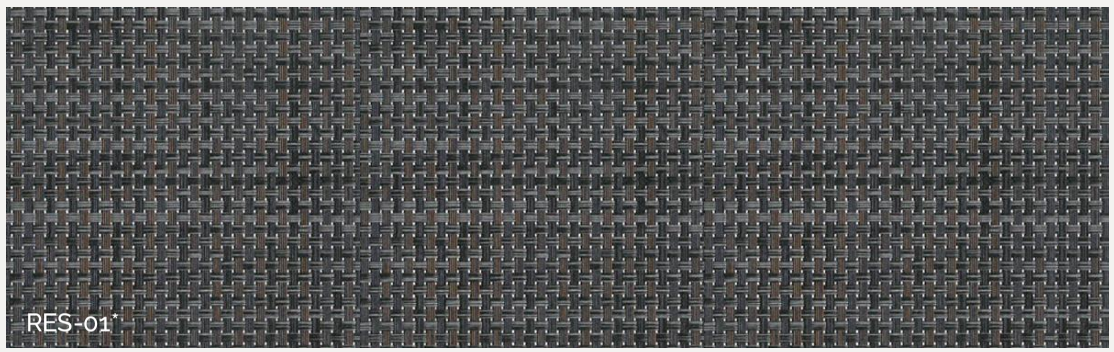
Dusk Scheme









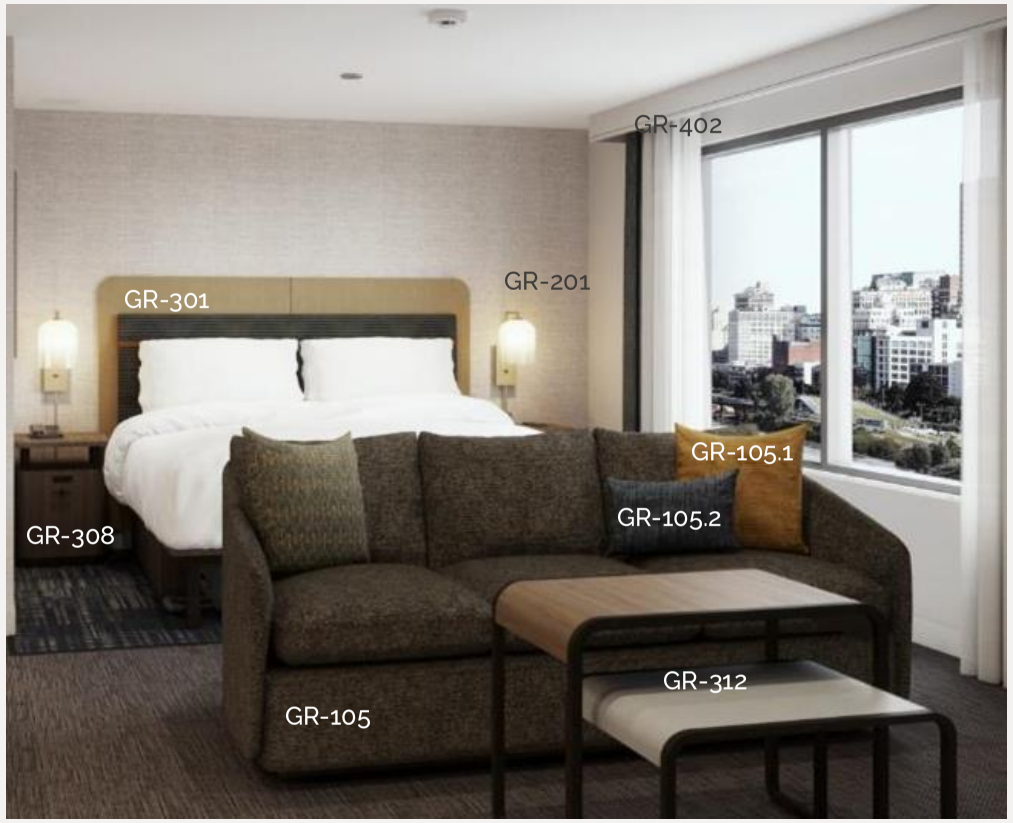


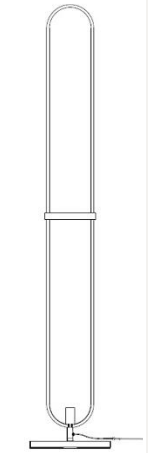
Studio Suite: Entry / Kitchen Area

GR-103	Counter Height Kitchen Stool
GR-103A	Vinyl at Counter Height Kitchen Stool
GR-203	Pendants at Productivity Table
GR-314	Productivity Table – Studio Suite
GR-318	Highboy Dresser – Studio Suite
GR-321	Closet – Studio Suite
GR-502	Art at Highboy Dresser
GR-508	Full Length Mirror
PL-01	Plastic Laminate – Textured
PL-04	Plastic Laminate - Dark Wood (Drawers and Sides of Highboy)
PT-01	Ceilings Throughout
PT-03	Trim, Valance, Doors, VTAC
PT-04	Powder Coat Finish (Various Furnishings)
PT-05	Powder Coat Finish (Bed Base)
PT-11	Trim (Entry Door)
RB-01*	Guest Suite Base
RES-01*	Guest Suite Floor
SS-01*	Countertops
WC-01	Wallcovering at Guest Suite
WD-03	Satin Grade Wood Veneer - Dark

* = Multiple options available.

Dusk Scheme




GR-205

GR-402A

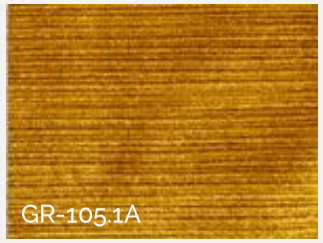
GR-402B

PT-01

PT-04

PT-05

GR-105A

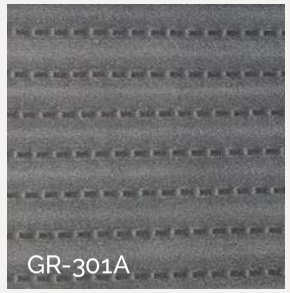

GR-105.1A

GR-105.2A

SS-02

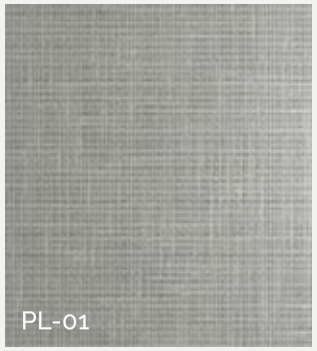
WC-01

PT-02 &
PT-03


GR-301A

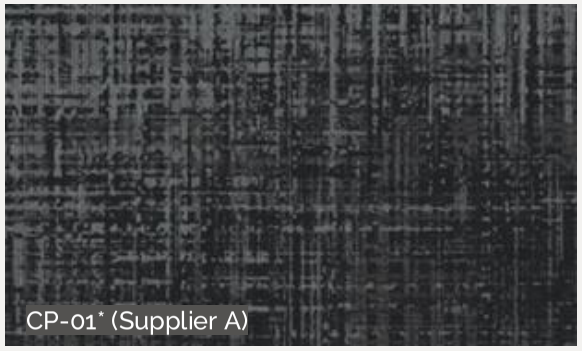
GR-301B

RB-01*

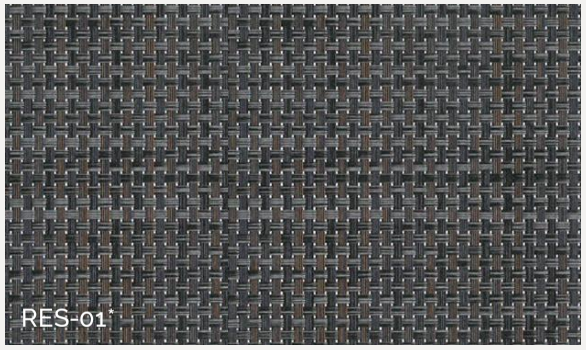

PL-01

PL-04/WD-03

GR-504


CP-01* (Supplier A)

RB-01*

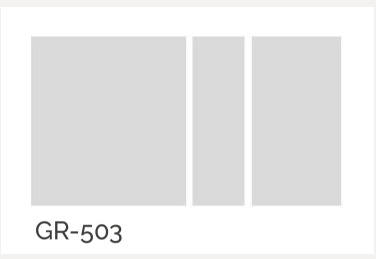

RES-01*

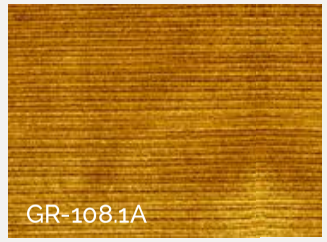
Studio Suite: Sleeping / Living Area

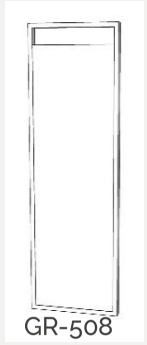
CP-01*	Bedroom Carpet
GR-105	Sleeper Sofa (Sleep Between the Arms)
GR-105A	Fabric at Sleeper Sofa
GR-105.1A	Fabric at Sleeper Sofa Accent Pillow
GR-105.2A	Fabric at Sleeper Sofa Accent Pillow
GR-201	Sconce at Nightstand
GR-205	Floor Lamp
GR-301	King Headboard
GR-301A	Vinyl at Headboard Front Panel
GR-301B	Vinyl at Headboard Back Panel
GR-308	Nightstand
GR-303	King Bed Base
GR-312	Nesting Tables
GR-402A	Fabric at Sheer
GR-402B	Fabric at Blackout
GR-504	Art at Bedroom
PL-01	Plastic Laminate - Textured
PL-04	Plastic Laminate – Dark Wood (Sofa, Small Nesting Table)
PT-01	Ceilings Throughout
PT-03	Trim, Valance, Doors, VTAC
PT-04	Powder Coat Finish (Various Furnishings)
PT-05	Powder Coat Finish (Bed Base)
RB-01*	Guest Suite Base
RES-01	Guest Suite Floor
SS-02	Guest Suite Window Sill
WC-01	Wallcovering at Guest Suite
WD-03	Satin Grade Wood Veneer – Dark

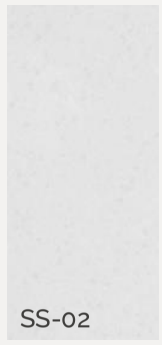
* = Multiple options available.

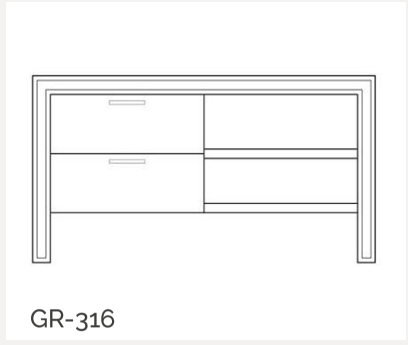
Dusk Scheme

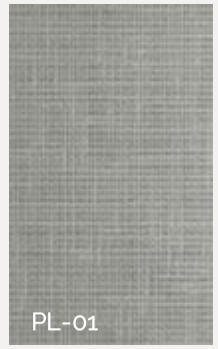


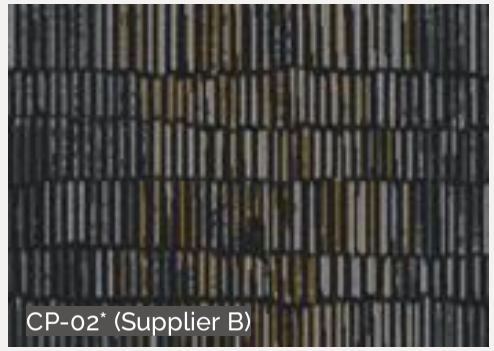


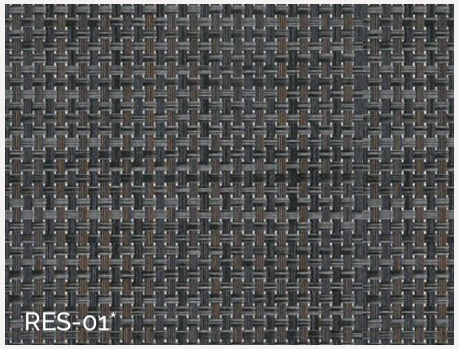










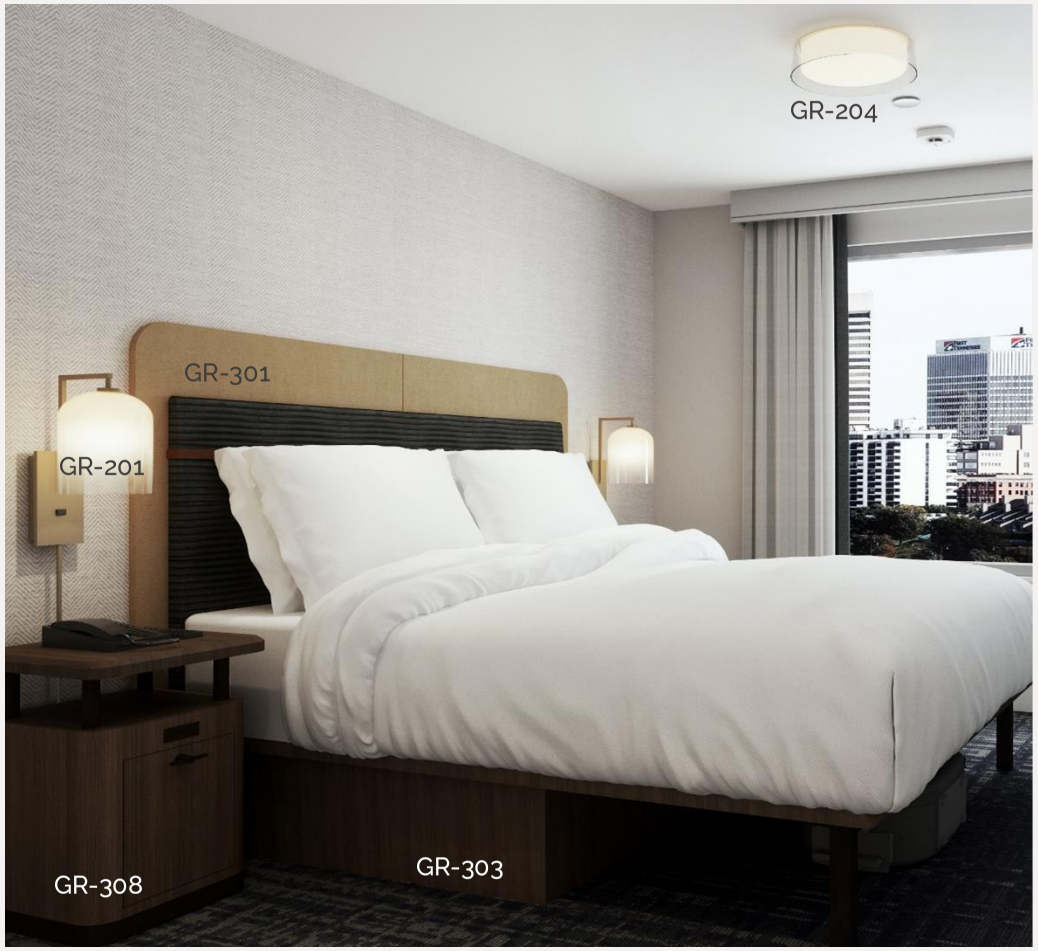


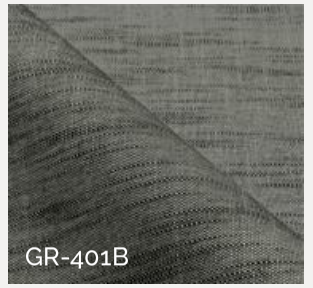
One Bedroom Suite: Entry, Living and Kitchen Area

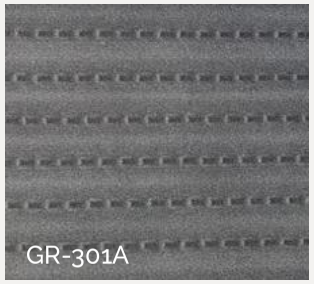
CP-02*	Inset Living Room Carpet
GR-103	Counter Height Kitchen Stool
GR-103A	Vinyl at Counter Height Kitchen Stool
GR-108	Sectional Sleeper Sofa (Standard) with Pillows
GR-108A	Fabric at Sectional Sleeper Sofa
GR-108.1A	Fabric at Sectional Sleeper Sofa Accent Pillow
GR-108.2A	Fabric at Sectional Sleeper Sofa Accent Pillow
GR-203	Pendants at Productivity Table
GR-205	Floor Lamp
GR-312	Nesting Tables
GR-315	Productivity Table – One Bedroom Suite
GR-316	Living Room Console
GR-323	Closet – One Bedroom Suite
GR-403A	Fabric at Sheer (Roller Shade at Kitchen)
GR-403B	Fabric at Blackout (Roller Shade at Kitchen)
GR-405A	Fabric at Sheer
GR-405B	Fabric at Blackout
GR-503	Tryptic Art at Kitchen – One Bedroom Suite
GR-508	Full Length Mirror
PL-01	Plastic Laminate - Textured
PL-04	Plastic Laminate – Dark Wood (Sofa, Nesting Table)
PT-01	Ceilings Throughout
PT-02	Guest Suite Exterior Wall
PT-03	Trim, Valance, Doors, VTAC
PT-04	Powder Coat Finish (Various Furnishings)
RB-01*	Guest Suite Base
RES-01	Guest Suite Floor
SS-02*	Guest Suite Window Sill
WC-01	Wallcovering at Guest Suite
WD-03	Satin Grade Wood Veneer – Dark

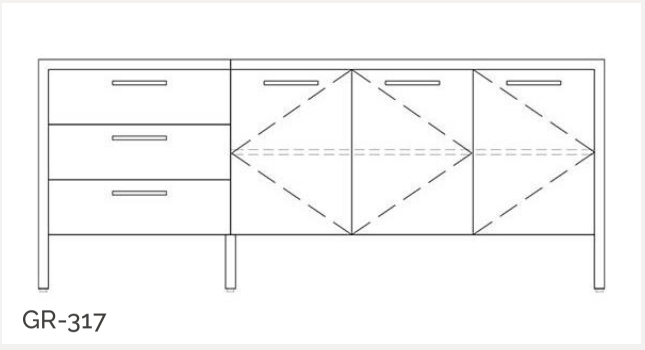
* = Multiple options available.

Daybreak Scheme







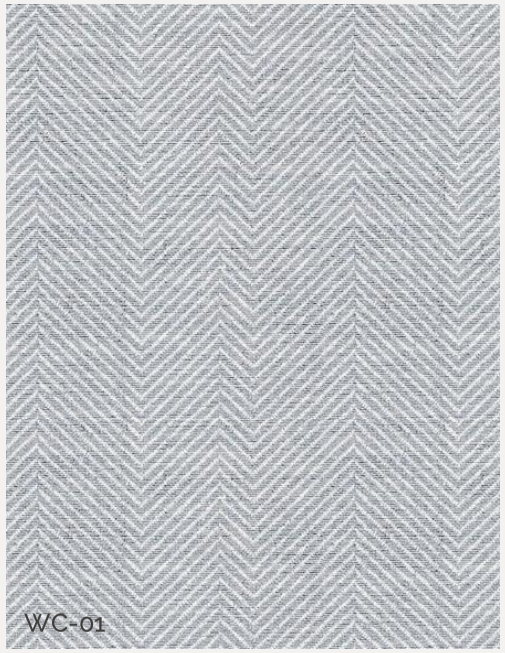


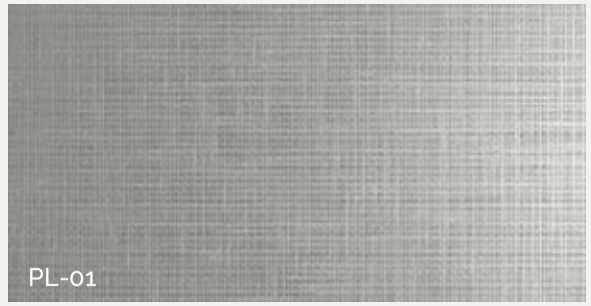
One Bedroom Suite: Bedroom

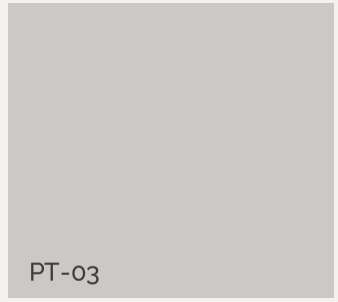
CP-01*	Bedroom Carpet
GR-201	Sconce at Nightstand
GR-204	Ceiling Light at Bedroom
GR-301	King Headboard
GR-301A	Vinyl at Headboard Front Panel
GR-301B	Vinyl at Headboard Back Panel
GR-303	King Bed Base
GR-308	Nightstand
GR-317	Dresser at Bedroom
GR-401A	Fabric at Sheer
GR-401B	Fabric at Blackout
GR-504	Art at Bedroom
PL-01	Plastic Laminate – Textured
PL-04	Plastic Laminate – Dark
PT-01	Ceilings Throughout
PT-02	Guest Suite Exterior Wall
PT-03	Trim, Valance, Doors, VTAC
PT-04	Powder Coat Finish (Various Furnishings)
PT-05	Powder Coat Finish (Bed Base)
RB-01*	Guest Suite Base
SS-02*	Guest Suite Window Sill
WC-01	Wallcovering at Guest Suite
WD-03	Satin Grade Wood Veneer – Dark

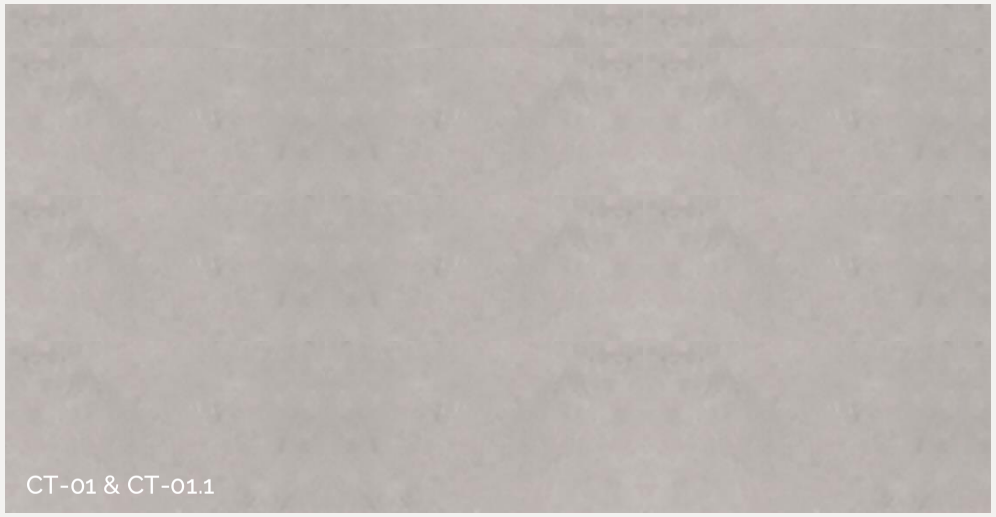
* = Multiple options available.

Dusk Scheme









Guest Bathroom / Dressing Area

CT-01	Tile at Guest Bathroom Floor
CT-01.1	Tile Base at Guest Bathroom
GR-319	Closet – Efficiency Suite
GR-325	Vanity – Efficiency Suite
GR-326	Vanity – Studio Suite & One Bedroom Suites (similar, not pictured)
GR-506	Vanity Mirror
PL-01	Plastic Laminate – Textured
PL-03	Plastic Laminate – Black (Vanity Accent Back Panel)
PT-01	Ceilings Throughout
PT-03	Door & Door Trim
PT-04	Powder Coat Finish (Vanity & Closet)
SS-01*	Countertops
WC-02	Wallcovering at Guest Suite Bathroom Accent
WC-01	Wallcovering at Guest Suite

Dusk Scheme

HOMEWOOD SUITES by Hilton™

HWS DUSK FINISH SPECIFICATIONS

V1.1 April 19, 2021

Revised May 2021

Revised Aug 2021

Revised Dec 2021

Revised Mar 2022

Revised Oct 2022

Revised Feb 2023

Revised Jun 2023

Revised Sept 2023

Revised Oct 2023

HILTON 755 CROSSOVER LANE, MEMPHIS, TENNESSEE 38117

Supplemental Information

Hilton Design resources are available on the Hilton Design Information site: designinformation.hilton.com
Note: Design Information login and password credentials have recently changed. Use the link above to access the login page for more information.

- Design Guide: This document gives a designer all the reasons why the Brand is what it is. It helps establish uniformity of practice, consistently express the Brand identity and serves as a guide for Interior Design and FF&E selection. It discusses the specific elements required and describes how the design is integrated to optimize guest experience and operational efficiency.

- Homewood Suites Brand Standards: This document lists the minimum standards, procedures, rules, regulations, policies, and techniques required by the Homewood Suites Brand and Hilton.

Suppliers

- Approved Suppliers: Suppliers specified herein as manufacturers are pre-approved and have been selected through an extensive product development and vetting effort. Approved Suppliers have the necessary experience with specific products, including pre-approved shop drawings, finishes, and model room samples. Approved Suppliers have committed to ensuring all products meet or exceed Homewood Suites Brand Standards and upholding Hilton's Responsible Sourcing Policy.

- For custom designs, owners are encouraged to use the Approved Suppliers based on their experience with the Homewood Suites Brand Standards and prototype.

- For non-required items, an Owner/Designer may use a supplier of their choice outside of the Approved Suppliers. However, those suppliers and their products must be approved through the Hilton Design Review process on an individual project basis. It is the Owner's/Designer's responsibility to ensure that all such products comply with Homewood Suites Brand Standards.

Notes

- It is the Owner's/Designer's responsibility to maintain the design intent and adapt all required elements to their property's conditions and code requirements prior to fabrication and installation.

HOMEWOOD SUITES by Hilton

Index by Item Type
project name: Homewood Suites Dusk Finish Specifications
project #: Dusk Scheme

Issue Dt		Item Number	Item Description	Item Qty
CARPET				
04/19/21	Δ 2	(B) CP-01 Supplier A	Bedroom Carpet	sq yds
04/19/21	Δ 1	(B) CP-01 Supplier B	Bedroom Carpet	sq yds
02/23	Δ 2	(B) CP-01-ALT Supplier A	Bedroom Carpet - Tile Option	sq yds
02/23	Δ 1	(B) CP-01-ALT Supplier B	Bedroom Carpet - Tile Option	sq yds
04/19/21	Δ 2	(B) CP-02 Supplier A	Inset Living Room Carpet	sq yds
04/19/21	Δ 1	(B) CP-02 Supplier B	Inset Living Room Carpet	sq yds
02/23	Δ 1	(B) CP-02-ALT Supplier A	Inset Living Room Carpet - Tile Option	sq yds
02/23	Δ 1	(B) CP-02-ALT Supplier B	Inset Living Room Carpet - Tile Option	sq yds
04/19/21	Δ 2	(B) CP-10 Supplier A	Corridor Carpet	sq yds
04/19/21	Δ 1	(B) CP-10 Supplier B	Corridor Carpet	sq yds
02/23	Δ 1	(B) CP-10-ALT Supplier A	Corridor Carpet - Tile Option	sq yds
02/23	Δ 1	(B) CP-10-ALT Supplier B	Corridor Carpet - Tile Option	sq yds
04/19/21	Δ 2	(B) CP-11 Supplier A	Inset Carpet at Central Hub - Social Nook and Living Room Area	sq yds
04/19/21	Δ 1	(B) CP-11 Supplier B	Inset Carpet at Central Hub - Social Nook and Living Room Area	sq yds
02/23	Δ 1	(B) CP-11-ALT Supplier A	Inset Carpet at Central Hub - Social Nook and Living Room Area - Tile Option	sq yds
02/23	Δ 1	(B) CP-11-ALT Supplier B	Inset Carpet at Central Hub - Social Nook and Living Room Area - Tile Option	sq yds
04/19/21	Δ 2	(B) CP-12 Supplier A	Inset Carpet at Central Hub - Center Area	sq yds
04/19/21	Δ 1	(B) CP-12 Supplier B	Inset Carpet at Central Hub - Center Area	sq yds
02/23	Δ 1	(B) CP-12-ALT Supplier A	Inset Carpet at Central Hub - Center Area - Tile Option	sq yds
02/23	Δ 1	(B) CP-12-ALT Supplier B	Inset Carpet at Central Hub - Center Area - Tile Option	sq yds
10/22		(B) CP-13 Supplier A	Carpet at Meeting Room	sq yds
10/22		(B) CP-13 Supplier B	Carpet at Meeting Room	sq yds
06/23		(B) CP-13 ALT Supplier A	Carpet at Meeting Room	sq yds

10/22		(B) CP-14 Supplier A	Carpet at BOH & Stair	sq yds
10/22	Δ 1	(B) CP-14 Supplier B	Carpet at BOH & Stair	sq yds

Issue Dt		Item Number	Item Description	Item Qty
CARPET PAD				
04/19/21	Δ 2	(B) CPP-01 Supplier B	Carpet Pad at Guest Room	sq yds
04/19/21	Δ 2	(B) CPP-01 Supplier C	Carpet Pad at Guest Room	sq yds
04/19/21	Δ 1	(B) CPP-10 Supplier B	Carpet Pad at Public Space and Guest Corridor	sq yds
04/19/21	Δ 2	(B) CPP-10 Supplier C	Carpet Pad at Public Space and Guest Corridor	sq yds
CERAMIC TILE				
04/19/21	Δ 2	(B) CT-01 Supplier A	Tile at Guest Bathroom Floor	ea
03/2022		(B) CT-01 Supplier B	Tile at Guest Bathroom Floor	ea
04/19/21	Δ 2	(B) CT-01.1 Supplier A	Tile Base at Guest Bathroom	ea
03/2022		(B) CT-01.1 Supplier B	Tile Base at Guest Bathroom	ea
04/19/21	Δ 2	(B) CT-10 Supplier A	Tile at Public Space Floor	ea
03/2022		(B) CT-10 Supplier B	Tile at Public Space Floor	ea
04/19/21	Δ 2	(B) CT-10.1 Supplier A	Tile Base at Public RR & Laundry	ea
03/2022		(B) CT-10.1 Supplier B	Tile Base at Public RR & Laundry	ea
04/19/21	Δ 2	(B) CT-11 Supplier A	Tile at Public Restroom Walls	ea
03/2022		(B) CT-11 Supplier B	Tile at Public Restroom Walls	ea
04/19/21	Δ 2	(B) CT-12 Supplier A	Tile at Central Hub Tap Wall	ea
03/2022		(B) CT-12 Supplier B	Tile at Central Hub Tap Wall	ea
04/19/21	Δ 2	(B) CT-13 Supplier A	Tile at Central Hub Retail Wall	ea
03/2022		(B) CT-13 Supplier B	Tile at Central Hub Retail Wall	ea
04/19/21	Δ 2	(B) CT-14 Supplier A	Tile at Backyard Grill Area	ea
03/2022		(B) CT-14 Supplier B	Tile at Backyard Grill Area	ea
PLASTIC LAMINATE				
04/19/21		(B) PL-01	Plastic Laminate - Textured	ea
		(B) PL-02	NOT USED	
04/19/21		(B) PL-03	Plastic Laminate - Black	ea
04/19/21		(B) PL-04	Plastic Laminate - Dark Wood	ea
04/19/21		(B) PL-05	Plastic Laminate – Textured	ea
09/2023		(B) PL-06	Plastic Laminate – Black (at Suite Shop)	ea
PAINT				
04/19/21	Δ 1	(B) PT-01	Ceilings Throughout	ea
		(B) PT-02	NOT USED	

04/19/21	Δ 1	(B) PT-03	Guest Suite Trim, Valance, Interior Doors and VTAC Unit	ea
04/19/21	Δ 1	(B) PT-04	Powder Coat Finish	Ea

Issue Dt		Item Number	Item Description	Item Qty
04/19/21	Δ 1	(B) PT-05	Powder Coat Finish	ea
04/19/21		(B) PT-10	Guest Corridor Exterior Wall	ea
04/19/21		(B) PT-11	Guest Corridor Service Doors, Access Panels and Trim	ea
04/19/21		(B) PT-12	Central Hub Exterior Wall	ea
04/19/21		(B) PT-13	Guest Laundry Exterior Wall	ea
04/19/21		(B) PT-14	Fitness Exterior Wall	ea
04/19/21		(B) PT-15	Central Hub Base/Hold Open Doors	ea
02/2023		(B) PT-16	Powder Coat Finish	ea
QUARRY TILE				
04/19/21	Δ 2	(B) QT-10 Suppler A	Coffee Service & Food Prep Areas	ea
03/2022		(B) QT-10 Suppler B	Coffee Service & Food Prep Areas	ea
RESILIENT BASE				
04/19/21		(B) RB-01 Supplier A	Guest Suite Base	linl ft
04/19/21	Δ 1	(B) RB-01 Supplier B	Guest Suite Base	linl ft
04/19/21	Δ 2	(B) RB-10 Supplier A	Guest Corridor, Meeting Room, and Central Hub Base	linl ft
04/19/21	Δ 3	(B) RB-10 Supplier B	Guest Corridor, Meeting Room, and Central Hub Base	linl ft
04/19/21		(B) RB-11 Supplier A	Fitness Base	linl ft
04/19/21	Δ 1	(B) RB-11 Supplier B	Fitness Base	linl ft
RESILIENT FLOORING				
04/19/21	Δ 3	(B) RES-01 Supplier A	Guest Suite Floor	sq ft
04/19/21	Δ 2	(B) RES-01 Supplier B	Guest Suite Floor	sq ft
04/19/21	Δ 1	(B) RES-10	Fitness Floor (Cardio)	linl ft
04/19/21	Δ 1	(B) RES-11	Fitness Floor (Strength and Functional)	linl ft
04/19/21	Δ 1	(B) RES-12	Outdoor Fitness Floor	sq ft
		(B) RES-13	REMOVED	
SPECIAL FINISHES				
10/22		(B) SF-01	Acrylic Knockdown at Guest Suite Walls	ea
SOLID SURFACING				
12/15/21	Δ 1	(B) SS-01 Supplier A	Guest Suite and Public Space Countertops	ea
04/19/21	Δ 2	(B) SS-01 Supplier B	Guest Suite and Public Space Countertops	ea
12/15/21		(B) SS-02 Supplier A	Guest Suite Windowsill	ea
04/19/21	Δ 2	(B) SS-02 Supplier B	Guest Suite Windowsill	ea
12/15/21		(B) SS-10 Supplier A	Countertop at Outdoor Kitchen	ea
		(B) SS-10 Supplier B	REMOVED	ea
STONE (TILE OR SLAB)				
04/19/21		(B) ST-01	REMOVED	Ea

Index by Item Type

project name: Homewood Suites Dusk Finish Specifications

project #: Dusk Scheme

Issue Dt		Item Number	Item Description	Item Qty
VINYL COMPOSITION TILE				
02/2023		(B) VCT-01	Tile at Storage Room	ea
04/19/21	Δ 1	(B) WC-01	Wallcovering at Guest Suite	ea
WALLCOVERING				
04/19/21	Δ 2	(B) WC-02	Wallcovering at Guest Suite Bathroom Accent	linl yds
04/19/21	Δ 2	(B) WC-10	Wallcovering at Guest Corridor	ea
04/19/21	Δ 1	(B) WC-11	Wallcovering at Guest Corridor Door Drop and Central Hub Accent	linl yds
04/19/21	Δ 1	(B) WC-12	Wallcovering at Central Hub	ea
04/19/21	Δ 2	(B) WC-13	Wallcovering at Fitness	linl yds
04/19/21	Δ 2	(B) WC-14	Wallcovering at Guest Laundry	ea
04/19/21	Δ 1	(B) WC-15	Wallcovering at Public Restroom	ea
WOOD				
04/19/21		(B) WD-01	Stain Grade Wood Veneer - Light	ea
04/19/21		(B) WD-02	Stain Grade Wood Veneer - Black	ea
04/19/21		(B) WD-03	Stain Grade Wood Veneer - Dark	ea
WALL PANEL				
09/2023		(B) WP-01 Supplier A	Lobby Screen Wall	sq ft
09/2023		(B) WP-02 Supplier B	Lobby Screen Wall	sq ft

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-01 Supplier A
Project #:	Dusk Scheme	Item Description:	Bedroom Carpet
Issue Date:	04/19/21		
Revision(s):	10/22 Δ 2		

Item Quantity: sq yds

Manufacturer: **Tarkett**

Address: 285 Kraft Drive
Dalton GA 30721-

Phone: (440) 903-4319 (800) 871-3211

Alternate: (703) 919-4751

Contact: Jackie Passaro

E-mail: Jackie.Passaro@tarkett.com

Web: www.tarkett.com

Description: Broadloom Guestroom Carpet at Bedroom or Inset at Sleeping Area.

Style Number:	HS132
Color:	110
Width or Rug Size:	12'
Type:	See Notes Below
Repeat:	144"W x 168"L
Content:	100% C.F. Lextron Enviro-Green Solution Dyed Nylon
Weight:	32 oz.
Primary Backing:	Woven Polypropylene
Secondary Backing:	Action Bac
Pile Height	See Notes Below
Gauge:	1/10
Stitches Per Inch:	10
Dye Method:	Solution Dyed
Installation Method:	Stretch-In, Over Pad
Flame Requirements:	ASTM E-648 Class I

Notes:

Construction/Type: Dynamics

Pile Height: 0.250" High, 0.187" Med, 0.062" Low.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Strike-Off.

Manufacturer to Confirm the Carpet Meets Hilton Design and Construction Standards as Noted in Section 2514.03.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-01 Supplier A
Project #:	Dusk Scheme	Item Description:	Bedroom Carpet
Issue Date:	04/19/21		
Revision(s):	10/22 Δ 2		

Item Quantity: sq yds

Glue: Per Manufacturer's Recommendations.

Manufacturer's Recommended Transition Strip: Slim
Line Transitions SLT-63-A; Color: 63 Burnt Umber
Reference Prototype Drawings for Transition Detail.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram	☐ Strike-Off	☐ Finish Sample	☐ Cutting	☐ Shop Dwgs	☐ Prototype	☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Installer to provide all materials and equipment for complete installation, seaming diagrams, and full carpet layouts for all areas per manufacturer's recommendations.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-01 Supplier B
Project #:	Dusk Scheme	Item Description:	Bedroom Carpet
Issue Date:	04/19/21		

Revision(s): 05/11/21 Δ 1

Item Quantity: sq yds

Manufacturer: **Shaw Hospitality Group**

Address: 410 Old Mill Road
Cartersville GA
30120-

Phone: (301) 520-9360

Contact: David Burn

E-mail: dburn1@mac.com

Web: www.shawhospitality.com

Description: Broadloom Guestroom Carpet at Bedroom or Inset at Sleeping Area.

Style Number:	BS506; AF1977 446931
Color:	B5044
Width or Rug Size:	12'
Type:	Multi-Level Loop Tip Shear
Repeat:	144"W x 160"L
Content:	100% Solution Dyed Nylon
Weight:	32 oz. Per Sq. Yd.
Primary Backing:	Woven Polypropylene
Secondary Backing:	Classic-Bac
Pile Height	.223
Gauge:	1/10
Stitches Per Inch:	9.33 per inch
Dye Method:	100% Solution Dyed
Installation Method:	Direct Glue
Flame Requirements:	ASTM E-648 Class I

Notes:

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Strike-Off.

Manufacturer to Confirm the Carpet Meets Hilton Design and Construction Standards as Noted in Section 2514.03.

Glue: Per Manufacturer's Recommendations.

Manufacturer's Recommended Transition Strip: Lok Seam Moisture Impervious Seam Sealer

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-01 Supplier B
Project #:	Dusk Scheme	Item Description:	Bedroom Carpet
Issue Date:	04/19/21		
Revision(s):	05/11/21 Δ 1		

Item Quantity: sq yds

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: JJS

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Installer to provide all materials and equipment for complete installation, seaming diagrams, and full carpet layouts for all areas per manufacturer's recommendations.

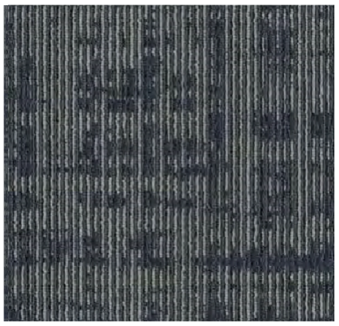
HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-01-ALT Supplier A
Project #:	Dusk Scheme	Item Description:	Bedroom Carpet – Tile Option
Issue Date:	02/23		
Revision(s):	06/2023 Δ 1		

Item Quantity: sq yds

Manufacturer: **Tarkett**
Address: 285 Kraft Drive
Dalton GA 30721
Phone: (440) 903-4319 800#: (800) 871-3211
Alternate: (703) 919-4751
Contact: Jackie Passaro
E-mail: Jackie.Passaro@tarkett.com
Web: www.tarkett.com

Description: Carpet Tile Option at Bedroom.



Style Number:	HS13T
Color:	110
Size:	18 in x 36 in
Type:	Dynamics – Servo-Scroll All Loop
Repeat:	74” W x 99.58” L
Content:	C.F. Lextrom Enviro-Green Nylon
Weight:	28 oz per Square Yard, 106 oz Total
Primary Backing:	Woven Polypropylene
Secondary Backing:	Flex-Aire Modular® Cushion
Pile Height	0.218” H, 0.156” Med., 0.125” Low
Gauge:	1/10 in
Stitches Per Inch:	7 Stitches Approximately
Dye Method:	100% Solution Dyed
Installation Method:	Vertical Ashlar
Flame Requirements:	Meets or Exceeds Class 1

Notes: Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Manufacturer to Confirm the Carpet Meets Hilton Design and Construction Standards as Noted in Section 2514.03.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-01-ALT Supplier A
Project #:	Dusk Scheme	Item Description:	Bedroom Carpet – Tile Option
Issue Date:	02/23		
Revision(s):	06/2023 Δ 1		

Item Quantity: sq yds

Glue: Per Manufacturer's Recommendations.

Manufacturer's Recommended Transition Strip: Slim Line Transitions SLT-63-A; Color: 63 Burnt Umber
Reference Prototype Drawings for Transition Detail.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Installer to provide all materials and equipment for complete installation, seaming diagrams, and full carpet layouts for all areas per manufacturer's recommendations.

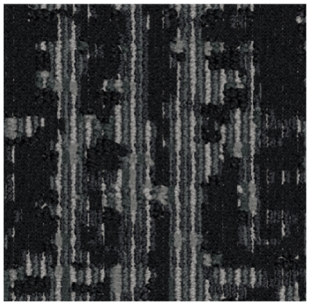
HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-01-ALT Supplier B
Project #:	Dusk Scheme	Item Description:	Bedroom Carpet – Tile Option
Issue Date:	02/23		
Revision(s):	06/23 Δ1		

Item Quantity: sq yds

Manufacturer: **Shaw Hospitality Group**
Address: 410 Old Mill Road Cartersville GA 30120
Phone: (301) 520-9360
Contact: David Burn
E-mail: dburn1@mac.com
Web: www.shawhospitality.com

Description:	Carpet Tile Option at Bedroom.
Style Number:	BS722
Color:	D9461
Type:	Carpet Tile
Content:	Multi-Level Loop Tip Shear
Weight:	24 oz
Primary Backing:	Woven Polypropylene
Secondary Backing:	Ecologix
Pile Height:	0.205 in
Gauge:	1/10 in
Stitches Per Inch:	11.67 per inch
Dye Method:	100% Solution Dyed
Installation Method:	Direct Glue, Quarter Turn
Flame Requirements:	Meets or Exceeds Class 1



Notes:

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Manufacturer to Confirm the Carpet Meets Hilton Design and Construction Standards as Noted in Section 2514.03.

Glue: Per Manufacturer's Recommendations.

Manufacturer's Recommended Transition Strip: No Transition Strip Required.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-01-ALT Supplier B
Project #:	Dusk Scheme	Item Description:	Bedroom Carpet – Tile Option
Issue Date:	02/23		
Revision(s):	06/23 Δ1		

Item Quantity: sq yds

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: JJS

☐ Seaming Diagram	☐ Strike-Off	☐ Finish Sample	☐ Cutting	☐ Shop Dwgs	☐ Prototype	☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

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Installer to provide all materials and equipment for complete installation, seaming diagrams, and full carpet layouts for all areas per manufacturer's recommendations.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-02 Supplier A
Project #:	Dusk Scheme	Item Description:	Inset Living Room Carpet
Issue Date:	04/19/21		
Revision(s):	10/22 Δ 2		

Item Quantity: sq yds

Manufacturer: **Tarkett**

Address: 285 Kraft Drive
Dalton GA 30721-

Phone: (440) 903-4319 800# : (800) 871-3211

Alternate: (703) 919-4751

Contact: Jackie Passaro

E-mail: Jackie.Passaro@tarkett.com

Web: www.tarkett.com

Description:	Inset Broadloom Guestroom Carpet at Living Room.
Style Number:	HS232
Color:	210
Width or Rug Size:	12'
Type:	See Notes Below
Repeat:	144"W x 43"L
Content:	100% C.F. Lextron Enviro-Green Solution Dyed Nylon
Weight:	32 oz.
Primary Backing:	Woven Polypropylene
Secondary Backing:	Action Bac
Pile Height	See Notes Below
Gauge:	1/10
Stitches Per Inch:	10
Dye Method:	Solution Dyed
Installation Method:	Stretch-In, Over Pad
Flame Requirements:	ASTM E-648 Class I

Notes:

Construction/Type: Dynamics

Pile Height: 0.250" High, 0.187" Med, 0.062" Low.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Strike-Off.

Manufacturer to Confirm the Carpet Meets Hilton Design and Construction Standards as Noted in Section 2514.03.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-02 Supplier A
Project #:	Dusk Scheme	Item Description:	Inset Living Room Carpet
Issue Date:	04/19/21		
Revision(s):	05/11/21 Δ 1		

Item Quantity: sq yds

Glue: Per Manufacturer's Recommendations.

Manufacturer's Recommended Transition Strip:
Profilitec; Color: Brushed Antique Bronze Aluminum
Reference Prototype Drawings for Transition Detail.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

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Installer to provide all materials and equipment for complete installation, seaming diagrams, and full carpet layouts for all areas per manufacturer's recommendations.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-02 Supplier B
Project #:	Dusk Scheme	Item Description:	Inset Living Room Carpet
Issue Date:	04/19/21		
Revision(s):	05/11/21 Δ 1		

Item Quantity: sq yds

Manufacturer: **Shaw Hospitality Group**

Address: 410 Old Mill Road
Cartersville GA
30120-

Phone: (301) 520-9360

Contact: David Burn

E-mail: dburn1@mac.com

Web: www.shawhospitality.com

Description:	Inset Broadloom Guestroom Carpet at Living Room.
Style Number:	BS507; AF2015 446925
Color:	B5036
Width or Rug Size:	12'
Type:	Multi-Level Loop Tip Shear
Repeat:	144"W x 55"L
Content:	100% Solution Dyed Nylon
Weight:	32 oz. Per Sq. Yd.
Primary Backing:	Woven Polypropylene
Secondary Backing:	ClassicBac
Pile Height	0.233 in
Gauge:	1/10
Stitches Per Inch:	11.67 per inch
Dye Method:	100% Solution Dyed
Installation Method:	Direct Glue
Flame Requirements:	ASTM E-648 Class I

Notes:

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Strike-Off.

Manufacturer to Confirm the Carpet Meets Hilton Design and Construction Standards as Noted in Section 2514.03.

Glue: Per Manufacturer's Recommendations.

Manufacturer's Recommended Transition Strip: Lok Seam Moisture Impervious Seam Sealer

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-02 Supplier B
Project #:	Dusk Scheme	Item Description:	Inset Living Room Carpet
Issue Date:	04/19/21		
Revision(s):	05/11/21 Δ 1		

Item Quantity: sq yds

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: JJS

☐ Seaming Diagram	☐ Strike-Off	☐ Finish Sample	☐ Cutting	☐ Shop Dwgs	☐ Prototype	☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

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Installer to provide all materials and equipment for complete installation, seaming diagrams, and full carpet layouts for all areas per manufacturer's recommendations.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-02-ALT Supplier A
Project #:	Dusk Scheme	Item Description:	Inset Living Room Carpet – Tile Option
Issue Date:	02/23		
Revision(s):	06/2023 Δ1		

Item Quantity: sq yds

Manufacturer: **Tarkett**

Address: 285 Kraft Drive
Dalton GA 30721

Phone: (440) 903-4319 800#: (800) 871-3211

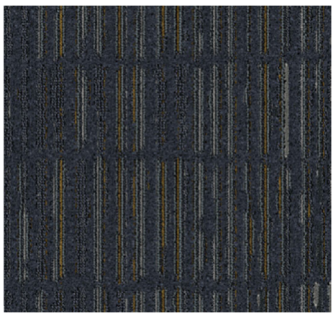
Alternate: (703) 919-4751

Contact: Jackie Passaro

E-mail: Jackie.Passaro@tarkett.com

Web: www.tarkett.com

Description: Carpet Tile Option at Living Room Inset.



Style Number:	HS53T
Color:	643
Size:	18” x 36”
Type:	Dynamics Tile, Multi-Level Cut/Loop
Repeat:	76” W x 53.72” L
Content:	C.F. Lextron Enviro-Green Nylon
Weight:	22 oz per Square Yard, 100 oz Total
Primary Backing:	Woven Polypropylene
Secondary Backing:	Flex-Aire Modular® Cushion
Pile Height	0.250”
Gauge:	1/10 in
Stitches Per Inch:	7 Stitches Approximately
Dye Method:	100% Solution Dyed
Installation Method:	Vertical Ashlar
Flame Requirements:	Meets or Exceeds Class 1

Notes: Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Manufacturer to Confirm the Carpet Meets Hilton Design and Construction Standards as Noted in Section 2514.03.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-02-ALT Supplier A
Project #:	Dusk Scheme	Item Description:	Inset Living Room Carpet – Tile Option
Issue Date:	02/23		
Revision(s):	06/2023 Δ1		

Item Quantity: sq yds

Glue: Per Manufacturer's Recommendations.

Manufacturer's Recommended Transition Strip:
Profilitec; Color: Brushed Antique Bronze Aluminum
Reference Prototype Drawings for Transition Detail.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram	☐ Strike-Off	☐ Finish Sample	☐ Cutting	☐ Shop Dwgs	☐ Prototype	☐ Flame Certificate

Instructions:

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All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Installer to provide all materials and equipment for complete installation, seaming diagrams, and full carpet layouts for all areas per manufacturer's recommendations.

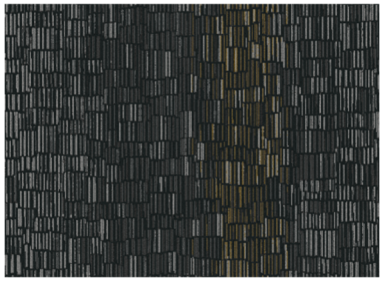
HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-02-ALT Supplier B
Project #:	Dusk Scheme	Item Description:	Living Room Inset Carpet – Tile Option
Issue Date:	02/23		
Revision(s):	06/23 Δ1		

Item Quantity: sq yds

Manufacturer: **Shaw Hospitality Group**
Address: 410 Old Mill Road Cartersville GA 30120
Phone: (301) 520-9360
Contact: David Burn
E-mail: dburn1@mac.com
Web: www.shawhospitality.com

Description:	Carpet Tile Option at Living Room Inset.
Style Number:	BS732
Color:	D5500
Type:	Carpet Tile
Content:	Multi-Level Loop Tip Shear
Weight:	24 oz
Primary Backing:	Woven Polypropylene
Secondary Backing:	Ecologix
Pile Height	0.209 in
Gauge:	1/10 in
Stitches Per Inch:	12.33 Per Inch
Dye Method:	100% Solution Dyed
Installation Method:	Direct Glue, Monolithic
Flame Requirements:	Meets or Exceeds Class 1



Notes:

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Manufacturer to Confirm the Carpet Meets Hilton Design and Construction Standards as Noted in Section 2514.03.

Glue: Per Manufacturer's Recommendations.

Manufacturer's Recommended Transition Strip: No transition strip required.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-02-ALT Supplier B
Project #:	Dusk Scheme	Item Description:	Living Room Inset Carpet – Tile Option
Issue Date:	02/23		
Revision(s):	06/23 Δ1		

Item Quantity: sq yds

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: JJS

☐ Seaming Diagram	☐ Strike-Off	☐ Finish Sample	☐ Cutting	☐ Shop Dwgs	☐ Prototype	☐ Flame Certificate

Instructions:

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Installer to provide all materials and equipment for complete installation, seaming diagrams, and full carpet layouts for all areas per manufacturer's recommendations.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-10 Supplier A
Project #:	Dusk Scheme	Item Description:	Corridor Carpet
Issue Date:	04/19/21		
Revision(s):	10/22 Δ 2		

Item Quantity: sq yds

Manufacturer: **Tarkett**

Address: 285 Kraft Drive
Dalton GA 30721

Phone: (440) 903-4319 800#: (800) 871-3211

Alternate: (703) 919-4751

Contact: Jackie Passaro

E-mail: Jackie.Passaro@tarkett.com

Web: www.tarkett.com

Description: Broadloom Carpet at Corridor.

Style Number:	HS342
Color:	310
Width or Rug Size:	12'-0"
Type:	See Notes Below
Repeat:	72"W x 72"L
Content:	100% C.F. Lextron Enviro-Green Solution Dyed Nylon
Weight:	36 oz.
Primary Backing:	Woven Polypropylene
Secondary Backing:	Unitary Action Bac
Pile Height	See Notes Below
Gauge:	1/10
Stitches Per Inch:	28
Dye Method:	Solution Dyed
Installation Method:	Double Stick
Flame Requirements:	ASTM E-648 Class I

Notes:

Construction/Type: Intrepid Multi-Level Loop Tip Shear.

Pile Height: 0.250" High, 0.187" Med, 0.062" Low.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Strike-Off.

Manufacturer to Confirm the Carpet Meets Hilton Design and Construction Standards as Noted in Section 2514.03.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-10 Supplier A
Project #:	Dusk Scheme	Item Description:	Corridor Carpet
Issue Date:	04/19/21		
Revision(s):	10/22 Δ 2		

Item Quantity: sq yds

Glue: Per Manufacturer's Recommendations.

Manufacturer's Recommended Transition Strip:
Profilitec; Color: Brushed Antique Bronze Aluminum
Reference Prototype Drawings for Transition Detail.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

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HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-10 Supplier B
Project #:	Dusk Scheme	Item Description:	Corridor Carpet
Issue Date:	04/19/21		
Revision(s):	05/11/21 Δ 1 Revision		

Item Quantity: sq yds

Manufacturer: **Shaw Hospitality Group**

Address: 410 Old Mill Road
Cartersville GA 30120

Phone: (301) 520-9360

Contact: David Burn

E-mail: dburn1@mac.com

Web: www.shawhospitality.com

Description:	Broadloom Carpet at Corridor.
Style Number:	BS508; CF71607 449975
Color:	B6814
Width or Rug Size:	12'-0"
Type:	Multi-Level Loop Tip Shear
Repeat:	72"W x 76.8"L
Content:	100% Solution Dyed Nylon
Weight:	36 oz.
Primary Backing:	Woven Polypropylene
Secondary Backing:	Ultraloc
Pile Height	.239 in
Gauge:	1/10
Stitches Per Inch:	10 per inch
Dye Method:	100% Solution Dyed
Installation Method:	Direct Glue
Flame Requirements:	ASTM E-648 Class I

Notes:

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Strike-Off.

Manufacturer to Confirm the Carpet Meets Hilton Design and Construction Standards as Noted in Section 2514.03.

Glue: Per Manufacturer's Recommendations.

Manufacturer's Recommended Transition Strip: Profilitec; Color: Brushed Antique Bronze Aluminum Reference Prototype Drawings for Transition Detail.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-10 Supplier B
Project #:	Dusk Scheme	Item Description:	Corridor Carpet
Issue Date:	04/19/21		
Revision(s):	05/11/21 Δ 1		

Item Quantity: sq yds

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: JJS

☐ Seaming Diagram	☐ Strike-Off	☐ Finish Sample	☐ Cutting	☐ Shop Dwgs	☐ Prototype	☐ Flame Certificate

Instructions:

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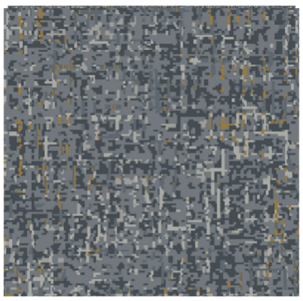
HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-10-ALT Supplier A
Project #:	Dusk Scheme	Item Description:	Corridor Carpet – Tile Option
Issue Date:	02/23		
Revision(s):			

Item Quantity:	sq yds

Manufacturer:	**Tarkett**
Address:	285 Kraft Drive Dalton GA 30721
Phone:	(440) 903-4319 800#: (800) 871-3211
Alternate:	(703) 919-4751
Contact:	Jackie Passaro
E-mail:	Jackie.Passaro@tarkett.com
Web:	www.tarkett.com

Description: Carpet Tile Option at Corridor.



Style Number:	HS55T
Color:	310
Size:	18” x 36”
Type:	Intrepid Tile, Multi-Level Cut/Loop
Repeat:	76” W x 73.14” L
Content:	C.F. Lextron Enviro-Green Nylon
Weight:	34 oz per Square Yard, 112 oz Total
Primary Backing:	Woven Polypropylene
Secondary Backing:	Ethos with Omnicoat Technology
Pile Height	0.250”
Gauge:	1/10 in
Stitches Per Inch:	7 Stitches Approximately
Dye Method:	100% Solution Dyed
Installation Method:	Vertical Ashlar or Herringbone
Flame Requirements:	Meets or Exceeds Class 1

Notes: Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Manufacturer to Confirm the Carpet Meets Hilton Design and Construction Standards as Noted in Section 2514.03.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-10-ALT Supplier A
Project #:	Dusk Scheme	Item Description:	Corridor Carpet – Tile Option
Issue Date:	02/23		
Revision(s):			

Item Quantity: sq yds

Glue: Per Manufacturer's Recommendations.

Manufacturer's Recommended Transition Strip:
Profilitec; Color: Brushed Antique Bronze Aluminum
Reference Prototype Drawings for Transition Detail.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram	☐ Strike-Off	☐ Finish Sample	☐ Cutting	☐ Shop Dwgs	☐ Prototype	☐ Flame Certificate

Instructions:

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Installer to provide all materials and equipment for complete installation, seaming diagrams, and full carpet layouts for all areas per manufacturer's recommendations.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-10-ALT Supplier B
Project #:	Dusk Scheme	Item Description:	Corridor Carpet – Tile Option
Issue Date:	02/23		
Revision(s):	06/23 Δ1		

Item Quantity: sq yds

Manufacturer: **Shaw Hospitality Group**
Address: 410 Old Mill Road Cartersville GA 30120
Phone: (301) 520-9360
Contact: David Burn
E-mail: dburn1@mac.com
Web: www.shawhospitality.com

Description:	Carpet Tile Option at Corridor.
Style Number:	BS733
Color:	D5503
Type:	Carpet Tile
Content:	Multi-Level Loop Tip Shear
Weight:	26 oz
Primary Backing:	Woven Polypropylene
Secondary Backing:	Ecologix
Pile Height	0.239 in
Gauge:	1/10 in
Stitches Per Inch:	8 per inch
Dye Method:	100% Solution Dyed
Installation Method:	Direct Glue, Monolithic
Flame Requirements:	Meets or Exceeds Class 1

Notes:

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Manufacturer to Confirm the Carpet Meets Hilton Design and Construction Standards as Noted in Section 2514.03.

Glue: Per Manufacturer's Recommendations.

Manufacturer's Recommended Transition Strip: Profilitec; Color: Brushed Antique Bronze Aluminum Reference Prototype Drawings for Transition Detail.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-10-ALT Supplier B
Project #:	Dusk Scheme	Item Description:	Corridor Carpet – Tile Option
Issue Date:	02/23		
Revision(s):	06/23 Δ1		

Item Quantity: sq yds

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: JJS

☐ Seaming Diagram	☐ Strike-Off	☐ Finish Sample	☐ Cutting	☐ Shop Dwgs	☐ Prototype	☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Installer to provide all materials and equipment for complete installation, seaming diagrams, and full carpet layouts for all areas per manufacturer's recommendations.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-11 Supplier A
Project #:	Dusk Scheme	Item Description:	Inset Carpet at Central Hub - Social Nook and Living Room Area
Issue Date:	04/19/21		
Revision(s):	10/22 Δ 2		

Item Quantity: sq yds

Manufacturer: **Tarkett**

Address: 285 Kraft Drive
Dalton GA 30721

Phone: (440) 903-4319 800# : (800) 871-3211

Alternate: (703) 919-4751

Contact: Jackie Passaro

E-mail: Jackie.Passaro@tarkett.com

Web: www.tarkett.com

Description:	Broadloom Carpet at Social Nook and Living Room Areas.
Style Number:	HS442
Color:	410
Width or Rug Size:	12'-0"
Type:	See Notes Below
Repeat:	72"W x 182.29"L
Content:	100% C.F. Lextron Enviro-Green Solution Dyed Nylon
Weight:	36 oz.
Primary Backing:	Woven Polypropylene
Secondary Backing:	Unitary Action Bac
Pile Height	See Notes Below
Gauge:	1/10
Stitches Per Inch:	28
Dye Method:	Solution Dyed
Installation Method:	Double Stick
Flame Requirements:	ASTM E-648 Class I

Notes:

Construction/Type: Intrepid Multi-Level Loop Tip Shear.

Pile Height: 0.250" High, 0.187" Med, 0.062" Low.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Strike-Off.

Manufacturer to Confirm the Mirror Meets Hilton Design and Construction Standards as Noted in Section 2514.03.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-11 Supplier A
Project #:	Dusk Scheme	Item Description:	Inset Carpet at Central Hub - Social Nook and Living Room Area
Issue Date:	04/19/21		
Revision(s):	10/22 Δ 2		

Item Quantity: sq yds

Glue: Per Manufacturer's Recommendations.

Manufacturer's Recommended Transition Strip:
Profilitec; Color: Brushed Antique Bronze Aluminum
Reference Prototype Drawings for Transition Detail.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

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HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-11 Supplier B
Project #:	Dusk Scheme	Item Description:	Inset Carpet at Central Hub - Social Nook and Living Room Area
Issue Date:	04/19/21		
Revision(s):	05/11/21 Δ 1		

Item Quantity: sq yds

Manufacturer: **Shaw Hospitality Group**

Address: 410 Old Mill Road
Cartersville GA
30120-

Phone: (301) 520-9360

Contact: David Burn

E-mail: dburn1@mac.com

Web: www.shawhospitality.com

Description:	Broadloom Carpet at Social Nook and Living Room Areas.
Style Number:	BS509; CF71612 447594
Color:	B4891-1
Width or Rug Size:	12'-0"
Type:	Multi-Level Loop Tip Shear
Repeat:	72"W x 177.6"L
Content:	100% Solution Dyed Nylon
Weight:	36 oz.
Primary Backing:	Woven Polypropylene
Secondary Backing:	Ultraloc
Pile Height	0.265 in
Gauge:	1/10
Stitches Per Inch:	10 per inch
Dye Method:	100% Solution Dyed
Installation Method:	Direct Glue
Flame Requirements:	ASTM E-648 Class I

Notes:

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Strike-Off.

Manufacturer to Confirm the Mirror Meets Hilton Design and Construction Standards as Noted in Section 2514.03.

Glue: Per Manufacturer's Recommendations.

Manufacturer's Recommended Transition Strip: Profilitec; Color: Brushed Antique Bronze Aluminum

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-11 Supplier B
Project #:	Dusk Scheme	Item Description:	Inset Carpet at Central Hub - Social Nook and Living Room Area
Issue Date:	04/19/21		
Revision(s):	05/11/21 Δ 1		

Item Quantity: sq yds

Reference Prototype Drawings for Transition Detail.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: JJS

☐ Seaming Diagram	☐ Strike-Off	☐ Finish Sample	☐ Cutting	☐ Shop Dwgs	☐ Prototype	☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

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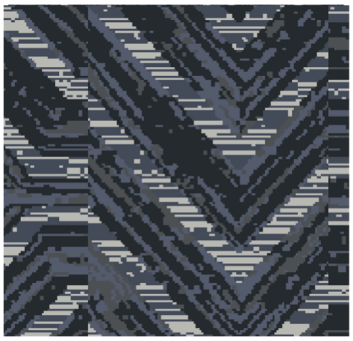
HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-11-ALT Supplier A
Project #:	Dusk Scheme	Item Description:	Inset at Central Hub Carpet – Social Nook and Living Room Area - Tile Option
Issue Date:	02/23		
Revision(s):	06/2023 Δ1		

Item Quantity: sq yds

Manufacturer: **Tarkett**
Address: 285 Kraft Drive
Dalton GA 30721
Phone: (440) 903-4319 800#: (800) 871-3211
Alternate: (703) 919-4751
Contact: Jackie Passaro
E-mail: Jackie.Passaro@tarkett.com
Web: www.tarkett.com

Description: Carpet Tile Option at Social Nook and Living Room Areas.



Style Number:	HS41T
Color:	410
Size:	18” x 36”
Type:	Colorpoint Tile, All Loop
Repeat:	72” W x 174.22” L
Content:	C.F. Lextron Enviro-Green Nylon
Weight:	30 oz per Square Yard, 108 oz Total
Primary Backing:	Woven Polypropylene
Secondary Backing:	Flex-Aire Modular® Cushion
Pile Height	0.218” High, 0.156” Med., 0.125” Low
Gauge:	1/10 in
Stitches Per Inch:	9 Stitches Approximately
Dye Method:	100% Solution Dyed
Installation Method:	Vertical Ashlar
Flame Requirements:	Meets or Exceeds Class 1

Notes: Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Manufacturer to Confirm the Carpet Meets Hilton Design and Construction Standards as Noted in Section 2514.03.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-11-ALT Supplier A
Project #:	Dusk Scheme	Item Description:	Inset at Central Hub Carpet – Social Nook and Living Room Area - Tile Option
Issue Date:	02/23		
Revision(s):	06/2023 Δ1		

Item Quantity: sq yds

Glue: Per Manufacturer's Recommendations.

Manufacturer's Recommended Transition Strip:
Profilitec; Color: Brushed Antique Bronze Aluminum
Reference Prototype Drawings for Transition Detail.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

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HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-11-ALT Supplier B
Project #:	Dusk Scheme	Item Description:	Inset at Central Hub Carpet – Social Nook and Living Room Area - Tile Option
Issue Date:	02/23		
Revision(s):	06/23 Δ1		

Item Quantity: sq yds

Manufacturer: **Shaw Hospitality Group**
Address: 410 Old Mill Road Cartersville GA 30120
Phone: (301) 520-9360
Contact: David Burn
E-mail: dburn1@mac.com
Web: www.shawhospitality.com

Description:	Carpet Tile Option at Social Nook and Living Room Areas.
Style Number:	BS723
Color:	D5501
Type:	Carpet Tile
Content:	Multi-Level Loop Tip Shear
Weight:	26 oz
Primary Backing:	Woven Polypropylene
Secondary Backing:	Ecologix
Pile Height	0.203 in
Gauge:	1/10 in
Stitches Per Inch:	8.67 per inch
Dye Method:	100% Solution Dyed
Installation Method:	Direct Glue, Monolithic
Flame Requirements:	Meets or Exceeds Class 1

Notes:

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Manufacturer to Confirm the Carpet Meets Hilton Design and Construction Standards as Noted in Section 2514.03.

Glue: Per Manufacturer's Recommendations.

Manufacturer's Recommended Transition Strip: Profilitec; Color: Brushed Antique Bronze Aluminum Reference Prototype Drawings for Transition Detail.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-11-ALT Supplier B
Project #:	Dusk Scheme	Item Description:	Inset at Central Hub Carpet – Social Nook and Living Room Area - Tile Option
Issue Date:	02/23		
Revision(s):	06/23 Δ1		

Item Quantity: sq yds

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: JJS

☐ Seaming Diagram	☐ Strike-Off	☐ Finish Sample	☐ Cutting	☐ Shop Dwgs	☐ Prototype	☐ Flame Certificate

Instructions:

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HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-12 Supplier A
Project #:	Dusk Scheme	Item Description:	Inset Carpet at Central Hub - Center Area
Issue Date:	04/19/21		
Revision(s):	10/22 Δ 2		

Item Quantity:	sq yds
Manufacturer:	**Tarkett**
Address:	285 Kraft Drive Dalton GA 30721-
Phone:	(440) 903-4319 800# : (800) 871-3211
Alternate:	(703) 919-4751
Contact:	Jackie Passaro
E-mail:	Jackie.Passaro@tarkett.com
Web:	www.tarkett.com

Description: Broadloom Carpet at Center Area.

Style Number:	HS542
Color:	510
Width or Rug Size:	12'-0"
Type:	See Notes Below
Repeat:	48"W x 96"L
Content:	100% C.F. Lextron Enviro-Green Solution Dyed Nylon
Weight:	36 oz.
Primary Backing:	Woven Polypropylene
Secondary Backing:	Unitary Action Bac
Pile Height	See Notes Below
Gauge:	1/10
Stitches Per Inch:	28
Dye Method:	Solution Dyed
Installation Method:	Double Stick
Flame Requirements:	ASTM E-648 Class I

Notes:

Construction/Type: Intrepid Multi-Level Loop Tip Shear.

Pile Height: 0.250" High, 0.187" Med, 0.062" Low.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Strike-Off.

Manufacturer to Confirm the Carpet Meets Hilton Design and Construction Standards as Noted in Section 2514.03.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-12 Supplier A
Project #:	Dusk Scheme	Item Description:	Inset Carpet at Central Hub - Center Area
Issue Date:	04/19/21		
Revision(s):	10/22 Δ 2		

Item Quantity: sq yds

Glue: Per Manufacturer's Recommendations.

Manufacturer's Recommended Transition Strip:
Profilitec; Color: Brushed Antique Bronze Aluminum
Reference Prototype Drawings for Transition Detail.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

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HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-12 Supplier B
Project #:	Dusk Scheme	Item Description:	Inset Carpet at Central Hub - Center Area
Issue Date:	04/19/21		
Revision(s):	05/11/21 Δ 1		

Item Quantity: sq yds

Manufacturer: **Shaw Hospitality Group**
Address: 410 Old Mill Road
Cartersville GA
30120-
Phone: (301) 520-9360
Fax:
Contact: David Burn
E-mail: dburn1@mac.com
Web: www.shawhospitality.com

Description:	Broadloom Carpet at Center Area.
Style Number:	BS510; CF71333 446934
Color:	B4946-1
Width or Rug Size:	12'-0"
Type:	
Repeat:	48"W x 96"L
Content:	100% Solution Dyed Nylon
Weight:	36 oz.
Primary Backing:	Woven Polypropylene
Secondary Backing:	Ultraloc
Pile Height	0.239 in
Gauge:	1/10
Stitches Per Inch:	10 per inch
Dye Method:	100% Solution Dyed
Installation Method:	Direct Glue
Flame Requirements:	ASTM E-648 Class I

Notes:

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Strike-Off.

Manufacturer to Confirm the Carpet Meets Hilton Design and Construction Standards as Noted in Section 2514.03.

Glue: Per Manufacturer's Recommendations.

Manufacturer's Recommended Transition Strip: Profilitec; Color: Brushed Antique Bronze Aluminum Reference Prototype Drawings for Transition Detail.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-12 Supplier B
Project #:	Dusk Scheme	Item Description:	Inset Carpet at Central Hub - Center Area
Issue Date:	04/19/21		
Revision(s):	05/11/21 Δ 1		

Item Quantity: sq yds

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: JJS

☐ Seaming Diagram	☐ Strike-Off	☐ Finish Sample	☐ Cutting	☐ Shop Dwgs	☐ Prototype	☐ Flame Certificate

Instructions:

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HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-12-ALT Supplier A
Project #:	Dusk Scheme	Item Description:	Inset Carpet at Central Hub – Center Area - Tile Option
Issue Date:	02/23		
Revision(s):	06/2023 Δ1		

Item Quantity: sq yds

Manufacturer: **Tarkett**

Address: 285 Kraft Drive
Dalton GA 30721

Phone: (440) 903-4319 800#: (800) 871-3211

Alternate: (703) 919-4751

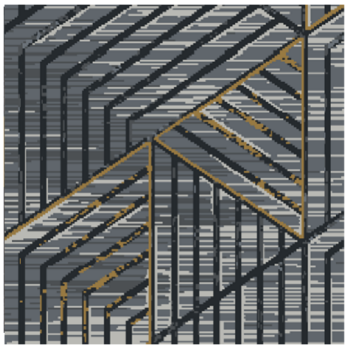
Contact: Jackie Passaro

E-mail: Jackie.Passaro@tarkett.com

Web: www.tarkett.com

Description: Carpet Tile Option at Central Hub - Center Area Inset.

Style Number:	HS47T
Color:	289
Size:	24” x 24”
Type:	Intrepid Tile, Multi-Level Cut/Loop
Repeat:	76” W x 97.14” L
Content:	C.F. Lextron Enviro-Green Nylon
Weight:	26 oz per Square Yard, 104 oz Total
Primary Backing:	Woven Polypropylene
Secondary Backing:	Flex-Aire Modular® Cushion
Pile Height	0.241”
Gauge:	1/10 in
Stitches Per Inch:	7 Stitches Approximately
Dye Method:	100% Solution Dyed
Installation Method:	Vertical Ashlar or Quarter Turn
Flame Requirements:	Meets or Exceeds Class 1



Notes: Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Manufacturer to Confirm the Carpet Meets Hilton Design and Construction Standards as Noted in Section 2514.03.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-12-ALT Supplier A
Project #:	Dusk Scheme	Item Description:	Inset Carpet at Central Hub – Center Area - Tile Option
Issue Date:	02/23		
Revision(s):	06/2023 Δ1		

Item Quantity: sq yds

Glue: Per Manufacturer's Recommendations.

Manufacturer's Recommended Transition Strip:
Profilitec; Color: Brushed Antique Bronze Aluminum
Reference Prototype Drawings for Transition Detail.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram	☐ Strike-Off	☐ Finish Sample	☐ Cutting	☐ Shop Dwgs	☐ Prototype	☐ Flame Certificate

Instructions:

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Installer to provide all materials and equipment for complete installation, seaming diagrams, and full carpet layouts for all areas per manufacturer's recommendations.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-12-ALT Supplier B
Project #:	Dusk Scheme	Item Description:	Inset at Central Hub Carpet – Center Area - Tile Option
Issue Date:	02/23		
Revision(s):	06/23 Δ1		

Item Quantity: sq yds

Manufacturer: **Shaw Hospitality Group**
Address: 410 Old Mill Road Cartersville GA 30120
Phone: (301) 520-9360
Contact: David Burn
E-mail: dburn1@mac.com
Web: www.shawhospitality.com

Description:	Carpet Tile Option at Central Hub - Center Area Inset.
Style Number:	BS724
Color:	D9457
Type:	Carpet Tile
Content:	Multi-Level Loop Tip Shear
Weight:	26 oz
Primary Backing:	Woven Polypropylene
Secondary Backing:	Ecologix
Pile Height	0.239 in
Gauge:	1/10 in
Stitches Per Inch:	8 per inch
Dye Method:	100% Solution Dyed
Installation Method:	Direct Glue, Monolithic
Flame Requirements:	Meets or Exceeds Class 1

Notes:

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Manufacturer to Confirm the Carpet Meets Hilton Design and Construction Standards as Noted in Section 2514.03.

Glue: Per Manufacturer's Recommendations.

Manufacturer's Recommended Transition Strip: Profilitec; Color: Brushed Antique Bronze Aluminum Reference Prototype Drawings for Transition Detail.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-12-ALT Supplier B
Project #:	Dusk Scheme	Item Description:	Inset at Central Hub Carpet – Center Area - Tile Option
Issue Date:	02/23		
Revision(s):	06/23 Δ1		

Item Quantity: sq yds

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: JJS

☐ Seaming Diagram	☐ Strike-Off	☐ Finish Sample	☐ Cutting	☐ Shop Dwgs	☐ Prototype	☐ Flame Certificate

Instructions:

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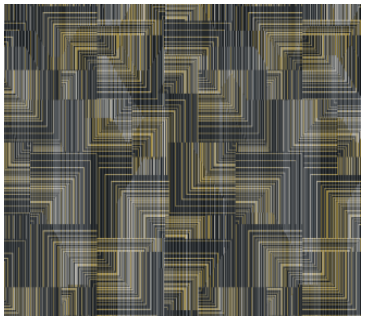
HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-13 Supplier A
Project #:	Dusk Scheme	Item Description:	Carpet at Meeting Room
Issue Date:	10/22		
Revision(s):			

Item Quantity:	sq yds

Manufacturer:	**Tarkett**
Address:	285 Kraft Drive Dalton GA 30721-
Phone:	(440) 903-4319 800# : (800) 871-3211
Alternate:	(703) 919-4751
Contact:	Jackie Passaro
E-mail:	Jackie.Passaro@tarkett.com
Web:	www.tarkett.com

Description: Broadloom Carpet at Meeting Room.



Style Number:	HS336
Color:	610
Width or Rug Size:	15'-0"
Type:	See Notes Below
Repeat:	180"W x 171.43"L
Content:	100% C.F. Lextron Enviro-Green Solution Dyed Nylon
Weight:	72 oz.
Primary Backing:	Woven Polypropylene
Secondary Backing:	Unitary Action Bac
Pile Height	See Notes Below
Gauge:	1/10
Stitches Per Inch:	7
Dye Method:	Solution Dyed
Installation Method:	Double Stick
Flame Requirements:	ASTM E-648 Class I

Notes:

Construction/Type: Intrepid Multi-Level Loop Tip Shear.

Pile Height: 0.250" High, 0.187" Med, 0.062" Low.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Strike-Off.

Manufacturer to Confirm the Carpet Meets Hilton Design and Construction Standards as Noted in Section 2514.03.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-13 Supplier A
Project #:	Dusk Scheme	Item Description:	Carpet at Meeting Room
Issue Date:	10/22		
Revision(s):			

Item Quantity: sq yds

Glue: Per Manufacturer's Recommendations.

Manufacturer's Recommended Transition Strip:
Profilitec; Color: Brushed Antique Bronze Aluminum
Reference Prototype Drawings for Transition Detail.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram	☐ Strike-Off	☐ Finish Sample	☐ Cutting	☐ Shop Dwgs	☐ Prototype	☐ Flame Certificate

Instructions:

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Installer to provide all materials and equipment for complete installation, seaming diagrams, and full carpet layouts for all areas per manufacturer's recommendations.

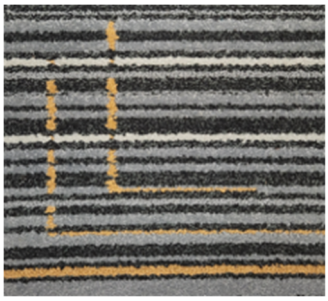
HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-13 Supplier B
Project #:	Dusk Scheme	Item Description:	Carpet at Meeting Room
Issue Date:	10/22		
Revision(s):			

Item Quantity: sq yds

Manufacturer:	**Shaw Hospitality Group**
Address:	410 Old Mill Road Cartersville GA 30120-
Phone:	(301) 520-9360
Contact:	David Burn
E-mail:	dburn1@mac.com
Web:	www.shawhospitality.com

Description:	Broadloom Carpet at Meeting Room
Style Number:	CF80427/472536
Color:	BS668
Width or Rug Size:	12'-0"
Type:	Multi-Level Loop Tip Shear
Repeat:	144"W x 144"L
Content:	100% Solution Dyed Nylon
Weight:	36 oz.
Primary Backing:	Woven Polypropylene
Secondary Backing:	Ultraloc
Pile Height	0.229 in
Gauge:	1/10
Stitches Per Inch:	10 per inch
Dye Method:	100% Solution Dyed
Installation Method:	Direct Glue
Flame Requirements:	ASTM E-648 Class I



Notes:

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Strike-Off.

Manufacturer to Confirm the Carpet Meets Hilton Design and Construction Standards as Noted in Section 2514.03.

Glue: Per Manufacturer's Recommendations.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-13 Supplier B
Project #:	Dusk Scheme	Item Description:	Carpet at Meeting Room
Issue Date:	10/22		
Revision(s):			

Item Quantity: sq yds

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: JJS

☐ Seaming Diagram	☐ Strike-Off	☐ Finish Sample	☐ Cutting	☐ Shop Dwgs	☐ Prototype	☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Installer to provide all materials and equipment for complete installation, seaming diagrams, and full carpet layouts for all areas per manufacturer's recommendations.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-13 ALT Supplier A
Project #:	Dusk Scheme	Item Description:	Carpet at Meeting Room
Issue Date:	06/23		
Revision(s):			

Item Quantity: sq yds

Manufacturer: **Tarkett**

Address: 285 Kraft Drive
Dalton GA 30721-

Phone: (440) 903-4319

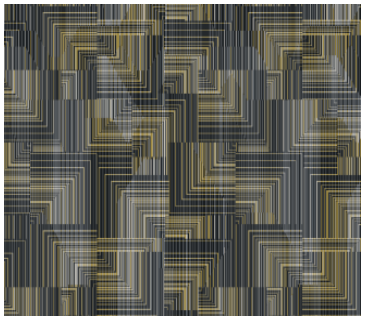
Alternate: (703) 919-4751

Contact: Jackie Passaro

E-mail: Jackie.Passaro@tarkett.com

Web: www.tarkett.com

Description: Carpet Tile at Meeting Room.



Style Number:	HS65T
Color:	c.894
Width or Rug Size:	24" x 24"
Type:	See Notes Below
Repeat:	76" x 171.43"
Content:	100% Solution Dyed
Weight:	32 oz.
Primary Backing:	Woven Polypropylene
Secondary Backing:	Flex-Aire Modular® Cushion
Pile Height	See Notes Below
Gauge:	1/10
Stitches Per Inch:	7
Dye Method:	Solution Dyed
Installation Method:	Vertical Ashlar/Quarter Turn
Flame Requirements:	ASTM E-648 Class I

Notes:

Glue: Per Manufacturer's Recommendations

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Strike-Off.

Manufacturer to Confirm the Carpet Meets Hilton Design and Construction Standards as Noted in Section 2514.03.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-13 ALT Supplier A
Project #:	Dusk Scheme	Item Description:	Carpet at Meeting Room
Issue Date:	06/23		
Revision(s):			

Item Quantity: sq yds

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram	☐ Strike-Off	☐ Finish Sample	☐ Cutting	☐ Shop Dwgs	☐ Prototype	☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Installer to provide all materials and equipment for complete installation, seaming diagrams, and full carpet layouts for all areas per manufacturer's recommendations.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-13 Supplier B
Project #:	Dusk Scheme	Item Description:	Carpet at Meeting Room
Issue Date:	06/23		
Revision(s):			

Item Quantity: sq yds

Manufacturer: **Shaw Hospitality Group**
Address: 410 Old Mill Road Cartersville GA 30120-
Phone: (301) 520-9360

Contact: David Burn
E-mail: dburn1@mac.com
Web: www.shawhospitality.com

Description:	Carpet Tile at Meeting Room
Style Number:	BS755
Color:	E6928
Type:	Carpet Tile
Content:	Multi-Level Loop Tip Shear
Weight:	30 oz.
Primary Backing:	Woven Polypropylene
Secondary Backing:	Ecologix
Pile Height	0.229 in
Gauge:	1/10
Stitches Per Inch:	9 per inch
Dye Method:	100% Solution Dyed
Installation Method:	Direct Glue/ Quarter Turn
Flame Requirements:	Meets or Exceeds Class I

Notes:

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Strike-Off.

Manufacturer to Confirm the Carpet Meets Hilton Design and Construction Standards as Noted in Section 2514.03.

Glue: Per Manufacturer's Recommendations.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-13 ALT Supplier B
Project #:	Dusk Scheme	Item Description:	Carpet at Meeting Room
Issue Date:	06/23		
Revision(s):			

Item Quantity: sq yds

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: JJS

☐ Seaming Diagram	☐ Strike-Off	☐ Finish Sample	☐ Cutting	☐ Shop Dwgs	☐ Prototype	☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Installer to provide all materials and equipment for complete installation, seaming diagrams, and full carpet layouts for all areas per manufacturer's recommendations.

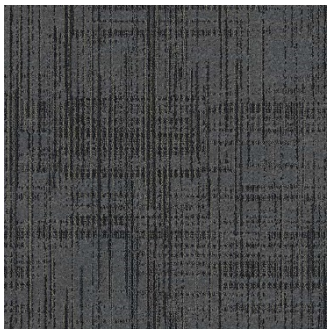
HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-14 Supplier A
Project #:	Dusk Scheme	Item Description:	Carpet at BOH & BOH Stair
Issue Date:	10/22		
Revision(s):			

Item Quantity: sq yds

Manufacturer: **Tarkett**
Address: 285 Kraft Drive
Dalton GA 30721-
Phone: (440) 903-4319 800# : (800) 871-3211
Other: (703) 919-4751
Contact: Jackie Passaro
E-mail: Jackie.Passaro@tarkett.com
Web: www.tarkett.com

Description:	Carpet at Back of House and BOH Stair
Style Number:	HS107
Color:	126
Width or Rug Size:	12'-0"
Type:	Dynamics – Servo Scroll Loop Tip Shear
Repeat:	24" x 24"
Content:	100% C.F. Lextron Enviro-Green Solution Dyed Nylon
Weight:	32 oz.
Primary Backing:	Woven Polypropylene
Secondary Backing:	Unitary Action Bac
Pile Height	.250 High, .187 Med, .062 Low
Gauge:	1/10
Stitches Per Inch:	10
Dye Method:	100% Solution Dyed
Installation Method:	Direct Glue
Flame Requirements:	ASTM E-648 Class I



Notes:

Glue: Per Manufacturer's Recommendation

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Strike-Off.

Manufacturer to Confirm the Carpet Meets Hilton Design and Construction Standards as Noted in Section 2514.03.

Glue: Per Manufacturer's Recommendations.

Manufacturer's Recommended Transition Strip: Profilitec; Color: Brushed Antique Bronze Aluminum Reference Prototype Drawings for Transition Detail.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-14 Supplier A
Project #:	Dusk Scheme	Item Description:	Carpet at BOH
Issue Date:	10/22		
Revision(s):			

Item Quantity: sq yds

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MT

☐ Seaming Diagram	☐ Strike-Off	☐ Finish Sample	☐ Cutting	☐ Shop Dwgs	☐ Prototype	☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Installer to provide all materials and equipment for complete installation, seaming diagrams, and full carpet layouts for all areas per manufacturer's recommendations.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-14 Supplier B
Project #:	Dusk Scheme	Item Description:	Carpet at BOH & BOH Stair
Issue Date:	10/22		
Revision(s):	02/23 Δ1		

Item Quantity: sq yds

Manufacturer: **Shaw Hospitality Group**

Address: 410 Old Mill Road
Cartersville GA 30120-

Phone: (301) 520-9360

Contact: David Burn
E-mail: dburn1@mac.com
Web: www.shawhospitality.com

Description:	Broadloom Carpet at Back of House and BOH Stair
Style Number:	BS589
Color:	11510
Width or Rug Size:	12'-0"
Type:	Multi-Level Pattern Cut/Loop
Repeat:	12"W x 18"L
Content:	100% Solution Dyed Nylon
Weight:	32 oz.
Primary Backing:	Woven Polypropylene
Secondary Backing:	Classicbac
Pile Height	0.287 in
Gauge:	1/10 in
Stitches Per Inch:	12 per inch
Dye Method:	100% Solution Dyed
Installation Method:	Direct Glue
Flame Requirements:	ASTM E-648 Class I

Notes:

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Strike-Off.

Manufacturer to Confirm the Carpet Meets Hilton Design and Construction Standards as Noted in Section 2514.03.

Glue: Per Manufacturer's Recommendations.

Manufacturer's Recommended Transition Strip: Profilitec; Color: Brushed Antique Bronze Aluminum Reference Prototype Drawings for Transition Detail.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CP-14 Supplier B
Project #:	Dusk Scheme	Item Description:	Carpet at BOH & BOH Stair
Issue Date:	10/22		
Revision(s):	02/23 Δ1		

Item Quantity: sq yds

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MT

☐ Seaming Diagram	☐ Strike-Off	☐ Finish Sample	☐ Cutting	☐ Shop Dwgs	☐ Prototype	☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Installer to provide all materials and equipment for complete installation, seaming diagrams, and full carpet layouts for all areas per manufacturer's recommendations.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CPP-01 Supplier B
Project #:	Dusk Scheme	Item Description:	Carpet Pad at Guest Room
Issue Date:	04/19/21		
Revision(s):	06/2023 Δ 2		

Item Quantity: sq yds

Manufacturer: **Shaw Hospitality Group**

Address: 410 Old Mill Road
Cartersville GA
30120-

Phone: (301) 520-9360

Contact: David Burn

E-mail: dburn1@mac.com

Web: www.shawhospitality.com

Description:	Carpet Padding to be Used with Broadloom Carpet in Guestrooms.
Style Number:	132FS
Style Name:	Fiber Select
Width or Rug Size:	Reference Inset Size of Drawings
Content:	Synthetic Fiber
Weight:	32 oz.
Height	0.312"
Installation Method:	Stretch-in
Flame Requirements:	See Notes

Notes:

Manufacturer to Confirm the Carpet Pad Meets Hilton Design and Construction Standards as Noted in Section 2514.03.

Impact Insulation Class Rating: 55-75

Radiant Panel: Must Be Tested in Accordance with the Approved Installation Instructions.

NBS Smoke Density: <450

Glue: Per Manufacturer's Recommendations.

Density: 4.01 lbs. /ft3

Carpet Pad to Only Be Used with Manufacturer's Own Product.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CPP-01 Supplier B
Project #:	Dusk Scheme	Item Description:	Carpet Pad at Guest Room
Issue Date:	04/19/21		
Revision(s):	06/2023 Δ 2		

Item Quantity: sq yds

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Installer to provide all materials and equipment for complete installation, seaming diagrams, and full carpet layouts for all areas per manufacturer's recommendations.

Must meet or exceed all Fire Hazard/Flammability codes. If applicable codes do not address carpet and pad it must at minimum meet NFPA 253 (ASTM E 648).

Must be treated for soil and stain repellency. Moth and mildew proofed.

Manufacturer to clearly mark each carton with item ID and specification number.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CPP-01 Supplier C
Project #:	Dusk Scheme	Item Description:	Carpet Pad at Guest Room
Issue Date:	04/19/21		
Revision(s):	10/22 Δ 2		

Item Quantity: sq yds

Manufacturer: **Sponge Cushion, Inc.**

Address: 902 Armstrong Street
Morris IL 60450-

Phone: (815) 942-2300 800# : (800) 435-4062

Contact: Vinny Dimino

E-mail: vinny.dimino@sponge-cuhsion.com

Web: www.commercial-carpetcushion.com

Description:	Carpet Padding to be Used with Broadloom Carpet in Guestrooms.
Style Number:	BV0147
Style Name:	Contract Master
Color:	Black
Width or Rug Size:	Reference Inset Size on Drawings
Content:	Synthetic Rubber
Weight:	64 Oz.
Height	0.260"
Flame Requirements:	ASTM E-648

Notes:

Manufacturer to Confirm the Mirror Meets Hilton Design and Construction Standards as Noted in Section 2514.03.

Contract Master is stretch in installation only; glue should never be used.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Installer to provide all materials and equipment for complete installation, seaming diagrams, and full carpet layouts for all areas per manufacturer's recommendations.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CPP-01 Supplier C
Project #:	Dusk Scheme	Item Description:	Carpet Pad at Guest Room
Issue Date:	04/19/21		
Revision(s):	10/22 Δ 2		

Item Quantity: sq yds

Instructions:

Must meet or exceed all Fire Hazard/Flammability codes. If applicable codes do not address carpet and pad it must at minimum meet NFPA 253 (ASTM E 648).

Must be treated for soil and stain repellency. Moth and mildew proofed.

Manufacturer to clearly mark each carton with item ID and specification number.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CPP-10 Supplier B
Project #:	Dusk Scheme	Item Description:	Carpet Pad at Public Space and Guest Corridor
Issue Date:	04/19/21		
Revision(s):	05/11/21 Δ 1		

Item Quantity: sq yds

Manufacturer: **Shaw Hospitality Group**

Address: 410 Old Mill Road
Cartersville GA
30120-

Phone: (301) 520-9360

Contact: David Burn

E-mail: dburn1@mac.com

Web: www.shawhospitality.com

Description:	Carpet Padding to be Used with Broadloom Carpet in Guest Corridor and Public Area.
Style Number:	DW206
Style Name:	Dura-Worx
Width or Rug Size:	Reference Inset Size on Drawings
Content:	Polyurethane
Weight:	47 Oz.
Height	0.20 in.
Installation Method:	Double Glue Down
Flame Requirements:	ASTM E-684

Notes:

Manufacturer to Confirm the Carpet Pad Meets Hilton Design and Construction Standards as Noted in Section 2514.03.

Roll Size: 30 sq. yd.

Glue: Per Manufacturer's Recommendations.

Density: 19 lbs./sq yd

Carpet Pad to Only Be Used with Manufacturer's Own Product.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CPP-10 Supplier B
Project #:	Dusk Scheme	Item Description:	Carpet Pad at Public Space and Guest Corridor
Issue Date:	04/19/21		
Revision(s):	05/11/21 Δ 1		

Item Quantity: sq yds

Instructions:

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Installer to provide all materials and equipment for complete installation, seaming diagrams, and full carpet layouts for all areas per manufacturer's recommendations.

Must meet or exceed all Fire Hazard/Flammability codes. If applicable codes do not address carpet and pad it must at minimum meet NFPA 253 (ASTM E 648).

Must be treated for soil and stain repellency. Moth and mildew proofed.

Manufacturer to clearly mark each carton with item ID and specification number.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CPP-10 Supplier C
Project #:	Dusk Scheme	Item Description:	Carpet Pad at Public Space and Guest Corridor
Issue Date:	04/19/21		
Revision(s):	10/22 Δ 2		

Item Quantity: sq yds

Manufacturer: **Sponge Cushion, Inc.**

Address: 902 Armstrong Street
Morris IL 60450-

Phone: (815) 942-2300 800# : (800) 435-4062

Contact: Vinny Dimino

E-mail: vinny.dimino@sponge-cuhsion.com

Web: www.commercial-carpetcushion.com

Description:	Carpet Padding to be Used with Broadloom Carpet in Guest Corridor and Public Area.
Style Number:	Tredmor 2568
Style Name:	Tredmor 2568
Color:	Black
Width or Rug Size:	Reference Inset Size on Drawings
Content:	Synthetic Rubber
Weight:	68 Oz.
Secondary Backing:	Poly-Tek
Height	0.25"
Flame Requirements:	Class II

Notes:

Manufacturer to Confirm the Carpet Pad Meets Hilton Design and Construction Standards as Noted in Section 2514.03.

Glue: Per Manufacturer's Recommendations.

Impact Insulation Class: 75 (ASTM-492)

Impact Noise Rating: 24 (ASTM-492)

Sound Absorption: 0.35 (ASTM-C423-81)

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CPP-10 Supplier C
Project #:	Dusk Scheme	Item Description:	Carpet Pad at Public Space and Guest Corridor
Issue Date:	04/19/21		
Revision(s):	10/22 Δ 2		

Item Quantity: sq yds

Instructions:

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Installer to provide all materials and equipment for complete installation, seaming diagrams, and full carpet layouts for all areas per manufacturer's recommendations.

Must meet or exceed all Fire Hazard/Flammability codes. If applicable codes do not address carpet and pad it must at minimum meet NFPA 253 (ASTM E 648).

Must be treated for soil and stain repellency. Moth and mildew proofed.

Manufacturer to clearly mark each carton with item ID and specification number.

HOMEWOOD SUITES by Hilton

Project Name: Homewood Suites Dusk Finish Specifications Item Number: (B) CT-01 Supplier A

Project #: Dusk Scheme Item Description: Tile at Guest Bathroom Floor

Issue Date: 04/19/21

Revision(s): 09/2023 Δ 2

Item Quantity: ea

Manufacturer: **Ceramic Technics**

Address: 1298 Old Alpharetta Road
Alpharetta GA 30005-

Phone: (901) 921-8281 800# : (844) 303-7274

Fax: (770) 740-1199

Contact: Carly Kuyper

E-mail: hilton@ceramictechnics.com

Web: www.ceramictechnics.com

Product: Luserna Stream

Color/Finish: Grigio

Size/Dimensions: 12″ x 24″ x 3/8" Rectified

Slip Resistance: See Notes Below

Grout: Laticrete International, Inc.; 89 Smoke Grey, See Notes

Edge Detail: Rectified

Notes: Coefficient of Friction: DCOF greater than or equal to 0.42

Grout Lines: 1/8" grout joint thickness

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Installation: Refer to Architectural Prototype Drawings for Installation Pattern. Advanced High-Performance Grout or Epoxy Based Grout is Highly Recommended.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: JJS

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

HOMEWOOD SUITES by Hilton

Project Name: Homewood Suites Dusk Finish Specifications

Item Number: (B) CT-01 Supplier A

Project #: Dusk Scheme

Item Description: Tile at Guest Bathroom Floor

Issue Date: 04/19/21

Revision(s): 09/2023 Δ 2

Item Quantity: ea

Instructions:

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Grout to include clear matte sealer.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CT-01 Supplier B
Project #:	Dusk Scheme	Item Description:	Tile at Guest Bathroom Floor
Issue Date:	03/2022		
Revision(s):			

Item Quantity: ea

Manufacturer:	**Dal-Tile**
Address:	7834 C.F. Hawn Freeway Dallas, Texas 75217
Phone:	(214) 309-4531
Contact:	Morgan Stephenson
E-mail:	hospitality@daltile.com
Web:	www.daltile.com

Product:	VOLUME 1.0™ Glazed Porcelain Tile with StepWise™ Technology
Color/Finish:	Electric Moss VL79
Size/Dimensions:	12”W x 24”L x 5/16" Thickness
Slip Resistance:	≥ 0.60
Grout:	Laticrete International, Inc.; 89 Smoke Grey, See Notes

Notes:

Grout Joint Recommendation: 3/16" (Overlap should not exceed 33% when installing tile with a length 15" or greater in a staggered brick-joint pattern.)

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Installation: Refer to Architectural Prototype Drawings for Installation Pattern. Advanced High-Performance Grout or Epoxy Based Grout is Highly Recommended.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CT-01 Supplier B
Project #:	Dusk Scheme	Item Description:	Tile at Guest Bathroom Floor
Issue Date:	03/2022		

Item Quantity: ea

Instructions:

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Grout to include clear matte sealer.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CT-01.1 Supplier A
Project #:	Dusk Scheme	Item Description:	Tile Base at Guest Bathroom
Issue Date:	04/19/21		
Revision(s):	09/2023 Δ 2		

Item Quantity: ea

Manufacturer: **Ceramic Technics**

Address: 1298 Old Alpharetta Road
Alpharetta GA 30005-

Phone: (901) 921-8281 800# : (844) 303-7274

Fax: (770) 740-1199

Contact: Carly Kuyper

E-mail: hilton@ceramictechnics.com

Web: www.ceramictechnics.com

Product:	Luserna Stream
Color/Finish:	Grigio
Size/Dimensions:	4”W x 24”W x 3/8" Rectified
Slip Resistance:	See Notes Below
Grout:	Laticrete International, Inc.; 89 Smoke Grey, See Notes
Edge Detail:	Factory Finished or GC Finished Bullnose Edge
Notes:	Coefficient of Friction: DCOF greater than or equal to 0.42 Grout Lines: 1/8" grout joint thickness Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample. Installation: Refer to Architectural Prototype Drawings for Installation Pattern. Advanced High-Performance Grout or Epoxy Based Grout is Highly Recommended.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MT

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CT-01.1 Supplier A
Project #:	Dusk Scheme	Item Description:	Tile Base at Guest Bathroom
Issue Date:	04/19/21		
Revision(s):	09/2023 Δ 2		

Item Quantity: ea

Instructions:

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Grout to include clear matte sealer.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CT-01.1 Supplier B
Project #:	Dusk Scheme	Item Description:	Tile Base at Guest Bathroom
Issue Date:	03/2022		
Revision(s):			

Item Quantity: ea

Manufacturer:	**Dal-Tile**
Address:	7834 C.F. Hawn Freeway Dallas, Texas 75217
Phone:	(214) 309-4531
Contact:	Morgan Stephenson
E-mail:	hospitality@daltile.com
Web:	www.daltile.com

Product:	VOLUME 1.0™ Glazed Porcelain Tile with StepWise™ Technology Base
Color/Finish:	Electric Moss VL79
Size/Dimensions:	4″H x 24″W x 5/16" Thickness
Slip Resistance:	≥ 0.60
Grout:	Laticrete International, Inc.; 89 Smoke Grey, See Notes

Notes:

Grout Joint Recommendation: 3/16" (Overlap should not exceed 33% when installing tile with a length 15" or greater in a staggered brick-joint pattern.)

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Installation: Refer to Architectural Prototype Drawings for Installation Pattern. Advanced High-Performance Grout or Epoxy Based Grout is Highly Recommended.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MT

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CT-01.1 Supplier B
Project #:	Dusk Scheme	Item Description:	Tile Base at Guest Bathroom
Issue Date:	03/2022		
Item Quantity:	ea		

Instructions:

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Grout to include clear matte sealer.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CT-10 Supplier A
Project #:	Dusk Scheme	Item Description:	Tile at Public Space Floor
Issue Date:	04/19/21		
Revision(s):	09/2023 Δ 2		

Item Quantity: ea

Manufacturer: **Ceramic Technics**

Address: 1298 Old Alpharetta Road
Alpharetta GA 30005-

Phone: (901) 921-8281 800# : (844) 303-7274

Fax: (770) 740-1199

Contact: Carly Kuyper

E-mail: hilton@ceramictechnics.com

Web: www.ceramictechnics.com

Product:	Luserna Stream
Color/Finish:	Grigio
Size/Dimensions:	24" x 24" x 3/8" Rectified
Slip Resistance:	See Notes Below
Grout:	Laticrete International, Inc.; 89 Smoke Grey, See Notes
Edge Detail:	Rectified
Notes:	Coefficient of Friction: DCOF greater than or equal to 0.42 Grout Lines: 1/8" grout joint thickness Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample. Installation: Refer to Architectural Prototype Drawings for Installation Pattern. Advanced High-Performance Grout or Epoxy Based Grout is Highly Recommended.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: JJS

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CT-10 Supplier A
Project #:	Dusk Scheme	Item Description:	Tile at Public Space Floor
Issue Date:	04/19/21		
Revision(s):	09/2023 Δ 2		

Item Quantity: ea

Instructions:

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Grout to include clear matte sealer.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CT-10 Supplier B
Project #:	Dusk Scheme	Item Description:	Tile at Public Space Floor
Issue Date:	03/2022		
Revision(s):			

Item Quantity: ea

Manufacturer:	**Dal-Tile**
Address:	7834 C.F. Hawn Freeway Dallas, Texas 75217
Phone:	(214) 309-4531
Contact:	Morgan Stephenson
E-mail:	hospitality@daltile.com
Web:	www.daltile.com

Product:	VOLUME 1.0™ Glazed Porcelain Tile with StepWise™ Technology
Color/Finish:	Electric Moss VL79
Size/Dimensions:	24” x 24”x 5/16" Thickness
Slip Resistance:	≥ 0.60
Grout:	Laticrete International, Inc.; 89 Smoke Grey, See Notes

Notes:

Grout Joint Recommendation: 3/16" (Overlap should not exceed 33% when installing tile with a length 15" or greater in a staggered brick-joint pattern.)

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Installation: Refer to Architectural Prototype Drawings for Installation Pattern. Advanced High-Performance Grout or Epoxy Based Grout is Highly Recommended.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CT-10 Supplier B
Project #:	Dusk Scheme	Item Description:	Tile at Public Space Floor
Issue Date:	03/2022		

Item Quantity: ea

Instructions:

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Grout to include clear matte sealer.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CT-10.1 Supplier A
Project #:	Dusk Scheme	Item Description:	Tile Base at Public RR & Laundry
Issue Date:	04/19/21		
Revision(s):	09/2023 Δ 2		

Item Quantity: ea

Manufacturer: **Ceramic Technics**

Address: 1298 Old Alpharetta Road
Alpharetta GA 30005

Phone: (901) 921-8281 800# : (844) 303-7274

Fax: (770) 740-1199

Contact: Carly Kuyper

E-mail: hilton@ceramictechnics.com

Web: www.ceramictechnics.com

Product:	Luserna Stream
Color/Finish:	Grigio
Size/Dimensions:	4"H x 24"W x 3/8" Rectified
Slip Resistance:	See Notes Below
Grout:	Laticrete International, Inc.; 89 Smoke Grey, See Notes
Edge Detail:	Factory Finished Exposed Edge
Notes:	Coefficient of Friction: DCOF greater than or equal to 0.42 Grout Lines: 1/8" grout joint thickness Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample. Installation: Refer to Architectural Prototype Drawings for Installation Pattern. Advanced High-Performance Grout or Epoxy Based Grout is Highly Recommended.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MT

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CT-10.1 Supplier A
Project #:	Dusk Scheme	Item Description:	Tile Base at Public RR & Laundry
Issue Date:	04/19/21		
Revision(s):	09/2023 Δ 2		

Item Quantity: ea

Instructions:

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Grout to include clear matte sealer.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CT-10.1 Supplier B
Project #:	Dusk Scheme	Item Description:	Tile Base at Public RR & Laundry
Issue Date:	03/2022		
Revision(s):			

Item Quantity: ea

Manufacturer: **Dal-Tile**
Address: 7834 C.F. Hawn Freeway
Dallas, Texas 75217
Phone: (214) 309-4531
Contact: Morgan Stephenson
E-mail: hospitality@daltile.com
Web: www.daltile.com

Product: VOLUME 1.0™ Glazed Porcelain Tile with StepWise™ Technology Base
Color/Finish: Electric Moss VL79
Size/Dimensions: 4" x 24"x 5/16" Thickness
Slip Resistance: ≥ 0.60
Grout: Laticrete International, Inc.; 89 Smoke Grey, See Notes

Notes:

Grout Joint Recommendation: 3/16" (Overlap should not exceed 33% when installing tile with a length 15" or greater in a staggered brick-joint pattern.)

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Installation: Refer to Architectural Prototype Drawings for Installation Pattern. Advanced High-Performance Grout or Epoxy Based Grout is Highly Recommended.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MT

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

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Must be of contract quality and suitable for commercial use.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CT-10.1 Supplier B
Project #:	Dusk Scheme	Item Description:	Tile Base at Public RR & Laundry
Issue Date:	03/2022		

Item Quantity: ea

Instructions:

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Grout to include clear matte sealer.

HOMEWOOD SUITES by Hilton

Project Name: Homewood Suites Dusk Finish Specifications
Project #: Dusk Scheme
Issue Date: 04/19/21

Item Number: (B) CT-11 Supplier A
Item Description: Tile at Public Restroom Walls

Revision(s): 09/202 Δ 2

Item Quantity: ea

Manufacturer: **Ceramic Technics**
Address: 1298 Old Alpharetta Road
Alpharetta GA 30005-

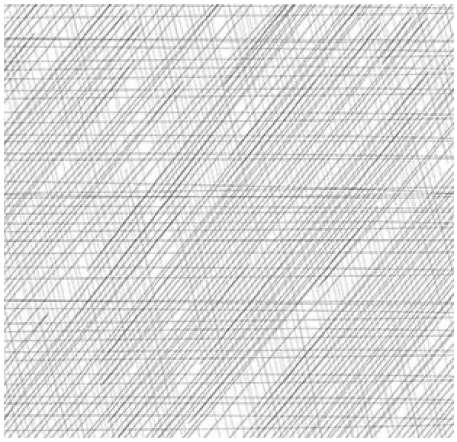
Phone: (901) 921-8281 800# : (844) 303-7274
Fax: (770) 740-1199
Contact: Carly Kuyper

E-mail: hilton@ceramictechnics.com
Web: www.ceramictechnics.com

Product: Firenze Abstract
Color/Finish: Black

Size/Dimensions: 39" x 39"

Grout: Custom Building Products; 381 Bright White, See Notes



Notes:

Grout Lines: 1/8" grout joint thickness Unless

Using A Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Installation: Refer to Architectural Prototype Drawings for Installation Pattern. Advanced High-Performance Grout or Epoxy Based Grout is Highly Recommended.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: JJS

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Grout to include clear matte sealer.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CT-11 Supplier B
Project #:	Dusk Scheme	Item Description:	Tile at Public Restroom Walls
Issue Date:	03/2022		
Revision(s):			

Item Quantity: ea

Manufacturer:	**Dal-Tile**
Address:	7834 C.F. Hawn Freeway Dallas, Texas 75217
Phone:	(214) 309-4531
Contact:	Morgan Stephenson
E-mail:	hospitality@daltile.com
Web:	www.daltile.com

Product:	MY CITY™ London Color-body™ Porcelain Tile
Color/Finish:	Piccadilly Concrete, Matte LD15
Size/Dimensions:	12" x 24" x 5/16" Thickness
Grout:	Custom Building Products; 381 Bright White, See Notes
Notes:	Grout Lines: 1/8" grout joint thickness Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample. Installation: Refer to Architectural Prototype Drawings for Installation Pattern. Advanced High-Performance Grout or Epoxy Based Grout is Highly Recommended.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Grout to include clear matte sealer.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CT-12 Supplier A
Project #:	Dusk Scheme	Item Description:	Tile at Central Hub Tap Wall
Issue Date:	04/19/21		
Revision(s):	09/2023 Δ 2		

Item Quantity: ea

Manufacturer: **Ceramic Technics**

Address: 1298 Old Alpharetta Road
Alpharetta GA 30005-

Phone: (901) 921-8281 800# : (844) 303-7274

Fax: (770) 740-1199

Contact: Carly Kuyper

E-mail: hilton@ceramictechnics.com

Web: www.ceramictechnics.com

Product: Scandiano Picket

Color/Finish: Storm, Glossy

Size/Dimensions: 3" x 12" x 3/8" Picket

Grout: Laticrete International, Inc.; 89 Smoke Grey, See Notes

Notes: Grout Lines: 1/8" grout joint thickness

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Installation: Refer to Architectural Prototype Drawings for Installation Pattern. Advanced High-Performance Grout or Epoxy Based Grout is Highly Recommended.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: JJS

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Grout to include clear matte sealer.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CT-12 Supplier B
Project #:	Dusk Scheme	Item Description:	Tile at Central Hub Tap Wall
Issue Date:	03/2022		
Revision(s):			

Item Quantity: ea

Manufacturer:	**Dal-Tile**
Address:	7834 C.F. Hawn Freeway Dallas, Texas 75217
Phone:	(214) 309-4531
Contact:	Morgan Stephenson
E-mail:	hospitality@daltile.com
Web:	www.daltile.com

Product:	MYTHOLOGY™ Wave crest Glazed Ceramic Wall Tile Aura
Color/Finish:	MY95 Gloss
Size/Dimensions:	4" x 12"x 3/8"Thk
Grout:	Laticrete International, Inc.; 89 Smoke Grey, See Notes

Notes:

Grout Lines: Grout Joints 1/16" (Straight Joint Installation only)

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Installation: Refer to Architectural Prototype Drawings for Installation Pattern. Advanced High-Performance Grout or Epoxy Based Grout is Highly Recommended.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Grout to include clear matte sealer.

HOMEWOOD SUITES by Hilton

Project Name: Homewood Suites Dusk Finish Specifications
Project #: Dusk Scheme
Issue Date: 04/19/21

Item Number: (B) CT-13 Supplier A
Item Description: Tile at Central Hub Retail Wall

Revision(s): 09/2023 Δ 2

Item Quantity: ea

Manufacturer: **Ceramic Technics**
Address: 1298 Old Alpharetta Road
Alpharetta GA 30005-
Phone: (901) 921-8281
Fax:
Contact: Carly Kuyper
E-mail: hilton@ceramictechnics.com
Web: www.ceramictechnics.com

Product: Studio Elements Basic
Color/Finish: White Glossy

Size/Dimensions: 4" x 12"

Grout: Custom Building Products; 381 Bright White, See Notes

Notes: Grout Lines: 1/8" grout joint thickness

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Installation: Refer to Architectural Prototype Drawings for Installation Pattern. Advanced High-Performance Grout or Epoxy Based Grout is Highly Recommended.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: JJS

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Grout to include clear matte sealer.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CT-13 Supplier B
Project #:	Dusk Scheme	Item Description:	Tile at Central Hub Retail Wall
Issue Date:	03/2022		
Revision(s):			

Item Quantity: ea

Manufacturer:	**Dal-Tile**
Address:	7834 C.F. Hawn Freeway Dallas, Texas 75217
Phone:	(214) 309-4531
Contact:	Morgan Stephenson
E-mail:	hospitality@daltile.com
Web:	www.daltile.com

Product:	Color Wheel Linear Glazed Ceramic Wall Tile Arctic
Color/Finish:	White 0190
Size/Dimensions:	4"H x 12"W x 5/16" Thickness
Grout:	Custom Building Products; 381 Bright White, See Notes
Notes:	Grout Lines: 1/16" (When rectangular size is installed in a staggered brick joint pattern, overlap should not exceed 33%. Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample. Installation: Refer to Architectural Prototype Drawings for Installation Pattern. Advanced High-Performance Grout or Epoxy Based Grout is Highly Recommended.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Grout to include clear matte sealer.

HOMEWOOD SUITES by Hilton

Project Name: Homewood Suites Dusk Finish Specifications
Project #: Dusk Scheme
Issue Date: 04/19/21

Item Number: (B) CT-14 Supplier A
Item Description: Tile at Backyard Grill Area

Revision(s): 09/2023 Δ 2

Item Quantity: ea

Manufacturer: **Ceramic Technics**
Address: 1298 Old Alpharetta Road
Alpharetta GA 30005-
Phone: (901) 921-8281
Fax:
Contact: Carly Kuyper
E-mail: hilton@ceramictechnics.com
Web: www.ceramictechnics.com

Product: San Marino USA Encaustic Patterns
Color/Finish: Brickell

Size/Dimensions: 8" x 8"

Grout: Custom Building Products; 335 Winter Gray, See Notes

Notes: Grout Lines: 1/8" grout joint thickness Unless

Using a Specified Manufacturer, The
Following Item(s) are Required to be Submitted for Approval
Prior to Fabrication: Finish Sample.

Installation: Refer to Architectural Prototype Drawings
for Installation Pattern. Advanced High-Performance
Grout or Epoxy Based Grout is Highly Recommended.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: JJS

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Grout to include clear matte sealer.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) CT-14 Supplier B
Project #:	Dusk Scheme	Item Description:	Tile at Backyard Grill Area
Issue Date:	03/2022		
Revision(s):			

Item Quantity: ea

Manufacturer:	**Dal-Tile**
Address:	7834 C.F. Hawn Freeway Dallas, Texas 75217
Phone:	(214) 309-4531
Contact:	Morgan Stephenson
E-mail:	hospitality@daltile.com
Web:	www.daltile.com

Product:	D_SEGNI – Glazed Porcelain
Color/Finish:	Birdseye Denim Blend MOUE- Matte 8" x
Size/Dimensions:	8" x 3/8"Thk
Grout:	Custom Building Products; 335 Winter Gray, See Notes
Notes:	Grout Lines: 3/16" grout joint thickness Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample. Installation: Refer to Architectural Prototype Drawings for Installation Pattern. Advanced High-Performance Grout or Epoxy Based Grout is Highly Recommended.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Grout to include clear matte sealer.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) PL-01
Project #:	Dusk Scheme	Item Description:	Plastic Laminate - Textured
Issue Date:	04/19/21		
Revision(s):	06/2023 Δ1		

Item Quantity: ea

Manufacturer: **Wilsonart**

Address: 2501 Wilsonart Drive
Temple TX 76503-6110

Phone: 917.951.6524

Contact: Amy Morgenweck

Email: morgena@wilsonart.com

Web: www.wilsonartlaminate.com

Product: 4991K-19

Color/Finish: Pressed Linen - Leno Weave with Aeon™

Notes: Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Refer to Architectural Prototype Drawings for Locations.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: JJS

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by contractor prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) PL-03
Project #:	Dusk Scheme	Item Description:	Plastic Laminate - Black
Issue Date:	04/19/21		
Revision(s):	06/2023		

Item Quantity: ea

Manufacturer: **Wilsonart**

Address: 2501 Wilsonart Drive
Temple TX 76503-6110

Phone: 917.951.6524

Contact: Amy Morgenweck

Email: morgena@wilsonart.com

Web: www.wilsonartlaminate.com

Product: 1595K-18

Color/Finish: Black - Linearity Finish with Aeon™

Notes: Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Refer to Architectural Prototype Drawings for Locations.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: JJS

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by contractor prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) PL-04
Project #:	Dusk Scheme	Item Description:	Plastic Laminate - Dark Wood
Issue Date:	04/19/21		
Revision(s):			

Item Quantity: ea

Manufacturer: **Wilsonart**

Address: 2501 Wilsonart Drive
Temple TX 76503-6110

Phone: 917.951.6524

Contact: Amy Morgenweck

Email: morgena@wilsonart.com

Web: www.wilsonartlaminate.com

Product: 7991K-12

Color/Finish: Neo Walnut - Soft Grain Finish with Aeon™

Notes: Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Refer to Architectural Prototype Drawings for Locations.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: JJS

☐ Seaming Diagram	☐ Strike-Off	☐ Finish Sample	☐ Cutting	☐ Shop Dwgs	☐ Prototype	☐ Flame Certificate

Instructions:

All quantities to be verified by contractor prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) PL-05
Project #:	Dusk Scheme	Item Description:	Plastic Laminate - Textured
Issue Date:	04/19/21		
Revision(s):			

Item Quantity: ea

Manufacturer: **Wilsonart**

Address: 2501 Wilsonart Drive
Temple TX 76503-6110

Phone: 917.951.6524

Contact: Amy Morgenweck

Email: morgena@wilsonart.com

Web: www.wilsonartlaminate.com

Product: 4943-38

Color/Finish: Classic Linen - Fine Velvet Finish with Aeon™

Notes: Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Refer to Architectural Prototype Drawings for Locations.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: JJS

☐ Seaming Diagram	☐ Strike-Off	☐ Finish Sample	☐ Cutting	☐ Shop Dwgs	☐ Prototype	☐ Flame Certificate

Instructions:

All quantities to be verified by contractor prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) PL-06
Project #:	Dusk Scheme	Item Description:	Plastic Laminate – Black (at Suite Shop)
Issue Date:	09/2023		
Revision(s):			

Item Quantity: ea

Manufacturer: **Wilsonart**

Address: 2501 Wilsonart Drive
Temple TX 76503-6110

Phone: 917.951.6524

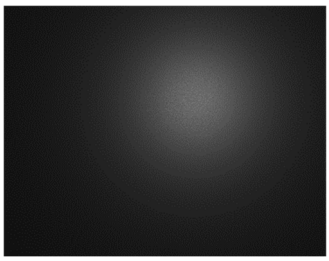
Contact: Amy Morgenweck

Email: morgena@wilsonart.com

Web: www.wilsonartlaminate.com

Product: 1595-38

Color/Finish: Black - Fine Velvet Finish with Aeon™



Notes: Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Refer to Architectural Prototype Drawings for Locations.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: JK

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by contractor prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) PT-01
Project #:	Dusk Scheme	Item Description:	Ceilings Throughout
Issue Date:	04/19/21		
Revision(s):			

Item Quantity: ea

Manufacturer: **Sherwin-Williams**

Address: 101 W. Prospect Ave.
Cleveland OH 44115-

Phone: (800) 474-3794

Fax: (216) 566-1660

Contact: Customer Service

Web: www.sherwin-williams.com

Product: Pro-Mar 200 Zero VOC

Color/Finish: SW 7005 Pure White - Flat

Notes: Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Refer to Manufacturer's Recommended Installation Instructions.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

Painter required to use 1 coat primer 2 coats paint minimum.

All paints to be low VOC.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Manufacturer to clearly mark each carton with item ID and specification number.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) PT-03
Project #:	Dusk Scheme	Item Description:	Guest Suite Trim, Valance, Interior Doors and VTAC Unit
Issue Date:	04/19/21		
Revision(s):			

Item Quantity: ea

Manufacturer: **Sherwin-Williams**

Address: 101 W. Prospect Ave.
Cleveland OH 44115-

Phone: 800# : (800) 474-3794

Fax: (216) 566-1660

Contact: Customer Service

Web: www.sherwin-williams.com

Product: Pro-Mar 200 Zero VOC

Color/Finish: SW 7667 Zircon - Semi-Gloss

Notes: Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Refer to Manufacturer's Recommended Installation Instructions.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

Painter required to use 1 coat primer 2 coats paint minimum.

All paints to be low VOC.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Manufacturer to clearly mark each carton with item ID and specification number.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) PT-04
Project #:	Dusk Scheme	Item Description:	Powder Coat Finish
Issue Date:	04/19/21		
Revision(s):			

Item Quantity: ea

Manufacturer: **TIGER Drylac U.S.A., Inc.**

Address: 3945 Swenson Ave.
St. Charles IL 60174-

Phone: 800# : (800) 243-8148

Fax: (877) 243-8148

Contact: Customer Service

E-mail: customerservice.us(at)tiger-coatings.us

Web: www.tiger-coatings.com

Product: Stellix Bonded Metallic Powder Coating

Color/Finish: APRX to RAL 9007 Silver Gloss, 49/92880

Notes: Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Refer to Manufacturer's Recommended Installation Instructions.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

Painter required to use 1 coat primer 2 coats paint minimum.

All paints to be low VOC.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Manufacturer to clearly mark each carton with item ID and specification number.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) PT-05
Project #:	Dusk Scheme	Item Description:	Powder Coat Finish
Issue Date:	04/19/21		
Revision(s):			

Item Quantity: ea

Manufacturer: **TIGER Drylac U.S.A., Inc.**

Address: 3945 Swenson Ave.
St. Charles IL 60174-

Phone: 800# : (800) 243-8148

Fax: (877) 243-8148

Contact: Customer Service

E-mail: customerservice.us(at)tiger-coatings.us

Web: www.tiger-coatings.com

Product: Stellix Bonded Metallic Powder Coating

Color/Finish: Low Lights Bronze, 49/61120

Notes: Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Refer to Manufacturer's Recommended Installation Instructions.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

Painter required to use 1 coat primer 2 coats paint minimum.

All paints to be low VOC.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Manufacturer to clearly mark each carton with item ID and specification number.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) PT-10
Project #:	Dusk Scheme	Item Description:	Guest Corridor Exterior Wall
Issue Date:	04/19/21		
Revision(s):			

Item Quantity: ea

Manufacturer: **Sherwin-Williams**

Address: 101 W. Prospect Ave.
Cleveland OH 44115-

Phone: 800# : (800) 474-3794

Fax: (216) 566-1660

Contact: Customer Service

Web: www.sherwin-williams.com

Product: Pro-Mar 200 Zero VOC Low Gloss Eg-Shel

Color/Finish: SW 7072 Online

Notes: Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Refer to Manufacturer's Recommended Installation Instructions.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

Painter required to use 1 coat primer 2 coats paint minimum.

All paints to be low VOC.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Manufacturer to clearly mark each carton with item ID and specification number.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) PT-11
Project #:	Dusk Scheme	Item Description:	Guest Corridor Service Doors, Access Panels and Trim
Issue Date:	04/19/21		
Revision(s):			

Item Quantity: ea

Manufacturer: **Sherwin-Williams**

Address: 101 W. Prospect Ave.
Cleveland OH 44115-

Phone: 800# : (800) 474-3794

Fax: (216) 566-1660

Contact: Customer Service

Web: www.sherwin-williams.com

Product: Pro-Mar 200 Zero VOC Semi-Gloss

Color/Finish: SW 7072 Online

Notes: Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Refer to Manufacturer's Recommended Installation Instructions.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

Painter required to use 1 coat primer 2 coats paint minimum.

All paints to be low VOC.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Manufacturer to clearly mark each carton with item ID and specification number.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) PT-12
Project #:	Dusk Scheme	Item Description:	Central Hub Exterior Wall
Issue Date:	04/19/21		
Revision(s):			

Item Quantity: ea

Manufacturer: **Sherwin-Williams**

Address: 101 W. Prospect Ave.
Cleveland OH 44115-

Phone: 800# : (800) 474-3794

Fax: (216) 566-1660

Contact: Customer Service

Web: www.sherwin-williams.com

Product: Pro-Mar 200 Zero VOC Low Gloss Eg-Shel

Color/Finish: SW 7064 Passive

Notes: Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Refer to Manufacturer's Recommended Installation Instructions.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

Painter required to use 1 coat primer 2 coats paint minimum.

All paints to be low VOC.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Manufacturer to clearly mark each carton with item ID and specification number.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) PT-13
Project #:	Dusk Scheme	Item Description:	Guest Laundry Exterior Wall
Issue Date:	04/19/21		
Revision(s):			

Item Quantity: ea

Manufacturer: **Sherwin-Williams**

Address: 101 W. Prospect Ave.
Cleveland OH 44115-

Phone: 800# : (800) 474-3794

Fax: (216) 566-1660

Contact: Customer Service

Web: www.sherwin-williams.com

Product: Pro-Mar 200 Zero VOC Low Gloss
Eg-Shel

Color/Finish: SW 7604 Smoky Blue

Notes: Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Refer to Manufacturer's Recommended Installation Instructions.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

Painter required to use 1 coat primer 2 coats paint minimum.

All paints to be low VOC.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Manufacturer to clearly mark each carton with item ID and specification number.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) PT-14
Project #:	Dusk Scheme	Item Description:	Fitness Exterior Wall
Issue Date:	04/19/21		
Revision(s):			

Item Quantity: ea

Manufacturer: **Sherwin-Williams**

Address: 101 W. Prospect Ave.
Cleveland OH 44115-

Phone: 800# : (800) 474-3794

Fax: (216) 566-1660

Contact: Customer Service

Web: www.sherwin-williams.com

Product: Pro-Mar 200 Zero VOC Low Gloss Eg-Shel

Color/Finish: SW 9152 Let it Rain

Notes: Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Refer to Manufacturer's Recommended Installation Instructions.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

Painter required to use 1 coat primer 2 coats paint minimum.

All paints to be low VOC.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Manufacturer to clearly mark each carton with item ID and specification number.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) PT-15
Project #:	Dusk Scheme	Item Description:	Central Hub Base/Hold Open Doors
Issue Date:	04/19/21		
Revision(s):			

Item Quantity: ea

Manufacturer: **Sherwin-Williams**

Address: 101 W. Prospect Ave.
Cleveland OH 44115-

Phone: 800# : (800) 474-3794

Fax: (216) 566-1660

Contact: Customer Service

Web: www.sherwin-williams.com

Product: Pro-Mar 200 Zero VOC Semi-Gloss

Color/Finish: SW 7064 Passive

Notes: Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Refer to Manufacturer's Recommended Installation Instructions.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

Painter required to use 1 coat primer 2 coats paint minimum.

All paints to be low VOC.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Manufacturer to clearly mark each carton with item ID and specification number.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) PT-16
Project #:	Dusk Scheme	Item Description:	Powder Coat Finish
Issue Date:	02/23		
Revision(s):			

Item Quantity: ea

Manufacturer: **TIGER Drylac U.S.A., Inc.**

Address: 3945 Swenson Ave.
St. Charles IL 60174-

Phone: 800# : (800) 243-8148

Fax: (877) 243-8148

Contact: Customer Service

E-mail: customerservice.us(at)tiger-coatings.us

Web: www.tiger-coatings.com

Product: Stellix Bonded Metallic Powder Coating

Color/Finish: Black Smoke, 49/80924

Notes: Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Refer to Manufacturer's Recommended Installation Instructions.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

Painter required to use 1 coat primer 2 coats paint minimum. All paints to be low VOC.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Manufacturer to clearly mark each carton with item ID and specification number.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) QT-10 Supplier A
Project #:	Dusk Scheme	Item Description:	Coffee Service & Food Prep Areas
Issue Date:	04/19/21		
Revision(s):	09/2023 Δ 2		
Item Quantity:	ea		

Manufacturer: **Ceramic Technics**
Address: 1298 Old Alpharetta Road
Alpharetta GA 30005-
Phone: (901) 921-8281
Fax: (770) 740-1199
Contact: Carly Kuyper
E-mail: hilton@ceramictechnics.com
Web: www.ceramictechnics.com

Product: Essentials Quarry Collection

Color/Finish: Shadow Grey

Size/Dimensions: 6" x 6"

Slip Resistance: COF Dry: 0.87, COF Wet: 0.72

Grout: Custom Building Products; Match Grout with Floor Color, 1/8"

Notes:

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Refer to Manufacturer's Recommended Installation Instructions.

Installation: Refer to Architectural Prototype Drawings for Installation Pattern. Advanced High-Performance Grout or Epoxy Based Grout is Highly Recommended.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: JJS

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Grout to include clear matte sealer.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) QT-10 Supplier B
Project #:	Dusk Scheme	Item Description:	Coffee Service & Food Prep Areas
Issue Date:	03/2022		
Revision(s):			

Item Quantity: ea

Manufacturer: **Dal-Tile**
Address: 7834 C.F. Hawn Freeway Dallas, Texas 75217
Phone: (214) 309-4531

Contact: Morgan Stephenson
E-mail: hospitality@daltile.com
Web: www.daltile.com

Product: Quarry Que-Tread Series
Color/Finish: Gray – 0Q22 Paver

Size/Dimensions: 6"x 6" x 1/2" Thickness

Slip Resistance: ≥ 0.42
Grout: Custom Building Products; Match Grout with Floor Color, 3/8"

Notes:

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Refer to Manufacturer's Recommended Installation Instructions.

Installation: Refer to Architectural Prototype Drawings for Installation Pattern. Advanced High-Performance Grout or Epoxy Based Grout is Highly Recommended.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Grout to include clear matte sealer.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) RB-01 Supplier A
Project #:	Dusk Scheme	Item Description:	Guest Suite Base
Issue Date:	04/19/21		
Revision(s):			

Item Quantity: linl ft

Manufacturer:	**Tarkett**
Address:	285 Kraft Drive Dalton GA 30721-
Phone:	(440) 903-4319 800# : (800) 871-3211
Alternate:	(703) 919-4751
Contact:	Jackie Passaro
E-mail:	Jackie.Passaro@tarkett.com
Web:	www.tarkett.com

Product:	Monument 4"
Color/Finish:	23 Vapor Grey
Size/Dimensions:	4"H x 0.25"D x 8'L

Notes:

Style Number: MW-23-S4

64'/Carton - Full Cartons Only

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Refer to Manufacturer's Recommended Guidelines for Surface Preparation and Installation.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Contractor to verify all sizes, quantities, and trim pieces required.

Contractor to install with a 45-degree miter on all corners.

Installer to provide all materials and equipment for complete installation.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) RB-01 Supplier B
Project #:	Dusk Scheme	Item Description:	Guest Suite Base
Issue Date:	04/19/21		

Revision(s): 08/31/2021 Δ 2

Item Quantity: linl ft

Manufacturer: **Shaw Hospitality Group**

Address: 410 Old Mill Road
Cartersville GA
30120-

Phone: (301) 520-9360

Contact: David Burn

E-mail: dburn1@mac.com

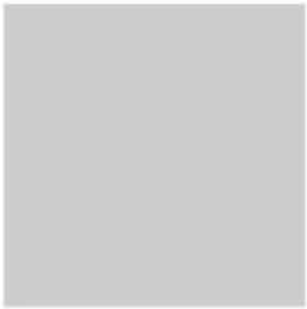
Web: www.shawhospitality.com

Product: 4 in Flat Top Vinyl Base - 501199 D Profile

SKU: BS514/00515

Color/Finish: Fog 00515

Size/Dimensions: 4"H x 0.25"D x 96"L



Notes: Construction: Thermoplastic Rubber (TPR)

120'/Carton - Full Cartons Only

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Refer to Manufacturer's Recommended Guidelines for Surface Preparation and Installation.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: EJ

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Contractor to verify all sizes, quantities, and trim pieces required.

Contractor to install with a 45-degree miter on all corners.

Installer to provide all materials and equipment for complete installation.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) RB-10 Supplier A
Project #:	Dusk Scheme	Item Description:	Guest Corridor, Meeting Room, and Central Hub Base
Issue Date:	04/19/21		
Revision(s):	09/2023 Δ 2		

Item Quantity: linl ft

Manufacturer:	**Tarkett**
Address:	285 Kraft Drive Dalton GA 30721-
Phone:	(440) 903-4319 800# : (800) 871-3211
Alternate:	(703) 919-4751
Contact:	Jackie Passaro
E-mail:	Jackie.Passaro@tarkett.com
Web:	www.tarkett.com

Product:	Monument 4"
Color/Finish:	23 Vapor Grey
Size/Dimensions:	4"H x 0.25"D x 8'L

Notes:

Style Number: MW-23-S4

64'/Carton - Full Cartons Only

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Refer to Manufacturer's Recommended Guidelines for Surface Preparation and Installation.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Contractor to verify all sizes, quantities, and trim pieces required.

Contractor to install with a 45-degree miter on all corners.

Installer to provide all materials and equipment for complete installation.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) RB-10 Supplier B
Project #:	Dusk Scheme	Item Description:	Guest Corridor, Meeting Room, and Central Hub Base
Issue Date:	04/19/21		

Revision(s): 9/2023 Δ 3

Item Quantity: linl ft

Manufacturer:	**Shaw Hospitality Group**
Address:	410 Old Mill Road Cartersville GA 30120-
Phone:	(301) 520-9360
Contact:	David Burn
E-mail:	dburn1@mac.com
Web:	www.shawhospitality.com

Product:	4 in Flat Top Vinyl Base - 501199 D Profile
SKU:	BS514/00515
Color/Finish:	Fog 00515
Size/Dimensions:	4"H x 0.25"D x 96"L

Notes:

Construction: Thermoplastic Rubber (TPR)

120'/Carton - Full Cartons Only

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Refer to Manufacturer's Recommended Guidelines for Surface Preparation and Installation.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: EJ

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Contractor to verify all sizes, quantities, and trim pieces required.

Contractor to install with a 45-degree miter on all corners.

Installer to provide all materials and equipment for complete installation.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) RB-11 Supplier A
Project #:	Dusk Scheme	Item Description:	Fitness Bas
Issue Date:	04/19/21		
Revision(s):			

Item Quantity: linl ft

Manufacturer:	**Tarkett**		
Address:	285 Kraft Drive Dalton GA 30721-		
Phone:	(440) 903-4319	800# : (800) 871-3211	
Alternate:	(703) 919-4751		
Contact:	Jackie Passaro		
E-mail:	Jackie.Passaro@tarkett.com		
Web:	www.tarkett.com		

Product:	Monument 4"
Color/Finish:	48 Grey
Size/Dimensions:	4"H x 0.25"D x 8'L

Notes:

Style Number: MW-48-S4

64'/Carton - Full Cartons Only

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Refer to Manufacturer's Recommended Guidelines for Surface Preparation and Installation.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: YK

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Contractor to verify all sizes, quantities, and trim pieces required.

Contractor to install with a 45-degree miter on all corners.

Installer to provide all materials and equipment for complete installation.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) RB-11 Supplier B
Project #:	Dusk Scheme	Item Description:	Fitness Base
Issue Date:	04/19/21		
Revision(s):	08/31/21 Δ 2		

Item Quantity: linl ft

Manufacturer: **Shaw Hospitality Group**

Address: 410 Old Mill Road
Cartersville GA
30120-

Phone: (301) 520-9360

Contact: David Burn

E-mail: dburn1@mac.com

Web: www.shawhospitality.com

Product: 4 in Flat Top Vinyl Base - 501199 D Profile

SKU: BS515/00750

Color/Finish: Cobblestone 00750

Size/Dimensions: 4"H x 0.25"D x 96"L

Notes: Construction: Thermoplastic Rubber (TPR)

120'/Carton - Full Cartons Only

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Refer to Manufacturer's Recommended Guidelines for Surface Preparation and Installation.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: EJ

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Contractor to verify all sizes, quantities, and trim pieces required.

Contractor to install with a 45-degree miter on all corners.

Installer to provide all materials and equipment for complete installation.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) RES-01 Supplier A
Project #:	Dusk Scheme	Item Description:	Guest Suite Floor
Issue Date:	04/19/21		
Revision(s):	02/23 Δ 3		

Item Quantity: sq ft

Manufacturer: **Tarkett**

Address: 285 Kraft Drive
Dalton GA 30721-

Phone: (440) 903-4319 800# : (800) 871-3211

Alternate: (703) 919-4751

Contact: Jackie Passaro

E-mail: Jackie.Passaro@tarkett.com

Web: www.tarkett.com

Description: Resilient Flooring at Guestroom with Waterproof Rigid Construction, Scratch and Indent Resistance Finish.

Style & Color Number: X-6642

Width or Rug Size: 7" x 48"

Content: Vinyl

Height 0.197" (5mm)

Installation Method: Click-In, Ashlar

Notes: Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval prior to Fabrication: Finish Sample.

Product Details:

Core Thickness: 0.157" (4mm)
Acoustical Backing: 0.039" (1mm) IXPE
Wear layer Thickness: 0.020" (.51mm)
Edge Treatment: Micro-beveled
Dimensional Stability: ASTM F2199: Passes 2.2.
Heat Stability: ASTM 1514: $\Delta E \leq 8$
Light Stability: ASTM F1515: $\Delta E \leq 8$
Residual Indentation : ASTM F1914: Passes 2.5.
Stain Resistance: ASTM F925: Passes
Impact Sound: ASTM E2179: $\Delta IIC \geq 21$ dB
Slip Resistance: ASTM D2047: SCOF $\geq$ 0.5 Floor-Score® Certification: SCS-EC10.3-2014 v3.0

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: EJ

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) RES-01 Supplier A
Project #:	Dusk Scheme	Item Description:	Guest Suite Floor
Issue Date:	04/19/21		
Revision(s):	02/23 Δ2		

Item Quantity: sq ft

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Contractor to verify all sizes, quantities, and trim pieces required.

Installer to provide all materials and equipment for complete installation.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) RES-01 Supplier B
Project #:	Dusk Scheme	Item Description:	Guest Suite Floor
Issue Date:	04/19/21		
Revision(s):	02/23 Δ 2		

Item Quantity: sq ft

Manufacturer: **Shaw Hospitality Group**

Address: 410 Old Mill Road
Cartersville GA
30120-

Phone: (301) 520-9360

Contact: David Burn

E-mail: dburn1@mac.com

Web: www.shawhospitality.com

Description:	Resilient Flooring at Guestroom with Waterproof Rigid Construction, Scratch and Indent Resistance Finish.
Style Number:	BS517
Color:	00700
Width or Rug Size:	See Notes Below
Content:	Vinyl
Height	0.217 in
Installation Method:	Perimeter Glue, Ashlar/Stagger
Flame Requirements:	Class III, Type B

Notes: Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval prior to Fabrication: Finish Sample.

Product Details:

Construction: Multilayer SPC With Attached Cork Underlayment
Finish: ExoGuard®
Nominal Dimensions: 19" x 24"
Actual Dimensions: 18.5" x 24.02"
Wear Layer Thickness: 20 mil (0.02 in)
Edge Profile: Micro-Bevel

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) RES-01 Supplier B
Project #:	Dusk Scheme	Item Description:	Guest Suite Floor
Issue Date:	04/19/21		
Revision(s):	02/23 Δ 2		

Item Quantity: sq ft

Instructions:

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Contractor to verify all sizes, quantities, and trim pieces required.

Installer to provide all materials and equipment for complete installation.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) RES-10
Project #:	Dusk Scheme	Item Description:	Fitness Floor (Cardio)
Issue Date:	04/19/21		
Revision(s):	05/11/21 Δ 1		

Item Quantity: linl ft

Manufacturer: **Ecore Commercial Flooring**

Address: 715 Fountain Avenue
Lancaster PA 17601-

Phone: (717) 517-5418

Contact: Lisa Ambrose

E-mail: lisa.ambrose@ecoreintl.com

Web: www.ecorecommercial..com

Description: Resilient Flooring at Fitness Room Cardio Zone with Waterproof Construction, Scratch and Indent Resistance Finish.

Style Number: 6623

Style Name: Strait RX

Color: Burnished Nickel

Width or Rug Size: 7mm (0.28") x 72" (1.83 m) x 30 LF (9.14m)

Content: Heterogeneous Vinyl Over Vulcanized Composition Rubber
Reinforcement

Weight: 1-hide

Height 7 mm

Installation Method: Dry Lay

Notes: Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval prior to Fabrication: Finish Sample.

Product Details:

Core Thickness: 0.28" (7mm)
Acoustical Backing: 0.039" (5mm) Wear layer Thickness: 2 mm
Edge Treatment: Micro-beveled
Dimensional Stability: ASTM F2199: Passes 2.2.
Heat Stability: ASTM 1514: $\Delta E \leq 8$
Light Stability: ASTM F1515: $\Delta E \leq 8$
Residual Indentation : ASTM F1914: Passes 2.5.
Stain Resistance: ASTM F925: Passes
Impact Sound: ASTM E2179: $\Delta IIC \geq 21$ dB
Slip Resistance: ASTM D2047: SCOF ≥ 0.5
Floor-Score® Certification: SCS-EC10.3-2014 v3.0

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) RES-10
Project #:	Dusk Scheme	Item Description:	Fitness Floor (Cardio)
Issue Date:	04/19/21		
Revision(s):	05/11/21 Δ 1		

Item Quantity: linl ft

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Contractor to verify all sizes, quantities, and trim pieces required.

Installer to provide all materials and equipment for complete installation.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) RES-11
Project #:	Dusk Scheme	Item Description:	Fitness Floor (Strength and Functional)
Issue Date:	04/19/21		
Revision(s):	05/11/21 Δ 1		

Item Quantity: linl ft

Manufacturer: **Ecore Commercial Flooring**

Address: 715 Fountain Avenue
Lancaster PA 17601-

Phone: (717) 517-5418

Contact: Lisa Ambrose

E-mail: lisa.ambrose@ecoreintl.com

Web: www.ecorecommercial..com

Description:	Resilient Flooring at Fitness Room Strength and Functional Zone with Waterproof Construction, Scratch and Indent Resistance.
Style Number:	ES505
Style Name:	Motivate
Color:	Charcoal
Width or Rug Size:	7.5 mm (0.30") x 48" (1.22m) x 25 L
Content:	Vulcanized Composition Rubber
Height	7.5 mm
Installation Method:	Dry Lay

Notes: Unless Using A Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval prior to Fabrication: Finish Sample.

Product Details:

Base Layer: 5mm
Wear layer Thickness: 2.5 mm
Edge Treatment: Micro-beveled
Dimensional Stability: ASTM F2199: Passes 2.2.
Heat Stability: ASTM 1514: $\Delta E \leq 8$
Light Stability: ASTM F1515: $\Delta E \leq 8$
Residual Indentation : ASTM F1914: Passes 2.5.
Stain Resistance: ASTM F925: Passes
Impact Sound: ASTM E2179: $\Delta IIC \geq 21$ dB
Slip Resistance: ASTM D2047: SCOF ≥ 0.5
FloorScore® Certification: SCS-EC10.3-2014 v3.0

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: EJ

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) RES-11
Project #:	Dusk Scheme	Item Description:	Fitness Floor (Strength and Functional)
Issue Date:	04/19/21		
Revision(s):	05/11/21 Δ 1		

Item Quantity: linl ft

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Contractor to verify all sizes, quantities, and trim pieces required.

Installer to provide all materials and equipment for complete installation.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) RES-12
Project #:	Dusk Scheme	Item Description:	Outdoor Fitness Floor
Issue Date:	04/19/21		
Revision(s):	05/11/21 Δ 1		

Item Quantity: sq ft

Manufacturer: **Ecore Commercial Flooring**

Address: 715 Fountain Avenue
Lancaster PA 17601-

Phone: (717) 517-5418

Contact: Lisa Ambrose

E-mail: lisa.ambrose@ecoreintl.com

Web: www.ecorecommercial..com

Style Name: Ever-Top Outdoor Poured-in-Place System

Color: 1204 Medium Grey

Content: Rubber
Reinforcement

Height 1/2"

Installation Method: Poured-in-Place

Notes: Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval prior to Fabrication: Finish Sample.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Contractor to verify all sizes, quantities, and trim pieces required.

Installer to provide all materials and equipment for complete installation.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Daybreak Finish Specifications	Item Number:	(B) SF-01
Project #:	Dusk Scheme	Item Description:	Guest Suite Exterior Wall Knock-Down Finish
Issue Date:	10/22		
Revision(s):			

Item Quantity: ea

Manufacturer:	**Sherwin-Williams**
Address:	101 W. Prospect Ave. Cleveland OH 44115-
Phone:	(800) 474-3794
Fax:	(216) 566-1660
Contact:	Customer Service
Web:	www.sherwin-williams.com

Product:	100% Acrylic Knockdown Finish per Homewood Suites Standards
Color/Finish:	SW 7667 Zircon - Eg-Shel

Notes:

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Refer to Manufacturer's Recommended Installation Instructions.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

Painter required to use 1 coat primer 2 coats paint minimum.

All paints to be low VOC.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Manufacturer to clearly mark each carton with item ID and specification number.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) SS-01 Supplier A
Project #:	Dusk Scheme	Item Description:	Guest Suite and Public Space Countertops
Issue Date:	12/16/2021		
Revision(s):	10/22 Δ 1		

Item Quantity: ea

Manufacturer:	**Dal-TIle**
Address:	7834 C. F. Hawn Freeway Dallas, Texas 75217
Phone:	(214) 309-4531
Contact:	Morgan Stephenson
E-mail:	hospitality@daltile.com
Web:	www.daltile.com

Product:	Quartz
Color/Finish:	Independence Calacatta OQ48, Polished
Size/Dimensions:	2cm
Edge Detail:	Square
Notes:	Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample. Refer to Manufacturer's Recommended Installation Instructions.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: AB

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Installer to provide all materials and equipment for complete installation.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) SS-01 Supplier B
Project #:	Dusk Scheme	Item Description:	Guest Suite and Public Space Countertops
Issue Date:	04/19/21		
Revision(s):	12/16/21 Δ 2		

Item Quantity:	ea
Manufacturer:	**Belstone**
Address:	7658 Haskell Ave Van Nuys CA 91406 -
Phone:	(818) 373-4900 800# : (877) 667-8663
Fax:	(818) 503-6256
Contact:	Customer Service
E-mail:	contactus@belstoneproducts.com
Web:	www.belstoneproducts.com

Product:	Dodi Engineered Stone
Color/Finish:	Calacatta Aramis, Polished
Size/Dimensions:	2cm
Edge Detail:	Square
Notes:	Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample. Refer to Manufacturer's Recommended Installation Instructions.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Installer to provide all materials and equipment for complete installation.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) SS-02 Supplier A
Project #:	Dusk Scheme	Item Description:	Guest Suite Windowsill
Issue Date:	12/16/21		
Revision(s):			

Item Quantity: ea

Manufacturer: **Dal-TIle**

Address: 7834 C. F. Hawn Freeway
Dallas, Texas 75217

Phone: (214) 309-4531
Contact: Morgan Stephenson
E-mail: hospitality@daltile.com
Web: www.daltile.com

Product: Quartz

Color/Finish: White Sand NQ97, Polished

Size/Dimensions: 2cm

Edge Detail: Square

Notes: Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Refer to Manufacturer's Recommended Installation Instructions.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: AB

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Installer to provide all materials and equipment for complete installation.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) SS-02 Supplier B
Project #:	Dusk Scheme	Item Description:	Guest Suite Windowsill
Issue Date:	04/19/21		
Revision(s):	12/16/21 Δ 2		

Item Quantity: ea

Manufacturer: **Wilsonart**

Address: 2501 Wilsonart Drive
P.O.Box #6110
Temple TX 76503-6110

Phone: 800# : (800) 433-3222

Contact: Customer Service

Web: www.wilsonartlaminate.com

Product: Quartz

Color/Finish: NIWA, Q1002, Polished

Size/Dimensions: 2cm

Edge Detail: Square

Notes: Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample.

Refer to Manufacturer's Recommended Installation Instructions.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Installer to provide all materials and equipment for complete installation.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) SS-10 Supplier A
Project #:	Dusk Scheme	Item Description:	Countertop at Outdoor Kitchen
Issue Date:	12/16/21		
Revision(s):			

Item Quantity: ea

Manufacturer:	**Dal-TIle**
Address:	7834 C. F. Hawn Freeway Dallas, Texas 75217
Phone:	(214) 309-4531
Contact:	Morgan Stephenson
E-mail:	hospitality@daltile.com
Web:	www.daltile.com

Product:	Quartz
Color/Finish:	Mercer Grey Velvet NQ52, Polished
Size/Dimensions:	2cm
Edge Detail:	Square
Notes:	Unless Using a Specified Manufacturer, The Following Required Item(s) for Approval Prior to Fabrication: Finish Sample Refer to Manufacturer's recommended installation instructions.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: AB

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Installer to provide all materials and equipment for complete installation.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) VCT-01
Project #:	Dusk Scheme	Item Description:	Tile at Storage Room
Issue Date:	02/23		
Revision(s):			

Item Quantity: ea

Manufacturer:	**Tarkett**
Address:	285 Kraft Drive Dalton GA 30721-
Phone:	(440) 903-4319 (800) 871-3211
Alternate:	(703) 919-4751
Contact:	Jackie Passaro
E-mail:	Jackie.Passaro@tarkett.com
Web:	www.tarkett.com

Product:	Tarkett VCT II
Color/Finish:	557 Shooting Star
Size/Dimensions:	12” x 12”
Notes:	Materials meet or exceed ADAAG recommended value of .6 on James Machine

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: AB

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

Manufacturer to clearly mark each carton with item ID and specification number.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Brand Standards.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) WC-01
Project #:	Dusk Scheme	Item Description:	Wallcovering at Guest Suite
Issue Date:	04/19/21		
Revision(s):	10/22 Δ 1		
Item Quantity:	ea		

Manufacturer:	**Koroseal**
Address:	3875 Embassy Parkway Suite 110 Fairlawn OH 44333-
Phone:	(855) 753-5474
Contact:	Linda Hathaway Tobin
E-mail:	ltobin@koroseal.com
Web:	www.koroseal.com

Pattern Name:	Cross the Line
Color:	KIP 45213
Width:	52/54
Type:	II
Weight:	20 oz.
Content:	100% Vinyl
Backing:	Woven
Fire Rating:	ASTM E 84 - Class A
Notes:	Corner Guards: In all high traffic public areas and guestrooms, Brand Standards require the use of corner guards. Approved Specification: Inpro® Tape-On Corner Guards in Coordinating Finish: 105/Silver. Ordering contact: Eric Rupnow 800-222-5556 x 5508, erupnow@inprocorp.com Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Cutting, Flame Certificate. Manufacturer to Confirm the Wallcovering Meets Hilton Design and Construction Standards as Noted in Section 2514.02.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

Wallcovering must be contract quality and suitable for commercial use.

Manufacturer must provide certificate of flame spread rating, smoke develop rating, and fuel contribution as tested in accordance with ASTM-E84 test.

Installer must verify yardage requirement prior to ordering and installation.

Mildew resistant adhesive must be used.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) WC-02
Project #:	Dusk Scheme	Item Description:	Wallcovering at Guest Suite Bathroom Accent
Issue Date:	04/19/21		
Revision(s):	10/22 Δ 2		

Item Quantity: linl yds

Manufacturer:	**MDC Wallcovering**
Address:	400 High Grove Blvd. Glendale Heights IL 60139-
Phone:	(847) 437-4000
Contact:	MDC National Accounts
E-mail:	NationalAccounts@mdcwall.com
Web:	www.mdcwall.com

Pattern Number:	HLTN3102
Pattern Name:	Reflections
Color:	Stillwater
Width:	52"
Type:	II
Weight:	20 oz.
Content:	Fabric-Backed Vinyl
Backing:	Osnaburg
Fire Rating:	Class A
Notes:	Corner Guards: In all high traffic public areas and guestrooms, Brand Standards require the use of corner guards. Approved Specification: Inpro® Tape-On Corner Guards in Coordinating Finish: 372/Storm Cloud. Ordering contact: Eric Rupnow 800-222-5556 x 5508, erupnow@inprocorp.com Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Cutting, Flame Certificate. Manufacturer to Confirm the Wallcovering Meets Hilton Design and Construction Standards as Noted in Section 2514.02.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

Wallcovering must be contract quality and suitable for commercial use.

Manufacturer must provide certificate of flame spread rating, smoke develop rating, and fuel contribution as tested in accordance with ASTM-E84 test.

Installer must verify yardage requirement prior to ordering and installation.

Mildew resistant adhesive must be used.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) WC-02
Project #:	Dusk Scheme	Item Description:	Wallcovering at Guest Suite Bathroom Accent
Issue Date:	04/19/21		
Revision(s):	10/22 Δ 2		

Item Quantity: linl yds

Instructions:

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) WC-10
Project #:	Dusk Scheme	Item Description:	Wallcovering at Guest Corridor and Meeting Room Main
Issue Date:	04/19/21		
Revision(s):	10/22 Δ 2		

Item Quantity: ea

Manufacturer: **Wolf Gordon**

Address: 333 Seventh Ave
New York NY 10001-

Phone: (702) 812-1311

Contact: David Cluer

E-mail: david.cluer@wolfgordon.com

Web: www.wolfgordon.com

Pattern Name:	Quinault (Modified)
Color:	WG 31848023
Width:	52"
Type:	II
Weight:	20 oz.
Content:	100% Vinyl
Backing:	Osnaburg
Fire Rating:	ASTM E 84 - Class A
Notes:	Corner Guards: In all high traffic public areas and guestrooms, Brand Standards require the use of corner guards. Approved Specification: Inpro® Tape-On Corner Guards in Coordinating Finish: 107/Pewter Grey. Ordering contact: Eric Rupnow 800-222-5556 x 5508, erupnow@inprocorp.com Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Cutting, Flame Certificate. Manufacturer to Confirm the Wallcovering Meets Hilton Design and Construction Standards as Noted in Section 2514.02.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

Wallcovering must be contract quality and suitable for commercial use.

Manufacturer must provide certificate of flame spread rating, smoke develop rating, and fuel contribution as tested in accordance with ASTM-E84 test.

Installer must verify yardage requirement prior to ordering and installation.

Mildew resistant adhesive must be used.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) WC-11
Project #:	Dusk Scheme	Item Description:	Wallcovering at Guest Corridor Door Drop, Central Hub Accent, and Meeting Room Accent
Issue Date:	04/19/21		
Revision(s):	10/22 Δ 1		

Item Quantity: linl yds

Manufacturer: **National Solutions**

Address: 10020 Maumelle Blvd
North Little Rock AR 72113- United States

Phone: (214) 364-8527 800# : (800) 222-1028

Contact: Kristen Harris

E-mail: Kristen.harris@nationalsolutions.com

Web: www.nationalwallcovering.com

Pattern Name:	Angles Max
Color:	Charcoal (Gold Line)
Width:	52"
Repeat:	V: 24" x H: 52"
Type:	II
Weight:	20 oz.
Content:	Vinyl (10% Recycled Content)
Backing:	Non-Woven
Fire Rating:	ASTM E 84 - Class A
Notes:	Corner Guards: In all high traffic public areas and guestrooms, Brand Standards require the use of corner guards. Approved Specification: Inpro® Tape-On Corner Guards in Coordinating Finish: 256/Castle. Ordering contact: Eric Rupnow 800-222-5556 x 5508, erupnow@inprocorp.com Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Cutting, Flame Certificate. Manufacturer to Confirm the Wallcovering Meets Hilton Design and Construction Standards as Noted in Section 2514.02.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

Wallcovering must be contract quality and suitable for commercial use.

Manufacturer must provide certificate of flame spread rating, smoke develop rating, and fuel contribution as tested in accordance with ASTM-E84 test.

Installer must verify yardage requirement prior to ordering and installation.

Mildew resistant adhesive must be used.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) WC-02
Project #:	Dusk Scheme	Item Description:	Wallcovering at Guest Suite Bathroom Accent
Issue Date:	04/19/21		
Revision(s):	10/22 Δ 2		

Item Quantity: linl yds

Instructions:

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) WC-12
Project #:	Dusk Scheme	Item Description:	Wallcovering at Central Hub
Issue Date:	04/19/21		
Revision(s):	10/22 Δ 1		

Item Quantity: ea

Manufacturer: **National Solutions**

Address: 10020 Maumelle Blvd
North Little Rock AR 72113- United States

Phone: (214) 364-8527 800# : (800) 222-1028

Contact: Kristen Harris

E-mail: Kristen.harris@nationalsolutions.com

Web: www.nationalwallcovering.com

Pattern Number:	Y47681WC
Pattern Name:	Watercolor Canvas
Color:	Hazy Grey
Width:	52/54
Type:	II
Weight:	20 oz.
Content:	Vinyl
Backing:	Osnaburg
Fire Rating:	ASTM E 84 - Class A
Notes:	Corner Guards: In all high traffic public areas and guestrooms, Brand Standards require the use of corner guards. Approved Specification: Inpro® Tape-On Corner Guards in Coordinating Finish: 151/Graystone. Ordering contact: Eric Rupnow 800-222-5556 x 5508, erupnow@inprocorp.com Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Cutting, Flame Certificate. Manufacturer to Confirm the Wallcovering Meets Hilton Design and Construction Standards as Noted in Section 2514.02.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

Wallcovering must be contract quality and suitable for commercial use.

Manufacturer must provide certificate of flame spread rating, smoke develop rating, and fuel contribution as tested in accordance with ASTM-E84 test.

Installer must verify yardage requirement prior to ordering and installation.

Mildew resistant adhesive must be used.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) WC-12
Project #:	Dusk Scheme	Item Description:	Wallcovering at Central Hub
Issue Date:	04/19/21		
Revision(s):	10/22 Δ 1		

Item Quantity: linl yds

Instructions:

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) WC-13
Project #:	Dusk Scheme	Item Description:	Wallcovering at Fitness
Issue Date:	04/19/21		
Revision(s):	10/22 Δ 2		

Item Quantity: linl yds

Manufacturer:	**MDC Wallcovering**
Address:	400 High Grove Blvd. Glendale Heights IL 60139-
Phone:	(847) 437-4000
Contact:	MDC National Accounts
E-mail:	NationalAccounts@mdcwall.com
Web:	www.mdcwall.com

Pattern Number:	HLTN3103
Pattern Name:	Avatar
Color:	Bell Bottom Blues
Width:	54"
Repeat:	18" V
Type:	II
Weight:	20 oz.
Content:	Vinyl
Backing:	Non-Woven
Fire Rating:	ASTM E 84 - Class A
Notes:	Corner Guards: In all high traffic public areas and guestrooms, Brand Standards require the use of corner guards. Approved Specification: Inpro® Tape-On Corner Guards in Coordinating Finish: 134/Cadet Blue. Ordering contact: Eric Rupnow 800-222-5556 x 5508, erupnow@inprocorp.com Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Cutting, Flame Certificate. Manufacturer to Confirm the Wallcovering Meets Hilton Design and Construction Standards as Noted in Section 2514.02.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

Wallcovering must be contract quality and suitable for commercial use.

Manufacturer must provide certificate of flame spread rating, smoke develop rating, and fuel contribution as tested in accordance with ASTM-E84 test.

Installer must verify yardage requirement prior to ordering and installation.

Mildew resistant adhesive must be used.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) WC-13
Project #:	Dusk Scheme	Item Description:	Wallcovering at Fitness
Issue Date:	04/19/21		
Revision(s):	10/22 Δ 2		

Item Quantity: linl yds

Instructions:

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) WC-14
Project #:	Dusk Scheme	Item Description:	Wallcovering at Guest Laundry
Issue Date:	04/19/21		
Revision(s):	10/22 Δ2		

Item Quantity: ea

Manufacturer: **Wolf Gordon**

Address: 333 Seventh Ave
New York NY 10001-

Phone: (702) 812-1311

Contact: David Cluer

E-mail: david.cluer@wolfgordon.com

Web: www.wolfgordon.com

Pattern Number:	GOH 31981832
Pattern Name:	Myanmar
Color:	Cobra
Width:	52"
Type:	II
Weight:	20 oz.
Content:	100% Vinyl
Backing:	Osnaburg
Fire Rating:	ASTM E 84 - Class A
Notes:	Corner Guards: In all high traffic public areas and guestrooms, Brand Standards require the use of corner guards. Approved Specification: Inpro® Tape-On Corner Guards in Coordinating Finish: 372/Storm Cloud. Ordering contact: Eric Rupnow 800-222-5556 x 5508, erupnow@inprocorp.com Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Cutting, Flame Certificate. Manufacturer to Confirm the Wallcovering Meets Hilton Design and Construction Standards as Noted in Section 2514.02.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

Wallcovering must be contract quality and suitable for commercial use.

Manufacturer must provide certificate of flame spread rating, smoke develop rating, and fuel contribution as tested in accordance with ASTM-E84 test.

Installer must verify yardage requirement prior to ordering and installation.

Mildew resistant adhesive must be used.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) WC-14
Project #:	Dusk Scheme	Item Description:	Wallcovering at Guest Laundry
Issue Date:	04/19/21		
Revision(s):	10/22 Δ 2		

Item Quantity: ea

Instructions:

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) WC-15
Project #:	Dusk Scheme	Item Description:	Wallcovering at Public Restroom
Issue Date:	04/19/21		
Revision(s):	10/22 Δ 1		

Item Quantity: ea

Manufacturer: **Koroseal**

Address: 3875 Embassy Parkway
Suite 110
Fairlawn OH 44333-

Phone: (855) 753-5474

Contact: Linda Hathaway Tobin

E-mail: ltobin@koroseal.com

Web: www.koroseal.com

Pattern Number:	LN21-92
Pattern Name:	Lino
Color:	Embellish
Width:	52/54
Type:	II
Weight:	20 oz.
Content:	100% Vinyl
Backing:	Woven
Fire Rating:	ASTM E 84 - Class A

Notes:

Corner Guards: In all high traffic public areas and guestrooms, Brand Standards require the use of corner guards. Approved Specification: Inpro® Tape-On Corner Guards in Coordinating Finish: 280/Shiprock.
Ordering contact: Eric Rupnow 800-222-5556 x 5508, erupnow@inprocorp.com

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Cutting, Flame Certificate.

Manufacturer to Confirm the Wallcovering Meets Hilton Design and Construction Standards as Noted in Section 2514.02.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

Wallcovering must be contract quality and suitable for commercial use.

Manufacturer must provide certificate of flame spread rating, smoke develop rating, and fuel contribution as tested in accordance with ASTM-E84 test.

Installer must verify yardage requirement prior to ordering and installation.

Mildew resistant adhesive must be used.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) WC-15
Project #:	Dusk Scheme	Item Description:	Wallcovering at Public Restroom
Issue Date:	04/19/21		

Item Quantity: ea

Instructions:

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) WD-01
Project #:	Dusk Scheme	Item Description:	Stain Grade Wood Veneer - Light
Issue Date:	04/19/21		
Revision(s):			

Item Quantity: ea

Manufacturer:	Source:
Address:	Address:
Phone:	Phone:
Fax:	Fax:
Contact:	Contact:
E-mail:	E-mail:
Web:	Web:

Product:	Stain Grade Wood Veneer
Color/Finish:	Solid Wood with Satin Transparent Stain to Match Wilsonart Laminate Pressed Linen 4991K with Sheen Level of 40 GU
Wood Species:	Rift Sawn White Oak

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by contractor prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) WD-02
Project #:	Dusk Scheme	Item Description:	Stain Grade Wood Veneer - Black
Issue Date:	04/19/21		
Revision(s):			

Item Quantity: ea

Manufacturer:	Source:
Address:	Address:
Phone:	Phone:
Fax:	Fax:
Contact:	Contact:
E-mail:	E-mail:
Web:	Web:

Product:	Stain Grade Wood Veneer
Color/Finish:	Solid Wood with Satin Transparent Stain to Match Wilsonart Laminate Black Linearity 1595K with Sheen Level of 40 GU
Wood Species:	Rift Sawn White Oak

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by contractor prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) WD-03
Project #:	Dusk Scheme	Item Description:	Stain Grade Wood Veneer - Dark
Issue Date:	04/19/21		
Revision(s):			

Item Quantity: ea

Manufacturer:	Source:
Address:	Address:
Phone:	Phone:
Fax:	Fax:
Contact:	Contact:
E-mail:	E-mail:
Web:	Web:

Product:	Stain Grade Wood Veneer
Color/Finish:	Solid Wood with Satin Transparent Stain to Match Wilsonart Laminate Neo Walnut 7991K with Sheen Level of 40 GU
Wood Species:	Rift Sawn White Oak

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by contractor prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) WP-01 Supplier A
Project #:	Dusk Scheme	Item Description:	Lobby Screen Wall
Issue Date:	09/2023		
Revision(s):			

Item Quantity: sq ft

Manufacturer: **Lightwave Laser**
Address: 3186 Coffey Lane
Santa Rosa, CA 95403

Phone: 800# : (800) 716-2116
Contact: Ivan Richard

E-mail: Ivan@lightwavelaser.com
Web: www.lightwavelaser.com

Description:	Decorative wood screen consisting of laser-cut panels mounted in freestanding partition frame.
Pattern/Color:	Secret Code/Grey Stain-Rift Cut White Oak; Frame: Black
Size:	Panel Insert: 4'x8'x1/2"; Coordinate overall width/number of panels with prototype plans
Content:	Wood veneer on MDF core
Height:	97.81" (including partition frame)
Installation Method:	Freestanding partition system - Basis of Design: 3Form Iltuo Cantilevered I or approved eq. Must be anchored into concrete slab. Coordinate exact panel dimensions with partition hardware system specifications.
Notes:	The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawings

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: JK

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.
All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Contractor to verify all sizes, quantities, and trim pieces required.

Installer to provide all materials and equipment for complete installation.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk Finish Specifications	Item Number:	(B) WP-01 Supplier B
Project #:	Dusk Scheme	Item Description:	Lobby Screen Wall
Issue Date:	09/2023		
Revision(s):			

Item Quantity: sq ft

Manufacturer: **Corona Group Inc**
Address: 3650 Messer Airport Hwy
Birmingham, AL 35222

Phone: (205) 941-1942
Contact: Sam Corona

E-mail: sam.corona@coronagroupinc.com
Web: www.coronagroupinc.com

Description:	Large Screen with Decorative Random and Various Size Wood Slats Spanning Across Horizontally with Vertical Metal Rods (floor to ceiling) and equally spaced for slats to weave in and between.
Pattern/Color:	Intersection; Frame: Powder Coat Black. Decorative Wood Slats: Painted Birch to Match (PT-04) TIGER Drylac Silver Gloss 49/92880 with Clear Coat.
Size:	Panel Width (O.C.): 45.75"; 1.5" Square Frame; Coordinate overall width/ number of panels with prototype drawings.
Content:	Woven oak slats, aluminum frame
Height:	Coordinate floor to ceiling height with prototype drawings
Installation Method:	Divider Unit to be Anchored to Floor and Secured to the ceiling for Proper Support to Ensure Stability and Prevent Tipping. Bracing Connections to the Ceiling are required, Bracing May Need to be Coordinated with Manufacturer and Property.
Notes:	The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawings

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: JK

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property

All quantities to be verified by installer prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Contractor to verify all sizes, quantities, and trim pieces required.

Installer to provide all materials and equipment for complete installation.

HOMEWOOD SUITES by Hilton™

HWS DUSK PUBLIC AREA SPECIFICATIONS

V1.1 April 19, 2021

Revised May 2021

Revised Dec 2021

Revised Mar 2022

Revised Oct 2022

Revised Feb 2023

Revised Jun 2023

Revised Sept 2023

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Supplemental Information

The below documents can be found on the designinformation.hilton.com (username and password are hilton20xx, where xx is current year).

- Design Guide: This document gives a designer all the reasons why the Brand is what it is. It helps establish uniformity of practice, consistently express the Brand identity and serves as a guide for Interior Design and FF&E selection. It discusses the specific elements required and describes how the design is integrated to optimize guest experience and operational efficiency.

- Homewood Suites Brand Standards: This document lists the minimum standards, procedures, rules, regulations, policies, and techniques required by the Homewood Suites Brand and Hilton.

- Design Intent Drawings: These drawing sets provide dimensions and finishes for all casegoods and softgoods in the Homewood Suites Brand prototype. These may be used as a guide for designers and manufacturers in combination with the specifications, Brand Standards, and Design Guide.

Suppliers

- Approved Suppliers: Suppliers specified herein as manufacturers are pre-approved and have been selected through an extensive product development and vetting effort. Approved Suppliers have the necessary experience with specific products, including pre-approved shop drawings, finishes, and model room samples. Approved Suppliers have committed to ensuring all products meet or exceed Homewood Suites Brand Standards and upholding Hilton's Responsible Sourcing Policy.

- For custom designs, owners are encouraged to use the Approved Suppliers based on their experience with the Homewood Suites Brand Standards and prototype.

- For non-required items, an Owner/Designer may use a supplier of their choice outside of the Approved Suppliers. However, those suppliers and their products must be approved through the Hilton Design Review process on an individual project basis. It is the Owner's/Designer's responsibility to ensure that all such products comply with Homewood Suites Brand Standards.

Notes

- All upholstered specifications are fabric-inclusive when using the Approved Suppliers within the Homewood Suites prototype package. Upholstered products may be purchased with COM fabric, subject to approval through the Hilton Design Review process.

- It is the Owner's/Designer's responsibility to maintain the design intent and adapt all required elements to their property's conditions and code requirements prior to fabrication and installation.

HOMEWOOD SUITES by Hilton

Index by Area

project name: Homewood Suites Dusk FF&E Specifications

project #: Dusk Scheme

Issue Dt		Item Number	Item Description	Item Qty
Public Area (PA)				
04/19/21	Δ 4	(B) PA-100	Banquette	ea
04/19/21	Δ 2	(B) PA-100.1	Lumbar Pillow at Banquette	ea
04/19/21	Δ 3	(B) PA-100.2	Lumbar Pillow at Banquette	ea
~~04/19/21~~		~~(B) PA-100.3~~	~~Lumbar Pillow at Banquette~~	~~ea~~
~~04/19/21~~		~~(B) PA-100.4~~	~~Lumbar Pillow at Banquette~~	~~ea~~
04/19/21	Δ 2	(B) PA-101	Dining Chair at Banquette	ea
04/19/21	Δ 3	(B) PA-102	Barstool at High Top Dining	ea
04/19/21	Δ 2	(B) PA-103	Barrel Back Lounge Chair	ea
04/19/21	Δ 2	(B) PA-104	Lounge Chair at Main Dining	ea
04/19/21	Δ 2	(B) PA-105	Counter Height Stool at Window Seating	ea
04/19/21	Δ 4	(B) PA-106	Dining Chair	ea
04/19/21	Δ 2	(B) PA-107	Counter Stool at Pantry	ea
04/19/21	Δ 3	(B) PA-108	Counter Stool at Communal Table	ea
04/19/21	Δ 2	(B) PA-109	Sectional	ea
04/19/21	Δ 3	(B) PA-109.1	Accent Pillow at Sectional	ea
04/19/21	Δ 2	(B) PA-109.2	Accent Pillow at Sectional	ea
04/19/21	Δ 2	(B) PA-109.3	Accent Pillow at Sectional	ea
04/19/21	Δ 2	(B) PA-110	Lounge Chair at Living Room	ea
04/19/21	Δ 2	(B) PA-111	Bench at Entry	ea
04/19/21	Δ 4	(B) PA-112	Banquette at Guest Laundry	ea
04/19/21	Δ 1	(B) PA-113	Dining Chair at BOH Breakroom	ea
04/19/21	Δ 2	(B) PA-114	Bench at Fitness	ea
10/22		(B) PA-115 Suppler A	Meeting Room Stacking Chair	ea
10/22	Δ 1	(B) PA-115 Suppler B	Meeting Room Stacking Chair	ea
04/19/21	Δ 3	(B) PA-200	Pendant at Reception	ea
04/19/21	Δ 3	(B) PA-201	Floor Lamp at Central Hub	ea
04/19/21	Δ 2	(B) PA-202	Pendant at Pantry	ea
04/19/21	Δ 5	(B) PA-203	Pendant at Public Restroom	ea
04/19/21	Δ 3	(B) PA-204	Sconce at Guest Corridor	ea
10/22	Δ 1	(A) PA-205	Wall Sconce at Meeting Room	ea
04/19/21	Δ 4	(B) PA-300	Rectangular Dining Table	ea
04/19/21	Δ 4	(B) PA-301	High 4-Top Dining Table	ea
04/19/21	Δ 5	(B) PA-302	Tea Height Table	ea
04/19/21	Δ 4	(B) PA-303	Dining Table	ea
04/19/21	Δ 4	(B) PA-304	Communal Table at Windows	ea
04/19/21	Δ 3	(B) PA-305	Pantry Induction Table	ea
04/19/21	Δ 5	(B) PA-306	Communal Table at Living Room	ea
04/19/21	Δ 5	(B) PA-307	Cocktail Table at Living Room	ea
04/19/21	Δ 5	(B) PA-308	Table at Laundry Lounge	ea
04/19/21	Δ 3	(B) PA-309	Side Table at Sectional at Living Room	ea
04/19/21	Δ 5	(B) PA-310	Coffee Station at Living Room	ea
04/19/21	Δ 4	(B) PA-311	Entertainment Console at Living Room	ea
04/19/21	Δ 4	(B) PA-312	Dining Table at Break Room - ADA	ea
~~04/19/21~~		~~(B) PA-313~~	REMOVED	ea
~~04/19/21~~		~~(B) PA-314~~	REMOVED	ea

HOMEWOOD SUITES by Hilton

Index by Area

project name: Homewood Suites Dusk FF&E Specifications

project #: Dusk Scheme

Issue Dt		Item Number	Item Description	Item Qty
Public Area (PA)				
~~04/19/21~~		~~(B) PA-315~~	REMOVED	ea
04/19/21	Δ 4	(B) PA-316	Printer Cabinet at Living Room	ea
10/22	Δ 2	(B) PA-317	Console Table at Meeting Room	ea
10/22		(B) PA-318	Folding Table at Meeting Room	ea
09/23		(B) PA-319	Retail Shelving	ea
04/19/21		(B) PA-400	Roller Shade Fabrication at Central Hub	lot
04/19/21		(B) PA-401	Roller Shade Fabrication at Guest Laundry	lot
04/19/21		(B) PA-402	Roller Shade Fabrication at Fitness	lot
04/19/21		(B) PA-403	Roller Shade Fabrication at Break Room	ea
04/19/21		(B) PA-404	Roller Shade Fabrication at Corridor	ea
10/22		(A) PA-405	Window Treatments at Meeting Room	ea
04/19/21	Δ 1	(B) PA-500	Art Grouping at Central Hub	lot
04/19/21	Δ 1	(B) PA-501	Art at Public Restroom (Men's)	ea
04/19/21	Δ 1	(B) PA-502	Art at Public Restroom (Women's)	ea
04/19/21	Δ 1	(B) PA-503	Art at Guest Laundry Lounge	ea
04/19/21	Δ 2	(B) PA-504	Art at Guest Floor Elevator Lobbies	ea
04/19/21	Δ 3	(B) PA-505	Art at First Floor Elevator Lobby	ea
04/19/21	Δ 3	(B) PA-506	Mirror at Public Restroom Vanity	ea
04/19/21	Δ 2	(B) PA-507	Full Length Mirror at Main Public Restroom	ea
05/11/21		(B) PA-508	Decorative Hook at Fitness	ea
10/22		(A) PA-509	Artwork at Meeting Room	ea
04/19/21	Δ 2	(B) OF-700	Outdoor Lounge Chair	ea
04/19/21	Δ 2	(B) OF-701	Outdoor Lounge Chair @ Fire Feature	ea
04/19/21	Δ 2	(B) OF-702	Outdoor & Optional Pool Dining Chair	ea
04/19/21	Δ 2	(B) OF-703	Outdoor Counter Stool	ea
04/19/21	Δ 2	(B) OF-704	Pendant @ Backyard Kitchen	ea
04/19/21	Δ 2	(B) OF-705	Outdoor & Optional Pool Side Table	ea
04/19/21	Δ 1	(B) OF-706	Outdoor Side Table @ Fire Feature	ea
04/19/21	Δ 2	(B) OF-707	Outdoor Large Dining Table	ea
04/19/21	Δ 4	(B) OF-708	Outdoor & Optional Pool 4-Top Dining Table	ea
10/22	Δ 1	(B) OF-709	Optional Pool 2-Top Dining Table	ea
10/22	Δ 1	(B) OF-710	Pool Chaise Lounge	ea
10/22		(B) OF-711	Outdoor Umbrella	ea
04/19/21	Δ 3	(B) PA-800	Accessories at Entertainment Wall & Bussing Station	lot

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-100
Project #:	Dusk Scheme	Item Description:	Banquette
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/2023 Δ3		

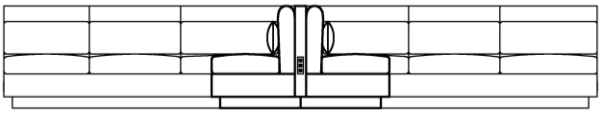
Item Quantity: ea

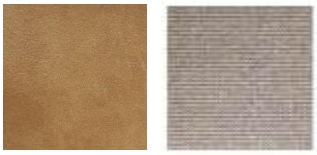
Manufacturer:	**Charter Furniture**	**Kovet Hospitality**	**Prime Hospitality**
Address:	206 Frazier Ave. Liberty, NC 27298	6700 Gateway Park Dr. Ste. 1 San Diego, CA 92154	2000 Remke Ave. Lawrenceburg TN 38464
Phone:	(818) 943-1757	(619) 554 - 8800	(931) 762-5800
Fax:			
Contact:	Jim Trowbridge	Cindy Royals	Jim Donnelly
E-mail:	jtrowbridge@charterfurniture.com	sales@kovethospitality.com	Jim@primehospitalitygroup.com
Web:	www.charterfurniture.com	www.kovethospitality.com	www.primehospitalitygroup.com

Description: Banquette with Recessed Plinth Base and Center Divider with tight upholstered, box-style Seat and Back Cushions with Crown on Center. Additional (10) Ten Lumbar Pillows attached at Back with Velcro Strips to Each Back Cushion. Banquette Pieces to be Secured Together with T-Nut Ganging Device.

Manufacturer to Provide (3) Three Black Satin Dual USB and Duplex Convenience Outlet Receptacles with Plug Exiting Through Back of Banquette.
Convenience Outlets to be Daisy Chain Compatible.

Model Name:	Custom Banquette
Material/Finish:	(PL-04) Wilsonart Laminate 7991K-12 Neo Walnut with Soft Grain Finish with Aeon™
Dimensions:	210.5"W x 62"D x 36"H
Arm Height:	N/A
Seat Height:	19"
Seat Depth:	19.5"
Seat Cushion Style:	Attached Box with Crown on Center
Back Cushion Style:	Attached Box with Crown on Center
Cushion Content:	Poly Fiber Wrapped High Resiliency Foam





COM/COL: Fabric at Seat Cushion: (B) PA- 100A; Fil Doux Fabrics; Pattern: Mundano Coffee; 100% Otratex; Width: 54"; Backing: Acrylic; Finish: Pro Tech; Fire Rating: NFPA - 260, Cal 117-2013; Durability: 200,000 Double Rubs, Repeat: NA; COO: Chile

Fabric at Back Cushion: (B) PA-100B; Valley Forge Fabrics; Pattern: CSU103-03; Merengue; Cappuccino; 71% Polyester, 23% Viscose, 6% Linen; Width: 54"; Railroad: No; Backing: Inherent Acrylic Backing Provided by Manufacturer; Finish: Inherent Stain Resistant Finish Provided by Manufacturer; Fire Rating: Cal 117; Durability: 100,000 Double Rubs

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-100
Project #:	Dusk Scheme	Item Description:	Banquette
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/2023 Δ3		

Item Quantity: ea

Notes:

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Seat Cushion Requirement: Minimum 2.2 Density Polyurethane with an I.L.D. (Initial Load Deflection) of 24-32 Foam with a Soft Crown.

Back Cushion Requirement: 1.8 Density Polyurethane with an I.L.D. (Initial Load Deflection) of 18 I.L.D. Foam.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

COM quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Wood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

Manufacturer to provide nylon carpet glides when applicable.

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Ensure that upholstered goods will fit in elevators and through doors prior to commencing fabrication.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number.

Manufacturer to include all necessary hardware with each item.

Reference the Design Intent softgoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-100.1
Project #:	Dusk Scheme	Item Description:	Lumbar Pillow at Banquette
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ3		

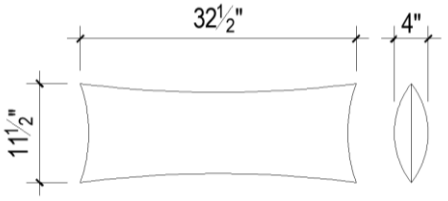
Item Quantity: ea

Manufacturer:	**Charter Furniture**	**Kovet Hospitality**	**Prime Hospitality**
Address:	206 Frazier Ave. Liberty, NC 27298	6700 Gateway Park Dr. Ste. 1 San Diego, CA 92154	2000 Remke Ave. Lawrenceburg TN 38464
Phone:	(818) 943-1757	(619) 554 - 8800	(931) 762-5800
Fax:			
Contact:	Jim Trowbridge	Cindy Royals	Jim Donnelly
E-mail:	jtrowbridge@charterfurniture.com	sales@kovethospitality.com	Jim@primehospitalitygroup.com
Web:	www.charterfurniture.com	www.kovethospitality.com	www.primehospitalitygroup.com

Description: (8) Eight Loose Rectangular Knife Edge Accent Pillow with Removable Cover, Synthetic Down Fill and Hidden Rust Proof Zipper. To include Velcro to attach to seat back

Model Name: Lumbar Pillow at Banquette

Dimensions: 32.5"W x 4"D x 11.5"H



Cushion Content: Poly Fiber Wrapped High Resiliency Foam

COM/COL: Fabric at Lumbar Pillow at Banquette: (B) PA-100.1A; P/Kaufmann Contract; Pattern: Upson Downs; Haberdashery; 100% Polyester; Repeat: V: 2.38" x H: 1.25"; Width: 55"; Railroad: No; Backing: Inherent Acrylic Backing Provided by Manufacturer; Finish: Inherent SSR Finish Provided by Manufacturer; Fire Rating: NFPA - 260; Durability: 100,000 Double Rubs

Notes: Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Shop Drawing.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-100.1
Project #:	Dusk Scheme	Item Description:	Lumbar Pillow at Banquette
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ3		

Item Quantity: ea

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: CM

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

COM quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Wood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

Manufacturer to provide nylon carpet glides when applicable.

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Ensure that upholstered goods will fit in elevators and through doors prior to commencing fabrication.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number.

Manufacturer to include all necessary hardware with each item.

Reference the Design Intent softgood drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-100.2
Project #:	Dusk Scheme	Item Description:	Lumbar Pillow at Banquette
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ 3		

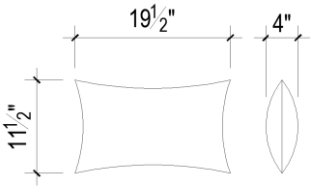
Item Quantity: ea

Manufacturer:	**Charter Furniture**	**Kovet Hospitality**	**Prime Hospitality**
Address:	206 Frazier Ave. Liberty, NC 27298	6700 Gateway Park Dr. Ste. 1 San Diego, CA 92154	2000 Remke Ave. Lawrenceburg TN 38464
Phone:	(818) 943-1757	(619) 554 - 8800	(931) 762-5800
Contact:	Jim Trowbridge	Cindy Royals	Jim Donnelly
E-mail:	jtrowbridge@charterfurniture.com	sales@kovethospitality.com	Jim@primehospitalitygroup.com
Web:	www.charterfurniture.com	www.kovethospitality.com	www.primehospitalitygroup.com

Description: (2) Two Loose Rectangular Knife Edge Accent Pillow with Removable Cover, Synthetic Down Fill and Hidden Rust Proof Zipper.

Model Name: Lumbar Pillow at Banquette

Dimensions: 19.5"W x 4"D x 11.5"H



Cushion Content: Poly Fiber Wrapped High Resiliency Foam

COM/COL: Fabric at Lumbar Pillow at Banquette: (B) PA-100.2A; P/Kaufmann Contract; Pattern: Upson Downs; Haberdashery; 100% Polyester; Repeat: V: 2.38" x H: 1.25"; Width: 55"; Railroad: No; Backing: Inherent Acrylic Backing Provided by Manufacturer; Finish: Inherent SSR Finish Provided by Manufacturer; Fire Rating: NFPA - 260; Durability: 100,000 Double Rubs

Notes: Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Shop Drawing.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-100.2
Project #:	Dusk Scheme	Item Description:	Lumbar Pillow at Banquette
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ 3		

Item Quantity: ea

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: CM

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

COM quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Wood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

Manufacturer to provide nylon carpet glides when applicable.

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Ensure that upholstered goods will fit in elevators and through doors prior to commencing fabrication.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number.

Manufacturer to include all necessary hardware with each item.

Reference the Design Intent softgoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-101
Project #:	Dusk Scheme	Item Description:	Dining Chair at Banquette
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ 2		

Item Quantity: ea

Manufacturer:	**Charter Furniture**	**Kovet Hospitality**
Address:	206 Frazier Ave. Liberty, NC 27298	6700 Gateway Park Dr. Ste. 1 San Diego, CA 92154
Phone:	(818) 943-1757	(619) 554 - 8800
Contact:	Jim Trowbridge	Cindy Royals
E-mail:	jtrowbridge@charterfurniture.com	sales@kovethospitality.com
Web:	www.charterfurniture.com	www.kovethospitality.com

Description:	Upholstered Bucket-Style Dining Chair with (4) Four Round Wood Legs, Tapered Height Arm, and X-Stretcher that Attaches to Upholstered Shell with “Pockets”. Double Stitch Detail on Upholstered Shell and Pockets. Attached Seat Pad with Crown on Center.
Model Name:	Dining Chair at Banquette
Material/Finish:	Wood Legs & Stretchers to have Satin Transparent Stain to Match (PL-04) Wilsonart Laminate Neo Walnut 7991K-12 with Low Sheen Level
Dimensions:	25"W x 22"D x 30"H
Arm Height:	Tapered 25.5" - 30"
Seat Height:	19"
Seat Depth:	18.5"
Seat Cushion Style:	Attached Seat Pad with Crown on Center
Back Cushion Style:	Tight Upholstered
Cushion Content:	Poly Fiber Wrapped High Resiliency Foam

COM/COL:	Fabric at Dining Chair: (B) PA-101A; Fabric Innovations; Pattern: Mohawk - KF; Carbon; 100% Polyester; Width: 54"; Backing: Manufacturer to Provide Acrylic Backing; Finish: Inherent Stain Repellent Finish Provided by Manufacturer; Fire Rating: NFPA - 260; Durability: 50,000 Double Rubs
Notes:	Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00. Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing. Seat Cushion Requirement: Minimum 2.2 Density Polyurethane with an I.L.D. (Initial Load Deflection) of 24-32 Foam with a Soft Crown.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-101
Project #:	Dusk Scheme	Item Description:	Dining Chair at Banquette
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ 2		

Item Quantity: ea

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

COM quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Wood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

Manufacturer to provide nylon carpet glides when applicable.

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Ensure that upholstered goods will fit in elevators and through doors prior to commencing fabrication.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number.

Manufacturer to include all necessary hardware with each item.

Reference the Design Intent softgoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-102
Project #:	Dusk Scheme	Item Description:	Barstool at High Top Dining
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ 3		

Item Quantity: ea

Manufacturer:	**Charter Furniture**	**Kovet Hospitality**	**Prime Hospitality**
Address:	206 Frazier Ave. Liberty, NC 27298	6700 Gateway Park Dr. Ste. 1 San Diego, CA 92154	2000 Remke Ave. Lawrenceburg TN 38464
Phone:	(818) 943-1757	(619) 554 - 8800	(931) 762-5800
Contact:	Jim Trowbridge	Cindy Royals	Jim Donnelly
E-mail:	jtrowbridge@charterfurniture.com	sales@kovethospitality.com	Jim@primehospitalitygroup.com
Web:	www.charterfurniture.com	www.kovethospitality.com	www.primehospitalitygroup.com

Description: Upholstered Bar Height Stool with Seat and Back Cushions, Tapered Wood Legs with Visible X-Stretcher Below Seat Cushion, Wood Side Stretchers, Front Stretcher with Brushed Stainless-Steel U-Cap. Wood Frame to Extend Partially Up Back.

Model Name:	Barstool at High Top Dining
Material/Finish:	Satin Transparent Stain to Match (PL-04) Wilsonart Laminate Neo Walnut 7991K-12 with Low Sheen Level
Dimensions:	20"W x 23"D x 41.5"H
Seat Height:	29"
Seat Depth:	18"
Seat Cushion Style:	Tight Upholstered with Crown and Waterfall Edge
Back Cushion Style:	Tight Upholstered with Crown
Cushion Content:	Poly Fiber Wrapped High Resiliency Foam
COM/COL:	Vinyl at Barstool: (B) PA-102A; Fil Doux Textiles; Pattern: Charisma; Nostalgia; 100% Otratex; Width: 54"; Finish: Manufacturer to Provide PRO- TECH Finish; Fire Rating: NFPA - 260, Cal 117; Durability: 200,000 Double Rubs
Notes:	Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00. Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing. Seat Cushion Requirement: Minimum 2.2 Density Polyurethane with an I.L.D. (Initial Load Deflection) of 24-32 Foam with a Soft Crown.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-102
Project #:	Dusk Scheme	Item Description:	Barstool at High Top Dining
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ 3		

Item Quantity: ea

Back Cushion Requirement: 1.8 Density
Polyurethane with an I.L.D. (Initial Load Deflection)
of 18 I.L.D. Foam.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use. COM

quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Wood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

Manufacturer to provide nylon carpet glides when applicable.

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Ensure that upholstered goods will fit in elevators and through doors prior to commencing fabrication.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number.

Manufacturer to include all necessary hardware with each item.

Reference the Design Intent softgoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-103
Project #:	Dusk Scheme	Item Description:	Barrel Back Lounge Chair
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ 2		

Item Quantity: ea

Manufacturer:	**Charter Furniture**	**Kovet Hospitality**	**Prime Hospitality**
Address:	206 Frazier Ave. Liberty, NC 27298	6700 Gateway Park Dr. Ste. 1 San Diego, CA 92154	2000 Remke Ave. Lawrenceburg TN 38464
Phone:	(818) 943-1757	(619) 554 - 8800	(931) 762-5800
Contact:	Jim Trowbridge	Cindy Royals	Jim Donnelly
E-mail:	jtrowbridge@charterfurniture.com	sales@kovethospitality.com	Jim@primehospitalitygroup.com
Web:	www.charterfurniture.com	www.kovethospitality.com	www.primehospitalitygroup.com

Description: Fully Upholstered Lounge Chair with Curved Fabric Upholstered Shell Back and Sides, Tapering Height Arm, Recessed Wood Plinth Base, and Vinyl Seat Cushion with Double Stitch Detailing.

Model Name:	Barrel Back Lounge Chair
Material/Finish:	Wood at plinth base to be Satin Transparent Stain to Match (PL-04) Wilsonart Laminate Neo Walnut 7991K-12with Low Sheen Level
Dimensions:	29"W x 24"D x 30.5"H
Arm Height:	Tapered 26.5" - 30.5"
Seat Height:	18"
Seat Depth:	19"
Seat Cushion Style:	Tight Upholstered with Crown on Center
Back Cushion Style:	Tight Upholstered
Cushion Content:	Poly Fiber Wrapped High Resiliency Foam
COM/COL:	Vinyl at Chair Seat: (B) PA-103A; Fabric Innovations; Pattern: VIP; Hazelnut; 100% Vinyl Face; Width: 54"; Backing: 100% Polyester; Fire Rating: NFPA - 260, Cal 117; Durability: 200,000 Double Rubs Fabric at Chair Shell: (B) PA-103B; Valley Forge Fabrics; Pattern: IS43-04; Guru's Texture; Destiny; 100% Polyester; Width: 54"; Backing: Inherent Backing Provided by Manufacturer; Finish: Inherent Stain Repellent Finish Provided by Manufacturer; Fire Rating: Cal 117; Durability: 100,000 Double Rubs
Notes:	Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00. Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-103
Project #:	Dusk Scheme	Item Description:	Barrel Back Lounge Chair
Issue Date:	04/19/21	Area Name:	Public Area

Item Quantity: ea

Seat Cushion Requirement: Minimum 2.2 Density
Polyurethane with an I.L.D. (Initial Load Deflection)
of 24-32 Foam with a Soft Crown.

Back Cushion Requirement: 1.8 Density
Polyurethane with an I.L.D. (Initial Load Deflection)
of 18 I.L.D. Foam.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

COM quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Wood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

Manufacturer to provide nylon carpet glides when applicable.

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Ensure that upholstered goods will fit in elevators and through doors prior to commencing fabrication.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number.

Manufacturer to include all necessary hardware with each item.

Reference the Design Intent softgoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-104
Project #:	Dusk Scheme	Item Description:	Lounge Chair at Main Dining
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ 2		

Item Quantity: ea

Manufacturer:	**Charter Furniture**	**Kovet Hospitality**	**Prime Hospitality**
Address:	206 Frazier Ave. Liberty, NC 27298	6700 Gateway Park Dr. Ste. 1 San Diego, CA 92154	2000 Remke Ave. Lawrenceburg TN 38464
Phone:	(818) 943-1757	(619) 554 - 8800	(931) 762-5800
Contact:	Jim Trowbridge	Cindy Royals	Jim Donnelly
E-mail:	jtrowbridge@charterfurniture.com	sales@kovethospitality.com	Jim@primehospitalitygroup.com
Web:	www.charterfurniture.com	www.kovethospitality.com	www.primehospitalitygroup.com

Description:	Lounge Chair with Upholstered Curved Frame with Semi-Attached Seat and Back Cushions with Buttonless Square Tufting, Square Tapered Metal Legs, Side Stretchers and Concealed X-Stretcher with Powder Coat Finish.
Model Name:	Lounge Chairs at Main Dining
Material/Finish:	(PT-05) TIGER Drylac Low Lights Bronze 49/61120
Dimensions:	27"W x 28"D x 32"H
Seat Height:	18.5"
Seat Depth:	18"
Seat Cushion Style:	Semi Attached with Single Stitch Tufting
Back Cushion Style:	Semi Attached with Single Stitch Tufting
Cushion Content:	Poly Fiber Wrapped High Resiliency Foam
COM/COL:	Fabric at Lounge Chair: (B) PA-104A; Fabric Innovations; Pattern: Copa Cabana - KF; Ocean Site; 100% Polyester; Width: 54"; Backing: Inherent Acrylic Backing Provided by Manufacturer; Finish: Manufacturer to Provide Alta Food + Beverage Seating Finish; Fire Rating: NFPA - 260, Cal 117; Durability: 100,000 Double Rubs
Notes:	Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00. Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing. Seat Cushion Requirement: Minimum 2.2 Density Polyurethane with an I.L.D. (Initial Load Deflection) of 24-32 Foam with a Soft Crown. Back Cushion Requirement: 1.8 Density

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-104
Project #:	Dusk Scheme	Item Description:	Lounge Chair at Main Dining
Issue Date:	04/19/21	Area Name:	Public Area

Item Quantity: ea

Polyurethane with an I.L.D. (Initial Load Deflection)
of 18 I.L.D. Foam.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use. COM

quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Wood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

Manufacturer to provide nylon carpet glides when applicable.

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Ensure that upholstered goods will fit in elevators and through doors prior to commencing fabrication.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number.

Manufacturer to include all necessary hardware with each item.

Reference the Design Intent softgood drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-105
Project #:	Dusk Scheme	Item Description:	Counter Height Stool at Window Seating
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ 2		

Item Quantity: ea

Manufacturer:	**Charter Furniture**	**Kovet Hospitality**	**Prime Hospitality**
Address:	206 Frazier Ave. Liberty, NC 27298	6700 Gateway Park Dr. Ste. 1 San Diego, CA 92154	2000 Remke Ave. Lawrenceburg TN 38464
Phone:	(818) 943-1757	(619) 554 - 8800	(931) 762-5800
Contact:	Jim Trowbridge	Cindy Royals	Jim Donnelly
E-mail:	jtrowbridge@charterfurniture.com	sales@kovethospitality.com	Jim@primehospitalitygroup.com
Web:	www.charterfurniture.com	www.kovethospitality.com	www.primehospitalitygroup.com

Description:	Counter Height Stool with Upholstered Seat and Back Cushion with Subtle Concave Shape, Round Tapered Wood Legs that Extend Up to Support Back Cushion and Brushed Stainless Steel H-Style Stretcher.
Model Name:	Counter Height Stool at Window Seating
Material/Finish:	See Notes Below
Dimensions:	20"W x 20"D x 30"H
Seat Height:	21"
Seat Depth:	17"
Seat Cushion Style:	Tight Upholstered
Back Cushion Style:	Tight Upholstered
Cushion Content:	Poly Fiber Wrapped High Resiliency Foam
COM/COL:	Fabric at Counter Height Stool at Window Seating: (B) PA-105A; Fabric Innovations; Pattern: Copa Cabana - KF; Fossil; 100% Polyester; Width: 54"; Backing: Manufacturer to Provide Acrylic Backing; Finish: Manufacturer to Provide Stain Repellent Finish; Fire Rating: NFPA - 260; Durability: 50,000 Double Rubs
Notes:	Wood Finish: Stain to Match (PL-03) Wilsonart Laminate #1595K-18 Black, Linearity Finish with Aeon™ with Low Sheen Level. Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00. Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-105
Project #:	Dusk Scheme	Item Description:	Counter Height Stool at Window Seating
Issue Date:	04/19/21	Area Name:	Public Area

Item Quantity: ea

Drawing.

Seat Cushion Requirement: Minimum 2.2 Density
Polyurethane with an I.L.D. (Initial Load Deflection)
of 24-32 Foam with a Soft Crown.

Back Cushion Requirement: 1.8 Density
Polyurethane with an I.L.D. (Initial Load Deflection)
of 18 I.L.D. Foam.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use. COM

quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Wood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

Manufacturer to provide nylon carpet glides when applicable.

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Ensure that upholstered goods will fit in elevators and through doors prior to commencing fabrication.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number.

Manufacturer to include all necessary hardware with each item.

Reference the Design Intent softgood drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-106
Project #:	Dusk Scheme	Item Description:	Dining Chair
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ 3		

Item Quantity: ea

Manufacturer:	**Charter Furniture**	**Kovet Hospitality**
Address:	206 Frazier Ave. Liberty, NC 27298	6700 Gateway Park Dr. Ste. 1 San Diego, CA 92154
Phone:	(818) 943-1757	(619) 554 - 8800
Contact:	Jim Trowbridge	Cindy Royals
E-mail:	jtrowbridge@charterfurniture.com	sales@kovethospitality.com
Web:	www.charterfurniture.com	www.kovethospitality.com

Description:	Upholstered Bucket-Style Dining Chair with (4) Four Round Wood Legs, Tapered Height Arm, and X-Stretcher that Attaches to Upholstered Shell with "Pockets". Double Stitch Detail on Upholstered Shell and Pockets. Attached Seat Pad with Crown on Center.
Model Name:	Dining Chair
Material/Finish:	Wood legs & Stretcher to be Satin Transparent Stain to Match (PL-04) Wilsonart Laminate Neo Walnut 7991K-12 with Low Sheen Level
Dimensions:	25"W x 22"D x 30"H
Arm Height:	Tapered 25.5" - 30"
Seat Height:	19"
Seat Depth:	18.5"
Seat Cushion Style:	Attached Seat Pad with Crown on Center
Back Cushion Style:	Tight Upholstered
Cushion Content:	Poly Fiber Wrapped High Resiliency Foam

COM/COL:	Vinyl at Dining Chair: (B) PA-106A; Fil Doux Fabrics; Pattern: Mundano Coffee; 100% Otratex; Width: 54"; Backing: Acrylic; Finish: Pro Tech; Fire Rating: NFPA - 260, Cal 117-2013; Durability: 200,000 Double Rubs, COO: Chile, Repeat: NA
Notes:	Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00. Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing. Seat Cushion Requirement: Minimum 2.2 Density Polyurethane with an I.L.D. (Initial Load Deflection) of 24-32 Foam with a Soft Crown.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-106
Project #:	Dusk Scheme	Item Description:	Dining Chair
Issue Date:	04/19/21	Area Name:	Public Area

Item Quantity: ea

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

COM quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Wood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

Manufacturer to provide nylon carpet glides when applicable.

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Ensure that upholstered goods will fit in elevators and through doors prior to commencing fabrication.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number.

Manufacturer to include all necessary hardware with each item.

Reference the Design Intent softgood drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-107
Project #:	Dusk Scheme	Item Description:	Counter Stool at Pantry
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ 2		

Item Quantity: ea

Manufacturer:	**Charter Furniture**	**Kovet Hospitality**	**Prime Hospitality**
Address:	206 Frazier Ave. Liberty, NC 27298	6700 Gateway Park Dr. Ste. 1 San Diego, CA 92154	2000 Remke Ave. Lawrenceburg TN 38464
Phone:	(818) 943-1757	(619) 554 - 8800	(931) 762-5800
Contact:	Jim Trowbridge	Cindy Royals	Jim Donnelly
E-mail:	jtrowbridge@charterfurniture.com	sales@kovethospitality.com	Jim@primehospitalitygroup.com
Web:	www.charterfurniture.com	www.kovethospitality.com	www.primehospitalitygroup.com

Description:	Counter Height Stool with Upholstered Seat and Back Cushion with Subtle Concave Shape, Round Tapered Wood Legs that Extend Up to Support Back Cushion and Brushed Stainless Steel H-Style Stretcher.
Model Name:	Counter Stool at Pantry
Material/Finish:	See Notes Below
Dimensions:	20"W x 20"D x 28"H
Seat Height:	22"
Seat Depth:	17"
Seat Cushion Style:	Tight Upholstered
Back Cushion Style:	Tight Upholstered
Cushion Content:	Poly Fiber Wrapped High Resiliency Foam
COM/COL:	Vinyl at Counter Stool: (B) PA-107A; Fabric Innovations; Pattern: Patagonian; Tuco; 100% Phthalate Free Vinyl; Width: 54"; Fire Rating: NFPA - 260; Durability: 100,000 Double Rubs
Notes:	Wood Stain to Match (PL-03) Wilsonart Laminate #1595K-18 Black, Linearity Finish with Aeon™ with Low Sheen Level. Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00. Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing. Seat Cushion Requirement: Minimum 2.2 Density

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-107
Project #:	Dusk Scheme	Item Description:	Counter Stool at Pantry
Issue Date:	04/19/21	Area Name:	Public Area

Item Quantity: ea

Polyurethane with an I.L.D. (Initial Load Deflection)
of 24-32 Foam with a Soft Crown.

Back Cushion Requirement: 1.8 Density
Polyurethane with an I.L.D. (Initial Load Deflection)
of 18 I.L.D. Foam.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use. COM

quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Wood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

Manufacturer to provide nylon carpet glides when applicable.

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Ensure that upholstered goods will fit in elevators and through doors prior to commencing fabrication.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number.

Manufacturer to include all necessary hardware with each item.

Reference the Design Intent softgood drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-108
Project #:	Dusk Scheme	Item Description:	Counter Stool at Communal Table
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/27 Δ 3		

Item Quantity: ea

Manufacturer:	**Charter Furniture**	**Kovet Hospitality**	**Prime Hospitality**
Address:	206 Frazier Ave. Liberty, NC 27298	6700 Gateway Park Dr. Ste. 1 San Diego, CA 92154	2000 Remke Ave. Lawrenceburg TN 38464
Phone:	(818) 943-1757	(619) 554 - 8800	(931) 762-5800
Fax:			
Contact:	Jim Trowbridge	Cindy Royals	Jim Donnelly
E-mail:	jtrowbridge@charterfurniture.com	sales@kovethospitality.com	Jim@primehospitalitygroup.com
Web:	www.charterfurniture.com	www.kovethospitality.com	www.primehospitalitygroup.com

Description:	Upholstered Counter Height Stool with Seat and Back Cushions, Tapered Wood Legs with Visible X-Stretcher Below Seat Cushion, Wood Side and Stretchers and Front Stretcher with Brushed Stainless-Steel U-Cap. Wood Frame to Extend Partially Up Back
Model Name:	Counter Stool at Communal Table
Material/Finish:	Wood legs and stretchers to be Satin Transparent Stain to Match (PL-04) Wilsonart Laminate Neo Walnut 7991K-12 with Low Sheen Level
Dimensions:	20"W x 23"D x 34.5"H
Seat Height:	22"
Seat Depth:	18"
Seat Cushion Style:	Tight Upholstered with Crown and Waterfall Edge
Back Cushion Style:	Tight Upholstered with Crown
Cushion Content:	Poly Fiber Wrapped High Resiliency Foam
COM/COL:	Vinyl at Counter Stool: (B) PA-108A; Fil Doux Textiles; Pattern: Charisma; Nostalgia; 100% Otratex; Width: 54"; Finish: Manufacturer to Provide PRO-TECH Finish; Fire Rating: NFPA - 260, Cal 117; Durability: 200,000 Double Rubs

Notes:

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-108
Project #:	Dusk Scheme	Item Description:	Counter Stool at Communal Table
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/27 Δ 3		

Item Quantity: ea

Seat Cushion Requirement: Minimum 2.2 Density
Polyurethane with an I.L.D. (Initial Load Deflection)
of 24-32 Foam with a Soft Crown.

Back Cushion Requirement: 1.8 Density
Polyurethane with an I.L.D. (Initial Load Deflection)
of 18 I.L.D. Foam.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use. COM

quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Wood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

Manufacturer to provide nylon carpet glides when applicable.

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Ensure that upholstered goods will fit in elevators and through doors prior to commencing fabrication.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number.

Manufacturer to include all necessary hardware with each item.

Reference the Design Intent softgoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

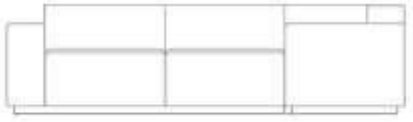
Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-109
Project #:	Dusk Scheme	Item Description:	Sectional
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ 2		

Item Quantity: ea

	Charter Furniture	**Kovet Hospitality**	**Prime Hospitality**
Manufacturer:			
Address:	206 Frazier Ave. Liberty, NC 27298	6700 Gateway Park Dr. Ste. 1 San Diego, CA 92154	2000 Remke Ave. Lawrenceburg TN 38464
Phone:	(818) 943-1757	(619) 554 - 8800	(931) 762-5800
Contact:	Jim Trowbridge	Cindy Royals	Jim Donnelly
E-mail:	jtrowbridge@charterfurniture.com	sales@kovethospitality.com	Jim@primehospitalitygroup.com
Web:	www.charterfurniture.com	www.kovethospitality.com	www.primehospitalitygroup.com

Description: Fully Upholstered Sectional Sofa with Recessed Wood Plinth Base, Tight Upholstered Box-Style Cushions with ½" Flange Detail on all Edge Facing Seams and (5) Five Loose Accent Pillows. Sectional Constructed in (2) Two Parts, Secured Together with Concealed Ganging Devices.

(4) Four Loose Square Accent Pillows and (1) One Loose Rectangular Accent Pillow.



Model Name:	Sectional
Material/Finish:	Wood plinth base to be Satin Transparent Stain to Match (PL-04) Wilsonart Laminate Neo Walnut 7991K-12 with Low Sheen Level
Dimensions:	109.5"W x 68.5"D x 30"H
Arm Height:	25"
Seat Height:	18"
Seat Depth:	22.5"
Seat Cushion Style:	Tight Upholstered with Crown on Center
Back Cushion Style:	Tight Upholstered with Crown on Center
Cushion Content:	Poly Fiber Wrapped High Resiliency Foam
COM/COL:	Fabric at Sectional: (B) PA-109A; Fabric Innovations; Pattern: Copa Cabana - KF; Fossil; 100% Polyester; Width: 54"; Backing: Inherent Acrylic Backing Provided by Manufacturer; Finish: Manufacturer to Provide Alta Food + Beverage Seating Finish; Fire Rating: NFPA - 260; Durability: 50,000 Double Rubs
Notes:	Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00. Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing. Seat Cushion Requirement: Minimum 2.2 Density Polyurethane with an I.L.D. (Initial Load Deflection)

of 24-32 Foam with a Soft Crown.

Back Cushion Requirement: 1.8 Density
Polyurethane with an I.L.D. (Initial Load Deflection)
of 18 I.L.D. Foam.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use. COM

quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Wood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

Manufacturer to provide nylon carpet glides when applicable.

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Ensure that upholstered goods will fit in elevators and through doors prior to commencing fabrication.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number.

Manufacturer to include all necessary hardware with each item.

Reference the Design Intent softgoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-109.1
Project #:	Dusk Scheme	Item Description:	Accent Pillow at Sectional
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ 3		

Item Quantity: ea

Manufacturer:	**Charter Furniture**	**Kovet Hospitality**	**Prime Hospitality**
Address:	206 Frazier Ave. Liberty, NC 27298	6700 Gateway Park Dr. Ste. 1 San Diego, CA 92154	2000 Remke Ave. Lawrenceburg TN 38464
Phone:	(818) 943-1757	(619) 554 - 8800	(931) 762-5800
Contact:	Jim Trowbridge	Cindy Royals	Jim Donnelly
E-mail:	jtrowbridge@charterfurniture.com	sales@kovethospitality.com	Jim@primehospitalitygroup.com
Web:	www.charterfurniture.com	www.kovethospitality.com	www.primehospitalitygroup.com

Description:	Loose Rectangular Knife Edge Accent Pillow with Removable Cover, Synthetic Down Fill and Hidden Rust Proof Zipper. Quantity of (1) One Accent Pillow at Sectional.
Model Name:	Accent Pillow at Sectional
Dimensions:	20"W x 16"H x 4"D
Cushion Content:	Poly Fiber Wrapped High Resiliency Foam
COM/COL:	Fabric at Sectional Accent Pillow: (B) PA-109.1A; Valley Forge Fabrics; Pattern: CSU72-03; Electromagnetic; Skyfall; 75% Polyester, 11% Acrylic, 14% Olefin; Repeat: V: 15" x H: 13.75"; Width: 54"; Railroad: No; Backing: Inherent Acrylic Backing Provided by Manufacturer; Finish: Inherent Stain Treatment Provided by Manufacturer; Fire Rating: Cal 117; Durability: 50,000 Double Rubs
Notes:	Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00. Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: YK

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-109.1
Project #:	Dusk Scheme	Item Description:	Accent Pillow at Sectional
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ 3		

Item Quantity: ea

Instructions:

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

COM quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Wood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

Manufacturer to provide nylon carpet glides when applicable.

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Ensure that upholstered goods will fit in elevators and through doors prior to commencing fabrication.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number.

Manufacturer to include all necessary hardware with each item.

Reference the Design Intent softgoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-109.2
Project #:	Dusk Scheme	Item Description:	Accent Pillow at Sectional
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ 2		

Item Quantity: ea

	Charter Furniture	**Kovet Hospitality**	**Prime Hospitality**
Manufacturer:			
Address:	206 Frazier Ave. Liberty, NC 27298	6700 Gateway Park Dr. Ste. 1 San Diego, CA 92154	2000 Remke Ave. Lawrenceburg TN 38464
Phone:	(818) 943-1757	(619) 554 - 8800	(931) 762-5800
Contact:	Jim Trowbridge	Cindy Royals	Jim Donnelly
E-mail:	jtrowbridge@charterfurniture.com	sales@kovethospitality.com	Jim@primehospitalitygroup.com
Web:	www.charterfurniture.com	www.kovethospitality.com	www.primehospitalitygroup.com

Description:	Loose Square Knife Edge Accent Pillow with Removable Cover, Synthetic Down Fill and Hidden Rust Proof Zipper. Quantity of (2) Two Accent Pillows at Sectional.
Model Name:	Accent Pillow at Sectional
Dimensions:	20"Square x 4”D
Cushion Content:	Poly Fiber Wrapped High Resiliency Foam
COM/COL:	Fabric at Sectional Accent Pillow: (B) PA-109.2A; Fil-Doux Textiles; Pattern: Relax; Oro; 100% Polyester; Width: 54"; Railroad: No; Backing: Inherent Acrylic Backing Provided by Manufacturer; Finish: Manufacturer to Provide PRO-TECH Finish; Fire Rating: NFPA - 260, Cal 117-2013; Durability: 60,000 Double Rubs
Notes:	Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00. Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: YK

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-109.2
Project #:	Dusk Scheme	Item Description:	Accent Pillow at Sectional
Issue Date:	04/19/21	Area Name:	Public Area

Item Quantity: ea

Instructions:

COM quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Wood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

Manufacturer to provide nylon carpet glides when applicable.

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Ensure that upholstered goods will fit in elevators and through doors prior to commencing fabrication.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number.

Manufacturer to include all necessary hardware with each item.

Reference the Design Intent softgoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-109.3
Project #:	Dusk Scheme	Item Description:	Accent Pillow at Sectional
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ 2		

Item Quantity: ea

Manufacturer:	**Charter Furniture**	**Kovet Hospitality**	**Prime Hospitality**
Address:	206 Frazier Ave. Liberty, NC 27298	6700 Gateway Park Dr. Ste. 1 San Diego, CA 92154	2000 Remke Ave. Lawrenceburg TN 38464
Phone:	(818) 943-1757	(619) 554 - 8800	(931) 762-5800
Contact:	Jim Trowbridge	Cindy Royals	Jim Donnelly
E-mail:	jtrowbridge@charterfurniture.com	sales@kovethospitality.com	Jim@primehospitalitygroup.com
Web:	www.charterfurniture.com	www.kovethospitality.com	www.primehospitalitygroup.com

Description:	Loose Square Knife Edge Accent Pillow with Removable Cover, Synthetic Down Fill and Hidden Rust Proof Zipper. Quantity of (2) Two Accent Pillows at Sectional.
Model Name:	Accent Pillow at Sectional
Dimensions:	20"W x 20"H
Cushion Content:	Poly Fiber Wrapped High Resiliency Foam
COM/COL:	Fabric at Sectional Accent Pillow: (B) PA-109.3A; Fil Doux Textiles; Pattern: Park Slope; Storm; 80% Polyester, 20% Cotton; Width: 54"; Railroad: No; Backing: Inherent Acrylic Backing Provided by Manufacturer; Finish: Manufacturer to Provide PRO-TECH Finish; Fire Rating: NFPA - 260, Cal 117-2013; Durability: 60,000 Double Rubs
Notes:	Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00. Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: YK

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-109.3
Project #:	Dusk Scheme	Item Description:	Accent Pillow at Sectional
Issue Date:	04/19/21	Area Name:	Public Area

Item Quantity: ea

Instructions:

COM quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Wood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

Manufacturer to provide nylon carpet glides when applicable.

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Ensure that upholstered goods will fit in elevators and through doors prior to commencing fabrication.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number.

Manufacturer to include all necessary hardware with each item.

Reference the Design Intent softgoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-110
Project #:	Dusk Scheme	Item Description:	Lounge Chair at Living Room
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ 2		

Item Quantity: ea

Manufacturer:	**Charter Furniture**	**Kovet Hospitality**	**Prime Hospitality**
Address:	206 Frazier Ave. Liberty, NC 27298	6700 Gateway Park Dr. Ste. 1 San Diego, CA 92154	2000 Remke Ave. Lawrenceburg TN 38464
Phone:	(818) 943-1757	(619) 554 - 8800	(931) 762-5800
Contact:	Jim Trowbridge	Cindy Royals	Jim Donnelly
E-mail:	jtrowbridge@charterfurniture.com	sales@kovethospitality.com	Jim@primehospitalitygroup.com
Web:	www.charterfurniture.com	www.kovethospitality.com	www.primehospitalitygroup.com

Description: Lounge Chair with Open Powder Coated Metal Frame and Fully Upholstered Seat and Back Cushions. Seat Cushion to be Tight Upholstered with Crown on Center and Waterfall Front Edge, Supported by Metal Front Stretcher. Back Cushion to be Tight Upholstered with Crown, Rounded Top Edge and Flat Back.

Model Name:	Lounge Chair at Living Room
Material/Finish:	(PT-05) TIGER Drylac Low Lights Bronze 49/61120
Dimensions:	24"W x 29"D x 31.5"H
Arm Height:	23.5"
Seat Height:	18.5"
Seat Depth:	18"D
Seat Cushion Style:	Tight Upholstered with Crown and Waterfall Edge
Back Cushion Style:	Tight Upholstered with Waterfall Top Edge
Cushion Content:	Poly Fiber Wrapped High Resiliency Foam

COM/COL: Fabric at Lounge Chairs at Living Room: (B) PA- 110A; Fabric Innovations; Pattern: Copa Cabana - KF; Ocean Site; 100% Polyester; Width: 54"; Backing: Manufacturer to Provide Acrylic Backing; Finish: Manufacturer to Provide Stain Repellent Finish; Fire Rating: NFPA-260; Durability: 100,000 Double Rubs

Notes: Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Seat Cushion Requirement: Minimum 2.2 Density Polyurethane with an I.L.D. (Initial Load Deflection) of 24-32 Foam with a Soft Crown.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-110
Project #:	Dusk Scheme	Item Description:	Lounge Chair at Living Room
Issue Date:	04/19/21	Area Name:	Public Area

Item Quantity: ea

Back Cushion Requirement: 1.8 Density
Polyurethane with an I.L.D. (Initial Load Deflection)
of 18 I.L.D. Foam.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

COM quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Wood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

Manufacturer to provide nylon carpet glides when applicable.

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Ensure that upholstered goods will fit in elevators and through doors prior to commencing fabrication.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number.

Manufacturer to include all necessary hardware with each item.

Reference the Design Intent softgoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-111
Project #:	Dusk Scheme	Item Description:	Bench at Entry
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ 2		

Item Quantity: ea

Manufacturer:	**Charter Furniture**	**Kovet Hospitality**	**Prime Hospitality**
Address:	206 Frazier Ave. Liberty, NC 27298	6700 Gateway Park Dr. Ste. 1 San Diego, CA 92154	2000 Remke Ave. Lawrenceburg TN 38464
Phone:	(818) 943-1757	(619) 554 - 8800	(931) 762-5800
Contact:	Jim Trowbridge	Cindy Royals	Jim Donnelly
E-mail:	jtrowbridge@charterfurniture.com	sales@kovethospitality.com	Jim@primehospitalitygroup.com
Web:	www.charterfurniture.com	www.kovethospitality.com	www.primehospitalitygroup.com

Description:	Wing-Back Style Bench with Curved Plastic Laminate Frame and Front Apron, (3) Three Attached Fully Upholstered Box Seat Cushions with Crown on Center and Tight Upholstered Back Cushion to Fit Snug Against Curved Frame.
Model Name:	Bench at Entry
Material/Finish:	(PL-04) Wilsonart Laminate 7991K-12 Neo Walnut, Soft Grain Finish with Aeon™
Dimensions:	72"W x 25"D x 30"
Arm Height:	30"
Seat Height:	18"
Seat Depth:	20"D
Seat Cushion Style:	Attached Box Style Cushion with Crown at center
Back Cushion Style:	Curved, Tight Upholstered
Cushion Content:	Poly Fiber Wrapped High Resiliency Foam
COM/COL:	Fabric at Bench: (B) PA-111A; Fil Doux Textiles; Pattern: Park Slope; Storm; 80% Polyester, 20% Cotton; Width: 54"; Railroad: No; Backing: Inherent Acrylic Backing Provided by Manufacturer; Finish: Manufacturer to Provide PRO-TECH Finish; Fire Rating: NFPA - 260, Cal 117-2013; Durability: 60,000 Double Rubs
Notes:	Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00. Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing. Seat Cushion Requirement: Minimum 2.2 Density Polyurethane with an I.L.D. (Initial Load Deflection) of 24-32 Foam with a Soft Crown.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-111
Project #:	Dusk Scheme	Item Description:	Bench at Entry
Issue Date:	04/19/21	Area Name:	Public Area

Item Quantity: ea

Back Cushion Requirement: 1.8 Density Polyurethane with an I.L.D. (Initial Load Deflection) of 18 I.L.D. Foam.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use. COM

quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Wood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

Manufacturer to provide nylon carpet glides when applicable.

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Ensure that upholstered goods will fit in elevators and through doors prior to commencing fabrication.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number.

Manufacturer to include all necessary hardware with each item.

Reference the Design Intent softgoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-112
Project #:	Dusk Scheme	Item Description:	Banquette at Guest Laundry
Issue Date:	04/19/21	Area Name:	Public Area

Revision(s): 06/23 Δ3

Item Quantity: ea

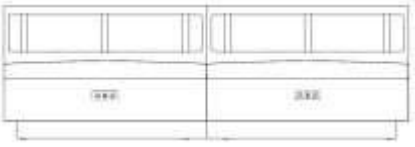
Manufacturer:	**Charter Furniture**	**Kovet Hospitality**	**Prime Hospitality**
Address:	206 Frazier Ave. Liberty, NC 27298	6700 Gateway Park Dr. Ste. 1 San Diego, CA 92154	2000 Remke Ave. Lawrenceburg TN 38464
Phone:	(818) 943-1757	(619) 554 - 8800	(931) 762-5800
Contact:	Jim Trowbridge	Cindy Royals	Jim Donnelly
E-mail:	jtrowbridge@charterfurniture.com	sales@kovethospitality.com	Jim@primehospitalitygroup.com
Web:	www.charterfurniture.com	www.kovethospitality.com	www.primehospitalitygroup.com

Description: (2) Two Piece Banquette with Tight Upholstered Seat Cushion with Waterfall Front Edge, Tight Upholstered Back Cushion Secured with Decorative Straps. Straps to be Attached so There is No Movement. Two Pieces to be Secured Together with Concealed Ganging Device.

Manufacturer to Provide (3) Three Black Satin Dual USB and Duplex Convenience Outlet Receptacles with Plug Exiting Through Back of Banquette. (2) Two Outlet Units Located at the Front of the Base and (1) One Outlet Unit Located at the Side, 15"H on Center Above the Floor.

Convenience Outlets to be Daisy Chain Compatible.

Upholsterer to Include A "Wipe Out" Channel Style Detail at Seat to Back Connection.



Material/Finish:	See Notes Below
Dimensions:	94"W x 26.5"D x 31"H
Seat Height:	18"
Seat Depth:	20"
Seat Cushion Style:	Removable Box with Crown and Waterfall Front Edge
Back Cushion Style:	Tight Upholstered Pad
Cushion Content:	Poly Fiber Wrapped High Resiliency Foam

COM/COL: Vinyl at Banquette Seat Cushion and Strap: (B) PA-112A; Fil Doux; Pattern: Mundano Coffee; 100% Otratex; Width: 54"; Backing: Acrylic; Finish: Pro-Tech; Fire Rating: NFPA - 260, Cal 117-2013; Durability: 200,000 Double Rubs; COO: Chile; Repeat: NA

Fabric at Back Cushion: (B) PA-112B; P/Kaufmann Contract; Pattern: Upson Downs; Haberdashery; 100% Polyester; Repeat: V: 2.38" x H: 1.25"; Width: 55"; Railroad: No; Backing: Inherent Acrylic Backing Provided by Manufacturer; Finish: Inherent SSR Finish Provided by Manufacturer; Fire Rating: NFPA - 260; Durability: 100,000 Double Rubs

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-112
Project #:	Dusk Scheme	Item Description:	Banquette at Guest Laundry
Issue Date:	04/19/21	Area Name:	Public Area

Item Quantity: ea

Notes:

Finishes:
Back: (PL-04) Wilsonart Laminate 7991K-12 Neo Walnut, Soft Grain Finish with Aeon™
Base: Solid Wood, (PL-04) Wilsonart Laminate 7991K-12 Neo Walnut, Soft Grain Finish with Aeon™ OR Stained to Match (PL-04)

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Seat Cushion Requirement: Minimum 2.2 Density Polyurethane with an I.L.D. (Initial Load Deflection) of 24-32 Foam with a Soft Crown.

Back Cushion Requirement: 1.8 Density Polyurethane with an I.L.D. (Initial Load Deflection) of 18 I.L.D. Foam.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use. COM

quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Wood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

Manufacturer to provide nylon carpet glides when applicable.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-112
Project #:	Dusk Scheme	Item Description:	Banquette at Guest Laundry
Issue Date:	04/19/21	Area Name:	Public Area

Item Quantity: ea

Instructions:

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Ensure that upholstered goods will fit in elevators and through doors prior to commencing fabrication.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number.

Manufacturer to include all necessary hardware with each item.

Reference the softgoods drawings on hiltonworldwide.com/design for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-113
Project #:	DuskScheme	Item Description:	Dining Chair at BOH Breakroom
Issue Date:	04/19/21	Area Name:	Public Area
	Δ 1		
Revision(s):	03/22		

Item Quantity: ea

Manufacturer:	Emeco	Source:	
Address:	805 Elm Avenue. Hanover PA 17331	Address:	
Phone:	(917) 224-6422	Phone:	
Contact:	Efe Oztas	Contact:	
E-mail:	efe@emeco.net	E-mail:	
Web:	www.emeoco.net	Web:	

Description:	Chair at Employee Breakroom.
Model Name:	Broom Stacking Chair
Material/Finish:	Reclaimed WPP / Gray
Dimensions:	19"W x 19.5"D x 32.5"H
Seat Height:	18"
Notes:	Manufacturer to Provide Clear Butyrate Floor Glides. Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Wood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

Manufacturer to provide nylon carpet glides when applicable.

Ensure that upholstered goods will fit in elevators and through doors prior to commencing fabrication.

Manufacturer to clearly mark each carton with item ID and specification number.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-114
Project #:	Dusk Scheme	Item Description:	Bench at Fitness
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ 3		

Item Quantity: ea

	Charter Furniture	Kovet Hospitality	Prime Hospitality
Manufacturer:			
Address:	206 Frazier Ave. Liberty, NC 27298	6700 Gateway Park Dr. Ste. 1 San Diego, CA 92154	2000 Remke Ave. Lawrenceburg TN 38464
Phone:	(818) 943-1757	(619) 554 - 8800	(931) 762-5800
Contact:	Jim Trowbridge	Cindy Royals	Jim Donnelly
E-mail:	jtrowbridge@charterfurniture.com	sales@kovethospitality.com	Jim@primehospitalitygroup.com
Web:	www.charterfurniture.com	www.kovethospitality.com	www.primehospitalitygroup.com

Description:	Bench with Open Powder Coated Metal and Rounded Edged Base, with an Upholstered Fixed 3" Box Cushion with (2) Two French Seams, and (4) Four Powder Coated Round Metal Legs.
Model Name:	Bench at Fitness
Material/Finish:	Powder Coat Paint (PT-16) TIGER Drylac Black Smoke Transparent Matte 49/80924
Dimensions:	60"W x 18"D x 18"H
Seat Height:	18"
Seat Depth:	18"
Seat Cushion Style:	Attached Box Cushion with Crown at Center
Cushion Content:	See Notes Below
COM/COL:	Vinyl at Bench at Fitness: (B) PA-114A; Fabric Innovations; Pattern: Patagonian; Tuco; 100% Phthalate Free Vinyl; Width: 54"; Fire Rating: NFPA - 260; Durability: 100,000 Double Rubs
Notes:	Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00. Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing. Seat Cushion Requirement: Minimum 2.2 Density Polyurethane with an I.L.D. (Initial Load Deflection) of 24-32 Foam with a Soft Crown. Cushion Content: Poly Fiber Wrapped High Resiliency Foam

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MT

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-114
Project #:	Dusk Scheme	Item Description:	Bench at Fitness
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	10/22 Δ 1		

Item Quantity: ea

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

COM quantities must be verified by fabricator prior to

ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Wood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

Manufacturer to provide nylon carpet glides when applicable.

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable

codes. Cushions to be adequately vented for displacement of air and to provide increased

comfort.

Ensure that upholstered goods will fit in elevators and through doors prior to commencing fabrication.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification

number. Manufacturer to include all necessary hardware with each item.

Reference the Design Intent softgoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

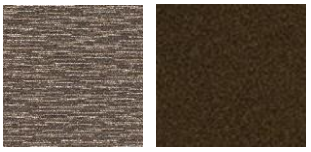
Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-115 Supplier A
Project #:	Dusk Scheme	Item Description:	Meeting Room Stack Chair
Issue Date:	10/22	Area Name:	Meeting Room
Revision(s):			

Item Quantity: ea

Manufacturer:	**MTS Seating**
Address:	7100 Industrial Drive Temperance, MI 48182
Phone:	(734) 847-3875
Contact:	Shayna Munson
E-mail:	shaynamunson@mtsseating.com
Web:	www.mtsseating.com

Description:	Stacking Chair @ Meeting Room
Model Name:	Omega II Nesting Chair (C-578)
Material/Finish:	Metal Tone Espresso (M7)
Dimensions:	18"W x 22.5"D x 36.5" OAH
Seat Height:	18"
Seat Cushion Style:	Tight Attached
Back Cushion Style:	Tight Attached
Fabric Details:	*All fabric is inclusive

Fabric @ Meeting Room Stacking Chair:
Manufacturer: MTS In-Line
Pattern: Flux
Color: FLX607 Lunar
Finish: Soil & Stain Resistance
Fire Rating: CAL 117-2013, NFPA260 Class 1
Content: 100% Polyester
Width: 54"
Repeat: N/A
Durability: 100,000 Double Rubs
Backing: Latex
Railroad: No



Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

COM quantities must be verified by fabricator prior to ordering.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-115 Supplier A
Project #:	Dusk Scheme	Item Description:	Meeting Room Stack Chair
Issue Date:	10/22	Area Name:	Meeting Room
Revision(s):			

Item Quantity: ea

Instructions:

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Wood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

Manufacturer to provide nylon carpet glides when applicable.

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Ensure that upholstered goods will fit in elevators and through doors prior to commencing fabrication.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number.

Manufacturer to include all necessary hardware with each item.

Reference the Design Intent softgood drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-115 Supplier B
Project #:	Dusk Scheme	Item Description:	Meeting Room Stack Chair
Issue Date:	10/22	Area Name:	Meeting Room
Revision(s):	06/2023 Δ 1		

Item Quantity: ea

Manufacturer:	**Shelby Williams**
Address:	810 West Highway 25/70
	Newport, TN 37821
Phone:	(617) 939-6611
Contact:	Jordan McInturf
E-mail:	jminturf@mycfgroup.com
Web:	www.shelbywilliams.com

Description:	Stacking Chair @ Meeting Room
Model Name:	5253P fixed back
Material/Finish:	PT-05 Tiger Drylac Low Lights Bronze 49/61120
Dimensions:	18"W x 23"D x 33.5" OAH
Seat Height:	18.5"
Seat Cushion Style:	Tight Attached
Back Cushion Style:	Tight Attached
Fabric Details:	*All fabric is inclusive

Fabric @ Meeting Room Stacking Chair:
Manufacturer: Momentum
Pattern: Fuse
Color: Lunar - 09123354
Finish: Soil & Stain Treatment
Fire Rating: CAL 117-2013, NFPA260 Class 1
Content: 100% Polyester
Width: 54"
Repeat: N/A
Durability: 100,000 Double Rubs
Backing: Latex
Railroad: No

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

COM quantities must be verified by fabricator prior to ordering.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-115 Supplier B
Project #:	Dusk Scheme	Item Description:	Meeting Room Stack Chair
Issue Date:	10/22	Area Name:	Meeting Room
Revision(s):	06/2023 Δ 1		

Item Quantity: ea

Instructions:

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Wood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

Manufacturer to provide nylon carpet glides when applicable.

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Ensure that upholstered goods will fit in elevators and through doors prior to commencing fabrication.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim, and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number. Manufacturer

to include all necessary hardware with each item.

Reference the Design Intent softgood drawings on designinformation.hilton.com for further information.

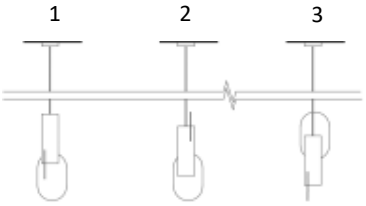
HOMEWOOD SUITES by Hilton

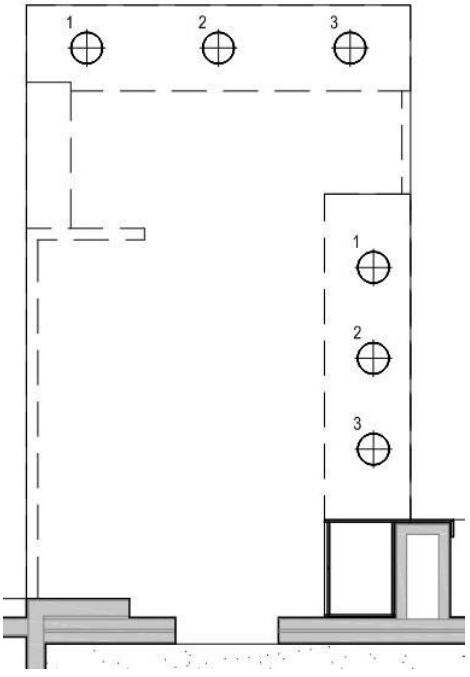
Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-200
Project #:	Dusk Scheme	Item Description:	Pendant at Reception
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ 3		

Item Quantity: ea

Manufacturer:	**Ashley Lighting**	**Remington Lighting**	**Scott Lamp**
Address:	405 Industrial Drive Trumann AR 72472	5031 Richard Lane Suite 101 Mechanicsburg, PA 17055	355 Watt Drive Fairfield, CA 94534
Phone:	(870) 483-6181	(717) 730-1017	(707) 639-9297
Alternate:	(800) 343-5267		
Contact:	Betty Tucker	Terry Goen	Ben Manley
E-mail:	betty.tucker@ashleylighting.com	terry.goen@remingtonlighting.com	ben@scottlamp.com
Web:	www.ashleylighting.com	www.remingtonlighting.com	www.scottlamp.com

Description:	Ceiling Mounted, Metal Pendants with a Cylinder Lamp Shade with (2) Two Intersecting Accent Metal Fins with a Contrasting Finish and a Metal Canopy. (3) Three Shade Styles as Indicated Below.
Dimensions:	7"W x 21.5"H
Finish:	See Notes Below
Switch Type:	Hardwired, No Switch at Fixture
Cord Color:	Black Fabric Wrapped
Lamp Type:	A21, E26 Medium Base 18W
Lamp Wattage:	LED
Lamp Quantity:	1
UL Listing:	Indoor Dry Rated
Shade/Diffuser Style:	Cylinder
Shade/Diffuser Material:	Metal
Shade/Diffuser Dimensions:	4"Dia. x 12"H
Mounting Instructions:	82" AFF
Dimmer:	Yes
Suspension Information:	Height Adjustable
Notes:	RCP Shows Placement for the (3) Three Shade Styles Finishes: All Finishes to be Matte Shade 1 at Metal Pendant Lamp Shade: Powder Coated to Match RAL 7031 Blue Gray (Blau Grau) Pendant Interior: Powder Coated White. Shade 2 at Circular Accent Fin: Powder Coated to Match RAL 1011 Brown Beige (Braun Beige). Shade 3 at Racetrack Accent Fin: Powder Coated to Match RAL 7030 Stone Gray (Stein Grau). Canopy: Powder Coated Casual Dark Bronze 048. Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for





HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-200
Project #:	Dusk Scheme	Item Description:	Pendant at Reception
Issue Date:	04/19/21	Area Name:	Public Area

Item Quantity: ea

Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Manufacturer to Confirm the Light Fixture Meets Hilton Design and Construction Standards as Noted in Section 2515.00

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: YK

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes and Homewood Suites Brand Standards.

Fixture must be U.L. Listed and so labeled. Manufacturer is responsible for submitting all technical specifications for fire safety, UL standards, and any other specifications that are required to comply with local and state fire codes.

Manufacturer/Fabricator to confirm weight of fixture.

Manufacturer/Fabricator to verify installation method and hanging points.

Show all pieces in scaled shop drawings. Entire fixture shall be inspected during the manufacturing and again after final assembly.

Manufacturer to clearly mark each carton with item ID and specification number.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-201
Project #:	Dusk Scheme	Item Description:	Floor Lamp at Central Hub
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/2023 Δ2		

Item Quantity: ea

Manufacturer:	**Ashley Lighting**	**Remington Lighting**	**Scott Lamp**
Address:	405 Industrial Drive Trumann AR 72472	5031 Richard Lane Suite 101 Mechanicsburg, PA 17055	355 Watt Drive Fairfield, CA 94534
Phone:	(870) 483-6181	(717) 730-1017	(707) 639-9297
Alternate:	(800) 343-5267		
Contact:	Betty Tucker	Terry Goen	Ben Manley
E-mail:	betty.tucker@ashleylighting.com	terry.goen@remingtonlighting.com	ben@scottlamp.com
Web:	www.ashleylighting.com	www.remingtonlighting.com	www.scottlamp.com

Description:	Floor Lamp with a Trapezoid Lamp Shade, a Racetrack Metal Frame with a Rectangular Block for the Base.
Dimensions:	26"W x 14"D x 66.5"H
Finish:	See Notes Below
Weight:	Per Manufacturer
Switch Type:	Foot Switch on Cord - Clear
Cord Length:	8'-0"
Cord Color:	Clear
Lamp Type:	A21, E26 Medium Base
Lamp Wattage:	18W LED
Lamp Quantity:	1
UL Listing:	Dry Rated
Shade/Diffuser Style:	Trapezoid Shade
Shade/Diffuser Material:	Linen Wrapped Styrene
Shade/Diffuser Dimensions:	26"W x 14" D x 14"H

Notes:

Finishes:
Finial: Powder Coated Casual Bozeman Bronze 741

Frame: Powder Coated Casual Dark Bronze 048

Base: Powder Coated Casual Bozeman Bronze 741

Base to be Properly Weighted to Prevent Floor Lamp from tipping.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Manufacturer to Confirm the Light Fixture Meets Hilton Design and Construction Standards as Noted

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-201
Project #:	Dusk Scheme	Item Description:	Floor Lamp at Central Hub
Issue Date:	04/19/21	Area Name:	Public Area

Item Quantity: ea

in Section 2515.00

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes and Homewood Suites Brand Standards.

Fixture must be U.L. Listed and so labeled. Manufacturer is responsible for submitting all technical specifications for fire safety, UL standards, and any other specifications that are required to comply with local and state fire codes.

Manufacturer/Fabricator to confirm weight of fixture.

Manufacturer/Fabricator to verify installation method and hanging points.

Show all pieces in scaled shop drawings. Entire fixture shall be inspected during the manufacturing and again after final assembly.

Manufacturer to clearly mark each carton with item ID and specification number.

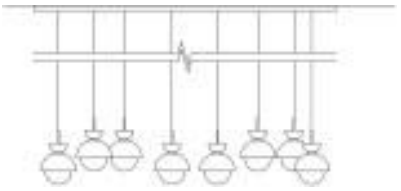
HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-202
Project #:	Dusk Scheme	Item Description:	Pendant at Pantry
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ2		

Item Quantity: ea

Manufacturer:	**Ashley Lighting**	**Remington Lighting**	**Scott Lamp**
Address:	405 Industrial Drive Trumann AR 72472	5031 Richard Lane Suite 101 Mechanicsburg, PA 17055	355 Watt Drive Fairfield, CA 94534
Phone:	(870) 483-6181	(717) 730-1017	(707) 639-9297
Alternate:	(800) 343-5267		
Contact:	Betty Tucker	Terry Goen	Ben Manley
E-mail:	betty.tucker@ashleylighting.com	terry.goen@remingtonlighting.com	ben@scottlamp.com
Web:	www.ashleylighting.com	www.remingtonlighting.com	www.scottlamp.com

Description:	A Group of (8) Eight Metal Pendants Suspended at Varying Heights From a Rectangular Metal Canopy. Each Pendant to Have a teacup shape for The Exterior Shade and a Matte White Acrylic Globe at the Interior.
Dimensions:	62.5"W x 24"D x 40"H
Finish:	See Notes Below
Weight:	Per Manufacturer
Switch Type:	Hardwired, No Switch at Fixture
Cord Color:	Black Fabric Wrapped
Lamp Type:	A21, E26 Medium Base, Dimmable
Lamp Wattage:	18W LED
Lamp Quantity:	8 (1 per Pendant)
UL Listing:	Indoor, Damp Rated
Shade/Diffuser Style:	Globe Shade
Shade/Diffuser Material:	Matte White Acrylic
Shade/Diffuser Dimensions:	8"Dia. x 12"H
Mounting Instructions:	106" AFF
Dimmer:	Yes
Suspension Information:	Height Adjustable



Notes:

Finishes: All Finishes to be Matte

Stem Sleeve: Powder Coated to Match RAL 8007 Fawn Brown (Rehbraun)

Canopy: Powder Coated Bozeman Bronze 741

Shade Exterior: Powder Coated to Match RAL 6012 Black Green (Schwarzgrun)

Shade Interior: Powder Coated White

Accent Band: Powder Coated to Match RAL 8007 Fawn Brown (Rehbraun)

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-202
Project #:	Dusk Scheme	Item Description:	Pendant at Pantry
Issue Date:	04/19/21	Area Name:	Public Area

Item Quantity: ea

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Manufacturer to Confirm the Light Fixture Meets Hilton Design and Construction Standards as Noted in Section 2515.00

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: AM

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes and Homewood Suites Brand Standards.

Fixture must be U.L. Listed and so labeled. Manufacturer is responsible for submitting all technical specifications for fire safety, UL standards, and any other specifications that are required to comply with local and state fire codes.

Manufacturer/Fabricator to confirm weight of fixture.

Manufacturer/Fabricator to verify installation method and hanging points.

Show all pieces in scaled shop drawings. Entire fixture shall be inspected during the manufacturing and again after final assembly.

Manufacturer to clearly mark each carton with item ID and specification number.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-203
Project #:	Dusk Scheme	Item Description:	Pendant at Public Restroom
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/2023 Δ 4		

Item Quantity: ea

Manufacturer:	**Ashley Lighting**	**Remington Lighting**	**Scott Lamp**
Address:	405 Industrial Drive Trumann AR 72472	5031 Richard Lane Suite 101 Mechanicsburg, PA 17055	355 Watt Drive Fairfield, CA 94534
Phone:	(870) 483-6181	(717) 730-1017	(707) 639-9297
Alternate:	(800) 343-5267		
Contact:	Betty Tucker	Terry Goen	Ben Manley
E-mail:	betty.tucker@ashleylighting.com	terry.goen@remingtonlighting.com	ben@scottlamp.com
Web:	www.ashleylighting.com	www.remingtonlighting.com	www.scottlamp.com

Description:	Pendant with Globe and an off-center Metal Band, Suspended on (3) Three Rigid Metal Rods from a Round Metal Canopy.
Dimensions:	10" Dia. x 42.5"H
Finish:	Powder Coated to Match RAL 7031 Blue Gray (Blaugrae) Finish
Weight:	Per Manufacturer
Switch Type:	Hardwired, No switch at Fixture
Lamp Type:	A21, E26 Medium Base
Lamp Wattage:	18W LED
Lamp Quantity:	1
UL Listing:	Indoor, Dry Rated
Shade/Diffuser Style:	Globe
Shade/Diffuser Material:	Opal Acrylic
Shade/Diffuser Dimensions:	8" Dia.
Mounting Instructions:	77.5" AFF
Dimmer:	Yes
Suspension Information:	(3) Three Rigid Metal Rods

Notes:

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Manufacturer to Confirm the Light Fixture Meets Hilton Design and Construction Standards as Noted in Section 2515.00

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-203
Project #:	Dusk Scheme	Item Description:	Pendant at Public Restroom
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/2023 Δ 4		

Item Quantity: ea

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes and Homewood Suites Brand Standards.

Fixture must be U.L. Listed and so labeled. Manufacturer is responsible for submitting all technical specifications for fire safety, UL standards, and any other specifications that are required to comply with local and state fire codes.

Manufacturer/Fabricator to confirm weight of fixture.

Manufacturer/Fabricator to verify installation method and hanging points.

Show all pieces in scaled shop drawings. Entire fixture shall be inspected during the manufacturing and again after final assembly.

Manufacturer to clearly mark each carton with item ID and specification number.

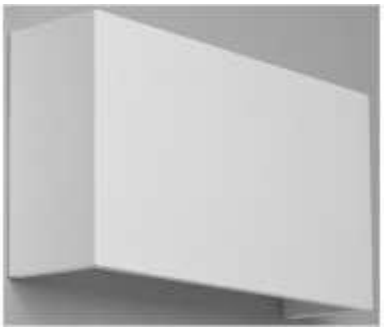
HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-204
Project #:	Dusk Scheme	Item Description:	Sconce at Guest Corridor
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/2023 Δ4		

Item Quantity: ea

Manufacturer:	**Ashley Lighting**	**Remington Lighting**	**Scott Lamp**
Address:	405 Industrial Drive Trumann AR 72472	5031 Richard Lane Suite 101 Mechanicsburg, PA 17055	355 Watt Drive Fairfield, CA 94534
Phone:	(870) 483-6181	(717) 730-1017	(707) 639-9297
Alternate:	(800) 343-5267		
Contact:	Betty Tucker	Terry Goen	Ben Manley
E-mail:	betty.tucker@ashleylighting.com	terry.goen@remingtonlighting.com	ben@scottlamp.com
Web:	www.ashleylighting.com	www.remingtonlighting.com	www.scottlamp.com

Description:	Surface Mounted Architectural Up/Down Metal Wall Sconce with Powder Coat Finish.
Model Name:	Sconce at Guest Corridor
Dimensions:	12.5"W x 4"D x 7"H
Finish:	Powder Coat Paint – SW 7073 Network Gray
Switch Type:	Hardwired, No Switch at Fixture
Lamp Type:	A19 LED, 2700K, 90 CRI
Lamp Wattage:	8.5W (120 V)
Lamp Quantity:	1
UL Listing:	Indoor, Dry Rated
Shade/Diffuser Style:	Rectangular
Shade/Diffuser Material:	Metal with Powder Coat Finish
Shade/Diffuser Dimensions:	3.5"W x 7"H
Suspension Information:	72"H on Center AFF



Notes:

All Exposed Sides and Edges to be Finished.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing

Manufacturer to Confirm the Light Fixture Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: YK

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-204
Project #:	Dusk Scheme	Item Description:	Sconce at Guest Corridor
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/2023 Δ4		

Item Quantity: ea

Instructions:

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes and Homewood Suites Brand Standards.

Fixture must be U.L. Listed and so labeled. Manufacturer is responsible for submitting all technical specifications for fire safety, UL standards, and any other specifications that are required to comply with local and state fire codes.

Manufacturer/Fabricator to confirm weight of fixture.

Manufacturer/Fabricator to verify installation method and hanging points.

Show all pieces in scaled shop drawings. Entire fixture shall be inspected during the manufacturing and again after final assembly.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference the Design Intent drawings on designinformation.hilton.com for further information.

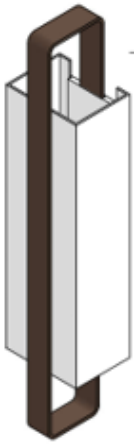
HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-205
Project #:	Dusk Scheme	Item Description:	Sconce at Meeting Room
Issue Date:	10/22	Area Name:	Meeting Room
Revision(s):	06/23 Δ1		

Item Quantity: ea

Manufacturer:	**Ashley Lighting, Inc**	**Remington Lighting**	**Scott Lamp**
Address:	405 Industrial Drive Trumann, AR 72472	5031 Richard Lane St. 101 Mechanicsburg, PA 17055	355 Watt Drive Fairfield, CA 94534
Phone:	870.483-6181 800#: 800.343.5267	717.730.1017	(707) 639-9297
Contact:	Betty Tucker	Terry Goen	Ben Manley
E-mail:	betty.tucker@ashleylighting.com	terry.goen@remingtonlighting.com	ben@scottlamp.com
Web:	www.ashleylighting.com	www.remingtonlighting.com	www.scottlamp.com

Description:	Wall Sconce at Meeting Room
Model Name:	Meeting Room Wall Sconce
Dimensions:	5"W x 4"D x 24"H
Finish:	Powder Coat to match (PT-05) Tiger Drylac Low Lights Bronze 49/61120
Switch Type:	Hardwired, No Switch at Fixture
Lamp Type:	E26
Lamp Wattage:	8W LED
Lamp Quantity:	1
UL Listing:	Indoor, Dry Rated
Shade/Diffuser Style:	Opal White
Shade/Diffuser Material:	Acrylic
Shade/Diffuser Dimensions:	5"W x 4"D x 16"H
Suspension Information:	Wall Mounted



Notes:

All Exposed Sides and Edges to be Finished.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing

Manufacturer to Confirm the Light Fixture Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MT

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-205
Project #:	Dusk Scheme	Item Description:	Sconce at Meeting Room
Issue Date:	10/22	Area Name:	Meeting Room
Revision(s):	06/23 Δ1		

Item Quantity: ea

Instructions:

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes and Homewood Suites Brand Standards.

Fixture must be U.L. Listed and so labeled. Manufacturer is responsible for submitting all technical specifications for fire safety, UL standards, and any other specifications that are required to comply with local and state fire codes.

Manufacturer/Fabricator to confirm weight of fixture.

Manufacturer/Fabricator to verify installation method and hanging points.

Show all pieces in scaled shop drawings. Entire fixture shall be inspected during the manufacturing and again after final assembly.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference the Design Intent Drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-300
Project #:	Dusk Scheme	Item Description:	Rectangular Dining Table
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ4		

Item Quantity: ea

Manufacturer:	**D'Style**	**Elkay Interior Systems**	**Shelby Williams**
Address:	3451 Main Street Suite 108 Chula Vista CA 91911	241 N Broadway Suite 600 Milwaukee WI 53202	810 West Highway 25/70 Newport, TN 37821
Phone:	(619) 662-0560	(224) 370-1635	(800) 873-3252
Alternate:	(619) 662-3388		
Contact:	Eric Constantino	Courtney Messersmith	Jordan McInturk
E-mail:	dsquotes@dstyle.com	courtney.messersmith@elkayinteriorsystems.com	jmcinturk@mycfgroup.com
Web:	www.dstyleinc.com	www.elkayinteriorsystems.com	www.mycfgroup.com

Description:	Rectangular Dining Table-top with Matching 2mm PVC Edge Banding, Powder Coated Steel End Base with Rectangular Foot, Square Column and Leveling Glides (ADA Compliant).
Model Name:	Rectangular Dining Table
Dimensions:	76"W x 30"D x 30"H
Top Mat'l/Finish:	See Notes Below
Base Mat'l/Finish:	(PT-05) TIGER Drylac Low Lights Bronze 49/61120
Edge Detail:	2mm PVC Edge Banding

Notes:

Finishes:
Top: 1.25" Thick (PL-04) Wilsonart Laminate 7991K-12 Neo Walnut, Soft Grain Finish with Aeon™

Edge: 2mm PVC Edge Banding to Match (PL-04) Wilsonart Laminate 7991K-12 Neo Walnut, Soft Grain Finish with Aeon™

Base: 3" Square Column, 27.5"H.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Interior Designer/Architect to Determine Orientation of Unit (Lefts & Rights) Based on Plan Locations.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-300
Project #:	Dusk Scheme	Item Description:	Rectangular Dining Table
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ4		

Item Quantity: ea

Pre-Catalyzed Lacquer on All Deciduous Hardwood Components or Wood Look Plastic Laminate.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-301
Project #:	Dusk Scheme	Item Description:	High 4-Top Dining Table
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ 4		

Item Quantity: ea

Manufacturer:	**D'Style**	**Elkay Interior Systems**
Address:	3451 Main Street, Suite 108 Chula Vista CA 91911	241 N Broadway, Suite 600 Milwaukee WI 53202
Phone:	(619) 662-0560	(224) 370-1635
Alternate:	(619) 662-3388	
Contact:	Eric Constantino	Courtney Messersmith
E-mail:	dsquotes@dstyle.com	courtney.messersmith@elkayinteriorsystems.com
Web:	www.dstyleinc.com	www.elkayinteriorsystems.com

Description: Bar Height 4-Top Dining Table with Engineered Stone Top, Legs with Powder Coated Metal Ferrules, and (2) Two Convenience Outlet Units.

Manufacturer to Accommodate and Provide Cut Outs for (2) Two Dual USB Duplex Convenience Outlet Receptacles. Manufacturer to Provide UL Listed Plug in Furniture Power Unit with a Cover Plate. Wire Management to Run Through Leg and Out Bottom.

Convenience Outlets to be Daisy Chain Compatible.

Model Name: High 4-Top Dining Table

Dimensions: 60"W x 36"D x 42"H

Finish: See Notes Below

Top Mat'l/Finish: 1.5" Engineered Stone Top

Edge Detail: Square

Notes:

Legs and Apron: (PL-03) Wilsonart Laminate 1595K-18 Black, Linearity Finish with Aeon™.
Top: (SS-01) Daltile Calcutta NQ06 or Belstone Dodi Calacatta Aramis. Reveal at Legs: Painted to Match Laminate.
Leg Caps: (PT-05) TIGER Drylac Low Lights Bronze 49/61120.
Outlet Unit Finish: Black Satin.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Interior Designer/Architect to Determine Orientation

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-301
Project #:	Dusk Scheme	Item Description:	High 4-Top Dining Table
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ 4		

Item Quantity: ea

of Unit (Lefts & Rights) Based on Plan Locations.

Pre-Catalyzed Lacquer on All Deciduous Hardwood Components or Wood Look Plastic Laminate.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegoods drawings on designinformation.hilton.com for further information.

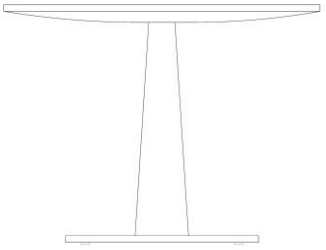
HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-302
Project #:	Dusk Scheme	Item Description:	Tea Height Table
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ 5		

Item Quantity: ea

Manufacturer:	**D'Style**	**Elkay Interior Systems**
Address:	3451 Main Street, Suite 108 Chula Vista CA 91911	241 N Broadway, Suite 600 Milwaukee WI 53202
Phone:	(619) 662-0560	(224) 370-1635
Alternate:	(619) 662-3388	
Contact:	Eric Constantino	Courtney Messersmith
E-mail:	dsquotes@dstyle.com	courtney.messersmith@elkayinteriorsystems.com
Web:	www.dstyleinc.com	www.elkayinteriorsystems.com

Description:	Round Tea Height Dining Table with Solid Surface Top and Solid Wood Conical Powder Coated Metal Base. Table Base to have Adjustable Nylon Carpet Glides and be Weighted Appropriately to Avoid Tipping.
Model Name:	Tea Height Table
Dimensions:	36" Dia. x 27"H
Top Mat'l/Finish:	2cm (SS-01) Daltile Calcutta NQ06 or Belstone Dodi Calacatta Aramis
Base Mat'l/Finish:	See Notes Below
Edge Detail:	Square



Notes:

Base Finish:
Column: Satin Transparent Stain to Match (PL-03)
Wilsonart Laminate 1595K-18 Black, Linearity Finish with Aeon™.

Metal Base: (PT-05) TIGER Drylac Low Lights Bronze 49/61120

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Pre-Catalyzed Lacquer on All Deciduous Hardwood Components or Wood Look Plastic Laminate.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-302
Project #:	Dusk Scheme	Item Description:	Tea Height Table
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ 5		

Item Quantity: ea

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegood drawings on designinformation.hilton.com for further information

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-303
Project #:	Dusk Scheme	Item Description:	Dining Table
Issue Date:	04/19/21	Area Name:	Public Area

Revision Date: 06/23 Δ3

Item Quantity: ea

Manufacturer:	**D'Style**	**Elkay Interior Systems**	**Shelby Williams**
Address:	3451 Main Street Suite 108 Chula Vista CA 91911	241 N Broadway Suite 600 Milwaukee WI 53202	810 West Highway 25/70 Newport, TN 37821
Phone:	(619) 662-0560	(224) 370-1635	(800) 873-3252
Alternate:	(619) 662-3388		
Contact:	Eric Constantino	Courtney Messersmith	Jordan McInturk
E-mail:	dsquotes@dstyle.com	courtney.messersmith@elkayinteriorsystems.com	jmcinturk@mycfgroup.com
Web:	www.dstyleinc.com	www.elkayinteriorsystems.com	www.mycfgroup.com

Description:	Rectangular Dining Table-top with 2mm PVC Edge Banding, Powder Coated Metal Base with Round Column and Base Plate, and Self Leveling Glides.
Model Name:	Dining Table
Dimensions:	30"W x 36"D x 30"H
Top Mat'l/Finish:	1.25" Thick (PL-04) Wilsonart Laminate 7991K-12 Neo Walnut, Soft Grain Finish with Aeon™
Base Mat'l/Finish:	(PT-05) TIGER Drylac Low Lights Bronze 49/61120
Edge Detail:	2mm PVC Edge Banding to match (PL-04) Wilsonart Laminate 7991K-12 Neo Walnut, Soft Grain Finish with Aeon™

Notes:

Base: 3" Round Column, 27.5"H.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Pre-Catalyzed Lacquer on All Deciduous Hardwood Components or Wood Look Plastic Laminate.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-303
Project #:	Dusk Scheme	Item Description:	Dining Table
Issue Date:	04/19/21	Area Name:	Public Area

Item Quantity: ea

Instructions:

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegood drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-304
Project #:	Dusk Scheme	Item Description:	Communal Table at Windows
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ4		

Item Quantity: ea

Manufacturer:	**D'Style**	**Elkay Interior Systems**
Address:	3451 Main Street, Suite 108 Chula Vista CA 91911	241 N Broadway, Suite 600 Milwaukee WI 53202
Phone:	(619) 662-0560	(224) 370-1635
Alternate:	(619) 662-3388	
Contact:	Eric Constantino	Courtney Messersmith
E-mail:	dsquotes@dstyle.com	courtney.messersmith@elkayinteriorsystems.com
Web:	www.dstyleinc.com	www.elkayinteriorsystems.com

Description: Counter Height Communal Table with Legs and Privacy Panel, Powder Coated Metal Ferrules and (2) Two Convenience Outlet Units. Table to be Anchored to the Floor with Hidden Bolts Provided by Manufacturer.

Manufacturer to Accommodate and Provide Cut Outs for (2) Two Dual USB Duplex Convenience Outlet Receptacles. Manufacturer to Provide UL Listed Plug in Furniture Power Unit with a Cover Plate. Wire Management to Run Through Leg and Out Bottom.

Convenience Outlets to be Daisy Chain Compatible.

Model Name:	Communal Table at Windows
Dimensions:	102"W x 18"D x 34"H
Finish:	See Notes Below
Top Mat'l/Finish:	3" Plastic Laminate Frame
Edge Detail:	Square

Notes:

Top and Legs: (PL-04) Wilsonart Laminate 7991K-12. Neo Walnut, Soft Grain Finish with Aeon™.
Leg Ferrules: (PT-05) TIGER Drylac Low Lights Bronze 49/61120.
Outlet Unit Finish: Black Satin.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-304
Project #:	Dusk Scheme	Item Description:	Communal Table at Windows
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ4		

Item Quantity: ea

Interior Designer/Architect to Determine Orientation of Unit (Lefts & Rights) Based on Plan Locations.

Pre-Catalyzed Lacquer on All Deciduous Hardwood Components or Wood Look Plastic Laminate.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegood drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-305
Project #:	Dusk Scheme	Item Description:	Pantry Induction Table
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/2023 Δ 2		

Item Quantity: ea

Manufacturer:	Spring USA	Source:	
Address:	127 Ambassador Drive Suite 147 Naperville IL 60540-	Address:	
Phone:	(630) 527-8600 800# : (800) 535-8974	Phone:	
Fax:	(630) 527-8677	Fax:	
Contact:	Jackson Biller / Nick Lekos	Contact:	
E-mail:	jbiller@springusa.com / nlekos@springusa.com	E-mail:	
Web:	www.springusa.com	Web:	

Description:

Rectangular Counter Height Concealed Induction Table with Inset Engineered Stone Top and Laminate Edges, Angled Laminate Aprons (22.5 Degree Angle) with Convenience Outlets/USB Ports with Concealed Steel Angle Center Support, and (2) Two Legs. Induction Controls to be Concealed Inside Table Leg Near Induction Ranges with Hinged Matching Laminate Panel at Outside Face of Leg.

Manufacturer to Accommodate and Provide Cut Outs for (4) Four Convenience Outlet Receptacles and USB Ports at Face of Angled Aprons. Manufacturer to Provide UL Listed Plug in Furniture Power Unit with a Cover Plate (Minimum 20 Amp). Wire Management to Run Through Access Door in Leg Closest to Induction Ranges and Out Bottom of Leg.

Provide (4) Four Convenience Outlet Receptacles and USB Ports, (4) Four Hidden 651SS Ranges (5.4 Amps Each) with Concealed Controls Located at Outside Leg Behind Hinged Laminate Panel - Model #SM-651SS and (2) Two 120V Power Strips (20 Amps Each) to Power Induction Ranges. Cord Management and Power Strips to be Concealed Inside Leg.

Manufacturer to Provide Dedicated Quadplex Outlet at Inside Face of Leg for Plug in Food and Beverage Equipment. Reference Drawings for Location.

Outlets for Guest Use: Black Satin Finish

Convenience Outlets to be Daisy Chain Compatible. Provide Enough Length of Cable for Wire Management to Run Through Table and Down Leg to Power at Floor.

Inset Top: Smartstone Oatmeal Honed Engineered Stone Top

Top Dimensions: 117-1/2"x54-7/8" .48" Thick

Base: (PL-04) Wilsonart Laminate 7991K-12. Neo Walnut, Soft Grain Finish with Aeon™. Bottom of Legs to be Finished on All Sides with Laminate for Protection of Core from Exposure to Moisture.

Flip Down Panel Hardware: To Match Hafele Inset Pull 151.00.311, Black Satin Finish

Standard Crate: 124"W x 64"D x 41"H, 1100 Lbs.

Metal Power Strip (Internal for Induction Units), Blue/Gray Finish: 120 VAC, 2400 W, 6 Outlets,

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-305
Project #:	Dusk Scheme	Item Description:	Pantry Induction Table
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/2023 Δ 2		

Item Quantity: ea

15 Feet Cable, NEMA 5-20P Plug, 20A Rating, UL1363, CUL Listed.

Model Number:	Spring USA Hilton Prototype, Job Ref. # 9654
Model Name:	Communal Table/Induction Table
Dimensions:	120"W x 57-3/8"D x 34"H
Finish:	See Notes Below
Top Mat'l/Finish:	See Notes Below
Base Mat'l/Finish:	See Notes Below
Edge Detail:	Square
Hardware Style:	See Notes Below

Notes:

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Interior Designer/Architect to Determine Orientation of Unit (Lefts & Rights) Based on Plan Locations.

Pre-Catalyzed Lacquer on All Deciduous Hardwood Components or Wood Look Plastic Laminate.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: YK

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-305
Project #:	Dusk Scheme	Item Description:	Pantry Induction Table
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/2023 Δ 2		

Item Quantity: ea

Instructions:

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegood drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-306
Project #:	Dusk Scheme	Item Description:	Communal Table at Living Room
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ5		

Item Quantity: ea

Manufacturer:	**D'Style**	**Elkay Interior Systems**
Address:	3451 Main Street, Suite 108 Chula Vista CA 91911	241 N Broadway, Suite 600 Milwaukee WI 53202
Phone:	(619) 662-0560	(224) 370-1635
Alternate:	(619) 662-3388	
Contact:	Eric Constantino	Courtney Messersmith
E-mail:	dsquotes@dstyle.com	courtney.messersmith@elkayinteriorsystems.com
Web:	www.dstyleinc.com	www.elkayinteriorsystems.com

Description:

Rectangular Counter Height Communal Table with Engineered Stone Top, (2) Two Legs with U-Shaped Cut Out with Powder Coated Metal Ferrules, Integrated Linear Light and (6) Convenience Outlet Units.

Light Fixture to have Powder Coated Metal Tubular Top Bar with Frosted Acrylic Bottom Diffuser and Integrated LED Light Source. Bar to be Supported by (3) Three Round Powder Coated Metal Stems. (1) One On/Off Rocker Switch for Light Fixture to be Located by End Column Support.

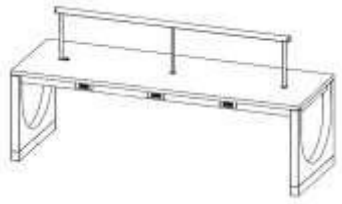
Manufacturer to Accommodate and Provide Cut Outs for (6) Six Dual USB Duplex Convenience Outlet Receptacles. Manufacturer to Provide UL Listed Plug in Furniture Power Unit with a Cover Plate. Wire Management to Run Through Leg and Out Bottom.

Provide One Internal Duplex Outlet (Out of Sight) For Light Fixture to Plug Into.

Convenience Outlets to be Daisy Chain Compatible.

Provide Self-Leveling Glides.

Dimensions:	108"W x 36"D x 34"H
Finish:	See Notes Below
Top Mat'l/Finish:	1.5" Solid Surface
Edge Detail:	Square



Notes:

Top: (SS-01) Daltile Calcutta NQ06 or Belstone Dodi Calacatta Aramis. Base: (PL-04) Wilsonart Laminate 7991K-12 Neo Walnut, Soft Grain Finish with Aeon™.
Leg Ferrules: (PT-05) TIGER Drylac Low Lights Bronze 49/61120.
Light Fixture: (PT-05) TIGER Drylac Low Lights Bronze 49/61120.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-306
Project #:	Dusk Scheme	Item Description:	Communal Table at Living Room
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ5		

Item Quantity: ea

Outlet Unit Finish: Black Satin.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Interior Designer/Architect to Determine Orientation of Unit (Lefts & Rights) Based on Plan Locations.

Pre-Catalyzed Lacquer on All Deciduous Hardwood Components or Wood Look Plastic Laminate.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-306
Project #:	Dusk Scheme	Item Description:	Communal Table at Living Room
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ5		

Item Quantity: ea

Instructions:

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Light fixture must be U.L. Listed and so labeled. Manufacturer is responsible for submitting all technical specifications for fire safety, UL standards, and any other specifications that are required to comply with local and state fire codes.

Reference Design Intent casegood drawings on designinformation.hilton.com for further information.

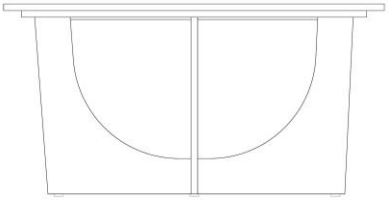
HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-307
Project #:	Dusk Scheme	Item Description:	Cocktail Table at Living Room
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ5		

Item Quantity: ea

Manufacturer:	**D'Style**	**Elkay Interior Systems**
Address:	3451 Main Street, Suite 108 Chula Vista CA 91911	241 N Broadway, Suite 600 Milwaukee WI 53202
Phone:	(619) 662-0560	(224) 370-1635
Alternate:	(619) 662-3388	
Contact:	Eric Constantino	Courtney Messersmith
E-mail:	dsquotes@dstyle.com	courtney.messersmith@elkayinteriorsystems.com
Web:	www.dstyleinc.com	www.elkayinteriorsystems.com

Description:	Oval Cocktail Table with Engineered Stone Top with Built-Up Edge, Painted Substrate, Carbon Steel Base with Powder Coat Finish. Provide Self-Leveling Nylon Glides.
Model Name:	Cocktail Table at Living Room
Dimensions:	43"W x 28"D x 22"H
Top Mat'l/Finish:	0.75" (SS-01) Daltile Calcutta NQ06 or Belstone Dodi Calacatta Aramis
Substrate Mat'l/Fin:	Acceptable Substrate per Homewood Suites Brand Standards painted to match top material
Base Mat'l/Finish:	Powder Coat Finish to Match (PT-05) TIGER Drylac Low Lights Bronze 49/61120
Edge Detail:	Built-up Edge
Notes:	Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing. Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.



Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-307
Project #:	Dusk Scheme	Item Description:	Cocktail Table at Living Room
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ5		

Item Quantity: ea

Instructions:

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-308
Project #:	Dusk Scheme	Item Description:	Table at Laundry Lounge
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ4		

Item Quantity: ea

Manufacturer:	**D'Style**	**Elkay Interior Systems**	**Shelby Williams**
Address:	3451 Main Street Suite 108 Chula Vista CA 91911	241 N Broadway Suite 600 Milwaukee WI 53202	810 West Highway 25/70 Newport, TN 37821
Phone:	(619) 662-0560	(224) 370-1635	(800) 873-3252
Alternate:	(619) 662-3388		
Contact:	Eric Constantino	Courtney Messersmith	Jordan McInturk
E-mail:	dsquotes@dstyle.com	courtney.messersmith@elkayinteriorsystems.com	jmcinturk@mycfgroup.com
Web:	www.dstyleinc.com	www.elkayinteriorsystems.com	www.mycfgroup.com

Description:	Round Table with HPL Top and coordinating PVC Edge Banding with Powder Coated Metal Base with Round Column and Round Base Plate with Nylon Glides. Provide Self-Leveling Nylon Glides.
Model Name:	Table at Laundry Lounge
Dimensions:	24"Dia x 25"
Top Mat'l/Finish:	(PL-04) Wilsonart Laminate 7991K-12 Neo Walnut, Soft Grain Finish with Aeon™
Base Mat'l/Finish:	(PT-05) Powder Coat to Match Tiger Drylac Low Lights Bronze
Edge Detail:	Square (PVC Edge Band)
Notes:	Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing. Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00. Pre-Catalyzed Lacquer on All Deciduous Hardwood Components or Wood Look Plastic Laminate.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-308
Project #:	Dusk Scheme	Item Description:	Table at Laundry Lounge
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ4		

Item Quantity: ea

Instructions:

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegood drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-309
Project #:	Dusk Scheme	Item Description:	Side Table at Sectional at Living Room
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ 4		

Item Quantity: ea

Manufacturer:	**D'Style**	**Elkay Interior Systems**
Address:	3451 Main Street, Suite 108 Chula Vista CA 91911	241 N Broadway, Suite 600 Milwaukee WI 53202
Phone:	(619) 662-0560	(224) 370-1635
Alternate:	(619) 662-3388	
Contact:	Eric Constantino	Courtney Messersmith
E-mail:	dsquotes@dstyle.com	courtney.messersmith@elkayinteriorsystems.com
Web:	www.dstyleinc.com	www.elkayinteriorsystems.com

Description: Open Rectangular Side Table with Painted Interior Finish. Side Table to have Recessed Plinth Base.

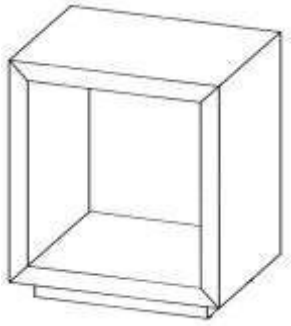
Provide Self-Leveling Nylon Glides.

Model Name: Side Table at Sectional at Living Room

Dimensions: 23"W x 18"D x 26.5"H

Finish: See Notes Below

Edge Detail: Square



Notes:

Outside and Base Finish: (PL-03) Wilsonart Laminate 1595K-18 Black, Linearity Finish with Aeon™.
Inside Finish: Painted to Match RAL 7031 Blue Gray (Blaugrae) with Low Sheen.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Pre-Catalyzed Lacquer on All Deciduous Hardwood Components or Wood Look Plastic Laminate.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-309
Project #:	Dusk Scheme	Item Description:	Side Table at Sectional at Living Room
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ 4		

Item Quantity: ea

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegood drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-310
Project #:	Dusk Scheme	Item Description:	Coffee Station at Living Room
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/2023 Δ 5		

Item Quantity: ea

Manufacturer:	**D'Style**	**Elkay Interior Systems**
Address:	3451 Main Street, Suite 108 Chula Vista CA 91911	241 N Broadway, Suite 600 Milwaukee WI 53202
Phone:	(619) 662-0560	(224) 370-1635
Alternate:	(619) 662-3388	
Contact:	Eric Constantino	Courtney Messersmith
E-mail:	dsquotes@dstyle.com	courtney.messersmith@elkayinteriorsystems.com
Web:	www.dstyleinc.com	www.elkayinteriorsystems.com

Description:	Console Table with Engineered Stone Top and Powder Coated Reverse Bevel Base and Tubular Metal Legs. Provide Self-Leveling Nylon Glides. Provide (3) Three Equal Doors with Heavy Duty Touch Latch hardware and Accent Storage Cubby with Center Shelf.
Model Name:	Coffee Station at Living Room
Dimensions:	84"W x 24"D x 34"H
Finish:	See Notes Below
Top Mat'l/Finish:	2cm Engineered Stone Top-See notes below
Edge Detail:	Square

Notes:	Engineered Stone: (SS-01) Daltile Calcutta NQ06 or Belstone Dodi Calacatta Aramis. Laminate or Wood Finish: Satin Transparent Stain to Match (PL- 04). Wilsonart Laminate Neo Walnut with Low Sheen Level. Accent Finish at Interior of Cubby and Shelf: (PL-03) Wilsonart Laminate 1595K-18 Black, Linearity Finish with Aeon™. Metal Base Finish: (PT-05) TIGER Drylac Low Lights Bronze 49/61120 Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing. Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-310
Project #:	Dusk Scheme	Item Description:	Coffee Station at Living Room
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/2023 Δ 5		

Item Quantity: ea

Interior Designer/Architect to Determine Orientation of Unit (Lefts & Rights) Based on Plan Locations.

Pre-Catalyzed Lacquer on All Deciduous Hardwood Components or Wood Look Plastic Laminate.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegood drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-311
Project #:	Dusk Scheme	Item Description:	Entertainment Console at Living Room
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ4		

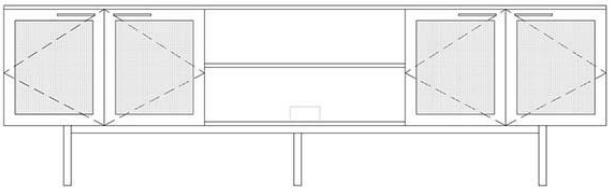
Item Quantity: ea

Manufacturer:	**D'Style**	**Elkay Interior Systems**
Address:	3451 Main Street, Suite 108 Chula Vista CA 91911	241 N Broadway, Suite 600 Milwaukee WI 53202
Phone:	(619) 662-0560	(224) 370-1635
Alternate:	(619) 662-3388	
Contact:	Eric Constantino	Courtney Messersmith
E-mail:	dsquotes@dstyle.com	courtney.messersmith@elkayinteriorsystems.com
Web:	www.dstyleinc.com	www.elkayinteriorsystems.com

Description: Entertainment Console with (4) Four Metal Meshed Face Cabinet Doors, Metal Door Pulls, 1" Metal Legs and Rail, and an Accent Cubby with Shelf at Center.

Provide Nylon Glides.

Model Name:	Entertainment Console at Living Room
Dimensions:	80.5"W x 17"D x 24"H
Finish:	See Notes Below
Edge Detail:	Square Edge
Hardware Finish:	See Notes Below
Hardware Size:	5" W x 1.5"D x .25"H



Notes:

Shelving, Cabinet Door Frame and Sides: (PL-04) Wilsonart Laminate 7991K-12 Neo Walnut, Soft Grain Finish with Aeon™.
Top and Accent Cubby: (PL-03) Wilsonart Laminate Black, Linearity Finish with Low Sheen Level
Accent Metal Mesh at Doors and Hardware: Powder Coat Paint (PT-16) TIGER Drylac Black Smoke Transparent Matte 49/80924.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Pre-Catalyzed Lacquer on All Deciduous Hardwood Components.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-311
Project #:	Dusk Scheme	Item Description:	Entertainment Console at Living Room
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ4		

Item Quantity: ea

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegood drawings on designinformation.hilton.com for further information.

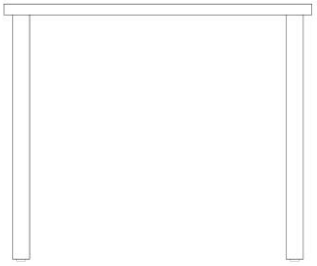
HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-312
Project #:	Dusk Scheme	Item Description:	Dining Table at Break Room - ADA
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ4		

Item Quantity: ea

Manufacturer:	**D'Style**	**Elkay Interior Systems**	**Shelby Williams**
Address:	3451 Main Street Suite 108 Chula Vista CA 91911	241 N Broadway Suite 600 Milwaukee WI 53202	810 West Highway 25/70 Newport, TN 37821
Phone:	(619) 662-0560	(224) 370-1635	(800) 873-3252
Alternate:	(619) 662-3388		
Contact:	Eric Constantino	Courtney Messersmith	Jordan McInturk
E-mail:	dsquotes@dstyle.com	courtney.messersmith@elkayinteriorsystems.com	jmcinturk@mycfgroup.com
Web:	www.dstyleinc.com	www.elkayinteriorsystems.com	www.mycfgroup.com

Description:	Rectangular Dining Table with HPL top, coordinating 2mm PVC Edge Banding, Powder Coated Square Metal Legs, and Self-Leveling Glides. Must meet ADA requirements. Provide Self-Leveling Nylon Glides.
Model Name:	Dining Table at Break Room - ADA
Dimensions:	36"W x 36"D x 30"H; 30”W Minimum Clearance Required at Leg Span
Top Mat'l/Finish:	See Notes Below
Base Mat'l/Finish:	(PT-05) TIGER Drylac Low Lights Bronze 49/61120
Edge Detail:	Square



Notes:

Top Finish:
1.25" Thick (PL-04) Wilsonart Laminate 7991K-12 Neo Walnut, Soft Grain Finish with Aeon™
Edge:
2mm PVC Edge Banding to Match (PL-04) Wilsonart Laminate 7991K-12 Neo Walnut, Soft Grain Finish with Aeon™

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Pre-Catalyzed Lacquer on All Deciduous Hardwood Components or Wood Look Plastic Laminate.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-312
Project #:	Dusk Scheme	Item Description:	Dining Table at Break Room - ADA
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ4		

Item Quantity: ea

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MT

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegood drawings on designinformation.hilton.com for further information.

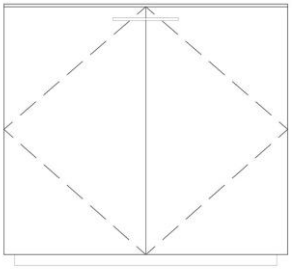
HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-316
Project #:	Dusk Scheme	Item Description:	Printer Cabinet at Living Room
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ4		

Item Quantity: ea

Manufacturer:	**D'Style**	**Elkay Interior Systems**
Address:	3451 Main Street, Suite 108 Chula Vista CA 91911	241 N Broadway, Suite 600 Milwaukee WI 53202
Phone:	(619) 662-0560	(224) 370-1635
Alternate:	(619) 662-3388	
Contact:	Eric Constantino	Courtney Messersmith
E-mail:	dsquotes@dstyle.com	courtney.messersmith@elkayinteriorsystems.com
Web:	www.dstyleinc.com	www.elkayinteriorsystems.com

Description: Two tone Printer Cabinet with Open Top for Printer, (2) Two Doors with Metal Door Pull Hardware and a Grommet at Back Panel for Printer Cable to Exit.



Model Name:	Printer Cabinet at Living Room
Dimensions:	26"W x 23"D x 24"H
Finish:	See Notes Below
Edge Detail:	Square Edge
Hardware Finish:	See Notes Below
Hardware Size:	3"W x 1.5"D x .25"H

Notes:

Shelving, Cabinet Doors and Sides: (PL-04) Wilsonart Laminate 7991K-12. Neo Walnut, Soft Grain Finish with Aeon™.
Top & Recessed Base: (PL-03) Wilsonart Laminate 1595K-18 Black, Linearity Finish with Low Sheen Level.
Door Hardware Finish: Powder Coated Metal to Match (PT-16) TIGER Drylac Black Smoke Transparent Black 49/80924.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Pre-Catalyzed Lacquer on All Deciduous Hardwood Components or Wood Look Plastic Laminate

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-316
Project #:	Dusk Scheme	Item Description:	Printer Cabinet at Living Room
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	06/23 Δ4		

Item Quantity: ea

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MT

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for

assembly. All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference casegood drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-317
Project #:	Dusk Scheme	Item Description:	Console Table at Meeting Room
Issue Date:	10/22	Area Name:	Meeting Room
Revision(s):	06/23 Δ2		

Item Quantity: ea

Manufacturer:	**D'Style**	**Elkay Interior Systems**
Address:	3451 Main Street Suite 108 Chula Vista CA 91911	241 N Broadway Suite 600 Milwaukee WI 53202
Phone:	(619) 662-0560	224-370-1635
Fax:	(619) 662-3388	
Contact:	Eric Constantino	Courtney Messersmith
E-mail:	dsquotes@dstyle.com	courtney.messersmith@elkayinteriorsystems.com
Web:	www.dstyleinc.com	

Description: Console Table with Engineered Stone Top and Powder Coated Reverse Bevel Base and Tubular Metal Legs.

Provide Self-Leveling Nylon Glides.

Provide (3) Three Equal Doors with Touch Latch and Open Storage Cubbies.

Model Name: Console Table at Meeting Room

Dimensions: 72"W x 24"D x 34"H

Finish: See Notes Below

Top Mat'l/Finish: 2cm Engineered Stone - See below note

Edge Detail: Square

Notes:

Engineered Stone: (SS-01) Daltile Calcutta NQ06 or Belstone Dodi Calacatta Aramis.
Wood Finish: Satin Transparent Stain to Match (PL- 04). Wilsonart Laminate 7991K-12 Neo Walnut with Low Sheen Level.
Accent Finish at Cubby and Shelf: (PL-03) Wilsonart Laminate 1595K-18 Black, Linearity Finish with Aeon™.
Metal Base Finish: (PT-05) TIGER Drylac Low Lights Bronze 49/61120

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-317
Project #:	Dusk Scheme	Item Description:	Console Table at Meeting Room
Issue Date:	10/22	Area Name:	Meeting Room
Revision(s):	06/23 Δ2		

Item Quantity: ea

Interior Designer/Architect to Determine Orientation of Unit (Lefts & Rights) Based on Plan Locations.

Pre-Catalyzed Lacquer on All Deciduous Hardwood Components or Wood Look Plastic Laminate.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegood drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-318
Project #:	Dusk Scheme	Item Description:	Folding Table at Meeting Room
Issue Date:	10/22	Area Name:	Meeting Room
Revision(s):			

Item Quantity: ea

Manufacturer: **MTS Seating**
Address: 7100 Industrial Drive
Temperance, MI 48182
Phone: (734) 847-3875
Fax:
Contact: Shayna Munson
E-mail: shaynamunson@mtsseating.com
Web: www.mtsseating.com

Description: Meeting Room Folding Table with Modesty Panel

Model Name: Folding Table at Meeting Room

Dimensions: 72"W x 18"D x 29 11/16"H

Top Style: Laminate: Wilsonart Neo Walnut 7991K-12 or Equal

Base Style: Edge: Black Vinyl Bumper Edge

Leg: Black S-18 Solid Satin Black Metal, Pin Style Leg Brace w/ Locking Mechanism

Notes:

Manufacturer to Provide Contract-Quality Glides/Levelers Suitable for Use on Carpet and Hard Surface.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Pre-Catalyzed Lacquer on All Deciduous Hardwood Components or Wood Look Plastic Laminate.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-318
Project #:	Dusk Scheme	Item Description:	Folding Table at Meeting Room
Issue Date:	10/22	Area Name:	Meeting Room
Revision(s):			

Item Quantity: ea

Instructions:

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame

strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for

assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources.

All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120.

Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegood drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-319
Project #:	Dusk Scheme	Item Description:	Retail Shelving
Issue Date:	09/2023	Area Name:	Central Hub
Revision(s):			

Item Quantity: ea

Manufacturer:	**Opto Systems**
Address:	1325 N. Mittel Boulevard Wood Dale, IL 60191
Phone:	847-541-6786 x5799
Fax:	
Contact:	Nicole Schopp
E-mail:	nschopp@optosystem.com
Web:	www.optosystem.com

Description:	Retail display with shelves, locking storage drawers, and integrated lighting.
Dimensions:	Coordinate with proto drawings
Finish:	Match Suite Shop millwork wood/laminate
Notes:	Manufacturer to verify size requirements by on-site measurements taken prior to fabrication. Units must be adjustable in field for overall height and shelf locations. All pieces to be mechanically secured together. Provide all corrosion proof hardware to secure pieces together. All cabinets to have same keyed locks. The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: JK

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-319
Project #:	Dusk Scheme	Item Description:	Retail Shelving
Issue Date:	09/2023	Area Name:	Central Hub

Item Quantity: ea

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegood drawings on designinformation.hilton.com for further info.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-400
Project #:	Dusk Scheme	Item Description:	Roller Shade Fabrication at Central Hub
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	10/22 Δ 1		

Item Quantity: lot

Manufacturer:	**Echota Fabrics**	**EE Sewing, Inc.**	**Quilt-craft Industries**
Address:	1394 US 41 N, PO Box 625 Calhoun, GA 30701	21601 E 340 Rd. Chelsea, OK 74016	1230 East Ledbetter Dallas, TX 75216
Phone:	(706) 629-9750	(918) 789-5881	(214) 376-1841
Fax:			
Contact:	Will Ostuw	Luke Cowles	David Pearson
E-mail:	will@echotafabrics.com	ee@junct.com	dpearson@quiltcraft.com
Web:	www.echotafabrics.com	www.eesewing.com	www.quiltcraft.com/

Description: (1) One Manual Sheer Roller Shade Per Section of Glass at Central Hub Windows with Stainless Steel Beaded Chains. Roller Shade and Fascia Cover to be Ceiling Mounted, Concealed by Contractor Provided Pocket.

Sheer Shade: FR Roller Shade with Fabric-Wrapped Hem Bar. FR Sheer to Extend to Windowsill and Overlap at Center of Mullions.

Single/Manual Clutch System with 3 1/2" Fascia. Anodized Finish at Fascia Headbox and Brackets.

Opening Quantity: 1 per Window Section VIF

Ceiling Height: 12'-0" - Verify in Field

Opening Size: Verify in Field

Mounting Method: Ceiling Mounted - Verify in Field

Pocket Dimensions: 8"W x 10"H - Verify in Field

Hardware: Single/Manual Clutch System

COM/COL: Fabric at Sheer - (B) PA-400A:

Echota Fabrics; Pattern: 2360 Sheer Weave; Color: Oyster/ Pearl Gray; Content: 65% Vinyl, 35% Fiberglass; Width: 63”/98”/126”; Openness: 5%; Fire Rating: NFPA 701

EE Sewing, Inc.; Pattern: Duncan; Color: White Gray; Content: 100% Polyester; Width: 79”; Openness: 5%; Fire Rating: NFPA 701

Quilt-craft Industries; Pattern: 2360; Sheer weave; Color: Oyster/Pearl Gray; Content: 65% Vinyl, 35% Fiberglass; Width: 63"/98"; Railroad: Yes; Finish: Manufacturer to Provide Alta Drapery; Fire Rating: NFPA 701

Notes: Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.03.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-400
Project #:	Dusk Scheme	Item Description:	Roller Shade Fabrication at Central Hub
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	10/22 Δ 1		

Item Quantity: lot

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Designer/Architect is Responsible for Determining the Orientation (Left or Right) of Cords/Chains Based on Plan Locations.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use. COM

quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All quantity requirements must be verified by on-site measurements taken prior to fabrication.

Drapery fabricator to provide all hardware complete for installation.

Drapery fabricator is responsible for the size and quantity of all hardware to be used.

Draperies must meet Class 1 ASTM E-84 and NFPA 701 Small and Large Scale as required by local and state fire codes for use in hotels.

Manufacturer to clearly mark each carton with item ID and specification number.

Sheer treatments must have a 1” single side hem, 4” single heading and 4” double bottom hem. Blackout treatments must have a 1” single side hem, 4” single heading and 1/2” double bottom hem.

Sheer and blackout must have 1/2” clear front mounted baton that is 36” long minimum.

All window treatments to have 4” overlap in center when they are two-way draw.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-401
Project #:	Dusk Scheme	Item Description:	Roller Shade Fabrication at Guest Laundry
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	10/22 Δ 1		

Item Quantity: lot

Manufacturer:	**Echota Fabrics**	**EE Sewing, Inc.**	**Quilt-craft Industries**
Address:	1394 US 41 N, PO Box 625 Calhoun, GA 30701	21601 E 340 Rd. Chelsea, OK 74016	1230 East Ledbetter Dallas, TX 75216
Phone:	(706) 629-9750	(918) 789-5881	(214) 376-1841
Fax:			
Contact:	Will Ostuw	Luke Cowles	David Pearson
E-mail:	will@echotafabrics.com	ee@junct.com	dpearson@quiltcraft.com
Web:	www.echotafabrics.com	www.eesewing.com	www.quiltcraft.com/

Description: (1) One Manual Sheer Roller Shade Per Section of Glass at Guest Laundry Windows with Stainless Steel Beaded Chains. Roller Shade and Fascia Cover to be Wall Mounted.

Sheer Shade: FR Roller Shade with Fabric-Wrapped Hem Bar. FR Sheer to Extend to Windowsill and Overlap at Center of Mullions.

Single/Manual Clutch System with 3 1/2" Fascia. Anodized Finish at Fascia Headbox and Brackets.
2" Overlap Minimum (Over Window Opening)

Opening Quantity: 1 per Window Section VIF

Ceiling Height: 11'-6" - Verify in Field

Opening Size: Verify in Field

Mounting Method: Wall Mounted - Verify in Field

Hardware: Single/Manual Clutch System

COM/COL: Fabric at Sheer - (B) PA-401A:

Echota Fabrics; Pattern: 2360 Sheer Weave; Color: Oyster/ Pearl Gray; Content: 65% Vinyl, 35% Fiberglass; Width: 63”/98”/126”; Openness: 5%; Fire Rating: NFPA 701

EE Sewing, Inc.; Pattern: Duncan; Color: White Gray; Content: 100% Polyester; Width: 79”; Openness: 5%; Fire Rating: NFPA 701

Quilt-craft Industries; Pattern: 2360; Sheer weave; Color: Oyster/Pearl Gray; Content: 65% Vinyl, 35% Fiberglass; Width: 63"/98"; Railroad: Yes; Finish: Manufacturer to Provide Alta Drapery; Fire Rating: NFPA 701

Notes: Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.03.

Unless Using A Specified Manufacturer, The Following Item(s) are Required to be Submitted for

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-401
Project #:	Dusk Scheme	Item Description:	Roller Shade Fabrication at Guest Laundry
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	10/22 Δ 1		

Item Quantity: lot

Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Designer/Architect is Responsible for Determining the Orientation (Left or Right) of Cords/Chains Based on Plan Locations.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use. COM

quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All quantity requirements must be verified by on-site measurements taken prior to fabrication.

Drapery fabricator to provide all hardware complete for installation.

Drapery fabricator is responsible for the size and quantity of all hardware to be used.

Draperies must meet Class 1 ASTM E-84 and NFPA 701 Small and Large Scale as required by local and state fire codes for use in hotels.

Manufacturer to clearly mark each carton with item ID and specification number.

Sheer treatments must have a 1” single side hem, 4” single heading and 4” double bottom hem. Blackout treatments must have a 1” single side hem, 4” single heading and 1/2” double bottom hem.

Sheer and blackout must have 1/2” clear front mounted baton that is 36” long minimum.

All window treatments to have 4” overlap in center when they are two-way draw.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-402
Project #:	Dusk Scheme	Item Description:	Roller Shade Fabrication at Fitness
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	10/22 Δ 1		

Item Quantity: lot

Manufacturer:	**Echota Fabrics**	**EE Sewing, Inc.**	**Quilt-craft Industries**
Address:	1394 US 41 N, PO Box 625 Calhoun, GA 30701	21601 E 340 Rd. Chelsea, OK 74016	1230 East Ledbetter Dallas, TX 75216
Phone:	(706) 629-9750	(918) 789-5881	(214) 376-1841
Fax:			
Contact:	Will Ostuw	Luke Cowles	David Pearson
E-mail:	will@echotafabrics.com	ee@junct.com	dpearson@quiltcraft.com
Web:	www.echotafabrics.com	www.eesewing.com	www.quiltcraft.com/

Description:

(1) One Manual Sheer Roller Shade Per Section of Glass at Fitness Windows with Stainless Steel Beaded Chains. Roller Shade and Fascia Cover to be Wall Mounted, Concealed by Contractor Provided Pocket.

Sheer Shade: FR Roller Shade with Fabric-Wrapped Hem Bar. FR Sheer to Extend to Windowsill and Overlap at Center of Mullions.

Single/Manual Clutch System with 3 1/2" Fascia. Anodized Finish at Fascia Headbox and Brackets.

Opening Quantity: 1 per Window Section VIF

Ceiling Height: 11'-6" - Verify in Field

Opening Size: Verify in Field

Mounting Method: Wall Mounted - Verify in Field

Hardware: Single/Manual Clutch System

COM/COL:

Fabric at Sheer: (B) PA-402A:

Echota Fabrics; Pattern: 2360 Sheer Weave; Color: Oyster/ Pearl Gray; Content: 65% Vinyl, 35% Fiberglass; Width: 63”/98”/126”; Openness: 5%; Fire Rating: NFPA 701

EE Sewing, Inc.; Pattern: Duncan; Color: White Gray; Content: 100% Polyester; Width: 79”; Openness: 5%; Fire Rating: NFPA 701

Quilt-craft Industries; Pattern: 2360; Sheer weave; Color: Oyster/Pearl Gray; Content: 65% Vinyl, 35% Fiberglass; Width: 63"/98"; Railroad: Yes; Finish: Manufacturer to Provide Alta Drapery; Fire Rating: NFPA 701

Notes:

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.03.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-402
Project #:	Dusk Scheme	Item Description:	Roller Shade Fabrication at Fitness
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	10/22 Δ 1		

Item Quantity: lot

Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Designer/Architect is Responsible for Determining the Orientation (Left or Right) of Cords/Chains Based on Plan Locations.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use. COM

quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All quantity requirements must be verified by on-site measurements taken prior to fabrication.

Drapery fabricator to provide all hardware complete for installation.

Drapery fabricator is responsible for the size and quantity of all hardware to be used.

Draperies must meet Class 1 ASTM E-84 and NFPA 701 Small and Large Scale as required by local and state fire codes for use in hotels.

Manufacturer to clearly mark each carton with item ID and specification number.

Sheer treatments must have a 1” single side hem, 4” single heading and 4” double bottom hem. Blackout treatments must have a 1” single side hem, 4” single heading and 1/2” double bottom hem.

Sheer and blackout must have 1/2” clear front mounted baton that is 36” long minimum.

All window treatments to have 4” overlap in center when they are two-way draw.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-403
Project #:	Dusk Scheme	Item Description:	Roller Shade Fabrication at Break Room
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	10/22 Δ 1		

Item Quantity: ea

Manufacturer:	**Echota Fabrics**	**EE Sewing, Inc.**	**Quilt-craft Industries**
Address:	1394 US 41 N, PO Box 625 Calhoun, GA 30701	21601 E 340 Rd. Chelsea, OK 74016	1230 East Ledbetter Dallas, TX 75216
Phone:	(706) 629-9750	(918) 789-5881	(214) 376-1841
Fax:			
Contact:	Will Ostuw	Luke Cowles	David Pearson
E-mail:	will@echotafabrics.com	ee@junct.com	dpearson@quiltcraft.com
Web:	www.echotafabrics.com	www.eesewing.com	www.quiltcraft.com/

Description: (1) One Manual Sheer Roller Shade Per Section of Glass at Break Room Windows with Stainless Steel Beaded Chains. Roller Shade and Fascia Cover to be Wall Mounted.

Sheer Shade: FR Roller Shade with Fabric-Wrapped Hem Bar. FR Sheer to Extend to Windowsill and Overlap at Center of Mullions.

Single/Manual Clutch System with 3 1/2" Fascia. Anodized Finish at Fascia Headbox and Brackets.

Opening Quantity: 1 per Window Section VIF

Ceiling Height: 11'-6" - Verify in Field

Opening Size: Verify in Field

Mounting Method: Wall Mounted - Verify in Field

Hardware: Single/Manual Clutch System

COM/COL: Fabric at Sheer: (B) PA-403A:

Echota Fabrics; Pattern: 2360 Sheer Weave; Color: Oyster/ Pearl Gray; Content: 65% Vinyl, 35% Fiberglass; Width: 63”/98”/126”; Openness: 5%; Fire Rating: NFPA 701

EE Sewing, Inc.; Pattern: Duncan; Color: White Gray; Content: 100% Polyester; Width: 79”; Openness: 5%; Fire Rating: NFPA 701

Quilt-craft Industries; Pattern: 2360; Sheer weave; Color: Oyster/ Pearl Gray; Content: 65% Vinyl, 35% Fiberglass; Width: 63"/98"; Railroad: Yes; Finish: Manufacturer to Provide Alta Drapery; Fire Rating: NFPA 701

Notes: Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.03.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-403
Project #:	Dusk Scheme	Item Description:	Roller Shade Fabrication at Break Room
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	10/22 Δ 1		

Item Quantity: ea

Designer/Architect is Responsible for Determining the Orientation (Left or Right) of Cords/Chains Based on Plan Locations.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MT

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use. COM

quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All quantity requirements must be verified by on-site measurements taken prior to fabrication.

Drapery fabricator to provide all hardware complete for installation.

Drapery fabricator is responsible for the size and quantity of all hardware to be used.

Draperies must meet Class 1 ASTM E-84 and NFPA 701 Small and Large Scale as required by local and state fire codes for use in hotels.

Manufacturer to clearly mark each carton with item ID and specification number.

Sheer treatments must have a 1” single side hem, 4” single heading and 4” double bottom hem. Blackout treatments must have a 1” single side hem, 4” single heading and 1/2” double bottom hem.

Sheer and blackout must have 1/2” clear front mounted baton that is 36” long minimum.

All window treatments to have 4” overlap in center when they are two-way draw.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-404
Project #:	Dusk Scheme	Item Description:	Roller Shade Fabrication at Corridor
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	10/22 Δ 1		

Item Quantity: ea

Manufacturer:	**Echota Fabrics**	**EE Sewing, Inc.**	**Quilt-craft Industries**
Address:	1394 US 41 N, PO Box 625 Calhoun, GA 30701	21601 E 340 Rd. Chelsea, OK 74016	1230 East Ledbetter Dallas, TX 75216
Phone:	(706) 629-9750	(918) 789-5881	(214) 376-1841
Fax:			
Contact:	Will Ostuw	Luke Cowles	David Pearson
E-mail:	will@echotafabrics.com	ee@junct.com	dpearson@quiltcraft.com
Web:	www.echotafabrics.com	www.eesewing.com	www.quiltcraft.com/

Description: (1) One Manual Sheer Roller Shade at Single Window with Stainless Steel Beaded Chain. Headbox to be Wall Mounted Above Window.

Sheer Shade: FR Roller Shade with Fabric-Wrapped Hem Bar. FR Sheer to Extend to Windowsill and Overlap Side Jambs by 3".

Single/Manual Clutch System with 3 1/2" Fascia. Anodized Finish at Fascia Headbox and Brackets.

Opening Quantity: 1

Ceiling Height: 8'-0" - Verify in Field

Opening Size: 4'-0" - Verify in Field Mounting

Method: Wall Mounted - Verify in Field

Hardware: Skyline Single Roller Shade

Shade Style: Manual Roller Shade

COM/COL: Fabric at Sheer: (B) PA-404A:

Echota Fabrics; Pattern: 2360 Sheer Weave; Color: Oyster/ Pearl Gray; Content: 65% Vinyl, 35% Fiberglass; Width: 63”/98”/126”; Openness: 5%; Fire Rating: NFPA 701

EE Sewing, Inc.; Pattern: Duncan; Color: White Gray; Content: 100% Polyester; Width: 79”; Openness: 5%; Fire Rating: NFPA 701

Quilt-craft Industries; Pattern: 2360; Sheer weave; Color: Oyster/Pearl Gray; Content: 65% Vinyl, 35% Fiberglass; ; Width: 63"/98"; Railroad: Yes; Finish: Manufacturer to Provide Alta Drapery; Fire Rating: NFPA 701

Notes: Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.03.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-404
Project #:	Dusk Scheme	Item Description:	Roller Shade Fabrication at Corridor
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	10/22 Δ 1		

Item Quantity: ea

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Designer/Architect is Responsible for Determining the Orientation (Left or Right) of Cords/Chains Based on Plan Locations.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use. COM

quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All quantity requirements must be verified by on-site measurements taken prior to fabrication.

Drapery fabricator to provide all hardware complete for installation.

Drapery fabricator is responsible for the size and quantity of all hardware to be used.

Draperies must meet Class 1 ASTM E-84 and NFPA 701 Small and Large Scale as required by local and state fire codes for use in hotels.

Manufacturer to clearly mark each carton with item ID and specification number.

Sheer treatments must have a 1” single side hem, 4” single heading and 4” double bottom hem. Blackout treatments must have a 1” single side hem, 4” single heading and 1/2” double bottom hem.

Sheer and blackout must have 1/2” clear front mounted baton that is 36” long minimum.

All window treatments to have 4” overlap in center when they are two-way draw.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-405
Project #:	Dusk Scheme	Item Description:	Window Treatments at Meeting Room
Issue Date:	10/22	Area Name:	Meeting Room
Revision(s):			

Item Quantity: ea

Manu:	**Echota Fabrics, Inc.**	**EE Sewing, Inc.**	**Quiltcraft Industries**
Address:	1394 US 41 N	21601 E 340 Rd.	1230 East Ledbetter
	Calhoun, GA 30701	Chelsea, OK 74016	Dallas, TX 75216
Phone:	(706) 629-9750	(918) 789-5881	(214) 376-1841
Contact:	Will Ostuw	Luke Cowles	David Pearson
Email:	will@echotafabrics.com	ee@junct.com	dpearson@quiltcraft.com
Web:	www.echotafabrics.com	www.eesewing.com	www.quiltcraft.com

Description:

A Dual Roller Shade with (1) One Motorized Blackout Roller Shade and (1) One Motorized Sheer Roller Shade at Single Window. Headbox to be Mounted Above Window. Blackout Shade Located Closest to the Window and Sheer Shade Located Closest to the Room.

Motor with Hardwired Power Cord and Quick Disconnect, Controlled by Wireless Wall Switch(es). Switch to be Coordinated with Contractor. Refer to Architectural Drawings for Location and Mounting Height.

Blackout Shade: FR Roller Shade with Fabric-Wrapped Hem Bar. FR Blackout to Extend to windowsill and Overlap Side Jambs by 3".
Sheer Shade: FR Roller Shade with Fabric-Wrapped Hem Bar.

Skyline Dual Roller Shade with 5 1/2" x 5 1/2" Headbox. Anodized Finish at Headbox, Side/Sill Channels and Brackets.

Opening Quantity:	VIF
Ceiling Height:	VIF
Opening Size:	VIF
Mounting Method:	See Notes Below
Hardware:	Skyline Dual Roller Shade
Shade Style:	Motorized Dual Roller Shade
COM/COL:	Fabric at Sheer - (B) PA-405A:

Echota Fabrics; Pattern: 2360 Sheer Weave; Color: Oyster/ Pearl Gray; Content: 65% Vinyl, 35% Fiberglass; Width: 63”/98”/126”; Openness: 5%; Fire Rating: NFPA 701

EE Sewing, Inc.; Pattern: Duncan; Color: White Gray; Content: 100% Polyester; Width: 79”; Openness: 5%; Fire Rating: NFPA 701

Quilt-craft Industries; Pattern: 2360; Sheer weave; Color: Oyster/Pearl Gray; Content: 65% Vinyl, 35% Fiberglass; ; Width: 63"/98"; Railroad: Yes; Finish: Manufacturer to Provide Alta Drapery; Fire Rating: NFPA 701

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Daybreak FF&E Specifications	Item Number:	(A) PA-405
Project #:	Daybreak Scheme	Item Description:	Window Treatments at Meeting Room
Issue Date:	10/22	Area Name:	Meeting Rooms
Revision(s):			

Item Quantity: ea

Fabric at Blackout - (B) PA-405B:

Echota Fabrics; Pattern: Lillabet; Color: Midnight; Content: 100% Polyester; Width: 118”; Fire Rating: NFPA 701 Backing: 4 Pass Blackout

EE Sewing, Inc.; Pattern: Mission; Color: Fog; Content: 100% Polyester; Width: 118”; Fire Rating: NFPA 701; Backing: 4 Pass Blackout

Quiltcraft Industries; Pattern: Galaxy; Color: Linen; Content: 100% Polyester; Width: 110"; Fire Rating: NFPA 701

Notes:

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.03.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

COM quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All quantity requirements must be verified by on-site measurements taken prior to fabrication.

Drapery fabricator to provide all hardware complete for installation.

Drapery fabricator is responsible for the size and quantity of all hardware to be used.

Draperies must meet Class 1 ASTM E-84 and NFPA 701 Small and Large Scale as required by local and state fire codes for use in hotels.

Manufacturer to clearly mark each carton with item ID and specification number.

Sheer treatments must have a 1” single side hem, 4” single heading and 4” double bottom hem. Blackout treatments must have a 1” single side hem, 4” single heading and 1/2” double bottom hem.

Sheer and blackout must have 1/2” clear front mounted baton that is 48" AFF.

All window treatments to have 4” overlap in center when they are two-way draw.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-500
Project #:	Dusk Scheme	Item Description:	Art Grouping at Central Hub
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	02/2023 Δ 2		

Item Quantity: lot

Manufacturer:	**Kalisher**	**PI Fine Art**	**Wendover Art Group**
Address:	800 Taylor Street Suite 9A-154 Durham NC 27701	1180 Caledonia Road Toronto, Ontario M6A 2W5	6465 126th Avenue North Largo, FL 33773
Phone:	(919) 967-4300	(416) 789-7156	(727) 573-1417 (312) 848-4151
Contact:	Julia Kushner	Elise Vandenbosch	Carmine Giso
E-mail:	j.kushner@kalisher.com	hilton@pifineart.com	carmine.giso@wendoverart.com
Web:	www.kalisher.com	www.pifineart.com	www.wendoverart.com

Description:

Custom Grouping of (8) Eight Pieces of Art to be Reflective of Local Character While Adhering to Homewood Suites Brand Characteristics. Subject Matter to be Customized Per Project Location.

Art 1: Print on Dibond with Copper Finish.
Overall Size: 18.75” W x 18.75” H.

Art 2: Framed Paper Print.
Overall Size: 24” W x 24”H, Image Size: 20.5” W x 20.5”H.
Frame: Framerica, BW217-961, Spumante Gold, 0.75”W.
Mat: Circular 1” Single White.

Art 3: Framed Paper Print.
Overall Size: 24”W x 39”H, Image Size: 16.5”W x 21.5”H.
Frame: Framerica, BW217-057, Organic Maple, 0.75”W.
Mat: Top/Sides 3" Bottom 13" Single White.

Art 4: Framed Paper Print.
Overall Size: 28.5”W x 48”H, Image Size: 26.5”W x 46”H.
Frame: Framerica, BW26025, Blue Colori, 1.25”W.

Art 5,6, and 7: Set of Three Framed Canvas on Hardboard.
Overall Size: 18”W x 23”H Per Piece, Image Size: 17”W x 22”H Per Piece.
Frame: Framerica, BW217-405, Gallery Black, 0.75”W.

Art 8: 3-Dimensional Sculpture.
Size: 18” x 18”.

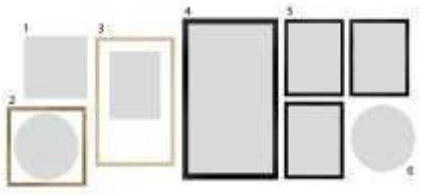
Manufacturer to Confirm the Artwork Meets Hilton Design and Construction Standards as Noted in Section 2515.05

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-500
Project #:	Dusk Scheme	Item Description:	Art Grouping at Central Hub
Issue Date:	04/19/21	Area Name:	Public Area

Item Quantity: lot

Image Size:	See Description Above
Framed Size:	See Description Above
Molding Number:	See Description Above
Molding Width:	See Description Above
Orientation:	Vertical
Hardware:	3-Point Security
Glass Type:	Clear at Art 2,3,4



Notes:

Unless Using A Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Prototype.

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.05.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: YK

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes and Homewood Suites Brand Standards.

Provide all parts, pieces and instructions for complete installation. Mounting method to be sufficient for weight of piece.

All pieces must be crated for shipping. All corners should be wrapped with corner guards. Crates should be labeled with instructions for shipment, storage and opening of crate.

Manufacturer to clearly mark each carton with item ID and specification number.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-501
Project #:	Dusk Scheme	Item Description:	Art at Public Restroom (Men's)
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	02/2023 Δ 2		

Item Quantity: ea

Manufacturer:	**Kalisher**	**PI Fine Art**	**Wendover Art Group**
Address:	800 Taylor Street Suite 9A-154 Durham NC 27701	1180 Caledonia Road Toronto, Ontario M6A 2W5	6465 126th Avenue North Largo, FL 33773
Phone:	(919) 967-4300	(416) 789-7156	(727) 573-1417 (312) 848-4151
Contact:	Julia Kushner	Elise Vandenbosch	Carmine Giso
E-mail:	j.kushner@kalisher.com	hilton@pifineart.com	carmine.giso@wendoverart.com
Web:	www.kalisher.com	www.pifineart.com	www.wendoverart.com

Description:	Custom Framed Paper Print Artwork to be Reflective of Local Character While Adhering to Homewood Suites Brand Characteristics. Subject Matter to be Customized Per Project Location.
Image Size:	41"W x 29"H
Framed Size:	42"W x 30"H
Molding Number:	Framerica, BW217-057, Organic Maple
Molding Width:	0.75"
Orientation:	Vertical
Hardware:	3-Point Security
Glass Type:	Non-Glare Clear
Notes:	Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Prototype. Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.05

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: YK

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes and Homewood Suites Brand Standards.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-501
Project #:	Dusk Scheme	Item Description:	Art at Public Restroom (Men's)
Issue Date:	04/19/21	Area Name:	Public Area

Item Quantity: ea

Instructions:

Provide all parts, pieces and instructions for complete installation. Mounting method to be sufficient for weight of piece.

All pieces must be crated for shipping. All corners should be wrapped with corner guards. Crates should be labeled with instructions for shipment, storage and opening of crate.

Manufacturer to clearly mark each carton with item ID and specification number.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-502
Project #:	Dusk Scheme	Item Description:	Art at Public Restroom (Women's)
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	02/2023 Δ2		

Item Quantity: ea

Manufacturer:	**Kalisher**	**PI Fine Art**	**Wendover Art Group**
Address:	800 Taylor Street Suite 9A-154 Durham NC 27701	1180 Caledonia Road Toronto, Ontario M6A 2W5	6465 126th Avenue North Largo, FL 33773
Phone:	(919) 967-4300	(416) 789-7156	(727) 573-1417 (312) 848-4151
Contact:	Julia Kushner	Elise Vandenbosch	Carmine Giso
E-mail:	j.kushner@kalisher.com	hilton@pifineart.com	carmine.giso@wendoverart.com
Web:	www.kalisher.com	www.pifineart.com	www.wendoverart.com

Description:	Custom Framed Paper Print Artwork to be Reflective of Local Character While Adhering to Homewood Suites Brand Characteristics. Subject Matter to be Customized Per Project Location.
Image Size:	41"W x 29"H
Framed Size:	42"W x 30"H
Molding Number:	Framerica, BW217-057, Organic Maple
Molding Width:	0.75"
Orientation:	Vertical
Hardware:	3-Point Security
Glass Type:	Non-Glare Clear
Notes:	Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Prototype. Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.05

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: YK

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes and Homewood Suites Brand Standards.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-502
Project #:	Dusk Scheme	Item Description:	Art at Public Restroom (Women's)
Issue Date:	04/19/21	Area Name:	Public Area

Item Quantity: ea

Instructions:

Provide all parts, pieces and instructions for complete installation. Mounting method to be sufficient for weight of piece.

All pieces must be crated for shipping. All corners should be wrapped with corner guards. Crates should be labeled with instructions for shipment, storage and opening of crate.

Manufacturer to clearly mark each carton with item ID and specification number.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-503
Project #:	Dusk Scheme	Item Description:	Art at Guest Laundry Lounge
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	02/2023 Δ 2		

Item Quantity: ea

Manufacturer:	**Kalisher**	**PI Fine Art**	**Wendover Art Group**
Address:	800 Taylor Street Suite 9A-154 Durham NC 27701	1180 Caledonia Road Toronto, Ontario M6A 2W5	6465 126th Avenue North Largo, FL 33773
Phone:	(919) 967-4300	(416) 789-7156	(727) 573-1417 (312) 848-4151
Contact:	Julia Kushner	Elise Vandenbosch	Carmine Giso
E-mail:	j.kushner@kalisher.com	hilton@pifineart.com	carmine.giso@wendoverart.com
Web:	www.kalisher.com	www.pifineart.com	www.wendoverart.com

Description:	Custom Gallery Wrapped Canvas Artwork to be Reflective of Local Character While Adhering to Homewood Suites Brand Characteristics. Subject Matter to be Customized Per Project Location.
Image Size:	48"W x 30"H
Orientation:	Horizontal
Hardware:	3-Point Security
Notes:	Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Prototype. Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.05

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: YK

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes and Homewood Suites Brand Standards.

Provide all parts, pieces and instructions for complete installation. Mounting method to be sufficient for weight of piece.

All pieces must be crated for shipping. All corners should be wrapped with corner guards. Crates should be labeled with instructions for shipment, storage and opening of crate.

Manufacturer to clearly mark each carton with item ID and specification number.

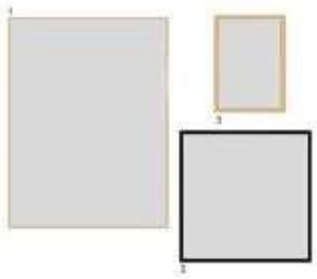
HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-504
Project #:	Dusk Scheme	Item Description:	Art at Guest Floor Elevator Lobbies
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	02/2023 Δ 3		

Item Quantity: ea

Manufacturer:	**Kalisher**	**PI Fine Art**	**Wendover Art Group**
Address:	800 Taylor Street Suite 9A-154 Durham NC 27701	1180 Caledonia Road Toronto, Ontario M6A 2W5	6465 126th Avenue North Largo, FL 33773
Phone:	(919) 967-4300	(416) 789-7156	(727) 573-1417 (312) 848-4151
Contact:	Julia Kushner	Elise Vandenbosch	Carmine Giso
E-mail:	j.kushner@kalisher.com	hilton@pifineart.com	carmine.giso@wendoverart.com
Web:	www.kalisher.com	www.pifineart.com	www.wendoverart.com

Description:	Custom Grouping of (3) Three Pieces of Art to be Reflective of Local Character While Adhering to Homewood Suites Brand Characteristics. Subject Matter to be Customized Per Project Location.
Image Size:	See Notes Below
Framed Size:	See Notes Below
Molding Number:	See Notes Below
Molding Width:	See Notes Below
Orientation:	Vertical
Hardware:	3-Point Security
Glass Type:	Clear on Paper Print



Notes:

Art 1: Framed Paper Print.
Overall Size: 26”W x 34”H, Image Size: 24.75”W x 32.75”H.
Frame: Michelangelo, 432-29, Black Shadow Box, 0.875"W.

Art 2: Framed Paper Print.
Overall Size: 18"W x 18”H.
Frame: Framerica, BW217-405, Gallery Black, 0.75"W.

Art 3: Framed Paper Print.
Overall Size: 29”W x 18”H, Image Size: 28”W x 17”H.
Frame: BW217-057, Organic Maple, 0.75"W.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Prototype.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-504
Project #:	Dusk Scheme	Item Description:	Art at Guest Floor Elevator Lobbies
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	02/2023 Δ 3		

Item Quantity: ea

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.05.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: YK

☐ Seaming Diagram	☐ Strike-Off	☐ Finish Sample	☐ Cutting	☐ Shop Dwgs	☐ Prototype	☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes and Homewood Suites Brand Standards.

Provide all parts, pieces and instructions for complete installation. Mounting method to be sufficient for weight of piece.

All pieces must be crated for shipping. All corners should be wrapped with corner guards. Crates should be labeled with instructions for shipment, storage and opening of crate.

Manufacturer to clearly mark each carton with item ID and specification number.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-505
Project #:	Dusk Scheme	Item Description:	Art at First Floor Elevator Lobby
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	02/2023 Δ4		

Item Quantity: ea

Manufacturer:	**Kalisher**	**PI Fine Art**	**Wendover Art Group**
Address:	800 Taylor Street Suite 9A-154 Durham NC 27701	1180 Caledonia Road Toronto, Ontario M6A 2W5	6465 126th Avenue North Largo, FL 33773
Phone:	(919) 967-4300	(416) 789-7156	(727) 573-1417 (312) 848-4151
Contact:	Julia Kushner	Elise Vandenbosch	Carmine Giso
E-mail:	j.kushner@kalisher.com	hilton@pifineart.com	carmine.giso@wendoverart.com
Web:	www.kalisher.com	www.pifineart.com	www.wendoverart.com

Description:

The Guest Engagement Moment Piece is an Impactful and Engaging Feature Comprised of a Word or Statement that Recognizably Relates to The Hotels Neighborhood and Surrounding Culture.

Font Style, Size, Localized Text Content, and Font Orientation are Completely Customizable. The Acrylic May Include a Half Tone Screen Printed Image. To Maintain a Level of Consistency from Property to Property, Designers are Required to Choose One Solid Color from the Homewood Suites Graphic Palette as Their Substrate Color, and the LED Light Color Must be Kept White or Blue Only.

Avoid General or Vague Phrases That May be Overused in Multiple Homewood Suites Locations.

Avoid Political, Suggestive, Racial or Religious Imagery or Text. Subject Matter Must be Globally Sensitive so as Not to Offend Anyone or Alienate Anyone or Any Culture.

- Minimum Panel Size: 42"H x 60"W / Single Panel.
- Back Frame Depth is About 1.5" x 2". Overall Piece Depth is 3".
- Back Printed Acrylic Panel is 1/4" Thick.
- Solution Must be ADA Compliant.
- Keep LED Lighting Mounted Above 36" AFF to Prevent Damage.
- Provide Clock Outlet Behind Solution.
- Sign Plugs In via Cord and Outlet. Not Dim-able, No On/Off Switch.
- Text Should Always be Neon Inspired LED Tubing Surface Mounted on UV-Printed Plexiglass Backer.
- LED Neon Can Be Either White or Blue and Will Be Attached to an Acrylic Backer.
- Utilize Neon Inspired LED Lighting Tubes (No Actual Neon is Permitted). Minimum Overall Size is 28" x 30" Due to LED Neon Bendability.
- Select From (12) Twelve Available Fonts.
- Submit All Proposed Text to Hilton for Approval Prior to Purchase and Production.
- Always Avoid Religious, Racial, and Political Subject Matter.
- Artwork to be Pre-wired Prior to Install on Site. Conceal Any Openings from LED Wording to Cord Behind Panel.
- Acrylic Backer to Receive Finished Edges. (No Raw or Sharp Cut Edges)

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-505
Project #:	Dusk Scheme	Item Description:	Art at First Floor Elevator Lobby
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	10/22 Δ3		

Item Quantity: ea

- Back Frame to be Included with Hanging Hardware.

Notes:

Unless Using a Specified Manufacturer, The Following Required Item(s) for Approval Prior to Fabrication: Finish Sample, Prototype. Manufacturer to Confirm the Art Meets Hilton Design and Construction Standards as Noted in Section 2515.05

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MT

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes and Homewood Suites Brand Standards.

Provide all parts, pieces and instructions for complete installation. Mounting method to be sufficient for weight of piece.

All pieces must be crated for shipping. All corners should be wrapped with corner guards. Crates should be labeled with instructions for shipment, storage and opening of crate.

Manufacturer to clearly mark each carton with item ID and specification number.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Daybreak FF&E Specifications	Item Number:	(B) PA-506
Project #:	Daybreak Scheme	Item Description:	Mirror at Public Restroom Vanity
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	09/2023 Δ3		

Item Quantity: ea

Manufacturer:	**Mirror Image**	**Majestic Mirror**	**PI Fine Art**
Address:	2937 Vail Avenue Los Angeles CA 90040	7425 N.W. 79th Street Miami, FL 33166	1180 Caledonia Road Toronto, Ontario M6A
Phone:	323.869.0100	305.827.2661 x106 305.827.2663	416.789.7156
Contact:	Glenn Neugarten	Adam Jaffe	Elise Vandenbosch
E-mail:	glenn@mirrorimageinc.com	adam@majesticmirror.com	hilton@pifineart.com
Web:	mirrorimageinc.com		www.pifineart.com

Description:	Rectangular Vanity Mirror with ½" Square Powder coat Metal Tube Open Box Frame. Mirror to be 5mm Thick Clear with Polished Edges and Vinyl Safety Backing.
Dimensions:	22"W x .5"D x 48"H
Mirror Size:	21"W x 47"H
Bevel:	No Bevel
Frame:	0.5" Square Tube
Finish:	Powder Coated to Match RAL 7031 Blaugrae Finish
Orientation:	Vertical
Mounting Height:	Refer to Architectural Prototype Drawing
Hardware:	Security Hardware
Notes:	Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.06. Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Daybreak FF&E Specifications	Item Number:	(B) PA-506
Project #:	Daybreak Scheme	Item Description:	Mirror at Public Restroom Vanity
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	09/2023 Δ3		

Instructions:

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Manufacturer to provide all component parts for complete assembly and installation.

Mounting method to be sufficient for weight of piece.

All pieces must be crated for shipping. All corners should be wrapped with corner guards. Crates should be labeled with instructions for shipment, storage and opening of crate.

For mirrors over 48" (1200mm) in any direction, provide inner frame and cross bracing.

Manufacturer to provide 3-point or continuous cleat security cleating system appropriate for the size and weight of the mirror.

Manufacturer to clearly mark each carton with item ID and specification number.

Must be crated for shipping with all corners wrapped with corner guards. Crates must be labeled with instructions for shipment, storage and opening of crate.

Provide ¼" (6mm) backer sheet, gator foam or tempered Masonite.

All works must be free of mildew, pests or any infestation. Protection and treatment for any damage must be handled by a certified conservator. Source/Gallery must document damage and treatment/protection from further damag

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-507
Project #:	Dusk Scheme	Item Description:	Full Length Mirror at Main Public Restroom
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	09/2023 Δ 2		

Item Quantity: ea

Manufacturer:	**Mirror Image**	**Majestic Mirror**	**PI Fine Art**
Address:	2937 Vail Avenue Los Angeles CA 90040	7425 N.W. 79th Street Miami, FL 33166	1180 Caledonia Road Toronto, Ontario M6A
Phone:	323.869.0100	305.827.2661 x106 305.827.2663	416.789.7156
Contact:	Glenn Neugarten	Adam Jaffe	Elise Vandenbosch
E-mail:	glenn@mirrorimageinc.com	adam@majesticmirror.com	hilton@pifineart.com
Web:	mirrorimageinc.com		www.pifineart.com

Description:	Rectangular Full-Length Mirror with a Solid Wood Frame. Mirror to be 5mm Thick and Clear with Polished Edges and Vinyl Safety Backing.
Dimensions:	22"W x 2"D x 84"H
Mirror Size:	20"W x 82"H
Bevel:	No Bevel
Frame:	1"W x 2"D
Finish:	Satin Transparent Stain to Match (PL-04) Wilsonart Laminate Neo Walnut with Low Sheen Level
Orientation:	Vertical
Mounting Height:	Refer to Architectural Prototype Drawing
Hardware:	Security Hardware
Notes:	Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.06. Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	**Item Number:**	(B) PA-507
Project #:	Dusk Scheme	Item Description:	Full Length Mirror at Main Public Restroom
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	09/2023 Δ 2		

Instructions:

Manufacturer to provide all component parts for complete assembly and installation.

Mounting method to be sufficient for weight of piece.

All pieces must be crated for shipping. All corners should be wrapped with corner guards. Crates should be labeled with instructions for shipment, storage and opening of crate.

For mirrors over 48" (1200mm) in any direction, provide inner frame and cross bracing.

Manufacturer to provide 3-point or continuous cleat security cleating system appropriate for the size and weight of the mirror.

Manufacturer to clearly mark each carton with item ID and specification number.

Must be crated for shipping with all corners wrapped with corner guards. Crates must be labeled with instructions for shipment, storage and opening of crate.

Provide ¼" (6mm) backer sheet, gator foam or tempered Masonite.

All works must be free of mildew, pests or any infestation. Protection and treatment for any damage must be handled by a certified conservator. Source/Gallery must document damage and treatment/protection from further damage.

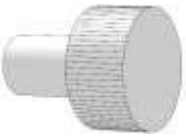
HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-508
Project #:	Dusk Scheme	Item Description:	Decorative Hook at Fitness
Issue Date:	05/11/21	Area Name:	Public Area
Revision(s):			

Item Quantity: ea

Manufacturer:	Williams Sonoma, Inc
Address:	55 Water Street, 2nd Floor Brooklyn, NY 11201-
Phone:	(718) 473-1873
Contact:	Liz Lighthall
E-mail:	hilton@wsgc.com
Web:	www.williams-sonoma.com/

Description:	Grouping of (5) Five Round Metal Wall Hooks with Flat Face, Ribbed Edge, Round Standoff and Powder Coated Finish. Wall Blocking to be Provided to Sustain a Weight Capacity of at Least 30 lbs. Per Decorative Hook.
Hardware:	Concealed Security (Provided by Manufacturer)
Installation Height:	Refer to Architectural Prototype Drawings for Height and Location
Notes:	Finish: (PT-05) TIGER Drylac Low Lights Bronze 49/61120. Dimensions: 1.25" Diameter x 1" Projection. Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Prototype. Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.05.



Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MT

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-508
Project #:	Dusk Scheme	Item Description:	Decorative Hook at Fitness
Issue Date:	05/11/21	Area Name:	Public Area

Item Quantity: ea

Instructions:

All materials and methods of construction must comply with all local fire and life safety codes and Homewood Suites Brand Standards.

Provide all parts, pieces and instructions for complete installation. Mounting method to be sufficient for weight of piece.

All pieces must be crated for shipping. All corners should be wrapped with corner guards. Crates should be labeled with instructions for shipment, storage and opening of crate.

Manufacturer to clearly mark each carton with item ID and specification number.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-509
Project #:	Dusk Scheme	Item Description:	Artwork at Meeting Room
Issue Date:	10/22	Area Name:	Meeting Room
Revision(s):			

Item Quantity: ea

Manufacturer:	**Kalisher**	**PI Fine Art**	**Wendover Art**
Address:	800 Taylor Street Suite 9A-154 Durham, NC 27701	1180 Caledonia Road Toronto, Ontario M6A 2W5	6465 126th Avenue North Largo, FL 33773
Phone:	(919) 967-4300	(416) 789-7156	(727) 573-1417
Fax:			
Contact:	Julia Kushner	Elisa Vandenbosch	Larry Hoffman
Email:	j.kushner@kalisher.com	hilton@pifineart.com	Hilton@wendoverart.com
Web:	www.kalisher.com	www.pifineart.com	www.wendoverart.com

Description:	Custom Tryptic Printed Gallery Wrapped Artwork to be Reflective of Local Character While Adhering to Homewood Suites Brand Characteristics. Subject Matter to be Customized Per Project Location.
Dimensions:	P1: 16”W x 32”H, P2: 16”W x 32”H, P3: 16”W x 32”H
Material:	Printed Canvas
Orientation:	Vertical
Hardware:	3-Point Security
Installation Height:	Refer to Architectural Prototype Drawings for Height and Location
Notes:	Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Prototype. Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.05.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-509
Project #:	Dusk Scheme	Item Description:	Artwork at Meeting Room
Issue Date:	10/22	Area Name:	Meeting Room
Revision(s):			

Item Quantity: ea

Instructions:

All materials and methods of construction must comply with all local fire and life safety codes and Homewood Suites Brand Standards.

Provide all parts, pieces and instructions for complete installation. Mounting method to be sufficient for weight of piece.

All pieces must be crated for shipping. All corners should be wrapped with corner guards. Crates should be labeled with instructions for shipment, storage and opening of crate.

Manufacturer to clearly mark each carton with item ID and specification number.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) OF-700
Project #:	Dusk Scheme	Item Description:	Outdoor Lounge Chair
Issue Date:	04/19/21	Area Name:	Outdoor Furniture
Revision(s):	10/22 Δ 2		

Item Quantity: ea

Manufacturer:	**Ratana International, Ltd.**
Address:	800 5th Ave., Suite 4100
	Seattle, Washington 98104
Phone:	703.926.5864
Contact:	Joanna Meletis
E-mail:	joannameletis@gmail.com
Web:	www.ratana.com

Description:	Outdoor High Back Lounge Chair with Aluminum Frame Covered in Durarope™ Criss-cross Rope Weaving with Tapered Round Legs, Dry-Fast Foam Loose Back and Seat Cushion in Fabric, Nylon Glides.
Model Name:	Poinciana High Back Chair
Material/Finish:	See Notes Below
Dimensions:	32.5”W x 35.5”D x 40”H
Seat Height:	17"
COM/COL:	Fabric at Outdoor Lounge Chair Seat Cushion: (B) OF-700A; Sunbrella; Pattern: 5402 Canvas Granite; 100% Sunbrella Acrylic; Width: 54"; Finish: Fabric is Treated with Non-PFOA Water and Stain Repellent; Fire Rating: CAL 117 2013, NFPA 260, UFAC 1 Fabric at Outdoor Lounge Chair Back Cushion: (A) OF-700A; Sunbrella; Pattern: 5439 Canvas Navy; 100% Sunbrella Acrylic; Width: 54"; Finish: Fabric is Treated with Non-PFOA Water and Stain Repellent; Fire Rating: CAL 117 2013, NFPA 260, UFAC 1
Notes:	Weight: 62 Lbs. Finishes: Frame: Powder Coated Aluminum – Ash Grey ASG. Weave: Durarope™ - Lava Grey LAG.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) OF-700
Project #:	Dusk Scheme	Item Description:	Outdoor Lounge Chair
Issue Date:	04/19/21	Area Name:	Outdoor Furniture
Revision(s):	10/22 Δ 2		

Item Quantity: ea

Manufacturer to Confirm the Furniture Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Unless Using A Specified Manufacturer, Submit the Following Required Item(s) for Approval Prior to Fabrication: Finish Sample, Shop Drawing

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MT

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use. COM

quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Wood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

Manufacturer to provide nylon carpet glides when applicable.

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Ensure that upholstered goods will fit in elevators and through doors prior to commencing fabrication.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number.

Manufacturer to include all necessary hardware with each item.

Reference the Design Intent softgood drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) OF-701
Project #:	Dusk Scheme	Item Description:	Outdoor Lounge Chair @ Fire Feature
Issue Date:	04/19/21	Area Name:	Outdoor Furniture
Revision(s):	10/22 Δ2		

Item Quantity: ea

Manufacturer:	**Janus Et Cie**
Address:	12310 Greenstone Ave. Santa Fe Springs, CA 90670
Phone:	202.802.0106
Fax:	
Contact:	Deron Bennett
E-mail:	dbennett@janusetcie.com
Web:	www.janusetcie.com

Description:	Outdoor Lounge Chair with Powder Coated Aluminum Frame, Handwoven Olefin Rope Back, Olefin Strapped Seat with Upholstered Loose Seat and Back Cushions. Provide Nylon Glides.
Model Number:	706-02-111-81-00
Model Name:	Knot Lounge Chair - Shale
Material/Finish:	See Notes Below
Dimensions:	34"W x 34.5"D x 31.25"H
Arm Height:	22.75"
Seat Height:	15.25"
COM/COL:	Fabric at Seat Cushion: (B) OF- 701A; Spinnaker – Heather Grey Fabric at Back Cushion: Asti - Steel
Notes:	Finishes: Frame: Powder Coated Aluminum. Manufacturer to Confirm the Furniture Meets Hilton Design and Construction Standards as Noted in Section 2515.00. Unless Using a Specified Manufacturer, Submit the Following Required Item(s) for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MT

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) OF-701
Project #:	Dusk Scheme	Item Description:	Outdoor Lounge Chair @ Fire Feature
Issue Date:	04/19/21	Area Name:	Outdoor Furniture
Revision(s):	10/22 Δ2		

Item Quantity: ea

Instructions:

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use. COM

quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Wood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

Manufacturer to provide nylon carpet glides when applicable.

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Ensure that upholstered goods will fit in elevators and through doors prior to commencing fabrication.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number.

Manufacturer to include all necessary hardware with each item.

Reference the Design Intent softgood drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) OF-702 Supplier A
Project #:	Dusk Scheme	Item Description:	Outdoor & Optional Pool Dining Chair
Issue Date:	04/19/21	Area Name:	Outdoor Furniture
Revision(s):	02/23 Δ 2		

Item Quantity: ea

Manufacturer:	**Tropitone**
Address:	5 Marconi
	Irvine, CA 92618
Phone:	770.831.5831
Fax:	
Contact:	Jeff Howe
E-mail:	jeff.howe@jhoweandassociates.com
Web:	www.tropitone.com

Description:	Outdoor Powder Coated Aluminum Dining Chair with Sling Seat and Back and Nylon Glides.
Model Number:	591028
Model Name:	Cabana Club Relaxed Sling Side Chair
Material/Finish:	Frame: Powder Coated Aluminum – Graphite (GPH); Sling: Café 27515
Dimensions:	22"W x 23.75"D x 33.5"H
Seat Height:	17.5"

Notes:

Weight: 8 Lbs.

Manufacturer to Confirm the Furniture Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Unless Using a Specified Manufacturer, Submit the Following Required Item(s) for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MT

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) OF-702 Supplier A
Project #:	Dusk Scheme	Item Description:	Outdoor & Optional Pool Dining Chair
Issue Date:	04/19/21	Area Name:	Outdoor Furniture
Revision(s):	02/23 Δ 2		

Item Quantity: ea

Instructions:

Must be of contract quality and suitable for commercial use.

COM quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Wood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

Manufacturer to provide nylon carpet glides when applicable.

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Ensure that upholstered goods will fit in elevators and through doors prior to commencing fabrication.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number.

Manufacturer to include all necessary hardware with each item.

Reference the Design Intent softgood drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) OF-702 Supplier B
Project #:	Dusk Scheme	Item Description:	Outdoor & Optional Pool Dining Chair
Issue Date:	04/19/21	Area Name:	Outdoor Furniture

Revision(s): 02/23 Δ 2

Item Quantity: ea

Manufacturer:	**Janus Et Cie**
Address:	12310 Greenstone Ave.
	Santa Fe Springs, CA 90670
Phone:	202.802.0106
Fax:	
Contact:	Deron Bennett
E-mail:	dbennett@janusetcie.com
Web:	www.janusetcie.com

Description:	Outdoor Powder Coated Aluminum Dining Chair with Sling Seat and Back and Nylon Glides.
Model Number:	719-40-063-83-83
Model Name:	KOKO II Mesh Side Chair
Material/Finish:	Frame: Powder Coated Aluminum – Mercury; Sling: Platinum
Dimensions:	18.75"W x 22"D x 33"H
Seat Height:	14.5"
Notes:	Weight: 8 Lbs. Manufacturer to Confirm the Furniture Meets Hilton Design and Construction Standards as Noted in Section 2515.00. Unless Using a Specified Manufacturer, Submit the Following Required Item(s) for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MT

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Item Quantity: ea

Instructions:

Must be of contract quality and suitable for commercial use.

COM quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Wood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

Manufacturer to provide nylon carpet glides when applicable.

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Ensure that upholstered goods will fit in elevators and through doors prior to commencing fabrication.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number.

Manufacturer to include all necessary hardware with each item.

Reference the Design Intent softgood drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) OF-703
Project #:	Dusk Scheme	Item Description:	Outdoor Counter Stool
Issue Date:	04/19/21	Area Name:	Outdoor Furniture
Revision(s):	10/22 Δ2		

Item Quantity: ea

Manufacturer:	**Ratana International, Ltd.**
Address:	800 5th Ave., Suite 4100
	Seattle, Washington 98104
Phone:	703.926.5864
Contact:	Joanna Meletis
E-mail:	joannameletis@gmail.com
Web:	www.ratana.com

Description:	Outdoor Counter Stool with Open, Armless Frame. Hoop-shaped Back Frame with Net-like Rope
Model Number:	FN58840GRY
Model Name:	RIA Counter Stool (stackable)
Material/Finish:	See Notes Below
Dimensions:	24.25"W x 23.25"D x 38.5"H
Seat Height:	24.25"
COM/COL:	Fabric at Outdoor Counter Stool Seat Cushion: (A) OF-703A; Sunbrella; Pattern: 5402 Canvas Navy; 100% Sunbrella Acrylic; Width: 54"; Finish: Fabric is Treated with Non-PFOA Water and Stain Repellent; Fire Rating: CAL 117 2013, NFPA 260, UFAC 1
Notes:	Finishes: Frame: Powder Coated Aluminum – Black. Rope Color: Grey01; Weave: Durarope™ Provide Nylon Glides. Weight: 15 Lbs. Manufacturer to Confirm the Furniture Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) OF-703
Project #:	Dusk Scheme	Item Description:	Outdoor Counter Stool
Issue Date:	04/19/21	Area Name:	Outdoor Furniture
Revision(s):	10/22 Δ2		

Item Quantity: ea

Unless Using a Specified Manufacturer, Submit the Following Required Item(s) for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MT

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use. COM

quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Wood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

Manufacturer to provide nylon carpet glides when applicable.

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Ensure that upholstered goods will fit in elevators and through doors prior to commencing fabrication.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number.

Manufacturer to include all necessary hardware with each item.

Reference the Design Intent softgood drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) OF-704
Project #:	Dusk Scheme	Item Description:	Pendant @ Backyard Kitchen
Issue Date:	04/19/21	Area Name:	Outdoor Furniture
Revision(s):	02/2023 Δ 3		

Item Quantity: ea

Manufacturer:	**Arkansas**	**Scott Lamp**
Address:	1701 South 28th Street Van Buren, AK 72956	355 Watt Drive Fairfield, CA 94534
Phone:	(800) 437-7656	(301) 440-6739
Alternate:		
Contact:	Maria Gunter	Max Weber
E-mail:	mgunter@arkansaslighting.com	salesteam@theweberteam.com
Web:		www.scottlamp.com

Description:	Outdoor Hardwired Pendant with Round Metal Canopy, Powder Coated Metal Rod, Dual Layer Metal Mesh Shade with Interior Opal White Acrylic Globe.
Model Name:	Pendant at Backyard Kitchen
Dimensions:	17.5"Dia. x 46"H
Finish:	See Notes Below
Switch Type:	Hardwired/ No switch at Fixture
Cord Length:	26"
Cord Color:	PT-05
Lamp Type:	A21, E26 Medium Base
Lamp Wattage:	18W
Lamp Quantity:	1
UL Listing:	Exterior, Wet/Damp Rated
Diffuser Style:	Globe
Diffuser Material:	Opal White Acrylic
Diffuser Dimensions:	6" Dia.
Shade Material:	See notes
Mounting Instructions:	Ceiling Mounted
Hanging Height:	81" AFF

Notes:

Canopy Finish: (PT-05) TIGER Drylac Low Lights Bronze 49/61120.
Shade: Dual Layer Exterior Grade Metal Mesh Shade with Self Welt Over Ring at Top & Bottom of Shade – Finish (PT-05) TIGER Drylac Low Lights Bronze 49/61120.
Down Rod Finish: (PT-05) TIGER Drylac Low Lights Bronze 49/61120.

Unless Using a Specified Manufacturer, Submit the Following Required Item(s) for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Manufacturer to Confirm the Light Fixture Meets

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) OF-704
Project #:	Dusk Scheme	Item Description:	Pendant @ Backyard Kitchen
Issue Date:	04/19/21	Area Name:	Outdoor Furniture
Revision(s):	02/2023 Δ 3		

Item Quantity: ea

Hilton Design and Construction Standards as Noted in Section 2515.00.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MT

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes and Homewood Suites Brand Standards.

Fixture must be U.L. Listed and so labeled. Manufacturer is responsible for submitting all technical specifications for fire safety, UL standards, and any other specifications that are required to comply with local and state fire codes.

Manufacturer/Fabricator to confirm weight of fixture.

Manufacturer/Fabricator to verify installation method and hanging points.

Show all pieces in scaled shop drawings. Entire fixture shall be inspected during the manufacturing and again after final assembly.

Manufacturer to clearly mark each carton with item ID and specification number.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) OF-705
Project #:	Dusk Scheme	Item Description:	Outdoor & Optional Pool Side Table
Issue Date:	04/19/21	Area Name:	Outdoor Furniture
Revision(s):	06/2023 Δ 2		

Item Quantity: ea

Manufacturer:	**Janus Et Cie**
Address:	12310 Greenstone Ave.
	Santa Fe Springs, CA 90670
Phone:	202.802.0106
Fax:	
Contact:	Deron Bennett
E-mail:	dbennett@janusetcie.com
Web:	www.janusetcie.com

Description:	Outdoor Powder Coated Aluminum Side Table with Round Top and Three Leg Base
Model Number:	719-01-611-81-81
Model Name:	Echo Side Table
Dimensions:	17" Dia. x 20"H
Finish:	Powdercoat – Graphite
Notes:	Weight: 11 Lbs.
	Unless Using A Specified Manufacturer, Submit the Following Required Item(s) for Approval Prior to Fabrication: Finish Sample, Shop Drawing.
	Manufacturer to Confirm the Table Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MT

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) OF-705
Project #:	Dusk Scheme	Item Description:	Outdoor & Optional Pool Side Table
Issue Date:	04/19/21	Area Name:	Outdoor Furniture
Revision(s):	10/22 Δ 1		

Item Quantity: ea

Instructions:

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegood drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) OF-706
Project #:	Dusk Scheme	Item Description:	Outdoor Side Table @ Fire Feature
Issue Date:	04/19/21	Area Name:	Outdoor Furniture
Revision(s):	10/22 Δ 1		

Item Quantity: ea

Manufacturer:	**Janus Et Cie**
Address:	12310 Greenstone Ave. Santa Fe Springs, CA 90670
Phone:	202.802.0106
Contact:	Deron Bennett
E-mail:	dbennett@janusetcie.com
Web:	www.janusetcie.com

Description:	Outdoor Round Cocktail Table with Powder Coated Aluminum Frame with Legs
Model Number:	719-01-581-81-81
Model Name:	Echo Cocktail Table Round 67
Dimensions:	26.5"Dia x 16.5"H
Mat'l/Finish:	Powder Coated Aluminum: Graphite
Notes:	Provide Nylon Glides. Unless Using a Specified Manufacturer, Submit the Following Required Item(s) for Approval Prior to Fabrication: Finish Sample, Shop Drawing. Manufacturer to Confirm the Table Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MT

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) OF-706
Project #:	Dusk Scheme		
Issue Date:	04/19/21	Item Description:	Outdoor Side Table at Fire Feature
Revision(s):	10/22 Δ1	Area Name:	Outdoor Furniture

Item Quantity: ea

Instructions:

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegood drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) OF-707
Project #:	Dusk Scheme	Item Description:	Outdoor Large Dining Table
Issue Date:	04/19/21	Area Name:	Outdoor Furniture
Revision(s):	10/22 Δ 2		

Item Quantity: ea

Manufacturer:	**Ratana International, Ltd.**
Address:	800 5th Ave., Suite 4100
	Seattle, Washington 98104
Phone:	703.926.5864
Fax:	
Contact:	Joanna Meletis
E-mail:	joannameletis@gmail.com
Web:	www.ratana.com

Description:	Large Powder Coated Aluminum Dining Table
Model Number:	FN50063ASG
Model Name:	Limo Large Dining Table
Dimensions:	84”W x 42”D x 30”H
Finish:	Powder Coated ALU Finish: Color: Ash Grey
Notes:	Manufacturer to Confirm the Table Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MT

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) OF-707
Project #:	Dusk Scheme	Item Description:	Outdoor Large Dining Table
Issue Date:	04/19/21	Area Name:	Outdoor Furniture
Revision(s):	10/22 Δ 2		

Item Quantity: ea

Instructions:

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegood drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) OF-708
Project #:	Dusk Scheme	Item Description:	Outdoor & Optional Pool 4-Top ADA Height Dining Table
Issue Date:	04/19/21	Area Name:	Outdoor Furniture
Revision(s):	06/2023 Δ4		

Item Quantity: ea

Manufacturer: **Tropitone**
Address: 5 Marconi
Irvine, CA 92618
Phone: 770.831.5831
Fax:
Contact: Jeff Howe
E-mail: jeff.howe@jhoweandassociates.com
Web: www.tropitone.com

Description:	Outdoor Square Powder Coated Aluminum Dining Table with Perforated Top, Umbrella Hole and (4) Four Square Legs with Nylon Glides. Includes Cap to Cover Hole When Umbrella Not in Use. 27.55"H Clearance From the Floor to the Bottom of the Table Apron.
Model Number:	872076U-31
Model Name:	Dining Table with Perforated Aluminum Top ADA
Dimensions:	36"W x 36"D x 30.75"H
Finish:	Powder Coated ALU Finish: Color: Graphite (GPH)
Notes:	Unless Using A Specified Manufacturer, Submit the Following Required Item(s) for Approval Prior to Fabrication: Finish Sample, Shop Drawing. Manufacturer to Confirm the Table Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MT

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) OF-708
Project #:	Dusk Scheme	Item Description:	Outdoor & Optional Pool 4-Top ADA Height Dining Table
Issue Date:	04/19/21	Area Name:	Outdoor Furniture
Revision(s):	06/2023 Δ4		

Item Quantity: ea

Instructions:

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for

assembly. All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegood drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) OF-709
Project #:	Dusk Scheme	Item Description:	Optional Pool 2-Top Dining Table
Issue Date:	10/22	Area Name:	Outdoor Furnishings
Revision(s):	02/2023 Δ1		

Item Quantity: ea

Manufacturer:	**Emuamericas**
Address:	5579 Kipling St. Suite 201 Wheat Ridge, CO 80033
Phone:	800.726.0368 x230
Fax:	
Contact:	Brian Suttmiller
E-mail:	bsuttmiller@emuamericas.com
Web:	www.emuamericas.com

Description:	Outdoor Powder Coated Aluminum Side Table with Round Top and Single Leg Base
Model Number:	900
Model Name:	Bistro
Dimensions:	24"D x 30"H
Finish:	Powdercoat: 22 A/Iron
Weight:	11 lbs.

Notes:

Unless Using A Specified Manufacturer, Submit the Following Required Item(s) for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Manufacturer to Confirm the Table Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) OF-709
Project #:	Dusk Scheme	Item Description:	Optional Pool 2-Top Dining Table
Issue Date:	10/22	Area Name:	Outdoor Furnishings
Revision(s):	02/2023 Δ1		

Item Quantity: ea

Instructions:

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegood drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) OF-710
Project #:	Dusk Scheme	Item Description:	Pool Chaise Lounge
Issue Date:	10/22	Area Name:	Outdoor Furnishings
Revision(s):	06/2023 Δ1		

Item Quantity: ea

Manufacturer:	**Tropitone**
Address:	5 Marconi Irvine, CA 92618
Phone:	770.831.5831
Fax:	
Contact:	Jeff Howe
E-mail:	jeff.howe@jhoweandassociates.com
Web:	www.tropitone.com

Description:	Pool Chaise Lounge
Model Number:	891533
Model Name:	Kor Relaxed Sling Lounge
Dimensions:	W: 28.5" x 78.5" L x 15.5" SH
Finish:	Powder Coated ALU Finish: Color: Graphite (GPH)
Sling:	Mica 89054

Notes:

Unless Using A Specified Manufacturer, Submit the Following Required Item(s) for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Manufacturer to Confirm the Table Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) OF-710
Project #:	Dusk Scheme	Item Description:	Pool Chaise Lounge
Issue Date:	10/22	Area Name:	Outdoor Furnishings
Revision(s):	06/2023 Δ1		

Item Quantity: ea

Instructions:

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegood drawings on designinformation.hilton.com for further information.

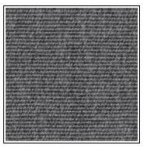
HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) OF-711
Project #:	Dusk Scheme	Item Description:	Outdoor Umbrella
Issue Date:	10/22	Area Name:	Outdoor Furnishings
Revision(s):			

Item Quantity: ea

Manufacturer:	**Tuuci**
Address:	2900 NW 35th Street
	Miami, FL 33142
Phone:	212-561-5533
Fax:	
Contact:	Dan Ryan
E-mail:	dan@ninesixseven.com
Web:	www.tuuci.com

Description:	Outdoor Umbrella
Product:	Bay Master Classic M1 with Single Wind Vent
Dimensions:	Umbrella: 6.5' Square Pole: 92" H Base: 24" Dia. x .5" H (A) X 10" H (B)
Finish:	Umbrella Fabric: Stingray 9050 Umbrella Finish: Satin Anodized
Hardware:	Manual Lift Pin
Base:	GV24RND
Notes:	If the environment is going to have windy conditions, consult with the manufacturer to accommodate for that by using an alternate base Unless Using A Specified Manufacturer, Submit the Following Required Item(s) for Approval Prior to Fabrication: Finish Sample, Shop Drawing. Manufacturer to Confirm the Table Meets Hilton Design and Construction Standards as Noted in Section 2515.00.



Stingray

Satin Anodized

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) OF-711
Project #:	Dusk Scheme	Item Description:	Outdoor Umbrella
Issue Date:	10/22	Area Name:	Outdoor Furnishings

~~Revision(s):~~

Item Quantity: ea

Instructions:

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly. All

wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegood drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) PA-800
Project #:	Dusk Scheme	Item Description:	Accessories at Entertainment Wall & Bussing Station
Issue Date:	04/19/21	Area Name:	Public Area
Revision(s):	10/22 Δ3		

Item Quantity: lot

Manufacturer: **Huber Décor**

Address: 10121 Bunsen Way
Louisville KY 40299-

Phone: (502) 491-1062

Contact: Haley Weiss

E-mail: hweiss@huberdecor.com

Web: www.huberdecor.com

Model Name: Accessories at Entertainment Wall & Bussing Station

Description: Entertainment Wall and Bussing Shelf Items:
(A) 1 Framed Artwork
(B) 1 Glass Vase / 5" Dia. x 12"H
(C) 1 Geode Bookends / 5"H x 5"L
(D) 1 Set Book Display / 11 Books
~~(E) 1 Stoneware Planter / 5"Dia x 4-3/4"H~~ - REMOVED
(F) 1 Book Set Display / 3 Books
(G) 1 Ginger Jar / 8" Dia x 10-1/4"H
(H) 1 Large Ginger Jar / 8-1/2" Dia x 13-1/4"H
(I) 1 Set Book Display / 3 Books
(J) 1 Stoneware Vase / 8-3/4" Dia x 8"H
~~(K) 1 Cove Pot / 8"Dia x 4-3/4"H~~ - REMOVED
(L) Large Serving Platters / Large: 16"L x 8-3/4"W, Medium: 14"L x 8"H, Small: 12"L x 7"H
~~(M) Stoneware Planter / 11-1/2"H x 10-3/4"W~~ - REMOVED
(N) Terra-cotta Vase / 7-3/4"Dia x 7-1/4"H
~~(O) 1 Set Book Display / 8 Books~~ - REMOVED
~~(P) 1 Set Book Display / 2 Books~~ - REMOVED

Dimensions: See Noted Below

Notes: Avoid Religious, Racial, and Political Subject Matter.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MT

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

HOMEWOOD SUITES by Hilton™

HWS DUSK GUEST SUITE SPECIFICATIONS

V1.1 April 19, 2021

Revised May 2021

Revised Dec 2021

Revised Oct 2022

Revised Feb 2023

Revised Jun 2023

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Supplemental Information

The below documents can be found on the designinformation.hilton.com (username and password are hilton20xx, where xx is current year).

- Design Guide: This document gives a designer all the reasons why the Brand is what it is. It helps establish uniformity of practice, consistently express the Brand identity, and serves as a guide for Interior Design and FF&E selection. It discusses the specific elements required and describes how the design is integrated to optimize guest experience and operational efficiency.

- Homewood Suites Brand Standards: This document lists the minimum standards, procedures, rules, regulations, policies, and techniques required by the Homewood Suites Brand and Hilton.

- Design Intent Drawings: These drawing sets provide dimensions and finishes for all casegoods and softgoods in the Homewood Suites Brand prototype. These may be used as a guide for designers and manufacturers in combination with the specifications, Brand Standards, and Design Guide.

Suppliers

- Approved Suppliers: Suppliers specified herein as manufacturers are pre-approved and have been selected through an extensive product development and vetting effort. Approved Suppliers have the necessary experience with specific products, including pre-approved shop drawings, finishes, and model room samples. Approved Suppliers have committed to ensuring all products meet or exceed Homewood Suites Brand Standards and upholding Hilton's Responsible Sourcing Policy.

- For custom designs, owners are encouraged to use the Approved Suppliers based on their experience with the Homewood Suites Brand Standards and prototype.

- For non-required items, an Owner/Designer may use a supplier of their choice outside of the Approved Suppliers. However, those suppliers and their products must be approved through the Hilton Design Review process on an individual project basis. It is the Owner's/Designer's responsibility to ensure that all such products comply with Homewood Suites Brand Standards.

Notes

- All upholstered specifications are fabric-inclusive when using the Approved Suppliers within the Homewood Suites prototype package. Upholstered products may be purchased with COM fabric, subject to approval through the Hilton Design Review process.

- It is the Owner's/Designer's responsibility to maintain the design intent and adapt all required elements to their property's conditions and code requirements prior to fabrication and installation.

HOMEWOOD SUITES by Hilton

Index by Area

project name: Homewood Suites Dusk FF&E Specifications

project #: Dusk Scheme

Issue Dt		Item Number	Item Description	Item Qty
Guestrooms (GR)				
04/19/21	Δ 2	(B) GR-100	Lounge Chair with Ottoman and Accent Pillow - Efficiency Suite	ea
04/19/21	Δ1	(B) GR-100.1	Accent Pillow at Lounge Chair with Ottoman	ea
04/19/21	Δ 3	(B) GR-101	Lounge Chair - QQ Studio Suites	ea
~~04/19/21~~		~~(B) GR-101.1~~	~~Accent Pillow at Lounge Chair~~	~~ea~~
04/19/21	Δ 4	(B) GR-102	Counter Height Desk Chair - Efficiency Suite	ea
04/19/21	Δ 3	(B) GR-103	Counter Height Kitchen Stool	ea
04/19/21	Δ 3	(B) GR-104	Desk Chair - Efficiency Suite ADA	ea
04/19/21	Δ 3	(B) GR-105	Sleeper Sofa (Sleep Between the Arms) with Accent Pillows	ea
04/19/21	Δ 2	(B) GR-105.1	Accent Pillow at Sleeper Sofa (Sleep Between the Arms)	ea
04/19/21	Δ 2	(B) GR-105.2	Accent Pillow at Sleeper Sofa (Sleep Between the Arms)	ea
~~04/19/21~~		~~(B) GR-105.3~~	~~Accent Pillow at Sleeper Sofa (Sleep Between the Arms)~~	~~ea~~
04/19/21	Δ 3	(B) GR-106	Sleeper Sofa (Standard) with Accent Pillows	ea
04/19/21	Δ 2	(B) GR-106.1	Accent Pillow at Sleeper Sofa (Standard)	ea
04/19/21	Δ 2	(B) GR-106.2	Accent Pillow at Sleeper Sofa (Standard)	ea
~~04/19/21~~		~~(B) GR-106.3~~	~~Accent Pillow at Sleeper Sofa (Standard)~~	~~ea~~
04/19/21	Δ 3	(B) GR-107	Sofa with Accent Pillows - QQ Studio Suite Only	ea
04/19/21	Δ 1	(B) GR-107.1	Sofa Accent Pillow	ea
04/19/21	Δ 2	(B) GR-107.2	Sofa Accent Pillow	ea
~~04/19/21~~		~~(B) GR-107.3~~	~~Sofa Accent Pillow~~	~~ea~~
04/19/21	Δ 3	(B) GR-108	Sectional Sleeper Sofa (Standard) with Accent Pillows	ea
04/19/21	Δ 1	(B) GR-108.1	Sectional Sleeper Sofa (Standard) Accent Pillow	ea
04/19/21	Δ 2	(B) GR-108.2	Sectional Sleeper Sofa (Standard) Accent Pillow	ea
~~04/19/21~~		~~(B) GR-108.3~~	~~Sectional Sleeper Sofa (Standard) Accent Pillow~~	~~ea~~
04/19/21	Δ 2	(B) GR-200	Pin-Up Sconce - Efficiency Suite	ea
04/19/21	Δ 2	(B) GR-201	Sconce at Nightstand	ea
04/19/21	Δ 1	(B) GR-202	Desk Lamp	ea
04/19/21	Δ 1	(B) GR-203	Pendants at Productivity Table	ea
04/19/21	Δ 1	(B) GR-204	Ceiling Light at Bedroom - One Bedroom Suite	ea
04/19/21		(B) GR-205	Floor Lamp	ea
04/19/21	Δ 2	(B) GR-206	QQ Reading Light	ea
04/19/21	Δ 2	(B) GR-300	King Headboard at Low Wall - Efficiency Suite Only	ea
04/19/21	Δ 2	(B) GR-301	King Headboard	ea
04/19/21	Δ 3	(B) GR-302	Queen Headboard	ea
04/19/21	Δ 2	(B) GR-303	King Bed Base	ea
~~04/19/21~~		~~(B) GR-304~~	~~King Bed Base - ADA~~	~~ea~~
04/19/21	Δ 3	(B) GR-305	Queen Bed Base	ea
~~04/19/21~~		~~(B) GR-306~~	~~Queen Bed Base - ADA~~	~~ea~~
04/19/21	Δ 4	(B) GR-307	Nightstand at Low Wall - Efficiency Suite Only	ea
04/19/21	Δ 4	(B) GR-308	Nightstand	ea
04/19/21	Δ 4	(B) GR-309	QQ Nightstand	ea
04/19/21	Δ 4	(B) GR-310	Counter Height Desk - Efficiency Suite	ea
04/19/21	Δ 3	(B) GR-311	Desk - Efficiency Suite ADA	ea

Index by Area

project name: Homewood Suites Dusk FF&E Specifications

project #: Dusk Scheme

Issue Dt		Item Number	Item Description	Item Qty
Guestrooms (GR)				
04/19/21	Δ 2	(B) GR-312	Nesting Tables	ea
04/19/21	Δ 1	(B) GR-313	Round Side Table	ea
04/19/21	Δ 4	(B) GR-314	Productivity Table - Studio Suite	ea
04/19/21	Δ 5	(B) GR-315	Productivity Table - One Bedroom Suite	ea
04/19/21	Δ 3	(B) GR-316	Living Room Console - One Bedroom Suite	ea
04/19/21	Δ 4	(B) GR-317	Dresser at Bedroom - One Bedroom Suite	ea
04/19/21	Δ 4	(B) GR-318	Highboy Dresser - Studio Suite	ea
04/19/21	Δ 3	(B) GR-319	Closet - Efficiency Suite	ea
04/19/21	Δ 3	(B) GR-320	Closet - Efficiency Suite ADA	ea
04/19/21	Δ 3	(B) GR-321	Closet - Studio Suite	ea
04/19/21	Δ 2	(B) GR-322	Closet - Studio Suite ADA	ea
04/19/21	Δ 3	(B) GR-323	Closet - One Bedroom Suite	ea
04/19/21	Δ 3	(B) GR-324	Closet - One Bedroom Suite ADA	ea
04/19/21	Δ 3	(B) GR-325	Vanity - Efficiency Suite	ea
04/19/21	Δ 3	(B) GR-326	Vanity - Studio & One Bedroom Suites	ea
04/19/21	Δ 3	(B) GR-327	Vanity - ADA Suites	ea
04/19/21	Δ 2	(B) GR-328	Bath Caddy - ADA Suites	ea
04/19/21		(B) GR-400	Single Window Drapery Fabrication - One-Way Draw - Efficiency Suite	ea
04/19/21	Δ 1	(B) GR-401	Single Window Drapery Fabrication - Two-Way Draw - One Bedroom Suite	ea
04/19/21		(B) GR-402	Double Window Drapery Fabrication - Two Way Draw - Studio Suite	ea
04/19/21	Δ 1	(B) GR-403	Single Window Roller Shade Fabrication at Kitchen - One Bedroom Suite	ea
04/19/21	Δ 2	(B) GR-404	Motorized Single Window Roller Shade Fabrication at Kitchen - One Bedroom Suite ADA	ea
04/19/21		(B) GR-405	Motorized Double Window Drapery Fab. - Two Way Draw - QQ Studio ADA & One Bedroom Suites	ea
04/19/21	Δ 1	(B) GR-406	Motorized Single Window Drapery Fabrication at Bedroom - Two Way Draw - QQ One Bedroom Suite ADA	ea
04/19/21		(B) GR-500	Art at Lounge Chair - Efficiency Suite	ea
04/19/21		(B) GR-501	Art Set at Bed - Efficiency Suite	ea
04/19/21		(B) GR-502	Art at Highboy Dresser - Studio Suite	ea
04/19/21		(B) GR-503	Tryptic Art at Kitchen - One Bedroom Suite	ea
04/19/21		(B) GR-504	Art at Bedroom	ea
04/19/21	Δ 1	(B) GR-505	Decorative Hooks - Efficiency Suite	ea
04/19/21	Δ 2	(B) GR-506	Vanity Mirror	ea
04/19/21	Δ 2	(B) GR-507	Vanity Mirror - ADA Suites	ea
04/19/21	Δ 1	(B) GR-508	Full Length Mirror	ea
04/19/21	Δ 1	(B) GR-509	Art at Kitchen - Studio Suite ADA	ea
04/19/21		(B) GR-600	King Mattress Set	ea
04/19/21		(B) GR-601	Queen Mattress Set	ea
10/2022		(B) GR-602	King Bed Frame - ADA	ea
10/2022		(B) GR-603	Queen Bed Frame - ADA	ea
10/2022		(B) GR-604	King Bed Skirt - ADA	ea
10/2022		(B) GR-605	Queen Bed Skirt – ADA	ea
06/2023		(B) GR-800	Kitchenette - One Bedroom Suite	ea
06/2023		(B) GR-801	Kitchenette - Studio Suite	ea
06/2023		(B) GR-802	Kitchenette - Efficiency Suite	ea
06/2023		(B) GR-803	Kitchenette - One Bedroom Suite Accessible	ea
06/2023		(B) GR-804	Kitchenette - Studio Suite Accessible	ea
06/2023		(B) GR-805	Kitchenette - Efficiency Suite Accessible	ea

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-100
Project #:	Dusk Scheme	Item Description:	Lounge Chair with Ottoman and Accent Pillow - Efficiency Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/2023 Δ 2		

Item Quantity: ea

Manufacturer:	**Charter Furniture**	**Kovet Hospitality**	**Prime Hospitality**
Address:	206 Frazier Ave. Liberty, NC 27298	6700 Gateway Park Dr. Ste. 1 San Diego, CA 92154	2000 Remke Ave. Lawrenceburg, TN 38464
Phone:	(818) 943-1757	(619) 554-8800	(931) 762-5800
Contact:	Jim Trowbridge	Cindy Royals	Jim Donnelly
E-mail:	jtrowbridge@charterfurniture.com	sales@kovethospitality.com	Jim@primehospitalitygroup.com
Web:	www.charterfurniture.com	www.kovethospitality.com	www.primehospitalitygroup.com

Description: Two-Seater Lounge Chair with Curved High Back Upholstered Frame with self-welt on outside edge of wrap around frame, Round Tapered Solid Wood Legs with Side Stretchers and Teflon Glides and (1) One Loose Knife Edge Back Cushion and (1) One Loose Knife Edge Accent Pillow. Tuck-Away Ottoman with Round Tapered Solid Wood Legs and Upholstered Top Cushion to Slide Underneath Lounge Chair.

Model Name:	Lounge Chair with Ottoman and Accent Pillow - Efficiency Suite
Material/Finish:	Satin Transparent Stain to Match (PL-04) Wilsonart Laminate Neo Walnut 7991K-19 with Low Sheen Level
Dimensions:	Chair: 50"W x 33"D x 40.5"H, Ottoman: 24"W x 18"D x 12"H
Arm Height:	36"H
Seat Height:	19"H
Seat Depth:	20.5"D
Seat Cushion Style:	Medium-Soft Box Fixed Cushion with Crown on Center
Back Cushion Style:	Medium-Soft Knife Edge Cushion
Cushion Content:	Poly Fiber Wrapped High Resiliency Foam
COM/COL:	Fabric at Lounge Chair: (B) GR-100A; Fabric Innovations; Pattern: Copa Cabana - KF; Ocean Site; 100% Polyester; Width: 54"; Backing: Manufacturer to Provide Acrylic Backing; Finish: Inherent Stain Repellent Finish Provided by Manufacturer; Fire Rating: NFPA- 260; Durability: 100,000 Double Rubs Vinyl at Ottoman: (B) GR-100B; Fabric Innovations; Product: Bowie/Fashion; Content: 100% PVC; Backing: 75% Polyester, 25% Cotton; Finish: Inherent Stain Resistant Finish Provided by Manufacturer; Fire Rating: NFPA 260, CAL 117-2013; Durability: 50,000 Double Rubs

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-100
Project #:	Dusk Scheme	Item Description:	Lounge Chair with Ottoman and Accent Pillow - Efficiency Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	10/22 Δ 1		

Item Quantity: ea

Notes:

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards As Noted in Section 2515.00.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Seat Cushion Requirement: Minimum 1.8 Density Polyurethane with an I.L.D. (Initial Load Deflection) of 24-32 Foam with a Soft Crown.

Back Cushion Requirement: 1.8 Density Polyurethane with an I.L.D. (Initial Load Deflection) of 18 I.L.D. Foam.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

COM quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Wood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed, and glued corner reinforcement.

Manufacturer to provide nylon carpet glides when applicable.

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Ensure that upholstered goods will fit in elevators and through doors prior to commencing fabrication.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim, and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number.

Manufacturer to include all necessary hardware with each item.

Reference the Design Intent softgood drawings on designinformation.hilton.com for further information.

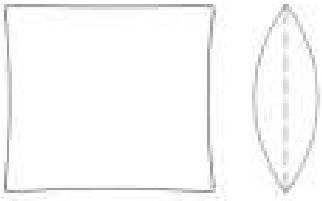
HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-100.1
Project #:	Dusk Scheme	Item Description:	Accent Pillow at Lounge Chair with Ottoman
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/2023 Δ1		

Item Quantity: ea

Manufacturer:	**Charter Furniture**	**Kovet Hospitality**	**Prime Hospitality**
Address:	206 Frazier Ave. Liberty, NC 27298	6700 Gateway Park Dr. Ste. 1 San Diego, CA 92154	2000 Remke Ave. Lawrenceburg, TN 38464
Phone:	(818) 943-1757	(619) 554-8800	(931) 762-5800
Contact:	Jim Trowbridge	Cindy Royals	Jim Donnelly
E-mail:	jtrowbridge@charterfurniture.com	sales@kovethospitality.com	Jim@primehospitalitygroup.com
Web:	www.charterfurniture.com	www.kovethospitality.com	www.primehospitalitygroup.com

Description:	Loose Knife Edge Rectangular Accent Pillow with Removable Cover, Synthetic Down Fill and a Hidden Rust Proof Zipper. Quantity of (1) One Accent Pillow at Lounge Chair.
Model Name:	Accent Pillow at Lounge Chair with Ottoman
Dimensions:	20"W x 18"H x 6”D
Cushion Content:	Poly Fiber Wrapped High Resiliency Foam
COM/COL:	Fabric at Accent Pillow: (B) GR-100.1A; Fil Doux Textiles; Pattern: Relax; Oro; 100% Polyester; Width: 54"; Finish: Pro-Tech Stain Treatment Provided by Manufacturer; Fire Rating: NFPA- 260, CAL-117, UFAC-1; Durability: 60,000 Double Rubs
Notes:	Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00. Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.



Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MT

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use. COM

quantities must be verified by fabricator prior to ordering.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-100.1
Project #:	Dusk Scheme	Item Description:	Accent Pillow at Lounge Chair with Ottoman
Issue Date:	04/19/21	Area Name:	Guestrooms

Item Quantity: ea

Instructions:

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference the Design Intent softgood drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-101
Project #:	Dusk Scheme	Item Description:	Lounge Chair - QQ Studio Suites
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 3		

Item Quantity: ea

Manufacturer:	**Charter Furniture**	**Kovet Hospitality**	**Prime Hospitality**
Address:	206 Frazier Ave. Liberty, NC 27298	6700 Gateway Park Dr. Ste. 1 San Diego, CA 92154	2000 Remke Ave. Lawrenceburg, TN 38464
Phone:	(818) 943-1757	(619) 554-8800	(931) 762-5800
Contact:	Jim Trowbridge	Cindy Royals	Jim Donnelly
E-mail:	jtrowbridge@charterfurniture.com	sales@kovethospitality.com	Jim@primehospitalitygroup.com
Web:	www.charterfurniture.com	www.kovethospitality.com	www.primehospitalitygroup.com

Description: Fully Upholstered Wing Style Lounge Chair with Tight Back including a Deep, Horizontal Tufted Channel, Tight Seat and Square Tapered Solid Wood Legs. Back Legs to be Fully Exposed and Integrated Separating Arm Panel from Back, Side Wing Panels.

Model Name: Lounge Chair - QQ Studio Suites

Material/Finish: Satin Transparent Stain to Match (PL-04) Wilsonart Laminate Neo Walnut 7991K-19 with Low Sheen Level

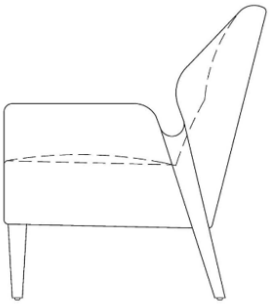
Dimensions: 28"W x 32"D x 36"H

Arm Height: 24"H

Seat Height: 18"H

Seat Depth: 21"D

Cushion Content: Poly Fiber Wrapped High Resiliency Foam



COM/COL: Fabric at Lounge Chair: (B) GR-101A; Fabric Innovations; Pattern: Copa Cabana - KF; Ocean Site; 100% Polyester; Width: 54"; Backing: Manufacturer to Provide Acrylic Backing; Finish: Inherent Stain Resistant Finish Provided by Manufacturer; Fire Rating: NFPA- 260; Durability: 100,000 Double Rubs.

Notes: Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Unless Using A Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Seat Cushion Requirement: Minimum 1.8 Density Polyurethane with an I.L.D. (Initial Load Deflection) of 24-32 Foam with a Soft Crown.

Back Cushion Requirement: 1.8 Density Polyurethane with an I.L.D. (Initial Load Deflection) of 18 I.L.D. Foam.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-101
Project #:	Dusk Scheme	Item Description:	Lounge Chair - QQ Studio Suites
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 3		

Item Quantity: ea

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram	☐ Strike-Off	☐ Finish Sample	☐ Cutting	☐ Shop Dwgs	☐ Prototype	☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use. COM

quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Wood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

Manufacturer to provide nylon carpet glides when applicable.

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Ensure that upholstered goods will fit in elevators and through doors prior to commencing fabrication.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number.

Manufacturer to include all necessary hardware with each item.

Reference the Design Intent softgood drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-102
Project #:	Dusk Scheme	Item Description:	Counter Height Desk Chair - Efficiency Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 3		

Item Quantity: ea

Manufacturer:	**Charter Furniture**	**Kovet Hospitality**	**Prime Hospitality**
Address:	206 Frazier Ave. Liberty, NC 27298	6700 Gateway Park Dr. Ste. 1 San Diego, CA 92154	2000 Remke Ave. Lawrenceburg, TN 38464
Phone:	(818) 943-1757	(619) 554-8800	(931) 762-5800
Contact:	Jim Trowbridge	Cindy Royals	Jim Donnelly
E-mail:	jtrowbridge@charterfurniture.com	sales@kovethospitality.com	Jim@primehospitalitygroup.com
Web:	www.charterfurniture.com	www.kovethospitality.com	www.primehospitalitygroup.com

Description:	Counter Height Desk Chair with Upholstered Seat and Back Cushion, a Reinforced Vinyl Wrapped Handle on Back of Chair, Metal Circular Foot Rail, Black 5-Star Spider Base with Black Soft Casters Suitable for Hard Surface or LVT Flooring and a Pneumatic Seat Height Adjustment Lever. Provide Back Rest Flexibility.
Model Name:	Counter Height Desk Chair - Efficiency Suite
Material/Finish:	Powder Coat (PT-05) TIGER Drylac Low Lights Bronze 49/61120
Dimensions:	21"W x 25"D x 41" - 44"H
Seat Height:	24"H - 27"H (Adjustable)
Seat Depth:	20"D
Seat Cushion Style:	Box Cushion with Crown on Center
Back Cushion Style:	Box
Cushion Content:	Poly Fiber Wrapped High Resiliency Foam
COM/COL:	Vinyl at Counter Height Desk Chair: (B) GR-102A; Fabric Innovations; Pattern: Bowie; Fashion; 100% PVC; Width: 54"; Backing: 75% Polyester, 25% Cotton; Finish: Inherent Stain Resistant Finish Provided by Manufacturer; Fire Rating: NFPA - 260, Cal 117-2013; Durability: 50,000 Double Rubs
Notes:	Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00. Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-102
Project #:	Dusk Scheme	Item Description:	Counter Height Desk Chair - Efficiency Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 3		

Item Quantity: ea

Seat Cushion Requirement: Minimum 1.8 Density Polyurethane with an I.L.D. (Initial Load Deflection) of 24-32 Foam with a Soft Crown.

Back Cushion Requirement: 1.8 Density Polyurethane with an I.L.D. (Initial Load Deflection) of 18 I.L.D. Foam.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use. COM

quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Wood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

Manufacturer to provide nylon carpet glides when applicable.

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Ensure that upholstered goods will fit in elevators and through doors prior to commencing fabrication.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number.

Manufacturer to include all necessary hardware with each item.

Reference the Design Intent softgoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-102
Project #:	Dusk Scheme	Item Description:	Counter Height Desk Chair - Efficiency Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 3		

Item Quantity: ea

Manufacturer:	**Charter Furniture**	**Kovet Hospitality**	**Prime Hospitality**
Address:	206 Frazier Ave. Liberty, NC 27298	6700 Gateway Park Dr. Ste. 1 San Diego, CA 92154	2000 Remke Ave. Lawrenceburg, TN 38464
Phone:	(818) 943-1757	(619) 554-8800	(931) 762-5800
Contact:	Jim Trowbridge	Cindy Royals	Jim Donnelly
E-mail:	jtrowbridge@charterfurniture.com	sales@kovethospitality.com	Jim@primehospitalitygroup.com
Web:	www.charterfurniture.com	www.kovethospitality.com	www.primehospitalitygroup.com

Description:	Counter Height Kitchen Stool with a Curved Back including a centered, lower opening detail, with Rounded, Tapered Wood Legs, (4) Four Round Metal Stretchers and Upholstered Seat and Back Cushions.
Model Name:	Counter Height Kitchen Stool
Material/Finish:	See Notes Below
Dimensions:	20"W x 21"D x 34"H
Seat Height:	23"H
Seat Depth:	17"D
Seat Cushion Style:	3" Seat Pad with Crown on Center, with Double Seams
Back Cushion Style:	Tight Upholstered with Curved; Lower Centered Opening with Double Seams
Cushion Content:	Poly Fiber Wrapped High Resiliency Foam
COM/COL:	Vinyl at Counter Height Stool Seat & Back Cushion: (B) GR-103A; Fabric Innovations; Pattern: Bowie; Fashion; 100% PVC; Width: 54"; Backing: 75% Polyester, 25% Cotton; Finish: Inherent Stain Resistant Finish Provided by Manufacturer; Fire Rating: NFPA-260, Cal 117-2013; Durability: 50,000 Double Rubs
Notes:	Counter Height Kitchen Stool Finishes: Frame/Base: Satin Transparent Stain to Match (PL-04) Wilsonart Laminate Neo Walnut 7991K-12 with Low Sheen Level. Metal Foot Rail at Front Stretcher: Powder Coat (PT-05) Tiger Drylac Low Lights Bronze 49/61120. Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00. Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-103
Project #:	Dusk Scheme	Item Description:	Counter Height Kitchen Stool
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/2023 Δ 2		

Item Quantity: ea

Seat Cushion Requirement: Minimum 1.8 density polyurethane with an I.L.D. (Initial Load Deflection) of 24-32 foam with a soft crown.

Back Cushion Requirement: 1.8 density polyurethane with an I.L.D. (Initial Load Deflection) of 18 I.L.D. foam.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

COM quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Wood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

Manufacturer to provide nylon carpet glides when applicable.

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Ensure that upholstered goods will fit in elevators and through doors prior to commencing fabrication.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number.

Manufacturer to include all necessary hardware with each item.

Reference the Design Intent softgoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-104
Project #:	Dusk Scheme	Item Description:	Desk Chair - Efficiency Suite ADA
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 4		

Item Quantity: ea

Manufacturer:	**Charter Furniture**	**Kovet Hospitality**	**Prime Hospitality**
Address:	206 Frazier Ave. Liberty, NC 27298	6700 Gateway Park Dr. Ste. 1 San Diego, CA 92154	2000 Remke Ave. Lawrenceburg, TN 38464
Phone:	(818) 943-1757	(619) 554-8800	(931) 762-5800
Contact:	Jim Trowbridge	Cindy Royals	Jim Donnelly
E-mail:	jtrowbridge@charterfurniture.com	sales@kovethospitality.com	Jim@primehospitalitygroup.com
Web:	www.charterfurniture.com	www.kovethospitality.com	www.primehospitalitygroup.com

Description:	Desk Chair with Upholstered Seat and Back Cushion, a Reinforced Vinyl Wrapped Handle on Back of Chair, Black 5-Star Spider Base with Black Soft Casters Suitable for Hard Surface or LVT Flooring and a Pneumatic Seat Height Adjustment Lever. Provide Back Rest Flexibility.
Model Name:	Desk Chair - Efficiency Suite ADA
Material/Finish:	Powder Coat (PT-05) TIGER Drylac Low Lights Bronze 49/61120
Dimensions:	21"W x 25"D x 38-41”H
Seat Height:	18"H - 21"H (Adjustable)
Seat Depth:	20"D
Seat Cushion Style:	Box Cushion with Crown on Center
Back Cushion Style:	Box
Cushion Content:	Poly Fiber Wrapped High Resiliency Foam
COM/COL:	Vinyl at Desk Chair: (B) GR-104A; Fabric Innovations; Pattern: Bowie; Fashion; 100% PVC; Width: 54"; Backing: 75% Polyester, 25% Cotton; Finish: Inherent Stain Resistant Finish Provided by Manufacturer; Fire Rating: NFPA-260, Cal 117-2013; Durability: 50,000 Double Rubs
Notes:	Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00. Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing. Seat Cushion Requirement: Minimum 1.8 Density Polyurethane with an I.L.D. (Initial Load Deflection) of 24-32 Foam with a Soft Crown.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-104
Project #:	Dusk Scheme	Item Description:	Desk Chair - Efficiency Suite ADA
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 4		

Item Quantity: ea

Back Cushion Requirement: 1.8 Density
Polyurethane with an I.L.D. (Initial Load Deflection)
of 18 I.L.D. Foam.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use. COM

quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Wood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

Manufacturer to provide nylon carpet glides when applicable.

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Ensure that upholstered goods will fit in elevators and through doors prior to commencing fabrication.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number.

Manufacturer to include all necessary hardware with each item.

Reference the Design Intent softgoods drawings on designinformation.hilton.com for further information.

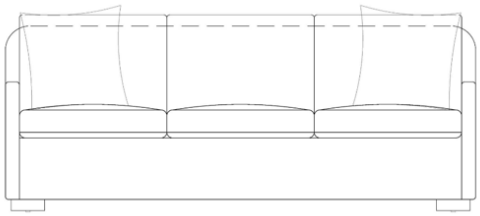
HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-105
Project #:	Dusk Scheme	Item Description:	Sleeper Sofa (Sleep Between the Arms) with Accent Pillows
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 3		

Item Quantity: ea

Manufacturer:	**Charter Furniture**	**Kovet Hospitality**	**Prime Hospitality**
Address:	206 Frazier Ave. Liberty, NC 27298	6700 Gateway Park Dr. Suite 1 San Diego, CA 92154	2000 Remke Ave. Lawrenceburg, TN 38464
Phone:	(818) 943-1757	(619) 554-8800	(931) 762-5800
Contact:	Jim Trowbridge	Cindy Royals	Jim Donnelly
E-mail:	jtrowbridge@charterfurniture.com	sales@kovethospitality.com	Jim@primehospitalitygroup.com
Web:	www.charterfurniture.com	www.kovethospitality.com	www.primehospitalitygroup.com

Description:	Three-Seater Sofa with Sleep Between the Arms Queen Sleeper Mechanism, Tight Upholstered Frame with Rounded Back Corners and Sloped Arms, Loose Seat & Back Cushions, Recessed Wood Sofa Legs and to include (2) Two, Loose Square Accent Pillows.
Sleeper Mechanism:	Leggett & Platt Studio Lounger Plus.
Sleeper Mattress:	Leggett & Platt 6” ComforCool™ II.
Model Name:	Sleeper Sofa (Sleep Between the Arms) with Accent Pillows
Material/Finish:	See Notes Below
Dimensions:	84"W x 37"D x 35"H
Arm Height:	23" - 33"H Tapered
Seat Height:	19"H
Seat Depth:	23"D
Seat Cushion Style:	Loose Reversible Box Cushion w/ Crown on Center
Back Cushion Style:	Loose Reversible Box Cushion w/ Crown on Center
Cushion Content:	Poly Fiber Wrapped High Resiliency Foam
Leg Type:	Legs to be 6”W x 6”D x 2”H Legs to be recessed within the radius at the sofa back
COM/COL:	Fabric at Sleeper Sofa: (B) GR-105A; Fabric Innovations; Pattern: Mohawk-KF; Carbon; 100% Polyester; Width: 54"; Backing: Manufacturer to Provide Acrylic Backing; Finish: Manufacturer to Provide Alta Guest Room Seating; Fire Rating: NFPA-260; Durability: 50,000 Double Rubs
Notes:	Finish at Sofa Leg: Solid Wood Stained to Match (PL-04) Wilsonart Laminate 7991K-12 Neo Walnut, Soft Grain Finish with Aeon™



HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-105
Project #:	Dusk Scheme	Item Description:	Sleeper Sofa (Sleep Between the Arms) with Accent Pillows
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 3		

Item Quantity: ea

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Unless Using A Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Seat Cushion Requirement: Minimum 1.8 Density Polyurethane with an I.L.D. (Initial Load Deflection) of 24-32 Foam with a Soft Crown.

Back Cushion Requirement: 1.8 Density Polyurethane with an I.L.D. (Initial Load Deflection) of 18 I.L.D. Foam.

Seat and Back Cushion Style at Sleeper: Medium-Soft Box Cushion, Loose, Attached with Straps, with Crown on Center.

Seat and Back Cushion Style at Sofa: Medium-Soft Box Cushion, Loose, Attached with Straps, with Crown on Center.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use. COM

quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Wood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

Manufacturer to provide nylon carpet glides when applicable.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-105
Project #:	Dusk Scheme	Item Description:	Sleeper Sofa (Sleep Between the Arms) with Accent Pillows
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 3		

Item Quantity: ea

Instructions:

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Ensure that upholstered goods will fit in elevators and through doors prior to commencing fabrication.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number.

Manufacturer to include all necessary hardware with each item.

Reference the Design Intent softgoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-105.1
Project #:	Dusk Scheme	Item Description:	Accent Pillow at Sleeper Sofa (Sleep Between the Arms)
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 2		

Item Quantity: ea

Manufacturer:	**Charter Furniture**	**Kovet Hospitality**	**Prime Hospitality**
Address:	206 Frazier Ave. Liberty, NC 27298	6700 Gateway Park Dr. Suite 1 San Diego, CA 92154	2000 Remke Ave. Lawrenceburg, TN 38464
Phone:	(818) 943-1757	(619) 554-8800	(931) 762-5800
Contact:	Jim Trowbridge	Cindy Royals	Jim Donnelly
E-mail:	jtrowbridge@charterfurniture.com	sales@kovethospitality.com	Jim@primehospitalitygroup.com
Web:	www.charterfurniture.com	www.kovethospitality.com	www.primehospitalitygroup.com

Description: Loose Square Knife Edge Accent Pillow with Removable Cover, Synthetic Down Fill and Hidden Rust Proof Zipper.

Quantity of (1) One Accent Pillow at Sleeper Sofa.

Model Name: Accent Pillow at Sleeper Sofa (Sleep Between the Arms)

Dimensions: 18"W x 18"H x 6”D

Cushion Content: Poly Fiber Wrapped High Resiliency Foam

COM/COL: Fabric at Sleeper Sofa Accent Pillow: (B) GR-105.1A; Fil Doux Textiles; Pattern: Relax; Oro; 100% Polyester; Width: 54"; Finish: Pro-Tech Stain Treatment Provided by Manufacturer; Fire Rating: NFPA-260, Cal 117, UFCA-1; Durability: 60,000 Double Rubs

Notes: Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MT

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-105.1
Project #:	Dusk Scheme	Item Description:	Accent Pillow at Sleeper Sofa (Sleep Between the Arms)
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	10/22 Δ 1		

Item Quantity: ea

Instructions:

Must be of contract quality and suitable for commercial use.

COM quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference the Design Intent softgoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-105.2
Project #:	Dusk Scheme	Item Description:	Accent Pillow at Sleeper Sofa (Sleep Between the Arms)
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 2		

Item Quantity: ea

Manufacturer:	**Charter Furniture**	**Kovet Hospitality**	**Prime Hospitality**
Address:	206 Frazier Ave. Liberty, NC 27298	6700 Gateway Park Dr. Suite 1 San Diego, CA 92154	2000 Remke Ave. Lawrenceburg, TN 38464
Phone:	(818) 943-1757	(619) 554-8800	(931) 762-5800
Fax:			
Contact:	Jim Trowbridge	Cindy Royals	Jim Donnelly
E-mail:	jtrowbridge@charterfurniture.com	sales@kovethospitality.com	Jim@primehospitalitygroup.com
Web:	www.charterfurniture.com	www.kovethospitality.com	www.primehospitalitygroup.com

Description: Loose Square Knife Edge Accent Pillow with Removable Cover, Synthetic Down Fill and Hidden Rust Proof Zipper.

Quantity of (1) One Accent Pillow at Sleeper Sofa.

Model Name: Accent Pillow at Sleeper Sofa (Sleep Between the Arms)

Dimensions: 18"W x 18"H

Cushion Content: Poly Fiber Wrapped High Resiliency Foam

COM/COL: Fabric at Sleeper Sofa Accent Pillow: (B) GR-105.2A; Fabric Innovations; Pattern: Copa Cabana/Ocean Site; Content: 100% Polyester; Repeat: H: 1.25", V: 2.375"; Width: 54"; Railroad: No; Backing: Inherent Acrylic Backing Provided by Manufacturer; Finish: Inherent Stain Repellent Finish Provided by Manufacturer; Fire Rating: NFPA - 260; Durability: Abrasion: 100,000 Double Rubs

Notes: Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Unless Using A Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MT

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-105.2
Project #:	Dusk Scheme	Item Description:	Accent Pillow at Sleeper Sofa (Sleep Between the Arms)
Issue Date:	04/19/21	Area Name:	Guestrooms

Item Quantity: ea

Instructions:

Must be of contract quality and suitable for commercial use.

COM quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference the Design Intent softgoods drawings on designinformation.hilton.com for further information.

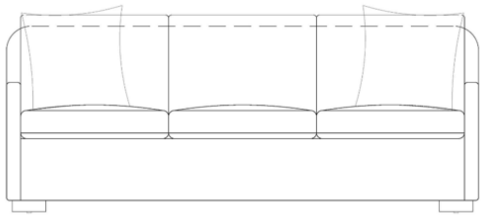
HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-106
Project #:	Dusk Scheme	Item Description:	Sleeper Sofa (Standard) with Accent Pillows
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 3		

Item Quantity: ea

Manufacturer:	**Charter Furniture**	**Kovet Hospitality**	**Prime Hospitality**
Address:	206 Frazier Ave. Liberty, NC 27298	6700 Gateway Park Dr. Suite 1 San Diego, CA 92154	2000 Remke Ave. Lawrenceburg, TN 38464
Phone:	(818) 943-1757	(619) 554-8800	(931) 762-5800
Contact:	Jim Trowbridge	Cindy Royals	Jim Donnelly
E-mail:	jtrowbridge@charterfurniture.com	sales@kovethospitality.com	Jim@primehospitalitygroup.com
Web:	www.charterfurniture.com	www.kovethospitality.com	www.primehospitalitygroup.com

Description:	Three-Seater Sofa with Standard Queen Sleeper Mechanism, Tight Upholstered Frame with Rounded Back Corners and Sloped Arms, Recessed Wood Sofa Legs, (2) Two Loose Square Accent Pillows.
Sleeper Mechanism:	Leggett & Platt Classic Square 3500-40.
Sleeper Mattress:	Leggett & Platt 6” ComforCool™ II.
Model Name:	Sleeper Sofa (Standard) with Accent Pillows
Material/Finish:	See Notes Below
Dimensions:	83"W x 37"D x 35"H
Arm Height:	23" - 33"H Tapered
Seat Height:	19"H
Seat Depth:	21"D
Seat Cushion Style:	Loose Reversible Box Cushion w/ Crown on Center
Back Cushion Style:	Loose Reversible Box Cushion w/ Crown on Center
Cushion Content:	Poly Fiber Wrapped High Resiliency Foam
Leg Type:	Legs to be 6”W x 6”D x 2”H Legs to be recessed within the radius at the sofa back
COM/COL:	Fabric at Sleeper Sofa: (B) GR-106A; Fabric Innovations; Pattern: Mohawk - KF; Carbon; 100% Polyester; Width: 54"; Backing: Manufacturer to Provide Acrylic Backing; Finish: Manufacturer to Provide Alta Guest Room Seating; Fire Rating: NFPA-260; Durability: 50,000 Double Rubs
Notes:	Finish at Sofa Leg: Solid Wood Stained to Match (PL-04) Wilsonart Laminate 7991K-12 Neo Walnut, Soft Grain Finish with Aeon™ Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.



HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-106
Project #:	Dusk Scheme	Item Description:	Sleeper Sofa (Standard) with Accent Pillows
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 3		

Item Quantity: ea

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Seat Cushion Requirement: Minimum 1.8 Density Polyurethane with an I.L.D. (Initial Load Deflection) of 24-32 Foam with a Soft Crown.

Back Cushion Requirement: 1.8 Density Polyurethane with an I.L.D. (Initial Load Deflection) of 18 I.L.D. Foam.

Seat and Back Cushion Style at Sleeper: Medium-Soft Box Cushion, Loose, Attached with Straps, with Crown on Center.

Seat and Back Cushion Style at Sofa: Medium-Soft Box Cushion, Loose, Attached with Straps, with Crown on Center.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use. COM

quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Wood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

Manufacturer to provide nylon carpet glides when applicable.

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-106
Project #:	Dusk Scheme	Item Description:	Sleeper Sofa (Standard) with Accent Pillows
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 3		

Item Quantity: ea

Instructions:

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Ensure that upholstered goods will fit in elevators and through doors prior to commencing fabrication.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number.

Manufacturer to include all necessary hardware with each item.

Reference the Design Intent softgoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-106.1
Project #:	Dusk Scheme	Item Description:	Accent Pillow at Sleeper Sofa (Standard)
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 2		

Item Quantity: ea

Manufacturer:	**Charter Furniture**	**Kovet Hospitality**	**Prime Hospitality**
Address:	206 Frazier Ave. Liberty, NC 27298	6700 Gateway Park Dr. Suite 1 San Diego, CA 92154	2000 Remke Ave. Lawrenceburg, TN 38464
Phone:	(818) 943-1757	(619) 554-8800	(931) 762-5800
Contact:	Jim Trowbridge	Cindy Royals	Jim Donnelly
E-mail:	jtrowbridge@charterfurniture.com	sales@kovethospitality.com	Jim@primehospitalitygroup.com
Web:	www.charterfurniture.com	www.kovethospitality.com	www.primehospitalitygroup.com

Description:	Loose Square Knife Edge Accent Pillow with Removable Cover, Synthetic Down Fill and Hidden Rust Proof Zipper. Quantity of (1) One Accent Pillow at Sleeper Sofa.
Model Name:	Accent Pillow at Sleeper Sofa (Standard)
Dimensions:	18"W x 18"H x 6”H
Cushion Content:	Poly Fiber Wrapped High Resiliency Foam
COM/COL:	Fabric at Sleeper Sofa Accent Pillow: (B) GR-106.1A; Fil Doux Textiles; Pattern: Relax; Oro; 100% Polyester; Width: 54"; Finish: Pro-Tech Stain Treatment Provided by Manufacturer; Fire Rating: NFPA-260, CAL 117, UFAC-1; Durability: 60,000 Double Rubs
Notes:	Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00. Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MT

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-106.1
Project #:	Dusk Scheme	Item Description:	Accent Pillow at Sleeper Sofa (Standard)
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 2		

Item Quantity: ea

Instructions:

COM quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference the Design Intent softgoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-106.2
Project #:	Dusk Scheme	Item Description:	Accent Pillow at Sleeper Sofa (Standard)
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 2		

Item Quantity: ea

Manufacturer:	**Charter Furniture**	**Kovet Hospitality**	**Prime Hospitality**
Address:	206 Frazier Ave. Liberty, NC 27298	6700 Gateway Park Dr. Suite 1 San Diego, CA 92154	2000 Remke Ave. Lawrenceburg, TN 38464
Phone:	(818) 943-1757	(619) 554-8800	(931) 762-5800
Contact:	Jim Trowbridge	Cindy Royals	Jim Donnelly
E-mail:	jtrowbridge@charterfurniture.com	sales@kovethospitality.com	Jim@primehospitalitygroup.com
Web:	www.charterfurniture.com	www.kovethospitality.com	www.primehospitalitygroup.com

Description:	Loose Square Knife Edge Accent Pillow with Removable Cover, Synthetic Down Fill and Hidden Rust Proof Zipper. Quantity of (1) One Accent Pillow at Sleeper Sofa.
Model Name:	Accent Pillow at Sleeper Sofa (Standard)
Dimensions:	18"W x 18"H x 6”H
Cushion Content:	Poly Fiber Wrapped High Resiliency Foam
COM/COL:	Fabric at Sleeper Sofa Accent Pillow: (B) GR-106.2A; Fabric Innovations; Pattern: Copa Cabana/Ocean Site; Content: 100% Polyester; Repeat: H: 1.25", V: 2.375"; Width: 54"; Railroad: No; Backing: Inherent Acrylic Backing Provided by Manufacturer; Finish: Inherent Stain Repellent Finish Provided by Manufacturer; Fire Rating: NFPA-260; Durability: 100,000 Double Rubs
Notes:	Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00. Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MT

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-106.2
Project #:	Dusk Scheme	Item Description:	Accent Pillow at Sleeper Sofa (Standard)
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 2		

Item Quantity: ea

Instructions:

COM quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference the Design Intent softgoods drawings on designinformation.hilton.com for further information.

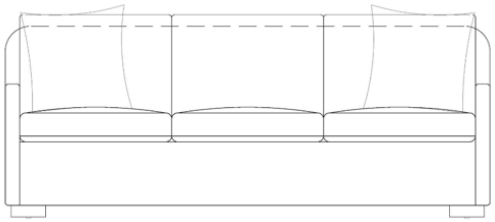
HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-107
Project #:	Dusk Scheme	Item Description:	Sofa with Accent Pillows - QQ Studio Suite Only
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 3		

Item Quantity: ea

Manufacturer:	**Charter Furniture**	**Kovet Hospitality**	**Prime Hospitality**
Address:	206 Frazier Ave. Liberty, NC 27298	6700 Gateway Park Dr. Suite 1 San Diego, CA 92154	2000 Remke Ave. Lawrenceburg, TN 38464
Phone:	(818) 943-1757	(619) 554-8800	(931) 762-5800
Contact:	Jim Trowbridge	Cindy Royals	Jim Donnelly
E-mail:	jtrowbridge@charterfurniture.com	sales@kovethospitality.com	Jim@primehospitalitygroup.com
Web:	www.charterfurniture.com	www.kovethospitality.com	www.primehospitalitygroup.com

Description: Three-Seater Sofa with Tight Upholstered Frame with Rounded Back Corners and Sloped Arms, Recessed, Wood Sofa Legs, to include (2) Two Loose Square Accent Pillows.



Model Name:	Sofa with Accent Pillows - QQ Studio Suite Only
Material/Finish:	See Notes Below
Dimensions:	83"W x 37"D x 35"H
Arm Height:	23" - 33"H Tapered
Seat Height:	19"H
Seat Depth:	21"D
Seat Cushion Style:	See Notes
Back Cushion Style:	See Notes
Cushion Content:	Poly Fiber Wrapped High Resiliency Foam
Leg Type:	Legs to be 6”W x 6”D x 2”H; legs to be recessed Within the radius at the sofa back
COM/COL:	Fabric at Sofa: (B) GR-107A; Fabric Innovations; Pattern: Mohawk - KF; Carbon; 100% Polyester; Width: 54"; Backing: Manufacturer to Provide Acrylic Backing; Finish: Manufacturer to Provide Alta Guest Room Seating; Fire Rating: NFPA 260; Durability: 50,000 Double Rubs
Notes:	Finish at Sofa Leg: Solid Wood Stained to Match (PL-04) Wilsonart Laminate 7991K-12 Neo Walnut, Soft Grain Finish with Aeon™ Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00. Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-107
Project #:	Dusk Scheme	Item Description:	Sofa with Accent Pillows - QQ Studio Suite Only
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 3		

Item Quantity: ea

Seat Cushion Requirement: Minimum 1.8 Density Polyurethane with an I.L.D. (Initial Load Deflection) of 24-32 Foam with a Soft Crown.

Seat Cushion Style: Box Cushion, Loose, Attached with Straps, with Crown on Center.

Back Cushion Requirement: 1.8 Density Polyurethane with an I.L.D. (Initial Load Deflection) of 18 I.L.D. Foam.

Back Cushion Style: Box Cushion, Loose, Attached with Straps, with Crown on Center.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use. COM

quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Wood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

Manufacturer to provide nylon carpet glides when applicable.

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Ensure that upholstered goods will fit in elevators and through doors prior to commencing fabrication.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number.
Manufacturer to include all necessary hardware with each item.

Reference the Design Intent softgoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-107.1
Project #:	Dusk Scheme	Item Description:	Sofa Accent Pillow
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 2		

Item Quantity: ea

Manufacturer:	**Charter Furniture**	**Kovet Hospitality**	**Prime Hospitality**
Address:	206 Frazier Ave. Liberty, NC 27298	6700 Gateway Park Dr. Suite 1 San Diego, CA 92154	2000 Remke Ave. Lawrenceburg, TN 38464
Phone:	(818) 943-1757	(770) 792-7156	(931) 762-5800
Contact:	Jim Trowbridge	Cindy Royals	Jim Donnelly
E-mail:	jtrowbridge@charterfurniture.com	sales@kovethospitality.com	Jim@primehospitalitygroup.com
Web:	www.charterfurniture.com	www.kovethospitality.com	www.primehospitalitygroup.com

Description:	Loose Square Knife Edge Accent Pillow with Removable Cover, Synthetic Down Fill and Hidden Rust Proof Zipper. Quantity of (1) One Accent Pillow at Sleeper Sofa.
Model Name:	Accent Pillow at Sleeper Sofa
Dimensions:	18"W x 18"H x 6”H
Cushion Content:	Poly Fiber Wrapped High Resiliency Foam
COM/COL:	Fabric at Sofa Accent Pillow: (B) GR-107.1A; Fil Doux Textiles; Pattern: Relax; Oro; 100% Polyester; Width: 54"; Finish: Pro-Tech Stain Treatment Provided by Manufacturer; Fire Rating: NFPA - 260, CAL 117, UFAC 1; Durability: 60,000 Double Rubs
Notes:	Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00. Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MT

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use. COM

quantities must be verified by fabricator prior to ordering.

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-107.1
Project #:	Dusk Scheme	Item Description:	Sofa Accent Pillow
Issue Date:	04/19/21	Area Name:	Guestrooms

Item Quantity: ea

Instructions:

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference the Design Intent softgoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-107.2
Project #:	Dusk Scheme	Item Description:	Sofa Accent Pillow
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 2		

Item Quantity: ea

	Charter Furniture	**Kovet Hospitality**	**Prime Hospitality**
Manufacturer:			
Address:	206 Frazier Ave. Liberty, NC 27298	6700 Gateway Park Dr. Suite 1 San Diego, CA 92154	2000 Remke Ave. Lawrenceburg, TN 38464
Phone:	(818) 943-1757	(619) 554-8800	(931) 762-5800
Contact:	Jim Trowbridge	Cindy Royals	Jim Donnelly
E-mail:	jtrowbridge@charterfurniture.com	sales@kovethospitality.com	Jim@primehospitalitygroup.com
Web:	www.charterfurniture.com	www.kovethospitality.com	www.primehospitalitygroup.com

Description: Loose Square Knife Edge Accent Pillow with Removable Cover, Synthetic Down Fill and Hidden Rust Proof Zipper.

Quantity of (1) One Accent Pillow at Sleeper Sofa.

Model Name: Sofa Accent Pillow

Dimensions: 18"W x 18"H x 6”D

Cushion Content: Poly Fiber Wrapped High Resiliency Foam

COM/COL: Fabric at Sofa Accent Pillow: (B) GR-107.2A; Fabric Innovations; Pattern: Copa Cabana/Ocean Site; Content: 100% Polyester; Repeat: H: 1.25", V: 2.375"; Width: 54"; Railroad: No; Backing: Inherent Acrylic Backing Provided by Manufacturer; Finish: Inherent Stain Repellent Finish Provided by Manufacturer; Fire Rating: NFPA-260; Durability: 100,000 Double Rubs

Notes: Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MT

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-107.2
Project #:	Dusk Scheme	Item Description:	Sofa Accent Pillow
Issue Date:	04/19/21	Area Name:	Guestrooms

Item Quantity: ea

Instructions:

COM quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference the Design Intent softgoods drawings on designinformation.hilton.com for further information.

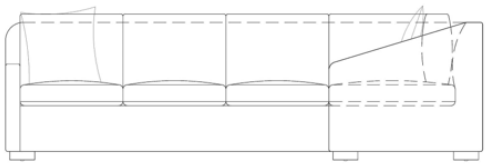
HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-108
Project #:	Dusk Scheme	Item Description:	Sectional Sleeper Sofa (Standard) with Accent Pillows
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 3		

Item Quantity: ea

Manufacturer:	**Charter Furniture**	**Kovet Hospitality**	**Prime Hospitality**
Address:	206 Frazier Ave. Liberty, NC 27298	6700 Gateway Park Dr. Suite 1 San Diego, CA 92154	2000 Remke Ave. Lawrenceburg, TN 38464
Phone:	(818) 943-1757	(619) 554-8800	(931) 762-5800
Contact:	Jim Trowbridge	Cindy Royals	Jim Donnelly
E-mail:	jtrowbridge@charterfurniture.com	sales@kovethospitality.com	Jim@primehospitalitygroup.com
Web:	www.charterfurniture.com	www.kovethospitality.com	www.primehospitalitygroup.com

Description:	L-Shaped Sofa with Standard Queen Sleeper Mechanism, Tight Upholstered Frame with Rounded Back Corners and Sloped Arms, Recessed, Wood Sofa Legs, to include (2) Two Loose Square Accent Pillows.
Sleeper Mechanism:	Leggett & Platt Classic Square 3500-40.
Sleeper Mattress:	Leggett & Platt ComforCool™ II.
Model Name:	Sectional Sleeper Sofa (Standard) with Accent Pillows
Material/Finish:	See Notes Below
Dimensions:	115"W x 77"D x 35"H
Arm Height:	23" - 33"H Tapered
Seat Height:	19"H
Seat Depth:	21.5"D
Seat Cushion Style:	See Notes
Back Cushion Style:	See Notes
Cushion Content:	Poly Fiber Wrapped High Resiliency Foam
Leg Type:	Legs to be 6”W x 6”D x 2”H Legs to be recessed within the radius at the sofa back
COM/COL:	Fabric at Sectional Sleeper Sofa: (B) GR-108A; Fabric Innovations; Pattern: Mohawk - KF; Carbon; 100% Polyester; Width: 54"; Backing: Manufacturer to Provide Acrylic Backing; Finish: Manufacturer to Provide Alta Guest Room Seating; Fire Rating: NFPA 260; Durability: 50,000 Double Rubs
Notes:	Finish at Sofa Leg: Solid Wood Stained to Match (PL-04) Wilsonart Laminate 7991K-12 Neo Walnut, Soft Grain Finish with Aeon™ Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.



HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-108
Project #:	Dusk Scheme	Item Description:	Sectional Sleeper Sofa (Standard) with Accent Pillows
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 3		

Item Quantity: ea

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Seat Cushion Requirement: Minimum 1.8 Density Polyurethane with an I.L.D. (Initial Load Deflection) of 24-32 Foam with a Soft Crown.

Seat Cushion Style at Sleeper: Box Cushion, Loose, Reversible, with Crown on Center.

Seat Cushion Style at Sofa: Box Cushion, Loose, Attached with Straps, with Crown on Center.

Back Cushion Requirement: 1.8 Density Polyurethane with an I.L.D. (Initial Load Deflection) of 18 I.L.D. Foam.

Back Cushion Style at Sleeper: Loose, Reversible, Box Cushion, with Crown on Center.

Back Cushion Style at Sofa: Box Cushion, Loose, Attached with Straps, with Crown on Center.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

COM quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Wood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-108
Project #:	Dusk Scheme	Item Description:	Sectional Sleeper Sofa (Standard) with Accent Pillows
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 3		

Item Quantity: ea

Instructions:

Manufacturer to provide nylon carpet glides when applicable.

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Ensure that upholstered goods will fit in elevators and through doors prior to commencing fabrication.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number.

Manufacturer to include all necessary hardware with each item.

Reference the Design Intent softgoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-108.1
Project #:	Dusk Scheme	Item Description:	Sectional Sleeper Sofa (Standard) Accent Pillow
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 2		

Item Quantity: ea

Manufacturer:	**Charter Furniture**	**Kovet Hospitality**	**Prime Hospitality**
Address:	206 Frazier Ave. Liberty, NC 27298	6700 Gateway Park Dr. Suite 1 San Diego, CA 92154	2000 Remke Ave. Lawrenceburg, TN 38464
Phone:	(818) 943-1757	(619) 554-8800	(931) 762-5800
Contact:	Jim Trowbridge	Cindy Royals	Jim Donnelly
E-mail:	jtrowbridge@charterfurniture.com	sales@kovethospitality.com	Jim@primehospitalitygroup.com
Web:	www.charterfurniture.com	www.kovethospitality.com	www.primehospitalitygroup.com

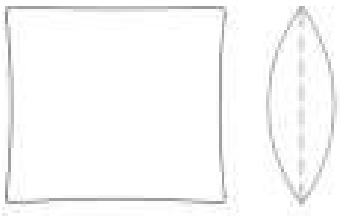
Description: Loose Square Knife Edge Accent Pillow with Removable Cover, Synthetic Down Fill and Hidden Rust Proof Zipper.

Quantity of (2) Two Accent Pillows at Sectional Sleeper Sofa.

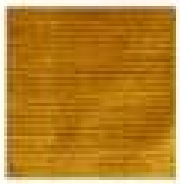
Model Name: Sectional Sleeper Sofa (Standard) Accent Pillow

Dimensions: 18"W x 18"H x 6”H

Cushion Content: Poly Fiber Wrapped High Resiliency Foam



COM/COL: Fabric at Sectional Sleeper Sofa Accent Pillow: (B) GR-108.1A; Fil Doux Textiles; Pattern: Relax; Oro; 100% Polyester; Width: 54"; Finish: Pro-Tech Stain Treatment Provided by Manufacturer; Fire Rating: NFPA - 260, CAL 117, UFAC 1; Durability: 60,000 Double Rubs



Notes: Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MT

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-108.1
Project #:	Dusk Scheme	Item Description:	Sectional Sleeper Sofa (Standard) Accent Pillow
Issue Date:	04/19/21	Area Name:	Guestrooms

Item Quantity: ea

Instructions:

COM quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference the Design Intent softgoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-108.2
Project #:	Dusk Scheme	Item Description:	Sectional Sleeper Sofa (Standard) Accent Pillow
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 2		

Item Quantity: ea

Manufacturer:	**Charter Furniture**	**Kovet Hospitality**	**Prime Hospitality**
Address:	206 Frazier Ave. Liberty, NC 27298	6700 Gateway Park Dr. Suite 1 San Diego, CA 92154	2000 Remke Ave. Lawrenceburg, TN 38464
Phone:	(818) 943-1757	(619) 554-8800	(931) 762-5800
Contact:	Jim Trowbridge	Cindy Royals	Jim Donnelly
E-mail:	jtrowbridge@charterfurniture.com	sales@kovethospitality.com	Jim@primehospitalitygroup.com
Web:	www.charterfurniture.com	www.kovethospitality.com	www.primehospitalitygroup.com

Description: Loose Square Knife Edge Accent Pillow with Removable Cover, Synthetic Down Fill and Hidden Rust Proof Zipper.

Quantity of (1) One Accent Pillow at Sectional Sleeper Sofa.

Model Name: Sectional Sleeper Sofa (Standard) Accent Pillow

Dimensions: 18"W x 18"H x 6”D

Cushion Content: Poly Fiber Wrapped High Resiliency Foam

COM/COL: Fabric at Sectional Sleeper Sofa Accent Pillow: (B) GR-108.2A; Fabric Innovations; Pattern: Copa Cabana/Ocean Site; 100% Polyester; Repeat: H: 1.25", V: 2.375"; Width: 54"; Railroad: No; Backing: Inherent Acrylic Backing Provided by Manufacturer; Finish: Inherent Stain Repellent Finish Provided by Manufacturer; Fire Rating: NFPA - 260; Durability: 100,000 Double Rubs

Notes: Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MT

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-108.2
Project #:	Dusk Scheme	Item Description:	Sectional Sleeper Sofa (Standard) Accent Pillow
Issue Date:	04/19/21	Area Name:	Guestrooms

Item Quantity: ea

Instructions:

Must be of contract quality and suitable for commercial use.

COM quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All foam, batting, padding, and Dacron wrap shall be fire retardant to meet all applicable codes.

Cushions to be adequately vented for displacement of air and to provide increased comfort.

Entire frame and upholstery shall be inspected during the manufacturing and again after final assembly. Tailoring shall be neat, trim and performed in a professional manner.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference the Design Intent softgoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-200
Project #:	Dusk Scheme	Item Description:	Pin-Up Sconce - Efficiency Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	02/23 Δ 3		

Item Quantity: ea

Manufacturer:	**Ashley Lighting, Inc**	**Remington Lighting**	**Scott Lamp**
Address:	405 Industrial Drive	5031 Richard Lane, Suite 101	355 Watt Drive
	Trumann, AR 72472	Mechanicsburg, PA 17055	Fairfield, CA 94534
Phone:	870.483.6181 / 800.343.5267	717.730.1017	301.440.6739
Contact:	Betty Tucker	Terry Goen	Max Weber
E-mail:	betty.tucker@ashleylighting.com	terry.goen@remingtonlighting.com	salesteam@theweberteam.com
Web:	www.ashleylighting.com	www.remingtonlighting.com	www.scottlamp.com

Description:	Wall Hung Plug-In Light with a Decorative Vinyl Strap and Anchors, a Round Wood Peg-Style Wall Hook and a Convex Racetrack Shaped Diffuser.
Model Name:	Pin-Up Sconce - Efficiency Suite
Dimensions:	8"W x 5"D x 31"H
Finish:	Powder Coat Paint - Casual Dark Bronze #048
Switch Type:	Rocker Switch at Frame - Black, ADA
Cord Length:	6'-0"
Cord Color:	Fabric Wrapped Black
Lamp Type:	PSB121:24V, 9.6W/M, +1300LM/M, 2700K 90CRI
Lamp Wattage:	15.5W
Lamp Quantity:	Integrated LED
UL Listing:	Indoor, Dry Rated
Shade/Diffuser Style:	Convex Racetrack
Shade/Diffuser Material:	Acrylic - Frosted White Matte
Shade/Diffuser Dimensions:	6.5"W x 21"H
Wall Strap Hook:	1.5” diameter wood peg-style hook
Suspension Information:	Refer to Architectural Prototype Drawings for Location

Notes:

Vinyl Strap: Fabric Innovations Pattern: Bowie, Color: Fashion,
Width: 54", Content: Face: 100% PVC, Back: 75% Polyester, 25% Cotton,
Flammability: NFPA 260, CAL TB 117-2013,
Abrasion: 50,000 DR,
Railroaded: No,
Finish: Stain resistant.

Fixed Metal A-Frame to Form Vinyl Strap

Vinyl Strap to extend no further than ½” from bottom Decorative Strap Anchor

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-200
Project #:	Dusk Scheme	Item Description:	Pin-Up Sconce - Efficiency Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	02/23 Δ 3		

Item Quantity: ea

Metal Finish: Powder Coat Paint - Casual Dark Bronze #048.

Wood Strap Hook: Solid Wood, Stained to Match (PL-04) Wilsonart Laminate 7991K-12 Neo Walnut, Soft Grain Finish with Aeon™.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes and Homewood Suites Brand Standards.

Fixture must be U.L. Listed and so labeled. Manufacturer is responsible for submitting all technical specifications for fire safety, UL standards, and any other specifications that are required to comply with local and state fire codes.

Manufacturer/Fabricator to confirm weight of fixture.

Manufacturer/Fabricator to verify installation method and hanging points.

Show all pieces in scaled shop drawings. Entire fixture shall be inspected during the manufacturing and again after final assembly.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference the Design Intent Drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

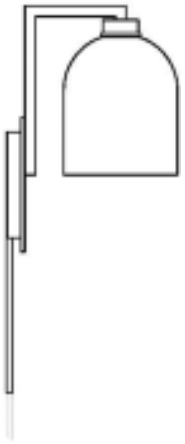
Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-201
Project #:	Dusk Scheme	Item Description:	Sconce at Nightstand
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	10/22 Δ 2		

Item Quantity: ea

Manufacturer:	**Ashley Lighting, Inc**	**Remington Lighting**	**Scott Lamp**
Address:	405 Industrial Drive Trumann, AR 72472	5031 Richard Lane, Suite 101 Mechanicsburg, PA 17055	355 Watt Drive Fairfield, CA 94534
Phone:	870.483.6181 / 800.343.5267	717.730.1017	301.440.6739
Contact:	Betty Tucker	Terry Goen	Max Weber
E-mail:	betty.tucker@ashleylighting.com	terry.goen@remingtonlighting.com	salesteam@theweberteam.com
Web:	www.ashleylighting.com	www.remingtonlighting.com	www.scottlamp.com

Description: Plug-In Bedside Wall Mounted Lamp with White Frosted, Opaque Acrylic Shade, Metal Arm and Backplate.

The Clear Cord Should Exit at the Bottom of the Back Plate and Should be Covered by a 3/8" Round Rigid Metal Cord Cover.



Model Name:	Sconce at Nightstand
Dimensions:	8"W x 12"D x 27.5"H
Finish:	Powder Coat Paint - Champagne #862
Switch Type:	Rocker Switch at Frame - Black, ADA
Cord Length:	6'-0"
Cord Color:	Clear
Lamp Type:	Warm Glow E26/A19 2700K
Lamp Wattage:	9W LED
Lamp Quantity:	1
UL Listing:	Indoor, Dry Rated
Shade Style:	Elongated Dome
Shade/Diffuser Material:	Matte White Frosted, Opaque Acrylic
Shade Dimensions:	8"Dia. x 10.25"H
Suspension Information:	Refer to Architectural Prototype Drawings for Location

Notes: Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-201
Project #:	Dusk Scheme	Item Description:	Sconce at Nightstand
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	10/22 Δ 2		

Item Quantity: ea

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes and Homewood Suites Brand Standards.

Fixture must be U.L. Listed and so labeled. Manufacturer is responsible for submitting all technical specifications for fire safety, UL standards, and any other specifications that are required to comply with local and state fire codes.

Manufacturer/Fabricator to confirm weight of fixture.

Manufacturer/Fabricator to verify installation method and hanging points.

Show all pieces in scaled shop drawings. Entire fixture shall be inspected during the manufacturing and again after final assembly.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference the Design Intent Drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-202
Project #:	Dusk Scheme	Item Description:	Desk Lamp
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	10/22 Δ 1		

Item Quantity: ea

Manufacturer:	**Ashley Lighting, Inc**	**Remington Lighting**	**Scott Lamp**
Address:	405 Industrial Drive Trumann, AR 72472	5031 Richard Lane, Suite 101 Mechanicsburg, PA 17055	355 Watt Drive Fairfield, CA 94534
Phone:	870.483.6181 / 800.343.5267	717.730.1017	301.440.6739
Contact:	Betty Tucker	Terry Goen	Max Weber
E-mail:	betty.tucker@ashleylighting.com	terry.goen@remingtonlighting.com	salesteam@theweberteam.com
Web:	www.ashleylighting.com	www.remingtonlighting.com	www.scottlamp.com

Description:	Plug-In Desk Lamp w/ (1) One Globe Lamp, Metal Stand and Round Metal Weighted Base. Two Outlets and Two USB Ports to be integrated into the Base.
Model Name:	Desk Lamp
Dimensions:	8"W x 9"D x 22.5"H
Finish:	Powder Coat Paint - Casual Dark Bronze #048
Weight:	Base: 2.5lb
Switch Type:	Rocker Switch at Base - Black, ADA
Cord Length:	8'-0"
Cord Color:	Clear
Lamp Type:	Warm Glow E26/A19 2700K
Lamp Wattage:	9W LED
Lamp Quantity:	1
UL Listing:	Indoor, Dry Rated
Shade/Diffuser Style:	Globe
Shade/Diffuser Material:	Matte White Frosted, Opaque Acrylic
Shade/Diffuser Dimensions:	7" Diameter

Notes:

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-202
Project #:	Dusk Scheme	Item Description:	Desk Lamp
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	10/22 Δ 1		

Item Quantity: ea

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes and Homewood Suites Brand Standards.

Fixture must be U.L. Listed and so labeled. Manufacturer is responsible for submitting all technical specifications for fire safety, UL standards, and any other specifications that are required to comply with local and state fire codes.

Manufacturer/Fabricator to confirm weight of fixture.

Manufacturer/Fabricator to verify installation method and hanging points.

Show all pieces in scaled shop drawings. Entire fixture shall be inspected during the manufacturing and again after final assembly.

Reference the Design Intent Drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-203
Project #:	Dusk Scheme	Item Description:	Pendants at Productivity Table
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	10/22 Δ 1		

Item Quantity: ea

Manufacturer:	**Ashley Lighting, Inc**	**Remington Lighting**	**Scott Lamp**
Address:	405 Industrial Drive Trumann, AR 72472	5031 Richard Lane, Suite 101 Mechanicsburg, PA 17055	355 Watt Drive Fairfield, CA 94534
Phone:	870.483.6181 / 800.343.5267	717.730.1017	301.440.6739
Contact:	Betty Tucker	Terry Goen	Max Weber
E-mail:	betty.tucker@ashleylighting.com	terry.goen@remingtonlighting.com	salesteam@theweberteam.com
Web:	www.ashleylighting.com	www.remingtonlighting.com	www.scottlamp.com

Description:	(2) Two Globe Pendants with a Metal Top and Canopy, suspended by a Fabric Wrapped Cord and Hang Straight Swivel.
Model Name:	Pendants at Productivity Table
Dimensions:	8"W x 8"D x 24"H
Finish:	Powder Coat Paint - Bozeman Bronze 741
Switch Type:	Hardwired
Cord Color:	Fabric Wrapped Black
Lamp Type:	E26/A19 2000K; 1100 Lumens
Lamp Wattage:	10W LED
Lamp Quantity:	2 (1 Per Pendant)
UL Listing:	Indoor, Dry Rated
Shade/Diffuser Style:	Globe
Shade/Diffuser Material:	Matte White Frosted, Opaque Acrylic
Shade/Diffuser Dimensions:	8" Diameter
Dimmer:	Dimmable
Suspension Information:	72" AFF

Notes:

Cord Length: 4'-0" (Field Adjustable).

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-203
Project #:	Dusk Scheme	Item Description:	Pendants at Productivity Table
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	10/22 Δ 1		

Item Quantity: ea

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes and Homewood Suites Brand Standards.

Fixture must be U.L. Listed and so labeled. Manufacturer is responsible for submitting all technical specifications for fire safety, UL standards, and any other specifications that are required to comply with local and state fire codes.

Manufacturer/Fabricator to confirm weight of fixture.

Manufacturer/Fabricator to verify installation method and hanging points.

Show all pieces in scaled shop drawings. Entire fixture shall be inspected during the manufacturing and again after final assembly.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference the Design Intent Drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-204
Project #:	Dusk Scheme	Item Description:	Ceiling Light at Bedroom - One Bedroom Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	10/22 Δ 1		

Item Quantity: ea

Manufacturer:	**Ashley Lighting, Inc**	**Remington Lighting**	**Scott Lamp**
Address:	405 Industrial Drive Trumann, AR 72472	5031 Richard Lane, Suite 101 Mechanicsburg, PA 17055	355 Watt Drive Fairfield, CA 94534
Phone:	870.483.6181 / 800.343.5267	717.730.1017	301.440.6739
Contact:	Betty Tucker	Terry Goen	Max Weber
E-mail:	betty.tucker@ashleylighting.com	terry.goen@remingtonlighting.com	salesteam@theweberteam.com
Web:	www.ashleylighting.com	www.remingtonlighting.com	www.scottlamp.com

Description: Hardwired, Flush Mount, Drum Style Ceiling Light with White Linen Shade and Opal Matte Acrylic Diffuser and Center Finial

Model Name:	Ceiling Light at Bedroom - One Bedroom Suite
Dimensions:	15"Dia x 4"H
Switch Type:	No Switch/Hardwired
Lamp Type:	120V CL, 2700K
Lamp Wattage:	17W LED
Lamp Quantity:	1
UL Listing:	Indoor, Dry Rated
Shade/Diffuser Style:	Drum
Shade/Diffuser Material:	Shade-Drum/Trim: White Linen Diffuser: Matte White Frosted, Opaque Acrylic
Shade/Diffuser Dimensions:	15"Diameter
Finial Finish:	To match Bozeman Bronze #741
Notes:	Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing. Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-204
Project #:	Dusk Scheme	Item Description:	Ceiling Light at Bedroom - One Bedroom Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	10/22 Δ 1		

Item Quantity: ea

Instructions:

All quantities to be verified by hotel operator prior to purchasing.
It is the responsibility of the owner to interpret these specifications for each property.
All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.
Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes and Homewood Suites Brand Standards.

Fixture must be U.L. Listed and so labeled. Manufacturer is responsible for submitting all technical specifications for fire safety, UL standards, and any other specifications that are required to comply with local and state fire codes.

Manufacturer/Fabricator to confirm weight of fixture.

Manufacturer/Fabricator to verify installation method and hanging points.

Show all pieces in scaled shop drawings. Entire fixture shall be inspected during the manufacturing and again after final assembly.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference the Design Intent Drawings on design information.hilton.com for further information.

HOMEWOOD SUITES by Hilton

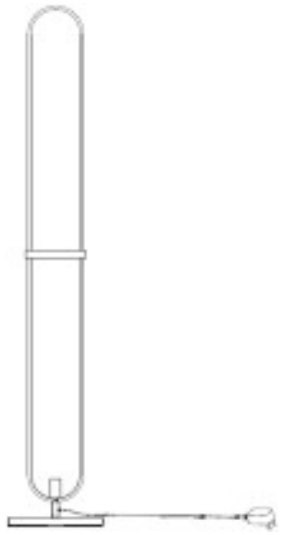
Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-205
Project #:	Dusk Scheme	Item Description:	Floor Lamp
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	10/22 Δ 1		

Item Quantity: ea

Manufacturer:	**Ashley Lighting, Inc**	**Remington Lighting**	**Scott Lamp**
Address:	405 Industrial Drive Trumann, AR 72472	5031 Richard Lane, Suite 101 Mechanicsburg, PA 17055	355 Watt Drive Fairfield, CA 94534
Phone:	870.483.6181 / 800.343.5267	717.730.1017	301.440.6739
Contact:	Betty Tucker	Terry Goen	Max Weber
E-mail:	betty.tucker@ashleylighting.com	terry.goen@remingtonlighting.com	salesteam@theweberteam.com
Web:	www.ashleylighting.com	www.remingtonlighting.com	www.scottlamp.com

Description: Racetrack Shaped Metal Lamp with Integrated Flexible LED Light Strip with Opal White Acrylic Diffuser, a Metal Cross Bar and Round Metal Base.

Model Name:	Floor Lamp
Dimensions:	7"W x 66"H; Base 12"Dia. x 1"H
Finish:	Powder Coat - Matte Black
Weight:	10 lb. Base
Switch Type:	On/Off Rocker Switch at Cross Bar, Black
Cord Length:	8'-0"
Cord Color:	Black
Lamp Type:	LED 12W/M Total 2700K, 2000 Lumens CRI 80
Lamp Wattage:	40W
Lamp Quantity:	Integrated LED
UL Listing:	Indoor, Dry Rated
Shade/Diffuser Style:	Linear Conical Strip
Shade/Diffuser Material:	Matte White Frosted, Opaque
Shade/Diffuser Dimensions:	7"W x 13/16" D x 63"H



Notes: Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-205
Project #:	Dusk Scheme	Item Description:	Floor Lamp
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	10/22 Δ 1		

Item Quantity: ea

Instructions:

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes and Homewood Suites Brand Standards.

Fixture must be U.L. Listed and so labeled. Manufacturer is responsible for submitting all technical specifications for fire safety, UL standards, and any other specifications that are required to comply with local and state fire codes.

Manufacturer/Fabricator to confirm weight of fixture.

Manufacturer/Fabricator to verify installation method and hanging points.

Show all pieces in scaled shop drawings. Entire fixture shall be inspected during the manufacturing and again after final assembly.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference the Design Intent Drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-206
Project #:	Dusk Scheme	Item Description:	QQ Reading Light
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	10/22 Δ 2		

Item Quantity: ea

Manufacturer:	**Ashley Lighting, Inc**	**Remington Lighting**	**Scott Lamp**
Address:	405 Industrial Drive	5031 Richard Lane, Suite 101	355 Watt Drive
	Trumann, AR 72472	Mechanicsburg, PA 17055	Fairfield, CA 94534
Phone:	870.483.6181 / 800.343.5267	717.730.1017	301.440.6739
Contact:	Betty Tucker	Terry Goen	Max Weber
E-mail:	betty.tucker@ashleylighting.com	terry.goen@remingtonlighting.com	salesteam@theweberteam.com
Web:	www.ashleylighting.com	www.remingtonlighting.com	www.scottlamp.com

Description:	Wall Mounted Plug-In Metal Reading Light with a Round Mounting Plate, Elongated Metal and Acrylic Diffuser Dome Shade with Horizontal Pin for 45 Degree Up/Down Rotation, 230 Degree Center Rotation from Left to Right, Fabric Wrapped Cord with Flat Plug and Metal Cord Cover. The Cable Should Exit at Center and Must be Concealed Within the Frame. The Clear Cord Should Exit at the Center of the Back Plate and Should be Covered by a 3/8" Round Rigid Metal Cord Cover.
Model Name:	QQ Reading Light
Dimensions:	6"Dia x 6"D x 22.5"OAH
Finish:	Powder Coat Paint - Champagne #862
Switch Type:	Rocker Switch centered on Face Plate - Black, ADA
Cord Length:	6'
Cord Color:	Clear
Lamp Type:	MR16 LED, 2700K, 90 CRI
Lamp Wattage:	9W (65W Equivalent)
Lamp Quantity:	1
UL Listing:	Indoor, Dry Rated
Shade/Diffuser Style:	Elongated Dome
Shade/Diffuser Material:	Shade (Top): Powder Coat Metal Diffuser (Bottom): Matte White Frosted, Opaque Acrylic
Shade/Diffuser Dimensions:	3.5"Dia x 4.5"H
Suspension Information:	45" OC AFF

Notes:	Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing. Manufacturer to Confirm the Light Fixture Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-206
Project #:	Dusk Scheme	Item Description:	QQ Reading Light
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	10/22 Δ 2		

Item Quantity: ea

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes and Homewood Suites Brand Standards.

Fixture must be U.L. Listed and so labeled. Manufacturer is responsible for submitting all technical specifications for fire safety, UL standards, and any other specifications that are required to comply with local and state fire codes.

Manufacturer/Fabricator to confirm weight of fixture.

Manufacturer/Fabricator to verify installation method and hanging points.

Show all pieces in scaled shop drawings. Entire fixture shall be inspected during the manufacturing and again after final assembly.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference the Design Intent Drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-300
Project #:	Dusk Scheme	Item Description:	King Headboard at Low Wall - Efficiency Suite Only
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 2		

Item Quantity: ea

Manu:	**Prime Hospitality Group**	**Foliot Furniture**	**HF Collection**	**Mandy Li Collection**
Address:	2000 Remke Ave. Lawrenceburg, TN 38464	7000 Placid St. Las Vegas, NV 89119	17201 Flagler Dr. Austin, TX 78738	617 S. Raymond Ave. Alhambra, CA 91803
Phone:	(931) 762-5800	(800) 545-5575	(859) 638-6091	(626) 457-1022
Contact:	Jim Donnelly	Karen Cox	Danny Smith	Mandy Li
Email:	jim@primehospitalitygroup.com	kcox@foliot.com	danny@hf-collection.com	mli@mandylicollection.com
Web:	www.primehospitalitygroup.com	www.foliot.com	https://hf-collection.com/	http://mandylicollection.com

Description: Double Stacked Wall Mounted Headboard with Fully Upholstered Back Panel and Fully Upholstered, Tapered Front Panel to be Secured Together in Field. Back Panel to have Rounded Top Corners and Straight Vertical Center Seam.

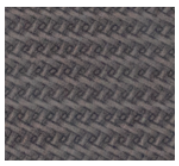
Vinyl at Headboard Front Panel to be Railroaded. Linear Pattern to Run Horizontally Across the Front Panel When Installed.

Model Name: King Headboard at Low Wall - Efficiency Suite Only

Overall Dimensions: 86"W x 3.5"D x 33"H

COM/COL: Vinyl at Headboard Front Panel: (B) GR-300A; Fil Doux; Pattern: Braided/Charcoal Vinyl; Content: 100% Otratex; Width: 54"; Railroad: Yes; Finish: Pro-Tech; Fire Rating: Cal 117-2013 NFPA-260 Class 1; Durability: 200,000 Double Rubs

Vinyl at Headboard Back Panel: (B) GR-300B; Fabric Innovations; Pattern: Wanna Be - HWS; Khaki; 100% PVC; Width: 54"; Backing: 100% Polyester; Fire Rating: NFPA-260; Durability: 200,000 Double Rubs



Notes: Front Panel tapers out a total of one inch to the bottom.

Front Panel is mounted on center vertically with 2” exposed at bottom, 4” on either side.

Vinyl to be Railroaded on Headboard.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-300
Project #:	Dusk Scheme	Item Description:	King Headboard at Low Wall - Efficiency Suite Only
Issue Date:	04/19/21	Area Name:	Guestrooms

Item Quantity: ea

Manufacturer is Responsible for Providing Necessary Support Hanging Hardware to Support 250 lb. Minimum.

All Foam, Batting, Padding, and Dacron Wrap Shall be Fire Retardant to Meet All Applicable Codes.

Upholstered Back Wall Panel: 1.8 Density, 50lb Foam.
Upholstered Front Headboard Panel: 1.8 Density, 40-50lb Foam.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-301
Project #:	Dusk Scheme	Item Description:	King Headboard
Issue Date:	04/19/21	Area Name:	Guestrooms

Revision(s): 06/23 Δ 2

Item Quantity: ea

Manu:	**Prime Hospitality Group**	**Foliot Furniture**	**HF Collection**	**Mandy Li Collection**
Address:	2000 Remke Ave. Lawrenceburg, TN 38464	7000 Placid St. Las Vegas, NV 89119	17201 Flagler Dr. Austin, TX 78738	617 S. Raymond Ave. Alhambra, CA 91803
Phone:	(931) 762-5800	(800) 545-5575	(859) 638-6091	(626) 457-1022
Contact:	Jim Donnelly	Karen Cox	Danny Smith	Mandy Li
Email:	jim@primehospitalitygroup.com	kcox@foliot.com	danny@hf-collection.com	mli@mandylicollection.com
Web:	www.primehospitalitygroup.com	www.foliot.com	https://hf-collection.com/	http://mandylicollection.com

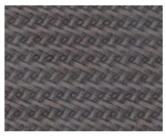
Description: Double Stacked Wall Mounted Headboard with Fully Upholstered Back Panel and Fully Upholstered, Tapered Front Panel to be Secured Together in Field. Back Panel to have Rounded Top Corners and Straight Vertical Center Seam.

Vinyl at Headboard Front Panel to be Railroaded. Linear Pattern to Run Horizontally Across the Front Panel When Installed.

Model Name: King Headboard

Overall Dimensions: 86"W x 3.5"D x 48"H

COM/COL: Vinyl at Headboard Front Panel: (B) GR-301A; Fil Doux; Pattern: Braided/Charcoal Vinyl; Content: 100% Otratex; Width: 54"; Railroad: Yes; Finish: Pro-Tech; Fire Rating: Cal 117-2013 NFPA-260 Class 1; Durability: 200,000 Double Rubs



Vinyl at Headboard Back Panel: (B) GR-301B; Fabric Innovations; Pattern: Wanna Be - HWS; Khaki; 100% PVC; Width: 54"; Backing: 100% Polyester; Fire Rating: NFPA-260; Durability: 200,000 Double Rubs

Notes: Vinyl to be Railroaded on Headboard.

Front Panel tapers out a total of one inch to the bottom.

Front Panel is mounted on center vertically with 2” exposed at bottom, 4” on either side.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-301
Project #:	Dusk Scheme	Item Description:	King Headboard
Issue Date:	04/19/21	Area Name:	Guestrooms

Item Quantity: ea

Manufacturer is Responsible for Providing Necessary Support Hanging Hardware to Support 250 lb. Minimum.

All Foam, Batting, Padding, and Dacron Wrap Shall be Fire Retardant to Meet All Applicable Codes.

Upholstered Back Wall Panel: 1.8 Density, 50lb Foam.
Upholstered Front Headboard Panel: 1.8 Density, 40-50lb Foam.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-302
Project #:	Dusk Scheme	Item Description:	Queen Headboard
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 3		

Item Quantity: ea

Manu:	**Prime Hospitality Group**	**Foliot Furniture**	**HF Collection**	**Mandy Li Collection**
Address:	2000 Remke Ave. Lawrenceburg, TN 38464	7000 Placid St. Las Vegas, NV 89119	17201 Flagler Dr. Austin, TX 78738	617 S. Raymond Ave. Alhambra, CA 91803
Phone:	(931) 762-5800	(800) 545-5575	(859) 638-6091	(626) 457-1022
Contact:	Jim Donnelly	Karen Cox	Danny Smith	Mandy Li
Email:	jim@primehospitalitygroup.com	kcox@foliot.com	danny@hf-collection.com	mli@mandylicollection.com
Web:	www.primehospitalitygroup.com	www.foliot.com	https://hf-collection.com/	http://mandylicollection.com

Description: Double Stacked Wall Mounted Headboard with Fully Upholstered Back Panel and Fully Upholstered, Tapered Front Panel to be Secured Together in Field. Back Panel to have Rounded Top Corners and Straight Vertical Center Seam.

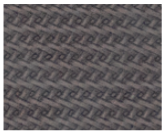
Vinyl at Headboard Front Panel to be Railroaded. Linear Pattern to Run Horizontally Across the Front Panel When Installed.

Model Name: Queen Headboard

Overall Dimensions: 70"W x 3.5"D x 48"H

COM/COL:

Vinyl at Headboard Front Panel: (B) GR-302A; Fil Doux; Pattern: Braided/Charcoal Vinyl; Content: 100% Otratex; Width: 54"; Railroad: Yes; Finish: Pro-Tech; Fire Rating: Cal 117-2013 NFPA-260 Class 1; Durability: 200,000 Double Rubs



Vinyl at Headboard Back Panel: (B) GR-302B; Fabric Innovations; Pattern: Wanna Be - HWS; Khaki; 100% PVC; Width: 54"; Backing: 100% Polyester; Fire Rating: NFPA-260; Durability: 200,000 Double Rubs

Notes:

Vinyl to be Railroaded on Headboard.

Front Panel tapers out a total of one inch to the bottom.

Front Panel is mounted on center vertically with 2” exposed at bottom, 4” on either side.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Manufacturer is Responsible for Providing Necessary Support Hanging Hardware to Support 250lb Minimum.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-302
Project #:	Dusk Scheme	Item Description:	Queen Headboard
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 3		

Item Quantity: ea

All Foam, Batting, Padding, and Dacron Wrap Shall be Fire Retardant to Meet All Applicable Codes.

Upholstered Back Wall Panel: 1.8 Density, 50lb Foam.
Upholstered Front Headboard Panel: 1.8 Density, 40-50lb Foam.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-303
Project #:	Dusk Scheme	Item Description:	King Bed Base
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/2023 Δ 2		

Item Quantity: ea

Manu:	**Prime Hospitality Group**	**Foliot Furniture**	**HF Collection**	**Mandy Li Collection**
Address:	2000 Remke Ave. Lawrenceburg, TN 38464	7000 Placid St. Las Vegas, NV 89119	17201 Flagler Dr. Austin, TX 78738	617 S. Raymond Ave. Alhambra, CA 91803
Phone:	(931) 762-5800	(800) 545-5575	(859) 638-6091	(626) 457-1022
Contact:	Jim Donnelly	Karen Cox	Danny Smith	Mandy Li
Email:	jim@primehospitalitygroup.com	kcox@foliot.com	danny@hf-collection.com	mli@mandylicollection.com
Web:	www.primehospitalitygroup.com	www.foliot.com	https://hf-collection.com/	http://mandylicollection.com

Description: Platform Bed Base and Top, Recessed Bed Box, (2) Two Powder Coated Metal Square Legs and Horizontal Support Brace. Bed Base to Sit Flush Against Headboard Wall with Rounded Corners Only in Front. 1” or Wider Non-Skid Strips to be Adhered to Top of Bed Base to Secure the Mattress.

Platform Bed Base Only Requires Mattress, No Foundation. Mattress Dimensions and Bed Base Sizes to be Coordinated Prior to Ordering.

Platform Bed Base Must Not Extend Past the Mattress Dimensions More than 1".
Legs and Leg Rail are a 2" x 2" Square Tube and Recessed 3" Under Platform.

Model Name: King Bed Base

Dimensions: 78"W x 82.5"D x 14"H

Finish: (PL-04) Wilsonart Laminate 7991K-12 Neo Walnut, Soft Grain Finish with Aeon™

Edge Detail: Eased PVC Edge Banding

Notes: Metal Leg Finish: (PT-05) Tiger Drylac Low Lights Bronze 49/61120.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Pre-Catalyzed Lacquer on All Deciduous Hardwood Components or Wood Look Plastic Laminate.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-303
Project #:	Dusk Scheme	Item Description:	King Bed Base
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/2023 Δ 2		

Item Quantity: ea

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-305
Project #:	Dusk Scheme	Item Description:	Queen Bed Base
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/2023 Δ 2		

Item Quantity: ea

Manu:	**Prime Hospitality Group**	**Foliot Furniture**	**HF Collection**	**Mandy Li Collection**
Address:	2000 Remke Ave. Lawrenceburg, TN 38464	7000 Placid St. Las Vegas, NV 89119	17201 Flagler Dr. Austin, TX 78738	617 S. Raymond Ave. Alhambra, CA 91803
Phone:	(931) 762-5800	(800) 545-5575	(859) 638-6091	(626) 457-1022
Contact:	Jim Donnelly	Karen Cox	Danny Smith	Mandy Li
Email:	jim@primehospitalitygroup.com	kcox@foliot.com	danny@hf-collection.com	mli@mandylicollection.com
Web:	www.primehospitalitygroup.com	www.foliot.com	https://hf-collection.com/	http://mandylicollection.com

Description: Platform Bed Base and Top, Recessed Bed Box, (2) Two Powder Coated Metal Square Legs and Horizontal Support Brace. Bed Base to Sit Flush Against Headboard Wall with Rounded Corners Only in Front. 1” or Wider Non-Skid Strips to be Adhered to Top of Bed Base to Secure the Mattress.

Platform Bed Base Only Requires Mattress, No Foundation. Mattress Dimensions and Bed Base Sizes to be Coordinated Prior to Ordering.

Platform Bed Base Must Not Extend Past the Mattress Dimensions More than 1".
Legs and Leg Rail are a 2" x 2" Square Tube and Recessed 3" Under Platform.

Model Name: Queen Bed Base

Dimensions: 62"W x 82.5"D x 14"H

Finish: (PL-04) Wilsonart Laminate 7991K-12 Neo Walnut, Soft Grain Finish with Aeon™

Edge Detail: Eased PVC Edge Banding

Notes: Metal Leg Finish: (PT-05) Tiger Drylac Low Lights Bronze 49/61120.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Pre-Catalyzed Lacquer on All Deciduous Hardwood Components or Wood Look Plastic Laminate.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-305
Project #:	Dusk Scheme	Item Description:	Queen Bed Base
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/2023 Δ 2		

Item Quantity: ea

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-307
Project #:	Dusk Scheme	Item Description:	Nightstand at Low Wall - Efficiency Suite Only
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/2023 Δ 3		

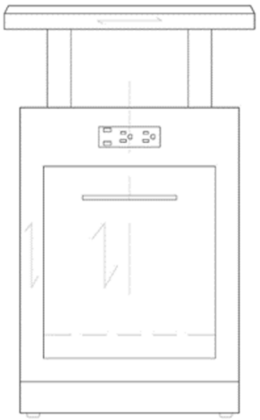
Item Quantity: ea

Manu:	**Prime Hospitality Group**	**Foliot Furniture**	**HF Collection**	**Mandy Li Collection**
Address:	2000 Remke Ave. Lawrenceburg, TN 38464	7000 Placid St. Las Vegas, NV 89119	17201 Flagler Dr. Austin, TX 78738	617 S. Raymond Ave. Alhambra, CA 91803
Phone:	(931) 762-5800	(800) 545-5575	(859) 638-6091	(626) 457-1022
Contact:	Jim Donnelly	Karen Cox	Danny Smith	Mandy Li
Email:	jim@primehospitalitygroup.com	kcox@foliot.com	danny@hf-collection.com	mli@mandylicollection.com
Web:	www.primehospitalitygroup.com	www.foliot.com	https://hf-collection.com/	http://mandylicollection.com

Description: Rectangular Nightstand with Raised Beveled Edge Top with Rounded on (4) Four Round Powder Coated Metal Standoffs. Rectangular Base has Rounded Corners, Powder Coated Recessed Metal Base and (1) One Soft-Closing Drawer with Metal Drawer Pull. Recess at Back of Nightstand for Cord Management.

Integrated Power with Low Profile Unit (2) Two Outlets and (1) One USB-A, (1) One USB-C unit Connections (Black Satin) Located Above the Face of the Drawer. 2.1 amps per USB required. Cord Should Exit at the Back of the Nightstand.

Provide Adjustable Nylon Glides.



Model Name:	Nightstand at Low Wall - Efficiency Suite Only
Dimensions:	16"W x 18"D x 26"H
Finish:	To Match (PL-04) Wilsonart Laminate 7991K-12 Neo Walnut, Soft Grain Finish with Aeon™
Edge Detail:	Bevel
Hardware Style:	To Match Richelieu BP719160195
Hardware Finish:	See Notes
Hardware Size:	6"W

Notes: Metal Finish on Standoffs, Hardware and Base:
(PT-05) Tiger Drylac Low Lights Bronze 49/61120.
Outlet Unit Finish: Black Satin.

HPL Top with Hardwood Edge to be Overlay, Not Inset.

Include a Flat .75” Panel with PVC Edge Band at Top of the Bottom Base Piece.

Front Metal Posts to be Set Back 3.5” from Front Edge of Nightstand Base.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-307
Project #:	Dusk Scheme	Item Description:	Nightstand at Low Wall - Efficiency Suite Only
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/2023 Δ 3		

Item Quantity: ea

Unless Using A Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Pre-Catalyzed Lacquer on All Deciduous Hardwood Components or Wood Look Plastic Laminate.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-308
Project #:	Dusk Scheme	Item Description:	Nightstand
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/2023 Δ 3		

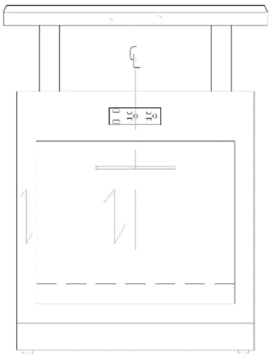
Item Quantity: ea

Manu:	**Prime Hospitality Group**	**Foliot Furniture**	**HF Collection**	**Mandy Li Collection**
Address:	2000 Remke Ave. Lawrenceburg, TN 38464	7000 Placid St. Las Vegas, NV 89119	17201 Flagler Dr. Austin, TX 78738	617 S. Raymond Ave. Alhambra, CA 91803
Phone:	(931) 762-5800	(800) 545-5575	(859) 638-6091	(626) 457-1022
Contact:	Jim Donnelly	Karen Cox	Danny Smith	Mandy Li
Email:	jim@primehospitalitygroup.com	kcox@foliot.com	danny@hf-collection.com	mli@mandylicollection.com
Web:	www.primehospitalitygroup.com	www.foliot.com	https://hf-collection.com/	http://mandylicollection.com

Description: Rectangular Nightstand with Raised Beveled Edge Top with Rounded on (4) Four Round Powder Coated Metal Standoffs. Rectangular Base has Rounded Corners, Powder Coated Recessed Metal Base and (1) One Soft-Closing Drawer with Metal Drawer Pull. Recess at Back of Nightstand for Cord Management.

Integrated Power with Low Profile Unit (2) Two Outlets and (1) One USB-A, (1) One USB-C unit Connections (Black Satin) Located Above the Face of the Drawer. 2.1 amps per USB required. Cord Should Exit at the Back of the Nightstand.

Provide Adjustable Nylon Glides.



Model Name:	Nightstand
Dimensions:	20"W x 18"D x 26"H
Finish:	To Match (PL-04) Wilsonart Laminate 7991K-12 Neo Walnut, Soft Grain Finish with Aeon™
Edge Detail:	Bevel
Hardware Style:	To match Richelieu BP719160195
Hardware Finish:	See Notes
Hardware Size:	6"W

Notes: Metal Finish on Standoffs, Hardware and Base:
(PT-05) Tiger Drylac Low Lights Bronze 49/61120.
Outlet Unit Finish: Black Satin.

HPL Top with Hardwood Edge to be Overlay, Not Inset.

Include a Flat .75” Panel with PVC Edge Band at Top of the Bottom Base Piece.

Front Metal Posts to be Set Back 3.5” from Front Edge of Nightstand Base.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-308
Project #:	Dusk Scheme	Item Description:	Nightstand
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/2023 Δ 3		

Item Quantity: ea

Unless Using A Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Pre-Catalyzed Lacquer on All Deciduous Hardwood Components or Wood Look Plastic Laminate.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-309
Project #:	Dusk Scheme	Item Description:	QQ Nightstand
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/2023 Δ 3		

Item Quantity: ea

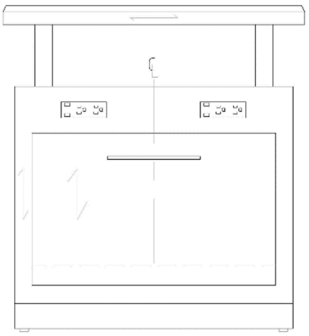
Manu:	**Prime Hospitality Group**	**Foliot Furniture**	**HF Collection**	**Mandy Li Collection**
Address:	2000 Remke Ave. Lawrenceburg, TN 38464	7000 Placid St. Las Vegas, NV 89119	17201 Flagler Dr. Austin, TX 78738	617 S. Raymond Ave. Alhambra, CA 91803
Phone:	(931) 762-5800	(800) 545-5575	(859) 638-6091	(626) 457-1022
Contact:	Jim Donnelly	Karen Cox	Danny Smith	Mandy Li
Email:	jim@primehospitalitygroup.com	kcox@foliot.com	danny@hf-collection.com	mli@mandylicollection.com
Web:	www.primehospitalitygroup.com	www.foliot.com	https://hf-collection.com/	http://mandylicollection.com

Description: Rectangular Nightstand with Raised Beveled Edge Top with Rounded on (4) Four Round Powder Coated Metal Standoffs. Rectangular Base has Rounded Corners, Powder Coated Recessed Metal Base and (1) One Soft-Closing Drawer with Metal Drawer Pull. Recess at Back of Nightstand for Cord Management.

Integrated Power with Low Profile Unit (2) Two Power Units with (2) Two Outlets and (1) One USB-A, (1) One USB-C unit Connections (Black Satin) Located Above the Face of the Drawer. 2.1 amps per USB required. Cord Should Exit at the Back of the Nightstand.

Provide Adjustable Nylon Glides.

Model Name:	QQ Nightstand
Dimensions:	26"W x 18"D x 26"H
Finish:	To Match (PL-04) Wilsonart Laminate 7991K-12 Neo Walnut, Soft Grain Finish with Aeon™
Edge Detail:	Bevel
Hardware Style:	To Match Richelieu BP719160195
Hardware Finish:	See Notes
Hardware Size:	8"W



Notes: Metal Finish on Standoffs, Hardware and Base: (PT-05) Tiger Drylac Low Lights Bronze 49/61120. Outlet Unit Finish: Black Satin.

HPL Top with Hardwood Edge to be Overlay, Not Inset.

Include a Flat .75” panel with PVC Edge Band at Top of the Bottom Base Piece.

Front Metal Posts to be Set Back 3.5” from Front Edge of Nightstand Base.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-309
Project #:	Dusk Scheme	Item Description:	QQ Nightstand
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/2023 Δ 3		

Item Quantity: ea

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in
Section 2515.00.

Pre-Catalyzed Lacquer on All Deciduous Hardwood Components or Wood Look Plastic Laminate.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-310
Project #:	Dusk Scheme	Item Description:	Counter Height Desk - Efficiency Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/2023 Δ 3		

Item Quantity: ea

Manu:	**Prime Hospitality Group**	**Foliot Furniture**	**HF Collection**	**Mandy Li Collection**
Address:	2000 Remke Ave. Lawrenceburg, TN 38464	7000 Placid St. Las Vegas, NV 89119	17201 Flagler Dr. Austin, TX 78738	617 S. Raymond Ave. Alhambra, CA 91803
Phone:	(931) 762-5800	(800) 545-5575	(859) 638-6091	(626) 457-1022
Contact:	Jim Donnelly	Karen Cox	Danny Smith	Mandy Li
Email:	jim@primehospitalitygroup.com	kcox@foliot.com	danny@hf-collection.com	mli@mandylicollection.com
Web:	www.primehospitalitygroup.com	www.foliot.com	https://hf-collection.com/	http://mandylicollection.com

Description: Rectangular Counter Height Desk with (1) One Inset Powder Coated Metal Tray, (4) Four Solid Wood Square Legs with Powder Coated Metal Ferrules, and (3) Three Rectangular Stretchers. Bottom of Legs to be Sealed to Prevent Moisture from Seeping In.

Provide Adjustable Nylon Glides.

Installer to Provide Hardware to Secure Counter Height Desk to Wall. Installer to Pre-Drill and Drive Screws Through Back Braces and Into Wall Blocking / Studs for Wall Attachment with Installer-Supplied Screws.

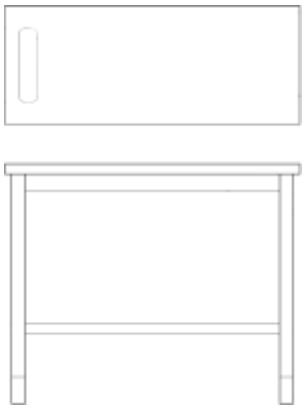
Interior Designer/Architect to Determine Orientation of Unit (Lefts or Rights) Based on Plan Locations.

Model Name: Counter Height Desk - Efficiency Suite

Dimensions: 44"W x 18"D x 36"H

Finish: See Notes Below

Edge Detail: Square



Notes:

Ferrules and Pen Tray Insert Finish: (PT-05) Tiger Drylac Low Lights Bronze 49/61120.

Plastic Laminate Top: (PL-04) Wilsonart Laminate 7991K-12 Neo Walnut, Soft Grain Finish with Aeon™.

Solid Wood Legs and Stretchers: Satin Transparent Stain to Match (PL-02) Wilsonart Laminate Neo Walnut with Low Sheen Level.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-310
Project #:	Dusk Scheme	Item Description:	Counter Height Desk - Efficiency Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/2023 Δ 3		

Item Quantity: ea

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Pre-Catalyzed Lacquer on All Deciduous Hardwood Components or Wood Look Plastic Laminate.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-311
Project #:	Dusk Scheme	Item Description:	Desk - Efficiency Suite ADA
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/2023 Δ 2		

Item Quantity: ea

Manu:	**Prime Hospitality Group**	**Foliot Furniture**	**HF Collection**	**Mandy Li Collection**
Address:	2000 Remke Ave. Lawrenceburg, TN 38464	7000 Placid St. Las Vegas, NV 89119	17201 Flagler Dr. Austin, TX 78738	617 S. Raymond Ave. Alhambra, CA 91803
Phone:	(931) 762-5800	(800) 545-5575	(859) 638-6091	(626) 457-1022
Contact:	Jim Donnelly	Karen Cox	Danny Smith	Mandy Li
Email:	jim@primehospitalitygroup.com	kcox@foliot.com	danny@hf-collection.com	mli@mandylicollection.com
Web:	www.primehospitalitygroup.com	www.foliot.com	https://hf-collection.com/	http://mandylicollection.com

Description: Rectangular Desk with (1) One Inset Powder Coated Metal Tray, (4) Four Solid Wood Square Legs with Powder Coated Metal Ferrules, and (3) Three Rectangular Stretchers. Bottom of Legs to be Sealed to Prevent Moisture from Seeping In.

Provide Adjustable Nylon Glides.

Installer to Provide Hardware to Secure Desk to Wall. Installer to Pre-Drill and Drive Screws Through Back Braces and Into Wall Blocking / Studs for Wall Attachment with Installer-Supplied Screws.

Interior Designer/Architect to Determine Orientation of Unit (Lefts or Rights) Based on Plan Locations.

Model Name: Desk - Efficiency Suite ADA

Dimensions: 60"W x 24"D x 31"H

Finish: See Notes Below

Edge Detail: Square

Notes: Ferrules and Pen Tray Insert Finish: (PT-05) Tiger Drylac Low Lights Bronze 49/61120.

Plastic Laminate Top: (PL-04) Wilsonart Laminate 7991K-12 Neo Walnut, Soft Grain Finish with Aeon™.

Solid Wood Legs and Stretchers: Satin Transparent Stain to Match (PL-04) Wilsonart Laminate Neo Walnut 7991K-12 with Low Sheen Level.

Unless Using a Specified Manufacturer, The Following Required Item(s) for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-311
Project #:	Dusk Scheme	Item Description:	Desk - Efficiency Suite ADA
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/2023 Δ 2		

Item Quantity: ea

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Pre-Catalyzed Lacquer On All Deciduous Hardwood Components or Wood Look Plastic Laminate.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-312
Project #:	Dusk Scheme	Item Description:	Nesting Tables
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	10/22 Δ 1		

Item Quantity: ea

Manu:	**Prime Hospitality Group**	**Foliot Furniture**	**HF Collection**	**Mandy Li Collection**
Address:	2000 Remke Ave. Lawrenceburg, TN 38464	7000 Placid St. Las Vegas, NV 89119	17201 Flagler Dr. Austin, TX 78738	617 S. Raymond Ave. Alhambra, CA 91803
Phone:	(931) 762-5800	(800) 545-5575	(859) 638-6091	(626) 457-1022
Contact:	Jim Donnelly	Karen Cox	Danny Smith	Mandy Li
Email:	jim@primehospitalitygroup.com	kcox@foliot.com	danny@hf-collection.com	mli@mandylicollection.com
Web:	www.primehospitalitygroup.com	www.foliot.com	https://hf-collection.com/	http://mandylicollection.com

Description: Set of (2) Two Nesting Cocktail Tables with Waterfall Edge and Rectangular Powder Coated Metal Frame with Sled-Style Base and Rounded Corners.

Provide Waterproof Sealant for Edge Protection at Waterfall Edge.

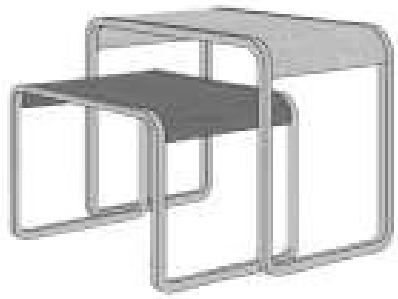
Provide Glides Suitable for LVT Flooring.

Model Name: Nesting Tables

Dimensions: Large: 32"W x 19"D x 24.5"H,
Small: 27"W x 19"D x 18"H

Finish: See Notes Below

Edge Detail: Square



Notes:

Large Nesting Table Finishes:
Top: (PL-04) Wilsonart Laminate 7991K-12 Neo Walnut, Soft Grain Finish with Aeon™.
Frame/Base: (PT-05) Tiger Drylac Low Lights Bronze 49/61120.

Small Nesting Table Finishes:
Top: (PL-01) Wilsonart Laminate 4991K-19, Pressed Linen, Leno Weave Finish with Aeon™.
Frame/Base: (PT-05) Tiger Drylac Low Lights Bronze 49/61120.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-312
Project #:	Dusk Scheme	Item Description:	Nesting Tables
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	10/22 Δ 1		

Item Quantity: ea

Pre-Catalyzed Lacquer On All Deciduous Hardwood Components or Wood Look Plastic Laminate.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-313
Project #:	Dusk Scheme	Item Description:	Round Side Table
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 2		

Item Quantity: ea

Manu:	**Prime Hospitality Group**	**Foliot Furniture**	**HF Collection**	**Mandy Li Collection**
Address:	2000 Remke Ave. Lawrenceburg, TN 38464	7000 Placid St. Las Vegas, NV 89119	17201 Flagler Dr. Austin, TX 78738	617 S. Raymond Ave. Alhambra, CA 91803
Phone:	(931) 762-5800	(800) 545-5575	(859) 638-6091	(626) 457-1022
Contact:	Jim Donnelly	Karen Cox	Danny Smith	Mandy Li
Email:	jim@primehospitalitygroup.com	kcox@foliot.com	danny@hf-collection.com	mli@mandylicollection.com
Web:	www.primehospitalitygroup.com	www.foliot.com	https://hf-collection.com/	http://mandylicollection.com

Description: Round Side Table with Powder Coated Metal Frame with Inset Top, (3) Three Square Metal Tube Legs and a Weighted Open Ring Metal Base.

Provide Waterproof Sealant for Edge Protection.

Model Name: Round Side Table

Dimensions: 19"Dia. X 25"H

Finish: See Notes Below

Edge Detail: Square

Notes: Provide Glides Suitable for LVT Flooring.

Frame/Base Finish: (PT-05) Tiger Drylac Low Lights Bronze 49/61120.
Top Finish: (PL-04) Wilsonart Laminate 7991K-12 Neo Walnut, Soft Grain Finish with Aeon™.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Manufacturer to Confirm the Table Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Pre-Catalyzed Lacquer on All Deciduous Hardwood Components or Wood Look Plastic Laminate.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-313
Project #:	Dusk Scheme	Item Description:	Round Side Table
Issue Date:	04/19/21	Area Name:	Guestrooms

Item Quantity: ea

Instructions:

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-314
Project #:	Dusk Scheme	Item Description:	Productivity Table - Studio Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 4		

Item Quantity: ea

Manu:	**Prime Hospitality Group**	**Foliot Furniture**	**HF Collection**	**Mandy Li Collection**
Address:	2000 Remke Ave. Lawrenceburg, TN 38464	7000 Placid St. Las Vegas, NV 89119	17201 Flagler Dr. Austin, TX 78738	617 S. Raymond Ave. Alhambra, CA 91803
Phone:	(931) 762-5800	(800) 545-5575	(859) 638-6091	(626) 457-1022
Contact:	Jim Donnelly	Karen Cox	Danny Smith	Mandy Li
Email:	jim@primehospitalitygroup.com	kcox@foliot.com	danny@hf-collection.com	mli@mandylicollection.com
Web:	www.primehospitalitygroup.com	www.foliot.com	https://hf-collection.com/	http://mandylicollection.com

Description: Asymmetrical Multi-Use Table with Engineered Stone Top and Outside Smaller Leg Panel finished with the engineered stone top. Recessed Apron with Protective PVC Edge Band. Legs to have Powder Coated Metal Base. Manufacturer to Seal Bottom of Legs to Prevent Moisture from Seeping In. Provide Adjustable Glides.
Manufacturer to Accommodate and Provide Cut Out for a Dual USB Duplex Outlet Unit. Manufacturer to Provide UL Listed Plug in Furniture Power Unit with a Cover plate. Wire Management to Run Through Leg and Out Bottom. Hidden Removable Access Panel to be Located on Inside Face of Leg with Integrated Power.

Model Name: Productivity Table - Studio Suite

Dimensions: 62"W x 30"D x 34"H

Finish: See Notes Below

Edge Detail: Square

Notes:
Engineered Stone: (SS-01) Daltile Calcutta NQ06 or Belstone Dodi Calacatta Aramis.
Apron and Leg Finish: (PL-01) Wilsonart Laminate 4991K-19, Pressed Linen, Leno Weave Finish with Aeon™.
Metal Base Finish: (PT-05) Tiger Drylac Low Lights Bronze 49/61120.
Outlet Unit Finish: Black Satin.

Metal Base to be Recessed 2mm.

Removable Panel with Top Finger Pull to be 22.5”H x 15”W

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-314
Project #:	Dusk Scheme	Item Description:	Productivity Table - Studio Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 4		

Item Quantity: ea

Interior Designer/Architect to Determine Orientation of Unit (Lefts or Rights) Based on Plan Locations.

Pre-Catalyzed Lacquer on All Deciduous Hardwood Components or Wood Look Plastic Laminate.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-315
Project #:	Dusk Scheme	Item Description:	Productivity Table - One Bedroom Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/2023 Δ 6		

Item Quantity: ea

Manu:	**Prime Hospitality Group**	**Foliot Furniture**	**HF Collection**	**Mandy Li Collection**
Address:	2000 Remke Ave. Lawrenceburg, TN 38464	7000 Placid St. Las Vegas, NV 89119	17201 Flagler Dr. Austin, TX 78738	617 S. Raymond Ave. Alhambra, CA 91803
Phone:	(931) 762-5800	(800) 545-5575	(859) 638-6091	(626) 457-1022
Contact:	Jim Donnelly	Karen Cox	Danny Smith	Mandy Li
Email:	jim@primehospitalitygroup.com	kcox@foliot.com	danny@hf-collection.com	mli@mandylicollection.com
Web:	www.primehospitalitygroup.com	www.foliot.com	https://hf-collection.com/	http://mandylicollection.com

Description: Asymmetrical Multi-Use Table with Engineered Stone Top and Outside Smaller Leg Panel finished with the engineered stone top. Recessed Apron with Protective PVC Edge Band. Legs to have Powder Coated Metal Base. Manufacturer to Seal Bottom of Legs to Prevent Moisture from Seeping In. Provide Adjustable Glides.

Manufacturer to Accommodate and Provide Cut Out for a Dual USB Duplex Outlet Unit. Manufacturer to Provide UL Listed Plug in Furniture Power Unit with a Cover plate. Wire Management to Run Through Leg and Out Bottom. Hidden Removable Access Panel to be Located on Inside Face of Leg with Integrated Power.

Model Name: Productivity Table - One Bedroom Suite

Dimensions: 62"W x 36"D x 34"H

Finish: See Notes Below

Edge Detail: Square

Notes:

Engineered Stone: (SS-01) Daltile Calcutta NQ06 or Belstone Dodi Calacatta Aramis.
Apron and Leg Finish: (PL-01) Wilsonart Laminate 4991K-19, Pressed Linen, Leno Weave Finish with Aeon™.
Metal Base Finish: (PT-05) Tiger Drylac Low Lights Bronze 49/61120.
Outlet Unit Finish: Black Satin.

Metal Base to be Recessed 2mm.

Removable Panel with Top Finger Pull to be 22.5”H x 15"W.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-315
Project #:	Dusk Scheme	Item Description:	Productivity Table - One Bedroom Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/2023 Δ 6		

Item Quantity: ea

Interior Designer/Architect to Determine Orientation of Unit (Lefts or Rights) Based on Plan Locations.

When specifying plastic laminate finish, marine grade plywood or equivalent is the required substrate.

Pre-Catalyzed Lacquer on All Deciduous Hardwood Components or Wood Look Plastic Laminate.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

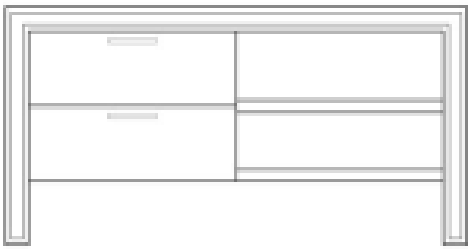
Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-316
Project #:	Dusk Scheme	Item Description:	Living Room Console - One Bedroom Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/2023 Δ 2		

Item Quantity: ea

Manu:	**Prime Hospitality Group**	**Foliot Furniture**	**HF Collection**	**Mandy Li Collection**
Address:	2000 Remke Ave. Lawrenceburg, TN 38464	7000 Placid St. Las Vegas, NV 89119	17201 Flagler Dr. Austin, TX 78738	617 S. Raymond Ave. Alhambra, CA 91803
Phone:	(931) 762-5800	(800) 545-5575	(859) 638-6091	(626) 457-1022
Contact:	Jim Donnelly	Karen Cox	Danny Smith	Mandy Li
Email:	jim@primehospitalitygroup.com	kcox@foliot.com	danny@hf-collection.com	mli@mandylicollection.com
Web:	www.primehospitalitygroup.com	www.foliot.com	https://hf-collection.com/	http://mandylicollection.com

Description: Console with Accent Profile at Front, (2) Two Soft Close Drawers with Powder Coated Metal Drawer Pulls and (2) Two Cubbies with Back Panel.
Provide Nylon Levelers.

Model Name: Living Room Console - One Bedroom Suite
Dimensions: 58"W x 18"D x 30"H
Finish: See Notes Below
Edge Detail: Square
Hardware Style: To Match-Richelieu BP719160195
Hardware Finish: (PT-05) Tiger Drylac 49/61120
Low Lights Bronze
Hardware Size: 7.94"W x 1.56"D



Notes: Finish: (PL-04) Wilsonart Laminate 7991K-12 Neo Walnut, Soft Grain Finish with Aeon™.
Accent Finish at Profile: (PL-03) Wilsonart Laminate 1595K-18 Black, Linearity Finish with Aeon™.

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Interior Designer/Architect to Determine Orientation of Unit (Lefts or Rights) Based on Plan Locations.

Pre-Catalyzed Lacquer on All Deciduous Hardwood Components or Wood Look Plastic Laminate.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-316
Project #:	Dusk Scheme	Item Description:	Living Room Console - One Bedroom Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/2023 Δ 2		

Item Quantity: ea

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

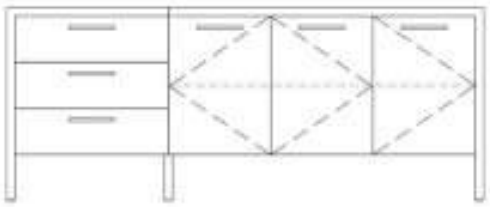
Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-317
Project #:	Dusk Scheme	Item Description:	Dresser at Bedroom - One Bedroom Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/2023 Δ 3		

Item Quantity: ea

Manu:	**Prime Hospitality Group**	**Foliot Furniture**	**HF Collection**	**Mandy Li Collection**
Address:	2000 Remke Ave. Lawrenceburg, TN 38464	7000 Placid St. Las Vegas, NV 89119	17201 Flagler Dr. Austin, TX 78738	617 S. Raymond Ave. Alhambra, CA 91803
Phone:	(931) 762-5800	(800) 545-5575	(859) 638-6091	(626) 457-1022
Contact:	Jim Donnelly	Karen Cox	Danny Smith	Mandy Li
Email:	jim@primehospitalitygroup.com	kcox@foliot.com	danny@hf-collection.com	mli@mandylicollection.com
Web:	www.primehospitalitygroup.com	www.foliot.com	https://hf-collection.com/	http://mandylicollection.com

Description: Freestanding Rectangular Dresser with (3) Three Soft Close Drawers with Undermount Slides, and (3) Three Doors with a Fixed Interior Shelf. Drawer Face and Sides to be Accent Finish. Powder Coated Metal Hardware on all Drawer Faces.

Provide Adjustable Nylon Glides.



Model Name:	Dresser at Bedroom - One Bedroom Suite
Dimensions:	84"W x 18"D x 34"H
Finish:	See Notes Below
Hardware Style:	To Match-Richelieu BP719160195
Hardware Finish:	(PT-05) Tiger Drylac 49/61120 Low Lights Bronze
Hardware Size:	7.94"W x 1.56"D

Notes:

Top and Leg Finish: (PL-04) Wilsonart Laminate 7991K-12 Neo Walnut, Soft Grain Finish with Aeon™.
Drawer/Door Front and Side Finish: (PL-01) Wilsonart Laminate 4991K-19, Pressed Linen, Leno Weave Finish with Aeon™.

Accent Side Panels to be Recessed 2mm.

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Interior Designer/Architect to Determine Orientation of Unit (Lefts or Rights) Based on Plan Locations.

Pre-Catalyzed Lacquer on All Deciduous Hardwood Components or Wood Look Plastic Laminate.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-317
Project #:	Dusk Scheme	Item Description:	Dresser at Bedroom - One Bedroom Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/2023 Δ 3		

Item Quantity: ea

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-318
Project #:	Dusk Scheme	Item Description:	Highboy Dresser - Studio Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/2023 Δ 3		

Item Quantity: ea

Manu:	**Prime Hospitality Group**	**Foliot Furniture**	**HF Collection**	**Mandy Li Collection**
Address:	2000 Remke Ave. Lawrenceburg, TN 38464	7000 Placid St. Las Vegas, NV 89119	17201 Flagler Dr. Austin, TX 78738	617 S. Raymond Ave. Alhambra, CA 91803
Phone:	(931) 762-5800	(800) 545-5575	(859) 638-6091	(626) 457-1022
Contact:	Jim Donnelly	Karen Cox	Danny Smith	Mandy Li
Email:	jim@primehospitalitygroup.com	kcox@foliot.com	danny@hf-collection.com	mli@mandylicollection.com
Web:	www.primehospitalitygroup.com	www.foliot.com	https://hf-collection.com/	http://mandylicollection.com

Description: Freestanding, Rectangular Highboy Dresser with Solid Wood Legs and (4) Four Operable Drawers, (2) Two Single Top Drawers and (2) Two Bottom Double Drawers with (2) Two Faux Drawer Front Detailing on Each.

Provide Nylon Glides.

Model Name: Highboy Dresser - Studio Suite

Dimensions: 24"W x 16"D x 51"H

Finish: See Notes Below

Hardware Style: To Match Richelieu BP719160195

Hardware Finish: (PT-05) Tiger Drylac 49/61120 Low Lights Bronze

Hardware Size: 7.94"W x 1.56"D

Notes:

Top: (PL-04) Wilsonart Laminate 7991K-12 Neo Walnut, Soft Grain Finish with Aeon™.
Drawer/Door Front and Side Finish: (PL-01) Wilsonart Laminate 4991K-19, Pressed Linen, Leno Weave Finish with Aeon™.

Leg Finish: Wood Stained to Match (PL-04) Wilsonart Laminate 7991K-12 Neo Walnut, Soft Grain Finish with Aeon™.

Accent Side Panels to be Recessed 2mm.

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Pre-Catalyzed Lacquer on All Deciduous Hardwood Components or Wood Look Plastic Laminate.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-318
Project #:	Dusk Scheme	Item Description:	Highboy Dresser - Studio Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/2023 Δ 3		

Item Quantity: ea

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-319
Project #:	Dusk Scheme	Item Description:	Closet - Efficiency Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 3		

Item Quantity: ea

Manu:	**Prime Hospitality Group**	**Foliot Furniture**	**HF Collection**	**Mandy Li Collection**
Address:	2000 Remke Ave. Lawrenceburg, TN 38464	7000 Placid St. Las Vegas, NV 89119	17201 Flagler Dr. Austin, TX 78738	617 S. Raymond Ave. Alhambra, CA 91803
Phone:	(931) 762-5800	(800) 545-5575	(859) 638-6091	(626) 457-1022
Contact:	Jim Donnelly	Karen Cox	Danny Smith	Mandy Li
Email:	jim@primehospitalitygroup.com	kcox@foliot.com	danny@hf-collection.com	mli@mandylicollection.com
Web:	www.primehospitalitygroup.com	www.foliot.com	https://hf-collection.com/	http://mandylicollection.com

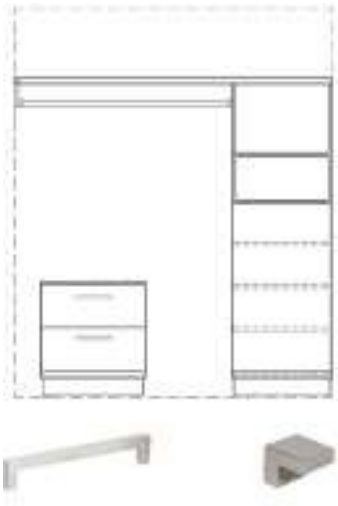
Description: Set of (3) Units, (1) One Freestanding Luggage Bench Unit with (2) Two Drawers and with Protective Metal Strips at the Top of the Bench, (1) One Shelf Tower Unit with Accent Back Panels and Storage for an Optional Safe and (1) One Continuous Top Shelf Spanning Wall to Wall. Manufacturer to Provide (1) One Oval Rod. Provide Recess at Back of Shelf Tower for Cleats to Secure Units to Wall.

Provide Non-Corrosive Metal Legs with Adjustable Nylon Glides and a Floating Plinth Base to Conceal the Legs.

Trim Shelf in Field to Approx. 73"W. Hanging Rod to be Cut in Field.

Ironing Board to Be Mounted on the Adjacent Wall and Below the Top Shelf and Hanging Rod.

Model Name:	Closet - Efficiency Suite
Dimensions:	76”W Overall (Trim in field to 73"W) x 23.75"D x 74"H
Finish:	See Notes Below
Hardware Style:	Rectangular
Hardware Finish:	(PT-05) Tiger Drylac 49/61120 Low Lights Bronze
Hardware Size:	8"W



Notes: Finish: (PL-01) Wilsonart Laminate 4991K-19, Pressed Linen, Leno Weave Finish with Aeon™.
Back Panel Finish: (PL-03) Wilsonart Laminate 1595K-18 Black, Linearity Finish with Aeon™.
Drawer Pulls Finish: (PT-05) Tiger Drylac Low Lights Bronze 49/61120.
Rod Finish: Anodized Aluminum to Match Chrome or Polished Stainless-Steel.

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-319
Project #:	Dusk Scheme	Item Description:	Closet - Efficiency Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 3		

Item Quantity: ea

Interior Designer/Architect to Determine Orientation of Unit (Lefts or Rights) Based on Plan Locations.

Pre-Catalyzed Lacquer on All Deciduous Hardwood Components or Wood Look Plastic Laminate.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-320
Project #:	Dusk Scheme	Item Description:	Closet - Efficiency Suite ADA
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 3		

Item Quantity: ea

Manu:	**Prime Hospitality Group**	**Foliot Furniture**	**HF Collection**	**Mandy Li Collection**
Address:	2000 Remke Ave. Lawrenceburg, TN 38464	7000 Placid St. Las Vegas, NV 89119	17201 Flagler Dr. Austin, TX 78738	617 S. Raymond Ave. Alhambra, CA 91803
Phone:	(931) 762-5800	(800) 545-5575	(859) 638-6091	(626) 457-1022
Contact:	Jim Donnelly	Karen Cox	Danny Smith	Mandy Li
Email:	jim@primehospitalitygroup.com	kcox@foliot.com	danny@hf-collection.com	mli@mandylicollection.com
Web:	www.primehospitalitygroup.com	www.foliot.com	https://hf-collection.com/	http://mandylicollection.com

Description:

Set of (3) Units, (1) One Freestanding Luggage Bench Unit with (2) Two Drawers and with Protective Metal Strips at the Top of the Bench, (1) One Shelf Tower Unit with (3) Three Shelves and (1) One Vertical Shelf to Stow an Ironing Board, Accent Back Panel, Storage for an Optional Safe, (1) One Continuous Top Shelf Spanning Wall to Wall and (1) One Lower Shelf Above the accessible, Lower Rod.

Provide a Concealed LED Lighting Strip Below the Shelves Above the Hanging Rods. Provide Recess at Back of Shelf Tower for Cord Management.

LED Tape Light to be Supplied by Manufacturer.

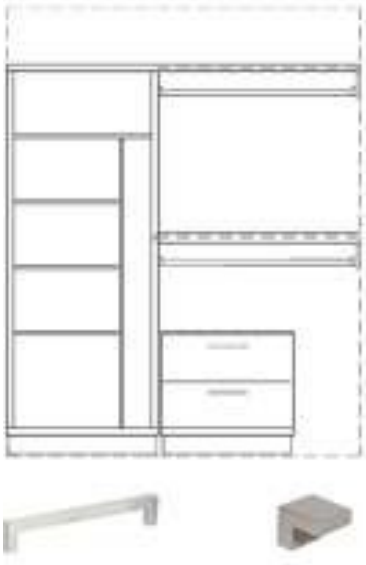
Manufacturer to Provide (2) Two Oval Rods. (1) One Rod to be Mounted 41.5" AFF.

Provide Non-Corrosive Metal Legs with Adjustable Nylon Glides and a Floating Plinth Base to Conceal the Legs.

Trim Shelf in Field to Approx. 75"W. Hanging Rod to be Cut in Field.

Ironing Board to Be Stowed at the Shelf Tower. Iron Should be Stowed in an Upright Position.

Model Name:	Closet - Efficiency Suite ADA
Dimensions:	77”W Overall (Trim in Field to 75"W) x 23.75"D x 84"H
Finish:	See Notes Below
Hardware Style:	Rectangular Pull; Square Coat Hook
Hardware Finish:	(PT-05) Tiger Drylac 49/61120 Low Lights Bronze
Hardware Size:	8"W



Notes:

Finishes:
(PL-01) Wilsonart Laminate 4991K-19, Pressed Linen, Leno Weave Finish with Aeon™. Back Panel Finish: (PL-03) Wilsonart Laminate 1595K-18 Black, Linearity Finish with Aeon™.
Rod Finish: Anodized Aluminum to Match Chrome or Polished Stainless-Steel.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-320
Project #:	Dusk Scheme	Item Description:	Closet - Efficiency Suite ADA
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 3		

Item Quantity: ea

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Interior Designer/Architect to Determine Orientation of Unit (Lefts or Rights) Based on Plan Locations.

Pre-Catalyzed Lacquer on All Deciduous Hardwood Components or Wood Look Plastic Laminate.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegoods drawings on designinformation.hilton.com for further information

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-321
Project #:	Dusk Scheme	Item Description:	Closet - Studio Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ3		

Item Quantity: ea

Manu:	**Prime Hospitality Group**	**Foliot Furniture**	**HF Collection**	**Mandy Li Collection**
Address:	2000 Remke Ave. Lawrenceburg, TN 38464	7000 Placid St. Las Vegas, NV 89119	17201 Flagler Dr. Austin, TX 78738	617 S. Raymond Ave. Alhambra, CA 91803
Phone:	(931) 762-5800	(800) 545-5575	(859) 638-6091	(626) 457-1022
Fax:				
Contact:	Jim Donnelly	Karen Cox	Danny Smith	Mandy Li
Email:	jim@primehospitalitygroup.com	kcox@foliot.com	danny@hf-collection.com	mli@mandylicollection.com
Web:	www.primehospitalitygroup.com	www.foliot.com	https://hf-collection.com/	http://mandylicollection.com

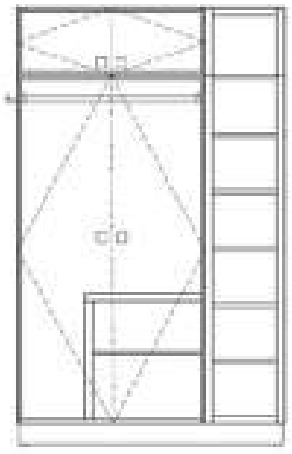
Description: Freestanding Closet Unit with a Luggage Bench and (2) Two Lower Shelves, (2) Two Surface Mounted Closet Doors, (1) One Top Shelf with (2) Two Doors, a Storage Tower with (7) Seven Shelves with an Accent Back Panel and (3) Three Coat Hooks at the Side of the Unit. Doors and Cubbies must be Flush.

Manufacturer to Provide (1) One Oval Rod.

Provide Non-Corrosive Metal Legs with Adjustable Nylon Glides and a Floating Base to Conceal the Legs.

Ironing Board to Be Mounted Inside the Closet on the Side. Iron Should be Stowed in an Upright Position.

Model Name:	Closet - Studio Suite
Dimensions:	52"W x 23.75"D x 86"H
Finish:	See Notes Below
Hardware Style:	Rectangular
Hardware Finish:	(PT-05) Tiger Drylac 49/61120 Low Lights Bronze
Hardware Size:	8"W



Notes: Finish: (PL-01) Wilsonart Laminate 4991K-19, Pressed Linen, Leno Weave Finish with Aeon™. Back Panel Finish: (PL-03) Wilsonart Laminate 1595K-18 Black, Linearity Finish with Aeon™.
Rod Finish: Anodized Aluminum to Match Chrome or Polished Stainless Steel.

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-321
Project #:	Dusk Scheme	Item Description:	Closet - Studio Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 ∆3		

Item Quantity: ea

Interior Designer/Architect to Determine Orientation of Unit (Lefts or Rights) Based on Plan Locations.

Pre-Catalyzed Lacquer on All Deciduous Hardwood Components or Wood Look Plastic Laminate.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-322
Project #:	Dusk Scheme	Item Description:	Closet - Studio Suite ADA
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 2		

Item Quantity: ea

Manu:	**Prime Hospitality Group**	**Foliot Furniture**	**HF Collection**	**Mandy Li Collection**
Address:	2000 Remke Ave. Lawrenceburg, TN 38464	7000 Placid St. Las Vegas, NV 89119	17201 Flagler Dr. Austin, TX 78738	617 S. Raymond Ave. Alhambra, CA 91803
Phone:	(931) 762-5800	(800) 545-5575	(859) 638-6091	(626) 457-1022
Contact:	Jim Donnelly	Karen Cox	Danny Smith	Mandy Li
Email:	jim@primehospitalitygroup.com	kcox@foliot.com	danny@hf-collection.com	mli@mandylicollection.com
Web:	www.primehospitalitygroup.com	www.foliot.com	https://hf-collection.com/	http://mandylicollection.com

Description:

Freestanding Closet Unit with a Luggage Bench and (2) Two Shelves, (2) Two Surface Mounted Closet Doors, (1) Full Length Mirror Behind (1) One Closet Door, (1) One Top Shelf with (2) Two Doors, (1) One Storage Cubby at the Top and Full Height Hanging Area with an Accent Back Panel and (6) Six Coat Hooks at the Side of the Unit. Doors and Cubbies must be Flush.

Provide a Concealed LED Lighting Strip Below the Shelves Above the Hanging Rods. Provide Recess at Back of Closet for Cord Management.

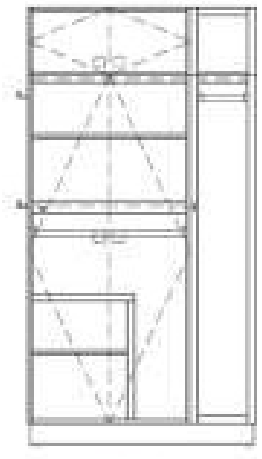
LED Tape Light to be Supplied by Manufacturer.

Manufacturer to Provide (2) Two Oval Rods. (1) One Rod and (3) Three Side Hooks to be Mounted 48" AFF.

Provide Non-Corrosive Metal Legs with Adjustable Nylon Glides and a Floating Base to Conceal the Legs.

Ironing Board to Be Mounted Inside the Closet on the Side. Iron Should be Stowed in an Upright Position.

Model Name:	Closet - Studio Suite ADA
Dimensions:	44"W x 23.75"D x 86"H
Finish:	See Notes Below
Hardware Style:	Rectangular
Hardware Finish:	(PT-05) Tiger Drylac 49/61120 Low Lights Bronze
Hardware Size:	8"W



Notes:

Finish: (PL-01) Wilsonart Laminate 4991K-19, Pressed Linen, Leno Weave Finish with Aeon™. Back Panel Finish: (PL-03) Wilsonart Laminate 1595K-18 Black, Linearity Finish with Aeon™.
Rod Finish: Anodized Aluminum to Match Chrome or Polished Stainless Steel.

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-322
Project #:	Dusk Scheme	Item Description:	Closet - Studio Suite ADA
Issue Date:	04/19/21	Area Name:	Guestrooms

Item Quantity: ea

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Interior Designer/Architect to Determine Orientation of Unit (Lefts or Rights) Based on Plan Locations.

Pre-Catalyzed Lacquer on All Deciduous Hardwood Components or Wood Look Plastic Laminate.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-323
Project #:	Dusk Scheme	Item Description:	Closet - One Bedroom Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 3		

Item Quantity: ea

Manu:	**Prime Hospitality Group**	**Foliot Furniture**	**HF Collection**	**Mandy Li Collection**
Address:	2000 Remke Ave. Lawrenceburg, TN 38464	7000 Placid St. Las Vegas, NV 89119	17201 Flagler Dr. Austin, TX 78738	617 S. Raymond Ave. Alhambra, CA 91803
Phone:	(931) 762-5800	(800) 545-5575	(859) 638-6091	(626) 457-1022
Contact:	Jim Donnelly	Karen Cox	Danny Smith	Mandy Li
Email:	jim@primehospitalitygroup.com	kcox@foliot.com	danny@hf-collection.com	mli@mandylicollection.com
Web:	www.primehospitalitygroup.com	www.foliot.com	https://hf-collection.com/	http://mandylicollection.com

Description:

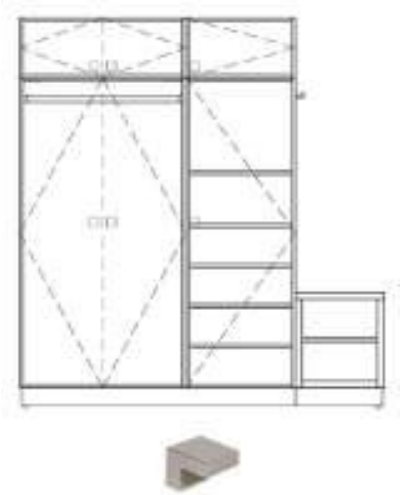
Freestanding Closet Unit with (7) Seven Stacked Shelves with an Accent Back Panel, (2) Two Surface Mounted Closet Doors, (1) One Top Shelf with (2) Two Doors, a Small Bench with (2) Two Lower Shelves with an Accent Back Panel and (3) Three Coat Hooks at the Side of the Unit. Doors and Cubbies must be Flush.

Manufacturer to Provide (1) One Oval Rod.

Provide Non-Corrosive Metal Legs with Adjustable Nylon Glides and a Floating Base to Conceal the Legs.

Ironing Board to Be Mounted Inside the Closet on the Side. Iron Should be Stowed in an Upright Position.

Model Name:	Closet - One Bedroom Suite
Dimensions:	80"W x 23.75"D x 86"H
Finish:	See Notes Below
Hardware Style:	Rectangular
Hardware Finish:	(PT-05) Tiger Drylac 49/61120 Low Lights Bronze
Hardware Size:	8"W



Notes:

Finish: (PL-01) Wilsonart Laminate 4991K-19, Pressed Linen, Leno Weave Finish with Aeon™. Back Panel Finish: (PL-03) Wilsonart Laminate 1595K-18 Black, Linearity Finish with Aeon™.
Rod Finish: Anodized Aluminum to Match Chrome or Polished Stainless Steel.

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-323
Project #:	Dusk Scheme	Item Description:	Closet - One Bedroom Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 3		

Item Quantity: ea

Interior Designer/Architect to Determine Orientation of Unit (Lefts or Rights) Based on Plan Locations.

Pre-Catalyzed Lacquer on All Deciduous Hardwood Components or Wood Look Plastic Laminate.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-324
Project #:	Dusk Scheme	Item Description:	Closet - One Bedroom Suite ADA
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 3		

Item Quantity: ea

Manu:	**Prime Hospitality Group**	**Foliot Furniture**	**HF Collection**	**Mandy Li Collection**
Address:	2000 Remke Ave. Lawrenceburg, TN 38464	7000 Placid St. Las Vegas, NV 89119	17201 Flagler Dr. Austin, TX 78738	617 S. Raymond Ave. Alhambra, CA 91803
Phone:	(931) 762-5800	(800) 545-5575	(859) 638-6091	(626) 457-1022
Fax:				
Contact:	Jim Donnelly	Karen Cox	Danny Smith	Mandy Li
Email:	jim@primehospitalitygroup.com	kcox@foliot.com	danny@hf-collection.com	mli@mandylicollection.com
Web:	www.primehospitalitygroup.com	www.foliot.com	https://hf-collection.com/	http://mandylicollection.com

Description:

Freestanding Closet Unit with (7) Seven Stacked Shelves with an Accent Back Panel, (2) Two Surface Mounted Closet Doors, (1) One Top Shelf with (2) Two Doors, a Full Height Hanging Area and (6) Six Coat Hooks at the Side of the Unit. Doors and Cubbies must be Flush.

Provide a Concealed LED Lighting Strip Below the Shelves Above the Hanging Rods. Provide Recess at Back of Closet for Cord Management.

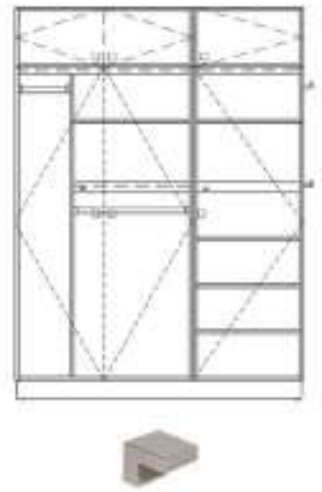
LED Tape Light to be Supplied by Manufacturer.

Manufacturer to Provide (2) Two Oval Rods. (1) One Rod and (3) Three Side Hooks to be Mounted 48" AFF.

Provide Non-Corrosive Metal Legs with Adjustable Nylon Glides and a Floating Base to Conceal the Legs.

Ironing Board to Be Mounted Inside the Closet on the Side. Iron Should be Stowed in an Upright Position.

Model Name:	Closet - One Bedroom Suite ADA
Dimensions:	63"W x 23.75"D x 86"H
Finish:	See Notes Below
Hardware Style:	Rectangular
Hardware Finish:	(PT-05) Tiger Drylac 49/61120 Low Lights Bronze
Hardware Size:	8"W



Notes:

Finish: (PL-01) Wilsonart Laminate 4991K-19, Pressed Linen, Leno Weave Finish with Aeon™.
Back Panel Finish: (PL-03) Wilsonart Laminate 1595K-18 Black, Linearity Finish with Aeon™.
Rod Finish: Anodized Aluminum to Match Chrome or Polished Stainless Steel.

Door Pulls: 1.5" x 1.5" Square with 'L' Shape Profile.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-324
Project #:	Dusk Scheme	Item Description:	Closet - One Bedroom Suite ADA
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 3		

Item Quantity: ea

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Interior Designer/Architect to Determine Orientation of Unit (Lefts or Rights) Based on Plan Locations.

Pre-Catalyzed Lacquer on All Deciduous Hardwood Components or Wood Look Plastic Laminate.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-324
Project #:	Dusk Scheme	Item Description:	Closet - One Bedroom Suite ADA
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 3		

Item Quantity: ea

Instructions:

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-325
Project #:	Dusk Scheme	Item Description:	Vanity - Efficiency Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 4		

Item Quantity: ea

Manu:	**Prime Hospitality Group**	**Foliot Furniture**	**HF Collection**	**Mandy Li Collection**
Address:	2000 Remke Ave. Lawrenceburg, TN 38464	7000 Placid St. Las Vegas, NV 89119	17201 Flagler Dr. Austin, TX 78738	617 S. Raymond Ave. Alhambra, CA 91803
Phone:	(931) 762-5800	(800) 545-5575	(859) 638-6091	(626) 457-1022
Contact:	Jim Donnelly	Karen Cox	Danny Smith	Mandy Li
Email:	jim@primehospitalitygroup.com	kcox@foliot.com	danny@hf-collection.com	mli@mandylicollection.com
Web:	www.primehospitalitygroup.com	www.foliot.com	https://hf-collection.com/	http://mandylicollection.com

Description: Freestanding Vanity with (3) Three Lower Storage Cubbies with an Accent Back Panel, (2) Two Soft-Closing Drawers with Metal Drawer Pulls, an Under Mount Sink and Powder Coated Metal Base.

Vanity Engineered Stone Top to Have a 4" H Backsplash. Hardware to be Supplied by Casegoods Manufacturer.

Provide Non-Corrosive Adjustable Glides.

Top and Backsplash Finish: (SS-01) Daltile Calcutta NQ06 or Belstone Dodi Calacatta Aramis.
Finish: Laminate or Wood Veneer to Match (PL-01) Wilsonart Laminate 4991K-19, Pressed Linen, Leno Weave Finish with Aeon™.
Accent Back Panels: Laminate or Wood Veneer to Match (PL-03) Wilsonart Laminate 1595K-18 Black, Linearity Finish with Aeon™.
Metal Base: (PT-05) TIGER Drylac Low Lights Bronze 49/61120 with Clear Coat.

Model Name:	Vanity - Efficiency Suite
Dimensions:	54"W x 24"D x 34"H
Finish:	See Notes Below
Edge Detail:	Square
Hardware Style:	Rectangular
Hardware Finish:	(PT-05) Tiger Drylac 49/61120 Low Lights Bronze
Hardware Size:	6"W
Notes:	Pre-Catalyzed Lacquer on All Deciduous Hardwood Components or Wood Veneer.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication:

Finish Sample, Shop Drawing. Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-325
Project #:	Dusk Scheme	Item Description:	Vanity – Efficiency Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	10/22 Δ 3		

Item Quantity: ea

Manufacturer to Coordinate Templating of Plumbing Fixtures with Contractor Prior to Fabrication. Construction Should Always Use a Marine Grade Plywood Substrate.

Vanity to be Attached to Wall on Back Side. Interior Designer/Architect to Coordinate Blocking Requirement. Manufacturer to Determine Method of Attachment. Rear Metal Legs to be Recessed ½" to Allow Tile Base.

Manufacturer is Responsible for Support of Counter-Top to Prevent Deflection and Cracking. Top Must Support 250 lb. Minimum.

Interior Designer/Architect to Coordinate All Plumbing with Vanity and Top. Refer to Hilton Homewood Suites Brand Standards for all Plumbing Requirements.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-325
Project #:	Dusk Scheme	Item Description:	Vanity – Efficiency Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	10/22 Δ 3		

Item Quantity: ea

Instructions:

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-326
Project #:	Dusk Scheme	Item Description:	Vanity – Studio & One Bedroom Suites
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 3		

Item Quantity: ea

Manu:	**Prime Hospitality Group**	**Foliot Furniture**	**HF Collection**	**Mandy Li Collection**
Address:	2000 Remke Ave. Lawrenceburg, TN 38464	7000 Placid St. Las Vegas, NV 89119	17201 Flagler Dr. Austin, TX 78738	617 S. Raymond Ave. Alhambra, CA 91803
Phone:	(931) 762-5800	(800) 545-5575	(859) 638-6091	(626) 457-1022
Contact:	Jim Donnelly	Karen Cox	Danny Smith	Mandy Li
Email:	jim@primehospitalitygroup.com	kcox@foliot.com	danny@hf-collection.com	mli@mandylicollection.com
Web:	www.primehospitalitygroup.com	www.foliot.com	https://hf-collection.com/	http://mandylicollection.com

Description: Freestanding Vanity with (3) Three Lower Storage Cubbies with an Accent Back Panel, (2) Two Soft-Closing Drawers with Metal Drawer Pulls, an Under Mount Sink and Powder Coated Metal Base.

Vanity Engineered Stone Top to Have a 4" H Backsplash. Hardware to be Supplied by Casegoods Manufacturer.

Provide Non-Corrosive Adjustable Glides.

Top and Backsplash Finish: (SS-01) Daltile Calcutta NQ06 or Belstone Dodi Calacatta Aramis.
Finish: Laminate or Wood Veneer to Match (PL-01) Wilsonart Laminate 4991K-19, Pressed Linen, Leno Weave Finish with Aeon™.
Accent Back Panels: Laminate or Wood Veneer to Match (PL-03) Wilsonart Laminate 1595K-18 Black, Linearity Finish with Aeon™
Metal Base: (PT-05) TIGER Drylac Low Lights Bronze 49/61120 with Clear Coat.

Model Name:	Vanity - Studio & One Bedroom Suites
Dimensions:	48"W x 24"D x 34"H
Finish:	See Notes Below
Edge Detail:	Square
Hardware Style:	Rectangular
Hardware Finish:	(PT-05) Tiger Drylac 49/61120 Low Lights Bronze
Hardware Size:	6"W
Notes:	Pre-Catalyzed Lacquer on All Deciduous Hardwood Components or Wood Veneer.

When specifying plastic laminate ensure marine grade plywood or equivalent is used as substrate. Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing. Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-326
Project #:	Dusk Scheme	Item Description:	Vanity - Studio & One Bedroom Suites
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	10/22 Δ 2		

Item Quantity: ea

Manufacturer to Coordinate Templating of Plumbing Fixtures with Contractor Prior to Fabrication. Construction Should Always Use a Marine Grade Plywood Substrate.

Vanity to be Attached to Wall on Back Side. Interior Designer/Architect to Coordinate Blocking Requirement. Manufacturer to Determine Method of Attachment. Rear Metal Legs to be Recessed ½" to Allow Tile Base.

Manufacturer is Responsible for Support of Counter-Top to Prevent Deflection and Cracking. Top Must Support 250 lb. Minimum.

Interior Designer/Architect to Coordinate all Plumbing with Vanity and Top. Refer to Hilton Homewood Suites Brand Standards for all Plumbing Requirements.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-326
Project #:	Dusk Scheme	Item Description:	Vanity - Studio & One Bedroom Suites
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	10/22 Δ 2		

Item Quantity: ea

Instructions:

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-327
Project #:	Dusk Scheme	Item Description:	Vanity - ADA Suites
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 3		

Item Quantity: ea

Manu:	**Prime Hospitality Group**	**Foliot Furniture**	**HF Collection**	**Mandy Li Collection**
Address:	2000 Remke Ave. Lawrenceburg, TN 38464	7000 Placid St. Las Vegas, NV 89119	17201 Flagler Dr. Austin, TX 78738	617 S. Raymond Ave. Alhambra, CA 91803
Phone:	(931) 762-5800	(800) 545-5575	(859) 638-6091	(626) 457-1022
Contact:	Jim Donnelly	Karen Cox	Danny Smith	Mandy Li
Email:	jim@primehospitalitygroup.com	kcox@foliot.com	danny@hf-collection.com	mli@mandylicollection.com
Web:	www.primehospitalitygroup.com	www.foliot.com	https://hf-collection.com/	http://mandylicollection.com

Description: Wall Mounted Vanity with Apron.

Vanity Engineered Stone Top to Have a 4" H Backsplash. Hardware to be Supplied by Casegoods Manufacturer.
Wall Mounted Vanity Must Support a Minimum of 250 lbs.

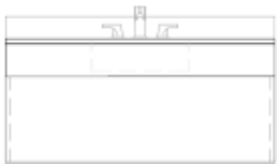
Top and Backsplash Finish: (SS-01) Daltile Calcutta NQ06 or Belstone Dodi Calacatta Aramis.
Finish: Laminate or Wood Veneer to Match (PL-01) Wilsonart Laminate 4991K-19, Pressed Linen, Leno Weave Finish with Aeon™.

Model Name: Vanity - ADA Suites

Dimensions: 48"W x 24"D x 26"H

Finish: See Notes Below

Edge Detail: Square



Notes: Pre-Catalyzed Lacquer on All Deciduous Hardwood Components or Wood Veneer.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.
Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00.
Manufacturer to Coordinate Templating of Plumbing Fixtures with Contractor Prior to Fabrication.
Construction Should Always Use a Marine Grade Plywood Substrate.

Vanity to be Attached to Wall on Back Side. Interior Designer/Architect to Coordinate Blocking Requirement. Manufacturer to Determine Method of Attachment.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-327
Project #:	Dusk Scheme	Item Description:	Vanity - ADA Suites
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 3		

Item Quantity: ea

Manufacturer is Responsible for Support of Counter-Top to Prevent Deflection and Cracking. Top Must Support 250 lb. Minimum.
Interior Designer/Architect to Coordinate All Plumbing with Vanity and Top. Refer to Hilton Homewood Suites Brand Standards for all Plumbing Requirements.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegoods drawings on designinformation.hilton.com for further information.

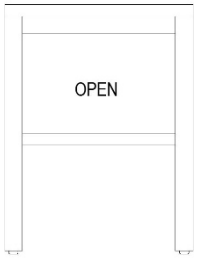
HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-328
Project #:	Dusk Scheme	Item Description:	Bath Caddy - ADA Suites
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 2		

Item Quantity: ea

Manu:	**Prime Hospitality Group**	**Foliot Furniture**	**HF Collection**	**Mandy Li Collection**
Address:	2000 Remke Ave. Lawrenceburg, TN 38464	7000 Placid St. Las Vegas, NV 89119	17201 Flagler Dr. Austin, TX 78738	617 S. Raymond Ave. Alhambra, CA 91803
Phone:	(931) 762-5800	(800) 545-5575	(859) 638-6091	(626) 457-1022
Contact:	Jim Donnelly	Karen Cox	Danny Smith	Mandy Li
Email:	jim@primehospitalitygroup.com	kcox@foliot.com	danny@hf-collection.com	mli@mandylicollection.com
Web:	www.primehospitalitygroup.com	www.foliot.com	https://hf-collection.com/	http://mandylicollection.com

Description:	Freestanding Moveable Bath Caddy with Square Open Tube Frame and Lower Shelf. Seal Bottom to Prevent Moisture from Seeping In. Provide Commercial Grade Adjustable Levelers.
Model Name:	Bath Caddy - ADA Suites
Dimensions:	16"W x 11"D x 21"H
Top Material/Finish:	Solid Wood, Stained to Match (PL-01) Wilsonart Laminate 4991K-19, Pressed Linen, Leno Weave Finish with Aeon™
Base Material/Finish:	(PT-05) Tiger Drylac Low Lights Bronze 49/61120
Edge Detail:	Square
Notes:	Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing. Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.00. Construction Should Always Use a Marine Grade Plywood Substrate or equivalent.



Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-328
Project #:	Dusk Scheme	Item Description:	Bath Caddy - ADA Suites
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/23 Δ 2		

Item Quantity: ea

Instructions:

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes.

Manufacturer to provide all necessary hardware for each item. All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Major joints as needed shall utilize lap joints or double doweled construction with corner blocks. Glue and staples are used to reinforce the joinery.

Metal fasteners should be used where appropriate to ensure commercial frame strength.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

All wood to be kiln dried and treated to be insect and vermin free.

Ensure that all pieces will fit in elevators and through doors prior to commencing fabrication.

Show all pieces in shop drawings. Provide reproducible scaled shop drawings to Hotel Operator Representative prior to production.

Provide clear alcohol and water-resistant penetrating sealer as required at wood.

Solid hardwood frames to be certified sustainable sources. All stress joints to be connected by double doweled, screwed and glued corner reinforcement.

All corners of metal frame to be mitered; All welds to be filled and fully finished; Grind and smooth all edges; No visible welds, seams, or burn marks; Seal as required.

Finish goods containing composite wood products must comply with California Code of Regulations 93120. Product and carton will be labeled in accordance with this regulation.

Manufacturer to clearly mark each carton with item ID and specification number.

Reference Design Intent casegoods drawings on designinformation.hilton.com for further information.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-400
Project #:	Dusk Scheme	Item Description:	Single Window Drapery Fabrication - One-Way Draw - Efficiency Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/2023 Δ 1		

Item Quantity: ea

Manu:	Echota Fabrics, Inc.	EE Sewing, Inc.	Quiltcraft Industries
Address:	1394 US 41 N	21601 E 340 Rd.	1230 East Ledbetter
	Calhoun, GA 30701	Chelsea, OK 74016	Dallas, TX 75216
Phone:	(706) 629-9750	(918) 789-5881	(214) 376-1841
Contact:	Will Ostuw	Luke Cowles	David Pearson
Email:	will@echotafabrics.com	ee@junct.com	dpearson@quiltcraft.com
Web:	www.echotafabrics.com	www.eesewing.com	www.quiltcraft.com

Description: Blackout Drapery and Sheer Fabrication with Baton for Two-Track Ceiling Mounted System with Manual One-Way Draw. Blackout Fabric Located Closest to the Window. Sheer Fabric Located Closest to the Room.

Manufacturer to Provide ADA Drapery Wand in All ADA Guestrooms. Designer/Architect is Responsible for Determining Location and Quantity.

10" Deep by 8" High Millwork Valance to be Supplied and Installed by Contractor.
Drapery Stack Back Not to Exceed 31".

Ceiling Height:	8'-0" VIF
Opening Size:	5'-0"
Mounting Method:	Two-Track System at Ceiling Pocket
Dimensions:	10"D x 8"H Millwork Valance to be Supplied and Installed by Contractor or Specified Window Treatment Manufacturer
Hardware:	Kirsch or Equivalent
Panels Style:	Pinch Pleat
Panels Fixed or Operative:	Operative
Panels Fullness:	180%
Panels Finished Length:	1/2" AFF
Sheers Style:	Weighted Pinch Pleat
Sheers Fullness:	180%
Sheers Finished Length:	1/2" AFF

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-400
Project #:	Dusk Scheme	Item Description:	Single Window Drapery Fabrication - One-Way Draw - Efficiency Suite
Issue Date:	04/19/21	Area Name:	Guestrooms

Item Quantity: ea

Opening Quantity: 1

COM/COL:

Fabric at Sheer: (B) GR-400A; P/Kaufmann Contract; Pattern: WD Belgrade Sheer; Custom Slate MIL Option 3; 100% Polyester; Repeat: H: 0.25"; Width: 118"; Railroad: Yes; Finish: Manufacturer to Provide Alta Drapery; Fire Rating: NFPA-701

Fabric at Blackout: (B) GR-400B; P/Kaufmann Contract; Pattern: 4P Dreamy; Custom Domino; 100% Polyester; Width: 110"; Railroad: Yes; Backing: 4-Pass Blackout; Finish: Manufacturer to Provide Alta Drapery; Fire Rating: NFPA-701

Notes:

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.03.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Designer/Architect is Responsible for Determining the Orientation of Window Treatment Stack Back (Left or Right) Based on Plan Locations.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use. COM

quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All quantity requirements must be verified by on-site measurements taken prior to fabrication.

Drapery fabricator to provide all hardware complete for installation.

Drapery fabricator is responsible for the size and quantity of all hardware to be used.

Draperies must meet Class 1 ASTM E-84 and NFPA 701 Small and Large Scale as required by local and state fire codes for use in hotels.

Manufacturer to clearly mark each carton with item ID and specification number.

Sheer treatments must have a 1” single side hem, 4” single heading and 4” double bottom hem. Blackout treatments must have a 1” single side hem, 4” single heading and 1/2” double bottom hem.

Sheer and blackout must have 1/2” clear front mounted baton that is 48” AFF.

All window treatments to have 4” overlap in center when they are two-way draw.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-401
Project #:	Dusk Scheme	Item Description:	Single Window Drapery Fabrication - Two-Way Draw - One Bedroom Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/2023 Δ 2		

Item Quantity: ea

Manu:	Echota Fabrics, Inc.	EE Sewing, Inc.	Quiltcraft Industries
Address:	1394 US 41 N	21601 E 340 Rd.	1230 East Ledbetter
	Calhoun, GA 30701	Chelsea, OK 74016	Dallas, TX 75216
Phone:	(706) 629-9750	(918) 789-5881	(214) 376-1841
Contact:	Will Ostuw	Luke Cowles	David Pearson
Email:	will@echotafabrics.com	ee@junct.com	dpearson@quiltcraft.com
Web:	www.echotafabrics.com	www.eesewing.com	www.quiltcraft.com

Description: Blackout Drapery and Sheer Fabrication with Baton for Two-Track Ceiling Mounted System with Manual Two-Way Draw. Blackout Fabric Located Closest to the Window. Sheer Fabric Located Closest to the Room.

Manufacturer to Provide ADA Drapery Wand in All ADA Guestrooms. Designer/Architect is Responsible for Determining Location and Quantity.

10" Deep by 8" High Millwork Valance to be Supplied and Installed by Contractor.
Drapery Stack Back not to exceed Width of 18" at Each Side.

Opening Quantity:	1
Ceiling Height:	8'-0" VIF
Opening Size:	5'-0"
Mounting Method:	Two-Track System at Ceiling Pocket
Dimensions:	10"D x 8"H Millwork Valance to be Supplied and Installed by Contractor or Specified Window Treatment Manufacturer
Hardware:	Kirsch or Equivalent
Panels Style:	Pinch Pleat
Panels Fixed or Operative:	Operative
Panels Fullness:	180%
Panels Finished Length:	1/2" AFF
Sheers Style:	Weighted Pinch Pleat
Sheers Fullness:	180%
Sheers Finished Length:	1/2" AFF

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-401
Project #:	Dusk Scheme	Item Description:	Single Window Drapery Fabrication - Two-Way Draw - One Bedroom Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/2023 Δ 2		

Item Quantity: ea

COM/COL:

Fabric at Sheer: (B) GR-401A; P/Kaufmann Contract; Pattern: WD Belgrade Sheer; Custom Slate MIL Option 3; 100% Polyester; Repeat: H: 0.25"; Width: 118"; Railroad: Yes; Finish: Manufacturer to Provide Alta Drapery; Fire Rating: NFPA-701

Fabric at Blackout: (B) GR-401B; P/Kaufmann Contract; Pattern: 4P Dreamy; Custom Domino; 100% Polyester; Width: 110"; Railroad: Yes; Backing: 4-Pass Blackout; Finish: Manufacturer to Provide Alta Drapery; Fire Rating: NFPA-701

Notes:

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.03.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Designer/Architect is Responsible for Determining the Orientation of Window Treatment Stack Back (Left or Right) Based on Plan Locations.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

COM quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All quantity requirements must be verified by on-site measurements taken prior to fabrication.

Drapery fabricator to provide all hardware complete for installation.

Drapery fabricator is responsible for the size and quantity of all hardware to be used.

Draperies must meet Class 1 ASTM E-84 and NFPA 701 Small and Large Scale as required by local and state fire codes for use in hotels.

Manufacturer to clearly mark each carton with item ID and specification number.

Sheer treatments must have a 1” single side hem, 4” single heading and 4” double bottom hem. Blackout treatments must have a 1” single side hem, 4” single heading and 1/2” double bottom hem.

Sheer and blackout must have 1/2” clear front mounted baton that is 48" AFF.

All window treatments to have 4” overlap in center when they are two-way draw.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-402
Project #:	Dusk Scheme	Item Description:	Double Window Drapery Fabrication - Two Way Draw - Studio Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/2023 Δ 1		

Item Quantity: ea

Manu:	Echota Fabrics, Inc.	EE Sewing, Inc.	Quiltcraft Industries
Address:	1394 US 41 N	21601 E 340 Rd.	1230 East Ledbetter
	Calhoun, GA 30701	Chelsea, OK 74016	Dallas, TX 75216
Phone:	(706) 629-9750	(918) 789-5881	(214) 376-1841
Contact:	Will Ostuw	Luke Cowles	David Pearson
Email:	will@echotafabrics.com	ee@junct.com	dpearson@quiltcraft.com
Web:	www.echotafabrics.com	www.eesewing.com	www.quiltcraft.com

Description:	Blackout Drapery and Sheer Fabrication with Cordless Hand-Drawn Two-Track Ceiling Mounted System with Manual Two-Way Draw. Blackout Fabric Located Closest to the Window. Sheer Fabric Located Closest to the Room. Manufacturer to Provide ADA Drapery Wand in All ADA Guestrooms. Designer/Architect is Responsible for Determining Location and Quantity. 10" Deep by 8" High Millwork Valance to be Supplied and Installed by Contractor. Drapery Stack Back not to exceed of 28" at Each Side of the Window.
Ceiling Height:	8'-0" VIF
Opening Size:	8'-0"
Mounting Method:	Two-Track System at Ceiling
Pocket Dimensions:	10"D x 8"H Millwork Valance to be Supplied and Installed by Contractor or Specified Window Treatment Manufacturer
Hardware:	Kirsch or Equivalent
Panels Style:	Pinch Pleat
Panels Fixed or Operative:	Operative
Panels Fullness:	180%
Panels Finished Length:	1/2" AFF
Sheers Style:	Weighted Pinch Pleat
Sheers Fullness:	180%
Sheers Finished Length:	1/2" AFF

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-402
Project #:	Dusk Scheme	Item Description:	Double Window Drapery Fabrication - Two Way Draw - Studio Suite
Issue Date:	04/19/21	Area Name:	Guestrooms

Item Quantity: ea

Opening Quantity: 1

COM/COL:

Fabric at Sheer: (B) GR-402A; P/Kaufmann Contract; Pattern: WD Belgrade Sheer; Custom Slate MIL Option 3; 100% Polyester; Repeat: H: 0.25"; Width: 118"; Railroad: Yes; Finish: Manufacturer to Provide Alta Drapery; Fire Rating: NFPA-701

Fabric at Blackout: (B) GR-402B; P/Kaufmann Contract; Pattern: 4P Dreamy; Custom Domino; 100% Polyester; Width: 110"; Railroad: Yes; Backing: 4-Pass Blackout; Finish: Manufacturer to Provide Alta Drapery; Fire Rating: NFPA-701

Notes:

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.03.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Designer/Architect is Responsible for Determining the Orientation of Window Treatment Stack Back (Left or Right) Based on Plan Locations.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-402
Project #:	Dusk Scheme	Item Description:	Double Window Drapery Fabrication - Two Way Draw - Studio Suite
Issue Date:	04/19/21	Area Name:	Guestrooms

Item Quantity: ea

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.
Must be of contract quality and suitable for commercial use. COM quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All quantity requirements must be verified by on-site measurements taken prior to fabrication.

Drapery fabricator to provide all hardware complete for installation.

Drapery fabricator is responsible for the size and quantity of all hardware to be used.

Draperies must meet Class 1 ASTM E-84 and NFPA 701 Small and Large Scale as required by local and state fire codes for use in hotels.

Manufacturer to clearly mark each carton with item ID and specification number.

Sheer treatments must have a 1” single side hem, 4” single heading and 4” double bottom hem. Blackout treatments must have a 1” single side hem, 4” single heading and 1/2” double bottom hem.

Sheer and blackout must have 1/2” clear front mounted baton that is 48" AFF.

All window treatments to have 4” overlap in center when they are two-way draw.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-403
Project #:	Dusk Scheme	Item Description:	Single Window Roller Shade Fabrication at Kitchen - One Bedroom Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	10/22 Δ 1		

Item Quantity: ea

Manu:	Echota Fabrics, Inc.	EE Sewing, Inc.	Quiltcraft Industries
Address:	1394 US 41 N	21601 E 340 Rd.	1230 East Ledbetter
	Calhoun, GA 30701	Chelsea, OK 74016	Dallas, TX 75216
Phone:	(706) 629-9750	(918) 789-5881	(214) 376-1841
Contact:	Will Ostuw	Luke Cowles	David Pearson
Email:	will@echotafabrics.com	ee@junct.com	dpearson@quiltcraft.com
Web:	www.echotafabrics.com	www.eesewing.com	www.quiltcraft.com

Description:

A Dual Roller Shade with (1) One Manual Blackout Roller Shade and (1) One Manual Sheer Roller Shade at Single Window with Stainless Steel Beaded Chains. Headbox to be Mounted Above Window. Blackout Shade Located Closest to the Window and Sheer Shade Located Closest to the Room.

Blackout Shade: FR Roller Shade with Fabric-Wrapped Hem Bar. FR Blackout to Extend to windowsill and Overlap Side Jambs by 3".
Sheer Shade: FR Roller Shade with Fabric-Wrapped Hem Bar.
Skyline Dual Roller Shade with 5 1/2" x 5 1/2" Headbox. Anodized Finish at Headbox, Side/Sill Channels and Brackets.

Opening Quantity:	1
Ceiling Height:	8'-0" VIF
Opening Size:	5'-0"
Mounting Method:	See Notes Below
Hardware:	Skyline Dual Roller Shade
Shade Style:	Manual Dual Roller Shade

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-403
Project #:	Dusk Scheme	Item Description:	Single Window Roller Shade Fabrication at Kitchen - One Bedroom Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	10/22 Δ 1		

Item Quantity: ea

COM/COL:

Fabric at Sheer - (B) GR-403A:

Echota Fabrics; Pattern: 2360 Sheer Weave; Color: Oyster/ Pearl Gray; Content: 65% Vinyl, 35% Fiberglass; Width: 63”/98”/126”; Openness: 5%; Fire Rating: NFPA 701

EE Sewing, Inc.; Pattern: Duncan; Color: White Gray; Content: 100% Polyester; Width: 79”; Openness: 5%; Fire Rating: NFPA 701

Quilt-craft Industries; Pattern: 2360; Sheer weave; Color: Oyster/Pearl Gray; Content: 65% Vinyl, 35% Fiberglass; ; Width: 63"/98"; Railroad: Yes; Finish: Manufacturer to Provide Alta Drapery; Fire Rating: NFPA 701

Fabric at Blackout - (B) GR-403B:

Echota Fabrics; Pattern: Lillabet; Color: Midnight; Content: 100% Polyester; Width: 118”; Fire Rating: NFPA 701 Backing: 4 Pass Blackout

EE Sewing, Inc.; Pattern: Mission; Color: Fog; Content: 100% Polyester; Width: 118”; Fire Rating: NFPA 701; Backing: 4 Pass Blackout

Quiltcraft Industries; Pattern: Galaxy; Color: Linen; Content: 100% Polyester; Width: 110"; Fire Rating: NFPA 701

Notes:

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.03.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Designer/Architect is Responsible for Determining the Orientation (Left or Right) of Cords/Chains Based on Plan Locations.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use. COM quantities must be verified by fabricator prior to ordering.

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-403
Project #:	Dusk Scheme	Item Description:	Single Window Roller Shade Fabrication at Kitchen - One Bedroom Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	10/22 Δ 1		

Item Quantity: ea

Instructions:

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All quantity requirements must be verified by on-site measurements taken prior to fabrication.

Drapery fabricator to provide all hardware complete for installation.

Drapery fabricator is responsible for the size and quantity of all hardware to be used.

Draperies must meet Class 1 ASTM E-84 and NFPA 701 Small and Large Scale as required by local and state fire codes for use in hotels.

Manufacturer to clearly mark each carton with item ID and specification number.

Sheer treatments must have a 1” single side hem, 4” single heading and 4” double bottom hem. Blackout treatments must have a 1” single side hem, 4” single heading and 1/2” double bottom hem.

Sheer and blackout must have 1/2” clear front mounted baton that is 48" AFF.

All window treatments to have 4” overlap in center when they are two-way draw.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-404
Project #:	Dusk Scheme	Item Description:	Motorized Single Window Roller Shade Fabrication at Kitchen - One Bedroom Suite ADA
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/2023 Δ 3		

Item Quantity: ea

Manu:	Echota Fabrics, Inc.	EE Sewing, Inc.	Quiltcraft Industries
Address:	1394 US 41 N	21601 E 340 Rd.	1230 East Ledbetter
	Calhoun, GA 30701	Chelsea, OK 74016	Dallas, TX 75216
Phone:	(706) 629-9750	(918) 789-5881	(214) 376-1841
Contact:	Will Ostuw	Luke Cowles	David Pearson
Email:	will@echotafabrics.com	ee@junct.com	dpearson@quiltcraft.com
Web:	www.echotafabrics.com	www.eesewing.com	www.quiltcraft.com

Description:

A Dual Roller Shade with (1) One Motorized Blackout Roller Shade and (1) One Motorized Sheer Roller Shade at Single Window. Headbox to be Mounted Above Window. Blackout Shade Located Closest to the Window and Sheer Shade Located Closest to the Room.

Motor with Hardwired Power Cord and Quick Disconnect, Controlled by Wireless Wall Switch(es). Switch to be Coordinated with Contractor. Refer to Architectural Drawings for Location and Mounting Height.

Blackout Shade: FR Roller Shade with Fabric-Wrapped Hem Bar. FR Blackout to Extend to windowsill and Overlap Side Jambs by 3".
Sheer Shade: FR Roller Shade with Fabric-Wrapped Hem Bar.

Skyline Dual Roller Shade with 5 1/2" x 5 1/2" Headbox. Anodized Finish at Headbox, Side/Sill Channels and Brackets.

Opening Quantity:	1
Ceiling Height:	8'-0" VIF
Opening Size:	5'-0"
Mounting Method:	See Notes Below
Hardware:	Skyline Dual Roller Shade
Shade Style:	Motorized Dual Roller Shade

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-404
Project #:	Dusk Scheme	Item Description:	Motorized Single Window Roller Shade Fabrication at Kitchen - One Bedroom Suite ADA
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/2023 Δ 3		

Item Quantity: ea

COM/COL:

Fabric at Sheer - (B) GR-404A:

Echota Fabrics; Pattern: 2360 Sheer Weave; Color: Oyster/ Pearl Gray; Content: 65% Vinyl, 35% Fiberglass; Width: 63”/98”/126”; Openness: 5%; Fire Rating: NFPA 701

EE Sewing, Inc.; Pattern: Duncan; Color: White Gray; Content: 100% Polyester; Width: 79”; Openness: 5%; Fire Rating: NFPA 701

Quilt-craft Industries; Pattern: 2360; Sheer weave; Color: Oyster/Pearl Gray; Content: 65% Vinyl, 35% Fiberglass; ; Width: 63"/98"; Railroad: Yes; Finish: Manufacturer to Provide Alta Drapery; Fire Rating: NFPA 701

Fabric at Blackout - (B) GR-404B:

Echota Fabrics; Pattern: Lillabet; Color: Midnight; Content: 100% Polyester; Width: 118”; Fire Rating: NFPA 701 Backing: 4 Pass Blackout

EE Sewing, Inc.; Pattern: Mission; Color: Fog; Content: 100% Polyester; Width: 118”; Fire Rating: NFPA 701; Backing: 4 Pass Blackout

Quiltcraft Industries; Pattern: Galaxy; Color: Linen; Content: 100% Polyester; Width: 110"; Fire Rating: NFPA 701

Notes:

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.03.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-404
Project #:	Dusk Scheme	Item Description:	Motorized Single Window Roller Shade Fabrication at Kitchen - One Bedroom Suite ADA
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/2023 Δ 3		

Item Quantity: ea

Instructions:

Must be of contract quality and suitable for commercial use. COM quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All quantity requirements must be verified by on-site measurements taken prior to fabrication.

Drapery fabricator to provide all hardware complete for installation.

Drapery fabricator is responsible for the size and quantity of all hardware to be used.

Draperies must meet Class 1 ASTM E-84 and NFPA 701 Small and Large Scale as required by local and state fire codes for use in hotels.

Manufacturer to clearly mark each carton with item ID and specification number.

Sheer treatments must have a 1” single side hem, 4” single heading and 4” double bottom hem. Blackout treatments must have a 1” single side hem, 4” single heading and 1/2” double bottom hem.

Sheer and blackout must have 1/2” clear front mounted baton that is 36” long minimum.

All window treatments to have 4” overlap in center when they are two-way draw.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-405
Project #:	Dusk Scheme	Item Description:	Motorized Double Window Drapery Fab. - Two Way Draw - QQ Studio ADA & One Bedroom Suites
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/2023 Δ 1		

Item Quantity: ea

Manu:	Echota Fabrics, Inc.	EE Sewing, Inc.	Quiltcraft Industries
Address:	1394 US 41 N	21601 E 340 Rd.	1230 East Ledbetter
	Calhoun, GA 30701	Chelsea, OK 74016	Dallas, TX 75216
Phone:	(706) 629-9750	(918) 789-5881	(214) 376-1841
Contact:	Will Ostuw	Luke Cowles	David Pearson
Email:	will@echotafabrics.com	ee@junct.com	dpearson@quiltcraft.com
Web:	www.echotafabrics.com	www.eesewing.com	www.quiltcraft.com

Description:

Blackout Drapery and Sheer Drapery Fabrication with a Motorized Two-Track Ceiling Mounted System with Two-Way Draw. Blackout Fabric Located Closest to the Window. Sheer Fabric Located Closest to the Room.

Designer/Architect is Responsible for Determining Location and Quantity.

10" Deep by 8" High Millwork Valance to be Supplied and Installed by Contractor.
Drapery Stack Back not to exceed 28" at Each Side of the Window.

Opening Quantity:	1
Ceiling Height:	8'-0" VIF
Opening Size:	8'-0"
Mounting Method:	Motorized Two-Track System at Ceiling Pocket
Dimensions:	10"D x 8"H Millwork Valance to be Supplied and Installed by Contractor or Specified Window Treatment Manufacturer
Hardware:	Kirsch or Equivalent
Panels Style:	Pinch Pleat
Panels Fixed or Operative:	Operative
Panels Fullness:	180%
Panels Finished Length:	1/2" AFF
Sheers Style:	Weighted Pinch Pleat
Sheers Fullness:	180%
Sheers Finished Length:	1/2" AFF

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-405
Project #:	Dusk Scheme	Item Description:	Motorized Double Window Drapery Fab. - Two Way Draw - QQ Studio ADA & One Bedroom Suites
Issue Date:	04/19/21	Area Name:	Guestrooms

Item Quantity: ea

COM/COL:	Fabric at Sheer: (B) GR-405A; P/Kaufmann Contract; Pattern: WD Belgrade Sheer; Custom Slate MIL Option 3; 100% Polyester; Repeat: H: 0.25"; Width: 118"; Railroad: Yes; Finish: Manufacturer to Provide Alta Drapery; Fire Rating: NFPA-701 Fabric at Blackout: (B) GR-405B; P/Kaufmann Contract; Pattern: 4P Dreamy; Custom Domino; 100% Polyester; Width: 110"; Railroad: Yes; Backing: 4-Pass Blackout; Finish: Manufacturer to Provide Alta Drapery; Fire Rating: NFPA-701
Notes:	Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.03. Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing. Designer/Architect is Responsible for Determining the Orientation of Window Treatment Stack Back (Left or Right) Based on Plan Locations.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-405
Project #:	Dusk Scheme	Item Description:	Motorized Double Window Drapery Fab. - Two Way Draw - QQ Studio ADA & One Bedroom Suites
Issue Date:	04/19/21	Area Name:	Guestrooms

Item Quantity: ea

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MT

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use. COM

quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All quantity requirements must be verified by on-site measurements taken prior to fabrication.

Drapery fabricator to provide all hardware complete for installation.

Drapery fabricator is responsible for the size and quantity of all hardware to be used.

Draperies must meet Class 1 ASTM E-84 and NFPA 701 Small and Large Scale as required by local and state fire codes for use in hotels.

Manufacturer to clearly mark each carton with item ID and specification number.

Sheer treatments must have a 1” single side hem, 4” single heading and 4” double bottom hem. Blackout treatments must have a 1” single side hem, 4” single heading and 1/2” double bottom hem.

Sheer and blackout must have 1/2” clear front mounted baton that is 48" AFF.

All window treatments to have 4” overlap in center when they are two-way draw.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-406
Project #:	Dusk Scheme	Item Description:	Motorized Single Window Drapery Fabrication at Bedroom - Two Way Draw - QQ One Bedroom Suite ADA
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/2023 Δ2		

Item Quantity: ea

Manu:	Echota Fabrics, Inc.	EE Sewing, Inc.	Quiltcraft Industries
Address:	1394 US 41 N	21601 E 340 Rd.	1230 East Ledbetter
	Calhoun, GA 30701	Chelsea, OK 74016	Dallas, TX 75216
Phone:	(706) 629-9750	(918) 789-5881	(214) 376-1841
Contact:	Will Ostuw	Luke Cowles	David Pearson
Email:	will@echotafabrics.com	ee@junct.com	dpearson@quiltcraft.com
Web:	www.echotafabrics.com	www.eesewing.com	www.quiltcraft.com

Description: Blackout Drapery and Sheer Drapery Fabrication with a Motorized Two-Track Ceiling Mounted System with Two-Way Draw. Blackout Fabric Located Closest to the Window. Sheer Fabric Located Closest to the Room.

Designer/Architect is Responsible for Determining Location and Quantity.

10" Deep by 8" High Millwork Valance to be Supplied and Installed by Contractor.
Drapery Stack Back of 18" at Each Side of the Window.

Opening Quantity:	1
Ceiling Height:	8'-0" VIF
Opening Size:	5'-0"
Mounting Method:	Motorized Two-Track System at Ceiling Pocket
	Dimensions: 10"D x 8"H Millwork Valance to be Supplied and Installed by Contractor or Specified Window Treatment Manufacturer
Hardware:	Kirsch or Equivalent
Panels Style:	Pinch Pleat
Panels Fixed or Operative:	Operative
Panels Fullness:	180%
Panels Finished Length:	1/2" AFF
Sheers Style:	Weighted Pinch Pleat
Sheers Fullness:	180%
Sheers Finished Length:	1/2" AFF

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-406
Project #:	Dusk Scheme	Item Description:	Motorized Single Window Drapery Fabrication at Bedroom - Two Way Draw - QQ One Bedroom Suite ADA
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/2023 Δ2		

Item Quantity: ea

COM/COL:

Fabric at Sheer: (B) GR-406A; P/Kaufmann Contract; Pattern: WD Belgrade Sheer; Custom Slate MIL Option 3; 100% Polyester; Repeat: H: 0.25"; Width: 118"; Railroad: Yes; Finish: Manufacturer to Provide Alta Drapery; Fire Rating: NFPA-701.

Fabric at Blackout: (B) GR-406B; P/Kaufmann Contract; Pattern: 4P Dreamy; Custom Domino; 100% Polyester; Width: 110"; Railroad: Yes; Backing: 4-Pass Blackout; Finish: Manufacturer to Provide Alta Drapery; Fire Rating: NFPA-701

Notes:

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.03.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Shop Drawing.

Designer/Architect is Responsible for Determining the Orientation of Window Treatment Stack Back

(Left or Right) Based on Plan Locations.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-406
Project #:	Dusk Scheme	Item Description:	Motorized Single Window Drapery Fabrication at Bedroom - Two Way Draw - QQ One Bedroom Suite ADA
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	06/2023 Δ2		

Item Quantity: ea

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MT

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use. COM

quantities must be verified by fabricator prior to ordering.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All quantity requirements must be verified by on-site measurements taken prior to fabrication.

Drapery fabricator to provide all hardware complete for installation.

Drapery fabricator is responsible for the size and quantity of all hardware to be used.

Draperies must meet Class 1 ASTM E-84 and NFPA 701 Small and Large Scale as required by local and state fire codes for use in hotels.

Manufacturer to clearly mark each carton with item ID and specification number.

Sheer treatments must have a 1” single side hem, 4” single heading and 4” double bottom hem. Blackout treatments must have a 1” single side hem, 4” single heading and 1/2” double bottom hem.

Sheer and blackout must have 1/2” clear front mounted baton that is 48" AFF.

All window treatments to have 4” overlap in center when they are two-way draw.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-500
Project #:	Dusk Scheme	Item Description:	Art at Lounge Chair - Efficiency Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	02/2023 Δ 2		

Item Quantity: ea

Manufacturer:	**Kalisher**	**PI Fine Art**	**Wendover Art**
Address:	800 Taylor Street Suite 9A-154 Durham, NC 27701	1180 Caledonia Road Toronto, Ontario M6A 2W5	6465 126th Avenue North Largo, FL 33773
Phone:	(919) 967-4300	(416) 789-7156	(727) 573-1417 (312) 848-4151
Contact:	Julia Kushner	Elisa Vandenbosch	Carmine Giso
Email:	j.kushner@kalisher.com	hilton@pifineart.com	carmine.giso@wendoverart.com
Web:	www.kalisher.com	www.pifineart.com	www.wendoverart.com

Description:	Custom Framed Paper Print Artwork to be Reflective of Local Character While Adhering to Homewood Suites Brand Characteristics. Subject Matter to be Customized Per Project Location.
Image Size:	13.25"W x 23.75"H
Framed Size:	20"W x 30"H
Mat:	2.5" Single White
Molding Number:	Michelangelo, 432-29, Black
Molding Width:	0.875"
Orientation:	Vertical
Hardware:	3-Point Security
Installation Height:	Refer to Architectural Prototype Drawings for Height and Location
Glass Type:	Clear

Notes:

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Prototype.

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.05.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: YK

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-500
Project #:	Dusk Scheme	Item Description:	Art at Lounge Chair - Efficiency Suite
Issue Date:	04/19/21	Area Name:	Guestrooms

Item Quantity: ea

Instructions:

All materials and methods of construction must comply with all local fire and life safety codes and Homewood Suites Brand Standards.

Provide all parts, pieces and instructions for complete installation. Mounting method to be sufficient for weight of piece.

All pieces must be crated for shipping. All corners should be wrapped with corner guards. Crates should be labeled with instructions for shipment, storage and opening of crate.

Manufacturer to clearly mark each carton with item ID and specification number.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-501
Project #:	Dusk Scheme	Item Description:	Art Set at Bed - Efficiency Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	02/2023 Δ 2		

Item Quantity: ea

Manufacturer:	**Kalisher**	**PI Fine Art**	**Wendover Art**
Address:	800 Taylor Street Suite 9A-154 Durham, NC 27701	1180 Caledonia Road Toronto, Ontario M6A 2W5	6465 126th Avenue North Largo, FL 33773
Phone:	(919) 967-4300	(416) 789-7156	(727) 573-1417 (312) 848-4151
Contact:	Julia Kushner	Elisa Vandenbosch	Carmine Giso
Email:	j.kushner@kalisher.com	hilton@pifineart.com	carmine.giso@wendoverart.com
Web:	www.kalisher.com	www.pifineart.com	www.wendoverart.com

Description:	Custom Set of Framed Paper Print Artwork to be Reflective of Local Character While Adhering to Homewood Suites Brand Characteristics. Subject Matter to be Customized Per Project Location.
Image Size:	P1: 10.5"W x 17.5"H, P2: 10.5"W x 7.5"H
Framed Size:	P1: 18"W x 28"H, P2: 18"W x 20"H
Mat:	P1: 3" Top/Sides, 6" Bottom, P2: 3" Top/Sides, 8" Bottom
Molding Number:	Framerica - P1: BW217-1908, P2: BW217-1906
Molding Width:	P1: 0.75", P2: 0.75"
Orientation:	Vertical
Hardware:	3-Point Security
Installation Height:	Refer to Architectural Prototype Drawings for Height and Location
Glass Type:	Clear
Notes:	Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Prototype. Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.05.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: YK

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-501
Project #:	Dusk Scheme	Item Description:	Art Set at Bed - Efficiency Suite
Issue Date:	04/19/21	Area Name:	Guestrooms

Item Quantity: ea

Instructions:

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes and Homewood Suites Brand Standards.

Provide all parts, pieces and instructions for complete installation. Mounting method to be sufficient for weight of piece.

All pieces must be crated for shipping. All corners should be wrapped with corner guards. Crates should be labeled with instructions for shipment, storage and opening of crate.

Manufacturer to clearly mark each carton with item ID and specification number.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-502
Project #:	Dusk Scheme	Item Description:	Art at Highboy Dresser - Studio Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	02/2023 Δ 2		

Item Quantity: ea

Manufacturer:	**Kalisher**	**PI Fine Art**	**Wendover Art**
Address:	800 Taylor Street Suite 9A-154 Durham, NC 27701	1180 Caledonia Road Toronto, Ontario M6A 2W5	6465 126th Avenue North Largo, FL 33773
Phone:	(919) 967-4300	(416) 789-7156	(727) 573-1417 (312) 848-4151
Contact:	Julia Kushner	Elisa Vandenbosch	Carmine Giso
Email:	j.kushner@kalisher.com	hilton@pifineart.com	carmine.giso@wendoverart.com
Web:	www.kalisher.com	www.pifineart.com	www.wendoverart.com

Description:	Custom Print with Copper Finish Artwork to be Reflective of Local Character While Adhering to Homewood Suites Brand Characteristics. Subject Matter to be Customized Per Project Location.
Image Size:	13"W x 13"H
Hardware:	3-Point Security
Installation Height:	Refer to Architectural Prototype Drawings for Height and Location
Notes:	Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Prototype. Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.05.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: YK

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes and Homewood Suites Brand Standards.

Provide all parts, pieces and instructions for complete installation. Mounting method to be sufficient for weight of piece.

All pieces must be crated for shipping. All corners should be wrapped with corner guards. Crates should be labeled with instructions for shipment, storage and opening of crate.

Manufacturer to clearly mark each carton with item ID and specification number.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-503
Project #:	Dusk Scheme	Item Description:	Tryptic Art at Kitchen - One Bedroom Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	02/2023 Δ 2		

Item Quantity: ea

Manufacturer:	**Kalisher**	**PI Fine Art**	**Wendover Art**
Address:	800 Taylor Street Suite 9A-154 Durham, NC 27701	1180 Caledonia Road Toronto, Ontario M6A 2W5	6465 126th Avenue North Largo, FL 33773
Phone:	(919) 967-4300	(416) 789-7156	(727) 573-1417 (312) 848-4151
Contact:	Julia Kushner	Elisa Vandenbosch	Carmine Giso
Email:	j.kushner@kalisher.com	hilton@pifineart.com	carmine.giso@wendoverart.com
Web:	www.kalisher.com	www.pifineart.com	www.wendoverart.com

Description:	Custom Tryptic Gallery Wrapped Canvas Artwork to be Reflective of Local Character While Adhering to Homewood Suites Brand Characteristics. Subject Matter to be Customized Per Project Location.
Image Size:	P1: 24”W x 26”H, P2: 8”W x 26”H, P3: 14”W x 26”H
Orientation:	Triptych Flow: Horizontal; Each Piece: Vertical
Hardware:	3-Point Security
Installation Height:	Refer to Architectural Prototype Drawings for Height and Location
Notes:	Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Prototype. Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.05.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: YK

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes and Homewood Suites Brand Standards.

Provide all parts, pieces and instructions for complete installation. Mounting method to be sufficient for weight of piece.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-503
Project #:	Dusk Scheme	Item Description:	Tryptic Art at Kitchen - One Bedroom Suite
Issue Date:	04/19/21	Area Name:	Guestrooms

Item Quantity: ea

Instructions:

All pieces must be crated for shipping. All corners should be wrapped with corner guards. Crates should be labeled with instructions for shipment, storage and opening of crate.

Manufacturer to clearly mark each carton with item ID and specification number.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-504
Project #:	Dusk Scheme	Item Description:	Art at Bedroom
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	02/2023 Δ 2		

Item Quantity: ea

Manufacturer:	**Kalisher**	**PI Fine Art**	**Wendover Art**
Address:	800 Taylor Street Suite 9A-154 Durham, NC 27701	1180 Caledonia Road Toronto, Ontario M6A 2W5	6465 126th Avenue North Largo, FL 33773
Phone:	(919) 967-4300	(416) 789-7156	(727) 573-1417 (312) 848-4151
Contact:	Julia Kushner	Elisa Vandenbosch	Carmine Giso
Email:	j.kushner@kalisher.com	hilton@pifineart.com	carmine.giso@wendoverart.com
Web:	www.kalisher.com	www.pifineart.com	www.wendoverart.com

Description:	Custom Framed Paper Print Artwork to be Reflective of Local Character While Adhering to Homewood Suites Brand Characteristics. Subject Matter to be Customized Per Project Location.
Image Size:	22"W x 30"H
Framed Size:	24"W x 32"H
Mat:	No Mat, 0.5"H Blue Spacer
Molding Number:	Michelangelo,41-12, Natural
Molding Width:	1.25"
Orientation:	Vertical
Hardware:	3-Point Security
Installation Height:	Refer to Architectural Prototype Drawings for Height and Location
Glass Type:	Clear
Notes:	Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Prototype. Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.05.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: YK

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-504
Project #:	Dusk Scheme	Item Description:	Art at Bedroom
Issue Date:	04/19/21	Area Name:	Guestrooms

Item Quantity: ea

Instructions:

All materials and methods of construction must comply with all local fire and life safety codes and Homewood Suites Brand Standards.

Provide all parts, pieces and instructions for complete installation. Mounting method to be sufficient for weight of piece.

All pieces must be crated for shipping. All corners should be wrapped with corner guards. Crates should be labeled with instructions for shipment, storage and opening of crate.

Manufacturer to clearly mark each carton with item ID and specification number.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-505
Project #:	Dusk Scheme	Item Description:	Decorative Hooks - Efficiency Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	05/11/21 Δ 1		

Item Quantity: ea

Manufacturer: **Williams Sonoma, Inc**
Address: 55 Water Street, 2nd Floor

Brooklyn, NY 11201
Phone: (718) 473-1873
Contact: Liz Lighthall
E-mail: elighthall@wsgc.com
Web: www.williams-sonoma.com

Description: Grouping of (2) Two Round Metal Wall Hooks with Flat Face, Ribbed Edge, Round Standoff and Powder Coated Finish.

Wall Blocking to be Provided to Sustain a Weight Capacity of at Least 30 lbs. Per Decorative Hook.

Hardware: Concealed Security (Provided by Manufacturer)

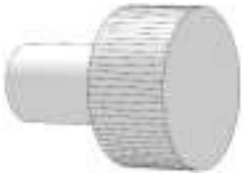
Installation Height: Refer to Architectural Prototype Drawings for Height and Location

Notes: Finish: (PT-05) TIGER Drylac Low Lights Bronze 49/61120.

Dimensions: 1.25" Diameter x 1" Projection.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Finish Sample, Prototype.

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.05.



Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-505
Project #:	Dusk Scheme	Item Description:	Decorative Hooks - Efficiency Suite
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	05/11/21 Δ 1		

Item Quantity: ea

Manufacturer: Williams Sonoma, Inc Source:

Instructions:

All materials and methods of construction must comply with all local fire and life safety codes and Homewood Suites Brand Standards.

Provide all parts, pieces and instructions for complete installation. Mounting method to be sufficient for weight of piece.

All pieces must be crated for shipping. All corners should be wrapped with corner guards. Crates should be labeled with instructions for shipment, storage and opening of crate.

Manufacturer to clearly mark each carton with item ID and specification number.

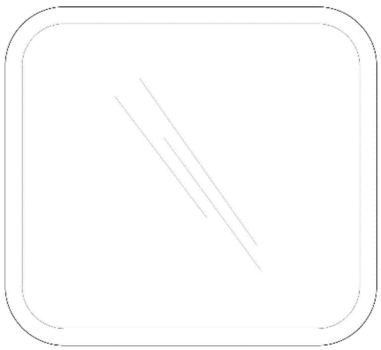
HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-506
Project #:	Dusk Scheme	Item Description:	Vanity Mirror
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	02/2023 Δ 2		

Item Quantity: ea

Manufacturer:	**Mirror Image**	**Majestic Mirror**
Address:	2937 Vail Avenue	7425 N.W. 79th Street
	Los Angeles, CA 90040	Miami, FL 33166
Phone:	(323) 869-0100	(305) 827-2661 x106
Fax:		(305) 827-2663
Contact:	Glenn Neugarten	Adam Jaffe
E-mail:	glenn@mirrorimageinc.com	adam@majesticmirror.com
Web:	www.mirrorimageinc.com	www.majesticmirror.com

Description:	Rectangular Lighted Vanity Mirror, Frameless with R7 Radius Rounded Corners, 2" Frosted Front Perimeter with Anti-Fingerprint Finish, and Double LED Strip Lights. Mirror to be 6mm Thick Clear with Polished Edges and Vinyl Safety Backing. Optional Technology Upgrades.
Model Name:	Vanity Mirror
Dimensions:	44"W x 40"H x 2"D
Mirror Size:	40"W x 36"H
Finish:	Mirror with Frosted Glass Border
Orientation:	Horizontal
Mounting Height:	See Architectural Prototype Drawings for Height
Hardware:	Continuous Cleat with Security System
Notes:	Mirror to Have a Metal Frame Substrate and No Bevel. Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Shop Drawing. Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.06. Refer to Architectural Prototype Drawings for Mounting Height and Location. 3000K, CRI 85+ Approx., 8,800 lumens, 63 watts



Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-506
Project #:	Dusk Scheme	Item Description:	Vanity Mirror
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	02/2023 Δ 2		

Item Quantity: ea

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Manufacturer to provide all component parts for complete assembly and installation.

Mounting method to be sufficient for weight of piece.

All pieces must be crated for shipping. All corners should be wrapped with corner guards. Crates should be labeled with instructions for shipment, storage and opening of crate.

For mirrors over 48" (1200mm) in any direction, provide inner frame and cross bracing.

Manufacturer to provide 3-point or continuous cleat security cleating system appropriate for the size and weight of the mirror.

Manufacturer to clearly mark each carton with item ID and specification number.

Must be crated for shipping with all corners wrapped with corner guards. Crates must be labeled with instructions for shipment, storage and opening of crate.

Provide ¼” (6mm) backer sheet, gator foam or tempered Masonite.

All works must be free of mildew, pests or any infestation. Protection and treatment for any damage must be handled by a certified conservator. Source/Gallery must document damage and treatment/protection from further damage.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-507
Project #:	Dusk Scheme	Item Description:	Vanity Mirror - ADA Suites
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	02/2023 Δ 2		

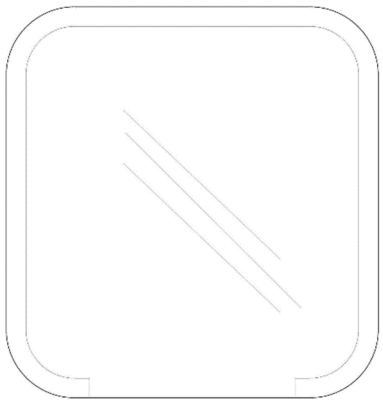
Item Quantity: ea

Manufacturer:	**Mirror Image**	**Majestic Mirror**
Address:	2937 Vail Avenue Los Angeles, CA 90040	7425 N.W. 79th Street Miami, FL 33166
Phone:	(323) 869-0100	(305) 827-2661 x106 (305) 827-2663
Contact:	Glenn Neugarten	Adam Jaffe
E-mail:	glenn@mirrorimageinc.com	adam@majesticmirror.com
Web:	www.mirrorimageinc.com	www.majesticmirror.com

Description: Rectangular Lighted Vanity Mirror with R7 Radius Rounded Corners, 2" Frosted Front Perimeter with Anti-Fingerprint Finish, and Double LED Strip Lights.
Mirror to be 6mm Thick Clear with Polished Edges and Vinyl Safety Backing.

The Reflective Surface Must Extend to the Bottom Center Edge of the Frame for ADA Compliance.

Optional Technology Upgrades.



Model Name:	Vanity Mirror - ADA Suites
Dimensions:	38"W x 40"H x 2"D
Mirror Size:	36"W x 40"H
Finish:	Mirror with Frosted Glass Border
Orientation:	Vertical
Mounting Height:	See Architectural Prototype Drawings for Height
Hardware:	Continuous Cleat with Security System

Notes: Mirror to Have a Metal Frame Substrate and No Bevel.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Shop Drawing.

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.06.

Refer to Architectural Prototype Drawings for Mounting Height and Location.

3000K, CRI 85+ Approx., 8,800 lumens, 63 watts

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-507
Project #:	Dusk Scheme	Item Description:	Vanity Mirror - ADA Suites
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	02/2023 Δ 2		

Item Quantity: ea

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Manufacturer to provide all component parts for complete assembly and installation.

Mounting method to be sufficient for weight of piece.

All pieces must be crated for shipping. All corners should be wrapped with corner guards. Crates should be labeled with instructions for shipment, storage and opening of crate.

For mirrors over 48" (1200mm) in any direction, provide inner frame and cross bracing.

Manufacturer to provide 3-point or continuous cleat security cleating system appropriate for the size and weight of the mirror.

Manufacturer to clearly mark each carton with item ID and specification number.

Must be crated for shipping with all corners wrapped with corner guards. Crates must be labeled with instructions for shipment, storage and opening of crate.

Provide ¼" (6mm) backer sheet, gator foam or tempered Masonite.

All works must be free of mildew, pests or any infestation. Protection and treatment for any damage must be handled by a certified conservator. Source/Gallery must document damage and treatment/protection from further damage.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-508
Project #:	Dusk Scheme	Item Description:	Full Length Mirror
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	10/22 Δ 1		

Item Quantity: ea

Manufacturer:	**Mirror Image**
Address:	2937 Vail Avenue
	Los Angeles, CA 90040
Phone:	(323) 869-0100
Contact:	Glenn Neugarten
E-mail:	glenn@mirrorimageinc.com
Web:	www.mirrorimageinc.com

Description:	Rectangular Wood Full-Length Mirror with Exposed Space at Top of Reflective Glass. Mirror to be 5MM Glass with Vinyl Safety Backing.
Model Name:	Full Length Mirror
Dimensions:	22"W x 70"H x 2"D
Mirror Size:	20"W x 64"H
Frame Material:	Composite
Frame Finish:	To Match (PL-04) Wilsonart Laminate Neo Walnut with Low Sheen Level
Orientation:	Vertical
Mounting Height:	See Architectural Prototype Drawings for Height
Hardware:	Continuous Cleat with Security System
Notes:	Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Shop Drawing. Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2515.06. Refer to Architectural Prototype Drawings for Mounting Height and Location.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: MG

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-508
Project #:	Dusk Scheme	Item Description:	Full Length Mirror
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	10/22 Δ 1		

Item Quantity: ea

Instructions:

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

Manufacturer to provide all component parts for complete assembly and installation.

Mounting method to be sufficient for weight of piece.

All pieces must be crated for shipping. All corners should be wrapped with corner guards. Crates should be labeled with instructions for shipment, storage and opening of crate.

For mirrors over 48" (1200mm) in any direction, provide inner frame and cross bracing.

Manufacturer to provide 3-point or continuous cleat security cleating system appropriate for the size and weight of the mirror.

Manufacturer to clearly mark each carton with item ID and specification number.

Must be crated for shipping with all corners wrapped with corner guards. Crates must be labeled with instructions for shipment, storage and opening of crate.

Provide ¼" (6mm) backer sheet, gator foam or tempered Masonite.

All works must be free of mildew, pests or any infestation. Protection and treatment for any damage must be handled by a certified conservator. Source/Gallery must document damage and treatment/protection from further damage.

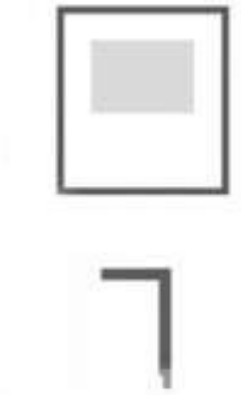
HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-509
Project #:	Dusk Scheme	Item Description:	Art at Kitchen - Studio Suite ADA
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	10/22 Δ 1		

Item Quantity: ea

Manufacturer:	**Kalisher**	**PI Fine Art**	**Wendover Art**
Address:	800 Taylor Street Suite 9A-154 Durham, NC 27701	1180 Caledonia Road Toronto, Ontario M6A 2W5	6465 126th Avenue North Largo, FL 33773
Phone:	(919) 967-4300	(416) 789-7156	(727) 573-1417
Fax:			
Contact:	Julia Kushner	Elisa Vandenbosch	Larry Hoffman
Email:	j.kushner@kalisher.com	hilton@pifineart.com	Hilton@wendoverart.com
Web:	www.kalisher.com	www.pifineart.com	www.wendoverart.com

Description:	Custom Framed Paper Print.
Title / Number:	TBD
Image Size:	13.5”W x 13.5”H
Framed Size:	20"W x 22"H
Mat:	2.5” Top/Sides 4.5” Bottom
Molding Number:	Michelangelo 432-29
Orientation:	Vertical
Hardware:	3-Point Security
Installation Height:	Refer to Architectural Prototype Drawings for Height and Location
Glass Type:	Clear
Notes:	Unless Using a Specified Manufacturer, Submit the Following Required Item(s) for Approval Prior to Fabrication: Finish Sample, Prototype. Manufacturer to Confirm the Art Meets Hilton Design and Construction Standards as Noted in Section 2515.05.



Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: YK

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-509
Project #:	Dusk Scheme	Item Description:	Art at Kitchen - Studio Suite ADA
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):	10/22 Δ 1		

Item Quantity: ea

Instructions:

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes and Homewood Suites Brand Standards.

Provide all parts, pieces, and instructions for complete installation. Mounting method to be sufficient for weight of piece.

All pieces must be crated for shipping. All corners should be wrapped with corner guards. Crates should be labeled with instructions for shipment, storage and opening of crate.

Manufacturer to clearly mark each carton with item ID and specification number.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-600
Project #:	Dusk Scheme	Item Description:	King Mattress Set
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):			

Item Quantity: ea

Mfr:	Tempur Sealy International	Serta Hospitality	Simmons Beautyrest
Address:	One Office Pkwy	2451 Industry Ave.	2451 Industry Ave.
	Trinity, NC 27370	Doraville, GA 30360	Doraville, GA 30360
Phone:	(312) 399-7208	(877) 737-8245	(877) 485-2337
Contact:	Deanna Luzzo	Janel Blakely	Bridget Price
Email:	Deanna.luzzo@tempursealy.com	hiltonorders@sertasimmons.com	hiltonorders@sertasimmons.com
Website:	www.tempursealyhospitality.com	www.sertahospitality.com	www.simmonshospitality.com

Description:

(5) Five Homewood Suites Approved King Mattresses are Listed Below.

Box Spring Foundation Required for ADA Rooms Only: 5 ½" High. Platform Bed Base Requires Mattress Only, No Foundation.

Mattress Option 1: Sealy Mesmerize, 1-Sided.
75 3/4"W x 79"L x 12" H

Mattress Option 2: Sealy Enchant, 2-Sided.
75 3/4"W x 79" L x 12" H

Mattress Option 3: Serta Dream Structure II, 1- or 2 Sided.
76"W x 79.5"L x 12" H

Mattress Option 4: Simmons Harmony, 1-Sided.
76"W x 79.5" L x 12" H

Mattress Option 5: Simmons 360 Harmony, 2-Sided.
76"W x 79.5"L x 12" H

Color/Finish: White

Notes:

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2510.00.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Flame Certificate.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-600
Project #:	Dusk Scheme	Item Description:	King Mattress Set
Issue Date:	04/19/21	Area Name:	Guestrooms

Item Quantity: ea

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: YK

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All fabrication, lining and filler shall meet local fire and applicable codes.

Ensure that mattress/foundation will fit in elevators and through doors prior to ordering.

Manufacturer to clearly mark each carton with item ID and specification number.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-601
Project #:	Dusk Scheme	Item Description:	Queen Mattress Set
Issue Date:	04/19/21	Area Name:	Guestrooms
Revision(s):			

Item Quantity: ea

Mfr:	Tempur Sealy International	Serta Hospitality	Simmons Beautyrest
Address:	One Office Pkwy	2451 Industry Ave.	2451 Industry Ave.
	Trinity, NC 27370	Doraville, GA 30360	Doraville, GA 30360
Phone:	(312) 399-7208	(877) 737-8245	(877) 485-2337
Contact:	Deanna Luzzo	Janel Blakely	Bridget Price
Email:	Deanna.luzzo@tempursealy.com	hiltonorders@sertasimmons.com	hiltonorders@sertasimmons.com
Website:	www.tempursealyhospitality.com	www.sertahospitality.com	www.simmonshospitality.com

Description:

(5) Five Homewood Suites Approved Queen Mattresses are Listed Below.

Box Spring Foundation Required for ADA Rooms Only: 5 ½" High. Typical Platform Bed Base Requires Mattress Only, No Foundation n.

Mattress Option 1: Sealy Mesmerize, 1-Sided.
59.75"W x 79"L x 12" H

Mattress Option 2: Sealy Enchant, 2-Sided.
59.75"W x 79"L x 12" H

Mattress Option 3: Serta Dream Structure II, 1- or 2 Sided.
60"W x 79.5"L x 12" H

Mattress Option 4: Simmons Harmony, 1-Sided.
60"W x 79.5"L x 12" H

Mattress Option 5: Simmons 360 Harmony, 2-Sided.
60"W x 79.5"L x 12" H

Color/Finish: White

Notes:

Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2510.00.

Unless Using a Specified Manufacturer, The Following Item(s) are Required to be Submitted for Approval Prior to Fabrication: Flame Certificate.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-601
Project #:	Dusk Scheme	Item Description:	Queen Mattress Set
Issue Date:	04/19/21	Area Name:	Guestrooms

Revision(s):

Item Quantity: ea

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: YK

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All fabrication, lining and filler shall meet local fire and applicable codes.

Ensure that mattress/foundation will fit in elevators and through doors prior to ordering.

Manufacturer to clearly mark each carton with item ID and specification number.

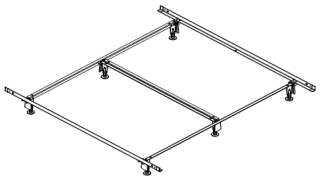
HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-602
Project #:	Dusk Scheme	Item Description:	King Bed Frame – ADA Guestrooms
Issue Date:	10/22	Area Name:	
Revision(s):			

Item Quantity: ea

Mfr:	Hilton Supply Management	Hollywood Bed Frame Company
Address:	7926 Jones Branch Dr., Suite 400 McLean, VA 22102	5959 Corvette Street Commerce CA 90040
Phone:	877-275-4769	770-329-6326
Contact:	HSMx Replenishment Team	Phillip Herrin
Email:	hsmx@hilton.com	pherrin@hollywoodbed.com
Website:	www.mysupplymanagement.com	www.hollywoodbed.com

Description:	Homewood Suites Accessible King Bed Frame
Dimensions:	7 ¼" High
Color/Finish:	N/A
Notes:	Mattress dimensions and bed frame sizes to be coordinated prior to ordering. Fabrication and Installation to Coordinate closely with nightstand and headboard to ensure proper height of mattress. Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2510.00.



Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: AB

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

Ensure that pieces will fit in elevators and through doors prior to commencing fabrication.

Manufacturer to clearly mark each carton with item ID and specification number.

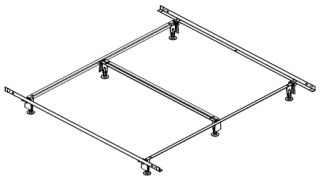
HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-603
Project #:	Dusk Scheme	Item Description:	Queen Bed Frame – ADA Guestrooms
Issue Date:	10/22	Area Name:	
Revision(s):			

Item Quantity: ea

Mfr:	Hilton Supply Management	Hollywood Bed Frame Company
Address:	7926 Jones Branch Dr., Suite 400 McLean, VA 22102	5959 Corvette Street Commerce CA 90040
Phone:	877-275-4769	770-329-6326
Contact:	HSMx Replenishment Team	Phillip Herrin
Email:	hsmx@hilton.com	pherrin@hollywoodbed.com
Website:	www.mysupplymanagement.com	www.hollywoodbed.com

Description:	Homewood Suites Accessible Queen Bed Frame
Dimensions:	7 ¼" High
Color/Finish:	N/A
Notes:	Mattress dimensions and bed frame sizes to be coordinated prior to ordering. Fabrication and Installation to Coordinate closely with nightstand and headboard to ensure proper height of mattress. Manufacturer to Confirm the Product Meets Hilton Design and Construction Standards as Noted in Section 2510.00.



Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: AB

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All internal hardware (hinges, screws, bolts, etc.) shall be corrosion proof.

Manufacturer to verify all necessary parts, hardware and dimensions required for assembly.

Ensure that pieces will fit in elevators and through doors prior to commencing fabrication.

Manufacturer to clearly mark each carton with item ID and specification number.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-604
Project #:	Dusk Scheme	Item Description:	King Bed Skirt - ADA
Issue Date:	10/22	Area Name:	Guestrooms
Revision(s):			

Item Quantity: ea

Mfr:	Fil Doux	**Mfr:**	Fabric Innovations	**Mfr:**	Samelson-Chatelane
Address:	501 3rd Avenue Brooklyn, NY 11215	**Address:**	3111 Ponce De Leon Blvd Coral Gables, FL 33134	**Address:**	102 Madison Avenue 6th Fl. New York, NY 10016
Phone:	(212) 202-1459	**Phone:**	(786) 667-8793	**Phone:**	(212) 686-6829
Contact:	Hannah Rice	**Contact:**	Donna McAndrews	**Contact:**	Jackqueline Tellekamp
Email:	hannah@fildoux.com	**Email:**	donna@fabricinnovations.com	**Email:**	JTellekamp@csamelson.com
Website:	www.fildoux.com	**Website:**	www.fabricinnovations.com	**Website:**	www.csamelson.com

Description:	Tailored Dust Skirt with Inverted Pleats on Both End Corners and 4" End Caps. Bedskirt to have Polyester Decking with 4" Wide Platform on Perimeter Decking. Platform Strips to be of Face Fabric. Decking Must be Flame Proofed.
Dimensions:	Box Spring Size: 76"W x 79.5"L x 5.5"H - Verify All – See additional notes
COM/COL:	Fil Doux - Pattern: Rafia; Color: To match Melange Pebble color on Box Spring Cover; Content: 100% Polyester; CAL117-2013; NFPA-260; Class 1; NFPA-701 Fabric Innovations; Pattern: Cape Cod; Smoke; 100% Polyester; Width: 54"; Finish: Stain Repellent; Fire Rating: NFPA - 260, Cal 117E; Durability: 50,000+ Double Rubs Samelson-Chatelane – Pattern: Eternal, Ash; 100% Polyester; Width: 54"; Finish: Stain Repellent; Fire Rating: NFPA-260, CAL 117E; Durability: 50,000+ Double Rubs
Notes:	Dimensions with Final Box Spring Specification Bed Base Height: 7 1/4" - Verify All Dimensions with Final Bed Base Specification

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: EJ

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All fabrication, lining and filler shall meet local fire and applicable codes.

Ensure that mattress/foundation will fit in elevators and through doors prior to ordering.

Manufacturer to clearly mark each carton with item ID and specification number.

Manufacturer to clearly mark each carton with item ID and specification number.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-605
Project #:	Dusk Scheme	Item Description:	Queen Bedskirt - ADA
Issue Date:	10/22	Area Name:	Guestrooms
Revision(s):			

Item Quantity: ea

Mfr:	Fil Doux	**Mfr:**	Fabric Innovations	**Mfr:**	Samelson-Chatelane
Address:	501 3rd Avenue Brooklyn, NY 11215	**Address:**	3111 Ponce De Leon Blvd Coral Gables, FL 33134	**Address:**	102 Madison Avenue 6th Fl. New York, NY 10016
Phone:	(212) 202-1459	**Phone:**	(786) 667-8793	**Phone:**	(212) 686-6829
Contact:	Hannah Rice	**Contact:**	Donna McAndrews	**Contact:**	Jackqueline Tellekamp
Email:	hannah@fildoux.com	**Email:**	donna@fabricinnovations.com	**Email:**	JTellekamp@csamelson.com
Website:	www.fildoux.com	**Website:**	www.fabricinnovations.com	**Website:**	www.csamelson.com

Description:	Tailored Dust Skirt with Inverted Pleats on Both End Corners and 4" End Caps. Bedskirt to have Polyester Decking with 4" Wide Platform on Perimeter Decking. Platform Strips to be of Face Fabric. Decking Must be Flame Proofed.
Dimensions:	Box Spring Size: 60"W x 79.5"L x 5.5"H - Verify All – See additional notes
COM/COL:	Fil Doux - Pattern: Rafia; Color: To match Melange Pebble color on Box Spring Cover; Content: 100% Polyester; CAL117-2013; NFPA-260; Class 1; NFPA-701 Fabric Innovations; Pattern: Cape Cod; Smoke; 100% Polyester; Width: 54"; Finish: Stain Repellent; Fire Rating: NFPA - 260, Cal 117E; Durability: 50,000+ Double Rubs Samelson-Chatelane – Pattern: Eternal, Ash; 100% Polyester; Width: 54"; Finish: Stain Repellent; Fire Rating: NFPA-260, CAL 117E; Durability: 50,000+ Double Rubs
Notes:	Dimensions with Final Box Spring Specification Bed Base Height: 7 1/4" - Verify All Dimensions with Final Bed Base Specification

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: EJ

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All fabrication, lining and filler shall meet local fire and applicable codes.

Ensure that mattress/foundation will fit in elevators and through doors prior to ordering.

Manufacturer to clearly mark each carton with item ID and specification number.

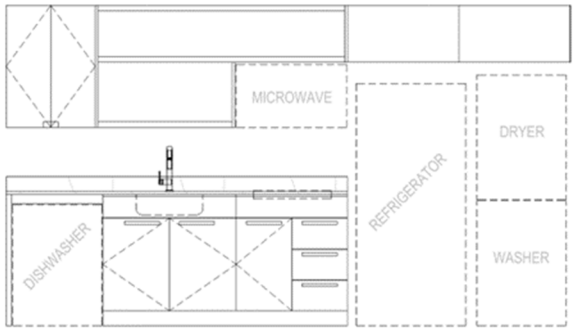
HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-800
Project #:	Dusk Scheme	Item Description:	Kitchenette - One Bedroom Suite
Issue Date:	06/2023	Area Name:	Guestrooms
Revision(s):			

Item Quantity: ea

Mfr:	**Prime Hospitality Group**	**Foliot Furniture**	**Elkay Interior Systems**
Address:	2000 Remke Ave.	7000 Placid St.	241 N Broadway, Suite 600
	Lawrenceburg, TN 38464	Las Vegas, NV 89119	Milwaukee, WI 53202
Phone:	(931) 762-5800	(800) 545-5575	(224) 370-1635
			hospitalitybids@elkayinteriorssystems.com
Email:	jim@primehospitalitygroup.com	hospitality@foliot.com	
Contact:	Jim Donnelly	Stephanie Belisle	Katie Ladd
Website:	www.primehospitalitygroup.com		

Description: Kitchenette to include full size refrigerator, dish washer, sink, electric cook-top, vent hood, microwave, washer and dryer. Kitchenettes complete with appliances, upper and lower cabinetry. Cabinetry to have a white melamine interior finish inside drawers and doored cabinets.



Dimensions: 152" W x 25" D x 86" H

Finishes: Countertop: (SS-01) Daltile Calcutta NQ06 or Belstone Dodi Calcutta Aramis

Laminate or Wood Veneer to Match:

Overall Cabinetry: (PL-01) 4991K-19 Pressed Linen – Leno Weave with Aeon™.

Accent: (PL-03) 1595K-18 Black – Linearity Finish with Aeon™.

Hardware: (PT-05) Tiger Drylac, Stellix Bonded Metallic Powder Coating Low Lights Bronze, 49/61120

Notes: Manufacturer to Coordinate Templating of Plumbing Fixture with Contractor Prior to Fabrication.
Construction Should Always Use a Marine Grade Plywood Substrate.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-800
Project #:	Dusk Scheme	Item Description:	Kitchenette - One Bedroom Suite
Issue Date:	06/2023	Area Name:	Guestrooms

Manufacturer is Responsible for Support of Counter-Top to Prevent Deflection and Cracking. Top Must Support 250 lbs. Minimum.

Interior Designer/Architect to Coordinate All Plumbing with cabinetry. Refer to Hilton Homewood Suites Brand Standards for all Plumbing Requirements.

Full Extension soft close drawers and soft close hinges on doors.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: EJ

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All fabrication, lining and filler shall meet local fire and applicable codes.

Ensure that mattress/foundation will fit in elevators and through doors prior to ordering.

Manufacturer to clearly mark each carton with item ID and specification number.

Revision(s):

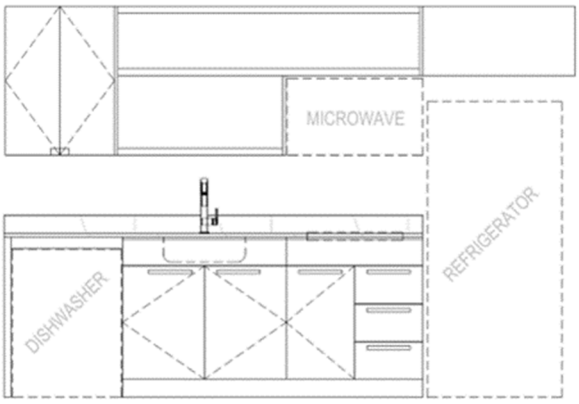
HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-801
Project #:	Dusk Scheme	Item Description:	Kitchenette - Studio Suite
Issue Date:	06/2023	Area Name:	Guestrooms

Item Quantity: ea

Mfr:	**Prime Hospitality Group**	**Foliot Furniture**	**Elkay Interior Systems**
Address:	2000 Remke Ave. Lawrenceburg, TN 38464	7000 Placid St. Las Vegas, NV 89119	241 N Broadway, Suite 600 Milwaukee, WI 53202
Phone:	(931) 762-5800	(800) 545-5575	(224) 370-1635 hospitalitybids@elkayinteriorssystems.com
Email:	jim@primehospitalitygroup.com	hospitality@foliot.com	
Contact:	Jim Donnelly	Stephanie Belisle	Katie Ladd
Website:	www.primehospitalitygroup.com		

Description: Kitchenette to include full size refrigerator, dish washer, sink, electric cook-top, vent hood, microwave, washer and dryer. Kitchenettes complete with appliances, upper and lower cabinetry. Cabinetry to have a white melamine interior finish inside drawers and doored cabinets.



Dimensions: 125 1/2" W x 25" D x 86" H

Finishes: Countertop: (SS-01) Daltile Calcutta NQ06 or Belstone Dodi Calcutta Aramis

Laminate or Wood Veneer to Match:

Overall Cabinetry: (PL-01) 4991K-19 Pressed Linen – Leno Weave with Aeon™.

Accent: (PL-03) 1595K-18 Black – Linearity Finish with Aeon™.

Hardware: (PT-05) Tiger Drylac, Stellix Bonded Metallic Powder Coating Low Lights Bronze, 49/61120

Notes: Manufacturer to Coordinate Templating of Plumbing Fixture with Contractor Prior to Fabrication.

Construction Should Always Use a Marine Grade Plywood Substrate.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-801
Project #:	Dusk Scheme	Item Description:	Kitchenette - Studio Suite
Issue Date:	06/2023	Area Name:	Guestrooms

Manufacturer is Responsible for Support of Counter-Top to Prevent Deflection and Cracking. Top Must Support 250 lbs. Minimum.

Interior Designer/Architect to Coordinate All Plumbing with cabinetry. Refer to Hilton Homewood Suites Brand Standards for all Plumbing Requirements.

Full Extension soft close drawers and soft close hinges on doors.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: EJ

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All fabrication, lining and filler shall meet local fire and applicable codes.

Ensure that mattress/foundation will fit in elevators and through doors prior to ordering.

Manufacturer to clearly mark each carton with item ID and specification number.

Revision(s):

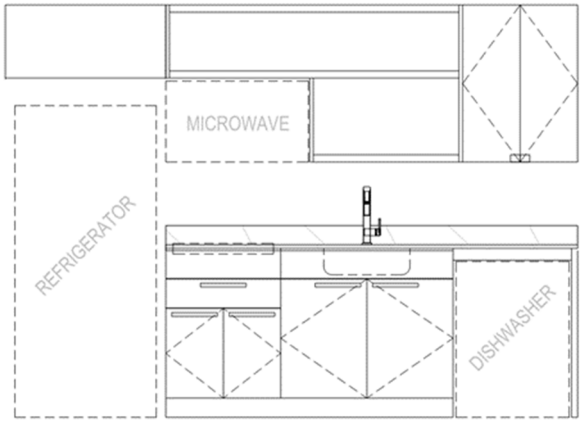
HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-802
Project #:	Dusk Scheme	Item Description:	Kitchenette - Efficiency Suite
Issue Date:	06/2023	Area Name:	Guestrooms

Item Quantity: ea

Mfr:	**Prime Hospitality Group**	**Foliot Furniture**	**Elkay Interior Systems**
Address:	2000 Remke Ave.	7000 Placid St.	241 N Broadway, Suite 600
	Lawrenceburg, TN 38464	Las Vegas, NV 89119	Milwaukee, WI 53202
Phone:	(931) 762-5800	(800) 545-5575	(224) 370-1635
			hospitalitybids@elkayinteriorssystems.com
Email:	jim@primehospitalitygroup.com	hospitality@foliot.com	
Contact:	Jim Donnelly	Stephanie Belisle	Katie Ladd
Website:	www.primehospitalitygroup.com		

Description: Kitchenette to include full size refrigerator, dish washer, sink, electric cook-top, vent hood, microwave, washer and dryer. Kitchenettes complete with appliances, upper and lower cabinetry. Cabinetry to have a white melamine interior finish inside drawers and doored cabinets.



Dimensions: 119 1/2" W x 25" D x 86" H

Finishes: Countertop: (SS-01) Daltile Calcutta NQ06 or Belstone Dodi Calcutta Aramis

Laminate or Wood Veneer to Match:

Overall Cabinetry: (PL-01) 4991K-19 Pressed Linen – Leno Weave with Aeon™.

Accent: (PL-03) 1595K-18 Black – Linearity Finish with Aeon™.

Hardware: (PT-05) Tiger Drylac, Stellix Bonded Metallic Powder Coating Low Lights Bronze, 49/61120

Notes: Manufacturer to Coordinate Templating of Plumbing Fixture with Contractor Prior to Fabrication.

Construction Should Always Use a Marine Grade Plywood Substrate.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-802
Project #:	Dusk Scheme	Item Description:	Kitchenette - Efficiency Suite
Issue Date:	06/2023	Area Name:	Guestrooms

Manufacturer is Responsible for Support of Counter-Top to Prevent Deflection and Cracking. Top Must Support 250 lbs. Minimum.

Interior Designer/Architect to Coordinate All Plumbing with cabinetry. Refer to Hilton Homewood Suites Brand Standards for all Plumbing Requirements.

Full Extension soft close drawers and soft close hinges on doors.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: EJ

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

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All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All fabrication, lining and filler shall meet local fire and applicable codes.

Ensure that mattress/foundation will fit in elevators and through doors prior to ordering.

Manufacturer to clearly mark each carton with item ID and specification number.

HOMEWOOD SUITES by Hilton

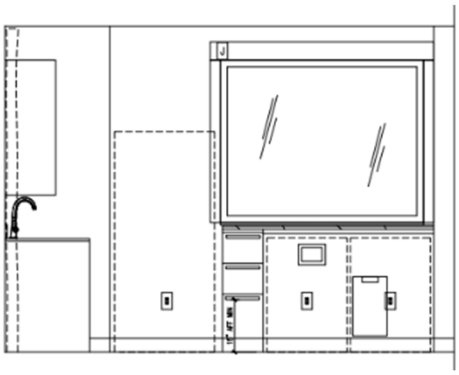
Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-803
Project #:	Dusk Scheme	Item Description:	Kitchenette - One Bedroom Suite Accessible Guestrooms
Issue Date:	06/2023	Area Name:	

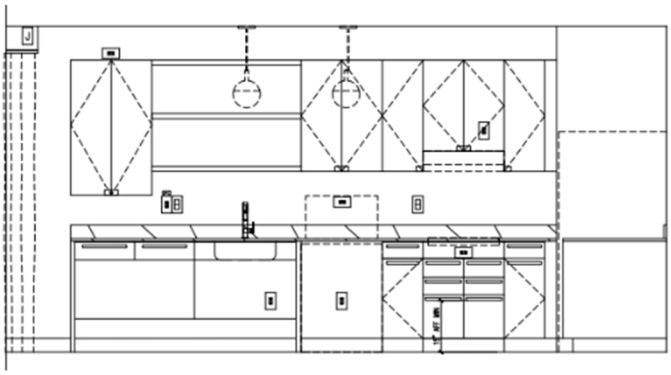
Revision(s):

Item Quantity: ea

Mfr:	**Prime Hospitality Group**	**Foliot Furniture**	**Elkay Interior Systems**
Address:	2000 Remke Ave.	7000 Placid St.	241 N Broadway, Suite 600
	Lawrenceburg, TN 38464	Las Vegas, NV 89119	Milwaukee, WI 53202
Phone:	(931) 762-5800	(800) 545-5575	(224) 370-1635
			hospitalitybids@elkayinteriorssystems.com
Email:	jim@primehospitalitygroup.com	hospitality@foliot.com	
Contact:	Jim Donnelly	Stephanie Belisle	Katie Ladd
Website:	www.primehospitalitygroup.com		

Description: Kitchenette to include full size refrigerator, dish washer, sink, electric cook-top, vent hood, microwave, washer and dryer. Kitchenettes complete with appliances, upper and lower cabinetry. Cabinetry to have a white melamine interior finish inside drawers and doored cabinets.





Dimensions: 147" W x 25" D x 86" H; 62 7/16" W x 30 5/8" D

Finishes:

Countertop: (SS-01) Daltile Calcutta NQ06 or Belstone Dodi Calcutta Aramis

Laminate or Wood Veneer to Match:

Overall Cabinetry: (PL-01) 4991K-19 Pressed Linen – Leno Weave with Aeon™.

Accent: (PL-03) 1595K-18 Black – Linearity Finish with Aeon™.

Hardware: (PT-05) Tiger Drylac, Stellix Bonded Metallic Powder Coating Low Lights Bronze, 49/61120

Notes: Manufacturer to Coordinate Templating of Plumbing Fixture with Contractor Prior to Fabrication.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-803
Project #:	Dusk Scheme	Item Description:	Kitchenette - One Bedroom Suite Accessible Guestrooms
Issue Date:	06/2023	Area Name:	

Construction Should Always Use a Marine Grade Plywood Substrate.

Manufacturer is Responsible for Support of Counter-Top to Prevent Deflection and Cracking. Top Must Support 250 lbs. Minimum.

Interior Designer/Architect to Coordinate All Plumbing with cabinetry. Refer to Hilton Homewood Suites Brand Standards for all Plumbing Requirements.

Full Extension soft close drawers and soft close hinges on doors.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: EJ

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All fabrication, lining and filler shall meet local fire and applicable codes.

Ensure that mattress/foundation will fit in elevators and through doors prior to ordering.

Manufacturer to clearly mark each carton with item ID and specification number.

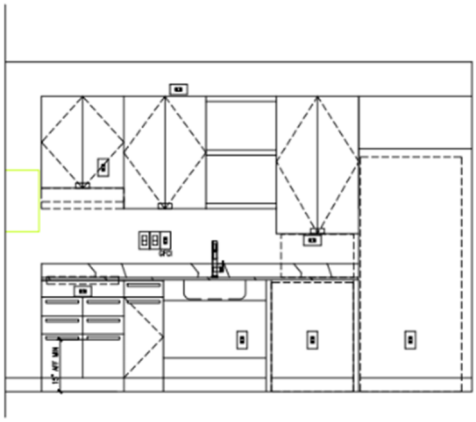
HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-804
Project #:	Dusk Scheme	Item Description:	Kitchenette - Studio Suite Accessible Guestrooms
Issue Date:	06/2023	Area Name:	
Revision(s):			

Item Quantity: ea

Mfr:	**Prime Hospitality Group**	**Foliot Furniture**	**Elkay Interior Systems**
Address:	2000 Remke Ave.	7000 Placid St.	241 N Broadway, Suite 600
	Lawrenceburg, TN 38464	Las Vegas, NV 89119	Milwaukee, WI 53202
Phone:	(931) 762-5800	(800) 545-5575	(224) 370-1635
			hospitalitybids@elkayinteriorssystems.com
Email:	jim@primehospitalitygroup.com	hospitality@foliot.com	
Contact:	Jim Donnelly	Stephanie Belisle	Katie Ladd
Website:	www.primehospitalitygroup.com		

Description: Kitchenette to include full size refrigerator, dish washer, sink, electric cook-top, vent hood, microwave, washer and dryer. Kitchenettes complete with appliances, upper and lower cabinetry. Cabinetry to have a white melamine interior finish inside drawers and doored cabinets.



Dimensions: 125 1/2" W x 25" D x 86" H

Finishes: Countertop: (SS-01) Daltile Calcutta NQ06 or Belstone Dodi Calcutta Aramis

Laminate or Wood Veneer to Match:

Overall Cabinetry: (PL-01) 4991K-19 Pressed Linen – Leno Weave with Aeon™.

Accent: (PL-03) 1595K-18 Black – Linearity Finish with Aeon™.

Hardware: (PT-05) Tiger Drylac, Stellix Bonded Metallic Powder Coating Low Lights Bronze, 49/61120

Notes: Manufacturer to Coordinate Templating of Plumbing Fixture with Contractor Prior to Fabrication.
Construction Should Always Use a Marine Grade Plywood Substrate.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-804
Project #:	Dusk Scheme	Item Description:	Kitchenette - Studio Suite Accessible Guestrooms
Issue Date:	06/2023	Area Name:	

Manufacturer is Responsible for Support of Counter-Top to Prevent Deflection and Cracking. Top Must Support 250 lbs. Minimum.

Interior Designer/Architect to Coordinate All Plumbing with cabinetry. Refer to Hilton Homewood Suites Brand Standards for all Plumbing Requirements.

Full Extension soft close drawers and soft close hinges on doors.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: EJ

☐ Seaming Diagram	☐ Strike-Off	☐ Finish Sample	☐ Cutting	☐ Shop Dwgs	☐ Prototype	☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

It is the responsibility of the owner to interpret these specifications for each property.

All interpretations of the specification MUST be submitted to Hilton Design Review (projecthub.hilton.com) for final approval prior to purchasing or implementation of any material.

Must be of contract quality and suitable for commercial use.

All materials and methods of construction must comply with all local fire and life safety codes for use in hotels and other public spaces, and Homewood Suites Brand Standards.

All fabrication, lining and filler shall meet local fire and applicable codes.

Ensure that mattress/foundation will fit in elevators and through doors prior to ordering.

Manufacturer to clearly mark each carton with item ID and specification number.

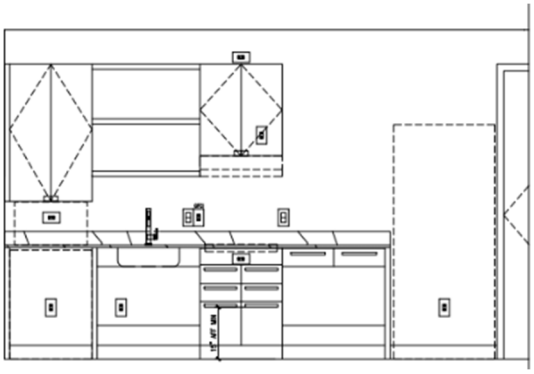
HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-805
Project #:	Dusk Scheme	Item Description:	Kitchenette - Efficiency Suite Accessible Guestrooms
Issue Date:	06/2023	Area Name:	
Revision(s):			

Item Quantity: ea

Mfr:	**Prime Hospitality Group**	**Foliot Furniture**	**Elkay Interior Systems**
Address:	2000 Remke Ave.	7000 Placid St.	241 N Broadway, Suite 600
	Lawrenceburg, TN 38464	Las Vegas, NV 89119	Milwaukee, WI 53202
Phone:	(931) 762-5800	(800) 545-5575	(224) 370-1635
			hospitalitybids@elkayinteriorssystems.com
Email:	jim@primehospitalitygroup.com	hospitality@foliot.com	
Contact:	Jim Donnelly	Stephanie Belisle	Katie Ladd
Website:	www.primehospitalitygroup.com		

Description: Kitchenette to include full size refrigerator, dish washer, sink, electric cook-top, vent hood, microwave, washer and dryer. Kitchenettes complete with appliances, upper and lower cabinetry. Cabinetry to have a white melamine interior finish inside drawers and doored cabinets.



Dimensions: 112 1/2" W x 25" D x 86" H

Finishes: Countertop: (SS-01) Daltile Calcutta NQ06 or Belstone Dodi Calcutta Aramis

Laminate or Wood Veneer to Match:

Overall Cabinetry: (PL-01) 4991K-19 Pressed Linen – Leno Weave with Aeon™.

Accent: (PL-03) 1595K-18 Black – Linearity Finish with Aeon™.

Hardware: (PT-05) Tiger Drylac, Stellix Bonded Metallic Powder Coating Low Lights Bronze, 49/61120

Notes: Manufacturer to Coordinate Templating of Plumbing Fixture with Contractor Prior to Fabrication.

Construction Should Always Use a Marine Grade Plywood Substrate.

HOMEWOOD SUITES by Hilton

Project Name:	Homewood Suites Dusk FF&E Specifications	Item Number:	(B) GR-805
Project #:	Dusk Scheme	Item Description:	Kitchenette - Efficiency Suite Accessible Guestrooms
Issue Date:	06/2023	Area Name:	

Manufacturer is Responsible for Support of Counter-Top to Prevent Deflection and Cracking. Top Must Support 250 lbs. Minimum.

Interior Designer/Architect to Coordinate All Plumbing with cabinetry. Refer to Hilton Homewood Suites Brand Standards for all Plumbing Requirements.

Full Extension soft close drawers and soft close hinges on doors.

Required Item(s) for Designer Approval Prior to Fabrication: Prepared By: EJ

☐ Seaming Diagram ☐ Strike-Off ☐ Finish Sample ☐ Cutting ☐ Shop Dwgs ☐ Prototype ☐ Flame Certificate

Instructions:

All quantities to be verified by hotel operator prior to purchasing.

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All fabrication, lining and filler shall meet local fire and applicable codes.

Ensure that mattress/foundation will fit in elevators and through doors prior to ordering.

Manufacturer to clearly mark each carton with item ID and specification number.

SECTION 00 31 32 - GEOTECHNICAL DATA

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Soils Investigation Data: Soil and subsurface investigations conducted at site by an independent testing laboratory and report with log of borings prepared.

2. Report obtained for Architect and Engineer design use only.

3. Copy of report is on file with Owner's Representative.

1.02 GEOTECHNICAL INVESTIGATION DATA

A. Soil and subsurface investigations were conducted at the site. Investigation results are documented in the report prepared by the geotechnical engineer.

B. Interpretation:

1. Soils investigation data are available for information and convenience of Bidders and is not warranted to indicate actual conditions.

2. Owner, Architect, and Engineers do not assume responsibility for variations in kind, depth, quantity, and condition of soils. Owner, Architect, and Engineers disclaim responsibility for accuracy, true location, and extent of soils investigation prepared by others; and further disclaim responsibility for interpretation of soils investigation data by Bidders such as projecting soil bearing values, rock profiles, soil stability, and presence, level, and extent of underground water.

3. Soils investigation report and data are not part of Contract Documents.

4. Report any variances from Geotechnical Report in writing to the Owner's Representative.

1.03 BIDDER INVESTIGATION

A. Bidder: Visit site and become familiar with site conditions.

B. Bidder may, at Bidder's own expense and prior to bidding, make soil surveys and investigations Bidder considers necessary.

C. Bidder assumes risk that soil and underground conditions may be other than that indicated in soil investigation data.

D. Procedure:

1. Obtain authorization from Owner prior to start of borings or subsurface investigations.

2. Immediately upon completion of Bidder subsurface investigation, return site areas affected by investigations to condition existing prior to start of Bidder subsurface investigations as directed by Owner.

1.04 CLAIMS

A. Claims for conditions found to be not as indicated in soil investigation data not permitted, unless otherwise indicated in Owner/Contractor agreement.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

END OF SECTION

GEOTECHNICAL EXPLORATION

PROPOSED HOMEWOOD SUITES
WEST MONROE, LOUISIANA
FILE NO. G24-02-029

Prepared for

GLOBAL LABORATORIES
105 PARKWEST DRIVE
WEST MONROE, LOUISIANA 71291

GOLDMAN GEOTECHNICAL CONSULTING, LLC

Taylor M. Goldman, PE
Member/Principal
(870) 904-2778

GOLDMAN
GEOTECHNICAL CONSULTING
LLC

3841 Industrial Circle, Suite 100
Bossier City, LA 71112
goldmangeotech@gmail.com
goldmangeotech.com

March 21, 2024

Mr. Jimmy Kent
Global Laboratories
105 Parkwest Drive
West Monroe, Louisiana 71291

RE: Geotechnical Exploration
Proposed Homewood Suites
West Monroe, Louisiana
File No. G24-02-029

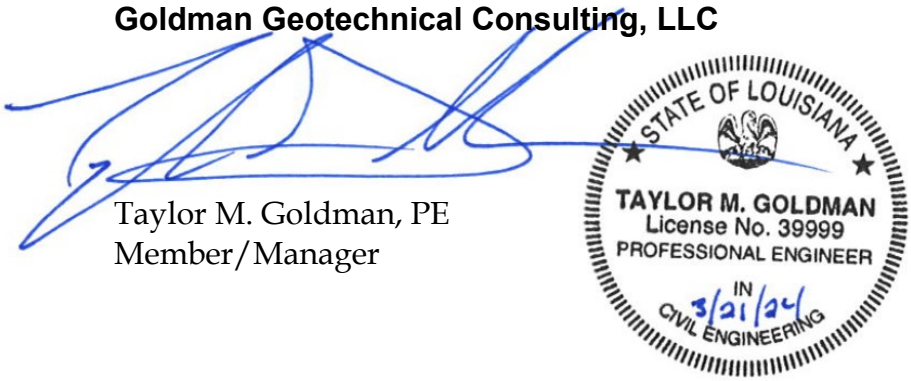
Dear Mr. Kent:

This office is pleased to transmit our geotechnical engineering services report for the above referenced project. The attached report presents the results of site investigations, laboratory testing, and engineering analysis and recommendations.

We appreciate the opportunity to provide our services to you and look forward to serving as your geotechnical consultant throughout this project. Please do not hesitate to contact this office if you have any questions regarding the information presented or if we may be of further service.

Sincerely,

Goldman Geotechnical Consulting, LLC



Taylor M. Goldman, PE
Member/Manager

GEOTECHNICAL EXPLORATION
PROPOSED HOMEWOOD SUITES
WEST MONROE, LOUISIANA

PROJECT DESCRIPTION

This report presents the results of the geotechnical exploration performed for the proposed Homewood Suites hotel on the eastern side of Blanchard Street in West Monroe, Louisiana. There is currently a two (2) story motel structure with associated pavement areas. It is the understanding of this office that the existing structure and pavement will be demolished and removed to allow for all new construction. The general areas of the subsurface investigation relative to the existing conditions are indicated on the attached Boring Location Diagram. The proposed construction is anticipated to consist of a multi-story hotel along with associated access drives and parking areas.

The proposed structure is anticipated to be a four (4) story hotel structure comprised of wood frame, concrete slab on grade, and possibly masonry veneer and stucco for the exterior walls. There may also be some CMU interior walls. Anticipated wall loads will be on the order of three (3) kips per linear foot with possible maximum isolated column loads on the order of seventy-five (75) kips. The new hotel location is anticipated to be shifted west of that of the existing motel structure. It is unknown whether the proposed pavements will be rigid or flexible. Finish floor elevations of the structures and final pavement subgrades are anticipated to be established near that

of the existing at the time of the field operations, likely requiring minor fill placement following demolition efforts.

GENERAL

The study was authorized by Global Laboratories on February 27, 2024. The purpose of the investigation was to evaluate the general subsurface conditions and develop recommendations for the design of the foundation system(s) of the proposed hotel structure, pavement sections, and subgrade preparation. The study included drilling sample borings, performing laboratory testing, and engineering analysis of the subsurface conditions. The field and laboratory investigations included in this report have been conducted in accordance with applicable standards and procedures set forth in ASTM Standards.

FIELD OPERATIONS

The subsurface conditions were evaluated by advancing four (4) sample borings on March 5 and 6, 2024. The approximate locations of the borings relative to the existing conditions are indicated on the attached Boring Location Diagram. The number and depth of the borings performed were selected based on the contractor recommendations and based on the anticipated construction. The boring locations were recommended by the contractor and staked in the field by representatives of Goldman Geotechnical Consulting, LLC. Descriptive terms and symbols used on the boring logs are in accordance with the Unified Soil Classification System. Surface elevations at the borehole locations were not supplied prior to field operations.

A truck mounted auger drill rig was used to advance the test borings. Intermittent undisturbed samples were obtained in the following manner. Standard penetration tests were performed in accordance with ASTM procedures. This test is conducted by recording the number of blows required for a one hundred forty (140) pound hammer falling thirty (30) inches to drive a split spoon sampler eighteen (18) inches into the substrata. Depths at which split spoon samples were taken are indicated by two (2) crossed lines in the “Samples” column on the Log of Boring. The number of blows required to drive the sampler for each 6-inch increment were recorded. The penetration resistance is the number of blows required to drive the split spoon sampler the final twelve (12) inches of penetration. Information related to the penetration resistance is presented under the “Field Data” head of the Log of Boring. All samples were extruded in the field, sealed to maintain in-situ conditions, and packaged for transport to the laboratory for additional testing.

Water observations were recorded during the drilling operations and again in the open boreholes upon completion of the field services to evaluate groundwater conditions. All borings were backfilled at completion of the field operations.

LABORATORY TESTING

Upon return to the laboratory all samples were visually logged in accordance with the Unified Soils Classification System. Selected samples were subjected to standard laboratory tests under the supervision of a Geotechnical Engineer to verify classification and to determine pertinent engineering properties of the substrata. The

results of laboratory testing and soil classifications are tabulated on the attached Logs of Boring. Samples obtained during our field studies and not consumed by laboratory testing procedures will be retained for a period of thirty (30) days. Arrangements for storage beyond that period must be made in writing to this office.

SUBSURFACE CONDITIONS

The pavement encountered in borings B-1 and B-2 is comprised of approximately two (2) inches of asphaltic concrete over approximately six (6) to eight (8) inches of Portland cement concrete. The subsurface stratigraphy of the site is comprised of four (4) generalized strata. The initial stratum encountered in borings B-1, B-3, and B-4 is comprised of gray and tan very loose silty, clayey sand and medium stiff to hard lean clay with variable sand fraction to approximately two (2) to three (3) feet depth. The clayey sand and lean clay soils exhibit low plasticity, very low to moderately high shear strength, and very high to low compressibility. The initial stratum in boring B-2 and the stratum underlying the initial stratum in the other borings is comprised of loose to medium dense gray, tan, brown, and reddish tan silty sand and sand with silt to approximately nine (9) to eighteen (18) feet depth. The sand soils exhibit no plasticity. The sand stratum in borings B-1 and B-3 is underlain by stiff to very stiff tan, gray, and dark gray lean clay to approximately thirteen (13) to twenty-three (23) feet depth. The lean clay exhibits low plasticity, moderate shear strength, and moderate compressibility. The lower stratum encountered in all borings to the forty (40) and thirty (30) feet termination depths is comprised of stiff to hard dark gray and tan fat clay and lean-to-fat clay. The fat clay and lean-to-fat clay soils exhibit

moderately high plasticity, moderate to high shear strength, and moderate to low compressibility. The fat clay soils are classified as moderately volumetrically unstable, possessing moderate susceptibility to shrink and swell with variations in moisture content.

The subsurface description provided in this section is of a generalized nature to highlight the major stratification features and material characteristics. For a detailed description of the subsoil, refer to the soil profiles located on the attached Logs of Boring.

Subsurface water was encountered in all the borings at depths ranging between approximately two (2) and five (5) feet during drilling operations. The water levels were measured and recorded at depths ranging between four (4) and five (5) feet upon completion of field operations. The borehole walls appeared to collapse at depths between nine (9) and twelve (12) feet upon completion; however, it seems that the sand stratum was likely falling in from above due to the non-plastic nature and groundwater elevation. Based on site topography, subsurface stratigraphy, and anticipated construction techniques required for this project, groundwater is not anticipated to present any significant problems during the construction phase of the project. However, the depth of perched water and shallow groundwater is influenced by seasonal moisture variations. Consequently, the depth to shallow subsurface water should be verified prior to the start of construction of the project.

SEISMIC DESIGN CONSIDERATIONS

The International Building Code, 2021 edition requires the design of structures must consider dynamic forces resulting from seismic events. These forces are dependent upon the magnitude of the earthquake event as well as the properties of the soils that underlie the site. As part of the procedure to evaluate seismic forces, the code requires the evaluation of the Seismic Site Class, which categorizes the site based upon the characteristic of the subsurface profile within the upper 100 feet of the ground surface. To define the Site Class for this project, we have interpreted the results of the test borings drilled within the project site and estimated appropriate soil properties below the base of the borings to a depth of 100 feet as permitted by the code. The estimated soil properties were based upon our experience with subsurface conditions in the general site area. Based upon this evaluation, the subsurface conditions within the site are consistent with the characteristics of a Site Class “D” (stiff soil profile) as defined in Table 1613.5.2 of the building code.

ANALYSIS AND RECOMMENDATIONS

Based on anticipated structural loading and results of the subsurface investigation, it is recommended that the structural loads be supported by a deep foundation system. However, due to the shallow groundwater elevation and the sand stratum apparently flowing into the boreholes, the typical deep foundation system of drilled and cast-in-place concrete piers do not seem feasible. Consequently, helical foundation piers are provided as a plausible foundation option, especially for lighter loads. Helical piers can be relatively easily installed even with limited access, and the amount of spoils

produced during the installation process should be minimal. Additionally, the presence of shallow groundwater is not a limitation concerning the installation of the piers, and the helical piers can easily be installed in the soil types encountered during subsurface investigation.

The helical pier foundation system should be designed by a professional engineer experienced in helical pier design and installed by an experienced contractor. Helical piers manufactured from galvanized steel should be utilized to prevent corrosion. With helical pier foundations elements, lateral resistance is generally achieved through depth and multiple piers. Alternatively, greater lateral and/or uplift resistance, as well as vertical load resistance, may be provided by utilizing grout around each pile or by installing battered piles. The design depths shall be provided by the design professional to achieve the necessary load resistance capabilities. We recommend that a load test be performed on helical piers of equivalent size and embedment as the designed production element to verify or determine the single pile load capacity.

Alternatively, if helical foundation piers do not provide the necessary vertical or lateral support, especially in areas of large, concentrated loads, it is the opinion of this office that augered and cast-in-place (ACIP) piles are a feasible option for these proposed structural loads. The ACIP piles may be installed through all the soil conditions encountered and regardless of the presence of the relatively shallow groundwater. Based upon evaluation of the subsurface stratigraphy and a factor of safety on the

order of two (2), estimates of allowable working capacities for various diameter and length ACIP piles are provided in the following table.

ACIP Pile Diameter (in)	Length (feet)	Allowable Compressive Load (kips)	Uplift Resistance (kips)
14	15	16	13
	20	25	21
	25	35	29
	30	45	37
16	15	18	15
	20	29	24
	25	40	33
	30	52	42
18	15	21	16
	20	33	27
	25	46	37
	30	59	47
24	15	30	21
	20	46	35
	25	64	49
	30	83	63

ACIP piles shall be installed by a hollow stem continuous flight auger of a nominal diameter equal to that of the selected pile. Upon reaching the desired depth the grout shall be pumped through the hollow stem of the auger discharging through the bit into the borehole. The grout should be pumped with a pump capable of developing displacement pressures at the pump of a minimum of 400 psi. The rate of auger withdrawal from the boring shall be such a minimum of 200 psi grout pressure is maintained throughout the grouting procedure. The volume of grout shall be

monitored for each five (5) feet of withdrawal. The total volume of grout actually used should be a minimum of twenty-five (25) percent greater than the theoretical grout volume.

Once the design pile type and length have been selected, a minimum of one (1) test pile should be installed and loaded to verify the single pile load capacity. The test pile must be installed with similar equipment and methodology utilized to install the production piles (i.e., grout volume, pump pressure, etc.). Allow a minimum of fourteen (14) days after installation for curing of the grout prior to testing. The results of the test pile program will be evaluated for determination of the single pile load capacity. Pile group capacity may be assumed to be the sum of properly installed individual piles, provided a minimum pile to pile spacing is maintained. For this site, the minimum recommended pile spacing is three (3) pile diameters, or three (3) feet, whichever is greater.

An accurate ACIP pile installation record of all foundation piles should be maintained by experienced personnel. All piles should be installed to the same approximate tip elevation for each structure to minimize potential of differential settlement. Total settlement potential of professionally installed piers or piles is estimated to be less than one half (0.5) inch.

Based on the anticipated site grading and site preparation efforts, it is recommended that a uniform thickness of select fill be placed beneath the top of subgrade elevation

to minimize the potential for differential movement beneath the slab(s). For deep foundation systems, it is recommended that the uniform thickness of select fill across the building pad area be a minimum of eighteen (18) inches. The recommended select fill material possesses a low susceptibility to shrink and swell with variations in moisture content. Subsequently, the slab(s), whether it be conventionally reinforced or reinforced with post-tension cables, for the proposed structure can be placed directly on the properly prepared select fill material. Slabs, which are placed at grade, should be stiffened and reinforced to tolerate potential differential movements between the periphery and the interior portions of the slabs associated with consolidation of select fill material or isolated undiscovered soft strata.

Prior to placement of any select fill the subgrade should be prepared as specified in the Site Preparation section of this report. Care should be taken to shape the site such that water does not pond around the structure during construction. When the structure is complete, the ground surface should slope away from the structure and all roof runoff should be collected in a gutter system and piped away from the structure, preferably onto paved areas or into subsurface drainage systems before discharging.

SITE PREPARATION

Site preparation should begin with the razing of the existing structure and the stripping of the existing pavement and any organic laden soils. A minimum stripping depth on the order of eight (8) to ten (10) inches is anticipated across the site. However, it may

be possible that multiple localized excavations are required across the site due to the removal of any foreign debris and/or due to any undiscovered soft strata. The removal of existing concrete pavement may reveal surficial soils more saturated than indicated in soil borings. The existing concrete generally prevents or restricts moisture accumulated in the upper soils from the possible rise of groundwater tables through capillary rise and thermal action to exit the soils and can accumulate over time. Once all deleterious matter has been removed, provide drainage of the exposed subgrade by sloping grades and ditching.

Following stripping and cutting and prior to any fill placement, the exposed surface of areas to receive fill material or directly support pavement elements should be scarified to a minimum of twelve (12) inches and compacted to a minimum of ninety-five (95) percent of the maximum dry density determined by ASTM D-698. The moisture content of the in-situ soils should be adjusted and maintained between two (2) percent below and two (2) percent above optimum. Succeeding moisture and density conditioning, the subgrade should be proof-rolled with a loaded tandem-wheel dump truck or equivalent equipment. Proof-rolling should be observed by a representative of the qualified construction materials testing laboratory to verify stable subgrade conditions. All soft or loose soils encountered within the construction area should be undercut, stabilized, processed, and recompacted or excavated and replaced with select fill, whichever is appropriate.

Place select fill in thin, essentially horizontal layers not exceeding eight (8) inches in loose thickness and compact to a minimum of ninety-five (95) percent of the maximum density established by ASTM D-698 and moisture content adjusted and maintained to within two (2) percent below to three (3) percent above optimum moisture. All select fill should be sandy clay or clayey sand possessing a liquid limit no greater than thirty-five (35), a plasticity index ranging between five (5) and eighteen (18), and not greater than sixty-five (65) percent passing the No. 200 mesh sieve. Soils possessing a plasticity index less than five (5) or a percent passing the No. 200 sieve greater than sixty-five (65) shall not be utilized as structural fill at this site without prior approval by the design professional. It should be noted that in-situ materials that are to be excavated and meet the provided criteria for select fill material may be stockpiled on-site segregated from other materials to be wasted and may be utilized as select fill material on-site.

PAVEMENT SECTIONS

The pavement section(s) for this project are based on the anticipated traffic volumes, the anticipated site grading, and the in-situ soils encountered during this subsurface investigation. It is anticipated that pavement subgrade will consist of either in-situ clayey sand, sand with silt, sandy lean clay, or select fill material. The select fill material, as described in the Site Preparation section of this report, and the in-situ soils anticipated to be encountered at the top of the pavement subgrade elevation possess Unified Soil Classifications of SC-SM, SP-SM, CL-ML, CL, and/or SC and should yield a CBR value on the order of five (5) and a corresponding modulus of

subgrade reaction (k) of 115 pci if properly prepared. The select fill material and subgrade preparation should extend a minimum of twelve (12) inches beyond the edge of the pavement, where possible. It should be noted that due to the variable in-situ soils that are anticipated to be encountered at the pavement subgrade elevation, it may be advantageous to cut the entire pavement area as such to place a minimum of twelve (12) inches of select fill material to minimize the potential for differential movement.

It is strongly recommended that rigid pavement sections be given the highest priority for this site. For the benefit of comparing the first costs of construction, alternative flexible pavement sections have been provided. However, it is entirely likely that Portland cement concrete sections will cost less over the life of the pavement than equivalent asphaltic concrete sections. The following rigid pavement sections are provided for this project:

Automobile Parking and Access Drive Areas

6 inches Portland Cement Concrete
over
12 inches Density Controlled In-Situ Subgrade and/or Select Fill Material

Channelized Heavy Truck Traffic

8 inches Portland Cement Concrete
over
4 inches of Density Controlled Aggregate Base
over
12 inches Density Controlled In-Situ Subgrade and/or Select Fill Material

Portland cement concrete, with air entrainment admixture, should possess a minimum compressive strength of 3500 pounds per square inch at twenty-eight (28) days and should have weakened planes installed at **maximum** spacing of fifteen (15) feet.

The following flexible pavement sections are provided for this project under the circumstances that the subgrade soils will be prepared as previously discussed in beginning of this section of the report:

Automobile Parking and Access Drive Areas

2 inches Hot Mixed Asphaltic Concrete
over
6 inches Aggregate Base Material
over
12 inches Density Controlled In-Situ Subgrade and/or Select Fill Material

Channelized Heavy Truck Traffic

4 inches Hot Mixed Asphaltic Concrete
over
8 inches Aggregate Base Material
over
12 inches Density Controlled In-Situ Subgrade and/or Select Fill Material

Hot Mixed Asphaltic Concrete shall consist of Asphaltic concrete as defined by section 502 of The Louisiana Standard of Specifications for Roads and Bridges issued by the Louisiana Department of Transportation and Development. For

thickness requirements greater than two (2) inches, the total section may consist of a minimum of two (2) inches of wearing course over the remaining thickness of base course asphaltic concrete.

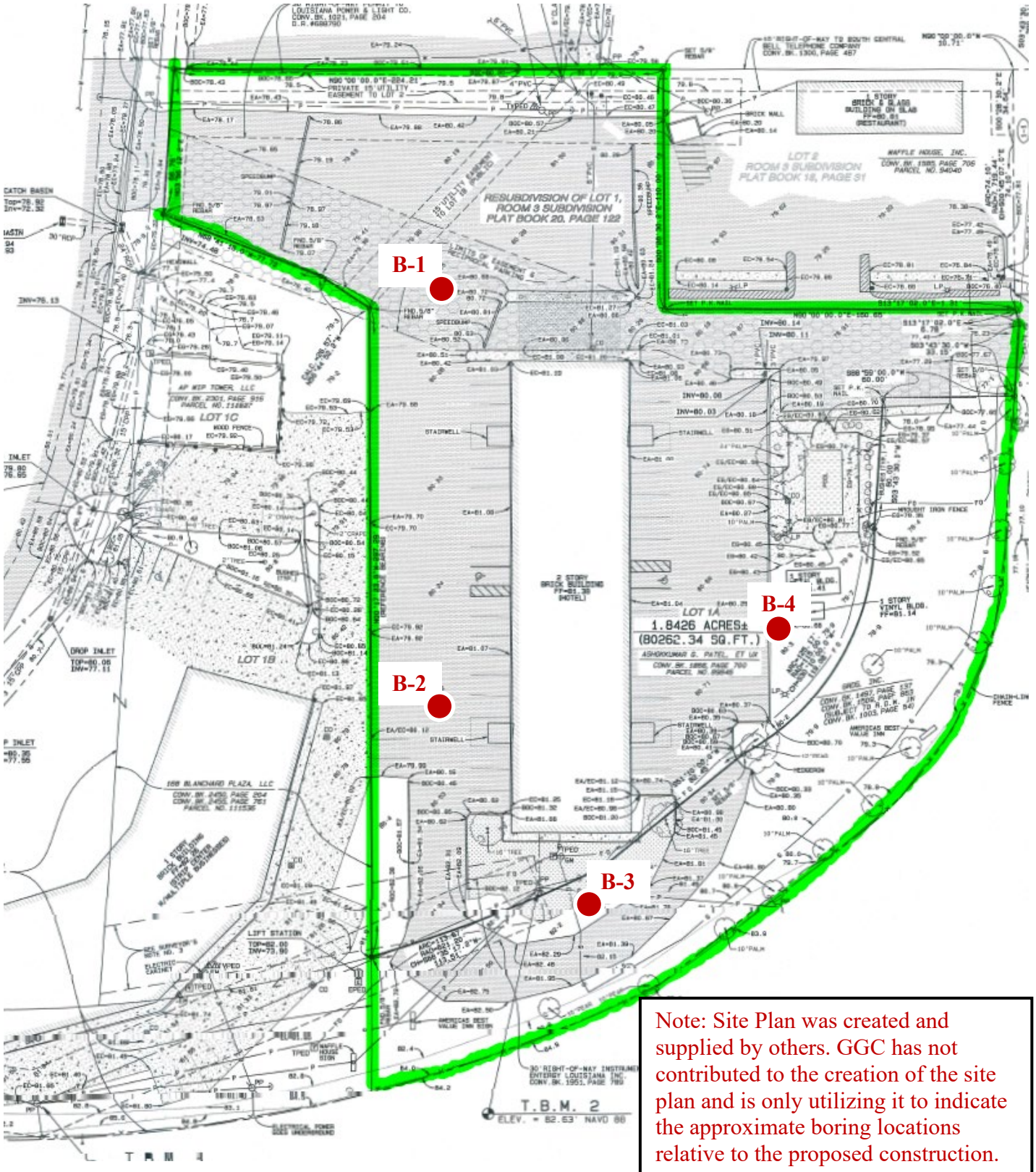
LIMITATIONS

The analysis and recommendations presented in this report are based upon the data obtained from the boring performed at the indicated location and from any other information discussed in the report. This report does not reflect any variations, which may occur across the site. The nature and extent of such variations may not become evident until construction. If variations appear evident it will be necessary to reevaluate the recommendations of this report.

It is recommended the Geotechnical Engineer be given the opportunity to review the plans and specifications so comments can be made regarding the interpretation and implementation of our geotechnical recommendations in the design and specifications. Sound engineering judgement must be followed when applying the recommendations to designs, plans, and during the construction monitoring.

This report has been prepared for the exclusive use of our client for specific applications to the project discussed and has been prepared in accordance with generally accepted geotechnical engineering practices. No warranties, either expressed or implied, are intended or made. In the event any changes in the nature, design, or location of the project as outlined in this report are planned, the conclusions

and recommendations contained in this report shall not be considered valid unless the changes are reviewed, and the conclusions of this report are verified in writing by the Geotechnical Engineer.



Note: Site Plan was created and supplied by others. GGC has not contributed to the creation of the site plan and is only utilizing it to indicate the approximate boring locations relative to the proposed construction.

GOLDMAN GEOTECHNICAL CONSULTING LLC

BORING LOCATION DIAGRAM
PROPOSED HOMEWOOD SUITES
WEST MONROE, LOUISIANA

March 19, 2024

Project: G24-02-029

LOG OF BORING B-1

Goldman Geotechnical Consulting, LLC
3841 Industrial Circle, Suite 100
Bossier City, Louisiana 71112
Telephone: (318) 459-6696

CLIENT: Global Laboratories
PROJECT: Proposed Homewood Suites
LOCATION: West Monroe, Louisiana
NUMBER: G24-02-029
DATE(S) DRILLED: 3/5/24

DRILLING METHOD(S):
Continuous Flight Auger

GROUNDWATER INFORMATION:
Groundwater encountered at 3 ft during drilling operations.
Water level recorded at 4 ft upon completion.
Borehole walls collapsed at 10 ft.

SURFACE ELEVATION: Unknown

SOIL SYMBOL	DEPTH (FT)	SAMPLES	N: BLOWS/FT P: TONS/SQ FT T: BLOWS R: % RQD: %	MOISTURE CONTENT (%)	ATTERBERG LIMITS LIQUID LIMIT LL	ATTERBERG LIMITS PLASTIC LIMIT PL	ATTERBERG LIMITS PLASTICITY INDEX PI	DRY DENSITY POUNDS/CU.FT	COMPRESSIVE STRENGTH (TONS/SQ FT)	FAILURE STRAIN (%)	CONFINING PRESSURE (POUNDS/SQ IN)	MINUS NO. 200 SIEVE (%)	DESCRIPTION OF STRATUM
													2" Asphaltic concrete
			N = 2@18"	16	20	13	7					48	8" Portland cement concrete Very loose gray silty, clayey sand (SC-SM)
			N = 5	17									Firm gray and tan silty sand (SM)g with gravel
	5		N = 9	18	NP	NP	NP					16	
			N = 10	18	35	18	17						Stiff tan and gray lean clay (CL)
	10												
			N = 30	34								96	Hard dark gray fat clay (CH)
	15												
			N = 25	33	54	35	19						-- Very stiff below 18 ft
	20												
			N = 19	36	62	38	24						
	25												
			N = 25	45	58	36	22						
	30												
			N = 18	33								69	Very stiff dark gray and tan sandy fat clay s(CH)
	35												
			N = 20	43	52	34	18						
	40												Boring Terminated 40 ft

N - STANDARD PENETRATION TEST RESISTANCE
P - POCKET PENETROMETER RESISTANCE
T - TXDOT CONE PENETRATION RESISTANCE
R - ROCK CORE RECOVERY
RQD - ROCK QUALITY DESIGNATION

REMARKS:

LOG A GNNL01 - LOG A GNNL01.GDT - 3/20/24 13:43 - C:\USERS\TGOLD\ONEDRIVE\DESKTOP\GGC REPORTS\GINT\G24-02-029 HOMEWOOD SUITES - WEST MONROE, LA.GPJ

LOG OF BORING B-2

Goldman Geotechnical Consulting, LLC
3841 Industrial Circle, Suite 100
Bossier City, Louisiana 71112
Telephone: (318) 459-6696

CLIENT: Global Laboratories
PROJECT: Proposed Homewood Suites
LOCATION: West Monroe, Louisiana
NUMBER: G24-02-029
DATE(S) DRILLED: 3/6/24

DRILLING METHOD(S):
Continuous Flight Auger

GROUNDWATER INFORMATION:
Groundwater encountered at 2 ft during drilling operations.
Water level recorded at 4 ft upon completion.
Borehole walls collapsed at 9 ft.

SURFACE ELEVATION: Unknown

SOIL SYMBOL	DEPTH (FT)	SAMPLES	N: BLOWS/FT P: TONS/SQ FT T: BLOWS R: % RQD: %	MOISTURE CONTENT (%)	ATTERBERG LIMITS LIQUID LIMIT LL	ATTERBERG LIMITS PLASTIC LIMIT PL	ATTERBERG LIMITS PLASTICITY INDEX PI	DRY DENSITY POUNDS/CU.FT	COMPRESSIVE STRENGTH (TONS/SQ FT)	FAILURE STRAIN (%)	CONFINING PRESSURE (POUNDS/SQ IN)	MINUS NO. 200 SIEVE (%)	DESCRIPTION OF STRATUM
													2" Asphaltic concrete
													6" Portland cement concrete
			N = 15	15	NP	NP	NP						Firm gray and tan sand with silt (SP-SM)
			N = 3	20	NP	NP	NP					11	-- Loose below 2 ft
	5		N = 3	18	NP	NP	NP						
													-- Firm below 8 ft
	10		N = 9	15	NP	NP	NP					9	
	15		N = 8	38	53	32	21						Stiff dark gray fat clay (CH)
	20		N = 20	34								95	-- Very stiff below 19 ft
	25		N = 20	31	61	38	23						
			N = 26	37	50	31	19						
	30												Boring Terminated 30 ft

N - STANDARD PENETRATION TEST RESISTANCE
P - POCKET PENETROMETER RESISTANCE
T - TXDOT CONE PENETRATION RESISTANCE
R - ROCK CORE RECOVERY
RQD - ROCK QUALITY DESIGNATION

REMARKS:

LOG A GNNL01 - LOG A GNNL01.GDT - 3/20/24 13:43 - C:\USERS\TGOLD\ONEDRIVE\DESKTOP\GGC REPORTS\GINT\G24-02-029 HOMEWOOD SUITES - WEST MONROE, LA.GPJ

LOG OF BORING B-3

Goldman Geotechnical Consulting, LLC
3841 Industrial Circle, Suite 100
Bossier City, Louisiana 71112
Telephone: (318) 459-6696

CLIENT: Global Laboratories
PROJECT: Proposed Homewood Suites
LOCATION: West Monroe, Louisiana
NUMBER: G24-02-029
DATE(S) DRILLED: 3/6/24

DRILLING METHOD(S):
Continuous Flight Auger

GROUNDWATER INFORMATION:
Groundwater encountered at 5 ft during drilling operations.
Water level recorded at 4 ft upon completion.
Borehole walls collapsed at 12 ft.

SURFACE ELEVATION: Unknown

SOIL SYMBOL	DEPTH (FT)	SAMPLES	N: BLOWS/FT P: TONS/SQ FT T: BLOWS R: % RQD: %	MOISTURE CONTENT (%)	ATTERBERG LIMITS LIQUID LIMIT LL	ATTERBERG LIMITS PLASTIC LIMIT PL	ATTERBERG LIMITS PLASTICITY INDEX PI	DRY DENSITY POUNDS/CU.FT	COMPRESSIVE STRENGTH (TONS/SQ FT)	FAILURE STRAIN (%)	CONFINING PRESSURE (POUNDS/SQ IN)	MINUS NO. 200 SIEVE (%)	DESCRIPTION OF STRATUM
			N = 8	15	35	18	17					61	Medium stiff gray and tan sandy lean clay s(CL)
	5		N = 9	16	NP	NP	NP					13	Firm tan and gray silty sand (SM)
			N = 14	17	NP	NP	NP						
	10		N = 8	17	NP	NP	NP						
	15		N = 9	21	NP	NP	NP					8	Firm brown and reddish tan sand with silt (SP-SM)
	20		N = 16	34	44	30	14						Very stiff dark gray lean clay (CL)
	25		N = 35	31									Hard dark gray fat clay (CH)
	30		N = 36	34	62	36	26						
													Boring Terminated 30 ft

N - STANDARD PENETRATION TEST RESISTANCE
P - POCKET PENETROMETER RESISTANCE
T - TXDOT CONE PENETRATION RESISTANCE
R - ROCK CORE RECOVERY
RQD - ROCK QUALITY DESIGNATION

REMARKS:

LOG A GNNL01 - LOG A GNNL01.GDT - 3/20/24 13:43 - C:\USERS\TGOLD\ONEDRIVE\DESKTOP\GGC REPORTS\GINT\G24-02-029 HOMEWOOD SUITES - WEST MONROE, LA.GPJ

LOG OF BORING B-4

Goldman Geotechnical Consulting, LLC
3841 Industrial Circle, Suite 100
Bossier City, Louisiana 71112
Telephone: (318) 459-6696

CLIENT: Global Laboratories
PROJECT: Proposed Homewood Suites
LOCATION: West Monroe, Louisiana
NUMBER: G24-02-029
DATE(S) DRILLED: 3/6/24

DRILLING METHOD(S):
Continuous Flight Auger

GROUNDWATER INFORMATION:
Groundwater encountered at 3 ft during drilling operations.
Water level recorded at 5 ft upon completion.
Borehole walls collapsed at 10 ft.

SURFACE ELEVATION: Unknown

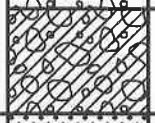
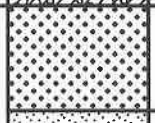
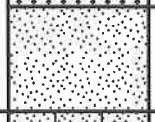
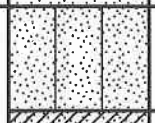
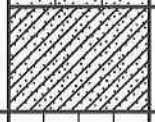
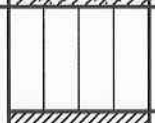
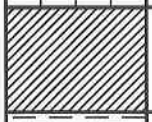
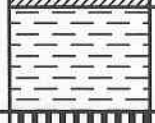
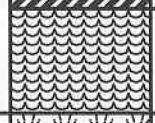
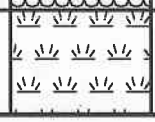
SOIL SYMBOL	DEPTH (FT)	SAMPLES	N: BLOWS/FT P: TONS/SQ FT T: BLOWS R: % RQD: %	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT (LL)	ATTERBERG LIMITS: PLASTIC LIMIT (PL)	ATTERBERG LIMITS: PLASTICITY INDEX (PI)	DRY DENSITY POUNDS/CU.FT	COMPRESSIVE STRENGTH (TONS/SQ FT)	FAILURE STRAIN (%)	CONFINING PRESSURE (POUNDS/SQ IN)	MINUS NO. 200 SIEVE (%)	DESCRIPTION OF STRATUM
			N = 36	13	33	17	16					76	Hard gray and tan lean clay (CL)s with sand
			N = 18	16	NP	NP	NP					34	Medium dense gray silty sand (SM)g with gravel
	5		N = 11	18	NP	NP	NP						Firm gray and tan sand with silt (SP-SM)
			N = 4	20	NP	NP	NP					11	-- Loose below 8 ft
	10												
	15		N = 20	35	49	28	21						Very stiff dark gray lean-to-fat clay (CL-CH)
	20		N = 21	36	52	32	20						
	25		N = 28	37									-- Hard below 27 ft
	30		N = 50@5"	38	55	34	21						Boring Terminated 30 ft

N - STANDARD PENETRATION TEST RESISTANCE
P - POCKET PENETROMETER RESISTANCE
T - TXDOT CONE PENETRATION RESISTANCE
R - ROCK CORE RECOVERY
RQD - ROCK QUALITY DESIGNATION

REMARKS:

LOG A GNNL01 - LOG A GNNL01.GDT - 3/20/24 13:43 - C:\USERS\TGOLD\ONEDRIVE\DESKTOP\GGC REPORTS\GINT\G24-02-029 HOMEWOOD SUITES - WEST MONROE, LA.GPJ

SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS		TYPICAL DESCRIPTIONS
			GRAPH	LETTER	
COARSE GRAINED SOILS MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	GRAVEL AND GRAVELLY SOILS MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
				GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
		GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
				GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
	SAND AND SANDY SOILS MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE	CLEAN SANDS (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
				SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
		SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND - SILT MIXTURES
				SC	CLAYEY SANDS, SAND - CLAY MIXTURES
FINE GRAINED SOILS MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
				CH	INORGANIC CLAYS OF HIGH PLASTICITY
				OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

SECTION 01 11 00 - SUMMARY OF WORK

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Project Description
2. Definitions
3. Quality Assurance
4. Contractor Use of Premises
5. Bidding Classification
6. Contracts
7. Owner Furnished Products
8. Owner Provided Work
9. Allowances

1.02 PROJECT DESCRIPTION

A. Work of this Contract comprises the general construction required for a new HOMEWOOD SUITES by Hilton, in city and state as indicated on the Project Manual cover.

B. The Work includes, but is not limited to site, structural, architectural, plumbing, mechanical, and electrical systems. It also includes installation of furniture, fixtures and equipment (FF&E).

C. The work of this Project is shown on the Drawings and described in the various Sections of the Specification.

D. The Drawings and Specifications are complementary and what is required by any one shall be as binding as if required by all.

E. The Project consists of the following:

1. New construction of a 4 story wood frame hotel consisting of 94 Guest Suites with support functions.
2. All new site improvements including parking, walks, landscaping, on-site utility services and tie-ins.
3. Outdoor gathering space and lawn ammenities.

1.03 DEFINITIONS

A. Furnish: Purchase and deliver to project site, ready for installation.

B. Install: Unpack, assemble, set in final position, fasten in place, make final connections, clean, adjust, and leave ready for use.

C. Provide: Furnish and install.

D. Receive: Accepting a delivery.

E. Final Connections: Complete plumbing, mechanical, and electrical connections as required and recommended by manufacturer for all contractor and/or Owner furnished equipment.

F. Drawings, Use of: Do not scale the Drawings. If the Contractor chooses to calculate measurements by scaling the Drawings, it is at his own risk and is not considered to be an accurate measurement. The Contractor is responsible for the accuracy of measurements, elevations, lines, and grades of the Work.

1.04 QUALITY ASSURANCE

A. It is the intent of the Owner and the Project Manual to conform with the AMERICANS WITH DISABILITIES ACT OF 2010 and all current State/Local adopted Codes and amendments.

1.05 CONTRACTOR USE OF PREMISES

A. General: Contractors shall limit their use of the premises to construction activities in areas indicated.

1. Confine operations to areas within Contract limits indicated. Portions of the site beyond areas in which construction operations are indicated are not to be disturbed.

2. Keep driveways and entrances serving the premises clear and available to the Owner at all times. Do not use these areas for parking or storage of materials. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on site.

B. Contractor shall assume full responsibility for protection and safe keeping of products under this Specification.

1.06 BIDDING CLASSIFICATION

A. This Project shall be performed under the following Prime Contracts:

1. General Contract

1.07 STANDARD FORM OF CONTRACT BETWEEN OWNER AND CONTRACTOR

A. Contract Description: Construct the Work under the Contract as stipulated in the Contract.

1.08 OWNER FURNISHED PRODUCTS

A. Owner's Responsibilities:

1. Arrange for and deliver Owner reviewed Shop Drawings, Product Data, and Samples, to Contractor.

2. Coordinate scheduling of and arrange pay for Owner’s product delivery to site.

3. Submit claims for transportation damage and replace damaged, defective, or deficient items.

4. Arrange for manufacturers' warranties, inspections, and service.

B. Contractor's Responsibilities:

1. Review Owner provided shop drawings, product data, and samples. Provide "takeoff" when requested.

2. Coordinate scheduling, receive and unload products at site; inspect for completeness or damage. Notify shipper and Owner of incomplete and damaged shipments.

3. Handle, store, install and finish products.

4. Repair or replace items damaged after receipt.

C. See listing "Owner Furnished Products/Work to be Provided" in Owner/Contractor Agreement.

1.09 OWNER PROVIDED WORK

A. Owner's Responsibilities:

1. Arrange for shop drawings, product data and samples, if requested by Contractor.

2. Coordinate scheduling of the work.

B. Contractor's Responsibilities:

1. Review Owner reviewed shop drawings, product data, and samples if necessary.

2. Coordinate schedule and provide supervision of the Work as Owner's on-site representative.

3. Provide access, use of utilities, vertical transportation, and trash dumpster.

C. See listing "Owner Furnished Products/Work to be Provided" in Owner-Contractor Agreement.

1.10 ALLOWANCES

A. Allowances include direct costs only. All costs for overhead, home office and site, and profit are included in the Base Bid.

B. See listing "Owner Furnished Products/Work to be Provided" in Owner/Contractor Agreement.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

END OF SECTION

SECTION 01 26 00 - CONTRACT MODIFICATION PROCEDURES

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Contract Modification Procedures:
    a. Submittals
    b. Documentation of Change in Contract Sum and Contract Time
2. Contract Modification Pricing Guidelines
3. Requests for Information and Supplemental Instructions
4. Change of Contract Procedures
5. Allowances
6. Construction Change Directive
7. Change of Contract:
    a. Stipulated price change order
    b. Unit price change order
    c. Time and material change order
    d. Execution of Change of Contract written orders
8. Correlation of Contractor Submittals

B. Related Sections:

1. Agreement: Monetary values of established unit prices and percentage allowances for Contractor's overhead and profit.
2. General Conditions, Article 19: Governing requirements for changes in the Work, in Contract Sum and Contract Time.
3. Section 01 33 00 - Submittals and Substitutions:
   Construction Progress Schedules and miscellaneous submittals.
4. Section 01 60 00 - Material and Equipment: Product options and substitutions.
5. Section 01 77 00 - Contract Closeout: Project Record Documents.

1.02 SUBMITTALS

A. Submit name of the individual authorized to receive change documents and be responsible for informing others in Contractor's employ and Subcontractors of changes to the Work.

B. Change of Contract Forms: Furnished by Owner

1.03 DOCUMENTATION OF CHANGE IN CONTRACT SUM AND CONTRACT TIME

A. Maintain detailed records of work performed on a time and material basis. Provide full information required for evaluation of proposed changes, and to substantiate costs of changes in the Work.

B. Document each quotation for a change in cost or time with sufficient data to allow evaluation of the quotation.

C. On request, provide additional data to support computations:

1. Quantities of products, labor, and equipment.

2. Taxes, insurance, and bonds.
3. Overhead and profit.
4. Justification for change in Contract Time.
5. Credit for deletions from Contract, similarly documented.

D. Support each claim for additional costs, and for work done, with additional information:
1. Origin and date of claim.
2. Dates and times work was performed, and by whom.
3. Time records and wage rates paid.
4. Invoices and receipts for products, equipment, and subcontracts, similarly documented.

1.04 CONTRACT MODIFICATION PRICING GUIDELINES

A. For each change, the Contractor shall furnish a detailed, written proposal itemized according to General Conditions, Article 19.

1.05 REQUESTS FOR INFORMATION AND SUPPLEMENTAL INSTRUCTIONS

A. Definition: **Requests for Information (RFI)** is a formal process used during bidding and during construction to facilitate communication between the Contractor and the Architect with regard to requests for information and clarification of the intent of the Contract Documents.
1. Request for Information form may be used during bidding phase. Refer to Invitation to Bid and Instructions to Bidders.

B. Procedure:
1. Conditions Requiring Clarification of the Contract Documents: Submit a Request for Information to the Architect.
a. Submit Requests for Information from Contractor's office or field office only. Requests for Information submitted directly from subcontractors or suppliers will not be accepted.
b. Generate Requests for Information by one source per project and number accordingly.
c. Submit one request for information per form.
2. The Architect will review formal requests from the Contractor with reasonable promptness and the Contractor will be notified in writing of decisions made, via the RFI form.
a. The Architect's response shall not be considered as a Change Order or Change Directive, nor does it authorize changes in the Contract Sum or Contract Time.
3. Maintain log of Requests for Information sent to, and responses from the Architect.
4. Scheduling, Costing, and Owner Furnished Products/Work Coordination: Direct to the Owner's Representative.

C. RFI Form: Submit requests for information on attached Request for Information form, attached at end of this Section. The Architect will not respond to requests for information unless this format is utilized.
1. Where the submittal form does not provide space needed for complete information, additional sheets may be attached.

1.06 CHANGE PROCEDURES

A. The Architect will advise of minor changes in the Work not involving an adjustment to Contract Sum or Contract Time as authorized by the Owner/Architect Agreement, and by issuing supplemental instructions on RFI form attached.

B. The Architect may issue a Proposal Request, Notice of Change which includes a detailed description of a proposed change with supplementary or revised Drawings and specifications. Contractor will prepare and submit an estimate within 10 days.

C. The Contractor may propose a change by submitting a request for change to the Owner's Representative, describing the proposed change and its full effect on the Work, with a statement describing the reason for the change, and the effect on the Contract Sum and Contract Time with full documentation and a statement describing the effect on Work by separate or other contractors. Document requested substitutions in accordance with Section 01 33 00.

1.07 ALLOWANCES

A. Allowance Adjustment: For allowance-cost adjustment, base each Change of Contract Proposal on the difference between the actual purchase amount and the allowance, multiplied by the final measurement of work-in-place. Where applicable, include reasonable allowances for cutting losses, tolerances, mixing wastes, normal product imperfections, and similar margins.

1. Include installation costs in the purchase amount only where indicated as part of the allowance.

2. When requested, prepare explanations and documentation to substantiate the margins claimed.

3. The Owner reserves the right to establish the actual quantity of work-in-place by independent quantity survey, measure, or count.

B. Submit claims for increased costs because of a change in scope or nature of the allowance described in the Contract Documents, whether for the purchase order amount or the Contractor's handling, labor, installation, overhead, and profit. Submit claims within 21 days of receipt of the Change of Contract authorizing work to proceed. The Owner will reject claims submitted later than 21 days.

1. Do not include the Contractor's or Subcontractor's indirect expense in the Change of Contract cost amount unless it is clearly shown that the nature or extent of work has changed from what could have been foreseen from information in Contract Documents.

2. No change to the Contractor's indirect expense is permitted for selection of higher or lower-priced materials or systems of the same scope and nature as originally indicated.

1.08 CORRELATION OF CONTRACTOR SUBMITTALS

A. Promptly revise Schedule of Values and Application for Payment forms to record each authorized Change of Contract as a separate line item and adjust the Contract Sum.

B. Promptly revise progress schedules to reflect any change in Contract Time, revise sub-schedules to adjust times for other items of work affected by the change, and resubmit.

C. Promptly enter changes in Project Record Documents.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

CONTRACTOR'S REQUEST FOR INFORMATION - RFI AND ARCHITECT'S SUPPLEMENTAL INSTRUCTIONS

Date	# of Pages
To	From
Co.	Co.
Phone #	Phone #
Fax #	Fax #

Project: _____ **RFI No.:** _____

Owner: _____ **Date of Request:** _____

To: _____ **Contractor:** _____

(Architect's Representative)

Project No.: _____ **Contractor's Representative:** _____

Architect's Fax No.: _____

Fax No.:

Information Requested:
(Re: Specification Section/Drawing/Detail Number)

Requested by:

Architect's Supplemental Instructions:

Attachments:

Reply By:

The Work shall be carried out in accordance with these supplemental instructions issued in accordance with the Contract Documents without change in Contract Sum or Contract Time. Prior to proceeding with these instructions, indicate acceptance of these instructions below as consistent with the Contract Documents and return a copy to the Architect.

Supplemental Instructions Issued:

By: _____
Architect

Date

Supplemental Instructions Accepted:

By: _____
Contractor

Date

Cc: ☐ **Owner** ☐ **Architect** ☐ **Consultant** ☐ **Contractor** ☐ **Field** ☐ **Other:**

END OF SECTION

SECTION 01 33 00 - SUBMITTAL AND SUBSTITUTION PROCEDURES

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Wherever possible throughout the Contract Documents, the minimum acceptable quality of workmanship and materials has been defined either by manufacturer's name and catalog number or reference to recognized industry standards.

2. To ensure that the specified products are furnished and installed in accordance with the design intent, procedures have been established for advance submittal of design data for its review and approval or rejection by the Architect.

3. This Section specifies administrative and procedural requirements for submittals required for performance of the work, including:

a. Contractor's Progress Schedule

b. Shop Drawings, Product Data, and Samples

c. Letters of Conformance

d. Certificates

e. Manufacturer Installation Instructions

4. Substitution Procedures

5. Manuals

6. Miscellaneous Submittals

B. Related Documents:

1. Letter of Conformance Form

2. Contractor’s Substitution Request Form

C. Related Sections:

1. Contractual Requirements for Submittals: General Conditions

a. Two (2) copies of all Submittals, plus number of copies to be returned to Contractor, shall be submitted unless otherwise specified.

b. Provide additional copies as required for use in Project Record Documents.

2. Section 01 77 00 - Contract Closeout

3. Individual Submittals Required: Pertinent Sections of these Specifications.

1.02 SUBMITTALS

A. Coordination: Coordinate preparation and processing of Submittals with performance of construction activities. Transmit each Submittal sufficiently in advance of performance of related construction activities to avoid delay.

1. Refer to General Conditions for additional requirements.

2. Coordinate each Submittal with fabrication, purchasing, testing, delivery, other Submittals and related activities that require sequential activity.

3. Coordinate transmittal of different types of Submittals for related elements of the work so processing will not be delayed by the need to review Submittals concurrently for coordination.

    a. The Architect reserves the right to withhold action on a Submittal requiring coordination with other Submittals until related Submittals are received.

    b. No extension of Contract Time will be authorized because of failure to transmit Submittals to the Owner's Representative sufficiently in advance of the work to permit processing.

B. Deliver Submittals to the Architect.

C. Submittal Preparation: Place a permanent label or title block on each Submittal for identification. Indicate the name of the entity that prepared each Submittal on the label or title block.

1. Provide a space approximately 10" x 10" on the label or beside the title block on Shop Drawings to record the Contractor's and Architect review and approval markings and the action taken.

2. Include the following information on the label for processing and recording action taken:

    a. Project Name

    b. Name of the Owner

    c. Date

    d. Name and Address of Architect

    e. Name and Address of Contractor

    f. Name and Address of Subcontractor or Vendor

    g. Location Where Item is to be Used

    h. Name of Manufacturer

    i. Drawing Number and Detail References, as Appropriate

    j. Certification by the Contractor

D. Submittal Transmittal: Package each Submittal appropriately for transmittal and handling. Transmit each Submittal from Contractor to Architect. Submittals received from sources other than the Contractor will be returned without action.

1. Transmit each submittal to the Architect with "AIA Document G810 - Transmittal Letter" and "Letter of Conformance".

2. Sequentially number the transmittal form. Revise submittals with original number and a sequential alphabetic suffix.

3. Identify Project, Contractor, Subcontractor or supplier, pertinent drawing and detail number, and specification section number, as appropriate.

4. On the transmittal, record relevant information and requests for data. On the form, or separate sheet, record deviations from Contract Document requirements, including minor variations and limitations. Include Contractor's certification that information complies with Contract Document requirements.

5. After Architect review of Submittal, revise and resubmit as required, identifying changes made since previous Submittal.

6. When re-submittal is required for any reason, transmit under new letter of transmittal, indicating by reference to a previous Submittal that this is a re-submittal.
    a. Identify on submittal all changes made since previous submission.
7. Distribute copies of reviewed Submittals to concerned persons. Instruct recipients to promptly report any inability to comply with provisions.
8. All Submittals shall bear the stamp of approval of the Contractor submitting same as evidence that they have been checked by him, or they will be rejected.
    a. Must be signed or initialed certifying that review, verification of Products required, field dimensions, adjacent construction Work, and coordination of information, is in accordance with the requirements of the Work and Contract Documents.
9. Schedule submittals to expedite the Project and deliver to Architect. Coordinate submission of related items. Instruct parties to promptly report any inability to comply with provisions.

1.03 NOT USED

1.04 PROGRESS SCHEDULES

A. Submit initial Construction Progress Schedule in duplicate within **14** days after date of Owner-Contractor Contract. Submit in the form required by the General Conditions of the Contract.

B. Revise and resubmit as required.

C. Submit revised schedules with each Application for Payment, identifying changes since previous version.

1.05 LETTERS OF CONFORMANCE

A. Letter of Conformance: Short-form informational submittals which are to be used instead of shop drawings, product data and samples. They are also to be used to supplement shop drawings, product data and samples. A sample "Letter of Conformance" is located at the end of this Section. Use copies of this form for each submittal unless a more specific Letter of Conformance is located at the end of a particular Specification Section.

B. Within 30 days after date of Owner-Contractor Agreement, submit all Letters of Conformance indicating Contractor's selections for products proposed for use, with name of manufacturer, trade name, and model number of each product. For products specified only by reference standards, give manufacturer, trade name, model or catalog designation, and reference standards.

C. Procedure:

1. Submit the number of copies which the Contractor requires, plus two copies which will be retained by the Architect.
2. Submit completed Letter of Conformance for products selected as indicated within each Section.
3. Fill-in required information on form and sign in ink by person authorized to sign on behalf of the Contractor.
4. Clearly identify applicable products, characteristics, models, and options. Attach supplemental information including product data to each Letter of Conformance as necessary to communicate all information specific to the product.
5. No modifications to form permitted.
6. Letters of Conformance are not to be used for substitution requests.

D. By submitting a Letter of Conformance, Contractor declares that the product identified by manufacturer's name and model number:

1. Is one of the product(s) specified
2. Is suitable for the intended use as defined within the Contract Documents, and
3. Will be provided and placed in operational condition in accordance with the Contract Documents and manufacturer's published instructions.

1.06 SHOP DRAWINGS

A. Where Shop Drawings are required, submit newly prepared information drawn to accurate scale. Highlight, encircle, or otherwise indicate deviations from the Contract Documents. Do not reproduce Contract Documents or copy standard information as the basis of Shop Drawings. Standard information prepared without specific reference to the Project is not considered Shop Drawings.

B. Shop Drawings shall be drawn at a scale to clearly indicate all of the above conditions and allow for corrections or modifications which the Architect may wish to make. The Architect shall be the sole judge as to the acceptability of manufacturer's literature and catalog sheets as Shop Drawings.

C. Shop Drawings shall clearly indicate all dimensional data for all parts of the item; types and materials for all connections; finishes; the exact relation of the item to adjacent materials and equipment in the completed structure including clearance, any necessary isolation, and fastening methods and devices; and mechanical and electrical connections.

D. Shop Drawings include fabrication and installation Drawings, setting diagrams, schedules, patterns, templates, and similar Drawings. Include the following information:

1. Dimensions
2. Identification of Products and Materials Included
3. Compliance with Specified Standards
4. Notation of Coordination Requirements
5. Notation of Dimensions Established by Field Measurement

E. Sheet Size: Except for templates, patterns, and similar full-size Drawings, submit Shop Drawings on sheets at least 8-1/2" x 11", but no larger than 36" x 48".

F. Submit in the form of one reproducible transparency and one opaque reproduction, or three opaque reproductions plus required amount to be returned to Contractor. After review, reproduce and distribute to appropriate parties.

G. Do not permit Shop Drawing copies, without an appropriate final "Action" marking by the Architect, to be used in connection with the work.

H. The Contractors shall be responsible for distribution of additional prints to vendors, etc.

1.07 PRODUCT DATA

A. Where Product Data is required, collect Product Data into a single submittal for each element of construction or system. Product Data includes printed information such as manufacturer's installation instructions, catalog cuts, standard color charts, roughing-in diagrams and templates, standard wiring diagrams and performance curves. Where Product Data must be specially prepared because standard printed data is not suitable for use, submit as "Shop Drawings."

1. Mark each copy to show applicable choices and options. Where printed Product Data includes information on several products, some of which are not required, mark copies to indicate the applicable information. Include the following information:
    a. Manufacturer's Printed Recommendations
    b. Compliance with Recognized Trade Association Standards
    c. Compliance with Recognized Testing Agency Standards
    d. Application of Testing Agency Labels and Seals
    e. Notation of Dimensions Verified by Field Measurement
    f. Notation of Coordination Requirements
    g. Type and Model Numbers
2. Do not submit Product Data until compliance with requirements of the Contract Documents has been confirmed.

B. Distribution: Furnish copies of final Submittal to installers, subcontractors, suppliers, manufacturers, fabricators, and others required for performance of construction activities. Show distribution on transmittal forms.
1. Do not proceed with installation until a copy of Product Data applicable is in the installer's possession.
2. Do not permit use of unmarked copies of Product Data in connection with construction.

1.08 SAMPLES

A. Where Samples are required, submit full-size, fully fabricated Samples cured and finished as specified and physically identical with the material or product proposed. Samples include partial sections of manufactured or fabricated components, cuts or containers of materials, full color-range sets, and swatches showing color, texture, and pattern.
1. Mount, display, or package Samples in the manner specified to facilitate review of qualities indicated. Include the following:
    a. Generic Description of the Sample
    b. Sample Source
    c. Product Name or Name of Manufacturer
    d. Compliance with Recognized Standards
    e. Availability and Delivery Time
2. Colors:
    a. General: Unless the precise color and pattern is specifically described in the Contract Documents, whenever a choice of color or pattern is available in a specified product, submit accurate color charts and pattern charts to the Architect for his review and selection.
3. Submit Samples for review of kind, color, pattern, and texture for a final check of these characteristics with other elements and for a comparison of these characteristics between the final Submittal and the actual component as delivered and installed.
    a. Where variation in color, pattern, texture, or other characteristics are inherent in the material or product represented, submit multiple units (not less than 3) that show approximate limits of the variations.

b. Refer to other Specification Sections for requirements for Samples that illustrate workmanship, fabrication techniques, details of assembly, connections, operation, and similar construction characteristics.

c. Refer to other Sections for Samples to be returned to the Contractor for incorporation in the work. Such Samples must be undamaged at time of use. On the transmittal, indicate special requests regarding disposition of Sample Submittals.

4. Preliminary Submittals: Where Samples are for selection of color, pattern, texture, or similar characteristics from a range of standard choices, submit a full set of choices for the material or product.

a. Preliminary Submittals will be reviewed and returned with the Architect's mark indicating selection and other action.

5. Maintain sets of Samples, as returned, at the Project site for quality comparisons throughout the course of construction.

a. Unless noncompliance with Contract Document provisions is observed, the Submittal may serve as the final Submittal.

b. Sample sets may be used to obtain final acceptance of the construction associated with each set.

B. Distribution of Samples: Prepare and distribute additional sets to Subcontractors, manufacturers, fabricators, suppliers, installers, and others as required for performance of the work.

1. Field Samples specified in individual Sections are special types of Samples. Field Samples are full-size examples erected on site to illustrate finishes, coatings, or finish materials and to establish the standard by which the work will be judged.

a. Comply with submittal requirements to the fullest extent possible. Process transmittal forms to provide a record of activity.

1.09 CERTIFICATES

A. When specified in individual specification sections, submit certification by manufacturer to Architect, in quantities specified for Product Data.

B. Indicate material or Product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.

C. Certificates may be recent or previous test results on material or Product but must be acceptable to Architect.

1.10 MANUFACTURER INSTALLATION INSTRUCTIONS

A. When specified in individual specification sections, submit printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing to Architect.

B. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.

PART 2 PRODUCTS

2.01 SUBSTITUTIONS

A. Source Limitations: To the greatest extent possible for each unit of work, provide products, materials, or equipment of a singular generic kind from a single source.

B. Compatibility of Options: Where more than one choice is available as options for Contractor's selection of a product or materials, select an option which is compatible with other products and materials already selected (which may have been from among options for those other products and materials). Total compatibility among options, if not assured by limitations within contract documents, must be provided by Contractor. Compatibility is a basic general requirement of product/material selections.

C. Owner's Approval Required:

1. In addition to the following, refer to the General Conditions for additional requirements.
2. The Contract is based on the materials, equipment, and methods described in the Contract Documents.
3. The Contract Drawings and Specifications establish the "minimum standard of quality" each product and/or system must meet to be considered acceptable. Products of other manufacturers will be considered if the product and/or system meets or exceeds the "minimum standard of quality" established by the Contract Documents.
4. The Owner will consider proposals for substitutions under the "or approved substitution" and the "or approved equal" provision of materials, equipment, and methods, only when such proposals are accompanied by full and complete technical data and all other information required by the Owner and Architect to evaluate the proposed substitutions.
    a. It will be the responsibility of the submitting Contractor to prove equality.
    b. Request must include “Contractor’s Substitution Request” Form, a copy of which is attached to this Section.
    c. The Submittal shall include a line-by-line, item-by-item description of the specified and proposed product.
5. Requests for substitutions must be submitted to the Architect NO later than 60 days after date of Owner-Contractor Agreement.
6. **DO NOT SUBSTITUTE MATERIALS, EQUIPMENT, OR METHODS UNLESS SUCH SUBSTITUTIONS HAVE BEEN SPECIFICALLY APPROVED FOR THIS WORK IN WRITING.**

D. "Or Approved Equal" or "Or Approved Substitution"

1. Where the phrase "or approved equal" or "approved substitution" occurs in the Contract Documents, do not assume that material, equipment, or methods will be approved as equal by the Owner and Architect unless the item has been specifically approved for this work by the Owner.
    a. Color choices will be one of the determining factors for approval.
2. The decision of the Owner will be final.

E. Availability of Specified Items:

1. Verify prior to bidding that all specified items will be available in time for installation during orderly and timely progress of the work.
2. In the event specified item or items will not be so available, so notify the Architect prior to the receipt of Bids.
3. Costs of delay caused on non-availability of specified items, when such delays could have been avoided by the Contractor, will be back-charged as necessary and shall not be borne by the Owner.

F. Whenever the Contractor secures approval for changing any items and such change involves a corresponding change or adjustment in any adjacent or related item, the responsibility for making the required change, or seeing that it is made, rests with the Contractor. The cost of these changes and/or adjustments shall be paid for by the Contractor unless it is otherwise agreed, in writing, at the time the change is approved. The acceptance of any change will not, in any way, relieve the Contractor from full compliance with the Contract Documents.

2.02 MANUALS

A. General: Where Manuals are required to be submitted covering items included in this work, prepare all such Manuals in durable plastic binders approximately 8-1/2 x 11 inches in size with at least the following:

1. Identification on or readable through the front cover stating the general nature of the Manual.
2. Neatly typewritten index near the front of the Manual furnishing immediate information as to location of all emergency data regarding the installation.
3. Complete instructions regarding operating and maintenance of all equipment involved.
4. Complete nomenclature of all replaceable parts, their part numbers, current cost, and name and address of nearest vendor of parts.
5. Copy of all guarantees and warranties issued.
6. Copy of approved Shop Drawing(s) with all data concerning all changes made during construction

2.03 MISCELLANEOUS SUBMITTALS

A. Inspection and Test Reports Not Performed by Owner: Classify each inspection and test report as being either "Shop Drawings" or "Product Data" depending on whether the report is specially prepared for the project or a standard publication of workmanship control testing at the point of production. Process inspection and test reports accordingly.

PART 3 EXECUTION

3.01 COORDINATION OF SUBMITTALS

A. Refer to General Conditions for additional requirements.

B. General: Prior to submittal for Architect's review, use all means necessary to fully coordinate all material, including the following:

1. Secure all necessary approvals from public agencies and others. Signify by stamp or other means that all required approvals have been obtained.
2. Clearly indicate all deviations from the Contract Documents.

C. The General Contractor shall submit a prioritized tabulation by date of Submittals required during the first 90 days of construction. List those Submittals required to maintain orderly progress of the work, and those required early because of long lead time for manufacture or fabrication.

1. These dates may be shown on Construction Project Schedule at Contractor's option.

3.02 TIMING OF SUBMITTALS

A. General

1. Make all Submittals enough in advance of scheduled dates for installation to provide all required time for reviews for securing necessary approvals, for possible revision and Resubmittals, and for placing orders and securing delivery.

2. In scheduling, allow a minimum of fourteen (**14**) full calendar days for the Architect's initial review following receipt of the Submittals. Allow additional time if the Architect requires coordination with subsequent Submittals.

   a. The Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until all related Submittals are received.

   b. If an Intermediate Submittal is necessary, process the same as the initial Submittal. Allow fourteen (**14**) calendar days for reprocessing each Submittal.

END OF SECTION

LETTER OF CONFORMANCE

PROJECT: _____ PROJECT NO.: _____

CITY: _____ STATE: _____

CONTRACTOR: _____

The following product(s) has been selected for use in the above referenced project from the list of specified items.

Section Number: _____ Section Name: _____

Drawing Number(s): _____ Detail Number(s): _____

SPECIFIED ITEM TO BE USED:

_____

_____

_____

Statement of Conformance:

This Letter of Conformance is provided as a Submittal for Information in accordance with Section 01 33 00 - Submittals and Substitutions. The undersigned hereby declares that the Product identified above by manufacturer's name and model number is (one of) the product(s) specified and is suitable for the intended use as defined within the Contract Documents and will be provided and placed in operational condition in accordance with the manufacturer's published instructions and the Contract Documents.

SUBCONTRACTOR/SUPPLIER:

_____ Phone Number: ( ) _____

(Contact name of subcontractor/supplier offering above product)

_____

(Subcontractor / Supplier name and address)

CONTRACTOR:

_____ _____

(Contact name of Contractor) (Contractor signature and Title of Signatory)

CONTRACTOR'S SUBSTITUTION REQUEST

(Use separate form for each request)

Date: _____ Request No.: _____

TO: Lonnie E. Patrick, Architect 2371 Tower Drive; Monroe, LA 71201
Phone: 318 388-2492 Email: Lonnie@Holyfield-inc.com

PROJECT: _____ Project No.: _____
CONTRACTOR _____

SPECIFIED ITEM: _____
Section: _____ Page: _____ Paragraph: _____ Description: _____
Drawing Number(s): _____ Detail Number(s): _____
The undersigned request consideration of the following:
PROPOSED SUBSTITUTION:

_____
REASON FOR NOT GIVING PRIORITY TO SPECIFIED ITEMS: _____

_____
SAVINGS or CREDIT to OWNER for ACCEPTING SUBSTITUTE: $ _____

Attached data includes description, Specifications, Drawings, photographs, performance, and test data adequate for evaluation of the request; applicable portions of the data are clearly identified.

Attached data also includes a description of changes to the Contract Documents that the proposed substitution will require for its proper installation.

The undersigned certifies that the following paragraphs, unless modified by attachments, are correct:

1. Proposed substitution has been fully checked and coordinated with the Contract Documents.
2. The proposed substitution does not affect dimensions shown on Drawings.
3. The proposed substitution does not require revisions to mechanical or electrical work.
4. The undersigned will pay for changes to the building design, including architectural and engineering design, detailing, and construction costs caused by the requested substitution.
5. The proposed substitution will have no adverse effect on other trades, the construction schedule, or specified warranty requirements.
6. Maintenance and service parts will be locally available for the proposed substitution.

The undersigned further states that the function, appearance, and quality of the proposed substitution are equivalent or superior to the specified item.

Attachments: The attached data is furnished herewith for evaluation of the proposed substitution.
☐ Catalog ☐ Drawings ☐ Samples ☐ Reports ☐ Tests ☐ Other: _____
Submitted by:

_____ _____
(Firm) (Authorized Legal Signature)

_____ ( ) _____
(Address) (Telephone)

For use by the Architect: ☐ Accepted ☐ Accepted as Noted ☐ Rejected: Submit Specified Item
BY: _____

Date: _____ Remarks: _____

SECTION 01 35 13.21 - SPECIAL PROCEDURES FOR HOSPITALITY PROJECTS

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. These Special Requirements contain changes and additions to the General Conditions and other Contract Documents. Where any Article or paragraph is modified or voided by these Special Requirements, the unaltered provisions shall remain in effect. In any case of conflict, these Special Requirements shall prevail.

B. Related Documents:

1. Drawings and Articles of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to work of this Section.

2. All Contractors shall be governed by all applicable Sections of these Documents with reference to their respective areas of work. It shall be the responsibility of the General Contractor to apprise its Subcontractors and suppliers of these requirements.

a. The Contractor and each Subcontractor shall review all Sections of the Specifications and all Drawings and are responsible for all work pertaining to their trade regardless of Drawing or Section of Specifications it is written in.

1.02 GENERAL

A. The Contractor and each Subcontractor affirmatively represents that they are skilled and experienced in the performance of work as required by this project and in the use and interpretation of Drawings and Specifications such as those included in the Contract Documents; that they have carefully reviewed the Drawings and Specifications of this project; and that their Contract is based solely on these Documents, not relying in any way on any explanation or interpretations - oral or written - from any other source. The Contractor agrees that it shall be conclusively presumed that the Contractor has exercised his afore mentioned skill and experience and found the Drawings and Specifications sufficient and free from ambiguities, errors, or omissions for the purpose of determining its Contract for the performance of the work in conformity with the Drawings, Specifications, and all other Contract Documents.

B. Each Contractor shall provide sufficient and adequate labor, materials and construction equipment necessary to properly correlate all phases of the work to the end that the approved Progress Schedule can be adhered to and the Substantial Completion Date met.

C. Each Contractor is responsible for all necessary development of the work to fulfill the intent of the Contract Documents for a complete and/or functioning system whether totally defined by the Drawings and Specifications or not.

D. In no case shall any Contractor proceed with work in uncertainty.

1.03 COMMUNICATIONS

A. The Contractor shall forward all communications to the Owner through the Architect.

B. Request for Information (RFI) and Supplemental Instructions

1. It shall be the Contractor's obligation to check the Contract Documents and to request of the Architect any clarification necessary and in time so as not to delay the progress of the work.

1.04 RELATIONS WITH ADJOINING PROPERTY OWNERS

A. To facilitate his work, the Contractor may choose to make necessary arrangements for use and subsequent rehabilitation of the adjoining Owner's property. Such arrangements are solely the Contractor's responsibility.

B. If work is required off-site, outside the Contract limit lines, or on property of others, such areas shall be restored by said Contractor to their original condition, or as required by local authorities, immediately following completion of the work.

1.05 ACCESS TO SITE AND BUILDING

A. Access and security of the project site are the responsibility of the Contractor and not that of the Owner, the Architect, or the Owner's Representative.

1.06 EXAMINATION OF THE SITE

A. All Contractors submitting proposals for this work shall first examine the site and all conditions thereon. All proposals shall take into consideration all such conditions as may affect the work under this Contract.

1.07 GRADES, LINES, LEVELS, AND SURVEYS

A. Verify all grades, lines, levels, and dimensions as shown on the Drawings, and report any errors or inconsistencies discovered in the above to the Architect before commencing work. Provide and maintain established benchmarks in not less than two widely separated places.

1.08 FIELD MEASUREMENTS

A. The Contractor shall take measurements in the field to verify or supplement dimensions indicated on Drawings and shall be responsible for accurate fit of specified work. Any discrepancy between the Drawings and the actual conditions shall be reported immediately to the Architect.

B. Tolerances: The Contractor shall be responsible to maintain dimensions for spaces requiring close tolerances for such items as equipment or fixtures by "grounding" such locations. Uneven surfaces and joints will not be accepted which prevents the installation of units whose dimensions are shown in the documents.

1.09 USE OF SITE

A. Material Delivery and Storage

1. It shall be the responsibility of the Contractor to direct all deliveries to the construction site and not the Architect, the Owner's Representative, or the Owner.

B. The Contractor shall exercise control over all trucks and equipment using public roads and the Owner's property to preclude spillage, tracking of dirt or debris thereon. Should spillage occur, that Contractor is held to promptly clean and remove same.

1.10 PROTECTION

A. The Contractor shall provide and maintain guard lights for all work at all barricades, railings, obstructions in the streets, roads, or sidewalks, and at all trenches or pits as necessary to direct automobile and truck traffic as well as pedestrians. Remove such work when directed after necessity for same ceases.

1. The Contractor is responsible for all required OSHA temporary protection and barricades necessary for the completion of his work.

2. Any temporary fencing and sidewalk barricades required will be provided by the General Contractor.

B. The Contractor will be held responsible for all of his work and materials provided for by the Plans and Specifications until the work is completed and accepted.

1. The Contractor shall:

   a. Provide temporary protection for installed products. Control traffic in the immediate area to minimize damage.

   b. Prohibit traffic and storage on waterproofed and roofed surfaces and on lawn and landscaped areas.

   c. Clean and repair damage caused by installation or use of temporary facilities.

C. Weather Protection

1. The Contractor shall at all times provide protection against weather -- rain, wind, storms, frost, or heat -- so as to maintain his work, materials, apparatus, and fixtures free from injury or damage. **At the end of the day's work, all work likely to be damaged shall be covered.**

2. During cold weather, the Contractor shall protect the work from damage. If low temperatures make it impossible to continue operations safely in spite of cold weather precautions, the Contractor shall cease work.

3. Any work damaged by failure to provide above protection shall be removed and replaced with new work at the Contractor's expense.

D. Dust Control and Partitions

1. The Contractor is responsible to completely control dust during the performance of his work, including any and all necessary measures such as dust enclosures, proper ventilation, etc. This also includes dust control during operations on the part of the Contractor in which services are provided by others. This cost is the responsibility of the Contractor.

2. The Contractor shall provide and remove upon completion all required weather and necessary dust-proof partitions, including doors, at locations required to phase the work, and as directed by the Owner's Representative.

E. Water Control:

1. The Contractor shall provide, operate, and maintain pumps or other equipment necessary to drain his work. Keep excavation pits, trenches, and ditches, including the entire subgrade, free of any water under any circumstances that may arise.

1.11 FIRE REGULATIONS AND EXTINGUISHERS

A. The Contractor is responsible for fire extinguishers and fire protection for all work, equipment, office, sheds, etc., as required by OSHA regulations.

B. Free access shall be maintained at all times from the street to fire hydrants and to outside connections for standpipes. Fire doors shall be installed and in operation at the earliest possible time.

C. Where existing exits occur, they shall be fully maintained at all times and shall be kept free from materials, equipment, or other obstructions.

D. Combustible materials shall not be stored in the building.

E. The use of wood scaffolding shall be kept to a minimum and entirely eliminated when possible in order to eliminate fire hazards from this source. No part of the building where forms are in place shall be used for the storage of flammable materials of any kind. Temporary structures of combustible material shall be located not less than 30 feet from the building.

F. No smoking or use of tobacco in any form shall be permitted within the building or on the roof surfaces.

1.12 HAZARDOUS MATERIALS

A. The Contractor shall comply with all laws concerning hazardous materials. Hazardous material shall be disposed in a legal manner. MSDS sheets for hazardous materials shall be filed at the Contractor's job site office and as otherwise required by law.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

END OF SECTION

SECTION 01 42 19 - REFERENCE STANDARDS

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Reference Standards

1.02 QUALITY ASSURANCE

A. Conflicting Requirements: Where compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer uncertainties and requirements that are different, but apparently equal, to the Architect for a decision before proceeding.

1. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum with reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of the requirements. Refer uncertainties to the Architect for a decision before proceeding.

1.03 INDUSTRY STANDARDS

A. Reference Standards

1. Conform with the provisions or standards referenced in the sections of the Specifications with the same force and effect as if the Standards referenced were bound or copied directly into the section, except that:

a. Conform with more stringent provisions when contained elsewhere in the Contract Documents; and

b. Conform with the more stringent provision when two or more Standards are referenced; and

c. Conform with the more stringent provision when the Standard referenced and the governing regulations differ unless the governing regulation requires conformance to the less stringent provision without exception.

2. Submit for clarification and conform to the decision of the Architect when the Standard referenced:

a. Presents options which have not specifically been selected in the Contract Documents; or

b. Contain provisions which conflict with other provisions in the Contract Documents; or

c. It is uncertain or not clear which of differing provisions is the more stringent.

3. Conform to the provisions of the most recent issue of the Standard referenced as of the date of the Contract Documents.

B. Abbreviations and Acronyms of Organizations

1. Abbreviations and Names: Trade association names and titles of general standards are frequently abbreviated. Where abbreviations and acronyms are used in the Specifications or other Contract Documents, they mean the recognized name of the trade association, standards-producing organization, authorities having jurisdiction, or other entity applicable to the context of the text provision. Refer to Gale Research's "Encyclopedia of Associations" or Columbia Books' "National Trade and Professional Associations of the U.S.," which are available in most libraries.

2. The names, addresses, and telephone numbers given in the List of Organizations are subject to change and are believed to be, but are not assured to be, accurate and up to date as of the issue date of this Section.

3. List of Organizations: Certain Standards issued by the following organizations may be referenced in the Specifications. Copies may be obtained from the issuing organization.

AA	The Aluminum Association, Inc. 1525 Wilson Blvd, Suite 600 Rossyln, Arlington, VA 22209	www.aluminum.org
AABC	Associated Air Balance Council 1518 K St., NW Washington, DC 20005	www.aabchq.com
AAMA	American Architectural Manufacturer's Association 1827 Walden Office Sq., Suite 550 Schaumburg, IL 60173	www.aamanet.org
AASHTO	American Association of State Highway and Transportation Officials 444 Capitol St., Suite 249 Washington, DC 20001	www.transportation.org
AATCC	American Association of Textile Chemists and Colorists P O Box 12215 Research Triangle Park, NC 27709	www.aatcc.org
ACI	American Concrete Institute 38800 Country Club Drive Fumington Hills, MI 48331	www.aci-int.org
ACMA	American Composites Manufacturers Association 1010 North Glebe Rd, Suite 450 Arlington, VA 22201	www.acmanet.org
ACPA	American Concrete Pipe Association 1303 West Walnut Hill Lane, Suite 305 Irving, TX 75038-3008	www.concrete-pipe.org
ADC	Air Diffusion Council 1901 N. Roselle Road, Suite 800 Schaumburg, IL 60195	www.flexibleduct.org/
AFPA	American Forest & Paper Association 1111 Nineteenth Street, NW, Suite 800 Washington, DC 20036	www.afandpa.org
AF&PA	American Wood Council 1111 Nineteenth Street, NW, Suite 800 Washington, DC 20036	www.awc.org
AGA	American Gas Association 400 North Capitol St. NW, Suite 450 Washington, DC 20001	www.aga.org
AHA	American Hardboard Association 1210 W. Northwest Hwy Palatine, IL 60067-4897	domensino.com/AHA

AHAM	Association of Home Appliance Manufacturers 1111 19th Street NW, Suite 402 Washington, DC 20036	www.aham.org
AI	Asphalt Institute 2696 Research Park Dr. Lexington, KY 40511	www.asphaltinstitute.org
AIA	The American Institute of Architects 1735 New York Ave., NW Washington, DC 20006-5292	www.aia.org
AIA	American Insurance Association 2101 L Street NW, Suite 400 Washington, DC 20037	www.aiadc.org
AIMCAL	Association of Industrial Metallizers, Coaters and Laminators 201 Springs Street Fort Mill, SC 29715	www.aimcal.org
AISC	American Institute of Steel Construction One East Wacker Dr., Suite 700 Chicago, IL 60601-1802	www.aisc.org
AISI	American Iron and Steel Institute 1140 Connecticut Avenue NW #705 Washington, DC 20036	www.steel.org
ALI	Associated Laboratories, Inc. P.O. Box 152837 1323 Wall St. Dallas, TX 75215	
ALSO	American Lumber Standards Committee 19715 Waters Road Germantown, MD 20874	
AMCA	Air Movement and Control Association International, Inc. 30 W. University Dr. Arlington Heights, IL 60004-1893	www.amca.org
ANSI	American National Standards Institute 25 West 43rd Street, 4th Floor New York, NY 10036	www.ansi.org/
APA	APA-The Engineered Wood Association (Formerly: American Plywood Association) 7011 S. 19th Street Tacoma, WA 98466-5333	www.apawood.org
APA	Architectural Precast Association 6710 Winkler Road Fort Myers, FL 33919	www.archprecast.org
ARI	Air-Conditioning, Heating and Refrigeration Institute 2111 Wilson Blvd., Suite 500 Arlington, VA 22201	www.ari.org

ARMA	Asphalt Roofing Manufacturer's Association 750 National Press Building 529 14th Street, NW Washington, DC 20045	www.asphaltroofing.org
ASA	Acoustical Society of America 2 Huntington Quadrangle Melville, NYU 11747-4502	asa.aip.org
ASC	Adhesive and Sealant Council 7101 Wisconsin Ave., Suite 990 Bethesda, MD 20814	www.ascouncil.org
ASCE	American Society of Civil Engineers World Headquarters 1801 Alexander Bell Dr. Reston, VA 20191-4400	www.asce.org
ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineers 1791 Tullie Circle, NE Atlanta, GA 30329-2305	www.ashrae.org
ASLA	American Society of Landscape Architects 636 Eye Street NW Washington, DC 20001-3736	www.asla.org
ASME	American Society of Mechanical Engineers Three Park Avenue New York, NY 10016-5990	www.asme.org
ASPA	Turfgrass Producers International Formerly: American Sod Producers Association 2 East Main Street East Dundee, IL 60118	www.turfgrasssod.org
ASPE	American Society of Plumbing Engineers 8614 Catalpa Avenue, Suite 1007 Chicago, IL 60656-1116	aspe.org
ASSE	American Society of Sanitary Engineering 901 Cantebury Road, Suite A Westlake, OH 44145	www.asse-plumbing.org
ASTM	American Society for Testing and Materials 100 Barr Harbor Dr., PO Box C700 West Conshohocken, PA 19428-2959	www.astm.org
AWCI	Association of the Wall and Ceiling Industry 513 West Broad Street, Suite 210 Falls Church, VA 22046	www.awci.org
AWI	Architectural Woodwork Institute 46179 Westlake Drive, Suite 120 Potomac Falls, VA 20165	www.awinet.org
AWPA	American Wood Protection Association 100 Chase Park South, Suite 116 Birmingham, AL 35244-1851	www.awpa.com
AWS	American Welding Society 550 NW Leleune Rd. Miami, FL 33126	www.aws.org/

AWWA	American Water Works Association 6666 W. Quincy Ave. Denver, CO 80235	www.awwa.org
BHMA	Builders Hardware Manufacturers Association 355 Lexington Ave., 15th Floor New York, NY 10017	www.buildershardware.com
BIA	Brick Institute of America 1850 Centennial Park Dr., #301 Reston, VA 20191	www.bia.org
CAGI	Compressed Air and Gas Institute 1300 Sumner Ave. Cleveland, OH 44115-2851	www.cagi.org
CDA	Copper Development Association 260 Madison Avenue, 16th Floor New York, NY 10016	www.copper.org
CFFA	Chemical Fabrics and Film Association 1300 Sumner Avenue Cleveland, Ohio 44115-2851	www.chemicalfabricsandfilm.com
CGA	Compressed Gas Association 4221 Walney Road, 5th Floor Chantilly, VA 20151	www.cganet.com
CISCA	Ceilings & Interior Systems Construction Association 405 Illinois Avenue, Unit 2B St. Charles, IL 60174	http://cisca.org
CISPI	Cast Iron Soil Pipe Institute 5959 Shallowford Rd., Suite 419 Chattanooga, TN 37421	www.cispi.org
CFLMI	Chain Link Fence Manufacturers Institute 10015 Old Columbia Road, Suite B-215 Columbia, MD 21046	CLFMI
CPA/CWC	Composite Panel Association/Composite Wood Council 10465 Deerfield Avenue, Suite 306 Leesburg, VA 20176	www.pbmdf.com
CPPA	Corrugated Polyethylene Pipe Association 432 N. Superior St. Toledo, OH 43604	
CPSC	U.S. Consumer Product Safety Commission 4330 East West Highway Bethesda, MD 20814	www.cpsc.gov
CRI	Carpet and Rug Institute 730 College Drive Dalton, GA 30720	www.carpet-rug.com
CRSI	Concrete Reinforcing Steel Institute 933 N. Plum Grove Rd. Schaumburg, IL 60173-4758	www.crsi.org

CSA	Canadian Standards Association 5060 Spectrum Way Mississauga, Ontario L4W 5N6 Canada	www.csa.ca
CSI	Cast Stone Institute 813 Chestnut Street, PO Box 68 Lebanon, PA 17042	www.caststone.org
CSSB	Cedar Shake & Shingle Bureau #2 – 7101 Horne Street Mission, BC V2V 7A2 Canada	www.cedarbureau.org
CTIOA	Ceramic Tile Institute of America 12061 West Jefferson Blvd. Culver City, CA 90230-6219	www.ctioa.org
DHI	Door and Hardware Institute (Formerly: National Builders Hardware Association) 14150 Newbrook Dr. Chantilly, VA20151	www.dhi.org
DIPRA	Ductile Iron Pipe Research Association 245 Riverchase Pkwy East, Suite O Birmingham, AL 35244	www.dipra.org
EIA/TIA	EIA/TIA Standards and Technology 2500 Wilson Blvd. Arlington, VA 22201	www.eia.org
EIMA	EIFS Industry Members Association 3000 Corporate center Drive, #270 Morrow, GA 30260	www.eima.com
EJMA	Expansion Joint Manufacturers Association 25 N. Broadway Tarrytown, NY 10591	www.ejma.org
FCI	Fluid Controls Institute 1300 Sumner Ave. Cleveland, OH 441 15-2851	www.fluidcontrolsinstitute.org
FCICA	The Flooring Contractors Association 7439 Millwood Drive West Bloomfield, MI 48322	www.fcica.com
FM	Factory Mutual Research Corporation 1151 Boston-Providence Turnpike P.O. Box 9102 Norwood, MA 02062-9102	www.fmglobal.com
FMG	FM Global Factory Mutual Insurance Company 1301 Atwood Avenue, PO Box 7500 Johnston, RI 02919	www.fmglobal.com
GA	Gypsum Association 6525 Belcrest Road #480 Hyattsville, MD 20782	www.gypsum.org
GANA	Glass Association of North America 2945 SW Wanamaker Drive, Suite A Topeka, KS 66614	www.glasswebsite.com

HI	Hydraulic Institute 6 Campus Drive, First Floor North Pusippuny, NJ 07054	www.pumps.org
AHRI	Hydronics Institute (merged with AHRI 2008) (Division of Gas Appliance Manufacturers Association) 2111 Wilson Blvd., Suite 500 Arlington, VA 22201	Hydronics Institute
HMA	Hardwood Manufacturers Association (Formerly: Southern Hardwood Lumber) Manufacturers Association) 400 Penn Center Blvd., Suite 530 Pittsburgh, PA 15235-5605	www.hardwood.org
HPVA	Hardwood Plywood and Veneer Association 1825 Michael Farraday Dr. Reston, VA 20190	www.hpva.org
ICC	International Code Council 500 New Jersey Avenue, NW, 6th Floor Washington, DC 20001-2070	www.iccsafe.org
ICC-ES	International Council Evaluation Service Inc. 5360 Workman Mill Road Whittier, CA 90601	www.icc-es.org
IECA	International Erosion Control Association 3401 Quebec St, Suite 3500 Denver, CO 80207	www.ieca.org
ICEA	Insulated Cable Engineers Association, Inc. P.O. Box 1569 Carrollton, GA 30117	www.icea.net
ICRI	International Concrete Repair Institute 3166 S. River Road, Suite 132 Des Plaines, IL 60018	www.icri.org
IEEE	Institute of Electrical and Electronics Engineers 3 Park Avenue, 17th Floor New York, NY 10016	www.ieee.org
IESNA	Illuminating Engineering Society of North America 120 Wall St., 17th Floor New York, NY 10005-4001	www.iesna.org
IGCC	Insulating Glass Certification Council, Inc. P O Box 730 Sackets Harbor, NY 13685	www.igcc.org
IGMA	Insulating Glass Manufacturers Alliance 27 N. Wacker Drive, Suite 365 Chicago, IL 60606-2800	www.igmaonline.org
IIDA	International Interior Design Association 222 Merchandise Mart, Suite 567 Chicago, IL 60654	www.iida.com
ILI	Indiana Limestone Institute of America	www.iliai.com

INCE	Institute of Noise Control Engineering of the USA 9100 Purdue Road, Suite 200 Indianapolis, IN 46268	www.inceusa.org
ISA	ISA - International Society for Measurement and Control 67 Alexander Dr. Research Triangle Park, NC 27709	www.isa.org
ISO	International Organization for Standardization 1 ch. De la Voie-Creuse Case Postale 56 CH-1211 Geneva 20, Switzerland	www.iso.org
ISSFA	International Solid Surface Fabricators Association 910 W. State Street, Unit 1 Lehi, UT 84043	www.issfa.com
ITS	Intelligent Transportation Systems Research and Innovative Technology Administration (RITA) 1200 New Jersey Avenue, S.E Washington, DC 20590	www.its.dot.gov
IWFA	International Window Film Association	www.iwfa.com
AIST	Association for Iron & Steel Technology (Formerly: Iron and Steel Society) 186 Thorn Hill Road Warrendale, PA 15086-7512	www.iss.org
KCMA	Kitchen Cabinet Manufacturers Association (Formerly: National Kitchen Cabinet Association) 1899 Preston White Dr. Reston, VA 22091-4326	www.kcma.org
LGSI	Light Gage Structural Institute c/o Loseke Technologies, Inc. P.O. Box 560746 The Colony, TX 75056	www.loseke.com/lgsi.html
LMA	Laminating Materials Association (Formerly: American Laminators Association) 116 Lawrence St. Hillsdale, NJ 07642-2730	
LPI	The Lightning Protection Institute P.O. Box 99 Maryville, MO 64468	www.lightning.org
MBMA	Metal Building Manufacturer's Association 1300 Sumner Ave. Cleveland, OH 441158-2851	www.mbma.com
MCAA	Mechanical Contractors Association of America 1385 Piccud Dr. Rockville, MD 20850	www.mcaa.org
MFMA	Metal Framing Manufacturers Association 401 N. Michigan Ave. Chicago, IL 60611	www.metalframingmfg.org

MIA	Marble Institute of America 28901 Clemens Road, Suite 100 Cleveland, OH 44145	www.marble-institute.com
MIA	Masonry Institute of America 22815 Frampton Avenue Torrence, CA 90501	www.masonryinstitute.org
MIHA	Material Handling Industry of America 8720 Red Oak Blvd, Suite 201 Charlotte, NC 28217-3992	/www.mhia.org
ML/SFA	Metal Lath/Steel Framing Association (A Division of the NAAMM) 8 South Michigan Ave., Suite 1000 Chicago, IL 60603	
MPI	Master Painters Institute	www.paintinfo.com
MSS	Manufacturers Standardization Society of the Valve and Fittings Industry 127 Park St., NE Vienna, VA 22180	mss-hq.org
NAAMM	National Association of Architectural Metal Manufacturers 800 Roosevelt Drive, Bldg C, Suite 312 Glen Ellyn, IL 60137	www.naamm.org
NAIMA	North American Insulation Manufacturers Association (Formerly: Thermal Insulation Manufacturers Association) 44 Canal Center Plaza, Suite 310 Alexandria, VA 22314	www.naima.org
NAPA	National Asphalt Pavement Association NAPA Building 5100 Forbes Blvd. Lanham, MD 20706-4413	www.hotmix.org
NBFAA	Electronic Life Safety, Security & Systems Professionals (Formerly: National Burglar & Fire Alarm Association) 2300 Valley View Lane Suite 230 Irving, TX 75062	www.alarm.org
NBGQA	National Building Granite Quarries Association Inc. 1220 L. Street, N.W., Suite 100-167 Washington, DC 20005	www.nbgqa.com
NCMA	National Concrete Masonry Association 13750 Sunrise Valley Drive Herndon, VA 20171	www.ncma.org

NCRMA	National Ready Mixed Concrete Association 900 Spring Street Silver Spring, MD 20910	www.nrmca.org
NCSPA	National Corrugated Steel Pipe Association 14070 Proton Road, Suite 100 LB9 Dallas, TX 75244	www.ncspa.org
NEBB	National Environmental Balancing Bureau 8575 Grovemont Circle Gaithersburg, MD 20877-4121	www.nebb.org
NECA	National Electrical Contractors Association 3 Bethesda Metro Center, Suite 1100 Bethesda, MD 20814-5372	www.necanet.org
NEII	National Elevator Industry, Inc. P.O. Box 838 Salem, NY 12865-0838	www.neii.org
NELMA	Northeastern Lumber Manufacturers Association 272 Tuttle Rd. P.O. Box 87A Cumberland Center, ME 04021	www.nelma.org
NEMA	The Association of and Medical Imaging Equipment Manufacturers 1300 N 17th St., Suite 1752 Rosslyn, VA 22209	www.nema.org
NFPA	National Fire Protection Association One Batterymarch Park P.O. Box 9101 Quincy, MA 02269-9101	http://www.nfpa.org
NFRC	National Fenestration Rating Council 6305 Ivy Lane, Suite 140 Greenbelt, MD 20770	www.nfrc.org
NFSHSA	National Federation of State High School Association PO Box 690 Indianapolis, IN 46206	http://nfshsa.org/
NFS	NSF International PO Box 130140 789 N. Dixboro Road Ann Arbor, MI 48113	www.nsf.org
NFSI	National Floor Safety Institute P.O. Box 92607 Southlake, TX 76092	www.nfsi.org
NHLA	National Hardwood Lumber Association P.O. Box 34518 Memphis, TN 38184-0518	www.natlhardwood.org
NGA	National Glass Association 8200 Greensboro Drive, Suite 302 McLean, VA 22102-3881	www.glass.org
NLGA	National Lumber Grades Authority #302-960 Quayside Dr. New Westminster, BC V3M 6G2	www.nlga.org

NPA	Composite Panel Association (Formerly: National Particleboard Association) 19465 Deerfield Avenue, Suite 306 Leesburg, VA 20176	www.pbmdf.com
NPCA	National Paint and Coatings Association 1500 Rhode Island Ave., NW Washington, DC 20005-5597	www.paint.org
NRCA	National Roofing Contractors Association O'Hare International Center 10255 W. Higgins Rd., Suite 600 Rosemont, IL 60018-5607	www.nrca.net
NRMCA	National Ready Mixed Concrete Association 900 Spring St. Silver Spring, MD 20910	www.nrmca.org
NSF	NSF International (Formerly: National Sanitation Foundation) P.O. Box 130140 Ann Arbor, MI 48113-0140	www.nsf.org
NTMA	The National Terrazzo & Mosaic Association, Inc. 201 North Maple, Suite 208 Purcellville, VA 20132	www.ntma.com
NUSIG	National Uniform Seismic Installation Guidelines 12 Lahoma Ct. Alamo, CA 94526	
NWFA	National Wood Flooring Association 111 Chesterfield Industrial Boulevard Chesterfield, MO 63005	http://woodfloors.org/
NWWDA	National Wood Window and Door Association (Formerly: National Woodwork Manuf. Association) 401 N. Michigan Avenue, Suite 2200 Chicago, IL 60611	www.nwwda.org/
ODNR	Ohio Department of Natural Resources 2045 Morse Road, Building G Columbus, OH 43229-6693	www.dnr.state.oh.us
PCA	Portland Cement Association 5420 Old Orchard Rd. Skokie, IL 60077-1083	www.cement.org
PCI	Precast/Prestressed Concrete Institute 209 W. Jackson Blvd. #500 Chicago, IL 60606	www.pci.org
PDCA	Painting and Decorating Contractors of America 1801 Park 270 Drive, Suite 220 St. Louis, MO 63146	www.pdca.com
PDI	Plumbing and Drainage Institute 800 Turnpike St., Suite 300 North Andove, MA 01845	www.pdionline.org

PEI	Porcelain Enamel Institute P.O. Box 90220 Norcross, GA 30010	www.porcelainenamel.com
PPFA	Plastic Pipe and Fittings Association 800 Roosevelt Rd., Building C, Suite 312 Glen Ellyn, IL 60137-5833	www.ppfahome.org
PPI	Plastic Pipe Institute (The Society of the Plastics Industry, Inc.) 105 Decker Court, Suite 825 Irving, TX 75062	www.plasticpipe.org
RCSC	Research Council on Structural Connections	www.boltcouncil.org
RFCI	Resilient Floor Covering Institute 115 Broad Street, Suite 201 LaGrange, GA 30240	www.rfci.com
RMA	Rubber Manufacturers Association 1400 K St., NW, Suite 900 Washington, DC 20005	www.rma.org
SAE	SAE International 400 Commonwealth Dr. Warrendale, PA 15096-0001 For publications: Call (412) 776-4970	www.sae.org
SDI	Steel Door Institute 30200 Detroit Rd. Cleveland, OH 44145-1967	www.steeldoor.org
SHLMA	Southern Hardwood Lumber Manufacturers Association (See HMA)	
SIGMA	Sealed Insulating Glass Manufacturers Association 401 N. Michigan Ave. Suite 2400 Chicago, IL 60611-4267	
SGCC	Safety Glazing Certification Council PO Box 730 Sackets Harbor, NY 13685	www.sgcc.org
SJI	Steel Joist institute 196 Stonebridge Drive, Unit 1 Myrtle Beach, SC 29588	www.steeljoist.org
SMA	Screen Manufacturers Association	www.smainfo.org
SMACNA	Sheet Metal and Air Conditioning Contractors' National Association, Inc. 4201 Lafayette Center Dr. P.O. Box 221230 Chantilly, VA 20151-1209	www.smacna.org
SMPTE	Society of Motion Picture and Television Engineers 3 Barker Ave., 5th Floor White Plains, NY 10601	www.smpte.org
SPIB	Southern Pine Inspection Bureau P.O. Box 10915 Pensacola, FL 32524-0915	www.spib.org

SPRI	Single Ply Roofing Industry 411 Waverly Oaks Road, 331B Waltham, MA 02452	www.spri.org
SSPC	The Society for Protective Coatings 40 24th St., 6th Floor Pittsburgh, PA 15222-4643	www.sspc.org
SWRI	Sealant, Waterproofing and Restoration Institute 400 Admiral Blvd. Kansas City, MO 64106	www.swrionline.org
TCIA	Tree Care Industry Association 136 Harvey Road, Suite 101 Londonderry, NH 03053	www.treecareindustry.org
TCNA	Tile Council of North America, Inc. 100 Clemson Rescue Blvd. Anderson, SC 29625	www.tileusa.com
TFS	Texas Forest Service John B. Connally Building, Suite 364 301 Tarrow Street College Station, TX 77840-7896	Texas Forest Service (TFS)
TPI	Truss Plate Institute 218 N. Lee St, #312 Alexandria, VA 22314	www.tpinst.org
TRI	Tile Roofing Institute 230 East Ohio St., Suite 400 Chicago, IL 60611	www.tileroofing.org
UL	Underwriters Laboratories Inc. 2600 N.W. Lake Road Camas, WA 98607	www.ul.com
VMMB	Volumetric Mixer Manufacturers Bureau 900 Spring Street Silver Spring, MD 20910	http://vmmb.org/
WA	Wallcoverings Association 401 N. Michigan Ave. Suite 2200 Chicago, IL 60611-4267	www.wallcoverings.org
WCSC	Window Covering Safety Council 355 Lexington Avenue, Suite 1500 New York, NY 10017	www.windowcoverings.org
WDMA	Window & Door Manufacturers Association 401 N. Michigan Avenue, Suite 220 Chicago, IL 60611	www.wdma.com
WRCLA	Western Red Cedar Lumber Association 1501-700 West Pender Street Pender Place 1, Business Building Vancouver, B.C., Canada V6C 1G8	www.wrcla.org

WWPA	Western Wood Products Association 522 SW 5th Ave. Portland, OR 97204-2122	(503) 224-3930 www.wwpa.org

FEDERAL GOVERNMENT AGENCIES:

ADA	U.S. Department of Justice 950 Pennsylvania Avenue, NW Civil Rights Division Disability Rights Section – NYA Washington, D.C. 20530	www.ada.gov
ADAAG	United States Access Board 1331 F Street, NW, Suite 1000 Washington, D.C. 20004-1111	www.access-board.gov
CFR	Code of Federal Regulations U.S. Government Printing Office Mail Stop: IDCC 732 N. Capitol Street, NW Washington, DC 20401	www.gpoaccess.gov/ecfr
CPSC	U.S. Consumer Product Safety Commission East West Towers 4330 East-West Hwy Bethesda, MD 20814	www.cpsc.gov
DOT	U.S. Department of Transportation 1200 New Jersey Avenue SE Washington, DC 20590	www.dot.gov
EPA	U.S. Environmental Protection Agency Ariel Rios Building 1200 Pennsylvania Avenue, N.W. Washington, DC 20460 Medford, NJ 08055	www.epa.gov
FHWA	Federal Highway Administration U.S. Department of Transportation 1200 New Jersey Ave., SE Washington, DC 20590	www.fhwa.dot.gov
FS	General Services Administration Federal Supply Service FSS Product Acquisition Center Supply Standards Division (FLAS Arlington, VA 22202	http://apps.fss.gsa.gov
FTC	Federal Trade Commission 600 Pennsylvania Ave., NW Washington, DC 20580	www.ftc.gov

NEPA	The National Environmental Policy Act U.S. Environmental Protection Agency 1200 Pennsylvania Ave., NW Washington, D.C. 20460-0001	www.epa.gov
NIST	National Institute of Standards and Technology (U.S. Department of Commerce) 100 Bureau Dr., Stop 1070 Gaithersburg, MD 20899-1070	www.nist.gov
NRMCA	National Ready Mix Concrete Association 900 Spring Street Silver Spring, MD 20910	www.nrmca.org
OSHA	Occupational Safety and Health Administration (U.S. Department of Labor) 200 Constitution Ave., NW Washington, DC 20210	www.osha.gov
USDA	U.S. Department of Agriculture 1400 Independence Ave., SW Washington, DC 20250	www.usda.gov

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

END OF SECTION

SECTION 01 45 00 - QUALITY CONTROL

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. References
2. Quality Assurance
    a. Testing Laboratory Qualifications
    b. Control of Installation
3. Tolerances
4. Inspection and Testing Laboratory Services
5. Manufacturers' Field Services and Reports

B. Related Sections:

1. Information Available to Bidders: Soil investigation data.
2. General Conditions: Inspections, testing, and approvals required by public authorities.
3. Section 01 33 00 (01330) - Submittals and Substitutions: Submission of manufacturers' instructions and certificates.
4. Section 01 60 00 (01600) - Material and Equipment: Requirements for material and product quality.
5. Section 01 77 00 (01770) - Contract Closeout: Project Record Documents.
6. Individual Specification Sections: Inspections and tests required, and standards for testing.

1.02 REFERENCES

A. For products or workmanship specified by association, trade, or other consensus standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.

B. Conform to reference standard by date of issue current on date of Contract Documents, except where a specific date is established by code.

C. Obtain copies of standards where required by product specification sections.

D. The contractual relationship, duties, and responsibilities of the parties in Contract nor those of the Architect shall not be altered from the Contract Documents by mention or inference otherwise in any reference document.

E. ASTM International Publications:

1. C802 - Practice for Conducting an Interlaboratory Test Program to Determine the Precision of Test Methods for Construction.
2. C1021 - Practice for Laboratories Engaged in the Testing of Building Sealants.
3. C1077 - Practice for Laboratories Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Laboratory Evaluation.
4. C1093 - Practice for Accreditation of Testing Agencies for Unit Masonry.
5. D290 - Recommended Practice for Bituminous Mixing Plant Inspection.

6. D3740 - Practice for Evaluation of Agencies Engaged in Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction.
7. D4561 - Practice for Quality Control Systems for an Inspection and Testing Agency for Bituminous Paving Materials.
8. E329 - Practice for Use in the Evaluation of Inspection and Testing Agencies as Used in Construction.
9. E543 - Practice for Determining the Qualification of Nondestructive Testing Agencies.
10. E699 - Practice for Criteria for Evaluation of Agencies Involved in Testing, Quality Assurance, and Evaluating Building Components in Accordance with Test Methods Promulgated by ASTM Committee E6.

1.03 SUBMITTALS

A. Before start of the Work, submit testing firm name, address, and telephone number and names of full time registered Engineers, specialists, and responsible officer.

B. Submit copy of report of laboratory facilities inspection made by Materials Reference Laboratory of National Bureau of Standards during most recent inspection, with memorandum of remedies of any deficiencies reported by the inspection.

1.04 QUALITY ASSURANCE

A. Testing Laboratory Qualifications:

1. Comply with requirements of ASTM Publications C802, C1021, C1077, C1093, D290, D3740, D4561, E329, E543, and E699.
2. Laboratory: Authorized to operate in State in which Project is located.
3. Laboratory Staff: Maintain a full time registered Engineer on staff to review services.
4. Testing Equipment: Calibrated at reasonable intervals with devices of an accuracy traceable to either National Bureau of Standards or accepted values of natural physical constants.

B. Control of Installation:

1. Monitor quality control over suppliers, manufacturers, Products, services, site conditions, and workmanship, to produce Work of specified quality.
2. Comply with manufacturers' instructions, including each step in sequence.
3. Should manufacturers' instructions conflict with Contract Documents, request clarification from Architect before proceeding.
4. Comply with specified standards as minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
5. Perform work by persons qualified to produce workmanship of specified quality.
6. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, or disfigurement.

1.05 TOLERANCES

A. Monitor tolerance control of installed Products to produce acceptable Work. Do not permit tolerances to accumulate.

B. Comply with manufacturers' tolerances. Should manufacturers' tolerances conflict with Contract Documents, request clarification from the Architect before proceeding.

C. Adjust products to appropriate dimensions; position before securing Products in place.

1.06 INSPECTING AND TESTING LABORATORY SERVICES

A. Except as otherwise required in the Owner-Contractor Agreement, the Contractor shall appoint, employ, and pay for specified services of an independent firm to perform inspecting and testing, subject to approval of the Owner and Architect.

1. Refer to General Conditions, Articles 5 and 26, for additional requirements.

B. Employment of testing laboratory in no way relieves Contractor of obligation to perform Work in accordance with requirements of Contract Documents.

C. The testing firm will perform inspections, tests, and other services specified in individual specification sections and as required by the Architect.

D. Inspecting, testing, and source quality control may occur on or off the project site.

E. Retesting required because of non-conformance to specified requirements shall be performed by the same testing firm on instructions by the Architect.

F. Laboratory Responsibilities:

1. Test samples of mixes submitted by Contractor.

2. Provide qualified personnel at site. Cooperate with Architect and Contractor in performance of services.

3. Perform specified inspecting, sampling, and testing of Products in accordance with specified standards.

4. Ascertain compliance of materials and mixes with requirements of Contract Documents.

5. Promptly notify Architect and Contractor of observed irregularities or non-conformance of Work or Products.

6. Perform additional inspection and tests required by the Architect.

7. Attend preconstruction meetings and progress meetings.

G. Laboratory Reports: After each inspection and test, promptly submit copies of laboratory report to the Architect and Contractor. Include the following:

1. Date issued

2. Project title and number

3. Name of inspector

4. Date and time of sampling or inspection

5. Identification of product and specifications section

6. Location in the Project

7. Type of inspection or test

8. Date of test

9. Results of tests

10. Conformance with Contract Documents

11. When requested by Architect, provide interpretation of test results

H. Limits on Testing Laboratory Authority:

1. Laboratory may not release, revoke, alter, or enlarge on requirements of Contract Documents.

2. Laboratory may not approve or accept any portion of the Work.

3. Laboratory may not assume any duties of Contractor.

4. Laboratory has no authority to stop the

Work. I. Contractor Responsibilities:

1. Deliver to laboratory at designated location, adequate samples of materials proposed to be used which require testing, along with proposed mix designs.

2. Cooperate with testing firm and personnel, and provide access to the Work. Furnish samples of materials, design mix, equipment, tools, storage, and assistance by incidental labor as requested.

3. Provide incidental labor and facilities:

   a. to provide access to Work to be tested

   b. to obtain and handle samples at the site or at source of Products to be tested

   c. to facilitate tests and inspections

   d. to provide storage and curing of test samples

4. Notify Architect and testing firm 24 hours prior to expected time for operations requiring services.

5. Make arrangements with testing firm and pay for additional samples and tests required for Contractor's use.

6. Notify laboratory sufficiently in advance of cancellation of required testing operations. Contractor shall be responsible to laboratory for changes due to failure to notify if requirements for testing are canceled.

1.07 MANUFACTURERS' FIELD SERVICES AND REPORTS

A. When specified in individual specification sections, require material or Product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, test, adjust and balance of equipment and erection as applicable, and to initiate instructions when necessary.

B. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.

C. Submit report in duplicate within 15 days of observation to Architect for information.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

END OF SECTION

SECTION 01 50 00 - TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. This Section specifies temporary services and facilities, including utilities, construction and support facilities, security and protection. Provide facilities ready for use. Maintain, expand and modify as needed. Remove when no longer needed, or when replaced by permanent facilities.

2. Work of this Section shall include, but not necessarily be limited to, the following:

a. Project/Site Conditions

b. Use Charges

c. Field Office and Storage Sheds

d. Temporary Sanitary Facilities

e. Temporary Fire Extinguishers

f. Temporary Water

g. Temporary Electric Power Service and Interior Lighting

h. Temporary Telephone Service and Facsimile Service

i. Temporary Storm and Sanitary Sewer

j. Temporary Heating, Cooling, and Ventilation

k. Temporary Paving

l. Temporary Enclosures

m. Project Identification

n. Temporary Exterior Lighting

o. Progress Cleaning and Waste Removal

p. Surface and Underground Water Control

q. Protection of Installed Work

1) Environmental Protection

2) Dust Control

3) Barriers, Barricades, Warning Signs, and Lights

r. Removal of Construction Facilities and Temporary Controls

B. Related Sections:

1. General Conditions:

a. Refer to General Conditions for additional requirements.

2. Section 01 35 13.21 (01000) - Special Procedures for Hospitality Projects

3. Section 01 11 00 (01110) - Summary of Work

4. Section 01 74 00 (01740) - Cleaning and Waste Management

5. Section 01 77 00 (01770) – Closeout Procedures

1.02 QUALITY ASSURANCE

A. Regulations: Each Contractor shall comply with industry standards and with applicable laws and regulations of authorities having jurisdiction, including but not limited to:

1. Owner's Requirements
2. Building Code Requirements
3. Health and Safety Regulations
4. Utility Company Regulations
5. Police, Fire Department, and Rescue Squad Rules
6. Environmental Protection Regulations

B. Standards: Comply with NFPA Code 241, "Building Construction and Demolition Operations", ANSI-A10 Series standards for "Safety Requirements for Construction and Demolition", and NECA Electrical Design Library "Temporary Electrical Facilities."

1. Refer to "Guidelines for Bid Conditions for Temporary Job Utilities and Services", prepared jointly by AGC and ASC for industry recommendations.
2. Trade Jurisdictions: Assigned responsibilities for installation and operation of temporary utilities are not intended to interfere with the normal application of trade regulations and union jurisdictions.
3. Electrical Service: Comply with NEMA, NECA, and UL standards and regulations for temporary electric service. Install service in compliance with National Electric Code (NFPA 70).

C. Inspections: Arrange for authorities having jurisdiction to inspect and test each temporary utility before use. Obtain required certifications and permits.

1.03 PROJECT/SITE CONDITIONS

A. Temporary Utilities: Prepare a schedule indicating dates of the implementation and termination of each temporary utility. At the earliest feasible time, when acceptable to the Owner, change over from use of the temporary service to use of the permanent service.

1. Temporary Use of Permanent Facilities: The installer of each permanent service or facility shall assume responsibility for its operation, maintenance and protection during its use as a construction service or facility prior to the Owner's acceptance, regardless of previously assigned responsibilities.

B. Conditions of Use: Keep temporary services and facilities clean and neat in appearance. Operate in a safe and efficient manner. Take necessary fire prevention measures. Do not overload facilities, or permit them to interfere with progress. Do not allow hazardous, dangerous, or unsanitary conditions, or public nuisances to develop or persist on the site.

1.04 USE CHARGES

A. General: Cost or use charges for temporary facilities are not chargeable to the Owner or the Architect. Contractor's cost or use charges for temporary services or facilities will not be accepted as a basis of claim for an adjustment in the Contract Sum or Contract Time.

1. Meters: Meters shall be on the Owner's utility systems and shall be furnished and installed by the Subcontractor responsible for respective use charges.

PART 2 PRODUCTS

2.01 MATERIALS

A. General: Provide new materials; if acceptable to the Owner's Representative, undamaged previously used materials in serviceable condition may be used. Provide materials suitable for the use intended.

B. Lumber and Plywood: Comply with requirements in Section 06 10 00 - Rough Carpentry.

C. Tarpaulins: Provide waterproof, fire-resistant, UL labeled tarpaulins with flame-spread rating of 15 or less. For temporary enclosures, provide translucent nylon reinforced laminated polyethylene or polyvinyl chloride fire-retardant tarpaulins.

D. Water: Provide potable water approved by local health authorities.

2.02 EQUIPMENT

A. Water Hoses: Provide 3/4" heavy-duty, abrasion-resistant, flexible rubber hoses 100 ft. long, with pressure rating greater than the maximum pressure of the water distribution system; provide adjustable shut-off nozzles at hose discharge.

B. Electrical Outlets: Provide properly configured NEMA polarized outlets to prevent insertion of 110-120 volt plugs into higher voltage outlets. provide receptacle outlets equipped with ground-fault circuit interrupters, reset button and pilot light, for connection of power tools and equipment.

C. Electrical Power Cords: Provide grounded extension cords; use "hard-service" cords where exposed to abrasion and traffic. Provide waterproof connectors to connect separate lengths of electric cords, if single lengths will not reach areas where construction activities are in progress.

D. Lamps and Light Fixtures: Provide general service incandescent lamps of wattage required for adequate illumination. Provide guard cages or tempered glass enclosures, where exposed to breakage. Provide exterior fixtures where exposed to moisture.

E. Heating Units: Provide temporary heating units that have been tested and labeled by UL, FM, or another recognized trade association related to the type of fuel being consumed.

F. Temporary Field Office

1. The General Contractor shall provide and maintain clean, temporary weather-tight offices at the site, in location as approved by the Owner, for the use of the Contractor, his Subcontractors' agents, Owner's Representative, and the Architect, and at which location he or his authorized agent shall be present, or to which either may be readily called at all times. While the work is in progress, copies of permits, approved Shop Drawings, and a complete set of Contract Drawings and Specifications marked up to date with any revisions, shall be kept at said office ready for use at all times.

   a. Provide sturdy furniture, drawing rack, and drawing display table.

2. All expenses in connection with the field office, including the installation cost, and use of heat, light, water, and janitor service shall be borne by the Contractor.

3. Field office shall be maintained until final acceptance and then be removed by the Contractor, no later than 15 days after acceptance of building unless the Owner orders earlier removal by them.

G. Temporary Storage Sheds: Each Subcontractor shall provide and maintain such additional offices, storage sheds, and other temporary buildings or trailers on the project as required for his own use. Location of sheds and trailers shall be located where directed by the Owner.

H. Sanitary Facilities: Toilet rooms within the new building shall not be used by construction personnel. Provide sanitary facilities that include temporary toilets, wash facilities and drinking water fixtures. Comply with regulations and health codes for the type, number, location, operation, and maintenance of fixtures. Install where facilities will best serve the Project. Provide toilet tissue, paper towels, paper cups, and similar disposable materials for each facility. Provide covered waste containers for used materials.

1. Toilets: Install self-contained single-occupant toilet units of the chemical, aerated recirculation, or combustion type, properly vented and fully enclosed with a glass fiber reinforced polyester shell or similar nonabsorbent material. Use of pit-type privies will not be permitted.

2. Wash Facilities: Install wash facilities supplied with potable water at convenient locations for personnel involved in handling materials that require wash-up. Dispose of drainage properly. Supply cleaning compounds.

3. Drinking Water Facilities: Provide containerized tap-dispenser bottled-water type drinking water units.

I. First Aid Supplies: Comply with governing regulations.

J. Fire Extinguishers: Provide hand-carried, portable UL-rated, class `A' fire extinguishers for temporary offices and similar spaces. In other locations, provide hand-carried, portable, UL- rated, class `ABC' dry chemical extinguishers, or a combination of extinguishers of NFPA recommended classes for the exposures.

1. Comply with NFPA 10 and 241 for classification, extinguishing agent, and size required by location and class of fire exposure.

PART 3 EXECUTION

3.01 INSTALLATION

A. Use qualified personnel for installation of temporary facilities. Locate facilities where they serve the project adequately and result in minimum interference with performance of the work. Relocate and modify facilities as required.

B. Provide each facility ready for use when needed to avoid delay. Maintain and modify as required. Do not remove until facilities are not longer needed, or are replaced by authorized use of completed permanent facilities.

3.02 TEMPORARY UTILITY INSTALLATION

A. General: Engage the appropriate local utility company to install temporary service. Where the company provides only part of the service, provide the remainder with matching, compatible materials and equipment; comply with the company's recommendations.

1. Obtain easements to bring temporary utilities to the site, where the Owner's easements cannot be used for that purpose.

B. Water Service:

1. Install water service connected to nearest system, and distribution piping of sizes and pressures adequate for construction until permanent water service is in use.

2. Sterilization: Sterilize temporary water piping prior to use.

C. Temporary Electric Power Service: Provide weatherproof, grounded electric power service and distribution system of sufficient size, capacity, and power characteristics during construction period. Include meters, transformers, overload protected disconnects, automatic ground-fault interrupters and main distribution switch gear.

D. Temporary Lighting:

1. Whenever overhead floor or roof deck has been installed, provide temporary lighting with local switching.

2. Install and operate temporary lighting that will fulfill security and protection requirements, without operating the entire system, and will provide adequate illumination for construction operations and traffic conditions.

E. Sewers and Drainage:

1. If sewers are available, provide temporary connections to remove effluent that can be discharged lawfully. If sewers are not available or cannot be sued, provide drainage ditches, dry wells, stabilization ponds and similar facilities. If neither sewers nor drainage facilities can be lawfully used for discharge of effluent, provide containers to remove and dispose of effluent off the site in a lawful manner.

3.03 TEMPORARY CONSTRUCTION AND SUPPORT FACILITIES INSTALLATION

A. Locate field offices, storage sheds, sanitary facilities and other temporary construction and support facilities for easy access.

1. Maintain temporary construction and support facilities until near Substantial Completion. Remove prior to Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to the Owner.

B. Temporary Heat: Provide temporary heat required by construction activities, for curing or drying of completed installations or protection of installed construction from adverse effects of low temperatures or high humidity. Select safe equipment that will not have a harmful effect on completed installations or elements being installed. Coordinate ventilation requirements to produce the ambient condition required and minimize consumption of energy.

1. The Contractor shall provide heat, supplied with air, as follows:

a. At all times during normal working hours, provide sufficient heat to maintain a temperature of not less than 50 degrees F., and from 40 degrees to 50 degrees F. during periods other than specified herein below.

b. At all times during the placing, setting, and curing of concrete, provide sufficient heat to ensure heating of the spaces involved to not less than 50 degrees F.

c. Well before gypsum board work begins and continuous throughout the setting and drying periods, a temperature range between 55 and 70 degrees F. shall be maintained day and night. During this period, no finish woodwork, wood finish flooring, resilient flooring or flexible wall coverings shall be installed or stored in the buildings, and no finish painting or applying of finish wall coatings shall be undertaken.

d. For a period of ten (10) days previous to the placing of interior wood finish and throughout the placing of this and other interior finishing, varnishing, painting, etc., and until final acceptance of the work or until full occupancy by the Owner, provide sufficient heat to produce a temperature of not less than 70 degrees F.

e. Heat and air shall be supplied in a manner which shall avoid the rapid drying of material but thoroughly dry to such an extent that no remaining moisture will affect finish material.

f. The Contractor shall operate the heating and ventilating systems each day, including Saturdays, Sundays, and holidays; operating shall include necessary labor and approved operating personnel in attendance as required by agencies having jurisdiction.

g. It shall be the Contractor's responsibility to coordinate for the range of temperatures required for temporary heating, during this period, that temperature as recommended by the manufacturer of the materials as mentioned are stored in the building or being installed, and for the length of time recommended, following installation.

2. Temporary heating and ventilating equipment, piping, etc., shall be installed in such a manner as not to interfere with work of other trades or the permanent construction. If such interference does occur, it shall be the responsibility of the Contractor to make any changes required to overcome the interference.

3. Except as hereinafter specified, the permanent heating and ventilating systems shall not be used for temporary heat. The Contractor shall provide, operate, and maintain heating and ventilating units for the purposes specified. The units shall be arranged to bring in sufficient outdoor air (min. 1-1/2 air changes per hour) to ventilate the building and to prevent build-up of harmful dusts and fumes and remove excess moisture, especially to prevent damage to built-up roofing. During warm weather, the Contractor shall provide an adequate supply of fresh air (min. 1-1/2 air changes per hour) when necessary to properly ventilate for moisture, dust, and fumes from paints, cements, or adhesives in tightly enclosed areas where natural ventilation will not be sufficient.

C. Temporary Paving: Construct and maintain temporary roads and paving to adequately support the indicated loading and to withstand exposure to traffic during the construction period. Locate temporary paving for roads, storage areas, and parking, where the same permanent facilities will be located. Review proposed modifications to permanent paving with the Architect.

D. Temporary Enclosures: Provide temporary enclosure for protection of construction from exposure, foul weather, other construction operations, and similar activities. Where heat is needed and the building enclosure is incomplete, provide enclosures where there is no other provision for containment of heat. Coordinate enclosure with ventilating and material drying or curing requirements to avoid dangerous conditions.

E. Project Identification and Temporary Signs:

1. Prepare project identification and other signs of the size indicated; install signs where indicated to inform the public and persons seeking entrance to the project. Support on posts or framing of preservative treated wood or steel. Do not permit installation of unauthorized signs.

2. Temporary Signs: Prepare signs to provide directional information to construction personnel and visitors.

F. Temporary Exterior Lighting: Install exterior yard and sign lights so that signs are visible when work is being performed.

G. Collection and Disposal of Waste: Collect waste from construction areas and elsewhere daily. Comply with requirements of NFPA 241 for removal of combustible waste material and debris. Enforce requirements strictly. Do not hold materials more than seven (7) days during normal weather or 3 days when the temperature is expected to rise above 80 degrees F. Handle hazardous, dangerous, or unsanitary waste materials separately from other waste by containerizing properly. Dispose of material in a lawful manner.

H. Stairs: Until permanent stairs are available, provide temporary stairs where ladders are not adequate. Cover finished permanent stairs with a protective covering of plywood or similar material so finishes will be undamaged at the time of acceptance.

I. Surface and Underground Water Control: Grade site to drain. Maintain excavations free of water. Provide, operate, and maintain pumping equipment. Protect site from puddling or running water. Provide water barriers as required to protect site from soil erosion. Provide dewatering of site as required.

3.04 SECURITY AND PROTECTION FACILITIES INSTALLATION: Except for use of permanent fire protection as soon as available, do not change from use of temporary security and protection facilities to permanent facilities until Substantial Completion.

A. Fire Protection: Until fire protection is supplied by permanent facilities, install and maintain temporary fire protection of types needed to protect against predictable and controllable fire losses. Comply with NFPA 10 "Standard for Portable Fire Extinguishers," and NFPA 241 "Standard for Safeguarding Construction, Alterations and Demolition Operations."

B. Permanent Fire Protection: At the earliest date, complete installation of the permanent fire protection facility, including connected services, and place into operation. Instruct key personnel on use of facilities.

1. The permanent Fire Protection System shall be operational before any furniture is installed in the facility.

C. Enclosure Fence: Contractor's option, unless otherwise required by the Owner/Contractor Agreement.

D. Environmental Protection: Operate temporary facilities and conduct construction by methods that comply with environmental regulations, and minimize the possibility that air, waterways, and subsoil might be contaminated or polluted. Avoid use of tools and equipment which produce harmful noise. Restrict use of noise making tools and equipment to hours that will minimize complaints.

3.05 OPERATION: Enforce strict discipline in use of temporary facilities. Limit availability to intended use to minimize abuse. Maintain facilities in good operating condition until removal.

A. Protect from damage by freezing temperatures and the elements.

1. Maintain operation of enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour day basis to achieve indicated results and to avoid damage.

2. Prevent piping from freezing. Maintain markers for underground lines. Protect from damage during excavation operations.

3.06 TERMINATION AND REMOVAL: Remove each facility when the need has ended, or replaced by a permanent facility, or no later than Substantial Completion. Complete or restore construction delayed because of interference with the facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.

A. Temporary facilities are property of the Contractor.

B. Remove paving that is not acceptable for integration into permanent paving. Where the area is intended for landscape development, remove soil and fill that does not comply with requirements. Remove materials contaminated with road oil, asphalt and other petrochemical compounds, and other substances that might impair growth of plant materials. Repair or replace street paving, curbs, and sidewalks at the temporary entrances.

C. At Substantial Completion, renovate permanent facilities used during the construction period, including but not limited to:

1. Replace air filters and clean inside of ductwork and housings.

2. Replace worn parts and parts subject to unusual operating conditions.

3. Replace lamps burned out or noticeably dimmed by substantial hours of use.

END OF SECTION

SECTION 01 58 00 - PROJECT IDENTIFICATION

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. The Contractor shall provide and maintain at the site one project sign.

2. No other signs or advertisements will be allowed to be displayed on the premises.

1.02 QUALITY ASSURANCE

A. Design sign and structure to withstand 50 mph wind velocity.

B. Sign Painter: Engaged as professional sign painter for not less than three years.

C. Finishes, Painting: Adequate to withstand weathering, fading, and chipping for duration of construction.

PART 2 PRODUCTS

2.01 MATERIALS

A. Structure and Framing: New wood, 4' x 4' x 8' treated posts, structurally adequate.

B. Sign Mounting Board: 4' x 8', exterior grade, GPX yellow or green plywood with medium density overlay, minimum 3/4 inch thick.

C. Rough Hardware: Galvanized, aluminum or brass.

D. Paint and Primers: Exterior quality, two coats. Color to be White.

E. Vinyl sign to be provided by Owner and installed by Contractor.

PART 3 EXECUTION

3.01 CONSTRUCTION

A. Install project identification sign within 30 days after date fixed by Owner-Contractor Contract.

B. Erect at designated location as directed by Architect.

C. Erect supports and framing with uprights 36 inches below surface, braced and framed to resist wind loadings.

D. Install sign surface plumb and level, with butt joints. Anchor securely.

E. Paint sight-exposed surfaces of sign, supports, and framing.

3.02 MAINTENANCE

A. Maintain signs and supports clean. Repair deterioration and damages.

3.03 REMOVAL

A. Remove signs, framing, supports, and foundations at completion of the Project, when directed by Architect and restore the area.

END OF SECTION

SECTION 01 60 00 - PRODUCT REQUIREMENTS

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Products
2. Transportation and Handling
3. Storage and Protection
4. General Product Requirements

B. Related Sections:

1. Section 01 33 00 - Submittals and Substitutions
2. Section 01 45 00 - Quality Control: Product quality monitoring.

1.02 QUALITY ASSURANCE

A. Do not use materials and equipment removed from existing premises, except as specifically permitted by the Contract Documents.

B. Provide interchangeable components of the same manufacturer, for components being replaced.

1.03 PRODUCT DELIVERY AND HANDLING

A. Transport and handle products in accordance with manufacturer's instructions.

B. Promptly inspect shipments to ensure that Products comply with requirements, quantities are correct, and Products are undamaged.

C. Provide equipment and personnel to handle Products by methods to prevent soiling, disfigurement, or damage.

1.04 STORAGE AND PROTECTION

A. Store and protect Products in accordance with manufacturers' instructions, with seals and labels intact and legible.

B. Store sensitive Products in weather tight, climate controlled enclosures.

C. For exterior storage of fabricated Products, place on sloped supports, above ground.

D. Provide bonded off-site storage and protection when site does not permit on-site storage or protection.

E. Cover Products subject to deterioration with impervious sheet covering. Provide ventilation to avoid condensation or potential degradation of Product.

F. Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.

G. Provide equipment and personnel to store Products by methods to prevent soiling, disfigurement, or damage.

H. Arrange storage of Products to permit access for inspection. Periodically inspect to verify Products are undamaged and are maintained in acceptable condition.

PART 2 PRODUCTS

2.01 General Product Requirements:

A. Semi-Open Proprietary Specification Requirements: Where Specifications name one or more products or manufacturers, provide one of the products indicated.

1. Where Specifications specify products or manufacturers by name, accompanied by the term "Approved Substitution", the Architect will allow products as substitutions only after complying with the requirements of the General Conditions and Section 01 33 00.

B. The Contract Documents and governing regulations govern product selection. Procedures governing product selection include the following:

1. **Approved Manufacturers**: Products by the listed manufacturers are acceptable for use on this Project.

PART 3 EXECUTION

Not Used

END OF SECTION

SECTION 01 71 23 - FIELD ENGINEERING

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Quality Assurance
2. Submittals
3. Project Record Documents
4. Survey Requirements
5. Examination
6. Survey Reference Points

B. Related Sections:

1. General Conditions: Basic site engineering requirements.
2. Section 01 31 32 - Geotechnical Data: Owner's topographic survey.
3. Section 01 77 00 - Contract Closeout: Project Record Documents.

1.02 QUALITY ASSURANCE

A. Employ a Land Surveyor or Engineer registered in the State where project is located and acceptable to the Owner and Architect, to perform survey work of this section.

B. Submit evidence of Surveyor's or Engineer's Errors and Omissions insurance coverage in the form of an Insurance Certificate.

1.03 SUBMITTALS

A. Submit a copy of registered site drawing and a certificate signed by the Land Surveyor or Engineer, that the elevations and locations of the Work are in conformance with Contract Documents.

B. On request, submit documentation verifying accuracy of survey work.

1.04 PROJECT RECORD DOCUMENTS

A. Maintain a complete and accurate log of control and survey work as it progresses.

B. On completion of foundation walls and major site improvements, prepare a certified survey illustrating dimensions, locations, angles, and elevations of construction and site work.

1.05 SURVEY REQUIREMENTS

A. Provide field engineering services. Utilize recognized engineering survey practices.

B. Establish a minimum of two permanent bench marks on site, referenced to established control points. Record locations, with horizontal and vertical data, on project record documents.

C. Submit Project Record Documents under provisions of Section 01 78 39.

D. Establish elevations, lines and levels. Locate and lay out by instrumentation and similar appropriate means.

E. Periodically verify layouts by same means

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify locations of survey control points prior to starting work. Verify set-backs and easements, confirm drawing dimensions and elevations.

B. Promptly notify Architect of any discrepancies discovered.

3.02 SURVEY REFERENCE POINTS

A. Contractor to locate and protect survey control and reference points.

B. Protect survey control points prior to starting site work; preserve permanent reference points during construction.

C. Promptly report to Architect the loss or destruction of any reference point or relocation required because of changes in grades or other reasons.

D. Replace dislocated survey control points based on original survey control. Make no changes without prior written notice to Architect.

END OF SECTION

SECTION 01 73 29 - CUTTING AND PATCHING

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Administrative and Procedural Requirements for Cutting and Patching

B. Related Documents:

1. Refer to other Sections of these Specifications, including Divisions 22 (15) through 28 (16), for specific requirements and limitations applicable to cutting and patching individual parts of the work.

1.02 DEFINITIONS

A. Cutting: Removal of in-place construction necessary to permit installation or performance of other Work.

B. Patching: Fitting and repair work required to restore surfaces to original conditions after installation of other Work.

1.03 SUBMITTALS

A. CUTTING AND PATCHING PROPOSAL:

1. Where approval of procedures is required before proceeding, submit a proposal describing procedures in advance of the time cutting and patching will be performed. Include the following information, as applicable:

a. Describe the extent of cutting and patching required and how it is to be performed. Indicate why it cannot be avoided.

b. Describe anticipated results, include changes to structural elements and operating components and changes in the building's appearance and other visual elements.

c. List products to be used and entities that will perform work.

d. Indicate dates when cutting and patching is to be performed.

e. List utilities that will be disturbed, including those that will be relocated and those that will be temporarily out-of service. Indicate how long service will be disrupted.

f. Approval by the Architect to proceed does not waive the Owner's Representative right to later require complete removal and replacement of work found to be unsatisfactory.

1.04 STRUCTURAL WORK:

A. Do not cut and patch structural elements in a manner that would reduce the load-carrying capacity or load deflection ratio. Obtain approval of the cutting and patching proposal before cutting and patching structural elements.

1.05 OPERATIONAL AND SAFETY LIMITATIONS:

A. Do not cut and patch operating elements or safety components in a manner that would reduce their capacity to perform as intended, or would increase maintenance, or decrease operational life or safety. Obtain approval of the cutting and patching proposal before cutting and patching operating elements or safety related systems.

1.06 VISUAL REQUIREMENTS:

A. Do not cut and patch construction exposed on the exterior or in occupied spaces in a manner that would reduce the building's aesthetic qualities or result in visual evidence of cutting and patching. Remove and replace Work cut and patched in a visually unsatisfactory manner.

PRODUCTS

1.07 MATERIALS:

A. Use materials identical to existing materials. If identical materials are not available or cannot be used where exposed surfaces are involved, use materials that match existing adjacent surfaces to the fullest extent possible. Use materials whose performance will equal or surpass that of existing materials.

PART 2 EXECUTION

2.01 EXAMINATION:

A. Before cutting, examine surfaces to be cut and patched and conditions under which cutting and patching is to be performed. Take corrective action before proceeding if unsafe or unsatisfactory conditions are encountered.

2.02 PREPARATION:

A. Provide temporary support of work to be cut.

2.03 CLEANING:

A. Thoroughly clean areas and spaces where cutting and patching is performed or used as access. Remove paint, mortar, oils, putty and similar items. Thoroughly clean piping, conduit, and similar features before painting or finishing is applied. Restore damaged pipe covering to its original condition.

2.04 PROTECTION:

A. Protect existing construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions that might be exposed during cutting and patching operations.

B. Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.

C. Take all precautions to avoid cutting existing pipe, conduit, or ductwork serving the building, but scheduled to be removed, or relocated until provisions have been made to bypass them.

D. Existing Utility Services and Mechanical/Electrical Systems: Where existing services/systems are required to be removed, relocated, or abandoned, bypass such services/systems, when possible, before cutting to minimize interruption to occupied areas.

2.05 PERFORMANCE:

A. Employ skilled workmen to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time and complete without delay.

B. Cut existing construction to provide for the installation of other components or the performance of other construction activities and the subsequent fitting and patching required to restore surfaces to their original condition.

2.06 CUTTING:

A. All cutting of areas shall be by Contractor requiring cutting, except where noted otherwise in the Specifications and/or Drawings.

B. Cut existing construction using methods least likely to damage elements to be retained or adjoining construction. Where possible, review procedures with the original installer. Comply with the original installer's recommendations.

C. Where cutting is required, use hand or small power tools designed for sawing or grinding, not hammering and chopping. Cut holes and slots to size required with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use. To avoid marring existing finished surfaces, cut or drill from the exposed or finished side into concealed surfaces.

D. Cut through concrete and masonry using a cutting machine such as a carborundum saw or diamond core drill. Overcuts are **NOT** allowed

1. At concrete slabs on grade cut existing vapor barrier leaving 6-inches of existing vapor barrier material on each side of cut for splicing in new vapor barrier material.

E. Comply with requirements of applicable sections of Division 02 where cutting and patching requires excavating and backfilling.

2.07 PATCHING:

A. All patching shall be provided by Contractor doing cutting work and shall be performed by trade who would customarily be performing that type of work.

B. Patch with durable seams that are as invisible as possible. Comply with specified tolerances.

C. Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing.

1. Where patching occurs in a smooth painted surface, extend final paint coat over entire unbroken surface containing the patch, after the patched area has received primer and second coat.

2. Patch, point or grout flush all voids, holes, chips, cracks, spalls, broken or otherwise damaged surfaces. Patch with materials which match adjacent surfaces in appearance and quality

D. Repair surfaces exposed by removed finishes, fixtures, or equipment.

END OF SECTION

SECTION 01 74 00 - CLEANING AND WASTE MANAGEMENT

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Throughout all phases and items of the construction period, maintain the building and site in a standard of cleanliness as described in this Section including:

a. Cleaning Materials and Equipment

b. Progress Cleaning

c. Final Cleaning

B. Related Sections:

1. General Conditions.

2. In addition to standards described in this Section, comply with all requirements for cleaning-up as described in various other Sections of these Specifications.

1.02 QUALITY ASSURANCE

A. Inspection: Conduct daily inspection, and more often if necessary, to verify that requirements of cleanliness are being met

B. Codes and Standards: In addition to the standards described in this Section, comply with all pertinent requirements of Governmental agencies having jurisdiction.

C. Disposal of volatile fluid wastes (such as mineral spirits, oil, or paint thinner) in storm or sanitary sewer systems or into streams or waterways is not permitted.

PART 2 PRODUCTS

2.01 CLEANING MATERIALS AND EQUIPMENT:

A. Provide all required personnel, equipment, and materials needed to maintain the specified standard of cleanliness.

2.02 COMPATIBILITY:

A. Use only the cleaning materials and equipment which are compatible with the surface being cleaned, as recommended by the manufacturer of the material or as approved by the Owner's Representative.

PART 3 EXECUTION

3.01 PROGRESS CLEANING

A. General:

1. Retain all stored items in an orderly arrangement allowing maximum access, not impeding traffic, and providing the required protection of materials.

2. Do not allow the accumulation of scrap, debris, waste material, and other items not required for the construction of this work.

3. Twice weekly, and more often if necessary, the Contractor shall completely remove all scrap, debris, and waste material from the job site, and shall place into container furnished by the Contractor.

4. Provide adequate storage for all items awaiting removal from the job site, observing all requirements for fire protection.

B. Project Site; The Contractor shall:

1. Daily, and more often if necessary, inspect the project site and pick up all scrap, debris, and waste material. Remove all such items to the place designated for their storage.

2. Weekly, and more often if necessary, sweep all interior places clean. "Clean", for the purpose of this subparagraph, shall be interpreted as meaning free from dust and other material capable of being removed by reasonable diligence using a hand-held broom.

3. As required preparatory to installation of succeeding materials, clean the structures or pertinent portions thereof to the degree of cleanliness recommended by the manufacturer of the succeeding material, using all equipment and materials required to achieve the required cleanliness.

4. Following the installation of finish floor materials, protect by covering with temporary coverings and/or clean the finish floor daily (and more often if necessary) at all times while work is being performed in the space in which finish materials have been installed. "Clean", for the purpose of this subparagraph, shall be interpreted as meaning free from all foreign material, which may be injurious to the finish floor material.

3.02 FINAL CLEANING

A. Definition: Except as otherwise specifically provided, "Clean" (for the purpose of this Article) shall be interpreted as meaning the level of cleanliness generally provided by commercial building maintenance Subcontractors using commercial quality building maintenance equipment and materials.

B. General: Prior to completion of the work, remove from the job site all tools, temporary structures, surplus materials, equipment, scrap, debris, and waste. Conduct final progress cleaning as described in Article 3.01 above.

C. Interior: Visually inspect all interior surfaces and remove all traces of soil, waste material, smudges, and other foreign matter. Remove all traces of splashed materials from adjacent surfaces. Remove all paint droppings, spots, stains, and dirt from finished surfaces. Use only the specified cleaning materials and equipment.

D. Repair, patch, and touch-up marred or damaged surfaces to match adjacent finishes.

E. Clean the following if located within the project area:

1. Plumbing Fixtures, Strainers and Floor Drains

2. Light Fixtures and Lamps

3. Replace filters of ventilating equipment when units have been operating during construction. In addition, clean grilles and louvers.

4. Excess lubrication is to be removed from mechanical and electrical equipment.

5. All Electrical Panels

F. Clean all transparent materials, including glass and mirrors. Remove glazing compound and other substances that are noticeable from vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials.

G. Remove labels that are not permanent labels.

H. Polished and Resilient Surfaces: To all surfaces requiring the routine application of protective waxes and/or buffed polish, apply the specified coating and/or polish as recommended by the manufacturer of the material being treated, as specified in individual Specification Sections.

I. Leave concrete floors broom clean. Vacuum carpeted surfaces.

J. Clean areas traversed by construction personnel.

K. Clean the site, including landscape development areas, of rubbish, litter, and other foreign substances. Sweep paved areas broom clean. Remove stains, spills, and other foreign deposits.

L. Maintain cleaning until the building, or portion thereof, is accepted by the Owner.

M. Timing: Schedule final cleaning as approved by the Owner's Representative to enable the Owner to accept a completely clean project.

END OF SECTION

SECTION 01 77 00 - CLOSEOUT PROCEDURES

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Closeout Procedures
2. Inspection Procedures

B. Related Sections:

1. Section 01 74 00 - Cleaning and Waste Management
2. Section 01 78 13 – Bonds and Warranties
3. Section 01 78 39 - Project Record Documents
4. Section 01 78 43 - Spare Parts and Materials
5. Section 01 78 23 – Operation and Maintenance
6. Section 01 79 00 – Demonstration and Training

1.02 DEFINITIONS

A. Closeout is hereby defined to include general requirements near end of Contract Time, in preparation for final acceptance, final payment, normal termination of contract, occupancy by Owner, and similar actions evidencing completion of the work. Specific requirements for individual units of work are specified in sections of Divisions 02 through 33. Time of closeout is directly related to "Substantial Completion" and shall be a single time period for the entire work.

1.03 PREREQUISITES TO SUBSTANTIAL COMPLETION

A. General: Prior to requesting inspection for Substantial Completion (for either entire work or portions thereof), complete the following and list known exceptions in request:

1. Include supporting documentation for completion as indicated in these Contract Documents.
2. Submit statement showing accounting of changes to Contract Sum.
3. The Contractor shall prepare, submit and complete a punch list in accordance with General Conditions.
4. Submit specific warranties, workmanship/maintenance bonds, maintenance agreements, final certifications, and similar documents.
5. Obtain and submit releases enabling Owner's full and unrestricted use of the work and access to services and utilities, including (where required) occupancy permits, operating certificates, waivers of lien, and similar releases.
6. Submit record drawings, maintenance manuals, and similar final record information.
7. Deliver tools, spare parts, extra stocks of materials, and similar physical items to Owner.
8. Complete start-up testing of systems, and instructions of Owner's operating/maintenance personnel. Discontinue (or change over) and remove from project site temporary facilities and services, along with construction tools and facilities, mock-ups, and similar elements.
9. Complete final cleaning up requirements, including touch-up painting of marred surfaces.
10. Touch-up and otherwise repair and restore marred, exposed finishes.

1.04 INSPECTION PROCEDURES:

A. Upon receipt of Contractor's request, the Architect will either proceed with inspection or advise Contractor of prerequisites not fulfilled. Following initial inspection, the Owner's Representative will establish the date of Substantial Completion, or advise Contractor of work which must be performed prior to establishing date; and repeat inspection when requested and assured that work has been substantially completed. Results of completed inspection will form initial "punch-list" for final acceptance.

1.05 RECORD DOCUMENTS

A. General: Specific requirements for record documents are indicated in individual sections of these Specifications. Other requirements are indicated in General Conditions. General submittal requirements are indicated in "Submittals" sections. Do not use record documents for construction purposes; protect from deterioration and loss in a secure, fire-resistive location; provide access to record documents for Owner's Representative and Architect's reference during normal working hours.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

3.01 CLEANING

A. General: Special cleaning for specific units of work is specified in sections of Divisions 02 through 33. General cleaning during progress of work is specified in General Conditions and as temporary services in Section 01 74 00. Provide final cleaning of the work, at time indicated, consisting of cleaning each surface or unit of work to normal "clean" condition expected for a first-class building cleaning and maintenance program. Comply with manufacturer's instructions for cleaning operations.

1. Where extra materials of value remain after completion of associated work have become Owner's property, dispose of these to Owner's best advantage as directed.

END OF SECTION

SECTION 01 78 13 - BONDS AND WARRANTIES

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. This Section specifies general administrative and procedural requirements for warranties, guarantees, and bonds required by the Contract Documents, including manufacturers standard warranties on products and special warranties. Warranties required by the Specifications, Divisions 02 through 33, shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and shall be in addition to other warranties made by the Contractor under the Contract Documents.

2. Disclaimers and Limitations: Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the Work that incorporates the products, nor does it relieve suppliers, manufacturers, and Subcontractors required to countersign special warranties with the Contractor.

B. Related Sections:

1. Additional requirements as specified in General Conditions.

2. General closeout requirements are included in Section 01 77 00 Contract Closeout.

3. Warranties, including requirements for certifications for the work and products and installation that are specified to be warranted, are stated in the individual Specification Sections of Divisions 02 through 33.

4. Specific certification requirements and other commitments and agreements for continuing services to the Owner are specified elsewhere in the Contract Documents.

1.02 DEFINITIONS

A. Categories of Specific Warranties: Warranties on the work are in several categories, including those of General Conditions, and including (but not necessarily limited to) the following specific categories related to individual units of work specified in sections of Divisions 02 through 33 of these Specifications.

1. Special Project Warranty (Guarantee): A warranty specifically written and signed by Contractor for a defined portion of the Work and, where required, countersigned by Subcontractor, installer, manufacturer, or other entity engaged by Contractor.

2. Specified Product Warranty: A warranty which is required by Contract Documents, to be provided for a manufactured product incorporated into the Work, regardless of whether manufacturer has published a similar warranty without regard for specific incorporation of product into the Work, or has written and executed a special project warranty as a direct result of Contract Documents requirements.

3. Coincidental Product Warranty: A warranty which is not specifically required by Contract Documents (other than as specified in this Section), but which is available on a product incorporated into the work by virtue of the fact that manufacturer of product has published warranty in connection with purchases and uses of product without regard for specific applications, except as otherwise limited by terms of warranty.

1.03 SUBMITTALS

A. If the date of Substantial Completion designates a commencement date for warranties other than the proposed date of Substantial Completion for the Work, or a designated portion of the Work, the Contractor shall submit written warranties upon request of the Owner, in accordance with this Section.

B. When a designated portion of the Work is completed and occupied or used by the Owner, by separate agreement with the Contractor during the construction period, properly executed warranties should be submitted to the Owner within 15 days of completion of that designated portion of the Work.

C. When a special warranty is required to be executed by the Contractor, or the Contractor and a Subcontractor, supplier or manufacturer, a written document should be prepared which contains appropriate terms and identification, ready for execution by the required parties. Draft copies should be submitted for approval prior to final execution.

D. Refer to individual Sections of Divisions 02 through 33 for specific content requirements, and particular requirements for submittal of special warranties.

E. Final Form of Submittal: Prior to certification for Substantial Completion, compile two original copies of each approved warranty and bond properly executed by the Contractor, or by the Contractor, Subcontractor, supplier, or manufacturer. Organize the warranty documents into an orderly sequence based on the table of contents of the Specifications.

1. Bind warranties and bonds in heavy-duty, commercial quality, durable 3-ring vinyl covered loose-leaf binders.

F. Provide additional photocopies of each warranty for inclusion in the appropriate volume of the Operating and Maintenance Manuals.

1.04 QUALITY ASSURANCE

A. Disclaimers and Limitations: Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the Work that incorporates the products. Manufacturer's disclaimers and limitations on product warranties do not relieve suppliers, manufacturers, and Subcontractors required to countersign special warranties with the Contractor.

1.05 WARRANTY REQUIREMENTS

A. Conform to General Conditions, Article 37, and the following:

1. Related Damages and Losses: When correcting warranted Work that has failed, remove and replace other Work that has been damaged as a result of such failure or that must be removed and replaced to provide access for correction of warranted Work.

2. Reinstatement of Warranty: When Work covered by a warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with date of revised warranty beginning from date of repair.

3. Replacement Cost: Upon determination that Work covered by a warranty has failed, replace or rebuild the Work to an acceptable condition complying with requirements of Contract Documents. The Contractor is responsible for the cost of replacing or rebuilding defective Work regardless of whether the Owner has benefited from use of the Work through a portion of its anticipated useful service life.

B. Owner's Recourse: Written warranties made to the Owner are in addition to implied warranties, and shall not limit the duties, obligations, right and remedies otherwise available under the law, nor shall warranty periods be interpreted as limitations on time in which the Owner can enforce such other duties, obligations, rights, or remedies.

C. Rejection of Warranties: The Owner reserves the right to reject warranties and to limit selections to products with warranties not in conflict with requirements of the Contract Documents.

D. The Owner reserves the right to refuse to accept Work for the Project where a special warranty, certification, or similar commitment is required on such Work or part of the Work, until evidence is presented that entities required to countersign such commitments are willing to do so.

E. In the event that the Owner or any of its agents takes possession of the Work or any portion thereof, pursuant to the Contract Provisions, warranties shall not start until such work, or portions thereof, are separately and finally accepted. Warranty coverage for system components shall not become effective until the Owner makes final acceptance of the system or a separate portion of the system containing the component. All affected warranties shall continue in force for a period of at least one (1) year from the date of final acceptance of the work or any portion thereof.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

END OF SECTION

SECTION 01 78 23 - OPERATION AND MAINTENANCE DATA

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. This Section specifies the administrative requirements, procedural obligations, terms and conditions and general requirements related to the preparation and submittal of instruction manuals covering the materials installed, care, preservation and maintenance of products, finishes, equipment and systems.

B. Related Sections:

1. Special operating and maintenance data requirements for specific equipment or building operating systems are included in the appropriate Specifications Sections of Divisions 02 through 33.

2. Preparation of Shop Drawings and Product Data are included in Specification Section 01 33 00, "Submittals and Substitutions".

3. General closeout requirements are included in Specification Section 01 77 00, "Contract Closeout".

4. General requirements for submittal of Project Record Documents are included in Section 01 78 39, "Project Record Documents".

1.02 SUBMITTALS

A. Submittal Schedule: Comply with the following schedule for submittal of operating and maintenance manuals:

1. Submit two (2) copies of the first and subsequent drafts of each manual for review. Include a complete index and table of contents for each volume. One (1) copy will be returned within 45 days of receipt with comments. The first draft shall be at least 95% complete. Provide FINAL manuals prior to commencement of training; these manuals shall be utilized as instructional text during the building orientation and training processes. Refer to Section 01 78 39.

B. Form of Submittal: Manuals should be prepared in the form of an instructional manual for use by the Owner's operating personnel and/or property management company. The information should be bound as follows:

1. Binders: For each manual, provide heavy-gauge, commercial quality, vinyl hanging VUE presentation binders in 3" capacity sized to receive 8-1/2" by 11" paper. Binder color shall be white.

a. Identify each binder on the spine with the typed or printed title "OPERATION AND MAINTENANCE MANUAL", project name and subject matter covered.

b. Indicate the volume number for multiple volume sets of manuals.

2. Dividers: Manual contents shall be organized and divided by specification divisions using index maker dividers.

3. Protective Plastic Jackets: Provide protective transparent plastic jackets designed to enclose diagnostic software for computerized electronic equipment.

4. Text Material: Where written material is required as part of the manual, use the manufacturer's standard printed material.

5. Drawings: Where drawings or diagrams are required as part of the manual, provide protective plastic jackets for the drawings and bind in with the text.

1.03 GENERAL MANUAL CONTENT

A. In each manual, include information specified in the individual Specification Section and the following information for each major component of building equipment and its controls:

1. General system or equipment description.
2. Design factors and assumptions.
3. Copies of approved shop drawings, product data, installation instructions and setup/calibration procedures.
4. Load and performance testing reports including equipment and system startup/performance documentation.
5. Fire/flame spread test certificates.
6. System or equipment identification, including:
    a. Name of manufacturer
    b. Model number
    c. Serial number
7. Standard operating instructions.
8. Emergency operating instructions.
9. Wiring diagrams including color coding, labeling and terminal designations.
10. Inspection and test procedures.
11. Detailed preventative maintenance procedures, frequencies and special tool requirements.
12. Operator trouble-shooting guide.
13. Precautions against improper use and maintenance.
14. Copies of warranties, including extended warranty options.
15. General owners operating/service manual.
16. Factory service manuals, including repair instructions and illustrated parts listing.
17. Electronic copies of operating system software (3.5 in. diskettes or CD-ROM).
18. Material safety data sheets.
19. Sources of required maintenance materials repair/replacement parts and related services.
20. Copies of inspections and certifications by governing authorities.

B. Manual Index: Organize each manual into separate Sections for each piece of related equipment. As a minimum each manual shall contain a title page, a table of contents, copies of Product Data, supplemented by drawings and written text, and copies of each warranty, bond and service contract proposal.

C. Title Page: Provide a title page as the first sheet of each manual. Provide the following information.

1. Subject matter covered by the manual.
2. Name and number of the Contract.
3. Date of submittal.
4. Name, address, and telephone number of the Contractor and Subcontractor.

5. Name and address of the Architect/Engineer.

6. Cross reference to related systems in other operating and maintenance manuals.

D. General Table of Contents: After the Title Page, include a typewritten table of contents for each volume (Divisions 02 through 33 inclusive), arranged according to the specification format.

E. General Information: Provide a general information Section immediately following the Table of Contents, listing by Specification Section each major product included in the manual, identified by product name. Under each product, list the name, address, telephone number, and point of contact of the Subcontractor or installer, and the maintenance contractor. Clearly delineate the extent of responsibility of each of these entities. In addition, list a local source for replacement parts and equipment.

F. Product Data: Where manufacturer's standard printed data is included in the manuals, include only sheets that are pertinent to the part or product installed. Mark each sheet to identify each part or product included in the installation. Where more than one item in a tabular format is included, identify each item, using appropriate references from the Contract Documents. Identify data that is applicable to the installation and delete references to information that is not applicable.

1. Manufacturer's Data: Provide complete information on architectural products, including the following, as applicable:

   a. Manufacturer's Catalog Number

   b. Size

   c. Material Composition

   d. Color

   e. Texture

   f. Re-ordering Information for Specially Manufactured Products

2. Care and Maintenance Instructions: Provide information on care and maintenance, including manufacturer's recommendations for types of cleaning agents to be used and methods of cleaning. Provide information regarding cleaning agents and methods that could prove detrimental to the product. Include manufacturer's recommended schedule for cleaning and maintenance.

3. Color Schedules: Provide information showing manufacturer's color name and catalog number for all exposed finishes, including paint, carpet, wallcoverings, and other finish materials.

4. Moisture-Protection and Weather-Exposed Products: Provide complete manufacturer's data with instructions on inspection, maintenance and repair of products exposed to the weather or designed for moisture-protection purposes.

   a. Manufacturer's Data: Provide manufacturer's data giving detailed information, including the following, as applicable:

      1) Applicable standards

      2) Chemical composition

      3) Installation details

      4) Inspection procedures

      5) Maintenance information

      6) Repair procedures

G. Equipment and Systems: Provide the following information for each piece of equipment, each building operating system, and each electric or electronic system.

1. Description: Provide a complete description of each unit and related component parts, including the following:
    a. Equipment or system function
    b. Operating characteristics
    c. Limiting conditions
    d. Performance curves
    e. Engineering data and tests
    f. Complete nomenclatures and number of replacement parts
2. Manufacturer's Information: For each manufacturer of a component part or piece of equipment, provide the following:
    a. Printed operating and maintenance instructions.
    b. Assembly drawings and diagrams required for maintenance.
    c. Recommended parts inventory listing.
3. Provide information detailing essential maintenance procedures, including the following:
    a. Routine operations
    b. Trouble-shooting guide
    c. Disassembly, repair and reassembly
    d. Alignment, adjusting and checking
4. Operating Procedures: Provide information on equipment and system operating procedures, including the following:
    a. Start-up procedures
    b. Equipment or system break-in
    c. Routine and normal operating instructions
    d. Regulation and control procedures
    e. Instructions on stopping
    f. Shut-down and emergency instructions
    g. Day and night operating instructions
    h. Summer and winter operating instructions
    i. Required sequences for pneumatic, electric, electronic or direct digital control systems
    j. Special operating instructions
5. Servicing Schedule: Provide a schedule of routine servicing and lubrication requirements, including a list of required lubricants for equipment with moving parts.
6. Controls: Provide a comprehensive description of the sequence of operation and as-installed control diagrams by the control manufacturer for systems requiring controls.
7. Drawings: Provide copies of each Contractor/Subcontractor set of coordination drawings.

8. Valve Tags: Provide charts of valve tag numbers with the room number location and function of each valve. Valve tag locations shall be clearly indicated on the set of record "As-Built" drawings.

9. Circuit Directories: For electric and electronic systems, provide complete circuit directories of panelboards, including the following:

   a. Electric power

   b. Lighting

   c. Communications

   d. Fire Alarm

H. Written Test: Where manufacturer's standard printed data is not available, and information is necessary for proper operation and maintenance of equipment or systems, or it is necessary to provide additional information to supplement data included in the manual, prepare written text to provide necessary information. Organize the text in a consistent format under separate headings for different procedures. Where necessary, provide a logical sequence of instruction for each operating or maintenance procedure.

I. Drawings: Provide specially prepared drawings where necessary to supplement manufacturer's printed data to illustrate the relationship of component parts of equipment or systems, or to provide control or flow diagrams. Coordinate these drawings with information contained in Project Record Drawings to assure correct illustration of the completed installation. Do not use original Project Record Documents as part of the Operating and Maintenance Manuals.

J. Warranties, Bonds, and Service Contracts: Provide a photocopy of each warranty, bond, or service contract in the appropriate manual for the information of the Owner's operating personnel. Provide written data outlining procedures to be followed in the event of product failure including the return policies/procedures. List circumstances and conditions that would affect validly of the warranty or bond. Commencement and expiration dates shall be clearly indicated.

K. Provide complete information in the manual on products specified in Divisions 02 through 33.

1.04 TRAINING OF OPERATING AND MAINTENANCE PERSONNEL

A. Prior to final inspection, instruct the hotel personnel in operation, adjustment, and maintenance of products, equipment and systems.

1. Use operation and maintenance manuals for each piece of equipment or system as the basis of instruction. Review contents in detail to explain all aspects of operation and maintenance.

2. Refer to Specification Section 01 79 00, "Training", for detailed training requirements

1.05 OPERATING MAINTENANCE MANUALS

A. Submit copies of each manual, in the form specified, to the Owner's Representative for distribution.

1. Refer to individual Specification Sections and other paragraphs within this Section for additional requirements.

B. Manuals should be organized into separate and distinct volumes (binders) as described hereafter:

1. "SITE WORK"

   a. Asphalt Concrete Pavement

   b. Tack and Prime Coat

c. Concrete Curbs and Sidewalks
d. Pavement Markings
e. Guide Rail
f. Termite Control
g. Traffic Signage

2. "SITE WORK UTILITIES"
   a. Water and Sanitary Sewer Facilities
   b. Drainage Structures
   c. Underdrains
   d. Electrical Power Service
   e. Gas Utility
3. "Landscape and Site Improvements"
   a. Soil Preparation and Seeding
   b. Trees, Plants, and Ground Cover
   c. Fences and Gates
   d. Playfields and Equipment
   e. Site and Street Furnishings
4. "BUILDINGS AND STRUCTURES"
   a. Concrete
   b. Unit Masonry
   c. Metals
   d. Woods and Plastics
   e. Thermal and Moisture Protection
   f. Doors and Windows
   g. Finishes
   h. Specialties
   i. Fixtures, Furnishings, and Equipment
5. "WAYFINDING"
   a. Exterior Signage
   b. Exterior Post/Panel and Overhead Panel Signs
6. "SWIMMING POOLS AND SPAS"
   a. Basic Piping and Pumps
   b. Filtering and Deck Equipment
   c. Pool Heater and Controls
   d. Chemical Treatment
7. "HYDRAULIC ELEVATORS"
8. "MECHANICAL, HVAC"

a. Basic Materials and Methods b. Piping and Specialties
c. Insulation d. Pumping
e. Refrigeration
f. Air Handling and Distribution
g. Automatic Temperature Control h. Testing/Adjusting/Balancing

9. "MECHANICAL, PLUMBING"
   a. Basic Materials and Methods b. Piping and Specialties
   c. Insulation
   d. Fixtures/Trim/Accessories e. Water Heaters
   f. In-Line Circulating Pumps
   g. Water Softening Equipment
10. "FIRE SPRINKLERS"
    a. Basic Materials and Methods b. Standpipe and Hose Systems c. Fire Pumps
    d. Dry Pipe Sprinkler Systems e. Wet Pipe Sprinkler Systems
11. "ELECTRICAL"
    a. Basic Materials and Methods
    b. Service and Distribution
       1) Service Entrance
       2) Switchboards
       3) Disconnects
       4) Grounding
       5) Transformers
       6) Panelboards
       7) Overcurrent Protective Devices
       8) Contactors
       9) Voltage Surge Suppression
       10) Heat Tracing

c. Lighting

1) Interior and Exterior Luminaries, Lamps and Accessories
2) Emergency Lighting
3) Lighting Control Equipment

12. "SOUND SYSTEMS"
13. "COMMUNICATIONS"
    a. Voice and Data
    b. Television Distribution System
    c. Security Intercom System
14. "FIRE ALARM SYSTEM"

1.06 MAINTENANCE OF DOCUMENTS AND SAMPLES: Store Record Documents and Samples in the field office apart from Contract Documents used for construction. Do not permit Project Record Documents to be used for construction purposes. Maintain Record Documents in good order and in a clean, dry, legible condition. Make Documents and Samples available at all times for inspection by the Owner's Representative or Architect.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

END OF SECTION

SECTION 01 78 39 - PROJECT RECORD DOCUMENTS

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. This Section specifies administrative and procedural requirements for Project Record Documents to be prepared and submitted by the General Contractor.

2. Project Record Documents required include:

a. Marked-Up Copies of Record Drawings, Specifications, and Product Data

b. Record Samples

c. Miscellaneous Record Submittals

B. Related Sections:

1. General project closeout requirements are included in “Contract Closeout”, Section 01 77 00.

2. General requirements for submittal of Shop Drawings and Product Data are included in General Conditions and the Section “Submittals and Substitutions,” Section 01 33 00.

3. Specific record copy requirements that expand requirements of this Section are included in the individual Sections of Divisions 02 through 33.

4. Operating and maintenance data is specified in Section 01 78 23.

1.02 MAINTENANCE OF DOCUMENTS AND SAMPLES

A. Refer to General Conditions, Article 17.

1.03 RECORD DRAWINGS

A. The Contractor shall maintain a white-print set (blue-line or black-line) of Contract Drawings and Shop Drawings in clean, undamaged condition, with mark-up of actual installations which vary substantially from the work as originally shown. Mark whichever drawing is most capable of showing "field" condition fully and accurately; however, where Shop Drawings are used for mark-up, record a cross reference at corresponding location on working drawings. Mark with red erasable pencil and, where feasible, use other colors to distinguish between variations in separate categories of work. Mark-up new information which is recognized to be of importance to Owner, but was for some reason not shown on either Contract Drawings or Shop Drawings. Give particular attention to concealed work, which would be difficult to measure and record at a later date. Note related change order numbers where applicable. Organize record drawing sheets into manageable sets, bind with durable paper cover sheets, and print suitable titles, dates, and other identification on cover of each set.

B. Responsibility for Markup: Where feasible, the individual or entity who obtained record data, whether the individual or entity is the installer, Subcontractor, or similar entity, is required to prepare the mark-up on Record Drawings.

C. At time of Substantial Completion, submit Record Drawings to Owner for Owner's records in accordance with General Conditions, Article 17.

1. Refer to Section 01 78 23 for items to be included in manuals.

2. Three (3) copies will be required.

1.04 RECORD SPECIFICATIONS

A. The Contractor shall maintain one copy of specifications, including addenda, change orders, and similar modifications issued in printed form during construction, and mark-up variations (of substance) in actual work in comparison with text of specifications and modifications as issued. Give particular attention to substitutions, selection of option, and similar information on work where it is concealed or cannot otherwise be readily discerned at a alter date by direct observation. Note related record drawing information and product data, where applicable. Upon completion of mark-up, submit to Owner's Representative.

1. The Contractor is responsible for collecting marked-up record Sections from each of the other Subcontractors, and for collating these Sections in proper numeric order with its own Sections to form a complete set of record Specifications. Submit to the Owner.

a. Three (3) copies will be required.

1.05 PRODUCT DATA

A. During the construction period, maintain one copy of each Product Data submittal for Project Record Document purposes.

1. Mark Product Data to indicate the actual product installation where installation varies substantially from that indicated in Product Data submitted. Include significant changes in the product delivered to the site and changes in manufacturer's instructions and recommendations for installation.

2. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.

3. Note related Change Orders and mark-up of Record Drawings, where applicable.

4. Where record Product Data is required as part of maintenance manuals, submit marked-up Product Data as an insert in the manual instead of submittal as record Product Data. Refer to Section 01 78 23 (01830) for requirements. Submit to the Owner.

5. The Contractor is responsible for mark-up and submittal of record Product Data.

1.06 SAMPLES

A. Immediately prior to date of Substantial Completion, the Contractor shall meet with the Owner at the site to determine which of the Samples maintained during the construction period shall be transmitted to the Owner for record purposes. Comply with the Owner's instructions for packaging, identification marking, and delivery to Owner's storage space. Dispose of other Samples in manner specified for disposal of surplus and waste materials.

1.07 MISCELLANEOUS RECORD SUBMITTALS

A. Refer to other Specification Sections for miscellaneous record-keeping requirements and submittals in connection with various construction activities. Immediately prior to Substantial Completion, complete miscellaneous records and place in good order, properly identified and bound or filed, ready for use and reference. Submit to the Owner.

1. Categories of requirements resulting in miscellaneous records include, but are not limited to, the following:

a. Field Records on Excavations and Foundations

b. Field Records on Underground Construction and Similar Work

c. Survey Showing Locations and Elevations of Underground Lines

d. Invert Elevations of Drainage Piping

e. Surveys Establishing Building Lines and Levels

f. Authorized Measurements Utilizing Unit Prices or Allowances

g. Batch Mixing and Bulk Delivery Records

h. Load and Performance Testing

i. Inspections and Certifications by Governing Authorities

j. Leakage and Water-Penetration Tests

k. Fire Resistance and Flame Spread Test Results

l. Final Inspection and Correction Procedures

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

3.01 RECORDING

A. Post changes and modifications to the Documents as they occur. Do not wait until the end of the Project.

END OF SECTION

SECTION 01 78 43 - SPARE PARTS

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Spare Parts and Materials

B. Related Sections:

1. Refer to individual sections for items listed herein, as well as other requirements.

PART 2 PRODUCTS

2.01 EXTRA MATERIALS - GENERAL

A. At the time of building acceptance, deliver to the Owner the following extra materials. Deliver in original unopened cartons or containers (except paint) with each item properly identified.

2.02 JOINT SEALANTS (07 92 00)

A. Furnish extra sealant materials from same production run as the materials applied in the quantities described below. Package materials in unopened, factory-sealed containers with labels describing contents.

1. Quantity: Furnish one unused tube of each type and color of exterior sealant applied.

2.03 TILING (09 30 00)

A. Furnish extra materials described below that match products installed, are packaged with protective covering for storage, and are identified with labels describing contents.

1. Tile and Trim Units: Furnish quantity of full-size units equal to one case for each type, composition, color, pattern, and size indicated.

2.04 ACOUSTIC TILE CEILINGS (09 51 23)

A. Replacement stock amounting to one full box (minimum 12 tiles) of each type.

2.05 RESILIENT FLOORING (09 65 00)

A. Furnish extra materials matching products installed as described below, packaged with protective covering for storage and identified with labels clearly describing contents.

1. Furnish not less than one box of each class, wearing surface, color, pattern, and size of resilient floor tile installed.

2. Furnish not less than one partial roll of sheet vinyl flooring, minimum of 100 square feet, of each color and pattern installed.

2.06 CARPETING (09 68 00)

A. Furnish extra materials described below before installation begins that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1. The Owner shall be permitted to view all carpet scraps and retain any that is chosen for future repairs before they are removed from the job site.

2.07 PAINTING AND SPECIAL COATINGS (09 90 00 / 09 96 00)

A. Furnish extra paint materials from the same production run as the materials applied in the quantities described below. Package paint materials in unopened, factory-sealed containers for storage.

1. Quantity: Furnish the Owner with two gallons of each material and color applied in addition to any leftover amounts.
2. All cans shall be labeled with Finish Index number.

2.08 FIRE SUPPRESSION (21 10 00)

A. Operating key handles: Furnish one extra for each key-operated hose bibb and hydrant installed.

B. Sprinkler Cabinets:

1. Finished, wall-mounting steel cabinet and hinged cover, with space for a minimum of six spare sprinklers plus sprinkler wrench.
2. Include the number of sprinklers required by NFPA 13 and wrench for sprinklers.
3. Include separate cabinet with sprinklers and wrench for each type of sprinkler on Project.

2.09 PLUMBING FIXTURES (22 40 00)

A. Shower Heads: Two units of each type.

B. Faucet Sets: Five complete sets for Guest Room units.

C. Toilet Seats: Furnish quantity of identical units not less than 2 of each type installed.

2.10 PLUMBING SPECIALTIES (22 40 00.01)

A. Operating key handles: Furnish one extra for each key-operated hose bibb and hydrant installed.

2.11 DUCT ACCESSORIES (23 33 00)

A. Fusible Links: Furnish quantity equal to 5 of each type installed.

2.12 POWER VENTILATORS (23 34 23)

A. Furnish one set of belts for each belt-driven fan that match products installed, are packaged with protective covering for storage, and are identified with labels clearly describing contents.

2.13 LF-CONTAINED AIR-CONDITIONING UNITS (23 81 19)

A. Filters: One set of filters for each unit for PTAC, VTAC, split A/C and Packaged HVAC units.

B. Fan Belts: One set of belts for each unit for Packaged HVAC units.

2.14 PACKAGED TERMINAL AIR CONDITIONING UNITS (23 81 13.13)

A. Replacement stock amounting to providing four complete spare units the most common size used.

B. Furnish two spare thermostat for each type/size installed.

2.15 ENCLOSED CONTROLLERS (26 29 13)

A. Furnish extra materials described below that match products installed, are packaged with protective covering for storage, and are identified with labels describing contents:

1. Spare Fuses and Incandescent Indicating Lamps: Furnish one set of three for each kind.

2.16 INTERIOR LIGHTING (26 51 00)

A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents:

1. Lamps: Five of each rating installed of the following types (Refer the Light Fixture Schedule located in the Appendix):

a. Incandescent

b. Fluorescent

c. Compact Fluorescent

d. Metal Halide

2.17 EXTERIOR LIGHTING (26 56 00)

A. Furnish extra materials described below that are packaged with protective covering for storage and identified with labels describing contents.

1. Lamps: Five of each rating installed of the following types (Refer the Light Fixture Schedule located in the Appendix):

a. Incandescent.

b. Fluorescent

c. Compact Fluorescent

d. Metal Halide

2.18 FIRE ALARM AND DETECTION SYSTEMS (28 31 00)

A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents:

1. Lamps for remote indicating lamp units: Two units.

2. Lamps for strobe units: Two units.

3. Smoke detectors, fire detectors, and carbon monoxide detectors: Two units of each type.

4. Detector bases: Two units of each type.

PART 3 EXECUTION

Not Used

END OF SECTION

SECTION 01 79 00 - DEMONSTRATION AND TRAINING

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. This Section specifies the administrative requirements, procedural obligations, terms and conditions and training requirements related to instructing the facility engineering personnel in the proper care, preservation, operations and maintenance of materials, finishes, equipment and systems.

a. Preparation and submittal of instructor qualifications, training schedules, and agendas for various building materials, components, systems and equipment.

b. Instruction of the Owner's personnel and adjunct organizations in the proper operation and maintenance of all building materials, components, systems and equipment.

B. Related Sections:

1. Special operating and maintenance data requirements for specific equipment or building operating systems are included in the appropriate Specification Sections of Divisions 02 through 33.

2. Preparation of Shop Drawings and Product Data are included in Specification Section 01 33 00 (01330), Submittals and Substitutions.

3. General closeout requirements are included in Specification Section 01 77 00 (01770). Contract Closeout.

4. General requirements for submittal of Project Record Documents are included in Section 01 78 39 (01785), Project Record Documents.

5. Additional training requirements for building systems and/or equipment are delineated in the appropriate Specification Sections, Divisions 02 through 33.

6. Where training manuals include information on work installed by the Contractor and their Subcontractors, the Contractor shall be responsible for the preparation of the manuals, including collection, collation and binding of the material and submittal of data as specified.

1.02 QUALITY ASSURANCE

A. The status of training deliverables shall be an integral part of the Contractor's coordination process. The Contractor shall meet with the Owner as required, to discuss progress-to-date, deficiencies and non-compliance issues.

1.03 TRAINING MANUALS

A. The completed FINAL VERSION of the approved Operation & Maintenance Manuals and the redlined set of the record "as-built" drawings shall be used as the basis of instruction. The Contractor is not responsible for providing additional copies of these documents for training purposes.

1.04 TRAINING HOURS

A. Training shall be conducted during normal working hours. All training shall be completed prior to the public opening of the hotel property.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

3.01 TRAINING OF FACILITY ENGINEERING, OPERATING AND MAINTENANCE PERSONNEL

A. Instruct the hotel's personnel in operation, adjustment, and maintenance of all materials, components, equipment and systems.

1. Use the Operation and Maintenance Manuals and the Record "As-Built" Drawings for each piece of equipment or system as the basis of instruction. Review contents in detail to explain all aspects of installation, care and preservation, operation, preventive maintenance, service, and replacement.

2. The detailed review of the materials, components, systems and equipment shall include as minimum the following items:

a. Materials, components, systems and equipment

b. Safety precautions and procedures

c. Installation

d. Operational features and functions

e. Operational testing and diagnostics

f. Preventive and predictive maintenance

g. Service: Repair and replacement

h. Operation and Maintenance manual content

i. Commissioning: Testing, adjusting, calibration and balancing

j. Contractor furnished spare parts and extra materials

k. Recommended "spare parts" inventory not furnished by Contractor

l. Specialty tool requirements

m. Lubricants

n. Fuels

o. Identification systems

p. Automatic/manual control systems

q. Hazards/Material Safety Data Sheets

r. Cleaning

s. Procurement of replacement parts

t. Warranty reviews including terms and conditions, points of contact, return material procedures, effective date, extended warranty options

u. Maintenance agreements and similar continuing commitments

v. Record "As-Built" Drawings

3. As part of the operations portion of the training session, demonstrate all operational features and functions.

4. Refer to other specification Sections for additional training requirements associated with engineering, operating and maintenance of various systems/equipment.

B. Provide a combination of classroom, field and factory training classes which includes as a minimum the following curricula requirements as indicated hereafter:

1. SITE WORK UTILITIES:
    a. Water, Storm, and Sanitary Sewer Facilities
    b. Underdrains
    c. Electrical Power Service
    d. Gas Utilities
2. BUILDINGS AND STRUCTURES:
    a. Concrete
    b. Unit Masonry
    c. Metals
    d. Woods and Plastics
    e. Thermal and Moisture Protection
    f. Doors and Windows
    g. Finishes
    h. Specialties
    i. Fixtures, Furnishings and Equipment
3. ELEVATORS:
4. HVAC:
    a. Basic Materials and Methods
    b. Piping and Specialties
    c. Insulation
    d. Pumping
    e. Refrigeration
    f. Air Handling and Distribution
    g. Automatic Temperature Controls
    h. Testing/Adjusting/Balancing
5. PLUMBING:
    a. Basic Materials and Methods
    b. Piping and Specialties
    c. Insulation
    d. Pumping
    e. Fixtures, Trim and Accessories
    f. Domestic Water Heaters
    g. Water Softening
6. SWIMMING POOLS AND SPAS:
    a. Basis Piping and Pumps
    b. Filter and Deck Equipment
    c. Pool Heater
    d. Water Treatment

7. FIRE SPRINKLERS:
    a. Basic Materials and Methods
    b. Standpipe and Hose Systems
    c. Wet Pipe Sprinkler Systems
8. ELECTRICAL:
    a. Basic Materials and Methods
    b. Service and Distribution
    c. Service Entrance
    d. Switchboards
    e. Disconnects
    f. Grounding
    g. Transformers
    h. Panelboards
    i. Overcurrent Protective Devices
    j. Contactors
    k. Voltage Surge Suppression
    l. Testing
    m. Lighting
    n. Interior and Exterior Luminaries, Lamps and Accessories
    o. Emergency Lighting
    p. Heat Tracing
9. SOUND SYSTEM:
10. COMMUNICATION:
    a. Voice and Data
    b. Television Distribution System
    c. Security Intercom System
11. FIRE ALARM SYSTEM:
    a. System Zoning and Operations
    b. End-Devices
    c. Carbon Monoxide Monitoring
    d. Supervisory and Control Interface
        Sprinkler Systems
        Elevators
        HVAC Fan Control
        Telephone
    e. Graphic Enunciators
    f. Signage

12. FOOD SERVICE & LAUNDRY EQUIPMENT:

    a. The Food Service & Laundry Equipment Contractor shall schedule demonstrations of all Class 2, 3 and 4 equipment by Factory Authorized Demonstrators, at times convenient to the Owner. Demonstration shall include competent instruction in the use, cleaning, repair, and maintenance of the equipment.

        1) Class I - Equipment that requires no demonstration. Written instructions will suffice (i.e. roll warmers, toasters, racks, refrigerators, etc.).

        2) Class 2 - Equipment that is easy to understand and quickly demonstrated by a Factory Authorized Demonstrator (i.e. ranges, slicers, disposers, etc.).

        3) Class 3 - Complex equipment which requires more in-depth knowledge of assembly, operation, maintenance or cleaning. (i.e. steam equipment, multi-tank dish washers, fryer batteries, etc.).

        4) Class 4 - High technology equipment or systems that require extensive training, or for which demonstrations are factory-required. (i.e. cook-chill systems, conveyor ovens, etc.).

END OF SECTION

SECTION 02 41 00 - DEMOLITION

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Building demolition .

B. Selective demolition of built site elements.

C. Selective demolition of building elements, furniture and equipment for alterations purposes.

D. Abandonment and removal of existing utilities and utility structures.

1.02 RELATED REQUIREMENTS

A. Section 01 50 00 - Temporary Facilities and Controls: Site fences, security, protective barriers, and waste removal.

B. Section 01 60 00 - Product Requirements: Handling and storage of items removed for salvage and relocation.

C. Section 01 77 00 - Execution and Closeout Requirements: Project conditions; protection of bench marks, survey control points, and existing construction to remain; reinstallation of removed products; temporary bracing and shoring.

1.03 REFERENCE STANDARDS

A. 29 CFR 1926 - U.S. Occupational Safety and Health Standards; current edition.

B. NFPA 241 - Standard for Safeguarding Construction, Alteration, and Demolition Operations; 2013.

1.04 SUBMITTALS

A. See Section 01 33 00 – Submittal and Substitution Procedures.

B. Project Record Documents: Accurately record actual locations of capped and active utilities and subsurface construction.

1.05 QUALITY ASSURANCE

A. Demolition Firm Qualifications: Company specializing in the type of work required.
   1. Minimum of 5 years of verifiable experience.

PART 2 PRODUCTS -- NOT USED

PART 3 EXECUTION

3.01 SCOPE

A. Remove the entire building(s) as indicated on the drawings.

B. Remove all paving and curbs within construction limits indicated on drawings.

C. Within area of new construction, remove foundation walls and footings to a minimum of 4 feet below finished grade or to a depth as may be required for complete removal, i.e. pool foundation.

D. Outside area of new construction, remove foundation walls and footings to a minimum of 2 feet below finished grade.

E. Remove concrete slabs on grade as indicated on drawings.

F. Remove fences and gates as noted in plans.

G. Remove other items indicated, for salvage, relocation, and recycling.

H. Fill excavations, open pits, and holes in ground areas generated as result of removals, using specified fill; compact fill as required so that required rough grade elevations do not subside within one year after completion.

3.02 GENERAL PROCEDURES AND PROJECT CONDITIONS

A. Comply with other requirements specified in Section 01 77 00.

B. Comply with applicable codes and regulations for demolition operations and safety of adjacent structures and the public.
   1. Obtain required permits.
   2. Comply with applicable requirements of NFPA 241.
   3. Use of explosives is not permitted.
   4. Take precautions to prevent catastrophic or uncontrolled collapse of structures to be removed; do not allow worker or public access within range of potential collapse of unstable structures.
   5. Provide, erect, and maintain temporary barriers and security devices.
   6. Use physical barriers to prevent access to areas that could be hazardous to workers or the public.
   7. Conduct operations to minimize effects on and interference with adjacent structures and occupants.
   8. Do not close or obstruct roadways or sidewalks without permit or prior approval from regulatory agencies involved.
   9. Conduct operations to minimize obstruction of public and private entrances and exits; do not obstruct required exits at any time; protect persons using entrances and exits from removal operations.
   10. Obtain written permission from owners of adjacent properties when demolition equipment will traverse, infringe upon or limit access to their property.

C. Do not begin removal until receipt of notification to proceed from Owner.

D. Prior to submitting proposal, Contractor shall request a list from the Owner stating items which shall be removed by the Owner prior to demolition.

E. Included with the demolition proposal, Contractor shall provide a written declaration of items that will be salvaged from the site. Each item shall be itemized and a monetary value assigned. Credit value of salvaged items shall be included in calculation of proposal. Declaration shall be reviewed by the Owner to determine that the declaration complies with state requirements and local jurisdictional policies in regards to disposing of removed materials.

F. All items called for on the drawings to be salvaged, removed and relocated shall be inventoried, removed and stored until such time as they are to be installed in their new location. The inventory list shall be given to the Owner and shall include an itemized list that includes quantities, descriptions and condition of each item. These items are considered to be in good operating condition at the time the contract is signed, and shall remain the property of Owner. These items shall be properly protected by the contractor and removed by him, complete, including all appurtenances and reinstalled in their new location in good working order with any modifications called for by the drawings.

G. All items noted on the drawings to be removed and delivered to the Owner shall be cataloged with a written description and delivered to Owner at a location designated by the Owner.

H. Do not begin removal until built elements to be salvaged or relocated have been removed.

I. Do not begin removal until vegetation to be relocated has been removed and specified measures have been taken to protect vegetation to remain.

J. Protect existing structures and other elements that are not to be removed.
   1. Provide bracing and shoring.
   2. Prevent movement or settlement of adjacent structures.
   3. Stop work immediately if adjacent structures appear to be in danger.

K. Minimize production of dust due to demolition operations; do not use water if that will result in ice, flooding, sedimentation of public waterways or storm sewers, or other pollution.

L. If hazardous materials are discovered during removal operations, stop work and notify Architect and Owner; hazardous materials include regulated asbestos containing materials, lead, PCB's, and mercury.

M. Partial Removal of Paving and Curbs: Neatly saw cut at right angle to surface.

3.03 EXISTING UTILITIES

A. Coordinate work with utility companies; notify before starting work and comply with their requirements; obtain required permits.

B. Protect existing utilities to remain from damage.

C. Do not disrupt public utilities without permit from authority having jurisdiction.

D. Do not close, shut off, or disrupt existing life safety systems that are in use without at least 7 days prior written notification to Owner.

E. Do not close, shut off, or disrupt existing utility branches or take-offs that are in use without at least 3 days prior written notification to Owner.

F. Locate and mark utilities to remain; mark using highly visible tags or flags, with identification of utility type; protect from damage due to subsequent construction, using substantial barricades if necessary.

G. Unused underground piping may be abandoned in place, provided it is completely drained and capped; remove exposed piping, valves, meters, equipment, supports, and foundations of disconnected and abandoned utilities.

H. Prepare building demolition areas by disconnecting and capping utilities outside the demolition zone; identify and mark utilities to be subsequently reconnected, in same manner as other utilities to remain.

3.04 SELECTIVE DEMOLITION FOR ALTERATIONS

A. Drawings showing existing construction and utilities are based on existing record documents and field observation.
   1. Verify that construction, salvage items and utility arrangements are as shown.
   2. Report discrepancies to Architect before disturbing existing installation.
   3. Beginning of demolition work constitutes acceptance of existing conditions that would be apparent upon examination prior to starting demolition.

B. Remove existing work as indicated and as required to accomplish new work.

C. Services (Including but not limited to HVAC, Plumbing, Fire Protection, Electrical, and Telecommunications): Remove existing systems and equipment as indicated.
   1. Maintain existing active systems that are to remain in operation; maintain access to equipment and operational components.
   2. Where existing active systems serve occupied facilities, maintain existing systems in service until new systems are complete and ready for service.
   3. Verify that abandoned services serve only abandoned facilities before removal.
   4. Remove abandoned pipe, ducts, conduits, and equipment as indicated on the drawings; remove back to source of supply where possible, otherwise cap stub and tag with identification.

D. Protect existing site work to remain.
   1. Prevent movement of structure; provide shoring and bracing if necessary.
   2. Perform cutting to accomplish removals neatly and as specified for cutting new work.
   3. Repair adjacent construction and finishes damaged during removal work.
   4. Patch as specified for patching new work.

3.05 DEBRIS AND WASTE REMOVAL

A. Remove debris, junk, and trash from site.
B. Remove from site all materials not to be reused on site; do not burn or bury.
C. Leave site in clean condition, ready for subsequent work.
D. Clean up spillage and wind-blown debris from public and private lands.

END OF SECTION

SECTION 02 41 21 – REMOVING EXISTING ASPHALT PAVEMENT AND FLATWORK

PART 1 - GENERAL

1.1. DESCRIPTION

The work as specified in this section of the specifications shall consist of removing and disposing all asphalt pavements, driveways, etc. as required for the installation of the items indicated in the Bid, specified in these Specifications, and as indicated on the Drawings.

1.2. MEASUREMENT AND PAYMENT

Removal and disposal of the various types of asphalt flatwork will not be paid for separately but shall be included in the lump sum bid for the project.

PART 2 - PRODUCTS (NOT APPLICABLE)

PART 3 - EXECUTION

3.1. CONSTRUCTION METHODS

Sections of asphalt to be removed adjacent to asphalt or concrete to remain shall be sawed FULL DEPTH and along the neat lines shown on the drawings or established by the Engineer. The asphalt which is to remain and is damaged by these operations shall be replaced at the Contractor's entire expense.

END OF SECTION

SECTION 03 10 00 CONCRETE FORMING AND ACCESSORIES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Formwork for cast-in place concrete.

B. Form accessories.

1.02 RELATED REQUIREMENTS

A. Section 03 20 00 - Concrete Reinforcing.

B. Section 03 30 00 - Cast-in-Place Concrete.

1.03 REFERENCE STANDARDS

A. ACI 117 - Standard Specifications for Tolerances for Concrete Construction and Materials; 2010.

B. ACI 301 - Specifications for Structural Concrete; 2010 (Errata 2012).

C. ACI 318 - Building Code Requirements for Structural Concrete and Commentary; 2014 (Errata 2016).

D. ACI 347R - Guide to Formwork for Concrete; 2014.

E. PS 1 - Structural Plywood; 2009.

1.04 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.

B. Product Data: Provide data on void form materials and installation requirements.

C. Shop Drawings: Indicate pertinent dimensions, materials, bracing, and arrangement of joints and ties.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Deliver prefabricated forms and installation instructions in manufacturer's packaging.

B. Store prefabricated forms off ground in ventilated and protected manner to prevent deterioration from moisture.

C. Protect plastic foam products from damage and exposure to sunlight.

PART 2 PRODUCTS

2.01 FORMWORK - GENERAL

A. Provide concrete forms, accessories, shoring, and bracing as required to accomplish cast-in-place concrete work.

B. Design and construct to provide resultant concrete that conforms to design with respect to shape, lines, and dimensions.

C. Comply with relevant portions of ACI 347R, ACI 301, and ACI 318.

2.02 WOOD FORM MATERIALS

A. Wood forms for unexposed concrete surfaces - No. 2 Common Southern Yellow Pine Lumber or other material of equal qualifications of sufficient thickness to be capable of sustaining the loads to be imposed thereon, dressed to uniformly smooth contact surfaces.

B. Wood forms for exposed concrete surfaces - Commercial Standard Douglas Fir, moisture-resistant, concrete form plywood with one smooth face.

2.03 FORMWORK ACCESSORIES

A. Formwork shall consist of steel or wood forming where it is required to form concrete, except under gradebeams and slabs where carton void forms are shown on the construction drawings. Where carton void forms are shown, it is acceptable to either use carton void forms or use temporary steel or wood forming that is to be removed. If steel or wood forming is used where

carton void forms are shown on the construction drawings, a void space shall be created below the concrete to match the specified carton void form dimensions.

B. Form Release Agent: Capable of releasing forms from hardened concrete without staining or discoloring concrete or forming bugholes and other surface defects, compatible with concrete and form materials, and not requiring removal for satisfactory bonding of coatings to be applied.
   1. Composition: Colorless mineral oil-based compound.

C. Nails, Spikes, Lag Bolts, Through Bolts, Anchorages: Sized as required, of sufficient strength and character to maintain formwork in place while placing concrete.

D. Joint Filler: Nonextruding, resilient asphalt impregnated fiberboard or felt, complying with ASTM D 1751, 1/2 inch thick and full depth of slab less 1/2 inch .

E. Waterstops: See section 03 3000 - Cast-in-Place Concrete.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify lines, levels and centers before proceeding with formwork. Ensure that dimensions agree with drawings.

3.02 EARTH FORMS

A. Earth formed grade beams are allowed on slab on grade foundations only. Grade beams shall be FORMED ON ALL structural slabs and exposed conditions. Hand trim sides and bottom of earth forms. Remove loose soil prior to placing concrete.

3.03 ERECTION - FORMWORK

A. Erect formwork, shoring and bracing to achieve design requirements, in accordance with requirements of ACI 301.

B. Provide bracing to ensure stability of formwork. Shore or strengthen formwork subject to overstressing by construction loads.

C. Arrange and assemble formwork to permit dismantling and stripping. Do not damage concrete during stripping. Permit removal of remaining principal shores.

D. Refer to the Civil Drawings for construction joint requirements at flatwork.

E. Construction joints: Locate construction joints in concrete as indicated. Contractor shall obtain written approval for all construction joints not shown on Drawings for structural concrete. Distance between construction joints shall be arranged so that the greatest horizontal dimension (including diagonal measurement) for slab pours shall not exceed 200 feet. Provide keyways and extra dowels at all joints. Provide longitudinal keys at joints.

F. Expansion joints: Expansion joints shall consist of joint fillers with sealant. Install filler strips 3/4" below finished surfaces. Clean grooves when surface is dry of foreign matter, loose particles and concrete protrusions; then fill approximately flush with joint sealant to be slightly concave after drying. Finish edges of exposed concrete along expansion joints around all fixed objects within or abutting concrete.

G. If formwork is placed after reinforcement, resulting in insufficient concrete cover over reinforcement, request instructions from Architect/Engineer before proceeding.

3.04 APPLICATION - FORM RELEASE AGENT

A. Apply form release agent on formwork in accordance with manufacturer's recommendations.

B. Apply prior to placement of reinforcing steel, anchoring devices, and embedded items.

C. Do not apply form release agent where concrete surfaces will receive special finishes or applied coverings that are affected by agent. Soak inside surfaces of untreated forms with clean water. Keep surfaces coated prior to placement of concrete.

3.05 FORMWORK TOLERANCES

A. Construct formwork to maintain tolerances required by ACI 117, unless otherwise indicated.

B. Construct and align formwork for elevator hoistway in accordance with ASME A17.1.

3.06 FIELD QUALITY CONTROL

A. A special inspections and testing agency (SITA) will perform field quality control tests and inspections, as specified in Sections 01 4516 and 01 4533.

B. Inspect erected formwork, shoring, and bracing to ensure that work is in accordance with formwork design, and to verify that supports, fastenings, wedges, ties, and items are secure.

C. Do not reuse wood formwork more than 2 times for concrete surfaces to be exposed to view. Do not patch formwork.

3.07 FORM REMOVAL

A. Do not remove forms or bracing until concrete has gained sufficient strength to carry its own weight and imposed loads.

B. Loosen forms carefully. Do not wedge pry bars, hammers, or tools against finish concrete surfaces scheduled for exposure to view.

C. Store removed forms to prevent damage to form materials or to fresh concrete. Discard damaged forms.

END OF SECTION

SECTION 03 2000

CONCRETE REINFORCING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Reinforcing steel for cast-in-place concrete.

B. Supports and accessories for steel reinforcement.

1.02 RELATED REQUIREMENTS

A. Section 03 10 00 - Concrete Forming and Accessories.

B. Section 03 30 00 - Cast-in-Place Concrete.

C. Section 04 20 00 - Unit Masonry: Reinforcement for masonry.

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1.03 REFERENCE STANDARDS

A. ACI 301 - Specifications for Structural Concrete; 2010 (Errata 2012).

B. ACI 318 - Building Code Requirements for Structural Concrete and Commentary; 2014 (Errata 2016).

C. ACI SP-66 - ACI Detailing Manual; 2004.

D. ASTM A615/A615M - Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement; 2016.

E. ASTM A706/A706M - Standard Specification for Deformed and Plain Low-Alloy Steel Bars for Concrete Reinforcement; 2016.

F. CRSI (DA4) - Manual of Standard Practice; 2009.

G. CRSI (P1) - Placing Reinforcing Bars; 2011.

1.04 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements, for submittal procedures.

B. Shop Drawings: Include bar schedules, shapes of bent bars, spacing of bars, location of splices and embedded metal assemblies.

C. Manufacturer's Certificate: Certify that reinforcing steel and accessories supplied for this project meet or exceed specified requirements.

D. Reports: Submit certified copies of mill test report of reinforcement materials analysis.

1.05 QUALITY ASSURANCE

A. Perform work of this section in accordance with CRSI (DA4), CRSI (P1), ACI 301, ACI SP-66, and ACI 318.
   1. Maintain one copy of each document on project site.

B. Provide Architect with access to fabrication plant to facilitate inspection of reinforcement. Provide notification of commencement and duration of shop fabrication in sufficient time to allow inspection.

C. Welders' Certificates: Submit certifications for welders employed on the project, verifying AWS qualification within the previous 12 months.

PART 2 PRODUCTS

2.01 REINFORCEMENT

A. Reinforcing Steel: ASTM A615/A615M, Grade 60 (60,000 psi).
   1. Deformed billet-steel bars.
   2. Unfinished.

B. Weldable Reinforcing Steel: ASTM A 706, deformed low-alloy steel bars.

1. Unfinished.

C. Steel Welded Wire Reinforcement (WWR): Plain type; 1.
   1. Form: Flat Sheets.

D. Reinforcement Accessories:
   1. Tie Wire: Annealed, minimum 16 gage, 0.0508 inch.
   2. Chairs, Bolsters, Bar Supports, Spacers: Sized and shaped for adequate support of reinforcement during concrete placement. At slabs, supports shall not be further than 48 inches apart, each way.
   3. Provide plastic or plastic coated steel components for placement within 1-1/2 inches of weathering surfaces.

2.02 FABRICATION

A. Fabricate concrete reinforcing in accordance with ACI SP-66 - ACI Detailing Manual.

B. Welding of reinforcement is not permitted.

C. Locate reinforcing splices not indicated on drawings at point of minimum stress.
   1. Review locations of splices with Architect.
   2. Approved patented type splices (No Electric Arc Welding Permitted) may be used instead of lap splices.
   3. Reinforcement shall not be bent or straightened after partial embedment in hardened concrete, except where noted otherwise on the Drawings.

PART 3 EXECUTION

3.01 PLACEMENT

A. Place, support and secure reinforcement against displacement. Do not deviate from required position.

B. Do not displace or damage vapor barrier.

C. Accommodate placement of formed openings.

D. Placement of reinforcing steel shall be done in cooperation with requirements of other trades. No cutting of reinforcement or displacement of bars shall be done by any of the trades without the consent of the Architect, and then only when adequate reinforcement is provided to replace the design requirements.

E. Use templates to locate all column and footing dowels.

F. Maintain concrete cover around reinforcing as indicated on drawings.

G. Bond and ground all reinforcement to requirements of Section 26 0526.

3.02 FIELD QUALITY CONTROL

A. An Independent Quality Control Agency (IQCA) will perform field quality control tests and inspections, as specified in Section 01 45 00.

END OF SECTION

SECTION 03 30 00 - CAST-IN-PLACE CONCRETE

PART 1 GENERAL

1.01 SUMMARY

A. Section includes:

1. Cast-in place concrete, including formwork, reinforcement, concrete materials, accessories mix design, placement procedures, and finishes.

B. Related Sections:

1. Section 03 54 13 - Cementitious Decks and Underlayment
2. Section 05 50 00 - Metal Fabrications
3. Section 07 10 00 – Damp-proofing and Waterproofing
4. Section 07 92 00 - Joint Sealants
5. Section 32 13 13 - Cement Concrete Paving
6. Section 33 00 00 - Utility Services

1.02 DEFINITIONS

A. Cementitious Materials: Portland cement alone or in combination with one or more of blended hydraulic cement, fly ash and other pozzolans, ground granulated blast-furnace slag, and silica fume.

1.03 REFERENCES

1.04 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

B. Product Data: Submit “Letter of Conformance” in accordance with Section 01 33 00 indicating specified items selected for use in project with the following supporting data.

1. Submit “Letter of Conformance” in accordance with Section 01 33 00 indicating specified items selected for use in project.

C. Design Mixes: For each concrete mix. Include alternate mix designs when characteristics of materials, project conditions, weather, test results, or other circumstances warrant adjustments.

1. Indicate amounts of mix water to be withheld for later addition at Project site.

D. Steel Reinforcement Shop Drawings: Details of fabrication, bending, and placement, prepared according to ACI 315, "Details and Detailing of Concrete Reinforcement." Include material, grade, bar schedules, stirrup spacing, bent bar diagrams, arrangement, and supports of concrete reinforcement. Include special reinforcement required for openings through concrete structures. Coordinate built-in items including anchor bolts, plates and clips.

E. Formwork Shop Drawings: Prepared by or under the supervision of a qualified professional engineer detailing fabrication, assembly, and support of formwork. Design and engineering of formwork are Contractor's responsibility.

F. Welding Certificates: Copies of certificates for welding procedures and personnel.

G. Material Test Reports: From a qualified testing agency indicating and interpreting test results for compliance of the following with requirements indicated, based on comprehensive testing of current materials:

H. Material Certificates: Submit “Letter of Conformance” in accordance with Section 01 33 00 (01300) indicating specified items selected for use in project.

1. Cementitious materials and aggregates.
2. Form materials and form-release agents.
3. Steel reinforcement and reinforcement accessories.
4. Fiber reinforcement.
5. Admixtures.
6. Waterstops.
7. Curing materials.
8. Floor and slab treatments.
9. Bonding agents.
10. Adhesives.
11. Vapor retarders.
12. Epoxy joint filler.
13. Joint-filler strips.
14. Repair materials.

I. Minutes of preinstallation conference.

1.05 QUALITY ASSURANCE

A. Installer Qualifications: An experienced installer with a minimum of five years experience, who has completed concrete Work similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.

B. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for formwork and shoring and reshoring installations that are similar to those indicated for this Project in material, design, and extent.

C. Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products complying with ASTM C94 requirements for production facilities and equipment.

1. Manufacturer must be certified according to the National Ready Mixed Concrete Association's (NRMCA) "Certification of Ready Mixed Concrete Production Facilities."

D. Testing Agency Qualifications: An independent testing agency, acceptable to authorities having jurisdiction, qualified according to ASTM C1077 and ASTM E329 to conduct the testing indicated, as documented according to ASTM E548.

1. Personnel conducting field tests shall be qualified as ACI Concrete Field Testing Technician, Grade 1, according to ACI CP-1 or an equivalent certification program.

E. Source Limitations: Obtain each type or class of cementitious material of the same brand from the same manufacturer's plant, each aggregate from one source, and each admixture from the same manufacturer.

F. Welding: Qualify procedures and personnel according to AWS D1.4, "Structural Welding Code--Reinforcing Steel."

G. ACI Publications: Comply with the following, unless more stringent provisions are indicated:

1. ACI 301, "Specification for Structural Concrete."
2. ACI 117, "Standard Specifications for Tolerances for Concrete Construction and Materials."
3. ACI 211.1 "Standard Practice for Selecting Proportions for Normal, Heavyweight, and Mass Concrete".
4. ACI 211.2 "Standard Practice for Selecting Proportions for Structural Lightweight Concrete".
5. ACI 212 "Chemical Admixtures for Concrete"
6. ACI 214R "Evaluation of Strength Test Results of Concrete"
7. ACI 301 "Standard Specification for Structural Concrete"
8. ACI 302 "Guide for Concrete Floor and Slab Construction"
9. ACI 304R "Guide for Measuring, Mixing, Transporting and Placing Concrete".
10. ACI 305R "Hot Weather Concreting".
11. ACI 306R "Cold Weather Concreting".
12. ACI 308 "Standard Practice for Curing Concrete"
13. ACI 309R "Guide for Consolidation of Concrete".
14. ACI 311.4R "Guide for Concrete Inspection".
15. ACI 318 "Building Code Requirements for Structural Concrete".
16. ACI 347R "Guide to Formwork for Concrete".
17. ACI 544 "Fibers Reinforced Concrete"
18. ACI SP-66 "ACI Detailing Manual".

H. Other Publications. Comply with the following, unless more stringent provisions are indicated:

1. CRSI-WCRSI "Placing Reinforcing Bars"
2. AWS D1.4 "Structural Welding Code - Reinforcing Steel".

1.06 DELIVERY, STORAGE, AND HANDLING

A. Deliver, store, and handle steel reinforcement to prevent bending and damage.

1. Avoid damaging coatings on steel reinforcement.
2. Repair damaged epoxy coatings on steel reinforcement according to ASTM D3963.

PART 2 PRODUCTS

2.01 FORM-FACING MATERIALS

A. Smooth-Formed Finished Concrete: Form-facing panels that will provide continuous, true, and smooth concrete surfaces. Furnish in largest practicable sizes to minimize number of joints.

1. Plywood, metal, or other approved panel materials.
2. Exterior-grade plywood panels, suitable for concrete forms, complying with DOC PS 1, and as follows:

a. High-density overlay, Class 1, or better.

b. Medium-density overlay, Class 1, or better, mill-release agent treated and edge sealed.

c. Structural 1, B-B, or better, mill oiled and edge sealed.

d. B-B (Concrete Form), Class 1, or better, mill oiled and edge sealed.

B. Rough-Formed Finished Concrete: Plywood, lumber, metal, or another approved material. Provide lumber dressed on at least two edges and one side for tight fit.

C. Forms for Cylindrical Columns, Pedestals, and Supports: Metal, glass-fiber-reinforced plastic, paper, or fiber tubes that will produce surfaces with gradual or abrupt irregularities not exceeding specified formwork surface class. Provide units with sufficient wall thickness to resist plastic concrete loads without detrimental deformation.

D. Pan-Type Forms: Glass-fiber-reinforced plastic or formed steel, stiffened to resist plastic concrete loads without detrimental deformation.

E. Void Forms: Biodegradable paper surface, treated for moisture resistance, structurally sufficient to support weight of plastic concrete and other superimposed loads.

F. Chamfer Strips: Wood, metal, PVC, or rubber strips, 3/4 by 3/4 inch (19 by 19 mm), minimum.

G. Form-Release Agent: Commercially formulated form-release agent that will not bond with, stain, or adversely affect concrete surfaces and will not impair subsequent treatments of concrete surfaces.

1. Formulate form-release agent with rust inhibitor for steel form-facing materials.

H. Form Ties: Factory-fabricated, removable or snap-off metal or glass-fiber-reinforced plastic form ties designed to resist lateral pressure of fresh concrete on forms and to prevent spalling of concrete on removal.

1. Furnish units that will leave no corrodible metal closer than 1 inch (25 mm) to the plane of the exposed concrete surface.

2. Furnish ties that, when removed, will leave holes not larger than 1 inch (25 mm) in diameter in concrete surface.

3. Furnish ties with integral water-barrier plates to walls indicated to receive dampproofing or waterproofing.

2.02 STEEL REINFORCEMENT

A. Reinforcing Bars: ASTM A615, Grade 60, deformed.

B. Low-Alloy-Steel Reinforcing Bars: ASTM A706, deformed.

C. Epoxy-Coated Reinforcing Bars: ASTM A775, and as follows:

D. Epoxy-Coated Fabricated Reinforcing Bars: ASTM A934, and as follows:

1. Steel Reinforcement: ASTM A615, Grade 60, deformed.

2. Steel Reinforcement: ASTM A706, deformed.

E. Steel Bar Mats: ASTM A184, assembled with clips.

1. Steel Reinforcement: ASTM A615, Grade 60, deformed bars.

2. Steel Reinforcement: ASTM A706, deformed bars.

F. Plain-Steel Wire: ASTM A82, as drawn.

G. Plain-Steel Wire: ASTM A82, galvanized.

H. Deformed-Steel Wire: ASTM A496.

I. Epoxy-Coated Wire: ASTM A884, Class A coated, plain-steel wire.

J. Epoxy-Coated Wire: ASTM A884, Class A coated, deformed-steel wire.

K. Plain-Steel Welded Wire Fabric: ASTM A185, fabricated from as-drawn steel wire into flat sheets.

L. Deformed-Steel Welded Wire Fabric: ASTM A497, flat sheet.

M. Epoxy-Coated Welded Wire Fabric: ASTM A884, Class A, plain steel.

N. Epoxy-Coated Welded Wire Fabric: ASTM A884, Class A, deformed steel.

2.03 REINFORCEMENT ACCESSORIES

A. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars and welded wire fabric in place. Manufacture bar supports according to CRSI's "Manual of Standard Practice" from steel wire, plastic, or precast concrete or fiber-reinforced concrete of greater compressive strength than concrete, and as follows:

1. For concrete surfaces exposed to view or weather where legs of wire bar supports contact forms, use CRSI Class 1 plastic-protected or CRSI Class 2 stainless-steel bar supports.

2. For epoxy-coated reinforcement, use epoxy-coated or other dielectric-polymer-coated wire bar supports.

B. Joint Dowel Bars: Plain-steel bars, ASTM A615, Grade 60. Cut bars true to length with ends square and free of burrs.

C. Epoxy-Coated Joint Dowel Bars: ASTM A775; with ASTM A615, Grade 60, plain-steel bars.

D. Epoxy Repair Coating: Liquid, two-part, epoxy repair coating; compatible with epoxy coating on reinforcement and complying with ASTM A775.

E. Tie Wire: Minimum 16 gage annealed type.

2.04 CONCRETE MATERIALS

A. Portland Cement: ASTM C150, Type I.

B. Portland Cement: ASTM C150, Type II.

C. Portland Cement: ASTM C150, Type III. Permitted only for concrete exposed to weather.

D. Normal-Weight Aggregate: ASTM C33, uniformly graded, and as follows:

1. Nominal Maximum Aggregate Size: 1-1/2 inches.

E. Lightweight Aggregate: ASTM C330.

1. Nominal Maximum Aggregate Size: 1 inch.

F. Water: Potable and complying with ASTM C94.

2.05 ADMIXTURES

A. General: Admixtures certified by manufacturer to contain not more than 0.1 percent water-soluble chloride ions by mass of cementitious material and to be compatible with other admixtures and cementitious materials. Do not use admixtures containing calcium chloride.

B. Air-Entraining Admixture: ASTM C260.

C. Water-Reducing Admixture: ASTM C494, Type A.

D. High-Range, Water-Reducing Admixture: ASTM C494, Type F.

E. Water-Reducing and Accelerating Admixture: ASTM C494, Type E.

F. Water-Reducing and Retarding Admixture: ASTM C494, Type D.

G. Corrosion-Inhibiting Admixture: Commercially formulated, anodic inhibitor or mixed cathodic and anodic inhibitor; capable of forming a protective barrier and minimizing chloride reactions with steel reinforcement in concrete.

1. Avendra, LLC Preferred Manufacturers:

a. None.

2. Approved Manufacturers:

a. “Catexol 1000CL”; Axim Italcementi Group, Inc. (800-899-8795)

b. “MCI 2000 or MCI 2005”; Cortec Corporation (800-426-7832)

c. “DCI or DCI-S”; W. R. Grace & Co., Construction Products Div. (800-778-2880)

d. “Rheocrete 222+”; BASF Building Systems (216-839-7000)

e. “FerroGard-901”; Sika Construction Products Division, Sika Corporation (800-933-7452)

f. “Eucon CIA”; Euclid Chemical Co, An RPM Company; (800-321-7628)

2.06 WATERSTOPS

A. Flexible PVC Waterstops: CE CRD-C 572, for embedding in concrete to prevent passage of fluids through joints. Factory fabricate corners, intersections, and directional changes.

1. Profile: Ribbed with center bulb.

B. Avendra, LLC Preferred Manufacturers:

1. None

C. Approved Manufacturers:

1. PVC Waterstops:

a. "PVC Waterstop"; Greenstreak, Inc.; (800-325-9504)

b. "Sealtight PVC Waterstops"; W. R. Meadows, Inc.; (800-342-5976)

c. Westec Barrier Technologies; Div. of Western Textile Products, Inc, (800-793-7832)

D. Self-Expanding Strip Waterstops: Manufactured rectangular or trapezoidal strip, sodium bentonite or other hydrophylic material for adhesive bonding to concrete.

1. Avendra, LLC Preferred Manufacturers:

a. None

2. Approved Manufacturers:

a. “Volclay Waterstop-RX”; CETCO, Subsidiary of AMCOL International Corp; (800-527-9948)

b. “Hydrotite”; Greenstreak, Inc.; (800-325-9504)

c. “Adeka Ultra Seal”; OCM, Inc. (800-999-3959)

2.07 VAPOR RETARDERS

A. Refer to Section 07 10 00 for [vapor barrier] [vapor retarder] materials.

B. Granular Fill: Clean mixture of crushed stone or crushed or uncrushed gravel; ASTM D448, Size 57, with 100 percent passing a 1-1/2-inch (38-mm) sieve and 0 to 5 percent passing a No. 4 (4.75-mm) sieve.

2.08 CURING MATERIALS

A. Absorptive Cover: AASHTO M 182, Class 2, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. (305 g/sq. m) dry.

B. Moisture-Retaining Cover: ASTM C171, .006 inch (6 mil) thick, polyethylene film or white burlap-polyethylene sheet.

C. Evaporation Retarder: Waterborne, monomolecular film forming, manufactured for application to fresh concrete.

1. Material shall become an integral part of concrete surface and leave floor free of residue or film.

2. Avendra, LLC Preferred Manufacturers:

a. None

3. Approved Manufacturers:

a. "Eucobar"; Euclid Chemical Co, An RPM Company; (800-321-7628)

1) VOC: 88 g/L

b. "Confilm"; BASF Building Systems (800-433-9517)

1) VOC: 10 g/L

c. "SikaFilm"; Sika Construction Products Division, Sika Corporation (800-933-7452)

1) VOC: g/L

D. Water: Potable.

E. Clear, Waterborne, Membrane-Forming Curing Compound: ASTM C309, Type 1, Class B.

1. Avendra, LLC Preferred Manufacturers:

a. None

2. Approved Manufacturers:

a. "Cure & Seal 309 EF"; Dayton Superior; (800-745-3700

1) VOC: <100 g/L

b. "Aqua Cure VOX"; Euclid Chemical Co, An RPM Company; (800-321-7628)

1) VOC: 184 g/L

c. "Glazecote 20"; Lambert Corp (800-432-4746)

1) VOC: 79.3 g/L

d. "Kure-N-Seal WB"; BASF Building Systems (800-433-9517)

1) VOC: 330 g/L

F. Clear, Waterborne, Curing and Sealing Compound: ASTM C1315, 25% solids minimum.

1. Approved Manufacturers:

a. "Cure & Seal 1315 EF"; Dayton Superior; (800-745-3700

1) VOC: <100 g/L

b. "Super Aqua Cure VOX"; Euclid Chemical Co, An RPM Company; (800-321-7628)

1) VOC: <200 g/L

c. "Glazecoat 30"; Lambert Corp (800-432-4746)

1) VOC: 145.4 g/L

d. "Clearseal WB 300"; Euclid Chemical Co, An RPM Company; (800-321-7628)

1) VOC: 134 g/L

e. "Kure 1315"; BASF Building Systems (800-433-9517)

1) VOC: 139 g/L

2.09 RELATED MATERIALS

A. Joint-Filler Strips: ASTM D1751, asphalt-saturated cellulosic fiber, or ASTM D1752, cork or self-expanding cork.

B. Epoxy Joint Filler: Two-component, semirigid, 100 percent solids, epoxy resin with a Shore A hardness of 80 per ASTM D2240.

C. Polyurea Joint Filler: Two-component, 100 percent solids, with a Shore A hardness of 80 per ASTM D2240.

D. Bonding Agent: ASTM C1059, Type II, non-redispersible, acrylic emulsion or styrene butadiene.

E. Epoxy-Bonding Adhesive: ASTM C881, two-component epoxy resin, capable of humid curing and bonding to damp surfaces, of class and grade to suit requirements, and as follows:

1. Type II, non-load bearing, for bonding freshly mixed concrete to hardened concrete.
2. Types I and II, non-load bearing, for bonding hardened or freshly mixed concrete to hardened concrete.
3. Types IV and V, load bearing, for bonding hardened or freshly mixed concrete to hardened concrete.

F. Reglets: Fabricate reglets of not less than 0.0217-inch- (0.55-mm-) thick galvanized steel sheet. Temporarily fill or cover face opening of reglet to prevent intrusion of concrete or debris.

G. Dovetail Anchor Slots: Hot-dip galvanized steel sheet, not less than 0.0336 inch (0.85 mm) thick, with bent tab anchors. Temporarily fill or cover face opening of slots to prevent intrusion of concrete or debris.

2.10 REPAIR MATERIALS

A. Repair Underlayment: Cement-based, polymer-modified, self-leveling product that can be applied in thicknesses from 1/8 inch (3.2 mm) and that can be feathered at edges to match adjacent floor elevations.

1. Cement Binder: ASTM C150, portland cement or hydraulic or blended hydraulic cement as defined in ASTM C219.
2. Primer: Product of underlayment manufacturer recommended for substrate, conditions, and application.
3. Aggregate: Well-graded, washed gravel, 1/8 to 1/4 inch (3 to 6 mm) or coarse sand as recommended by underlayment manufacturer.
4. Compressive Strength: Not less than 4100 psi (29 MPa) at 28 days when tested according to ASTM C109.

B. Repair Topping: Traffic-bearing, cement-based, polymer-modified, self-leveling product that can be applied in thicknesses from 1/4 inch (6 mm).

1. Cement Binder: ASTM C150, portland cement or hydraulic or blended hydraulic cement as defined in ASTM C219.

2. Primer: Product of topping manufacturer recommended for substrate, conditions, and application.

3. Aggregate: Well-graded, washed gravel, 1/8 to 1/4 inch (3 to 6 mm) or coarse sand as recommended by topping manufacturer.

4. Compressive Strength: Not less than 5700 psi (39 MPa) at 28 days when tested according to ASTM C109.

2.11 CONCRETE MIXES

A. Prepare design mixes for each type and strength of concrete determined by either laboratory trial mix or field test data bases, as follows:

1. Proportion normal-weight concrete according to ACI 211.1 and ACI 301.

2. Proportion lightweight structural concrete according to ACI 211.2 and ACI 301.

B. Use a qualified independent testing agency for preparing and reporting proposed mix designs for the laboratory trial mix basis.

C. Proportion concrete mix for each class of concrete to achieve the strengths (28 days) and slumps noted on the drawings.

D. Cementitious Materials: For concrete exposed to deicers, limit percentage, by weight, of cementitious materials other than portland cement according to ACI 301 requirements.

E. Cementitious Materials: Limit percentage, by weight, of cementitious materials other than portland cement in concrete as follows:

1. Fly Ash: 25 percent.

2. Combined Fly Ash and Pozzolan: 25 percent.

3. Ground Granulated Blast-Furnace Slag: 50 percent.

4. Combined Fly Ash or Pozzolan and Ground Granulated Blast-Furnace Slag: 50 percent portland cement minimum, with fly ash or pozzolan not exceeding 25 percent.

F. Maximum Water-Cementitious Materials Ratio: 0.50 for concrete required to have low water permeability.

G. Maximum Water-Cementitious Materials Ratio: 0.45 for concrete exposed to deicers or subject to freezing and thawing while moist.

H. Maximum Water-Cementitious Materials Ratio: 0.40 for corrosion protection of steel reinforcement in concrete exposed to chlorides from deicing chemicals, salt, saltwater, brackish water, seawater, or spray from these sources.

I. Maximum Water-Cementitious Materials Ratio: 0.50 for concrete subject to moderate sulfate exposure.

J. Maximum Water-Cementitious Materials Ratio: 0.45 for concrete subject to severe or very severe sulfate exposure.

K. Air Content: Add air-entraining admixture at manufacturer's prescribed rate to result in concrete at point of placement having an air content as follows within a tolerance of plus 1 or minus 1.5 percent, unless otherwise indicated:

1. Air Content: 5.5 percent for 1-1/2-inch- (38-mm-) nominal maximum aggregate size.

2. Air Content: 6 percent for 1-inch- (25-mm-) nominal maximum aggregate size.

3. Air Content: 6 percent for 3/4-inch- (19-mm-) nominal maximum aggregate size.

L. Do not air entrain concrete to trowel-finished interior floors and suspended slabs. Do not allow entrapped air content to exceed 3 percent.

M. Limit water-soluble, chloride-ion content in hardened concrete to 0.15 percent by weight of cement.

N. Micro-Synthetic Fiber: Uniformly disperse in concrete mix at manufacturer's recommended rate, but not less than 1 lb/cu. yd.

O. Admixtures: Use admixtures according to manufacturer's written instructions.

1. Use water-reducing admixture or high-range water-reducing admixture (superplasticizer) in concrete, as required, for placement and workability.

2. Use water-reducing and retarding admixture when required by high temperatures, low humidity, or other adverse placement conditions.

3. Use water-reducing admixture in pumped concrete, concrete for heavy-use industrial slabs and parking structure slabs, concrete required to be watertight, and concrete with a water-cementitious materials ratio below 0.50.

4. Use corrosion-inhibiting admixture in concrete mixes where indicated.

2.12 FABRICATING REINFORCEMENT

A. Fabricate steel reinforcement according to CRSI's "Manual of Standard Practice."

2.13 CONCRETE MIXING

A. Ready-Mixed Concrete: Measure, batch, mix, and deliver concrete according to ASTM C94 and ASTM C1116, and furnish batch ticket information.

1. When air temperature is between 85 and 90 deg F (30 and 32 deg C), reduce mixing and delivery time from 1-1/2 hours to 75 minutes; when air temperature is above 90 deg F (32 deg C), reduce mixing and delivery time to 60 minutes.

B. Project-Site Mixing: Measure, batch, and mix concrete materials and concrete according to ASTM C94. Mix concrete materials in appropriate drum-type batch machine mixer.

1. For mixer capacity of 1 cu. yd. (0.76 cu. m) or smaller, continue mixing at least one and one-half minutes, but not more than five minutes after ingredients are in mixer, before any part of batch is released.

2. For mixer capacity larger than 1 cu. yd. (0.76 cu. m), increase mixing time by 15 seconds for each additional 1 cu. yd. (0.76 cu. m).

3. Provide batch ticket for each batch discharged and used in the Work, indicating Project identification name and number, date, mix type, mix time, quantity, and amount of water added. Record approximate location of final deposit in structure.

PART 3 EXECUTION

3.01 FORMWORK

A. Design, erect, shore, brace, and maintain formwork, according to ACI 301, to support vertical, lateral, static, and dynamic loads, and construction loads that might be applied, until concrete structure can support such loads.

B. Construct formwork so concrete members and structures are of size, shape, alignment, elevation, and position indicated, within tolerance limits of ACI 117.

C. Limit concrete surface irregularities, designated by ACI 347R as abrupt or gradual, as follows:

1. Class A, 1/8 inch (3 mm).

2. Class B, 1/4 inch (6 mm).

D. Construct forms tight enough to prevent loss of concrete mortar.

E. Fabricate forms for easy removal without hammering or prying against concrete surfaces. Provide crush or wrecking plates where stripping may damage cast concrete surfaces. Provide top forms for inclined surfaces steeper than 1.5 horizontal to 1 vertical. Kerf wood inserts for forming keyways, reglets, recesses, and the like, for easy removal.

1. Do not use rust-stained steel form-facing material.

F. Set edge forms, bulkheads, and intermediate screed strips for slabs to achieve required elevations and slopes in finished concrete surfaces. Provide and secure units to support screed strips; use strike-off templates or compacting-type screeds.

G. Provide temporary openings for cleanouts and inspection ports where interior area of formwork is inaccessible. Close openings with panels tightly fitted to forms and securely braced to prevent loss of concrete mortar. Locate temporary openings in forms at inconspicuous locations.

H. Chamfer exterior corners and edges of permanently exposed concrete unless otherwise noted or detailed on drawings.

I. Form openings, chases, offsets, sinkages, keyways, reglets, blocking, screeds, and bulkheads required in the Work. Determine sizes and locations from trades providing such items.

J. Clean forms and adjacent surfaces to receive concrete. Remove chips, wood, sawdust, dirt, and other debris just before placing concrete.

K. Retighten forms and bracing before placing concrete, as required, to prevent mortar leaks and maintain proper alignment.

L. Coat contact surfaces of forms with form-release agent, according to manufacturer's written instructions, before placing reinforcement.

3.02 EMBEDDED ITEMS

A. Place and secure anchorage devices and other embedded items required for adjoining work that is attached to or supported by cast-in-place concrete. Use Setting Drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.

1. Install anchor bolts, accurately located, to elevations required.

2. Install reglets to receive top edge of foundation sheet waterproofing and to receive through-wall flashings in outer face of concrete frame at exterior walls, where flashing is shown at lintels, shelf angles, and other conditions.

3. Install dovetail anchor slots in concrete structures as indicated.

B. Embedded items shall be located so as not to reduce the strength of the construction. They shall be thoroughly clean and free from coating, rust, scale, oil and other foreign material. No wood shall be permanently embedded in concrete.

C. Embedments shall be maintained in position and protected until the concreting is complete.

3.03 REMOVING AND REUSING FORMS

A. General: Formwork, for sides of beams, walls, columns, and similar parts of the Work, that does not support weight of concrete may be removed after cumulatively curing at not less than 50 deg F (10 deg C) for 24 hours after placing concrete provided concrete is hard enough to not be damaged by form-removal operations and provided curing and protection operations are maintained.

B. Leave formwork, for beam soffits, joists, slabs, and other structural elements, that supports weight of concrete in place until concrete has achieved the following:

1. At least 70 percent of 28-day design compressive strength.

2. Determine compressive strength of in-place concrete by testing representative field- or laboratory-cured test specimens according to ACI 301.

3. Remove forms only if shores have been arranged to permit removal of forms without loosening or disturbing shores.

C. Clean and repair surfaces of forms to be reused in the Work. Split, frayed, delaminated, or otherwise damaged form-facing material will not be acceptable for exposed surfaces. Apply new form-release agent.

D. When forms are reused, clean surfaces, remove fins and laitance, and tighten to close joints. Align and secure joints to avoid offsets. Do not use patched forms for exposed concrete surfaces unless approved by [Architect].

3.04 SHORES AND RESHORES

A. Comply with ACI 318, ACI 301, and recommendations in ACI 347R for design, installation, and removal of shoring and reshoring.

B. In multistory construction, extend shoring or reshoring over a sufficient number of stories to distribute loads in such a manner that no floor or member will be excessively loaded or will induce tensile stress in concrete members without sufficient steel reinforcement.

C. Plan sequence of removal of shores and reshore to avoid damage to concrete. Locate and provide adequate reshoring to support construction without excessive stress or deflection.

3.05 VAPOR RETARDERS

A. General: Extend vapor retarder to extremities of areas to be protected from vapor transmission. Place, protect, and repair vapor-retarder sheets according to ASTM E1643 and manufacturer's written instructions.

B. Refer to Section 07 10 00 for vapor retarder for additional specifications.

3.06 STEEL REINFORCEMENT

A. General: Comply with CRSI's "Manual of Standard Practice" for placing reinforcement.

1. Do not cut or puncture vapor retarder. Repair damage and reseal vapor retarder before placing concrete.

B. Clean reinforcement of loose rust and mill scale, earth, ice, and other foreign materials.

C. Accurately position, support, and secure reinforcement against displacement. Locate and support reinforcement with bar supports to maintain minimum concrete cover. Do not tack weld crossing reinforcing bars.

1. Shop- or field-weld reinforcement according to AWS D1.4, where indicated.

D. Set wire ties with ends directed into concrete, not toward exposed concrete surfaces.

E. Install welded wire fabric in longest practicable lengths on bar supports spaced to minimize sagging. Lap edges and ends of adjoining sheets at least one mesh spacing. Offset laps of adjoining sheet widths to prevent continuous laps in either direction. Lace overlaps with wire.

F. Epoxy-Coated Reinforcement: Use epoxy-coated steel wire ties to fasten epoxy-coated reinforcement. Repair cut and damaged epoxy coatings with epoxy repair coating according to ASTM D3963.

G. Zinc-Coated Reinforcement: Use galvanized steel wire ties to fasten zinc-coated reinforcement. Repair cut and damaged zinc coatings with zinc repair material.

3.07 JOINTS

A. General: Construct joints true to line with faces perpendicular to surface plane of concrete.

B. Construction Joints: Install so strength and appearance of concrete are not impaired, at locations indicated or as approved by Architect.

1. Place joints perpendicular to main reinforcement. Continue reinforcement across construction joints, unless otherwise indicated. Do not continue reinforcement through sides of strip placements of floors and slabs.
2. Form from preformed galvanized steel, plastic keyway-section forms, or bulkhead forms with keys, unless otherwise indicated. Embed keys at least 1-1/2 inches (38 mm) into concrete.
3. Locate joints for beams, slabs, joists, and girders in the middle third of spans. Offset joints in girders a minimum distance of twice the beam width from a beam-girder intersection.
4. Locate horizontal joints in walls and columns at underside of floors, slabs, beams, and girders and at the top of footings or floor slabs.
5. Space vertical joints in walls as indicated. Locate joints beside piers integral with walls, near corners, and in concealed locations where possible.
6. Use a bonding agent at locations where fresh concrete is placed against hardened or partially hardened concrete surfaces.
7. Use epoxy-bonding adhesive at locations where fresh concrete is placed against hardened or partially hardened concrete surfaces.

C. Contraction Joints in Slabs-on-Grade: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Construct contraction joints for a depth equal to at least one-fourth of concrete thickness, as follows:

1. Grooved Joints: Form contraction joints after initial floating by grooving and finishing each edge of joint to a radius of 1/8 inch (3 mm). Repeat grooving of contraction joints after applying surface finishes. Eliminate groover tool marks on concrete surfaces.
2. Sawed Joints: Form contraction joints with power saws equipped with shatterproof abrasive or diamond-rimmed blades. Cut 1/8-inch- (3-mm-) wide joints into concrete when cutting action will not tear, abrade, or otherwise damage surface and before concrete develops random contraction cracks.

D. Isolation Joints in Slabs-on-Grade: After removing formwork, install joint-filler strips at slab junctions with vertical surfaces, such as column pedestals, foundation walls, grade beams, and other locations, as indicated.

1. Extend joint-filler strips full width and depth of joint, terminating flush with finished concrete surface, unless otherwise indicated.
2. Terminate full-width joint-filler strips not less than 1/2 inch (12 mm) or more than 1 inch (25 mm) below finished concrete surface where joint sealants, specified in Division 07 Section "Joint Sealants," are indicated.
3. Install joint-filler strips in lengths as long as practicable. Where more than one length is required, lace or clip sections together.

E. Dowel Joints: Install dowel sleeves and dowels or dowel bar and support assemblies at joints where indicated.

1. Use dowel sleeves or lubricate or asphalt-coat one-half of dowel length to prevent concrete bonding to one side of joint.

3.08 WATERSTOPS

A. Flexible Waterstops: Install in construction joints as indicated to form a continuous diaphragm. Install in longest lengths practicable. Support and protect exposed waterstops during progress of Work. Field-fabricate joints in waterstops according to manufacturer's written instructions.

B. Self-Expanding Strip Waterstops: Install in construction joints and at other locations indicated, according to manufacturer's written instructions, bonding or mechanically fastening and firmly pressing into place. Install in longest lengths practicable.

3.09 CONCRETE PLACEMENT

A. Before placing concrete, verify that installation of formwork, reinforcement, and embedded items is complete and that required inspections have been performed.

B. Do not add water to concrete during delivery, at Project site, or during placement, unless approved by Architect.

C. Before placing concrete, water may be added at Project site, subject to limitations of ACI 301.

1. Do not add water to concrete after adding high-range water-reducing admixtures to mix.

D. Deposit concrete continuously or in layers of such thickness that no new concrete will be placed on concrete that has hardened enough to cause seams or planes of weakness. If a section cannot be placed continuously, provide construction joints as specified. Deposit concrete to avoid segregation.

E. Deposit concrete in forms in horizontal layers no deeper than 24 inches (600 mm) and in a manner to avoid inclined construction joints. Place each layer while preceding layer is still plastic, to avoid cold joints.

1. Consolidate placed concrete with mechanical vibrating equipment. Use equipment and procedures for consolidating concrete recommended by ACI 309R.

2. Do not use vibrators to transport concrete inside forms. Insert and withdraw vibrators vertically at uniformly spaced locations no farther than the visible effectiveness of the vibrator. Place vibrators to rapidly penetrate placed layer and at least 6 inches (150 mm) into preceding layer. Do not insert vibrators into lower layers of concrete that have begun to lose plasticity. At each insertion, limit duration of vibration to time necessary to consolidate concrete and complete embedment of reinforcement and other embedded items without causing mix constituents to segregate.

F. Deposit and consolidate concrete for floors and slabs in a continuous operation, within limits of construction joints, until placement of a panel or section is complete.

1. Consolidate concrete during placement operations so concrete is thoroughly worked around reinforcement and other embedded items and into corners.

2. Maintain reinforcement in position on chairs during concrete placement.

3. Screed slab surfaces with a straightedge and strike off to correct elevations.

4. Slope surfaces uniformly to drains where required.

5. Begin initial floating using bull floats or darbies to form a uniform and open-textured surface plane, free of humps or hollows, before excess moisture or bleedwater appears on the surface. Do not further disturb slab surfaces before starting finishing operations.

G. Cold-Weather Placement: Comply with ACI 306.1 and as follows. Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing actions, or low temperatures.

1. When air temperature has fallen to or is expected to fall below 40 deg F (4.4 deg C), uniformly heat water and aggregates before mixing to obtain a concrete mixture temperature of not less than 50 deg F (10 deg C) and not more than 80 deg F (27 deg C) at point of placement.

2. Do not use frozen materials or materials containing ice or snow. Do not place concrete on frozen subgrade or on subgrade containing frozen materials.

3. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators, unless otherwise specified and approved in mix designs.

H. Hot-Weather Placement: Place concrete according to recommendations in ACI 305R and as follows, when hot-weather conditions exist:

1. Cool ingredients before mixing to maintain concrete temperature below 90 deg F (32 deg C) at time of placement. Chilled mixing water or chopped ice may be used to control temperature, provided water equivalent of ice is calculated to total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.

2. Cover steel reinforcement with water-soaked burlap so steel temperature will not exceed ambient air temperature immediately before embedding in concrete.

3. Fog-spray forms, steel reinforcement, and subgrade just before placing concrete. Keep subgrade moisture uniform without standing water, soft spots, or dry areas.

3.10 FINISHING FORMED SURFACES

A. Rough-Formed Finish: As-cast concrete texture imparted by form-facing material with tie holes and defective areas repaired and patched. Remove fins and other projections exceeding ACI 347R limits for class of surface specified.

B. Smooth-Formed Finish: As-cast concrete texture imparted by form-facing material, arranged in an orderly and symmetrical manner with a minimum of seams. Repair and patch tie holes and defective areas. Remove fins and other projections exceeding 1/8 inch (3 mm) in height.

1. Apply to concrete surfaces exposed to public view or to be covered with a coating or covering material applied directly to concrete, such as waterproofing, dampproofing, veneer plaster, or painting.

2. Do not apply rubbed finish to smooth-formed finish.

C. Rubbed Finish: Apply the following to smooth-formed finished concrete:

1. Grout-Cleaned Finish: Wet concrete surfaces and apply grout of a consistency of thick paint to coat surfaces and fill small holes. Mix one part portland cement to one and one-half parts fine sand with a 1:1 mixture of bonding admixture and water. Add white portland cement in amounts determined by trial patches so color of dry grout will match adjacent surfaces. Scrub grout into voids and remove excess grout. When grout whitens, rub surface with clean burlap and keep surface damp by fog spray for at least 36 hours.

D. Related Unformed Surfaces: At tops of walls, horizontal offsets, and similar unformed surfaces adjacent to formed surfaces, strike off smooth and finish with a texture matching adjacent formed surfaces. Continue final surface treatment of formed surfaces uniformly across adjacent unformed surfaces, unless otherwise indicated.

3.11 FINISHING FLOORS AND SLABS

A. General: Comply with recommendations in ACI 302.1R for screeding, restraightening, and finishing operations for concrete surfaces. Do not wet concrete surfaces.

B. Scratch Finish: While still plastic, texture concrete surface that has been screeded and bull-floated or darbied. Use stiff brushes, brooms, or rakes.

1. Apply scratch finish to surfaces indicated and to surfaces to receive concrete floor topping or mortar setting beds for ceramic or quarry tile, portland cement terrazzo, and other bonded cementitious floor finishes.

C. Float Finish: Consolidate surface with power-driven floats or by hand floating if area is small or inaccessible to power driven floats. Restraighten, cut down high spots, and fill low spots. Repeat float passes and restraightening until surface is left with a uniform, smooth, granular texture.

1. Apply float finish to surfaces indicated, to surfaces to receive trowel finish, and to floor and slab surfaces to be covered with fluid-applied or sheet waterproofing, built-up or membrane roofing, or sand-bed terrazzo.

D. Trowel Finish: After applying float finish, apply first trowel finish and consolidate concrete by hand or power-driven trowel. Continue troweling passes and restraighten until surface is free of trowel marks and uniform in texture and appearance. Grind smooth any surface defects that would telegraph through applied coatings or floor coverings.

1. Apply a trowel finish to surfaces indicated and to floor and slab surfaces exposed to view or to be covered with resilient flooring, carpet, ceramic or quarry tile set over a cleavage membrane, paint, or another thin film-finish coating system.

2. Finish and measure surface so gap at any point between concrete surface and an unleveled freestanding 10-foot- (3.05-m-) long straightedge, resting on two high spots and placed anywhere on the surface, does not exceed 3/16 inch (4.8 mm).

E. Trowel and Fine-Broom Finish: Apply a partial trowel finish, stopping after second troweling, to surfaces indicated and to surfaces where ceramic or quarry tile is to be installed by either thickset or thin-set method. Immediately after second troweling, and when concrete is still plastic, slightly scarify surface with a fine broom.

F. Broom Finish: Apply a broom finish to exterior concrete platforms, steps, and ramps, and elsewhere as indicated.

1. Immediately after float finishing, slightly roughen trafficked surface by brooming with fiber-bristle broom perpendicular to main traffic route. Coordinate required final finish with Owner's Representative before application.

G. Slip-Resistive Aggregate Finish (where required by local codes): Before final floating, apply slip-resistive aggregate finish where indicated and to concrete stair treads, platforms, and ramps. Apply according to manufacturer's written instructions and as follows:

1. Uniformly spread 25 lb/100 sq. ft. (12 kg/10 sq. m) of dampened slip-resistive aggregate over surface in one or two applications. Tamp aggregate flush with surface, but do not force below surface.

2. After broadcasting and tamping, apply float finish.

3. After curing, lightly work surface with a steel wire brush or an abrasive stone, and water to expose slip-resistive aggregate.

3.12 MISCELLANEOUS CONCRETE ITEMS

A. Filling In: Fill in holes and openings left in concrete structures, unless otherwise indicated, after work of other trades is in place. Mix, place, and cure concrete, as specified, to blend with in-place construction. Provide other miscellaneous concrete filling indicated or required to complete Work.

B. Curbs: Other than specified in Section 32 13 13 (02751) Cement Concrete Pavement, provide monolithic finish to interior curbs by stripping forms while concrete is still green and by steel-troweling surfaces to a hard, dense finish with corners, intersections, and terminations slightly rounded.

C. Equipment Bases and Foundations: Provide machine and equipment bases and foundations as shown on Drawings. Set anchor bolts for machines and equipment at correct elevations, complying with diagrams or templates of manufacturer furnishing machines and equipment.

D. Steel Pan Stairs: Provide concrete fill for steel pan stair treads, landings, and associated items. Cast-in inserts and accessories as shown on Drawings. Screed, tamp, and trowel-finish concrete surfaces.

3.13 CONCRETE PROTECTION AND CURING

A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. Comply with ACI 306.1 for cold-weather protection and with recommendations in ACI 305R for hot-weather protection during curing.

B. Evaporation Retarder: Apply evaporation retarder to unformed concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h (1 kg/sq. m x h) before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete, but before float finishing.

C. Formed Surfaces: Cure formed concrete surfaces, including underside of beams, supported slabs, and other similar surfaces. If forms remain during curing period, moist cure after loosening forms. If removing forms before end of curing period, continue curing by one or a combination of the following methods:

D. Unformed Surfaces: Begin curing immediately after finishing concrete. Cure unformed surfaces, including floors and slabs, concrete floor toppings, and other surfaces, by one or a combination of the following methods:

1. Moisture Curing: Keep surfaces continuously moist for not less than seven days with the following materials:

   a. Water.

   b. Continuous water-fog spray.

   c. Absorptive cover, water saturated, and kept continuously wet. Cover concrete surfaces and edges with 12-inch (300-mm) lap over adjacent absorptive covers.

2. Moisture-Retaining-Cover Curing: Cover concrete surfaces with moisture-retaining cover for curing concrete, placed in widest practicable width, with sides and ends lapped at least 12 inches (300 mm), and sealed by waterproof tape or adhesive. Cure for not less than seven days. Immediately repair any holes or tears during curing period using cover material and waterproof tape.

   a. Moisture cure or use moisture-retaining covers to cure concrete surfaces to receive floor coverings.

   b. Moisture cure or use moisture-retaining covers to cure concrete surfaces to receive penetrating liquid floor treatments.

   c. Cure concrete surfaces to receive floor coverings with either a moisture-retaining cover or a curing compound that the manufacturer recommends for use with floor coverings.

3. Curing Compound: Apply uniformly in continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Maintain continuity of coating and repair damage during curing period.

   a. Restrictions on use: Do not use curing compound on surfaces over which homogeneous sheet material will be applied. For surfaces to receive other finishes, submit well in advance of time for curing application, written acceptance of curing compound by both the manufacturer and the installer of the finish material, relative to compatibility therewith of finish material, including primers, adhesives, and similar materials. If manufacturer of finish material has not been determined, Contractor shall be responsible for coordinating such acceptance.

4. Curing and Sealing Compound: Apply uniformly to floors and slabs indicated in a continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial

application. Repeat process 24 hours later and apply a second coat. Maintain continuity of coating and repair damage during curing period.

3.14 JOINT FILLING

A. Prepare, clean, and install joint filler according to manufacturer's written instructions.

1. Defer joint filling until concrete has aged at least six months. Do not fill joints until construction traffic has permanently ceased.

B. Remove dirt, debris, saw cuttings, curing compounds, and sealers from joints; leave contact faces of joint clean and dry.

C. Install semirigid epoxy joint filler full depth in saw-cut joints and at least 2 inches (50 mm) deep in formed joints. Overfill joint and trim joint filler flush with top of joint after hardening.

3.15 CONCRETE SURFACE REPAIRS

A. Defective Concrete: Repair and patch defective areas when approved by Owner's Representative. Remove and replace concrete that cannot be repaired and patched to Owner's Representative approval.

B. Patching Mortar: Mix dry-pack patching mortar, consisting of one part portland cement to two and one-half parts fine aggregate passing a No. 16 (1.2-mm) sieve, using only enough water for handling and placing.

C. Repairing Formed Surfaces: Surface defects include color and texture irregularities, cracks, spalls, air bubbles, honeycombs, rock pockets, fins and other projections on the surface, and stains and other discolorations that cannot be removed by cleaning.

1. Immediately after form removal, cut out honeycombs, rock pockets, and voids more than 1/2 inch (13 mm) in any dimension in solid concrete but not less than 1 inch (25 mm) in depth. Make edges of cuts perpendicular to concrete surface. Clean, dampen with water, and brush-coat holes and voids with bonding agent. Fill and compact with patching mortar before bonding agent has dried. Fill form-tie voids with patching mortar or cone plugs secured in place with bonding agent.

2. Repair defects on surfaces exposed to view by blending white portland cement and standard portland cement so that, when dry, patching mortar will match surrounding color. Patch a test area at inconspicuous locations to verify mixture and color match before proceeding with patching. Compact mortar in place and strike off slightly higher than surrounding surface.

3. Repair defects on concealed formed surfaces that affect concrete's durability and structural performance as determined by Owner's Representative.

D. Repairing Unformed Surfaces: Test unformed surfaces, such as floors and slabs, for finish and verify surface tolerances specified for each surface. Correct low and high areas. Test surfaces sloped to drain for trueness of slope and smoothness; use a sloped template.

1. Repair finished surfaces containing defects. Surface defects include spalls, popouts, honeycombs, rock pockets, crazing and cracks in excess of 0.01 inch (0.25 mm) wide or that penetrate to reinforcement or completely through unreinforced sections regardless of width, and other objectionable conditions.

2. After concrete has cured at least 14 days, correct high areas by grinding.

3. Correct localized low areas during or immediately after completing surface finishing operations by cutting out low areas and replacing with patching mortar. Finish repaired areas to blend into adjacent concrete.

4. Correct other low areas scheduled to receive floor coverings with a repair underlayment. Prepare, mix, and apply repair underlayment and primer according to manufacturer's

written instructions to produce a smooth, uniform, plane, and level surface. Feather edges to match adjacent floor elevations.

5. Correct other low areas scheduled to remain exposed with a repair topping. Cut out low areas to ensure a minimum repair topping depth of 1/4 inch (6 mm) to match adjacent floor elevations. Prepare, mix, and apply repair topping and primer according to manufacturer's written instructions to produce a smooth, uniform, plane, and level surface.

6. Repair defective areas, except random cracks and single holes 1 inch (25 mm) or less in diameter, by cutting out and replacing with fresh concrete. Remove defective areas with clean, square cuts and expose steel reinforcement with at least 3/4 inch (19 mm) clearance all around. Dampen concrete surfaces in contact with patching concrete and apply bonding agent. Mix patching concrete of same materials and mix as original concrete except without coarse aggregate. Place, compact, and finish to blend with adjacent finished concrete. Cure in same manner as adjacent concrete.

7. Repair random cracks and single holes 1 inch (25 mm) or less in diameter with patching mortar. Groove top of cracks and cut out holes to sound concrete and clean off dust, dirt, and loose particles. Dampen cleaned concrete surfaces and apply bonding agent. Place patching mortar before bonding agent has dried. Compact patching mortar and finish to match adjacent concrete. Keep patched area continuously moist for at least 72 hours.

E. Perform structural repairs of concrete, subject to Owner's Representative's approval, using epoxy adhesive and patching mortar.

F. Repair materials and installation not specified above may be used, subject to Owner's Representative's approval.

3.16 FIELD QUALITY CONTROL

A. Testing Agency: Owner will engage a qualified independent testing and inspecting agency to sample materials, perform tests, and submit test reports during concrete placement. Sampling and testing for quality control may include those specified in this Article.

B. Testing Services: Testing of composite samples of fresh concrete obtained according to ASTM C172 shall be performed according to the following requirements:

1. Testing Frequency: Obtain one composite sample for each day's pour of each concrete mix exceeding 5 cu. yd. (4 cu. m), but less than 25 cu. yd. (19 cu. m), plus one set for each additional 50 cu. yd. (38 cu. m) or fraction thereof.

2. Slump: ASTM C143; one test at point of placement for each composite sample, but not less than one test for each day's pour of each concrete mix. Perform additional tests when concrete consistency appears to change.

3. Air Content: ASTM C231, pressure method, for normal-weight concrete; ASTM C173, volumetric method, for structural lightweight concrete; one test for each composite sample, but not less than one test for each day's pour of each concrete mix.

4. Concrete Temperature: ASTM C1064; one test hourly when air temperature is 40 deg F (4.4 deg C) and below and when 80 deg F (27 deg C) and above, and one test for each composite sample.

5. Unit Weight: ASTM C567, fresh unit weight of structural lightweight concrete; one test for each composite sample, but not less than one test for each day's pour of each concrete mix.

6. When frequency of testing will provide fewer than five compressive-strength tests Compression Test Specimens: ASTM C31; cast and laboratory cure one set of four standard cylinder specimens for each composite sample.

a. Cast and field cure one set of four standard cylinder specimens for each composite sample.

7. Compressive-Strength Tests: ASTM C39; test two laboratory-cured specimens at 7 days and two at 28 days.

a. Test two field-cured specimens at 7 days and two at 28 days.

b. A compressive-strength test shall be the average compressive strength from two specimens obtained from same composite sample and tested at age indicated.

C. When strength of field-cured cylinders is less than 85 percent of companion laboratory-cured cylinders, Contractor shall evaluate operations and provide corrective procedures for protecting and curing in-place concrete.

D. Strength of each concrete mix will be satisfactory if every average of any three consecutive compressive-strength tests equals or exceeds specified compressive strength and no compressive-strength test value falls below specified compressive strength by more than 500 psi (3.4 MPa).

E. Test results shall be reported in writing to Architect, concrete manufacturer, and Contractor within 48 hours of testing. Reports of compressive-strength tests shall contain Project identification name and number, date of concrete placement, name of concrete testing and inspecting agency, location of concrete batch in Work, design compressive strength at 28 days, concrete mix proportions and materials, compressive breaking strength, and type of break for both 7-and 28-day tests.

F. Nondestructive Testing: Impact hammer, sonoscope, or other nondestructive device may be permitted by Architect but will not be used as sole basis for approval or rejection of concrete.

G. Additional Tests: Testing and inspecting agency shall make additional tests of concrete when test results indicate that slump, air entrainment, compressive strengths, or other requirements have not been met, as directed by Architect. Testing and inspecting agency may conduct tests to determine adequacy of concrete by cored cylinders complying with ASTM C42 or by other methods as directed by Architect.

END OF SECTION

SECTION 03 54 13 - GYPSUM CEMENT UNDERLAYMENT

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Gypsum Cement Floor Underlayment.

B. Related Sections:

1.02 REFERENCES

A. ASTM International (ASTM) Publications: (Former American Society for Testing and Materials)

1. C472 “Standard Test Methods for Physical Testing of Gypsum, Gypsum Plasters and Gypsum Concrete”.

1.03 SUBMITTALS

A. Product Data: For each type of product indicated.

1.04 QUALITY ASSURANCE

A. Installer's Qualifications: An experienced installer who is acceptable to manufacturer, who has completed cement-based underlayment applications similar in material and extent to that required for this Project, and whose work has resulted in construction with a record of successful in-service performance.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials in original packages and containers, with seals unbroken, bearing manufacturer’s labels indicating brand name and directions for storage, mixing with other components, and application.

B. Store materials to comply with manufacturer’s written instructions to prevent deterioration from moisture or other detrimental effects.

1.06 PROJECT CONDITIONS

A. Environmental Limitations: Comply with manufacturer’s written recommendations for substrate temperature and moisture content, ambient temperature and humidity, ventilation, and other conditions affecting underlayment performance.

B. Close areas to traffic during underlayment application and for time period after application recommended in writing by manufacturer.

1.07 COORDINATION

A. Coordinate cement-based underlayment with requirements of finish flooring products, including adhesives, specified in Division 09 Sections.

1. Before installing surface sealers recommended by underlayment manufacturer, if any, verify compatibility with finish flooring installation adhesives.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Approved Manufacturers:

1. "Gyp-Crete 2000 with Maxxon Overspray Primer/Sealer"; Maxxon Corporation (800-356-7887)
2. "Firm-Fill 3310 with Hacker TopCoat SP"; Hacker Industries, Inc. (800-642-3455)
3. "LevelRock 2500 Floor Underlayment with SE-100 Surface Enhancer"; USG (United States Gypsum Company) (800-847-4431)

2.02 PRODUCTS AND MATERIALS

A. Gypsum Cement: Gypsum cement product as manufactured by listed manufacturers.

B. Aggregate: Well-graded, washed gravel, 1/8 to ¼", or coarse sand as recommended by underlayment manufacturer.

1. Provide aggregate when recommended in writing by underlayment manufacturer for underlayment thickness required.

C. Water: Potable and at a temperature of not more than 70 degrees F.

D. Floor Primer and Sealer: Products of underlayment manufacturer recommended in writing for substrate, conditions, and application indicated.

2.03 MIXES: Mix proportions and methods shall be in strict accordance with product manufacturer's recommendations.

A. Compressive strength of 2,500 psi. Do not over water.

PART 3 PRODUCTS

3.01 EXAMINATION

A. Examine substrates, with Installer present, for conditions affecting performance of underlayment including substrate moisture content. Begin underlayment application only after unsatisfactory conditions have been corrected.

3.02 PREPARATION

A. General: Prepare and clean substrate according to manufacturer's written instructions for substrate indicated. Provide clean, dry, neutral-pH substrate for underlayment application.

1. Subfloor shall be structurally sound, clean, and free of mud, oil, grease, or other contaminants.

B. Prior to installation of Gypsum Cement Underlayment, General Contractor shall inspect the area to be poured for proper attachment of the subfloor and replace any areas of subfloor that have weakened or delaminated during construction. All stud wall base plates in doors and other openings shall be removed.

1. Wood Substrates: Mechanically fasten loose boards and panels to eliminate substrate movement and squeaks. Sand to remove coatings that might impair underlayment bond and remove sanding dust.
2. Treat nonmoving substrate cracks to prevent cracks from telegraphing through underlayment according to manufacturer's written recommendations.
3. Fill substrate voids to prevent underlayment from leaking.
4. Verify that the subfloor deflection meets project specification.

C. Priming Subfloor:

1. Spray one coat of Floor Primer with a concrete or garden sprayer over entire plywood deck using mix as recommended by underlayment. When applying underlayment over APA span-rated oriented strand or waferboard, apply conditioner and primer as required by underlayment manufacturer.

D. Expansion Joints: Allow joints to continue through the underlayment at same width.

3.03 APPLICATION OF GYPSUM CEMENT UNDERLAYMENT

A. Scheduling: Application shall not begin until the building is enclosed, including roof, windows, doors and other fenestration. Install after drywall installation.

A. Application: Place underlayment at 1 1/2" minimum over subfloor. Spread and screed to a smooth surface. Except at authorized joints, place underlayment as continuously as possible until application is complete so that no gypsum cement slurry is placed against underlayment product that has obtained its initial set.

B. Curing: General Contractor shall provide continuous ventilation and adequate heat to rapidly remove moisture from the area until the underlayment is dry. Contractor shall provide mechanical ventilation if necessary. This Contractor shall test for dryness in the presence of the Owner's Representative utilizing the procedure as recommended by the underlayment manufacturer.

3.04 PREPARATION FOR INSTALLATION OF GLUE DOWN FLOOR GOODS

A. Sealing: Seal all areas that receive glue according to the underlayment manufacturer's specifications. Any floor areas where the surface has been damaged shall be cleaned and sealed regardless of floor covering to be used.

1. Where floor goods manufacturers require special adhesive or installation systems, their requirements supersede these recommendations.

3.05 FIELD QUALITY CONTROL

A. Slump Test: Gypsum cement mix shall be tested for slump as it's being pumped using a 2" x
4" cylinder for compliance with manufacturer's written recommendations.

B. Field Samples: At least one set of 3 molded cube samples shall be taken from each day's pour during the application. Cubes shall be tested as recommended by the underlayment manufacturer in accordance with ASTM C472 using split brass molds. Test results shall be available to Owner's Representative and Contractor from applicator upon request.

3.06 PROTECTION

A. During construction, contractor shall place temporary wood planking over underlayment wherever it will be subjected to heavy wheeled or concentrated loads.

END OF SECTION

SECTION 04 20 00 - UNIT MASONRY

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Types of masonry work required include:

a. Standard Concrete Masonry Units

b. Face Brick

c. Stone Trim Units

d. Mortar and Grout

e. Reinforcing Steel

f. Masonry Joint Reinforcement

g. Required Masonry Ties and Anchors

h. Architectural Cast Stone

B. Related Sections:

1. Section 07 19 00 - Water Repellents
2. Section 07 20 00 - Thermal Protection
3. Section 07 62 00 - Sheet Metal Flashing and Trim
4. Section 07 92 00 - Joint Sealants

C. Products installed, but not furnished, under this Section include the following:

1. Steel Lintels for unit masonry, furnished under Section 05 50 00 - Metal Fabrications.
2. Hollow-metal frames in unit masonry openings, furnished under Section 08 11 13 Steel Doors and Frames.

1.02 REFERENCES

A. ASTM International Publications:

1. A82 “Standard Specification for Steel Wire, Plain, for Concrete Reinforcement”
2. A185 “Standard Specification for Steel Welded Wire Reinforcement, Plain, for Concrete”
3. A307 "Standard Specification for Carbon Steel Bolts and Studs, 60 000 PSI Tensile Strength"
4. A496 “Standard Specification for Steel Wire, Deformed, for Concrete Reinforcement”
5. A497 “Standard Specification for Steel Welded Wire Reinforcement, Deformed, for Concrete”
6. A615 "Standard Specification for Deformed and Plain Billet-Steel Bars for Concrete Reinforcement"
7. A951 “Standard Specification for Masonry Joint Reinforcement”
8. C67 "Test Methods of Sampling and Testing Brick and Structural Clay Tile"
9. C90 “Standard Specification for Loadbearing Concrete Masonry Units”
10. C140 "Test Methods of Sampling and Testing Concrete Masonry Units and Related Units"

11. C144 “Standard Specification for Aggregate for Masonry Mortar”
12. C216 “Standard Specification for Facing Brick (Solid Masonry Units Made from Clay or Shale)”
13. C270 “Standard Specification for Mortar for Unit Masonry”
14. C404 “Standard Specification for Aggregates for Masonry Grout”
15. C476 “Standard Specification for Grout for Masonry”
16. C641 “Standard Test Methods for Mastics and Coatings Used With Thermal Insulation”
17. C1314 “Standard Test Method for Compressive Strength of Masonry Prisms”
18. D226 “Standard Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing”
19. D2287 “Standard Specification for Nonrigid Vinyl Chloride Polymer and Copolymer Molding and Extrusion Compounds”
20. E119 "Standard Test Methods for Fire Tests of Building Construction and Materials"
21. E514 "Test Method for Water Penetration and Leakage through Masonry"

B. Joint American Concrete Institute (ACI) / American Society of Civil Engineers (ASCE) / The Masonry Society (TMS) Publications:

1. ACI 530-1/ASCE 6/TMS 602 “Specification for Masonry Structures”
2. ACI 530/ASCE 5/TMS 402 “Building Code Requirements for Masonry Structures”

C. National Concrete Masonry Association (NCMA) Publications:

1. "Tek" Bulletins

1.03 PERFORMANCE REQUIREMENTS

A. Provide unit masonry that develops the following net-area compressive strengths at 28 days. Determine compressive strength of masonry from net-area compressive strengths of masonry units and mortar types according to Tables 1 and 2 in ACI 530.1/ASCE 6/TMS 602.

B. Determine net-area compressive strength of masonry by testing masonry prisms according to ASTM C1314.

1.04 SUBMITTALS

A. Product Data: Submit manufacturer's product data for each type of masonry unit, accessory, and other manufactured products, including certifications that each type complies with specified requirements.

B. Samples for Initial Selection: For the following:

1. Unit masonry samples in small-scale form showing the full range of colors and textures available for each different exposed masonry unit required.
2. Colored mortar Samples showing the full range of colors available.

1.05 QUALITY ASSURANCE

A. Unit Masonry Standard: Comply with ACI 530.1/ASCE 6/TMS 602, "Specifications for Masonry Structures", except as otherwise indicated.

1. Revise ACI 530.1/ASCE 6 to exclude Sections 1.5; Parts 1.6-A.1.b and 1.6-A.1.c; an d Part 3.3-E.

B. Single Source Responsibility for Masonry Units: Obtain exposed masonry units of uniform texture and color, or a uniform blend within the ranges accepted for these characteristics, through one source from a single manufacturer for each different product required for each continuous surface or visually related surfaces.

C. Single Source Responsibility for Mortar Materials: Obtain mortar ingredients of uniform quality, including color for exposed masonry, from one manufacturer for each cementitious component and from one source and producer for each aggregate.

D. Sample Panels: Before installing unit masonry, build sample panels, using materials indicated for the completed Work, to verify selection and to demonstrate aesthetic effects. Build sample panels for each type of exposed unit masonry assembly in sizes approximately 48 inches long by 48 inches high by full thickness.

1. Locate panels in the locations indicated or, if not indicated, as directed by Architect.

2. Clean exposed faces of panels with masonry cleaner indicated.

3. Maintain sample panels during construction in an undisturbed condition as a standard for judging the completed Work.

4. Approval of sample panels is for color, texture, and blending of masonry units; relationship of mortar and sealant colors to masonry unit colors; tooling of joints; aesthetic qualities of workmanship; and other material and construction qualities specifically approved by the Architect in writing.

a. Approval of sample panels does not constitute approval of deviations from the Contract Documents contained in sample panels, unless such deviations are specifically approved by the Owner's Representative in writing.

5. Demolish and remove sample panels when directed.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Deliver masonry materials to project in undamaged condition.

B. Store masonry units on elevated platforms in a dry location. If units are not stored in an enclosed location, cover tops and sides of stacks with waterproof sheeting, securely tied. If units become wet, do not install until they are dry.

C. Store cementitious materials on elevated platforms, under cover, and in a dry location. Do not use cementitious materials that have become damp.

D. Store aggregates where grading and other required characteristics can be maintained, and contamination avoided.

E. Store masonry accessories, including metal items, to prevent deterioration by corrosion and accumulation of dirt.

F. Deliver preblended, dry mortar mix in moisture-resistant containers designed for lifting and emptying into dispensing silo. Store preblended, dry mortar mix in delivery containers on elevated platforms, under cover, and in a dry location or in a metal dispensing silo with weatherproof cover.

1.07 PROJECT/SITE CONDITIONS

A. Protection of Work: During construction, cover tops of walls, projections, and sills with waterproof sheeting at end of each day's work. Cover partially completed masonry when construction is not in progress.

1. Extend cover a minimum of 24 inches down both sides and hold cover securely in place.

2. Where one wythe of multi-wythe masonry walls is completed in advance of other wythes, secure cover a minimum of 24 inches down face next to unconstructed wythe and hold cover in place.

B. Do not apply uniform roof loading for at least 12 hours after building masonry walls or columns.

C. Do not apply uniform roof or floor loading until the masonry has cured to the extent that it will safely support the intended load, a minimum of 12 hours after building masonry walls or columns.

D. Do not apply concentrated loads until the masonry has cured to the extent that it will safely support the intended load, a minimum of 3 days after building masonry walls or columns.

E. Staining: Prevent grout, mortar, and soil from staining the face of masonry to be left exposed or painted. Immediately remove grout, mortar, and soil that come in contact with such masonry.

1. Protect base of walls from rain-splashed mud and from mortar splatter by means of coverings spread on ground and over wall surface.

2. Protect surfaces of window and door frames, as well as similar products with painted and integral finishes, from mortar droppings.

1.08 COLD AND HOT WEATHER PROTECTION

A. Cold-Weather Requirements: Do not use frozen materials or materials mixed or coated with ice or frost. Do not build on frozen subgrade or setting beds. Remove and replace unit masonry damaged by frost or by freezing conditions. Comply with cold weather construction requirements contained in ACI 530.1/ASCE 6/TMS 602.

B. Remove masonry damaged by freezing conditions.

C. Cold Weather Construction: When the ambient temperature is within the limits indicated, use the following procedures:

1. 40 to 32 deg F: Heat mixing water or sand to produce mortar temperatures between 40 and 120 deg F.

2. 32 to 25 deg F: Heat mixing water and sand to produce mortar temperatures between 40 and 120 deg F. Heat grout materials to produce grout temperatures between 40 and 120 deg F. Maintain mortar and grout above freezing until used in masonry.

3. 25 to 20 deg F: Heat mixing water and sand to produce mortar temperatures between 40 and 120 deg F. Heat grout materials to produce grout temperatures between 40 and 120 deg F. Maintain mortar and grout above freezing until used in masonry. Heat masonry units to 40 deg F if grouting. Use heat on both sides of walls under construction.

4. 20 deg F and Below: Heat mixing water and sand to produce mortar temperatures between 40 and 120 deg F. Heat grout materials to produce grout temperatures between 40 and 120 deg F. Maintain mortar and grout above freezing until used in masonry. Heat masonry units to 40 deg F. Provide enclosures and use heat on both sides of walls under construction to maintain temperatures above 32 deg F within the enclosures.

D. Cold-Weather Protection: When the mean daily temperature is within the limits indicated, provide the following protection:

1. 40 to 25 deg F: Cover masonry with a weather-resistant membrane for 48 hours after construction.

2. 25 to 20 deg F: Cover masonry with insulating blankets or provide enclosure and heat for 48 hours after construction to prevent freezing. Install wind breaks when wind velocity exceeds 15 mi./h.

3. 20 deg F and Below: Provide enclosure and heat to maintain temperatures above 32 deg F within the enclosure for 48 hours after construction.

E. Cold-Weather Cleaning: Use liquid cleaning methods only when air temperature is 40 deg F and above and will remain so until masonry has dried out, but not less than 7 days after completion of cleaning.

F. Hot-Weather Requirements: Protect unit masonry work when temperature and humidity conditions produce excessive evaporation of water from mortar and grout. Provide artificial shade and wind breaks and use cooled materials as required.

1. Comply with hot weather construction requirements contained in ACI 530.1/ASCE 6/TMS 602.

2. When ambient temperature exceeds 100 deg F, or 90 deg F with a wind velocity greater than 8 mph, do not spread mortar beds more than 48 inches ahead of masonry. Set masonry units within one minute of spreading mortar.

PART 2 PRODUCTS

2.01 FACE BRICK: ASTM C216, Grade SW, Type FBS absorption not more than 9% by dry weight per ASTM C67.

A. General: Provide shapes indicated and as follows:

1. Provide units without cores or frogs and with exposed surfaces finished for ends of sills and caps and for similar applications that would otherwise expose unfinished brick surfaces.

2. Efflorescence: Provide brick that has been tested according to ASTM C67 and is rated "not effloresced".

3. Face Brick: ASTM C216, Grade SW, Type FBS absorption not more than 9% by dry weight per ASTM C67.

a. Unit Compressive Strength: Provide units with minimum average net-area compressive strength of 3000 psi.

4. Size and Color: Refer to Exterior Finish Index.

B. Avendra, LLC Preferred Manufacturers:

1. None

C. Approved Manufacturers:

1. Refer to Exterior Finish Index

2. Belden Brick Company (330-456-0031)

3. Endicott Clay Products Co.(800-927-9179)

4. Glen-Gery Brick (610-374-4011)

5. Hanson Building Products (800-277-2745)

2.02 CONCRETE MASONRY UNITS

A. Avendra, LLC Preferred Manufacturers:

1. None

B. Approved Manufacturers:

1. Oldcastle Architectural Inc. (866-259-6263)

2. Approved Substitution.

C. General: Comply with referenced standards and other requirements indicated below applicable to each form of concrete masonry unit required.

1. Provide special shapes where required for lintels, corners, jambs, sash, control joints, headers, bonding and other special conditions.

2. Provide square-edged units for outside corners, unless indicated otherwise on the Drawings.

D. Concrete Masonry Units: Provide units complying with characteristics indicated below for grade, type, face size, exposed face and, under each form of block included, for weight classification:

1. Size:

a. Unless noted otherwise, provide manufacturer's standard units with nominal face dimensions of 16" long x 8" high (15-5/8" x 7-5/8" actual) x thickness indicated.

2. Exposed Faces:

a. Manufacturer's Standard Gray Color and Texture

b. Face Finish:

1) Smooth

3. Hollow Loadbearing Block: ASTM C90, and as follows:

a. Weight Classification: Medium weight, minimum compressive strength of 2000 psi (net area).

4. Solid Loadbearing Block: ASTM C145, and as follows:

a. Weight Classification: Medium weight, minimum compressive strength of 2000 psi.

2.03 STONE TRIM UNITS

A. Limestone: Indiana oolitic limestone as quarried in Lawrence, Monroe, and Owen counties, Indiana; complying with ASTM C568, Category II (medium density); and matching standards of the Indiana Limestone Institute of America's "Indiana Limestone Handbook" for the following:

1. Grade: Standard

2. Color: Match Architect's sample

3. Finish: Match Architect's sample

B. Cut stone accurately to shape and dimensions indicated, with exposed faces dressed true, and with beds and joints at right angles to face; comply with fabricating tolerances specified by the Indiana Limestone Institute of America.

2.04 ARCHITECTURAL CAST STONE

A. Architectural Cast Stone shall be equal to Cates Cast Stone. Cement shall be Portland Cement conforming to ASTM C-150, Type I or III. Fine and course aggregate shall conform to ASTM C-33. Variations from aggregate gradations of ASTM C-33 are permissible for the facing mix. Stone shall be properly cured and seasoned for not less than 28 days and guaranteed against cracks and crazing for a period of one year. Physical properties of all cast stone shall be not less than 5000 PSI compressive strength with an absorption note less than 3% and not more than 7%.

B. Stone work shall be cast to the shape and dimensions indicated, with exposed faces dressed true, and with beds and joints at right angles to face.

C. Stone texture and color shall match Architects submittals.

D. Reinforcing steel shall be Hot-Dip galvanized steel and shall be provided as detailed and as required to resist stresses due to shrinkage. Reinforcement shall conform to ASTM C-615, 616 or 617 for deformed reinforcing bars.

E. Stainless Steel anchor imbeds shall be provided for anchorage of the cast stone sections. Anchor types, design, sizes and spacing shall be determined by the manufacturer ans shall as required for permanent, rigid and safe installation. Anchors shall be galvanized after they have been bent and fabricated and Hot dip galvanizing shall conform to ASTM A-153.

F. Mortar shall be proportioned using one part non-staining white Portland Cement to one part hydrated lime to six parts mason's sand. Tint mortar if required to match cast stone.

2.05 MORTAR AND GROUT MATERIALS

A. Colored Cement Product: Packaged blend made from masonry cement and mortar pigments, all complying with specified requirements, and containing no other ingredients.

1. Approved Manufacturers:

a. LeHigh Cement Co. (800-523-5488)

b. Cemex (800-245-1705)

c. Custom Building Products (800-272-8786)

d. LaFarge Corporation (800-336-2490)

e. Essroc, Italcementi Group (800-245-1717)

2. Formulate blend as required to produce color indicated or, if not indicated, as selected from manufacturer's standard colors. Use cement with synthetic iron oxide pigment only.

3. Aggregate for Mortar: ASTM C144; except for joints less than 1/4 inch thick, use aggregate graded with 100 percent passing the No. 16 sieve.

a. White-Mortar Aggregates: Natural white sand or ground white stone.

b. Colored-Mortar Aggregates: Natural-colored sand or ground marble, granite, or other sound stone; of color necessary to produce required mortar color.

B. Aggregate for Grout: ASTM C404.

C. Grout for Unit Masonry: Comply with ASTM C476 for grout for use in construction of reinforced and nonreinforced unit masonry. Use grout of consistency indicated or, if not otherwise indicated, of consistency (fine or coarse) at time of placement which will completely fill all spaces intended to receive grout. Minimum compressive strength shall be 2,500 psi in 28 days.

1. Use fine grout in grout spaces less than 2" in horizontal direction, unless otherwise indicated.

2. Use coarse grout (maximum 3/8" aggregate) in grout spaces 2" or more in least horizontal dimension, unless otherwise indicated.

D. Water Repellent Admix:

1. Approved Manufacturers:

a. "Dry-Block System Mortar Additive"; W. R. Grace & Co., Construction Products Div (800-558-7066)

b. "Blocktite Mortar Admixture"; Euclid Chemical Co, An RPM Company; (800-321-7628)

2. Mortar additive shall be used in Type M or S Mortar Only.

E. Mortar Color: See Exterior Finish Index.

F. Water: Potable

G. Cold Weather additives shall NOT be used.

2.06 JOINT REINFORCEMENT, TIES AND ANCHORING DEVICES

A. General: Comply with ASTM A 951.

B. Materials: Comply with requirements indicated below for basic materials and with requirements indicated under each form of joint reinforcement, tie and anchor for size and other characteristics:

1. Mill Galvanized Steel Wire: ASTM A82 for uncoated wire and with ASTM C641 for zinc coating of class indicated below:

a. Class 1 (0.40 oz. per sq. ft. of wire surface).

2. Hot-Dip Galvanized, Carbon Steel Wire: ASTM A82 with ASTM A153 for zinc coating of class indicated below:

a. Class B-2.

C. Joint Reinforcement: Provide welded-wire units prefabricated with deformed continuous side rods and plain cross rods into straight lengths of not less than 10', with prefabricated corner and tee units, and complying with requirements indicated below:

1. Width: Fabricate joint reinforcement in units with widths of approximately 2" less than nominal width of walls and partitions as required to provide mortar coverage of not less than 5/8" on joint faces exposed to exterior.

2. Wire Size for Side and Cross Rods: #9 Gauge

3. For single-wythe masonry, provide type as follows with single pair of side rods:

a. Truss design with continuous diagonal cross rods spaced not more than 16" o.c.

4. For multi-wythe masonry with cavity filled solid with mortar, provide type as follows:

a. Truss design with diagonal cross rods spaced not more than 16" o.c. and number of side rods as follows:

b. Number of Side Rods for Multiple-Wythe Concrete Masonry: One side rod for each face shell of concrete masonry back-up and of concrete masonry facing wythe.

D. Flexible Anchors: Where flexible anchors are indicated for connecting masonry to structural framework, provide 2-piece anchors, as described below, which permit vertical or horizontal differential movement between wall and framework parallel to, but resist tension and compression forces perpendicular to, plane of wall.

1. Masonry Veneer Anchors: Two-piece assemblies which permit vertical or horizontal differential movement between wall and framework parallel to, but resist tension and compression forces perpendicular to, plane of wall, consisting of wire tie section and metal anchor section for attachment over sheathing to metal studs and complying with the following requirements:

a. Wire Size: 0.1875" Diameter

b. Wire Tie Shape: Rectangular with Cavity Drip

c. Wire Tie Length: As Required to Extend Within 1-1/2" of Masonry Wythe of Veneer Face

2. Control Joint Anchors: Corrugated galvanized steel, 6-1/4" long x 1" wide x 24 gauge, with 1/4" wide x 1-3/4" deep V-groove.

E. Anchor Section: Sheet metal plate, with screw holes tope and bottom and with raised, rib-stiffened strap stamped into center to provide slot between strap and plate for connection of wire tie, of overall size and thickness indicated below:

1. Size: Plate and strap size: 1-1/4" wide for plate, 5/8" for strap x lengths indicated below. Slot clearance formed between face of plate and back of strap at maximum rib projection: 1/32" + diameter of wire tie.

2. Plate and Strap Lengths: 5" and 3-5/8", with both sides of plate stiffened by ribs.

3. Thickness: 0.0747" (14 Gauge)

2.07 REINFORCING STEEL

A. General: Provide reinforcing steel complying with requirements of referenced unit masonry standard and this article.

B. Steel Reinforcing Bars: Material and grade as follows:

1. Billet steel complying with ASTM A615, Grade 60.

C. Deformed Reinforcing Wire: ASTM A496.

D. Plain Welded Wire Fabric: ASTM A185.

E. Deformed Welded Wire Fabric: ASTM A497.

2.08 ACCESSORIES

A. Premolded Control Joint Strips: Material as indicated below, designed to fit standard sash block and to maintain lateral stability in masonry wall. Size and configuration as indicated.

1. Polyvinyl Chloride Complying with ASTM D2287, General Purpose Grade, Designation PVC-63506.

a. Avendra, LLC Preferred Manufacturers:

1) None

b. Approved Manufacturers:

1) "AA2000-2001 Blocktite"; Hohmann & Barnard, Inc. (800-645-0616)

2) "Rapid Poly-Joint"; Dur-O-Wal, A Dayton Superior Company (800-323-0090)

B. Bond Breaker Strips: Asphalt-Saturated Organic Roofing Felt Complying with ASTM D226, Type I (No. 15 Asphalt Felt)

C. Weepholes: Provide the following for weepholes:

1. Cellular Plastic Weep/Vent: One-piece, flexible extrusion made from UV-resistant polypropylene copolymer, full height and width of head joint and depth 1/8 inch (3 mm) less than depth of outer wythe, in color selected from manufacturer's standard.

a. Products:

1) “Mortar Maze Weep Vent “;Advanced Building Products, Inc. (800-252-2306)

2) “Cell Vents “;Dur-O-Wal, A Dayton Superior Company (800-323-0090)

3) “Quadro-Vent”; Hohmann & Barnard, Inc. (800-645-0616)

D. Flashings:

1. Refer to Section 07 62 00 (07620) – Sheet Metal Flashing & Trim for flashing materials.

E. Flashing Termination Drip Plates

1. Approved Manufacturers:

a. “Foam-Tite Seal Model No.FTSA”; Hohmann & Barnard, Inc. (800-645-0616)

F. Anchor Bolts: Provide steel bolts wit hex nuts and flat washers complying with ASTM A307, Grade A, hot-dip galvanized to comply with ASTM C153, Class C, in sizes and configuration indicated.

2.09 MASONRY CLEANERS

A. Proprietary Acidic Cleaner: Manufacturer's standard strength general purpose cleaner designed for removing mortar/grout stains, efflorescence, and other new construction stains from new masonry surfaces of type indicated; composed of blended organic and inorganic acids combined with special wetting systems and inhibitors; expressly approved for intended use by manufacturer of masonry units being cleaned without damaging or discoloring masonry surfaces.

B. Preferred Manufacturers:

1. None

C. Approved Manufacturers:

1. "Sure Klean No. 600 Detergent”; ProSoCo, Inc. (800-255-4255)

2. “202 New Masonry Detergent”; Diedrich Technologies, Inc. (800-323-3565)

2.10 MORTAR AND GROUT MIXES

A. General: Do not use admixtures, including coloring pigments, air-entraining agents, accelerators, retarders, water repellent agents, anti-freeze compounds or other admixtures, unless otherwise indicated.

1. Do not use calcium chloride in mortar or grout.

B. Mixing: Combine and thoroughly mix cementitious, water and aggregates in a mechanical batch mixer; comply with referenced ASTM standards for mixing time and water content.

C. Mortar for Unit Masonry: Comply with ASTM C270, Proportion Specification, for types of mortar required, unless otherwise indicated.

1. For masonry below grade, in contact with earth, and where indicated, use Type – M.

2. For reinforced masonry and where indicated, use Type -N.

3. For exterior, above-grade, load-bearing and non-load-bearing walls and parapet walls; for interior load-bearing walls; for interior non-load-bearing partitions; and for other applications where another type is not indicated, use Type - N.

4. For mortar parge coats use Type N.

D. Colored Pigmented Mortar: Select and Proportion pigments with other ingredients to produce color required. Do not exceed pigment-to-cement ratio of 1-to-10, by weight. Color as selected by Owner’s Representative.

E. Grout for Unit Masonry: Comply with ASTM C476.

1. Use grout of type indicated or, if not otherwise indicated, of type (fine or coarse) that will comply with Table 1.15.1 in ACI 530.1/ASCE 6/TMS 602 for dimensions of grout spaces and pour height.

2. Proportion grout in accordance with ASTM C476, Table 1 or paragraph 4.2.2 for specified 28-day compressive strength indicated, but not less than 2000 psi.

3. Provide grout with a slump of 8 to 11 inches as measured according to ASTM C143.

PART 3 EXECUTION

3.01 EXAMINATION

A. Examine conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance.

1. Verify that foundations are within tolerances specified.

2. Verify that reinforcing dowels are properly placed.

3. Proceed with installation only after unsatisfactory conditions have been corrected.

B. Before installation, examine rough-in and built-in construction to verify actual locations of piping connections.

3.02 INSTALLATION - GENERAL

A. Do not wet concrete masonry units.

B. Cleaning Reinforcing: Before placing, remove loose rust, ice and other coatings from reinforcing.

C. Thickness: Build cavity and composite walls, floors and other masonry construction to the full thickness shown. Build single-wythe walls (if any) to the actual thickness of the masonry units, using units of nominal thickness indicated.

D. Build chases and recesses to accommodate items specified in this Section or in other sections of the Specifications as shown or required. Provide not less than 8" of masonry between chase or recess and jamb of openings, and between adjacent chases and recesses.

E. Leave openings for equipment to be installed before completion of masonry work. After installation of equipment, complete masonry work to match work immediately adjacent to the opening.

F. Cut masonry units using motor-driven saws to provide clean, sharp, unchipped edges. Cut units as required to provide continuous pattern and to fit adjoining work. Use full-size units without cutting where possible.

1. Use dry cutting saws to cut concrete masonry units.

G. Select and arrange units for exposed unit masonry to provide a uniform blend of colors and textures.

3.03 CONSTRUCTION TOLERANCES

A. Comply with tolerances in ACI 530-1/ASCE 6/TMS 602 and the following:

1. Variation from Plumb: For vertical lines and surfaces of columns, walls and arises do not exceed 1/4" in 10', or 3/8" in a story height not to exceed 20'. For external corners, expansion joints, control joints and other conspicuous lines, do not exceed 1/4" in any story or 20' maximum, nor 1/2" in 40' or more. For vertical alignment of head joints, do not exceed plus or minus 1/4" in 10'.

2. Variation from Level: For bed joints and lines of exposed lintels, sills, parapets, horizontal grooves and other conspicuous lines, do not exceed 1/4" in any bay or 20' maximum, nor 1/2" in 40' or more. For top surface of bearing walls, do not exceed 1/8" between adjacent floor elements in 10' or 1/16" within width of a single unit.

3. Variation of Linear Building Line: For position shown in plan and related portion of columns, walls and partitions, do not exceed 1/2" in any bay or 20' maximum, nor 3/4" in 40' or more.

4. Variation in Mortar Joint Thickness: Do not exceed bed joint thickness indicated by more than plus or minus 1/8", with a maximum thickness limited to 1/2". Do not exceed head joint thickness indicated by more than plus or minus 1/8".

3.04 LAYING MASONRY WALLS

A. Lay out walls in advance for accurate spacing of surface bond patterns with uniform joint thicknesses and to accurately locate openings, movement-type joints, returns and offsets. Avoid the use of less-than-half-size units at corners, jambs and wherever possible at other locations.

B. Lay-up walls to comply with specified construction tolerances, with courses accurately spaced and coordinated with other work.

C. Bond Pattern: Lay exposed masonry in the bond pattern shown or, if not shown, lay in running bond with vertical joint in each course centered on units in courses above and below. Lay concealed masonry with all units in a wythe in running bond or bonded by lapping not less than 2". Bond and interlock each course of each wythe at corners. Do not use units with less that nominal 4" horizontal face dimensions at corners or jambs.

D. Stopping and Resuming Work: In each course, rack back 1/2-unit length for 1/2-running bond or 1/3-unit length for 1/3 running bond; do not tooth. Clean exposed surfaces of set masonry, wet clay units lightly (if required) and remove loose masonry units and mortar prior to laying fresh masonry.

E. Built-in Work: As construction progresses, build-in items specified under this and other Sections of these Specifications. Fill in solidly with masonry around built-in items.

1. Fill space between hollow metal frames and masonry solidly with mortar, unless otherwise indicated.

2. Where built-in items are to be embedded in cores of hollow masonry units, place a layer of metal lath in the joint below and rod mortar or grout into core.

3. Fill cores in hollow concrete masonry units with grout 24” under bearing plates, beams, lintels, posts and similar items, unless otherwise indicated.

F. Build non-load-bearing interior partitions full height of story to underside of solid floor or roof structure above, unless otherwise indicated.

1. Install compressible filler in joint between top of partition and underside of structure above.

2. At fire-rated partitions, install firestopping in joint between top of partition and underside of structure above to comply with Division 07 Section "Firestopping."

3.05 MORTAR BEDDING AND JOINTING

A. Lay solid masonry units and brick units with completely filled bed and head joint; butter ends with sufficient mortar to fill head joints and shove into place. Do not slush head joints.

B. Lay hollow concrete masonry units with full mortar coverage on horizontal and vertical face shells. Bed webs in mortar in starting course on footings and in all courses of piers, columns and pilasters, and where adjacent to cells or cavities to be reinforced or filled with concrete or grout. For starting course on footings where cells are not grouted, spread out full mortar bed including areas under cells.

C. Maintain joint widths shown, except for minor variations required to maintain bond alignment. If not shown, lay walls with 3/8" joints.

D. Cut joints flush for masonry walls which are to be concealed or to be covered by other materials, unless otherwise indicated.

E. All exposed joints shall be well-tooled to a concave or rodded profile, unless otherwise indicated.

1. Provide raked joints at all vertical scores in scored brick units. Strike to match concave or rodded profile of horizontal joints.

2. Rake-out expansion joints and joints indicated on Drawings to receive sealant.

F. Mortar joints shall be struck at a consistent time interval when mortar is at the same medium stiff consistency in order to minimize color variations.

G. Remove masonry units disturbed after laying; clean and reset in fresh mortar. Do not pound corners or jambs to shift adjacent stretcher units which have been set in position. If adjustments are required, remove units, clean off mortar and reset in fresh mortar.

H. Collar Joints: After each course is laid, fill the vertical longitudinal joint between wythes solidly and with mortar for the following masonry work:

1. All exterior walls, except cavity walls, and interior walls and partitions.

I. Use continuous horizontal joint reinforcement installed in horizontal mortar joints for bond tie between wythes. Install at not more than 16" o.c. vertically.

J. Corners: Provide interlocking masonry unit bond in each course at corners, unless otherwise shown.

K. Intersecting and Abutting Walls: Unless vertical expansion or control joints are shown at juncture, provide same type of bonding specified for structural bonding between wythes and space as follows:

1. Provide individual metal ties at not more than 24" o.c. vertically.

3.06 STONE TRIM UNITS

A. Set stone trim units in full bed of mortar with vertical joints slushed full. Fill dowel, anchor, and similar holes solid. Wet stone-joint surface thoroughly before setting; for soiled stone surfaces, clean bedding and exposed surfaces with fiber brush and soap powder and rinse thoroughly with clear water.

3.07 MASONRY JOINT REINFORCEMENT

A. General: Provide continuous masonry joint reinforcement as indicated. Install longitudinal side rods in mortar for their entire length with a minimum cover of 5/8" on exterior side of walls. Lap reinforcing a minimum of 6".

B. Cut or interrupt joint reinforcement at control and expansion joints, unless otherwise indicated.

C. Reinforce walls with continuous horizontal joint reinforcing, unless specifically noted to be omitted.

D. Provide continuity at corners and wall intersections by use of prefabricated "L" and "T" sections. Cut and bend reinforcement units as directed by manufacturer for continuity at returns, offsets, column fireproofing, pipe enclosures and other special conditions.

E. Space continuous horizontal reinforcement as follows:

1. For multi-wythe walls (solid or cavity) which are structurally bonded by masonry headers or individual wire ties, space horizontal reinforcement 24" o.c. vertically.

2. For single-wythe walls, space reinforcement at 16" o.c. vertically, unless otherwise indicated.

3. For parapets, space reinforcement at 8" o.c. vertically, unless otherwise indicated.

F. Reinforce masonry openings greater than 1'-0" wide, with horizontal joint reinforcement placed in 2 horizontal joints approximately 8" apart, immediately above the lintel and immediately below the sill. Extend reinforcement a minimum of 2'-0" beyond jambs of the opening, except at control joints.

1. In addition to wall reinforcement, provide additional reinforcement at openings as required to comply with the above.

3.08 ANCHORING MASONRY WORK

A. General: Provide anchor devices of type indicated.

B. Anchor single wythe masonry veneer to wood studs with masonry veneer anchors to comply with the following requirements:

1. Fasten each anchor section through sheathing to wood studs with two metal fasteners of type indicated.

2. Embed tie section in masonry joints. Provide not less than 1" air space between back of masonry veneer wythe and face of sheathing.

3. Locate anchor section relative to course in which tie section is embedded to allow maximum vertical differential movement of tie up and down.

4. Space anchors as indicated, but not more than 16" o.c. vertically and 24" o.c. horizontally. Install additional anchors within 1'-0" of openings and at intervals around perimeter not exceeding 3'-0".

3.09 CONTROL AND EXPANSION JOINTS

A. General: Provide vertical and horizontal expansion, control and isolation joints in masonry where shown. Build-in related items as the masonry work progresses.

B. Control Joint Spacing: If location of control joints is not shown, place vertical joints spaced not to exceed 30’-0” o.c. for concrete masonry wythes if reinforced, or 20’-0” o.c. if not reinforced. Locate control joints at points of natural weakness in the masonry work.

C. Build-in non-metallic joint fillers where indicated.

3.10 LINTELS

A. Provide masonry lintels where shown and wherever openings of more than 2'-0" for block size units or more than 1'-0" for brick size units are shown without structural steel or other supporting lintels.

3.11 FLASHING OF MASONRY WORK

A. General: Provide concealed flashing in masonry work at, or above, shelf angles, lintels, ledges and other obstructions to the downward flow of water in the wall so as to divert such water to the exterior. Prepare masonry surfaces smooth and free from projections which could puncture flashing. Place through-wall flashing on sloping bed of mortar and cover with mortar. Seal penetrations in flashing with mastic before covering with mortar. Extend flashings through exterior face of masonry and turn down to form drip.

1. Refer to Division 07 Specification Sections for flashing materials.

B. Extend flashing the full length of lintels and shelf angles and minimum of 4" into masonry each end. Extend flashing from exterior face of outer wythe of masonry, through the outer wythe, turned up a minimum of 4", and through the inner wythe to within 1/2" of the interior face of the wall in exposed work. Where interior surface of inner wythe is concealed by furring, carry flashing completely through the inner wythe and turn up approximately 2". At heads and sills, turn up ends not less than 2" to form a pan. Extend flashing on exterior to 1/4 inch past wall surface. Do **NOT** cut flush with wall.

C. Install flashing to comply with manufacturer's instructions.

D. Install weep holes in the exterior widths of the head joints of the first course of masonry immediately above embedded flashings. Space 24" o.c. unless otherwise indicated.

3.12 REPAIRING, POINTING AND CLEANING

A. Remove and replace masonry units which are loose, chipped, broken, stained or otherwise damaged, or if units do not match adjoining units as intended. Install new units to match adjoining units and install in fresh mortar or grout, pointed to eliminate evidence of replacement.

B. Pointing: During the tooling of joints, enlarge any voids or holes, except weep holes, and completely fill with mortar. Point-up all joints including corners, openings and adjacent work to provide a neat, uniform appearance, prepared for application of sealants.

C. Final Cleaning: After mortar is thoroughly set and cured, clean masonry as follows:

1. Remove large mortar particles by hand with wooden paddles and non-metallic scrape hoes or chisels.

2. Test cleaning methods on sample wall panel. Leave 1/2 panel uncleaned for comparison purposes. Obtain Owner’s Representative approval of sample cleaning before proceeding with cleaning of masonry.

3. Protect adjacent stone and non-masonry surfaces from contact with cleaner by covering them with liquid strippable masking agent, polyethylene film or waterproof masking tape.

4. Clean concrete unit masonry to comply with masonry manufacturer's directions and applicable NCMA "Tek" bulletins.

3.13 PROTECTION

A. Provide final protection and maintain conditions in a manner acceptable to Installer, which ensures unit masonry work being without damage and deterioration at time of substantial completion.

END OF SECTION

SECTION 05 12 00 - STRUCTURAL STEEL FRAMING

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Structural Steel

B. Related Sections:

1. Section 01 45 00 - Quality Control
2. Section 03 30 00 - Cast-in-Place Concrete
3. Section 05 50 00 - Metal Fabrications
4. Section 09 90 00 - Painting
5. Section 09 96 00 - High Performance Coatings

1.02 DEFINITIONS

A. Structural Steel: Elements of structural-steel frame, as classified by AISC's "Code of Standard Practice for Steel Buildings and Bridges," that support design loads.

1.03 PERFORMANCE REQUIREMENTS

A. Structural Performance: Engineer structural steel connections required by the Contract Documents to be selected or completed by the fabricator to withstand design loadings indicated.

B. Engineering Responsibility: Engage a fabricator who utilizes a qualified professional engineer to prepare calculations, Shop Drawings, and other structural data for structural steel connections.

C. Construction: Type PR, partially restrained.

D. Construction: Type 2, simple framing.

1.04 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

B. Product Data: Submit “Letter of Conformance” in accordance with Section 01 33 00 (01330) indicating specified items selected for use in project with the following supporting data.

1. Shop Drawings detailing fabrication of structural steel components.

a. Include details of cuts, connections, splices, camber, holes, and other pertinent data.

b. Indicate welds by standard AWS symbols, distinguishing between shop and field welds, and show size, length, and type of each weld.

c. Indicate type, size, and length of bolts, distinguishing between shop and field bolts. Identify high-strength bolted slip-critical, direct-tension, or tensioned shear/bearing connections.

d. Include Shop Drawings signed and sealed by a qualified professional engineer responsible for their preparation.

2. Qualification data for firms and persons specified in the "Quality Assurance" Article to demonstrate their capabilities and experience. Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.

3. Mill test reports signed by manufacturers certifying that their products, including the following, comply with requirements.
    a. Structural steel, including chemical and physical properties
    b. Bolts, nuts, and washers, including mechanical properties and chemical analysis
    c. Direct-tension indicators
    d. Shear stud connectors
    e. Shop primers
    f. Nonshrink grout

1.05 QUALITY ASSURANCE

A. Installer Qualifications: Engage an experienced Installer with a minimum of five years experience, who has completed structural steel work similar in material, design, and extent to that indicated for this Project and with a record of successful in-service performance.

B. Fabricator Qualifications: Engage a firm experienced in fabricating structural steel similar to that indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to fabricate structural steel without delaying the Work.

1. Fabricator must participate in the AISC Quality Certification Program and be designated an AISC-Certified Plant as follows:
    a. Category: Category "Sbd", Conventional Steel Building Structures.
    b. Fabricator shall be registered with and approved by authorities having jurisdiction.

C. Comply with applicable provisions of the following specifications and documents:

1. American Institute of Steel Construction Inc. (AISC) Publications:
    a. "AISC Code of Standard Practice for Steel Buildings and Bridges."
    b. "Specification for Structural Steel Buildings-Allowable Stress Design and Plastic Design."
    c. "Load and Resistance Factor Design (LFRD) Specification for Structural Steel Buildings."
    d. "Specification for Allowable Stress Design of Single-Angle Members."
    e. "Load and Resistance Factor Design Specification for Single-Angle Members."
    f. "Seismic Provisions for Structural Steel Buildings."
2. ASTM International Publications:
    a. A6 "Standard Specification for General Requirements for Rolled Steel Bars, Plates, Shapes, and Sheet Piling."
    b. A27 "Standard Specification for Steel Castings, Carbon, for General Application"
    c. A36 "Standard Specification for Carbon Structural Steel".
    d. A53 "Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless"
    e. A108 "Standard Specification for Steel Bar, Carbon and Alloy, Cold-Finished"
    f. A123 "Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products"
    g. A148 "Standard Specification for Steel Castings, High Strength, for Structural Purposes"

h. A153 "Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware"

i. A325 "Standard Specification for Structural Bolts, Steel, Heat Treated, 120/105 ksi Minimum Tensile Strength"

j. A490 "Standard Specification for Structural Bolts, Alloy Steel, Heat Treated, 150 ksi Minimum Tensile Strength"

k. A500 "Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes"

l. A501 "Standard Specification for Hot-Formed Welded and Seamless Carbon Steel Structural Tubing"

m. A572 "Standard Specification for High-Strength Low-Alloy Columbium-Vanadium Structural Steel"

n. A588 "Standard Specification for High-Strength Low-Alloy Structural Steel with 50 ksi [345 MPa] Minimum Yield Point to 4-in. [100-mm] Thick"

o. A780 "Standard Practice for Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings"

p. B695 "Standard Specification for Coatings of Zinc Mechanically Deposited on Iron and Steel"

q. C1107 "Standard Specification for Packaged Dry, Hydraulic-Cement Grout (Nonshrink)"

r. E119 "Standard Test Methods for Fire Tests of Building Construction and Materials"

s. E164 "Standard Practice for Ultrasonic Contact Examination of Weldments"

t. E709 "Standard Guide for Magnetic Particle Examination

u. F959 "Standard Specification for Compressible-Washer-Type Direct Tension Indicators for Use with Structural Fasteners"

3. Research Council on Structural Connections (RCSC) Publications:

a. "Specification for Structural Joints Using ASTM A325 or A490 Bolts."

b. "Load and Resistance Factor Design Specification for Structural Joints Using ASTM A325 or A490 Bolts."

D. Professional Engineer Qualifications: A professional engineer who is legally authorized to practice in the jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for projects with structural steel framing that are similar to that indicated for this Project in material, design, and extent.

E. Welding Standards: Comply with applicable provisions of AWS D1.1 "Structural Welding Code--Steel."

1. Present evidence that each welder has satisfactorily passed AWS qualification tests for welding processes involved and, if pertinent, has undergone recertification.

F. Pre-installation Conference: Conduct conference at Project site to comply with requirements of Section 01 31 00 "Project Management and Coordination."

1.06 DELIVERY, STORAGE, AND HANDLING

A. Deliver structural steel to Project site in such quantities and at such times to ensure continuity of installation.

B. Store materials to permit easy access for inspection and identification. Keep steel members off ground by using pallets, platforms, or other supports. Protect steel members and packaged materials from erosion and deterioration.

1. Store fasteners in a protected place. Clean and relubricate bolts and nuts that become dry or rusty before use.

2. Do not store materials on structure in a manner that might cause distortion or damage to members or supporting structures. Repair or replace damaged materials or structures as directed.

1.07 SEQUENCING

A. Supply anchorage items to be embedded in or attached to other construction without delaying the Work. Provide setting diagrams, templates, instructions, and directions, as required, for installation.

PART 2 PRODUCTS

2.01 MATERIALS

A. Structural Steel Shapes, Plates, and Bars: As follows:

1. Carbon Steel: ASTM A36.

2. High-Strength, Low-Alloy Columbium-Vanadium Steel: ASTM A572, Grade 50.

3. High-Strength, Low-Alloy Structural Steel: ASTM A588, Grade 50, corrosion resistant.

B. Cold-Formed Structural Steel Tubing: ASTM A500, Grade B.

C. Hot-Formed Structural Steel Tubing: ASTM A501.

D. Steel Pipe: ASTM A53, Type E or S, Grade B.

1. Finish: Black, except where indicated to be galvanized.

2. Carbon-Steel Castings: ASTM A27, Grade 65-35, medium-strength carbon steel.

E. High-Strength Steel Castings: ASTM A148, Grade 80-50.

F. Shear Connectors: ASTM A108, Grade 1015 through 1020, headed-stud type, cold-finished carbon steel, AWS D1.1, Type B.

G. Anchor Rods, Bolts, Nuts, and Washers: As follows:

1. Unheaded Rods: ASTM A36.

2. Headed Bolts: ASTM A325, Type 1, heavy hex steel structural bolts and heavy hex carbon-steel nuts.

3. Headed Bolts: ASTM A490, Type 1, heavy hex steel structural bolts and heavy hex carbon-steel nuts.

4. Washers: ASTM A36.

H. High-Strength Bolts, Nuts, and Washers: ASTM A325, Type 1, heavy hex steel structural bolts, heavy hex carbon-steel nuts, and hardened carbon-steel washers. Finish shall match material connected unless noted otherwise on plans.

1. Finish: Plain, uncoated.

2. Direct-Tension Indicators: ASTM F959, Type 325.

a. Finish: Plain, uncoated.

I. High-Strength Bolts, Nuts, and Washers: ASTM A490, Type 1, heavy hex steel structural bolts, heavy hex carbon-steel nuts, and hardened carbon-steel washers, uncoated.

1. Direct-Tension Indicators: ASTM F959, Type 490, uncoated.

J. Welding Electrodes: Comply with AWS requirements.

2.02 PRIMER

A. Fabricator's standard, fast-curing, lead-free, universal primer; selected for good resistance to normal atmospheric corrosion, for compatibility with finish paint systems indicated and for capability to provide a sound foundation for field-applied topcoats despite prolonged exposure, complying with performance requirements of FS TT-P-664.

1. Primer paint shall be compatible with finish coats on architecturally exposed steel.

a. SSPC Paint 25 BCS, Type II, iron oxide, zinc oxide, raw linseed oil and Alkyd or one coat of SSPC Paint 23, latex primer, as verified with top coat manufacturer.

B. Where prime painted steel is to receive sprayed-on fireproofing, the substrate shall provide adequate adhesion. Coordinate with fireproofing installer in selecting primer paint to be used to assure this requirement is met.

2.03 GROUT

A. Nonmetallic, Shrinkage-Resistant Grout: Premixed, nonmetallic, noncorrosive, nonstaining grout containing selected silica sands, portland cement, shrinkage compensating agents, plasticizing and water-reducing agents, complying with ASTM C1107, of consistency suitable for application, and a 30-minute working time.

2.04 FABRICATION

A. Fabricate and assemble structural steel in shop to greatest extent possible. Fabricate structural steel according to AISC specifications referenced in this Section and in Shop Drawings.

1. Camber structural steel members where indicated.

2. Identify high-strength structural steel according to ASTM A6 and maintain markings until steel has been erected.

3. Mark and match-mark materials for field assembly.

4. Fabricate for delivery a sequence that will expedite erection and minimize field handling of structural steel.

5. Complete structural steel assemblies, including welding of units, before starting shop-priming operations.

6. Comply with fabrication tolerance limits of AISC's "Code of Standard Practice for Steel Buildings and Bridges" for structural steel.

B. Fabricate architecturally exposed structural steel with exposed surfaces smooth, square, and free of surface blemishes, including pitting, rust and scale seam marks, roller marks, rolled trade names, and roughness.

1. Remove blemishes by filling, grinding, or by welding and grinding, prior to cleaning, treating, and shop priming.

2. Comply with fabrication requirements, including tolerance limits, of AISC's "Code of Standard Practice for Steel Buildings and Bridges" for architecturally exposed structural steel.

C. Thermal Cutting: Perform thermal cutting by machine to greatest extent possible.

1. Plane thermally cut edges to be welded.

D. Finishing: Accurately mill ends of columns and other members transmitting loads in bearing.

E. Shear Connectors: Prepare steel surfaces as recommended by manufacturer of shear connectors. Use automatic end welding of headed-stud shear connectors according to AWS D1.1 and manufacturer's printed instructions.

F. Steel Wall Framing: Select true and straight members for fabricating steel wall framing to be attached to structural steel framing. Straighten as required to provide uniform, square, and true members in completed wall framing.

G. Welded Door Frames: Build up welded door frames attached to structural steel framing. Weld exposed joints continuously and grind smooth. Plug-weld fixed steel bar stops to frames. Secure removable stops to frames with countersunk, cross-recessed head machine screws, uniformly spaced not more than 10 inches (250 mm) o.c., unless otherwise indicated.

H. Holes: Provide holes required for securing other work to structural steel framing and for passage of other work through steel framing members, as shown on Shop Drawings.

1. Cut, drill, or punch holes perpendicular to metal surfaces. Do not flame-cut holes or enlarge holes by burning. Drill holes in bearing plates.

2. Weld threaded nuts to framing and other specialty items as indicated to receive other work.

2.05 SHOP CONNECTIONS

A. Shop install and tighten high-strength bolts according to RCSC's "Specification for Structural Joints Using ASTM A325 or A490 Bolts."

1. Bolts: ASTM A325 high-strength bolts, unless otherwise indicated.

2. Connection Type: Snug tightened, unless indicated as slip-critical, direct-tension, or tensioned shear/bearing connections.

B. Weld Connections: Comply with AWS D1.1 for procedures, appearance and quality of welds, and methods used in correcting welding work.

1. Assemble and weld built-up sections by methods that will maintain true alignment of axes without warp.

2. Verify that weld sizes, fabrication sequence, and equipment used for architecturally exposed structural steel will limit distortions to allowable tolerances. Prevent surface bleeding of back-side welding on exposed steel surfaces. Grind smooth exposed fillet welds 1/2 inch and larger. Grind flush butt welds. Dress exposed welds.

2.06 SHOP PRIMING

A. Shop prime steel surfaces, except the following:

1. Surfaces embedded in concrete or mortar. Extend priming of partially embedded members to a depth of 2 inches.

2. Surfaces to be field welded.

3. Surfaces to be high-strength bolted with slip-critical connections.

4. Surfaces to receive sprayed-on fireproofing.

5. Exterior Railings and surfaces within interior pool area to receive “high performance coatings” require special primers. See Section 09 06 00.

6. Galvanized surfaces.

B. Surface Preparation: After inspection and before shipping, clean steelwork to be painted. Remove loose rust, loose mill scale, and spatter, slag or flux deposits. Clean steel in accordance with Society for Protective Coatings (SSPC) Surface Preparation Guidelines as follows:

1. All interior steel exposed to view: SSPC-SP 6/NACE No. 3, Commercial Blast Cleaning.
2. All exterior steel exposed to weather: SSPC-SP 10/NACE No. 2, Near White Blast Cleaning.
3. All other steel: SSPC-SP 3, Power Tool Cleaning.

C. Priming: Immediately after surface preparation, apply primer according to manufacturer's instructions and at rate recommended by SSPC to provide a dry film thickness of not less than 2.0 mils. Use priming methods that result in full coverage of joints, corners, edges, and exposed surfaces.
1. Stripe paint corners, crevices, bolts, welds, and sharp edges.
2. Apply 2 coats of shop paint to inaccessible surfaces after assembly or erection. Change color of second coat to distinguish it from first.

D. Paint Systems: Review painting specifications for finish paint systems. Coordinate surface preparations of steel and type of primer used with specifications and the manufacturer's recommendations to insure compatibility.

2.07 GALVANIZING

A. Hot-Dip Galvanized Finish: Apply zinc coating by the hot-dip process to structural steel indicated for galvanizing according to ASTM A123.

2.08 SOURCE QUALITY CONTROL

A. Owner will engage an independent testing and inspecting agency to perform shop inspections and tests and to prepare test reports.
1. Testing agency will conduct and interpret tests and state in each report whether test specimens comply with or deviate from requirements.
2. Provide testing agency with access to places where structural steel Work is being fabricated or produced so required inspection and testing can be accomplished.

B. Correct deficiencies in or remove and replace structural steel that inspections and test reports indicate do not comply with specified requirements.

C. Additional testing, at Contractor's expense, will be performed to determine compliance of corrected Work with specified requirements.

D. Joints Using ASTM A325 or A490 Bolts."

E. Shop-bolted connections will be tested and inspected according to RCSC's "Load and Resistance Factor Design Specification for Structural Joints Using ASTM A325 or A490 Bolts."
1. Direct-tension indicator gaps will be verified to comply with ASTM F959, Table 2.

F. In addition to visual inspection of all welds, shop-welded full penetration welds will be inspected and tested according to AWS D1.1 and the inspection procedures listed below, at testing agency's option.
1. Liquid Penetrant Inspection: ASTM E165.
2. Magnetic Particle Inspection: ASTM E709; performed on root pass and on finished weld. Cracks or zones of incomplete fusion or penetration will not be accepted.
3. Radiographic Inspection: ASTM E94 and ASTM E142; minimum quality level "2-2T."
4. Ultrasonic Inspection: ASTM E164.

G. In addition to visual inspection, shop-welded shear connectors will be inspected and tested according to requirements of AWS D1.1 for stud welding and as follows:

1. Bend tests will be performed when visual inspections reveal either less than a continuous 360-degree flash or welding repairs to any shear connector.
2. Tests will be conducted on additional shear connectors when weld fracture occurs on shear connectors already tested, according to requirements of AWS D1.1.

PART 3 EXECUTION

3.01 EXAMINATION

A. Before erection proceeds, and with the steel erector present, verify elevations of concrete and masonry bearing surfaces and locations of anchorages for compliance with requirements.

B. Do not proceed with erection until unsatisfactory conditions have been corrected.

3.02 PREPARATION

A. Provide temporary shores, guys, braces, and other supports during erection to keep structural steel secure, plumb, and in alignment against temporary construction loads and loads equal in intensity to design loads. Remove temporary supports when permanent structural steel, connections, and bracing are in place, unless otherwise indicated.

3.03 ERECTION

A. Set structural steel accurately in locations and to elevations indicated and according to AISC specifications referenced in this Section.

B. Base and Bearing Plates: Clean concrete and masonry bearing surfaces of bond-reducing materials and roughen surfaces prior to setting base and bearing plates. Clean bottom surface of base and bearing plates.

1. Set base and bearing plates for structural members on wedges, shims, or setting nuts as required.
2. Tighten anchor bolts after supported members have been positioned and plumbed. Do not remove wedges or shims but, if protruding, cut off flush with edge of base or bearing plate prior to packing with grout.
3. Pack grout solidly between bearing surfaces and plates so no voids remain. Finish exposed surfaces, protect installed materials, and allow to cure.
    a. Comply with manufacturer's instructions for proprietary grout materials.

C. Maintain erection tolerances of structural steel within AISC's "Code of Standard Practice for Steel Buildings and Bridges."

1. Maintain erection tolerances of architecturally exposed structural steel within AISC's "Code of Standard Practice for Steel Buildings and Bridges."

D. Align and adjust various members forming part of complete frame or structure before permanently fastening. Before assembly, clean bearing surfaces and other surfaces that will be in permanent contact. Perform necessary adjustments to compensate for discrepancies in elevations and alignment.

1. Level and plumb individual members of structure.
2. Establish required leveling and plumbing measurements on mean operating temperature of structure. Make allowances for difference between temperature at time of erection and mean temperature at which structure will be when completed and in service.

E. Splice members only where indicated.

F. Remove erection bolts on welded, architecturally exposed structural steel; fill holes with plug welds; and grind smooth at exposed surfaces.

G. Do not use thermal cutting during erection unless approved by Engineer of Record.

H. Finish sections thermally cut during erection equal to a sheared appearance.

I. Do not enlarge unfair holes in members by burning or by using drift pins. Ream holes that must be enlarged to admit bolts.

3.04 FIELD CONNECTIONS

A. Install and tighten high-strength bolts according to RCSC's "Specification for Structural Joints Using ASTM A325 or A490 Bolts."

1. Bolts: ASTM A325 high-strength bolts, unless otherwise indicated.

2. Connection Type: Snug tightened, unless indicated as slip-critical, direct-tension, or tensioned shear/bearing connections.

B. Weld Connections: Comply with AWS D1.1 for procedures, appearance and quality of welds, and methods used in correcting welding work.

1. Comply with AISC specifications referenced in this Section for bearing, adequacy of temporary connections, alignment, and removal of paint on surfaces adjacent to field welds.

2. Assemble and weld built-up sections by methods that will maintain true alignment of axes without warp.

3. Verify that weld sizes, fabrication sequence, and equipment used for architecturally exposed structural steel will limit distortions to allowable tolerances. Prevent surface bleeding of back-side welding on exposed steel surfaces. Grind smooth exposed fillet welds 1/2 inch and larger. Grind flush butt welds. Dress exposed welds.

3.05 FIELD QUALITY CONTROL

A. Contractor shall engage an independent testing and inspecting agency acceptable to Owner and Architect to perform field inspections and tests and to prepare test reports.

1. Testing agency will conduct and interpret tests and state in each report whether tested Work complies with or deviates from requirements.

B. Correct deficiencies in or remove and replace structural steel that inspections and test reports indicate do not comply with specified requirements.

C. Additional testing, at Contractor's expense, will be performed to determine compliance of corrected Work with specified requirements.

D. Field-bolted connections will be tested and inspected according to RCSC's "Specification for Structural Joints Using ASTM A325 or A490 Bolts."

1. Direct-tension indicator gaps will be verified to comply with ASTM F959, Table 2.

E. In addition to visual inspection of all welds, field-welded full penetration welds will be inspected and tested according to AWS D1.1 and the inspection procedures listed below, at testing agency's option.

1. Liquid Penetrant Inspection: ASTM E165.

2. Magnetic Particle Inspection: ASTM E709; performed on root pass and on finished weld. Cracks or zones of incomplete fusion or penetration will not be accepted.

3. Radiographic Inspection: ASTM E94 and ASTM E142; minimum quality level "2-2T."

4. Ultrasonic Inspection: ASTM E164.

F. In addition to visual inspection, field-welded shear connectors will be inspected and tested according to requirements of AWS D1.1 for stud welding and as follows:

1. Bend tests will be performed when visual inspections reveal either less than a continuous 360-degree flash or welding repairs to any shear connector.

2. Tests will be conducted on additional shear connectors when weld fracture occurs on shear connectors already tested, according to requirements of AWS D1.1.

3.06 CLEANING

A. Touchup Painting: Immediately after erection, clean field welds, bolted connections, and abraded areas of shop paint. Apply paint to exposed areas using same material as used for shop painting.

1. Apply by brush or spray to provide a minimum dry film thickness of 1.5 mils.

B. Touchup Painting: Cleaning and touchup painting of field welds, bolted connections, and abraded areas of shop paint on structural steel are included in Section 09 90 00 "Painting."

C. Galvanized Surfaces: Clean field welds, bolted connections, and abraded areas and apply galvanizing repair paint according to ASTM A780.

END OF SECTION

SECTION 05 50 00 - METAL FABRICATIONS

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Rough Hardware
2. Loose Bearing and Leveling Plates
3. Ladders:
    a. Elevator Pit Ladder
4. Support Angles for Elevator Door Sills
5. Elevator Sump Pit Cover
6. Pipe Bollards
7. Laundry Trench Grate
8. Miscellaneous Metal Trim
9. Steel Framing and Supports for Applications where framing and supports are not specified in other Sections

B. Related Sections:

1. Section 05 51 33.13 - Alternating Tread Steel Stair
2. Section 09 90 00 - Painting
3. Section 09 96 00 - High Performance Coatings
4. Section 10 82 13 – Exterior Grilles and Screens
5. Section 14 21 23 – Electric Traction Elevators
6. Section 32 31 13 - Fences and Gates

1.02 REFERENCES

A. ASTM International Publications:

1. A27 "Standard Specification for Steel Castings, Carbon, for General Application"
2. A36 "Standard Specification for Carbon Structural Steel".
3. A47 "Standard Specification for Ferritic Malleable Iron Castings"
4. A48 "Standard Specification for Gray Iron Castings"
5. A53 "Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless"
6. A123 "Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products"
7. A153 "Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware"
8. A307 "Standard Specification for Carbon Steel Bolts and Studs, 60 000 PSI Tensile Strength"
9. A563 "Standard Specification for Carbon and Alloy Steel Nuts"
10. A615 "Standard Specification for Deformed and Plain Billet-Steel Bars for Concrete Reinforcement"

11. A780 "Standard Practice for Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings"
12. B633 "Standard Specification for Electrodeposited Coatings of Zinc on Iron and Steel"
13. C1107 "Standard Specification for Packaged Dry, Hydraulic-Cement Grout (Nonshrink)"
14. E488 "Standard Test Methods for Strength of Anchors in Concrete and Masonry Elements"
15. F593 "Standard Specification for Stainless Steel Bolts, Hex Cap Screws, and Studs"
16. F594 "Standard Specification for Stainless Steel Nuts"
17. F1554 "Standard Specification for Anchor Bolts, Steel, 36, 55, and 105-ksi Yield Strength"

B. Federal Specifications (FS) Publications:
1. FS B 588 “Bolt, Toggle: And Expansion Sleeve, Screw” (Cancelled)
2. FS FF S 325
3. FS FF BS75
4. FS TT P664 - Paint 25 (superceeds FS TT-P-664), Zinc Oxide, Alkyd, Linseed Oil Primer for Use Over Hand Cleaned Steel”
5. DOD-P-21035A (formerly MIL-P-21035), Galvanizing Repair Specification

C. The American Society of Mechanical Engineers (ASME) Publications:
1. A17.1 “Handbook on Safety Code for Elevators and Escalators”
2. B18.2.1 "Square and Hex Bolts and Screws, Inch Series"
3. B18.6.1 "Wood Screws (Inch Series)"
4. B18.6.3 "Machine Screws and Machine Screw Nuts"
5. B18.21.1 "Lock Washers (Inch Series)"
6. B18.22.1 "Plain Washers"

D. American Welding Society (AWS) Publications:
1. D1.1 "Structural Welding Code - Steel"
2. D1.2 "Structural Welding Code--Aluminum"
3. D1.3 "Structural Welding Code - Sheet Steel"

E. National Association of Architectural Metal Manufacturers (NAAMM) Publications:
1. "Metal Finishes Manual"
2. “Metal Stairs Manual”

F. The Society for Protective Coatings (SSPC) Publications:
1. SP - Surface Preparation Standards and Specifications
   a. SP 3 "Power Tool Cleaning"
2. PA - Paint Application Standards, Guides, and Specifications
   a. PA 1 “Shop, Field, and Maintenance Painting of Steel”
3. Paint - Paint and Coating Standards and Specifications
   a. Paint 12, Cold-Applied Asphalt Mastic (Extra Thick Film)
   b. Paint 20 “Zinc-Rich Coating, Type I - Inorganic and Type II - Organic”

c. Paint 25 (superceeds FS TT-P-664), Zinc Oxide, Alkyd, Linseed Oil Primer for Use Over Hand Cleaned Steel"

1.03 SYSTEM DESCRIPTION

A. System Performance Requirements:

1. All stairways, platforms, treads, and landings of Steel Stairs: Capable of supporting a live load of 100 lbf per sf and a concentrated load of 300 lbf.

2. Ladders: Comply with ANSI A14.3.

1.04 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

1. Submit "Letter of Conformance" in accordance with Section 01 33 00 (01330) indicating specified items selected for use in project.

a. Include supporting product data for products used in miscellaneous metal fabrications, including paint products and grout.

B. Submit Shop Drawings detailing fabrication and erection of each metal fabrication indicated. Include plans, elevations, sections, and details of metal fabrications and their connections. Show anchorage and accessory items. Provide templates for anchors and bolts specified for installation under other sections.

C. Submit samples representative of materials and finished products as may be requested by Owner's Representative.

1.05 QUALITY ASSURANCE

A. Fabricator Qualifications: Firm experienced in successfully producing metal fabrications similar to that indicated for this Project, with sufficient production capacity to produce required units without causing delay in the Work.

B. Installer Qualifications: Arrange for installation of metal fabrications specified in this Section by same firm that fabricated them.

C. Quality welding processes and welding operators in accordance with the following:

1. AWS D1.1 "Structural Welding Code - Steel"

2. AWS D1.3 "Structural Welding Code - Sheet Steel"

3. AWS D1.2 "Structural Welding Code - Aluminum"

D. Certify that each welder has satisfactorily passed AWS qualification tests for welding processes involved and, if pertinent, has undergone recertification.

1.06 PROJECT/SITE CONDITIONS

A. Field Measurements: Check actual locations of walls and other construction to which metal fabrications must fit, by accurate field measurements before fabrication; show recorded measurements on final shop drawings. Coordinate fabrication schedule with construction progress to avoid delay of Work.

1.07 COORDINATION

A. Coordinate installation of anchorages for metal fabrications. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.

PART 2 PRODUCTS

2.01 FERROUS METALS

A. Metal Surfaces, General: For metal fabrications exposed to view upon completion of the Work, provide materials selected for their surface flatness, smoothness, and freedom from surface blemishes. Do not use materials whose exposed surfaces exhibit pitting, seam marks, roller marks, rolled trade names, roughness, and, for steel sheet, variations in flatness exceeding those permitted by reference standards for stretcher-leveled sheet.

B. Steel Plates, Shapes, and Bars: ASTM A36

C. Steel Tubing: Cold-formed steel tubing complying with ASTM A500.

D. Steel Pipe: ASTM A53

1. Black finish, unless otherwise indicated.

2. Galvanized finish for exterior installations, unless shown to receive special coatings.

3. Type E, OR S, Grade B, Fy = 35 KSI, unless otherwise indicated, or another weight, type, and grade required by structural loads.

E. Gray Iron Castings: ASTM A48, Class 30

F. Malleable Iron Castings: ASTM A47, Grade 32510

G. Brackets, Flanges and Anchors: Cast or formed metal of the same type material and finish as supported rails, unless otherwise indicated.

H. Concrete Inserts: Threaded or wedge type; galvanized ferrous castings, either malleable iron, ASTM A47, or cast steel, ASTM A27. Provide bolts, washers, and shims as required, hot-dip galvanized per ASTM A153.

I. Welding Rods: Select in accordance with AWS Specifications for the metal alloy to be welded.

2.02 NONFERROUS METALS

A. Aluminum Plate and Sheet: ASTM B209 (ASTM B209M), Alloy 6061-T6.

B. Aluminum Extrusions: ASTM B221 (ASTM B221M), Alloy 6063-T6.

C. Aluminum Castings: ASTM B26/B26M, Alloy 443.0-F.

2.03 FASTENERS

A. General: Provide zinc-coated fasteners for exterior use or where built into exterior walls. Select fasteners for the type, grade, and class required for each application and complying with applicable standards.

1. Bolts and Nuts: Regular hexagon head bolts, ASTM A307, Grade A with hex nuts ASTM A563; and, where indicated, flat washers.

2. Anchor Bolts: ASTM F1554, Grade 30

3. Lag Bolts: Square head type, ASME B18.2.1

4. Machine Screws: Cadmium plated steel, ASME B18.6.3

5. Wood Screws: Flat head carbon steel, ASME B18.6.1

6. Plain Washers: Round, carbon steel, ASME B18.22.1

7. Lock Washers: Helical, spring type, carbon steel, ASME B18.21.1

8. Drilled-in Expansion Anchors: Expansion Anchors Complying with FS FF S 325, Group VIII (anchors, expansion), Type I (internally threaded tubular expansion anchor); and machine bolts complying with FS FF BS75, Grade 5.

9. Expansion Anchors: Anchor bolt and sleeve assembly of material indicated below with capability to sustain, without failure, a load equal to six times the load imposed when installed in unit masonry and equal to four times the load imposed when installed in concrete, as determined by testing per ASTM E488, conducted by a qualified independent testing agency.

    a. Interior Use - Material: Carbon-steel components zinc-plated to comply with ASTM B633, Class Fe/Zn 5.

    b. Exterior and Swimming Pool Use - Material: Alloy Group 1 or 2 stainless-steel bolts complying with ASTM F593 and nuts complying with ASTM F594.

10. Toggle Bolts: FS FF-B-588, tumble-wing type, class and style as needed.

2.04 GROUT AND ANCHORING CEMENT

A. Nonshrink Nonmetallic Grout: Premixed, factory-packaged, nonstaining, noncorrosive, nongaseous grout complying with ASTM C1107. Provide grout specifically recommended by manufacturer for interior and exterior heavy-duty loading applications of type specified in this Section.

B. Avendra, LLC Preferred Manufacturers:

1. None

C. Approved Manufacturers:

1. "Euco N-S Grout", Euclid Chemical Co, An RPM Company (800-321-7628)

2. "Masterflow 713 Plus ", Degussa Building Systems, Inc (800-243-6739)

3. "Sonogrout 10K ", Degussa Building Systems, Inc (800-243-6739)

D. Interior Anchoring Cement: Factory-prepackaged, nonshrink, nonstaining, hydraulic controlled expansion cement formulation for mixing with water at Project site to create pourable anchoring, patching, and grouting compound. Use for interior applications only.

E. Erosion-Resistant Anchoring Cement: Factory-prepackaged, nonshrink, nonstaining, hydraulic controlled expansion cement formulation for mixing with water at Project site to create pourable anchoring, patching, and grouting compound. Provide formulation that is resistant to erosion from water exposure without need for protection by a sealer or waterproof coating and is recommended for exterior use by manufacturer.

2.05 CONCRETE FILL AND REINFORCING MATERIALS

A. Concrete Materials and Properties: Comply with requirements of Section 03 30 00, and as shown on Drawings, with minimum 28-day compressive strength of 3,000 PSI, unless otherwise indicated.

B. Non-slip Aggregate Finish: Factory-graded, packaged material containing fused aluminum oxide grits or crushed emery as abrasive aggregate; rustproof and non-glazing; unaffected by freezing, moisture, or cleaning materials.

C. Reinforcing Bars: ASTM A615, Grade 60, unless noted otherwise.

2.06 PAINT

A. Shop Primer for Ferrous Metal: Manufacturer's or fabricator's standard, fast-curing, lead and chromate-free, universal modified alkyd primer selected for good resistance to normal atmospheric corrosion, for compatibility with finish paint systems indicated, and for capability to provide a sound foundation for field-applied topcoats despite prolonged exposure complying with performance requirements of FS TT-P-664.

1. Avendra, LLC Preferred Manufacturers:

    a. None

2. Approved Manufacturers:

a. Carbozinc 621"; Carboline Co. (800-848-4645)

b. "Epoxy Zinc-Rich Primer CM18/CM19"; Benjamin Moore & Co. (888-236-6667)

c. Tneme-Zinc 90-97; Tnemec Co. (800-863-6321)

B. Galvanizing Repair Paint: High zinc dust content paint for regalvanizing welds in galvanized steel, with dry film containing not less than 94 percent zinc dust by weight, and complying with DOD-P-21035 or SSPC Paint 20.

C. Zinc Chromate Primer: FS TT-P-645.

D. Bituminous Paint: Cold-applied asphalt mastic complying with SSPC Paint 12 except containing no asbestos fibers.

E. All steel to be fireproofed shall not be primed.

2.07 FABRICATION - GENERAL

A. Form metal fabrications from materials of size, thickness, and shapes indicated but not less than that needed to comply with performance requirements indicated. Work to dimensions indicated or accepted on shop drawings, using proven details of fabrication and support. Use type of materials indicated or specified for various components of each metal fabrication.

B. Allow for thermal movement resulting from the following maximum change (range) of exterior metalwork in ambient temperature in the design, fabrication, and installation of installed metal assemblies to prevent buckling, opening up of joints, and overstressing of welds and fasteners. Base design calculations on actual surface temperatures of metals due to both solar heat gain and nighttime sky heat loss. Temperature Change (Range): 120 Degrees F., ambient; 130 degrees F., material surfaces.

C. Form exposed work true to line and level with accurate angles and surfaces and straight sharp edges. Ease exposed edges to a radius of approximately 1/32 inch, unless otherwise indicated. Form bent-metal corners to smallest radius possible without causing grain separation or otherwise impairing work. Form exposed connections with hairline joints, flush and smooth, using concealed fasteners wherever possible. Use exposed fasteners of type indicated or, if not indicated, Phillips flathead (countersunk) screws or bolts. Locate joints where least conspicuous.

D. Weld corners and seams continuously to comply with AWS recommendations and the following:

1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.

2. Obtain fusion without undercut or overlap.

3. Remove welding flux immediately.

4. At exposed connections, finish exposed welds and surfaces smooth and blended so that no roughness shows after finishing and contour

E. Provide for anchorage of type indicated; coordinate with supporting structure. Fabricate and space anchoring devices to provide adequate support for intended use.

F. Shop Assembly: Preassemble items in shop to greatest extent possible to minimize field splicing and assembly. Disassemble units only as necessary for shipping and handling limitations. Use connections that maintain structural value of joined pieces. Clearly mark units for reassembly and coordinated installation. Cut, reinforce, drill and tap miscellaneous metal work as indicated to receive finish hardware, screws, and similar items.

G. Fabricate joints that will be exposed to weather in a manner to exclude water, or provide weep holes where water may accumulate.

2.08 ROUGH HARDWARE

A. Furnish bent or otherwise custom fabricated bolts, plates, anchors, hangers, dowels, and other miscellaneous steel and iron shapes as required for framing and supporting woodwork, and for anchoring or securing woodwork to concrete or other structures. Fabricate items to sizes, shapes, and dimensions required. Furnish malleable-iron washers for heads and nuts which bear on wood structural connections; elsewhere, furnish steel washers.

2.09 STEEL LADDERS

A. General: Fabricate ladders for the locations shown, with dimensions, spacings, and anchorages as indicated. Comply with requirements of ANSI A14.3.

1. For elevator pit ladders, comply with ASME A17.1.

B. Siderails: Continuous, steel, 1/2" x 2-1/2" flat bars, with eased edges, space 18" apart.

C. Bar Rungs: 3/4" diameter steel bars, spaced 12" o.c.

D. Fit rungs in centerline of side rails, plug weld and grind smooth on outer rail faces.

E. Support each ladder at top and bottom and at intermediate points space not more than 5' o.c. with welded or bolted steel brackets.

F. Provide nonslip surfaces on top of each rung, either by coating the rung with aluminum-oxide granules set in epoxy-resin adhesive, or by using a type of manufacture rung that is filled with aluminum-oxide grout.

G. Provide ladder safety cages where required by local codes, to comply with ANSI A14.3.

2.10 LOOSE BEARING AND LEVELING PLATES

A. Provide loose bearing and leveling plates for steel items bearing on masonry or concrete construction, made flat, free from warps or twists, and of required thickness and bearing area. Drill plates to receive anchor bolts and for grouting as required. Galvanize after fabrication.

2.11 LOOSE STEEL LINTELS

A. Fabricate loose structural steel lintels from steel angles and shapes of size indicated for openings and recesses in masonry walls and partitions at locations indicated. Weld adjoining members together to form a single unit where indicated.

B. Hot-dipped galvanize loose steel lintels located in exterior walls.

C. Size loose lintels for equal bearing of one inch per foot of clear span but not less than 8 inches bearing at each side of openings, if not indicated on Drawings.

2.12 MISCELLANEOUS FRAMING AND SUPPORTS

A. General: Provide steel framing and supports for applications indicated or which are not a part of structural steel framework, as required to complete work.

B. Fabricate units to sizes, shapes, and profiles indicated and required to receive adjacent other construction retained by framing and supports. Fabricate from structural steel shapes, plates, and steel bars of welded construction using mitered joints for field connection. Cut, drill, and tap units to receive hardware, hangers, and similar items.

1. Equip units with integrally welded anchors for casting into concrete or building into masonry. Furnish inserts if units must be installed after concrete is placed. Spacing of anchors shall not be more than 24" o.c.

2.13 PIPE BOLLARDS

A. ASTM A153 galvanized schedule 40 steel pipe with concrete fill, as detailed on Drawings. Provide smooth radius for concrete top to prevent accumulation of rainwater. Provide field painted finish.

2.14 LAUNDRY TRENCH GRATE

A. Manufactures:

1. Avendra, LLC Preferred Manufacturers:

a. None:

2. Approved Manufacturers:

a. “Kordek PFR Isopthalic Polyester Resin”, Seasafe, Inc. (800-326-8842)

b. “Fibergrate Molded Gratings”, 1” x 1” x 4”; Fibergrate Composite Structures, Inc., An RPM Company (800-527-4043)

c. “Molded Square Fiberglass Gratings”; McNichols Co. (800-237-3828)

B. Provide square-mesh fiberglass grating, solid compression molded structure, 1” thick x size required, with bearing bars spaced at maximum 1” on center.

C. Accessories:

1. ½” round steel bars for lint screen.

D. Frame: Construct perimeter frame using 1” x 3” x 3/16” seat angle welded to 3” x 3” x 3/16” support steel angle to form seat for trench grate. Weld corners and grind smooth. Grate to be removable.

E. Forming and Finishing:

1. Form laundry trench using fabricated perimeter frame and concrete forms as required to depth and shape indicated.

2. Set top of perimeter seat angle flush with finish floor, allowing for thickness of finish material.

2.15 MISCELLANEOUS STEEL TRIM

A. Provide shapes and sizes indicated for profiles shown. Unless otherwise indicated, fabricate units from structural steel shapes, plates, and steel bars, with continuously welded joints and smooth exposed edges. Use concealed field splices wherever possible. Provide cutouts, fittings, and anchorages as required for coordination of assembly and installation with other work.

1. Galvanize miscellaneous framing and supports in exterior locations and where shown to be painted.

2.16 FINISHES, GENERAL

A. Comply with NAAMM "Metal Finishes Manual" for “Architectural and Metal Products” for recommendations relative to application and designations of finishes..

1. Finish metal fabrications after assembly.

2.17 STEEL AND IRON FINISHES

A. Galvanizing: For those items indicated for galvanizing, apply zinc-coating by the hot-dip process in compliance with the following requirements:

1. ASTM A153 for galvanizing iron and steel hardware.

2. ASTM A123 for galvanizing both fabricated and unfabricated iron and steel products made of uncoated rolled, pressed, and forged shapes, plates, bars, and strip 0.0299 inch thick and heavier.

B. Paint Systems: Review painting specifications for finish paint systems. Coordinate surface preparations of steel and type of primer used with specifications and the manufacturer’s recommendations to insure compatibility.

C. Preparation for Shop Priming: Prepare uncoated ferrous metal surfaces to comply with minimum requirements indicated below for SSPC surface preparation specifications and environmental exposure conditions of installed metal fabrications: Interiors (SSPC Zone 1A): SSPC SP 3 "Power Tool Cleaning".

D. Apply shop primer to uncoated surfaces of metal fabrications, except those with galvanized finish or to be embedded in concrete, sprayed-on fireproofing, or masonry, unless otherwise indicated. Comply with requirements of SSPC-PA1 "Paint Application Specification No. 1" for shop painting, and at rate recommended by SSPC to provide a minimum dry film thickness of 1.5 mils. Stripe paint all edges, corners, crevices, bolts, welds, and sharp edges.

PART 3 EXECUTION

3.01 PREPARATION

A. Coordinate and furnish anchorages, setting drawings, diagrams, templates, instructions, and directions for installation of anchorages, including concrete inserts, sleeves, anchor bolts, and miscellaneous items having integral anchors that are to be embedded in concrete or masonry construction. Coordinate delivery of such items to project site.

B. Set sleeves in concrete with tops flush with finish surface elevations; protect sleeves from water and concrete entry.

3.02 INSTALLATION

A. Fastening to In-Place Construction: Provide anchorage devices and fasteners where necessary for securing miscellaneous metal fabrications to in-place construction; include threaded fasteners for concrete and masonry inserts, toggle bolts, through-bolts, lag bolts, wood screws, and other connectors as required.

B. Cutting, Fitting, and Placement: Perform cutting, drilling, and fitting required for installation of miscellaneous metal fabrications. Set metal fabrication accurately in location, alignment, and elevation; with edges and surfaces level, plumb, true, and free of rack; and measured from established lines and levels.

C. Provide temporary bracing or anchors in formwork for items that are to be built into concrete masonry or similar construction.

D. Field Welding: Comply with AWS Code for procedures of manual shielded metal-arc welding, appearance and quality of welds made, methods used in correctly welding work, and the following:

1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
2. Obtain fusion without undercut or overlap.
3. Remove welding flux immediately.
4. At exposed connections, finish exposed welds and surfaces smooth and blended so that no roughness shows after finishing and contour of welded surface matches those adjacent.

3.03 INSTALLING MISCELLANEOUS FRAMING AND SUPPORTS

A. General: Install framing and supports to comply with requirements of items being supported, including manufacturers' written instructions and requirements indicated on shop drawings, if any.

B. Anchor supports securely to and rigidly brace from building structure.

C. Support steel girders on solid grouted masonry, concrete, or steel pipe columns. Secure girders with anchor bolts embedded in grouted masonry or concrete or with bolts through top plates of pipe columns.

1. Where grout space under bearing plates is indicated at girders supported on concrete or masonry, install as specified above for setting and grouting bearing and leveling plates.

3.04 SETTING BEARING AND LEVELING PLATES

A. Clean concrete and masonry bearing surfaces of any bond-reducing materials, and roughen to improve bond to surfaces. Clean bottom surface of plates.

B. Set leveling and bearing plates on wedges, shims, or leveling nuts. After the bearing members have been positioned and plumbed, tighten the anchor bolts. Do not remove wedges or shims, but if protruding, cut off flush with the edge of the bearing plate before packing with grout.

1. Use nonmetallic nonshrink grout, unless otherwise indicated.

2. Pack grout solidly between bearing surfaces and plates to ensure that no voids remain.

3.05 INSTALLING PIPE BOLLARDS

A. Anchor bollards in concrete with pipe sleeves preset and anchored into concrete. After bollards have been inserted into sleeves, fill annular space between bollard and sleeve solidly with nonshrink, nonmetallic grout, mixed and placed to comply with grout manufacturer's written instructions. Slope group up approximately 1/8" toward bollard.

B. Paint bollards yellow in front of dumpsters.

3.06 TOUCH-UP PAINTING:

A. Immediately after erection, clean field welds, bolted connections, and abraded areas of shop paint, and paint exposed areas with same material as used for shop painting to comply with SSPC PA 1 requirements for touch-up of field painted surfaces.

B. Apply by brush or spray to provide a minimum dry film thickness of 2.0 mils.

C. For galvanized surfaces clean welds, bolted connections and abraded areas and apply galvanizing repair paint to comply with ASTM A780.

END OF SECTION

SECTION 05 51 33.23 - ALTERNATING TREAD STEEL STAIRS

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Alternating Tread Steel Stairs
2. Fasteners

B. Related Sections:

1. Section 06 10 00 – Rough Carpentry
2. Section 06 17 53 – Shop-Fabricated Wood Trusses
3. Section 06 20 00 – Finish Carpentry
4. Section 07 20 00 – Thermal Protection
5. Section 07 54 23 – Thermoplastic-Polyolefin (TPO) Membrane Roofing
6. Section 07 72 33 – Roof Hatches
7. Section 09 21 16 – Gypsum Board Assemblies
8. Section 09 90 00 – Painting
9. Section 09 94 13 – Textured Finishing

1.02 REFERENCES

A. American Institute of Steel Construction (AISC) Publications:

1. Manual of Steel Construction
2. Code of Standard Practice

B. American Iron and Steel Institute Publications:

1. Type 304 Stainless Steel (UNS S30400)
2. Type 1010 Stainless Steel (UN G10100)

C. The American Society for Testing and Materials (ASTM) Publications:

1. ASTM A108-99 Standard Specification for Steel Bars, Carbon, Cold-Finished, Standard Quality
2. ASTM A123 - Standard Specification for Zinc (Hot Dip Galvanized) Coatings on Iron and Steel Products.
3. ASTM A193/A193M-03 - Standard Specification for Alloy-Steel and Stainless Steel Bolting Materials for High-Temperature Service
4. ASTM A240/A240M-03b - Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications
5. ASTM A269-04 Standard Specification for Seamless and Welded Austenitic Stainless Steel Tubing for General Service
6. ASTM A276-03 Standard Specification for Stainless Steel Bars and Shapes
7. ASTM A307 - Standard Specification for Carbon Steel Bolts and Studs, 60,000 PSI Tensile Strength.
8. ASTM A500 – Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes

9. ASTM A513 - Standard Specification for Electric-Resistance-Welded Carbon and Alloy Steel Mechanical Tubing.
10. ASTM A554-03 – Standard Specification for Welded Stainless Steel Mechanical Tubing
11. ASTM A563-00 - Standard Specification for Carbon and Alloy Steel Nuts.
12. ASTM A569/A569M-91a – Standard Specification for Steel, Carbon (.15 Maximum, Percent), Hot-Rolled Sheet and Strip Commercial Quality (superseded by A1011)
13. ASTM A780-01 - Standard Practice for Repair of Damaged and Un-coated Areas of Hot-Dip Galvanized Coatings
14. ASTM A786/A786M-00b Standard Specification for Hot-Rolled Carbon, Low-Alloy, High-Strength Low-Alloy, and Alloy Steel Floor Plates
15. ASTM A1011/A1011M-03 Standard Specification for Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability
16. ASTM F844-00 Standard Specification for Washers, Steel, Plain (Flat), Unhardened for General Use

D. National Association of Architectural Metal Manufacturers (NAAMM) Publications:

1. NAAMM STANDARD AMP 510-92 Metal Stairs Manual 5th Edition

1.03 SYSTEM DESCRIPTION

A. Alternating Tread Stair Treads: shall be capable of withstanding a single concentrated 1000 pound load without permanent deformation; or 100 pounds per square foot or 300 pounds on an area of 4 square inches without exceeding the allowable working stress of the material.

B. Alternating Tread Stair Guard/Handrail: shall be capable of withstanding a single concentrated load of 200 pounds or a uniform load of 50 pounds per linear foot applied in any direction at any point on the rail without exceeding the allowable working stress of the material.

C. Alternating Tread Stair Stringers: shall be capable of withstanding a single concentrated load of 1000 pounds at any point on the stair without permanent deformation; or a uniform live loading of 100 pounds per square foot applied in a downward direction to all tread surfaces or a 300 pound load on an area of 4 square inches without exceeding the allowable working stress of the material.

1.04 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

1. Submit “Letter of Conformance” in accordance with Section 01 33 00 indicating specified items selected for use in project.

a. Include supporting product data for products used in miscellaneous metal fabrications, including paint products and grout.

B. Submit Shop Drawings detailing fabrication and erection of each metal fabrication indicated. Include plans, elevations, sections, and details of metal fabrications and their connections. Show anchorage and accessory items. Provide templates for anchors and bolts specified for installation under other sections.

C. Submit samples representative of materials and finished products as may be requested by Owner’s Representative.

1.05 QUALITY ASSURANCE

A. Fabricator Qualifications: Firm experienced in successfully producing metal fabrications similar to that indicated for this Project, with sufficient production capacity to produce required units without causing delay in the Work.

B. Installer Qualifications: Arrange for installation of metal fabrications specified in this Section by same firm that fabricated them.

C. Quality welding processes and welding operators in accordance with the following:

1. AWS D1.1 "Structural Welding Code - Steel"

2. AWS D1.3 "Structural Welding Code - Sheet Steel"

D. Certify that each welder has satisfactorily passed AWS qualification tests for welding processes involved and, if pertinent, has undergone recertification.

1.06 PROJECT/SITE CONDITIONS

A. Fabricator Qualifications: Firm experienced in successfully producing metal fabrications similar to that indicated for this Project, with sufficient production capacity to produce required units without causing delay in the Work.

B. Installer Qualifications: Arrange for installation of metal fabrications specified in this Section by same firm that fabricated them.

C. Quality welding processes and welding operators in accordance with the following:

1. AWS D1.1 "Structural Welding Code - Steel"

2. AWS D1.3 "Structural Welding Code - Sheet Steel"

D. Certify that each welder has satisfactorily passed AWS qualification tests for welding processes involved and, if pertinent, has undergone recertification.

1.07 PERFORMANCE REQURMENTS

A. Alternating Tread Stair Treads: shall be capable of withstanding a single concentrated 1000 pound load without permanent deformation; or 100 pounds per square foot or 300 pounds on an area of 4 square inches without exceeding the allowable working stress of the material.

B. Alternating Tread Stair Guard/Handrail: shall be capable of withstanding a single concentrated load of 200 pounds or a uniform load of 50 pounds per linear foot applied in any direction at any point on the rail without exceeding the allowable working stress of the material.

C. Alternating Tread Stair Stringers: shall be capable of withstanding a single concentrated load of 1000 pounds at any point on the stair without permanent deformation; or a uniform live loading of 100 pounds per square foot applied in a downward direction to all tread surfaces or a 300 pound load on an area of 4 square inches without exceeding the allowable working stress of the material.

1.08 COORDINATION

A. Coordinate installation of anchorages for metal fabrications. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.

1.09 DIMENSIONS

A. Alternating Tread Stair Angle: 68 degrees from horizontal as specified in the drawings.

B. Vertical Drop: the change in elevation, as shown in the drawings, between the upper finished floor surface where the top landing will be attached and the lower finished floor surface where the base of the alternating tread stair will be secured.

1.10 DELIVERY STORAGE AND HANDLING

A. Deliver materials to the job-site in good condition and properly protected against damage to finished surfaces.
A. Store material in a location and manner to avoid damage. Do not stack components. Lay out components on firm foundation material such that bending can not occur.
B. Store metal components in a clean dry location, away from uncured concrete, cement, or masonry products, acids, oxidizers, rain water, or any other chemical or substance that might damage the material or finish.
C. Plan work and storage locations to keep on-site handling to a minimum.
D. Exercise particular care to avoid damage to material finishes or unprotected surfaces when handling.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. For purposes of designating design and quality of alternating tread steel stairs, Drawings and Specifications are based on the following:

1. Lapeyre Stair, Inc. (800-535-7631)

2.02 MATERIALS

A. Carbon Steel:
1. Treads: 13 Gauge AISI 1010/15 HRPO per ASTM A569 / A1011 grade 36 (or higher).
2. Landing & Foot Stampings: 11 Gauge AISI 1010/15 per ASTM A569 / A1011 grade 36 (or higher).
3. Top Landing Support Clips: L2 x 2 x ¼" x 4" lg. with 5/8" Φ round holes and 5/8" x 1" slot holes, ASTM A569/A1011 grade 36 (or higher)
4. Stringers:
a. 2" x 1 3/4" x 11 Gauge U section; AISI 1010/15 per ASTM A569/A1011 grade 36 (or higher) for 56 degree stairs under 10 vertical feet and for 68 degree stairs under 12 vertical feet.
b. 3" x 1 3/4" x 11 Gauge U section; AISI 1010/15 per ASTM A569/A1011 grade 36 or higher for 56 degree stairs over 10 vertical feet and for 68 degree stairs over 12 vertical feet.
5. Handrails: 1 1/2" OD x 0.095" AISI 1010/15 CS per ASTM A569/A1011 cold drawn, fully annealed tube per ASTM A513 grade 1008 or higher As-welded tubing or ASTM A500 Grade B.

2.03 FASTENERS

a. Bolts: handrail to stringer; Hex Head SAE J429 Grade 5, ½" Φ x 13 TPI
Landing to structure; Carriage Head A307 or Hex Head SAE J429 Grade 5, ½" Φ x 13 TPI
b. Nuts: ASTM A563 Grade 0
c. Washers ASTM F844

2.04 FINISHES

Carbon Steel:
1. Gray Primer: Epoxy Powder Coat or
2. Safety Yellow Paint: Polyester TGIC* Powder Coat or
3. Iron Gray: TGIC*
4. Typical RAL selections: Polyester Powder Coat
5. Hot-Dip Galvanized: per ASTM.

PART 3 EXECUTION

3.01 PREPARATION

A. Coordination: Coordinate start and installation of steel alternating tread stair with all other related and adjacent work. Installation shall not start until the construction has progressed to the

point that weather conditions and remaining construction operations will not damage alternating tread stair installation.

B. Verification: Verify that dimensions and angle are correct and that substrate is in proper condition for alternating tread stair installation. Do not proceed with installation until all necessary corrections have been made.

3.02 INSTALLATION

A. If bumper has not been installed at the factory, install the bumper in accordance with the manufacturer's instructions (peel and stick).
B. Prepare mounting holes.
C. Position alternating tread stair with top tread at same elevation as upper finished floor or roof surface. D. Secure alternating tread stair with not less than 2 bolts or studs at top and with not less than 2 at bottom of stair.
E. Touch up with matching paint any chipped or abraded damage to factory finish or
F. Touch up any damage to galvanized surfaces using galvanized repair paint in accordance with ASTM A780.

3.03 TOUCH-UP PAINTING:

A. Immediately after erection, clean field welds, bolted connections, and abraded areas of shop paint, and paint exposed areas with same material as used for shop painting to comply with SSPC PA 1 requirements for touch-up of field painted surfaces.

B. Apply by brush or spray to provide a minimum dry film thickness of 2.0 mils.

END OF SECTION

SECTION 05 52 00 - METAL RAILINGS

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Exterior Railings

B. Related Sections:

1. Section 03 30 00 - Cast-In-Place Concrete
2. Section 05 50 00 - Metal Fabrications
3. Section 09 90 00 - Painting
4. Section 09 96 00 - High Performance Coatings: For Exterior Railings

1.02 REFERENCES

A. ASTM International Publications:

1. A36 "Standard Specification for Carbon Structural Steel".
2. A47 "Standard Specification for Ferritic Malleable Iron Castings"
3. A48 "Standard Specification for Gray Iron Castings"
4. A53 "Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless"
5. A780 "Standard Practice for Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings"
6. B633 "Standard Specification for Electrodeposited Coatings of Zinc on Iron and Steel"
7. C1107 "Standard Specification for Packaged Dry, Hydraulic-Cement Grout (Nonshrink)"
8. E488 "Standard Test Methods for Strength of Anchors in Concrete and Masonry Elements"
9. E985 "Standard Specification for Permanent Metal Railing Systems and Rails for Buildings"

B. American Iron and Steel Institute (AISI) Publications:

1. SG02 "North American Specification for the Design of Cold-Formed Steel Structural Members"

C. American Welding Society (AWS) Publications:

1. D1.1 "Structural Welding Code - Steel"
2. D1.3 "Structural Welding Code - Sheet Steel"

D. Federal Specifications (FS) Publications:

1. DOD-P-21035A (formerly MIL-P-21035), Galvanizing Repair Specification

E. National Association of Architectural Metal Manufacturers (NAAMM) Publications:

1. "Metal Finishes Manual"
2. “Metal Stairs Manual”

F. The Society for Protective Coatings (SSPC) Publications:

1. PA - Paint Application Standards, Guides, and Specifications
    a. PA 1 “Shop, Field, and Maintenance Painting of Steel”
2. SP - Surface Preparation Standards and Specifications
    a. SP 7 "Brush-Off Blast Cleaning"
3. Paint - Paint and Coating Standards and Specifications
    a. Paint 12, Cold-Applied Asphalt Mastic (Extra Thick Film)
    b. Paint 20 “Zinc-Rich Coating, Type I - Inorganic and Type II - Organic”
    c. Paint 25 (superceeds FS TT-P-664), Zinc Oxide, Alkyd, Linseed Oil Primer for Use Over Hand Cleaned Steel

1.03 DEFINITIONS

A. Definitions in ASTM E985 for railing-related terms apply to this Section.

1.04 PERFORMANCE REQUIREMENTS

A. General: In engineering handrail and railing systems to withstand structural loads indicated, determine allowable design working stresses of railing materials based on the following:
    1. For Cold-Formed Structural Steel: AISI SG02 "North American Specification for Design of Cold-Formed Steel Structural Members".

B. Structural Performance of Handrails and Railing Systems: Engineer, fabricate, and install handrails and railing systems to withstand the following structural loads without exceeding the allowable design working stress of the materials for handrails, railing systems, anchors, and connections. Apply each load to produce the maximum stress in each of the respective components comprising handrails and railing systems.
    1. Top Rail of Guardrail Systems: Capable of withstanding the following loads applied as indicated:
        a. Designed to resist a load of 50 pounds per linear foot (pound per foot) applied in any direction at the top and to transfer this load through the supports to the structure.
        b. Concentrated Load: Handrail assemblies and guards shall be able to resist a single concentrated load of 200 pounds applied in any direction at any point along the top, and have attachment devices and supporting structure to transfer this loading to appropriate structural elements of the building . This load need not be assumed to act concurrently with the loads specified in the paragraph above.
    2. Intermediate Rails (all those except the handrail), balusters and panel fillers: Capable of withstanding the following loads applied as indicated.
        a. Designed to withstand a horizontally applied normal load of 50 pounds on an area not to exceed 1 square foot including openings and space between rails.

C. Control of Corrosion: Prevent galvanic action and other forms of corrosion by insulating metals and other materials from direct contact with incompatible materials.

D. Thermal Movements: Allow for thermal movement resulting from the following maximum change (range) in ambient temperature in the design, fabrication, and installation of handrails and railings to prevent buckling, opening up of joints, overstressing of components, connections, and other detrimental effects. Base design calculation on actual surface temperatures of materials due to both solar heat gain and nighttime sky heat loss.
    1. Temperature Change (Range): 120 deg. F. ambient; 180 deg. F. materials surfaces.

1.05 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

1. Submit “Letter of Conformance” in accordance with Section 01 33 00 (01330) indicating specified items selected for use in project.

a. Product test reports from and based on tests performed by qualified independent testing laboratory evidencing compliance of railing components and systems with requirements based on comprehensive testing of current products.

2. Shop Drawings showing fabrication and installation of handrails and railings including plans, elevations, sections, details of components, and attachments to other units of Work.

a. Where installed products are indicated to comply with certain design loadings, include structural computations, materials properties, and other information needed for structural analysis that has been signed and sealed by a qualified professional engineer responsible for their preparation.

3. Certify that each welder has satisfactorily passed AWS qualification tests for welding processes involved and, if pertinent, has undergone recertification.

a. Quality welding processes and welding operators in accordance with the following:

1) AWS D1.1 "Structural Welding Code - Steel"

2) AWS D1.3 "Structural Welding Code - Sheet Steel"

1.06 QUALITY ASSURANCE

A. Single-Source Responsibility: Obtain handrails and railing systems of each type and material from a single manufacturer.

B. Engineering Responsibility: Engineer handrails and railing systems by qualified professional engineer legally authorized to practice in jurisdiction where Project is located.

1.07 DELIVERY, STORAGE, AND HANDLING

A. Store handrails and railing systems in clean, dry location, away from uncured concrete and masonry, protected against damage of any kind. Cover with waterproof paper, tarpaulin, or polyethylene sheeting; allow for air circulation inside the covering.

1.08 PROJECT CONDITIONS

A. Field Measurements: Where handrails and railings are indicated to fit to other construction, check actual dimensions of other construction by accurate field measurements before fabrication; show recorded measurements on final shop drawings. Coordinate fabrication schedule with construction progress to avoid delay of Work.

1. Where field measurements cannot be made without delaying the Work, guarantee dimensions and proceed with fabrication of products without field measurements. Coordinate other construction to ensure that actual dimensions correspond to guaranteed dimensions.

1.09 SEQUENCING

A. Sequence and coordinate installation of handrails and railings as follows:

1. Mount handrails only on completed walls. Do not support handrails temporarily by any means not satisfying structural performance requirements.

2. Mount handrails only on gypsum board assemblies reinforced to receive anchors and where the location of concealed anchor plates has been clearly marked for benefit of

installer. Do not support temporarily by any means that does not satisfy structural performance requirements.

PART 2 PRODUCTS

2.01 METALS

A. General: Provide metal forms and types that comply with requirements of referenced standards and that are free from surface blemishes where exposed to view in the finished unit. Exposed-to-view surfaces exhibiting pitting, seam marks, roller marks, stains, discolorations, or other imperfections on finished units are not acceptable.

A. Steel Pipe: ASTM A53; finish, type, and weight class as follows:

1. Black finish, unless otherwise indicated.
2. Galvanized finish where indicated.
3. Type S, Grade A, standard weight (Schedule 40), unless otherwise indicated, or another weight required by structural loads.

B. Steel Plates, Shapes, and Bars: ASTM A36

C. Gray Iron Castings: ASTM A48, Class 30

D. Malleable Iron Castings: ASTM A47, Grade 32510

1. Bracket:
   a. Avendra, LLC Preferred Manufacturers:
      1) None
   b. Approved Manufacturers:
      1) “Model 382”; Julius Blum & Co., Inc. (800-526-6293)
      2) Approved Substitution

E. Fittings: Steel Elbows, Tee-Shapes, Wall Brackets, Escutcheons

F. Mounting: Brackets and Flanges: Steel inserts for casting or setting in new and existing concrete and with steel brackets for embedding into masonry.

G. Cast-In-Place and Post-Installed Anchors in Concrete: Anchors of type indicated below, fabricated from corrosion-resistant materials with capability to sustain, without failure, load imposed within a safety factor of 4, as determined by testing per ASTM E488, conducted by a qualified independent testing laboratory.

1. Sleeves: For steel posts set in concrete, fabricate sleeves from steel pipe not less than 6 inches long with an inside diameter not less than 1/2 inch greater than the outside diameter of post, with steel plate closure welded to bottom of sleeve.

2.02 GROUT AND ANCHORING CEMENT

A. Nonshrink, Nonmetallic Grout: Premixed, factory-packaged, nonstaining, noncorrosive, nongaseous grout complying with ASTM C1107. Provide grout specifically recommended by manufacturer for interior and exterior applications of type specified in this Section.

B. Avendra, LLC Preferred Manufacturers:

1. None

C. Approved Manufacturers:

1. "Euco N-S Grout", Euclid Chemical Co, An RPM Company; (800-321-7628)
2. "Masterflow 713", Degussa Building Systems, Inc (800-243-6739)

3. "Sonogrout 10K", Degussa Building Systems, Inc (800-243-6739)

D. Erosion-Resistant Anchoring Cement: Factory-prepackaged, nonshrink, nonstaining, hydraulic controlled expansion cement formulation for mixing with water at Project site to create pourable anchoring, patching, and grouting compound. Provide formulation that is resistant to erosion from water exposure without need for protection by a sealer or waterproof coating and is recommended for exterior use by manufacturer.

2.03 PAINT

A. Refer to Section 09 96 00 (09960) for Special Coatings used for exterior railings.

B. Shop Primer for Ferrous Metal: Manufacturers or Fabricators standard, fast-curing, lead and chromate-free, primer with performance requirements in FS TT-P-664; selected for resistance to normal atmosperic corrosion, for compatibility with substrate and field-applied finish paint system indicated, and for capability to provide a sound foundation for field-applied topcoats despite prolonged exposure.

1. Avendra, LLC Preferred Manufacturers:

a. None

2. Approved Manufacturers:

a. "Carbozinc 621"; Carboline Co. (800-848-4645)

b. "Epoxy Zinc-Rich Primer CM18/CM19"; Benjamin Moore & Co. (888-236-6667)

c. "Tneme-Zinc 90-97"; Tnemec Co. (800-863-6321)

C. Galvanizing Repair Paint: High-zinc-dust-content paint for regalvanizing welds in galvanized steel, with dry film containing not less than 94 percent zinc dust by weight, and complying with DOD-P-21035 or SSPC Paint 20.

D. Bituminous Paint: Cold-applied asphalt mastic complying with SSPC Paint 12 except containing no asbestos fibers and complying with ASTM D1187.

2.04 WELDING MATERIALS, FASTENERS, AND ANCHORS

A. Welding Electrodes and Filler Metal: Provide type and alloy of filler metal and electrodes as recommended by producer of metal to be welded and as required for color match, strength, and compatibility in fabricated items.

B. Fasteners for Anchoring Railings to Other Construction: Select fasteners of the type, grade, and class required to produce connections that are suitable for anchoring railing to other types of construction indicated and capable of withstanding design loadings.

1. For steel railings and fittings use plated fasteners complying with ASTM B633, Class Fe/Zen 25 for electro-deposited zinc coating.

2. Cast-In-Place and Post-Installed Anchors in Concrete: Anchors fabricated from corrosion-resistant materials with capability to sustain, without failure, load imposed within a safety factor of 4, as determined by testing per ASTM E488, conducted by a qualified independent testing laboratory.

3. Sleeves: For steel posts set in concrete, fabricate sleeves from steel pipe not less than 6 inches long with an inside diameter not less than 1/2 inch greater than the outside diameter of post, with steel plate closure welded to bottom of sleeve.

C. Fasteners for Interconnecting Railing Components: Use fasteners of same basic metal as the fastened metal, unless otherwise indicated. Do not use metals that are corrosive or incompatible with materials jointed.

1. Provide concealed fasteners for interconnection of handrail and railing components and for their attachment to other work except where exposed fasteners are unavoidable or are the standard fastening method for handrail and railing system indicated.

2. Provide Phillips flat-head machine screws for exposed fasteners, unless otherwise indicated.

2.05 FABRICATION

A. General: Fabricate handrails and railing systems to comply with requirements indicated for design, dimensions, details, finish, and member sizes, including wall thickness of hollow members, post spacings, and anchorage, but not less than those required to support structural loads.

B. Preassemble railing systems in the shop to greatest extent possible to minimize field splicing and assembly. Disassemble units only as necessary for shipping and handling limitations. Clearly mark units for reassembly and coordinated installation. Use connections that maintain structural value of jointed pieces. Clearly mark units for reassembly and coordinated installation.

C. Form changes in direction of railing members as shown on Drawings.

D. Form simple and compound curves by bending pipe in jigs to produce uniform curvature for each repetitive configuration required; maintain cylindrical cross-section of pipe throughout entire bend without buckling, twisting, cracking, or otherwise deforming exposed surfaces of pipe.

E. Welded Connections: Fabricate railing systems and handrails for connection of members by welding. For connections made during fabrication, weld corners and seams continuously to comply with the following:

1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.

2. Obtain fusion without undercut or overlap.

3. Remove welding flux immediately.

4. At tee and cross intersections, notch ends of intersecting members to fit contour of pipe to which end is joined and weld all around.

5. At exposed connections, finish exposed welds and surfaces smooth and blended so that no roughness shows after finishing and contour of welded surface matches those adjacent.

F. Nonwelded Connections: Fabricate railing systems and handrails for connection of members by means of railing manufacturer's standard concealed mechanical fasteners and fittings to produce flush, smooth, rigid, hairline joints.

1. Fabricate splice joints for field connection using epoxy structural adhesive where this represents manufacturer's standard splicing method.

G. Brackets, Flanges, Fittings and Anchors: Provide manufacturer's standard wall brackets, flanges, miscellaneous fittings and anchors for interconnection of handrail and railing members to other work, unless otherwise indicated.

H. Provide inserts and other anchorage devices for connecting handrails and railing systems to concrete or masonry work. Fabricate anchorage devices which are capable of withstanding loadings imposed by handrails and railing systems. Coordinate anchorage devices with supporting structure.

I. Shear and punch metals cleanly and accurately. Remove burrs from exposed cut edges.

J. Ease exposed edges to a radius of approximately 1/32 inch, unless otherwise indicated. Form bent-metal corners to smallest radius possible without causing grain separation or otherwise impairing work.

K. Cut, reinforce, drill, and tap miscellaneous metal work as indicated to receive finish hardware, screws, and similar items.

L. For handrails and railing systems that are exposed to exterior or to moisture from condensation or other sources, provide weepholes or other means for evacuation of entrapped water in hollow sections of railing members.

M. Fabricate joints that will be exposed to weather in a manner to exclude water.

N. Provide wall returns at ends of wall-mounted handrails, unless otherwise indicated.

O. Fillers: Provide steel sheet or plate fillers of thickness and size n indicated or required to support structural loads of handrails where needed to transfer wall bracket loads through wall finishes to structural supports. Size fillers to suit wall finish thicknesses to produce adequate bearing to prevent bracket rotation and overstressing of substrate.

2.06 STEEL FINISHES

A. Comply with NAAMM "Metal Finishes Manual" for recommendations relative to application and designations of finishes.

B. Protect mechanical finishes on exposed surfaces from damage by application of strippable, temporary protective covering prior to shipment.

C. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within 1/2 of the range of approved samples. Noticeable variations in the same piece are not acceptable. Variation in appearance of other components is acceptable if they are within range of approved samples and they are assembled or installed to minimize contract.

D. Interior:

1. Preparation for Shop Priming: Prepare uncoated ferrous metal surfaces to comply with minimum requirements indicated below for SSPC surface preparation specifications and environmental exposure conditions of installed metal fabrications.

   a. Interiors (SSPC Zone 1A): SSPC SP7 "Brush-Off Blast Cleaning".

2. Apply shop primer to uncoated surfaces of handrails and railing components, except those with galvanized finish or to be embedded in concrete or masonry, unless otherwise indicated. Comply with requirements of SSPC PA1 "Paint Application Specification No. 1" for shop painting.

   a. Avendra, LLC Preferred Manufacturers:

      1) None

   b. Approved Manufacturers:

      1) "Carbozinc 621"; Carboline Co. (800-848-4645)

      2) "Epoxy Zinc-Rich Primer CM18/CM19"; Benjamin Moore & Co. (888-236-6667)

      3) "Tneme-Zinc 90-97"; Tnemec Co. (800-863-6321)

3. Stripe paint all edges, corners, crevices, bolts, welds, and sharp edges.

E. Exterior:

1. Refer to Section 09 96 00 (09960) for Special Coatings used for exterior railings.

PART 3 EXECUTION

3.01 PREPARATION

A. Coordinate setting drawings, diagrams, templates, instructions, and directions for installation of anchorages, such as sleeves, concrete inserts, anchor bolts, and miscellaneous items having integral anchors that are to be embedded in concrete as masonry construction. Coordinate delivery of such items to project site.

3.02 INSTALLATION

A. Fit exposed connections accurately together to form tight, hairline joints.

B. Perform cutting, drilling, and fitting required for installation of handrails and railings. Set handrails and railings accurately in location, alignment, and elevation, measured from established lines and levels and free from rack.

1. Do not weld, cut, or abrade surfaces of handrails and railing components that have been coated or finished after fabrication and are intended for field connection by mechanical or other means without further cutting or fitting.

2. Set posts plumb within a tolerance of 1/4 inch in 12 feet.

3. Align rails so that variations from level for horizontal members and from parallel with rake of steps and ramps for sloping members do not exceed 1/4 inch in 12 feet.

C. Field Welding: Comply with the following requirements:

1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.

2. Obtain fusion without undercut or overlap.

3. Remove welding flux immediately.

4. At exposed connections, finish exposed welds and surfaces smooth and blended so that no roughness shows after finishing and contour of welded surface matches those adjacent.

D. Corrosion Protection: Coat concealed surfaces of aluminum that will come into contact with grout, concrete, masonry, wood, or dissimilar metals with a heavy coat of bituminous paint or zinc chromate primer.

E. Fastening to In-Place Construction: Provide anchorage devices and fasteners where necessary for securing handrails and railings to in-place construction.

3.03 ANCHORING POSTS

A. Adjust handrails and railing systems prior to anchoring to ensure matching alignment at abutting joints. Space posts at interval indicated but not less than that required by design loadings.

B. Anchor posts in concrete by means of pipe sleeves preset and anchored into concrete where shown on Drawings. After posts have been inserted into sleeves, fill annular space between post and sleeve solid with the following anchoring material, mixed and placed to comply with anchoring material manufacturer's directions.

C. Anchor posts in concrete by core drilling holes, where shown on drawings, not less than 5 inches deep and 3/4 inch greater than outside diameter of post. Clean holes of all loose material, insert posts, and fill annular space between post and concrete with the following anchoring material, mixed and placed to comply with anchoring material manufacturer's directions.

1. Nonshrink, nonmetallic grout or anchoring cement.

3.04 RAILING CONNECTIONS

A. Nonwelded Connections: Use manufacturer's standard mechanical for permanently connecting railing components. Use wood blocks and padding to prevent damage to railing members and fittings. Seal recessed holes of exposed locking screws with plastic filler cement colored to match finish of handrails and railing systems.

B. Welded Connections: Use fully welded joints for permanently connecting railing components by welding. Cope or butt components to provide 100 percent contact or use manufacturer's standard fittings designed for this purpose.

3.05 ANCHORING RAIL ENDS

A. Anchor rail ends into concrete and masonry with round flanges connected to rail ends and anchored into wall construction with post-installed anchors and bolts.

B. Anchor rail end to metal surfaces with oval or round flanges.

3.06 ATTACHMENT OF HANDRAILS TO WALLS

A. Attach handrails to wall with wall brackets and end fittings. Provide bracket with not less than 1-1/2 inch clearance from inside face of handrail and finished wall surface.

B. Locate brackets as indicated or, if not indicated, at spacing required to support structural loads.

C. Secure wall brackets and wall return fittings to building construction as follows:

1. Use type of bracket with predrilled hole for exposed bolt anchorage.

2. For concrete and solid masonry anchorage, use drilled-in expansion shield and either concealed hanger bolt or exposed lag bolt, as applicable.

3. For hollow masonry anchorage, use toggle bolts with square heads.

4. For wood-framed gypsum board assemblies, fasten brackets directly to wood framing or concealed anchors using self-tapping screws of size and type required to support structural loads.

3.07 ADJUSTING AND CLEANING

A. Touch-Up Painting: Immediately after erection, clean field welds, bolted connections, and abraded areas of shop paint, and paint exposed areas with same material.

B. For Galvanized Surfaces: Clean field welds, bolted connections, and abraded areas and apply galvanizing repair pint to comply with ASTM A780.

3.08 PROTECTION

A. Protect finishes of railing systems and handrails from damage during construction period by use of temporary protective coverings approved by railing manufacturer. Remove protective covering at time of Substantial Completion.

B. Restore finishes damaged during installation and construction period so that no evidence remains of correction work. Return items that cannot be refinished in the field to the shop. Make required alterations and refinish entire unit or provide new units.

END OF SECTION

SECTION 05 73 00 - DECORATIVE METAL RAILINGS

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Aluminum Ornamental Handrails and Railing Systems

B. Related Sections:

1. Section 03 30 00 - Cast-In-Place Concrete
2. Section 04 20 00 - Masonry Units
3. Section 05 52 00 - Handrails and Railings: For handrails and railings fabricated from round pipe and tube components.
4. Section 08 71 00 - Door Hardware

C. Products Supplied But Not Installed Under This Section:

1. Inserts and anchors preset in masonry and concrete for anchorage of handrails and railing systems.

1.02 DEFINITIONS

A. Definitions in ASTM E985 for railing-related terms apply to this Section.

1.03 PERFORMANCE REQUIREMENTS

A. General: In engineering handrail and railing systems to withstand structural loads indicated, determine allowable design working stresses of railing materials based on the following:

1. Aluminum: AA "Specifications for Aluminum Structures"

B. Structural Performance of Handrails and Railing Systems: Engineer, fabricate, and install handrails and railing systems to withstand the structural loads required by ASCE 7 and the following without exceeding the allowable design working stress of the materials for handrails, railing systems, anchors, and connections. Apply each load to produce the maximum stress in each of the respective components comprising handrails and railing systems.

1. Handrails and Guards: Capable of withstanding the following loads applied as indicated:

a. Designed to resist a load of 50 pounds per linear foot (pound per foot) applied in any direction at the top and to transfer this load through the supports to the structure.

b. Concentrated Load: Handrail assemblies and guards shall be able to resist a single concentrated load of 200 pounds applied in any direction at any point along the top, and have attachment devices and supporting structure to transfer this loading to appropriate structural elements of the building . This load need not be assumed to act concurrently with the loads specified in the paragraph above.

2. Intermediate Rails (all those except the handrail), balusters and panel fillers: Capable of withstanding the following loads applied as indicated.

a. Designed to withstand a horizontally applied normal load of 50 pounds on an area not to exceed 1 square foot including openings and space between rails.

C. Control of Corrosion: Prevent galvanic action and other forms of corrosion by insulating metals and other materials from direct contact with incompatible materials.

D. Thermal Movements: Allow for thermal movement resulting from the following maximum change (range) in ambient temperature in the design, fabrication, and installation of handrails and railings to prevent buckling, opening up of joints, overstressing of components, connections, and other detrimental effects. Base design calculation on actual surface temperatures of materials due to both solar heat gain and nighttime sky heat loss.

1. Temperature Change (Range): 120 deg. F. ambient; 180 deg. F. materials surfaces.

1.04 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

1. Product data for each type of product specified.

2. Shop Drawings showing fabrication and installation of handrails and railings including plans, elevations, sections, details of components, and attachments to other units of Work.

a. Where installed products are indicated to comply with certain design loadings, include structural computations, materials properties, and other information needed for structural analysis that has been signed and sealed by a qualified professional engineer responsible for their preparation.

3. Samples for initial selection purposes in form of manufacturer's color charts showing full range of colors available for those units with factory-applied color finishes.

4. Samples for verification purposes of each type of exposed finish required, prepared on components indicated below that are of the same thickness and metal indicated for final unit of Work. Where finishes involve normal color and texture variations, include sample sets showing full range of variations expected.

a. Six inch long sections of each distinctly different linear railing member including handrails, top rails, posts, and balusters.

5. Product test reports from and based on tests performed by qualified independent testing laboratory evidencing compliance of railing components and systems with requirements based on comprehensive testing of current products.

1.05 QUALITY ASSURANCE

A. Single-Source Responsibility: Obtain handrails and railing systems of each type and material from a single manufacturer.

B. Engineering Responsibility: Engineer handrails and railing systems by qualified professional engineer legally authorized to practice in jurisdiction where Project is located.

1.06 STORAGE AND PROTECTION

A. Store handrails and railing systems in clean, dry location, away from uncured concrete and masonry, protected against damage of any kind. Cover with waterproof paper, tarpaulin, or polyethylene sheeting; allow for air circulation inside the covering.

1.07 PROJECT/SITE CONDITIONS

A. Field Measurements: Where handrails and railings are indicated to fit to other construction, check actual dimensions of other construction by accurate field measurements before fabrication; show recorded measurements on final shop drawings. Coordinate fabrication schedule with construction progress to avoid delay of Work.

1. Where field measurements cannot be made without delaying the Work, guarantee dimensions and proceed with fabrication of products without field measurements. Coordinate other construction to ensure that actual dimensions correspond to guaranteed dimensions.

B. Sequencing and Scheduling

1. Sequence and coordinate installation of wall handrails as follows:

a. Mount handrails only on completed walls. Do not support handrails temporarily by any means not satisfying structural performance requirements.

b. Mount handrails only on gypsum board assemblies reinforced to receive anchors and where the location of concealed anchor plates has been clearly marked for benefit of installer.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Approved Manufacturers:

1. "Dula Products"; Sterling-Dula Architectural Products (814-838-7731)
2. Julius Blum & Co. Inc. (800-526-6293
3. Approved substitution

2.02 METALS

A. General: Provide metal forms and types that comply with requirements of referenced standards and that are free from surface blemishes where exposed to view in the finished unit. Exposed-to-view surfaces exhibiting pitting, seam marks, roller marks, stains, discolorations, or other imperfections on finished units are not acceptable.

B. Aluminum: Alloy and temper recommended by aluminum producer and finisher for type of use and finish indicated and with not less than the strength and durability properties of the alloy and temper designated below for each aluminum form required.

1. Extruded Bar and Tube: ASTM B221, Alloy 6063-T5
2. Extruded Structural Pipe and Tube: ASTM B429, Alloy 6063-T6
3. Drawn Seamless Tube: ASTM B210, Alloy 6063-TB32
4. Plate and Sheet: ASTM B209, Alloy 6061-T6
5. Die and Hand Forgings: ASTM B247, Alloy 6061-T6
6. Castings: ASTM B26, Alloy A356-T6

2.03 GROUT AND ANCHORING CEMENT

A. Nonshrink Nonmetallic Grout: Premixed, factory-packaged, nonstaining, noncorrosive, nongaseous grout complying with ASTM C1107. Provide grout specifically recommended by manufacturer for interior and exterior applications of type specified in this Section.

B. Approved Manufacturers:

1. "Euco N-S Grout", Euclid Chemical Co, An RPM Company; (800-321-7628)
2. "Masterflow 713", Degussa Building Systems, Inc (800-243-6739)
3. "Sonogrout 10K", Degussa Building Systems, Inc (800-243-6739)

2.04 MATERIALS

A. Welding Electrodes and Filler Metal: Provide type and alloy of filler metal and electrodes as recommended by producer of metal to be welded and as required for color match, strength, and compatibility in fabricated items.

B. Additional protection at railing/gate lock/panic bar: Provide 1/4" thickness clear Lexan panels, or 1/4" aluminum wire mesh with selvaged edges, trim with aluminum C-channel. Paint channel or mesh to match fence color. Extend Lexan 20" blow panic bar and 20" above panic bar or to top of fence if less than 20". Extend mesh/lexan 20" to each side of panic bar to prevent access to paint bar from opposite side. Provide clear Lexan with non-scratch coating, at locations noted on the Drawings.

C. Lock: Refer to Section 08 71 00 (08710) - Coordinate keying with other hardware used in job.

D. Hinge: Spring Hinge in 304 stainless steel; 3 knuckle, anti-friction bearings and lifetime warranty.

1. Approved Manufacturers:

a. “2060-R Series”; Stanley Hardware (800-337-4393)

2.05 FASTENERS

A. Fasteners for Anchoring Railings to Other Construction: Select fasteners of the type, grade, and class required to produce connections that are suitable for anchoring railing to other types of construction indicated and capable of withstanding design loadings.

1. For aluminum railings, provide fasteners fabricated from Type 304 stainless steel.

B. Fasteners for Interconnecting Railing Components: Use fasteners of same basic metal as the fastened metal, unless otherwise indicated. Do not use metals that are corrosive or incompatible with materials joined.

1. Provide concealed fasteners for interconnection of handrail and railing components and for their attachment to other work, except where exposed fasteners are unavoidable or are the standard fastening method for handrail and railing system indicated.

2.06 FABRICATION

A. General: Fabricate handrails and railing systems to comply with requirements indicated for design, dimensions, details, finish, and member sizes, including wall thickness of hollow members, post spacings, and anchorage, but not less than that required to support structural loads.

B. Preassemble railing systems in shop to greatest extent possible to minimize field splicing and assembly. Disassemble units only as necessary for shipping and handling limitations. Clearly mark units for reassembly and coordinated installation. Use connections that maintain structural value of joined pieces. Clearly mark units for reassembly and coordinated installation.

C. Gates:

1. Construct using same type material, finish, and design as adjacent railings or fencing.

2. Provide diagonal bracing as required to resist a minimum downward force of 75 lbs. on the latch jamb.

D. Fabrication Tolerances:

1. Top Rail and Post Dimensions: +/- 1/4"

2. Pickets and Bottom Rail Dimensions: +/- 1/8"

2.07 ALUMINUM FINISHES

A. Finish designations prefixed by "AA" conform to the system established by the Aluminum Association for designating aluminum finishes.

B. Finish: Baked acrylic over phosphate pretreatment with inhibitive primer complying with AAMA 603.8. Color: See Exterior and Interior Finish Indexes.

PART 3 EXECUTION

3.01 PREPARATION

A. Coordinate setting drawings, diagrams, templates, instructions, and directions for installation of anchorage's, such as sleeves, concrete inserts, anchor bolts, and miscellaneous items having integral anchors, that are to be embedded in concrete as masonry construction. Coordinate delivery of such items to project site.

3.02 INSTALLATION

A. Fit exposed connections accurately together to form tight, hairline joints.

B. Cutting, Fitting, and Placement: Perform cutting, drilling, and fitting required for installation of handrails and railings. Set handrails and railings accurately in location, alignment, and elevation, measured from established lines and levels and free from rack.

C. Do not weld, cut, or abrade surfaces of handrails and railing components that have been coated or finished after fabrication and are intended for field connection by mechanical or other means without further cutting or fitting.

D. Set posts plumb within a tolerance of 1/4 inch in 12 feet.

E. Align rails so that variations from level for horizontal members and from parallel with rake of steps and ramps for sloping members to not exceed 1/4 inch in 12 feet.

F. Corrosion Protection: Coat concealed surfaces of aluminum alloys which will be in contact with grout, concrete, masonry, wood, or dissimilar metals, with a heavy coat of bituminous paint or zinc chromate primer.

G. Adjust handrails and railing systems prior to anchoring to ensure matching alignment at abutting joints. Space posts at interval indicated, but not less than that required by structural loads.

H. Fastening to In-Place Construction: Use anchorage devices and fasteners where necessary for securing handrails and railings to in-place construction.

3.03 RAILING CONNECTIONS

A. Mechanical Connections: Fabricate handrails and railings by connecting members with railing manufacturer's standard concealed mechanical fasteners and fittings, unless otherwise indicated. Fabricate members and fittings to produce flush, smooth, rigid, hairline joints.

1. Fabricate splice joints for field connection using epoxy structural adhesive where this is manufacturer's standard splicing method.

B. Expansion Joints: Install expansion joints no further apart than required to accommodate thermal movement. Provide slip-joint internal sleeve extending 2 inches beyond joint on either side. Fasten internal sleeve securely to one side. Locate joint within 6" of post.

3.04 ANCHORING POSTS

A. Anchor posts in concrete by core drilling holes not less than 5 " deep and 3/4 inch greater than outside diameter of post. Clean holes of all loose material, insert posts, and fill annular space between post and concrete with the following anchoring material, mixed and placed to comply with anchoring material manufacturer's directions.

1. Nonshrink, nonmetallic grout.

B. Anchor posts to metal surfaces with oval flanges, angle type or floor type as required by conditions, connected to posts and to metal supporting members as follows:

1. For aluminum railings, attach posts as indicated using manufacturer's standard fittings designed and engineered for this purpose.

2. Install using Styrofoam inserts placed in the concrete by use of base plates welded to the aluminum posts using fasteners into the concrete deck.

3.05 ANCHORING RAIL ENDS

A. Anchor rail ends into concrete and masonry with round flanges connected to rail ends and anchored into wall construction with post-installed anchors and bolts.

B. Anchor rail ends to metal surfaces with oval or round flanges.

3.06 ADJUSTING

A. Touch-Up Painting: Immediately after erection, clean field welds, bolted connections, and abraded areas of shop paint and paint exposed areas with same material.

B. Clean the following metals by washing thoroughly with clean water and soap, following by rinsing with clean water.

1. Aluminum

3.07 PROTECTION

A. Protect finishes of railing systems and handrails from damage during construction period by use of temporary protective coverings approved by railing manufacturer. Remove protective covering at time of Substantial Completion.

B. Restore finishes damaged during installation and construction period so that no evidence remains of correction work. Return items that cannot be refinished in the field to the shop. Make required alterations and refinish entire unit or provide new units.

END OF SECTION

SECTION 06 10 00 - ROUGH CARPENTRY

PART 1 GENERAL

1.01 SUMMARY

A. This Section includes the following:

1. Framing with the following:
    a. Dimension Lumber
    b. Engineered Wood Products
        1) Laminated Veneer Lumber (LVL)
        2) Parallel Strand Lumber (PSL)
        3) Laminated Strand Lumber (LSL)
    c. Wood-Based Structural-Use Panels
        1) Subflooring
        2) Underlayment
        3) Wall Sheathing
        4) Roof Sheathing
        5) Backing Panels
    d. Wood-Preservative Treated Materials
    e. Fire-Retardant-Treated Materials
    f. Wall Sheathings
        1) Gypsum Wall Sheathing
        2) Extruded-Polystryrene-Foam Wall Sheathings
2. Fasteners
3. Wood Furring, Grounds, Nailers, and Blocking
4. Metal Framing Anchors

B. Related Sections:

1. Section 06 17 53 - Shop-Fabricated Wood Trusses
2. Section 07 54 23 - Thermoplastic-Polyolefin (TPO) Membrane Roofing
3. Section 08 14 00 - Wood Doors
4. Section 09 21 16 - Gypsum Board Assemblies
5. Section 10 28 00 - Toilet, Bath, and Laundry Equipment
6. Section 12 32 16– Manufactured Plastic Laminate Clad Casework
7. Section 12 35 30.13– Kitchen Case Woodwork
8. Section 12 36 23 - Plastic Countertops
9. Section 12 36 40 - Stone Countertops

1.02 REFERENCES

A. The American Forest & Paper Association (AFPA') Publications:

1. "National Design Specifications for Wood Construction"
2. "Wood Frame Construction Manual (WFCM) for One- and Two-Family Dwellings"

B. American Lumber Standards Committee (ALSC)

1. DOC PS 20, "American Softwood Lumber Standard"
2. DOC PS 1, "U.S. Product Standard for Construction and Industrial Plywood"
3. National Grading Rule (NGR)

C. American Wood-Preservers's Association (AWPA) Publications:

1. C2 "Lumber, Timber, Bridge Ties and Mine Ties - Preservative Treatment by Pressure Processes"
2. C9 "Plywood - Preservative Treatment by Pressure Process Document Number"
3. M4 "Standard for the Care of Preservative-Treated Wood Products Document Number"

D. ASTM International Publications:

1. A153 "Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware"
2. A307 "Standard Specification for Carbon Steel Bolts and Studs, 60 000 PSI Tensile Strength"
3. A563 "Standard Specification for Carbon and Alloy Steel Nuts"
4. A653 "Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process"
5. B117 "Standard Practice for Operating Salt Spray (Fog) Apparatus"
6. C27 "Standard Classification of Fireclay and High-Alumina Refractory Brick"
7. C208 "Standard Specification for Cellulosic Fiber Insulating Board"
8. C578 "Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation"
9. C846 "Standard Practice for Application of Cellulosic Fiber Insulating Board for Wall Sheathing"
10. C954 "Standard Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Steel Studs from 0.033 in. (0.84 mm) to 0.112 in. (2.84 mm) in Thickness"
11. C1177 "Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing"
12. D2559 "Standard Specification for Adhesives for Structural Laminated Wood Products for Use Under Exterior (Wet Use) Exposure Conditions"
13. D2898 "Standard Test Methods for Accelerated Weathering of Fire-Retardant-Treated Wood for Fire Testing"
14. D5055 "Standard Specification for Establishing and Monitoring Structural Capacities of Prefabricated Wood I-Joists"
15. E84 "Standard Test Method for Surface Burning Characteristics of Building Materials"
16. E699 "Standard Practice for Evaluation of Agencies Involved in Testing, Quality Assurance, and Evaluating of Building Components"
17. F1667 "Standard Specification for Driven Fasteners: Nails, Spikes, and Staples"

E. The Engineered Wood Association (APA) Publications:

1. Form No. E30, "APA Engineered Wood Construction Guide"

F. Single Ply Roofing Industry (SPRI) Publications

1.03 DEFINITIONS

A. Rough Carpentry: Carpentry work not specified in other Sections and not exposed, unless otherwise specified.

B. Dimension Lumber: Lumber that is precut in width and thickness to a standard size of 2 inches nominal or greater but less than 5 inches nominal in least dimension.

C. Exposed Framing: Dimension lumber not concealed by other construction and indicated to receive a stained or natural finish.

1.04 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

B. Submit “Letter of Conformance” in accordance with Section 01 33 00 (01330) indicating specified items selected for use in project.

1. Engineered wood products
2. Underlayment
3. Insulating sheathing
4. Construction adhesives
5. Metal framing anchors

C. Material certificates for dimension lumber specified to comply with minimum allowable unit stresses. Indicate species and grade selected for each use and design values approved by the American Lumber Standards Committee's (ALSC) Board of Review.

D. Wood treatment data as follows, including chemical treatment manufacturer's instructions for handling, storing, installing, and finishing treated materials:

1. For each type of preservative-treated wood product, include certification by treating plant stating type of preservative solution and pressure process used, net amount of preservative retained, and compliance with applicable standards.
2. For waterborne-treated products, include statement that moisture content of treated materials was reduced to levels indicated before shipment to Project site.
3. For fire-retardant-treated wood products, include certification by treating plant that treated materials comply with specified standard and other requirements as well as data relative to bending strength, stiffness, and fastener-holding capacities of treated materials.

E. Material test reports from a qualified independent testing agency indicating and interpreting test results relative to compliance of fire-retardant-treated wood products with requirements indicated.

F. Warranty of chemical treatment manufacturer for each type of treatment.

G. Shop Drawings:

1. For Engineered Wood Framing Systems provide layout drawings indicating materials, member sizes, member spacing and accessories required for proper installation. Drawings shall clearly reference construction details, loading assumptions (including

location of loads transferred from other levels), and minimum live load and total load deflection criteria.

a. Where installed products are indicated to comply with certain design loadings, include structural computations, materials properties, and other information needed for structural analysis that has been signed and sealed by a qualified professional engineer responsible for their preparation.

2. Details for joining, supporting, and securing wood blocking required for metal roof edge flashings, including gravel stops and copings, designed in accordance with SPRI Wind Design Standards.

H. Research or evaluation reports of the model code organization acceptable to authorities having jurisdiction that evidence the following products' compliance with building code in effect for Project.

1. Engineered wood products
2. Power-driven fasteners
3. Fire-retardant-treated wood
4. National Evaluation Service, Inc. or approved substitution.
5. Metal framing anchors

1.05 QUALITY ASSURANCE

A. Testing Agency Qualifications: To qualify for approval, an independent testing agency must demonstrate to Owner's Representative satisfaction, based on evaluation of agency-submitted criteria conforming to ASTM E699, that it has the experience and capability to satisfactorily conduct the testing indicated without delaying the Work.

B. Single-Source Responsibility for Fire-Retardant-Treated Wood: Obtain each type of fire-retardant-treated wood product from one source and by a single producer.

C. Single-Source Responsibility for Engineered Wood Products: Obtain each type of engineered wood product from one source and by a single manufacturer.

D. Engineering Responsibility: Engineered Wood Framing Systems shall be engineered by qualified professional engineer legally authorized to practice in jurisdiction where Project is located.

E. Product Identification: All Engineered Wood Products System members shall be clearly marked with manufacturer's name, product series, plant identification, date of manufacture, and code compliance.

F. Installation Review: The Engineered Wood Products System Manufacturer's Technical Representative shall be available to meet with the Contractors to review installation details prior to the beginning of framing. The Contractor shall give notification to the Technical Representative prior to enclosing the framing to provide opportunity for review of the installation.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Keep materials under cover and dry. Protect from weather and contact with damp or wet surfaces. Stack lumber, plywood, and other panels. Provide for air circulation within and around stacks and under temporary coverings.

1. For lumber and plywood pressure treated with waterborne chemicals, place spacers between each bundle to provide air circulation.

2. Store Engineered Wood materials on dry surfaces supported on raised wood sticks located every 10 feet. Store TJI joists in an upright position.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Avendra, LLC Preferred Manufacturers:

1. Laminated-Veneer Lumber (LVL):
   a. None.
2. Parallel-Strand Lumber (PSL):
   a. None.
3. Prefabricated Wood I-Joists (TJI):
   a. None.
4. Laminated Strand Lumber (LSL):
   a. None.
5. Oriented Strand Board (OSB)
   a. None.

B. Approved Manufacturers:

1. Wood-Preservative-Treated Materials:
   a. “Micro-Guard”; Hoover Treated Wood Products, Inc. (800-531-5558)
   b. “MicroPro”; Osmose, Inc. (800-241-0240)
2. Fire-Retardant-Treated Materials, Interior Type A:
   a. "Dricon FRT"; Lonza Wood Protection (678-627-2000)
   b. “Pryro-Guard”; Hoover Treated Wood Products, Inc. (800-531-5558)
   c. "FirePRO"; Osmose, Inc. (800-241-0240)
3. Fire-Retardant-Treated Materials, Exterior Type:
   a. “FRX Exterior FRT"; Lonza Wood Protection (678-627-2000)
   b. “Exterior Fire-X”; Hoover Treated Wood Products, Inc. (800-531-5558)
4. Laminated-Veneer Lumber (LVL):
   a. "VERSA-LAM"; Boise Building Solutions (800-232-0788) b. "Gang-Lam LVL"; Louisiana-Pacific Corp. (800-999-9105)
   c. "Microllam LVL"; iLevel by Weyerhaeuser (800-456-4787)
5. Parallel-Strand Lumber (PSL):
   a. "Parallam PSL"; iLevel by Weyerhaeuser (800-456-4787)
6. Prefabricated Wood I-Joists (TJI):
   a. Boise Building Solutions (800-232-0788)
   b. Louisiana-Pacific Corp. (800-999-9105)
   c. iLevel by Weyerhaeuser (800-456-4787)
7. Laminated Strand Lumber (LSL):

a. iLevel by Weyerhaeuser (800-456-4787)

8. Oriented Strand Board (OSB)

a. “Structurwood Sheathing”; iLevel by Weyerhaeuser (800-456-4787)

b. “Hew Zip System”; Huber Engineered Woods LLC (800-933-9220) c.

Approved Substitution

9. Glass-Fiber-Surfaced Gypsum Sheathing Board:

a. “DensGlass Sheathing ”; Georgia-Pacific Corp. (800-284-5347)

b. “GlasRoc Enhanced Glass Reinforced Gypsum Sheathing”; CertainTeed Corporation, a subsidiary of Saint-Gobain (800-233-8990)

c. “Securock Glass-Mat Sheathing”; United States Gypsum Co. (800-950-3839)

d. “Gold Bond Brand e^2XP Extended Exposure Sheathing”; National Gypsum Company. (800-628-4662)

e. “GreenGlass Fiberglass-Faced Gypsum Sheathing”; Temple-Inland Forest Products Corp. - Gypsum Products (800-231-6060)

10. Metal Framing Anchors:

a. Hilti, Inc. (800-879-8000)

b. Cleveland Steel Specialty Co. (800-251-8351)

c. USP Lumber Connectors (800-328-5934)

d. Simpson Strong-Tie Company, Inc. (800-999-5099)

e. EMCO/Southeastern Metals/A Gibralter Co. (800-690-7235)

2.02 LUMBER, GENERAL

A. Lumber Standards: Comply with DOC PS 20, "American Softwood Lumber Standard," and with applicable grading rules of inspection agencies certified by ALSC's Board of Review.

B. Inspection Agencies: Inspection agencies, and the abbreviations used to reference them, include the following:

1. NELMA - Northeastern Lumber Manufacturers Association.

2. NLGA - National Lumber Grades Authority (Canadian).

3. RIS - Redwood Inspection Service.

4. SPIB - Southern Pine Inspection Bureau.

5. WCLIB - West Coast Lumber Inspection Bureau.

6. WWPA - Western Wood Products Association.

C. Grade Stamps: Provide lumber with each piece factory marked with grade stamp of inspection agency evidencing compliance with grading rule requirements and identifying grading agency, grade, species, moisture content at time of surfacing, and mill.

1. For exposed lumber, furnish pieces with grade stamps applied to ends or back of each piece, or omit grade stamps and provide grade-compliance certificates issued by inspection agency.

D. Where nominal sizes are indicated, provide actual sizes required by DOC PS 20 for moisture content specified. Where actual sizes are indicated, they are minimum dressed sizes for dry lumber.

1. Provide dressed lumber, S4S, unless otherwise indicated.

2. Provide lumber with 15 percent maximum moisture content at time of dressing for 2-inch nominal thickness or less, unless otherwise indicated.

2.03 WOOD-PRESERVATIVE-TREATED MATERIALS

A. General: Where lumber or plywood is indicated as preservative treated or is specified to be treated, comply with applicable requirements of AWPA C2 (lumber) and AWPA C9 (plywood). Mark each treated item with the Quality Mark Requirements of an inspection agency approved by ALSC's Board of Review.

1. Do not use chemicals containing chromium or arsenic.

2. For exposed items indicated to receive stained finish, use chemical formulations that do not bleed through, contain colorants, or otherwise adversely affect finishes.

3. Use treatment that does not promote corrosion of metal fasteners.

B. Pressure treat above ground items with waterborne preservatives to a minimum retention of 0.25 lb/cu. ft. After treatment, kiln-dry lumber and plywood to a maximum moisture content of 19 and 15 percent, respectively. Treat indicated items and the following:

1. Wood cants, nailers, curbs, equipment support bases, blocking, stripping, and similar members in connection with roofing, flashing, vapor barriers, and waterproofing.

2. Wood sills, sleepers, blocking, furring, stripping, and similar concealed members in contact with masonry or concrete.

3. Wood framing members less than 18 inches above grade.

4. Wood floor plates installed over concrete slabs directly in contact with earth.

C. Pressure treat wood members in contact with ground or freshwater with waterborne preservatives to a minimum retention of 0.40 lb/cu. ft.

D. Complete fabrication of treated items before treatment, where possible. If cut after treatment, apply field treatment complying with AWPA M4 to cut surfaces. Inspect each piece of lumber or plywood after drying and discard damaged or defective pieces.

2.04 FIRE-RETARDANT-TREATED MATERIALS

A. General: Where fire-retardant-treated wood is indicated, comply with applicable requirements of ASTM E84 (lumber) and ASTM C27 (plywood). Identify fire-retardant-treated wood with appropriate classification marking of UL; SGS U.S. Testing; Timber Products Inspection, Inc; or another testing and inspecting agency acceptable to authorities having jurisdiction.

1. Provide fire treated wood in all concealed areas of construction, as shown or indicated on the drawings, and as required by code.

2. Fire-Retardant-Treated Plywood by Pressure Process: Products with a flame spread index of 25 or less when tested according to ASTM E84, and with no evidence of significant progressive combustion when the test is extended an additional 20 minutes, and with the flame front not extending more than 10.5 feet beyond the centerline of the burners at any time during the test.

a. Use treatment that does not promote corrosion of metal fasteners.

3. Research or Evaluation Reports: Provide fire-retardant-treated wood acceptable to authorities having jurisdiction and for which a current model code research or evaluation report exists that evidences compliance of fire-retardant-treated wood for application indicated.

4. For exposed items indicated to receive stained finish, use chemical formulations that do not bleed through, contain colorants, or otherwise adversely affect finishes.

B. Interior Type A: For interior locations, use chemical formulation that produces treated lumber and plywood with the following properties under conditions present after installation:

1. Bending strength, stiffness, and fastener-holding capacities are not reduced below values published by manufacturer of chemical formulation under elevated temperature and humidity conditions simulating installed conditions when tested by a qualified independent testing agency. Design value adjustment factors shall be calculated according to ASTM D6841.
2. No form of degradation occurs due to acid hydrolysis or other causes related to treatment.
3. Contact with treated wood does not promote corrosion of metal fasteners.
4. Treated materials shall have a moisture content of 28 percent or less when tested according to ASTM D3201 at 92 percent relative humidity. Use where exterior type is not indicated.

C. Exterior Type: Use for exterior locations and where indicated. Comply with ASTM D2898.

D. After treatment, kiln-dry lumber and plywood to a maximum moisture content of 19 and 15 percent, respectively

E. Inspect each piece of treated lumber or plywood after drying and discard damaged or defective pieces.

2.05 DIMENSION LUMBER

A. General: Provide dimension lumber of grades indicated according to the ALSC National Grading Rule (NGR) provisions of the inspection agency indicated.

B. Non-Load-Bearing Interior Partitions: Provide framing of the following grade and species:

1. Grade: Construction.
2. Species: Any species with a modulus of elasticity and an extreme fiber stress in bending as indicated on Drawings
    a. Exception: Southern (yellow) pine is not permitted, except for treated wood products.

C. Exterior and Load-Bearing Walls: Provide framing of the following grade and species:

1. Grade: No. 2.
2. Species: Any species with a modulus of elasticity and an extreme fiber stress in bending as indicated on Drawings
    a. Exception: Southern (yellow) pine is not permitted, except for treated wood products.

D. Ceilings (Non-Load-Bearing): For ceiling framing that does not support a floor, roof, or attic, provide the following grade and species:

1. Grade: Construction or No. 2.
2. Species: Any species with a modulus of elasticity and an extreme fiber stress in bending as indicated on Drawings
    a. Exception: Southern (yellow) pine is not permitted, except for treated wood products..

E. Other Framing Not Listed Above: Provide the following grades and species:

1. Grade: No. 1.
2. Species: Any species with a modulus of elasticity and an extreme fiber stress in bending as indicated on Drawings

a. Exception: Southern (yellow) pine is not permitted, except for treated wood products..

F. Exposed Framing: Provide material hand-selected from lumber of species and grade indicated below for uniformity of appearance and freedom from characteristics that would impair finish appearance.

1. Species and Grade: As indicated above for load-bearing construction of same type.

2.06 MISCELLANEOUS LUMBER

A. General: Provide lumber for support or attachment of other construction, cant strips, bucks, nailers, blocking, furring, grounds, stripping, and similar members.

B. Fabricate miscellaneous lumber from dimension lumber of sizes indicated and into shapes shown.

C. Moisture Content: 15 percent maximum for lumber items not specified to receive wood preservative treatment.

D. Grade: For dimension lumber sizes, provide No. 3 or Standard grade lumber per ALSC's NGRs of any species. For board-size lumber, provide No. 3 Common grade per NELMA, NLGA, or WWPA; No. 2 grade per SPIB; or Standard grade per NLGA, WCLIB or WWPA of any species.

2.07 ENGINEERED WOOD PRODUCTS

A. General: Provide engineered wood products acceptable to authorities having jurisdiction and for which current model code research or evaluation reports exist that evidence compliance with building code in effect for Project.

1. Allowable Design Stresses: Provide engineered wood products with allowable design stresses, as published by manufacturer, that meet or exceed those indicated. Manufacturer's published values shall be determined from empirical data or by rational engineering analysis, and demonstrated by comprehensive testing performed by a qualified independent testing agency.

B. Laminated-Veneer Lumber: Lumber manufactured by laminating wood veneers in a continuous press using an exterior-type adhesive complying with ASTM D2559 to produce members with grain of veneers parallel to their lengths. Comply with the following requirements:

1. Extreme Fiber Stress in Bending: 2,600 psi for 12-inch nominal-depth members.

2. Modulus of Elasticity: 1,900,000 psi

3. Tension Parallel to Grain: 1,555 psi

4. Compression Parallel to Grain: 2,510 psi

5. Compression Perpendicular to Grain: 750 psi perpendicular to and 480 psi and parallel to glue line.

6. Horizontal Shear: 285 psi perpendicular to and 190 psi parallel to glue line.

C. Parallel-Strand Lumber: Lumber manufactured by laying up wood strands using an exterior-type adhesive complying with ASTM D2559, and cured under pressure to produce members with grain of strands parallel to their lengths and complying with the following requirements:

1. Extreme Fiber Stress in Bending: 2900 psi for 12-inch nominal-depth members.

2. Modulus of Elasticity: 2,000,000 psi

3. Tension Parallel to Grain: 2,025 psi

4. Compression Parallel to Grain: 2,900 psi

5. Compression Perpendicular to Grain: 750 psi perpendicular to and 475 psi and parallel to wide face of strands.

6. Horizontal Shear: 210 psi perpendicular to and 290 psi and parallel to wide face of strands.

D. Prefabricated Wood I-Joists: Units manufactured by bonding stress-graded lumber flanges to wood-based structural-use panel webs with exterior-type adhesives complying with ASTM D2559, produce I-shaped joists complying with the following requirements:

1. Flange Material: Laminated-veneer lumber.

2. Flange Material: Southern pine dimension lumber.

3. Flange Material: Spruce-pine-fir dimension lumber.

4. Flange Material: Any material indicated above, as standard with joist manufacturer.

5. Web Material: Oriented-strand board (OSB) complying with DOC PS 2.

6. Web Material: Plywood complying with DOC PS 2.

7. Web Material: Either material indicated above, as standard with joist manufacturer.

8. Provide continuous "Microllam LVL flanges", by iLevel by Weyerhaeuser or approved substitution by other listed manufacturers free from finger or scarf joints for the length of the joists.

9. Provide webs manufactured from "Performance Plus Panels", by iLevel by Weyerhaeuser, or approved substitution by other listed manufacturers, with saw tooth edge detail interlocked and glued at panel joints. Joist web material must not exceed 12% tested average thickness swell due to moisture.

10. Structural Capacities: Establish and monitor structural capacities according to ASTM D5055.

11. Sizes: Depths and widths as indicated, with flanges not less than 1-1/2 inches in actual width.

E. Prefabricated Wood Rim Joists:

1. “Timberstrand LSL Rim Joist” as manufactured by iLevel by Weyerhaeuser or approved substitution by other listed manufacturers.

2. Construction: Solid 1-1/2” thick piece of laminated strand lumber sized to match depth of joist.

3. Design Values:

   a. MOE = 1.3×10^6

   b. Vertical Load transfer = 3450 plf (Governed by most restrictive capacity of member or wood plate below)

   c. Lateral Load transfer = 240 plf

4. (Case 1) and 180 plf (Case 3), as governed by horizontal diaphragm.

F. Microllam LVL Beams:

1. “Microllam LVL” as manufactured by iLevel by Weyerhaeuser or approved substitution by other listed manufacturers.

2. Construction: Continuous laminated veneer lumber free from finger or scarf joints. Stress graded veneers bonded with waterproof adhesive with face grain parallel to each adjacent layer. Provide Watershed Overlay coating and edge seal to prevent cupping and moisture damage.

3. Design Values:
    a. MOE = 1.9 x 10^6 psi
    b. Fb = 2600 psi (for 12" depth)
    c. Fc1 = 750 psi
    d. Fv = 285 psi.

G. Parallam PSL Beams:
1. "Parallam PSL" as manufactured by iLevel by Weyerhaeuser, or approved substitution by other listed manufacturers.
2. Construction: Continuous parallel strand lumber bonded with waterproof adhesives and formed into billets. Beams shall be of single ply construction and free from finger joints or splices for full length of span.
3. Design Values:
    a. MOE = 2.0 x 10^6 psi
    b. Fb - 2900 psi (for 12" depth)
    c. Fc1 = 750 psi
    d. Fv = 290 psi.

H. Laminated Strand Lumber (LSL) Headers:
1. "Timberstrand LSL Headers" as manufactured by iLevel by Weyerhaeuser, or approved substitution by other listed manufacturers.
2. Construction: Laminated strand lumber; strands of aspen or yellow poplar bonded with waterproof resins; cured using a steam injection process.
3. Design Values for depths 9.25" or greater:
    a. MOE = 1.5 x 10^6 psi
    b. Fb = 2250 psi (for 12" depth)
    c. Fc1 = 775 psi
    d. Fv = 400 psi .
4. Design Values for depths less than 9.25":
    a. MOE = 1.3 x 10^6 psi
    b. Fb = 1700 psi (for 12" depth)
    c. Fc1 = 680 psi
    d. Fv = 400 psi .

2.08 WOOD-BASED STRUCTURAL-USE PANELS, GENERAL

A. Structural-Use Panel Standards: Provide either all-veneer, mat-formed, or composite panels complying with DOC PS 2, "Performance Standard for Wood-Based Structural-Use Panels," unless otherwise indicated. Provide plywood panels complying with DOC PS 1, "U.S. Product Standard for Construction and Industrial Plywood," where plywood is indicated.

B. Trademark: Factory mark structural-use panels with APA trademark evidencing compliance with grade requirements.

2.09 CONCEALED, PERFORMANCE-RATED STRUCTURAL-USE PANELS

A. General: Where structural-use panels are indicated for the following concealed types of applications, provide APA-performance-rated panels complying with requirements designated under each application for grade, span rating, exposure durability classification, and edge detail (where applicable).

1. Thickness: Provide panels meeting requirements specified but not less than thickness indicated.

2. Span Ratings: Provide panels with span ratings required to meet "Code Plus" provisions of APA Form No. E30, "APA Design/Construction Guide: Residential & Commercial."

B. Combination Subfloor-Underlayment: APA-rated Sturd-I-Floor.

1. Exposure Durability Classification: Exposure 1.

2. Span Rating: As indicated.

3. Minimum Thickness: 23/32 inches.

4. Edge Detail: Tongue and grove

5. Surface Finish: Fully sanded face.

C. Combination Subfloor-Underlayment: Oriented-Stand-Board.

1. Exposure Durability Classification: Exposure 1.

2. Span Rating: As indicated.

3. Minimum Thickness: 23/32 inches.

4. Edge Detail: Tongue and grove

D. Subflooring: APA-rated plywood sheathing.

1. Exposure Durability Classification: Exposure 1.

2. Span Rating: As indicated.

3. Minimum Thickness: 23/32 inches.

4. Edge Detail: Tongue and grove

E. Subflooring: Oriented-Strand-Board.

1. Exposure Durability Classification: Exposure 1.

2. Span Rating: As indicated.

3. Minimum Thickness: 23/32 inches.

4. Edge Detail: Tongue and grove

F. Wall Sheathing: Where indicated on drawings, provide APA-rated plywood sheathing.

1. Exposure Durability Classification: Exposure 1, Structural I.

2. Span Rating: 16/0 - 16 for stud spacing of 16 inches or less.

3. Minimum Thickness: As shown on Drawings.

G. Wall Sheathing - Oriented-Strand-Board:

1. Exposure Durability Classification: Exposure 1, Structural I

2. Span Rating: 16/0

3. Minimum Thickness: As shown on Drawings.

H. Roof Sheathing: APA-rated plywood sheathing.

1. Exposure Durability Classification: Exposure 1, Structural I.
2. Span Rating: Not less than 16/0.
3. Minimum Thickness: 15/32 inches.

I. Roof Sheathing - Oriented-Strand-Board:

1. Exposure Durability Classification: Exposure 1, Structural I
2. Span Rating: 16/0
3. Minimum Thickness: As shown on Drawings.

2.10 STRUCTURAL-USE PANELS FOR BACKING

A. Plywood Backing Panels: For mounting electrical or telephone equipment, provide fire-retardant-treated plywood panels with grade, C-D Plugged Exposure 1, in thickness indicated or, if not otherwise indicated, not less than 15/32 inch thick.

2.11 STRUCTURAL-USE PANELS FOR UNDERLAYMENT

A. General: Over smooth subfloors, provide underlayment not less than 1/4 inch thick. Over board or uneven subfloors, provide underlayment not less than 11/32 inch thick.

B. Plywood Underlayment for Resilient Flooring: For underlayment under 19/32 inch-thick, provide plywood panels with fully sanded face and as follows:

1. Grade: APA Underlayment Exposure 1.

2.12 GYPSUM SHEATHING

A. Glass-Fiber-Surfaced Gypsum Sheathing Board: Gypsum sheathing board consisting of noncombustible gypsum core incorporating a water-resistant material, surfaced on face and back with glass-fiber mats with alkali-resistant coating, and with unsurfaced square edges; complying with ASTM C1177, and requirements indicated below:

1. Type: Regular or as noted on the drawings.
2. Thickness: 5/8” unless indicated otherwise.

2.13 EXTRUDED-POLYSTYRENE-FOAM WALL SHEATHING

A. Extruded-Polystyrene-Foam Wall Sheathing: ASTM C578, Type IV, in manufacturer's standard lengths and widths with tongue-and-groove or shiplap long edges as standard with manufacturer.

1. Thickness: As shown on Drawings.

2.14 FASTENERS

A. General: Provide fasteners of size and type indicated that comply with requirements specified in this Article for material and manufacture.

1. Where rough carpentry is exposed to weather, in ground contact, or in area of high relative humidity, provide fasteners with a hot-dip zinc coating per ASTM A153 or of Type 304 stainless steel.
2. For fasteners and hardware used with treated wood products, comply with manufacturer’s recommendations for their intended use.

B. Nails, Wire, Brads, and Staples: ASTM F1667.

C. Power-Driven Fasteners: NES NER-272.

D. Wood Screws: ASME B18.6.1.

E. Screws for Fastening Wood Structural Panels to Cold-Formed Metal Framing: ASTM C954, except with wafer heads and reamer wings, length as recommended by screw manufacturer for material being fastened.

1. For wall and roof sheathing panels, provide screws with organic-polymer or other corrosion-protective coating having a salt-spray resistance of more than 800 hours according to ASTM B117.

F. Screws for Fastening Gypsum Sheathing to Cold-Formed Metal Framing: Steel drill screws, in length recommended by sheathing manufacturer for thickness of sheathing board to be attached, with organic-polymer or other corrosion-protective coating having a salt-spray resistance of more than 800 hours according to ASTM B117. Attach sheathing to comply with ASTM C954.

G. Lag Bolts: ASME B18.2.1.

H. Bolts: Steel bolts complying with ASTM A307, Grade A; with ASTM A563 hex nuts and, where indicated, flat washers.

2.15 METAL FRAMING ANCHORS

A. General: Provide galvanized steel framing anchors of structural capacity, type, and size indicated and as follows:

1. Research or Evaluation Reports: Provide products for which model code research or evaluation reports exist that are acceptable to authorities having jurisdiction and that evidence compliance of metal framing anchors for application indicated with building code in effect for Project.

2. Allowable Design Loads: Provide products with allowable design loads, as published by manufacturer, that meet or exceed those indicated. Manufacturer's published values shall be determined from empirical data or by rational engineering analysis, and demonstrated by comprehensive testing performed by a qualified independent testing agency.

3. For metal framing anchors used with treated wood products, comply with manufacturer's recommendations for their intended use.

B. Galvanized Steel Sheet: Hot-dip, zinc-coated steel sheet complying with ASTM A653, G60 coating designation; structural, commercial, or lock-forming quality, as standard with manufacturer for type of anchor indicated.

C. Joist Hangers: U-shaped joist hangers with 2-inch-long seat and 1-1/4-inch-wide nailing flanges at least 85 percent of joist depth.

1. Thickness: 0.052 inch.

2. Thickness: 0.064 inch.

D. Top Flange Hangers: U-shaped joist hangers, full depth of joist, formed from metal strap with tabs bent to extend over and be fastened to supporting member.

1. Strap Width: 2 inches.

2. Thickness: 0.052 inch.

3. Thickness: 0.064 inch.

4. Designed for connection of engineered wood products, sized to support design loads.

E. Bridging: Rigid, V-section, nailless type, 0.064 inch thick, length to suit joist size and spacing.

F. Post Bases: Adjustable-socket type for bolting in place with standoff plate to raise post 1 inch above base and with 2-inch minimum side cover, socket 0.064 inch thick, standoff and adjustment plates 0.108 inch thick.

G. Joist Ties: Flat straps, with holes for fasteners, for tying joists together over supports.

1. Width: 1-1/4 inches.
2. Thickness: 0.052 inch.
3. Thickness: 0.064 inch.
4. Length: As indicated.

H. Rafter Tie-Downs (Hurricane Ties): Bent strap tie for fastening rafters or roof trusses to wall studs below, 1-5/8 inches wide by 0.052 inch thick.

I. Floor-to-Floor Ties: Flat straps, with holes for fasteners, for tying upper floor wall studs to band joists and lower floor studs, 1-1/4 inches wide by 0.052 inch thick by 36 inches long.

J. Hold-Downs: Brackets for bolting to wall studs and securing to foundation walls with anchor bolts or to other hold-downs with threaded rods and designed with first of 2 bolts placed 7 bolt diameters from reinforced base.

1. Bolt Diameter: 5/8 inch.
2. Bolt Diameter: 3/4 inch.
3. Width: 2-1/2 inches.
4. Width: 3-3/16 inches.
5. Body Thickness: 0.108 inch.
6. Body Thickness: 0.138 inch.
7. Base Reinforcement Thickness: 0.180 inch.
8. Base Reinforcement Thickness: 0.239 inch.
9. Wall Bracing: T-shaped bracing made for letting into studs in saw kerf, 1-1/8 inches wide by 9/16 inch deep by 0.034 inch thick with hemmed edges.

K. Wall Bracing: Angle bracing made for letting into studs in saw kerf, 15/16 by 15/16 by 0.040 inch thick with hemmed edges.

2.16 MISCELLANEOUS MATERIALS

A. Sill-Sealer Gaskets: Glass-fiber-resilient insulation, fabricated in strip form, for use as a sill sealer; 1-inch nominal thickness, compressible to 1/32 inch; selected from manufacturer's standard widths to suit width of sill members indicated.

B. Adhesives for Field Gluing Panels to Framing: Formulation complying with APA AFG-01 that is approved for use with type of construction panel indicated by both adhesive and panel manufacturers.

C. Water-Repellent Preservative: NWWDA-tested and -accepted formulation containing 3-iodo-2-propynyl butyl carbonate (IPBC) as its active ingredient.

PART 3 EXECUTION

3.01 INSTALLATION, GENERAL

A. Discard units of material with defects that impair quality of rough carpentry and that are too small to use with minimum number of joints or optimum joint arrangement.

B. Set rough carpentry to required levels and lines, with members plumb, true to line, cut, and fitted.

C. Fit rough carpentry to other construction; scribe and cope as required for accurate fit. Correlate location of furring, nailers, blocking, grounds, and similar supports to allow attachment of other construction.

D. Apply field treatment complying with AWPA M4 to cut surfaces of preservative-treated lumber and plywood.

E. Securely attach rough carpentry work to substrate by anchoring and fastening as indicated, complying with the following:

1. Published requirements of metal framing anchor manufacturer.

2. "Recommended Nailing Schedule" of referenced framing standard and with AFPA's "National Design Specifications for Wood Construction." And "Details for Conventional Wood Frame Construction"

3. "Table 2304.9.1 - Fastening Schedule" of the International Building Code.

F. Secure blocking for roof edge systems, such as copings or gravel stops, in accordance with SPRI Wind Design Standards as specified in Section 07 62 00 “Flashing and Sheet Metal” and the requirements of the International Building Code.

G. Use common wire nails, unless otherwise indicated. Use finishing nails for finish work. Select fasteners of size that will not fully penetrate members where opposite side will be exposed to view or will receive finish materials. Make tight connections between members. Install fasteners without splitting wood; predrill as required.

H. Use hot-dip galvanized or stainless-steel nails where rough carpentry is exposed to weather, in ground contact, or in area of high relative humidity.

I. Countersink nail heads on exposed carpentry work and fill holes with wood filler.

3.02 WOOD GROUNDS, NAILERS, BLOCKING, AND SLEEPERS

A. Install wood grounds, nailers, blocking, and sleepers where shown and where required for screeding or attaching other work. Form to shapes shown and cut as required for true line and level of attached work. Coordinate locations with other work involved.

1. Wood blocking or nailers used to attach roof edge system components shall be designed and installed to resist the design wind load and shall be firmly attached to the masonry structure to provide a continuous load path in accordance with SPRI Wind Design Standards. For wood nailers wider than 6-inches fasteners shall be staggered to avoid splitting the wood.

B. Attach to substrates to support applied loading. Recess bolts and nuts flush with surfaces, unless otherwise indicated. Build into masonry during installation of masonry work. Where possible, anchor to formwork before concrete placement.

C. Install permanent grounds of dressed, preservative-treated, key-beveled lumber not less than 1-1/2 inches wide and of thickness required to bring face of ground to exact thickness of finish material. Remove temporary grounds when no longer required.

3.03 WOOD FURRING

A. Install plumb and level with closure strips at edges and openings. Shim with wood as required for tolerance of finish work.

1. Firestop furred spaces of walls at each floor level and at ceiling with wood blocking or noncombustible materials, accurately fitted to close furred spaces.

B. Furring to Receive Plywood Paneling: Install 1-by-3-inch nominal-size furring at 24 inches o.c., horizontally and vertically. Select furring with no knots capable of producing bent-over nails and damage to paneling.

C. Furring to Receive Gypsum Board: Install 1-by-2-inch nominal-size furring at 16 inches o.c., vertically.

3.04 WOOD FRAMING, GENERAL

A. Framing Standard: Comply with AFPA's "Manual for Wood Frame Construction," unless otherwise indicated.

B. Framing with Engineered Wood Products: Install engineered wood products to comply with manufacturer's written instructions.

C. Install framing members of size and at spacing indicated.

D. Do not splice structural members between supports.

E. Firestop concealed spaces of wood-framed walls and partitions at each floor level and at ceiling line of top story. Where firestopping is not inherent in framing system used, provide closely fitted wood blocks of 2-inch nominal-thickness lumber of same width as framing members.

F. Comply with Table 2304.9.1 and Section 2304 of the International Building Code for minimum fastening requirements of wood members, and published requirements of metal fastener manufacturer, whichever is more stringent.

3.05 WALL AND PARTITION FRAMING

A. General: Arrange studs so that wide face of stud is perpendicular to direction of wall or partition and narrow face is parallel. Provide single bottom plate and double top plates using members of 2-inch nominal thickness whose widths equal that of studs; except single top plate may be used for non-load-bearing partitions. Nail or anchor plates to supporting construction, unless otherwise indicated.

B. Construct corners and intersections with 3 or more studs. Provide miscellaneous blocking and framing as shown and as required to support facing materials, fixtures, specialty items, and trim.

1. Provide continuous horizontal blocking at midheight of single-story partitions and multistory partitions, using members of 2-inch nominal thickness and of same width as wall or partitions.

C. Frame openings with multiple studs and headers. Provide nailed header members of thickness equal to width of studs. Set headers on edge and support on jamb studs.

1. For non-load-bearing partitions, provide double-jamb studs with headers not less than 4-inch nominal depth for openings 36 inches and less in width, and not less than 6-inch nominal depth for wider openings.

2. For load-bearing walls, provide double-jamb studs for openings 72 inches and less in width, and triple-jamb studs for wider openings. Provide headers of depth shown or, if not shown, as recommended by AFPA's "Manual for Wood Frame Construction."

D. Provide bracing in exterior walls, at both walls of each external corner, full-story height, unless otherwise indicated. Provide one of the following:

1. Diagonal bracing at 45-degree angle using let-in 1-by-4-inch nominal-size boards or using metal bracing.

2. Plywood panels, not less than 48 by 96 inches applied vertically.

3. Performance-rated structural-use panels, not less than 48 by 96 inches applied vertically.

4. Particleboard sheathing panels, not less than 48 by 96 inches applied vertically.

5. In lieu of bracing at corners or at locations indicated, continuous gypsum sheathing may be provided in panels not less than 48 by 96 inches applied vertically.

6. In lieu of bracing at corners or at locations indicated, continuous fiberboard sheathing, intermediate type, may be provided in panels not less than 48 by 96 inches applied vertically.

3.06 FLOOR JOIST FRAMING

A. General: Install floor joists with crown edge up and support ends of each member with not less than 1-1/2 inches of bearing on wood or metal, or 3 inches on masonry. Attach floor joists as follows:

1. Where supported on wood members, by toe nailing or by using metal framing anchors.

2. Where framed into wood supporting members, by using wood ledgers as shown or, if not shown, by using metal joist hangers.

B. Fire Cuts: At joists built into masonry, bevel cut ends 3 inches and do not embed more than 4 inches.

C. Frame openings with headers and trimmers supported by metal joist hangers; double headers and trimmers where span of header exceeds 48 inches.

D. Do not notch in middle third of joists; limit notches to 1/6 depth of joist, 1/3 at ends. Do not bore holes larger than 1/3 depth of joist; do not locate closer than 2 inches from top or bottom.

E. Provide solid blocking of 2-inch nominal thickness by depth of joist at ends of joists unless nailed to header or band.

F. Lap members framing from opposite sides of beams, girders, or partitions not less than 4 inches or securely tie opposing members together. Provide solid blocking of 2-inch nominal thickness by depth of joist over supports.

G. Anchor members paralleling masonry with 1/4-by-1-1/4-inch metal strap anchors spaced not more than 96 inches o.c. extending over and fastening to 3 joists. Embed anchors at least 4 inches into masonry with ends bent at right angles 4 inches into grouted masonry.

H. Under jamb studs at openings, provide solid blocking between joist.

I. Under non-load-bearing partitions, provide double joists separated by solid blocking equal to depth of studs above.

1. Provide triple joists separated as above, under partitions receiving ceramic tile and similar heavy finishes or fixtures.

J. Provide bridging of type indicated below, at intervals of 96 inches o.c., between joists.

1. Diagonal wood bridging formed from bevel cut 1-by-3-inch nominal-size lumber, double-crossed and nailed both ends to joists.

2. Steel bridging installed to comply with bridging manufacturer's written instructions.

3. Bridging may be omitted where joist depth is 12-inch nominal size or less, and where indicated live load is 40 psf or less.

K. Prefabricated Wood I-Joists:

1. Comply with manufacturer’s written instructions for design, installation, and fastening.

2. Design Loads: Joists shall be sized to support loads indicated on drawings and reviewed by a Registered Engineer in the employ of the joist manufacturer.

3. Allowable deflection:

a. Floor Joists: L/480 live load deflection; L/240 total load deflection.

4. Permanently bond the subfloor to the joists using waterproof construction adhesive and nails.

5. End Bearing: 1-3/4” minimum bearing with Timberstrand LSL rim joist.

6. Intermediate bearing: 3-1/2” minimum bearing. Blocking panels shall be installed between the joists when load bearing walls are located above the bearing point.

L. Engineered Wood Beams

1. Comply with manufacturer's written instructions for design, installation, and fastening.
2. Design Loads: Beams shall be sized to support loads indicated on drawings.
3. Allowable deflection:
    a. Floor Beams: L360 live load deflection; L240 total load deflection.
    b. Roof Beams: L/180 total load deflection.
4. Protect wood members from direct contact with concrete or masonry.
5. Refer to manufacturers literature for connection of multiple plies of side loaded beams.

3.07 RAFTER AND CEILING JOIST FRAMING

A. Ceiling Joists: Install ceiling joists with crown edge up and complying with requirements specified above for floor joists. Face nail to ends of parallel rafters.

1. Where ceiling joists are at right angles to rafters, provide additional short joists perpendicular to rafters from wall plate to first joist; nail to ends of rafters and to top plate and nail to first joist or anchor with framing anchors or metal straps. Provide 1-by-8-inch nominal-size or 2-by-4-inch nominal-size stringers spaced 48 inches o.c. crosswise over main ceiling joists.

B. Rafters: Notch to fit exterior wall plates and toe nail or use metal framing anchors. Double rafters to form headers and trimmers at openings in roof framing, if any, and support with metal hangers. Where rafters abut at ridge, place directly opposite each other and nail to ridge member or use metal ridge hangers.

1. At valleys, provide double-valley rafters of size shown or, if not shown, of same thickness as regular rafters and 2 inches deeper. Bevel ends of jack rafters for full bearing against valley rafters.
2. At hips, provide hip rafter of size shown or, if not shown, of same thickness as regular rafters and 2 inches deeper. Bevel ends of jack rafters for full bearing against hip rafter.

C. Provide collar beams (ties) as shown or, if not shown, provide 1-by-6-inch nominal-size boards between every third pair of rafters, but not more than 48 inches o.c. Locate below ridge member, at third point of rafter span. Cut ends to fit roof slope and nail to rafters.

D. Provide special framing as shown for eaves, overhangs, dormers, and similar conditions, if any.

E. Prefabricated Wood I-Joists:

1. Comply with manufacturer's written instructions for design, installation, and fastening.
2. Design Loads: Joists shall be sized to support loads indicated on drawings and reviewed by a Registered Engineer in the employ of the joist manufacturer.
3. Allowable deflection:
    a. Roof Joists: L/360 live load deflection; L/240 total load deflection
4. Permanently bond the subfloor to the joists using waterproof construction adhesive and nails.
5. End Bearing: 1-3/4" minimum bearing with Timberstrand LSL rim joist.
6. Intermediate bearing: 3-1/2" minimum bearing. Blocking panels shall be installed between the joists when load bearing walls are located above the bearing point.

F. Engineered Wood Beams

1. Comply with manufacturer's written instructions for design, installation, and fastening.

2. Design Loads: Beams shall be sized to support loads indicated on drawings.
3. Allowable deflection:
    a. Floor Beams: L360 live load deflection; L240 total load deflection.
    b. Roof Beams: L/180 total load deflection.
4. Protect wood members from direct contact with concrete or masonry.
5. Refer to manufacturers literature for connection of multiple plies of side loaded beams.

3.08 STAIR FRAMING

A. Provide stair framing members of size, space, and configuration indicated or, if not otherwise indicated, to comply with the following requirements:
    1. Stringer Size: 2-by-12-inch nominal-size minimum.
    2. Notching: Notch stringers to receive treads, risers, and supports; leave at least 3-1/2 inches of effective depth.
    3. Stringer Spacing: At least 3 stringers for each 36-inch clear width of stair.
B. Provide stair framing that does not exceed the following variations between treads and risers within each flight:
    1. Adjacent Treads and Risers: 3/16 inch.
    2. Between Largest and Smallest Treads and Risers: 3/8 inch.

3.09 INSTALLATION OF STRUCTURAL-USE PANELS

A. General: Comply with applicable recommendations contained in APA Form No. E30K, "APA Design/Construction Guide: Residential & Commercial," for types of structural-use panels and applications indicated.
    1. Comply with "Code Plus" provisions of above-referenced guide.
B. Securely attach to substrate by fastening as indicated, complying with the following:
    1. ICC NER-272 for power-driven fasteners.
    2. Table 2304.9.1, "Fastening Schedule," in ICC's "International Building Code."
C. Do not bridge building expansion joints; cut and space edges of panels to match spacing of structural support elements.
D. Coordinate sheathing installation with installation of materials installed over sheathing so sheathing is not exposed to precipitation or left exposed at end of the workday when rain is forecast.
E. Fastening Methods: Fasten panels as indicated below:
    1. Combination Subflooring-Underlayment: Glue and nail to framing throughout.
    2. Subflooring: Glue and nail to framing throughout.
        a. Space panels 1/8 inch at edges and ends.
    3. Sheathing:
        a. Nail to wood framing.
        b. Screw to cold-formed metal framing.
        c. Space panels 1/8 inch at edges and ends.
    4. Underlayment: Nail to subflooring.
        a. Space panels 1/32 inch at edges and ends.

b. Fill and sand edge joints of underlayment receiving resilient flooring just before installing flooring.

5. Plywood Backing Panels: Nail or screw to supports.

6. Lay-out panels with face grain oriented perpendicular to the supporting members.

7. Install roof sheathing with panel cups at all edges.

3.10 GYPSUM SHEATHING

A. General: Install gypsum sheathing to comply with manufacturer's instructions, GA-253, and the following:

1. Cut boards at penetrations, edge, and other obstructions of the work. Fit tightly against abutting construction, except provide a 3/8" setback where non-load-bearing construction abuts structural elements.

2. Coordinate sheathing installation with flashing and joint sealant installation so that these combined materials are installed in the sequence and manner that prevents exterior moisture from passing through completed exterior wall assembly.

3. Apply fasteners so that screw heads bear tightly against face of gypsum sheathing boards, but do not cut into face paper.

4. Do not bridge building expansion joints with gypsum sheathing. Cut and space edges to match spacing of structural support elements.

B. Vertical Installation: Install four-foot-wide gypsum sheathing boards vertically with vertical edges centered over flanges of studs. Abut ends and edges of each board with those of adjoining boards. Screw-attach boards at perimeter and within field of board to each steel stud a follows:

1. Fasteners spaced approximately 8" o.c. and set-back 3/8" minimum from edges and ends of boards.

3.11 FOAM-PLASTIC SHEATHING INSTALLATION

A. Comply with manufacturer's written instructions.

B. Foam-Plastic Wall Sheathing: Install vapor-relief strips or equivalent for permitting escape of moisture vapor that otherwise would be trapped in stud cavity behind sheathing.

3.12 PROTECTION

A. Protect wood that has been treated with inorganic boron from weather. If inorganic boron treated wood becomes wet, apply EPA registered borate treatment to wood surfaces in accordance with manufacturers recommendations.

B. Protect Gypsum Sheathing from weather by covering exposed exterior surface, if required by manufacturer of gypsum sheathing.

END OF SECTION

SECTION 06 17 53 - SHOP-FABRICATED WOOD TRUSSES

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Triangular-Pitched Roof Trusses
2. Scissor Roof Trusses
3. Parallel-Chord Roof Trusses, Top-Chord Bearing
4. Parallel-Chord Roof Trusses, Bottom-Chord Bearing
5. Girder Trusses
6. Parallel-Chord Floor Trusses, Top-Chord Bearing
7. Parallel-Chord Floor Trusses, Bottom-Chord Bearing
8. Truss Accessories

B. Related Sections:

1. Section 05 50 00 - Metal Fabrications
2. Section 06 10 00 - Rough Carpentry permanent bracing

1.02 REFERENCES

A. ASTM International Publications:

1. A153 "Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware"
2. A307 "Standard Specification for Carbon Steel Bolts and Studs, 60 000 PSI Tensile Strength"
3. A563 "Standard Specification for Carbon and Alloy Steel Nuts"
4. A591 "Standard Specification for Steel Sheet, Electrolytic Zinc-Coated, for Light Coating Weight [Mass] Applications"
5. A653 "Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process"
6. A666 "Standard Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar"
7. A780 "Standard Practice for Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings"
8. A792 "Standard Specification for Steel Sheet, 55 % Aluminum-Zinc Alloy-Coated by the Hot-Dip Process"
9. F1667 "Standard Specification for Driven Fasteners: Nails, Spikes, and Staples"

B. The American Society of Mechanical Engineers (ASME) Publications:

1. B18.2.1 "Square and Hex Bolts and Screws, Inch Series"

C. American Wood-Preservers's Association (AWPA) Publications:

1. C2 "Lumber, Timber, Bridge Ties and Mine Ties - Preservative Treatment by Pressure Processes"
2. C9 "Plywood - Preservative Treatment by Pressure Process Document Number"

3. M4 "Standard for the Care of Preservative-Treated Wood Products Document Number"

D. Truss Plate Institute (TPI) / American National Standards Institute (ANSI) Publications:

1. ANSI/TP1 1, "National Design Standard for Metal-Plate-Connected Wood Truss Construction."

2. TPI HIB "Commentary and Recommendations for Handling Installing & Bracing Metal Plate Connected Wood Trusses."

3. TPI DSB "Recommended Design Specification for Temporary Bracing of Metal Plate Connected Wood Trusses."

1.03 DEFINITIONS

A. Metal-plate-connected wood trusses include planar structural units consisting of metal-plate-connected members fabricated from dimension lumber and cut and assembled before delivery to Project site.

1.04 PERFORMANCE REQUIREMENTS

A. Structural Performance: Engineer, fabricate, and erect metal-plate-connected wood trusses to withstand design loads within limits and under conditions required.

1. Design Loads: As indicated.

2. Design trusses to withstand design loads without deflections greater than the following:

a. Roof Trusses: Vertical deflection of 1/240 of span due to total load.

b. Roof Trusses: Horizontal deflection at reactions of 1-1/4 inches due to total load.

c. Floor Trusses: Vertical deflection of 1/480 of span due to live load.

B. Engineering Responsibility: Engage a fabricator who uses a qualified professional engineer to prepare calculations, Shop Drawings, and other structural data for metal-plate-connected wood trusses.

1.05 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

B. Product Data: For lumber, metal-plate connectors, metal framing connectors, bolts, and fasteners.

1. Submit “Letter of Conformance” in accordance with Section 01 33 00 (01330) indicating specified items selected for use in project.

C. Shop Drawings detailing location, pitch, span, camber, configuration, and spacing for each type of truss required; species, sizes, and stress grades of lumber to be used; splice details; type, size, material, finish, design values, and orientation and location of metal connector plates; and bearing details.

1. To the extent truss design considerations are indicated as fabricator's responsibility, include structural analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

2. Include truss Shop Drawings signed and sealed by the qualified professional engineer responsible for their preparation.

D. Product certificates signed by officer of truss fabricating firm certifying that metal-plate-connected wood trusses supplied for Project comply with specified requirements and Shop Drawings.

E. Qualification data for firms and persons specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.

F. Material test reports from a qualified independent testing agency indicating and interpreting test results relative to compliance of fire-retardant-treated wood products with requirements indicated.

G. Warranty of chemical treatment manufacturer for each type of treatment.

H. Material certificates for dimension lumber specified to comply with minimum allowable unit stresses. Indicate species and grade selected for each use and design values approved by the American Lumber Standards Committee (ALSC) Board of Review.

I. Wood treatment data as follows, including chemical treatment manufacturer's instructions for handling, storing, installing, and finishing treated materials:

1. For each type of preservative-treated wood product, include certification by treating plant stating type of preservative solution and pressure process used, net amount of preservative retained, and compliance with applicable standards.

2. For waterborne-treated products, include statement that moisture content of treated materials was reduced to levels indicated before shipment to truss fabricator.

3. For fire-retardant-treated wood products, include certification by treating plant that treated materials comply with specified standard and other requirements as well as data relative to bending strength, stiffness, and fastener-holding capacities of treated materials, all tested in accordance with ASTM D5664.

J. Research or evaluation reports of the model code organization acceptable to authorities having jurisdiction that evidence the following products' compliance with building code in effect for Project.

1. Fire-retardant-treated wood

2. Metal-plate connectors

3. Metal framing connectors

1.06 QUALITY ASSURANCE

A. Installer Qualifications: An experienced installer with a minimum of five years of experience, who has completed wood truss projects similar in material, design, and extent to that indicated for this Project and with a record of successful in-service performance.

B. Fabricator's Qualifications: Engage a firm that complies with the following requirements for quality control and is experienced in fabricating metal-plate-connected wood trusses similar to those indicated for this Project and with a record of successful in-service performance:

1. Fabricator participates in a recognized quality-assurance program that involves inspection by SPIB; Timber Products Inspection, Inc.; Truss Plate Institute (TPI); or other independent inspecting and testing agency acceptable to Architect and authorities having jurisdiction.

C. Comply with applicable requirements and recommendations of the following Truss Plate Institute (TPI) / American National Standards Institute (ANSI) publications:

1. ANSI/TP1 1, "National Design Standard for Metal-Plate-Connected Wood Truss Construction."

2. TPI HIB "Commentary and Recommendations for Handling Installing & Bracing Metal Plate Connected Wood Trusses."

3. TPI DSB "Recommended Design Specification for Temporary Bracing of Metal Plate Connected Wood Trusses."

D. Metal-Plate Connector Manufacturer's Qualifications: A manufacturer that is a member of TPI and that complies with TPI quality-control procedures for manufacture of connector plates published in ANSI/TP1 1.

E. Single-Source Responsibility for Connector Plates: Provide metal connector plates from one source and by a single manufacturer.

F. Wood Structural Design Standard: Comply with applicable requirements of AFPA's "Manual for The Wood Frame Construction Manual (WFCM) for One- and Two-Family Dwellings."

G. Single-Source Engineering Responsibility: Provide trusses engineered by metal-plate connector manufacturer to support superimposed dead and live loads indicated, with design approved and certified by a qualified professional engineer.

H. Professional Engineer Qualifications: A professional engineer who is legally authorized to practice in the jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated that have resulted in installing metal-plate-connected wood trusses similar to those indicated for this Project and with a record of successful in-service performance.

1.07 DELIVERY, STORAGE, AND HANDLING

A. Handle and store trusses with care and comply with manufacturer's written instructions and TPI recommendations to avoid damage and lateral bending.

B. Inspect trusses showing discoloration, corrosion, or other evidence of deterioration. Discard and replace trusses that are damaged or defective.

1.08 SEQUENCING AND SCHEDULING

A. Time delivery and erection of trusses to avoid extended on-site storage and to avoid delaying progress of other trades whose work must follow erection of trusses.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Approved Manufacturers:

1. Fire-Retardant-Treated Materials, Interior Type A:

a. "FirePRO"; Osmose, Inc. (800-241-0240)

b. Hoover Treated Wood Products, Inc. (877-722-6292), ext. 211

2. Fire-Retardant-Treated Materials, Exterior Type:

a. Hoover Treated Wood Products, Inc. (877-722-6292), ext. 211

3. Metal Connector Plates:
    a. Alpine Engineered Products, Inc. (800-735-8055)
    b. Mitek Industries, Inc. (800-325-8075)
    c. Truswal Systems Corporation (800-521-9790)
    d. USP Lumber Connectors (800-328-5934)
    e. Approved substitution
4. Metal Framing Anchors:
    a. Hilti, Inc. (800-879-8000)
    b. Mitek Industries, Inc. (800-325-8075)
    c. Truswal Systems Corporation (800-521-9790)
    d. USP Lumber Connectors (800-328-5934)
    e. Simpson Strong-Tie Company, Inc. (800-999-5099)
    f. Approved substitution

2.02 DIMENSION LUMBER

A. Lumber Standards: Comply with DOC PS 20, "American Softwood Lumber Standard," and with applicable grading rules of inspection agencies certified by ALSC's Board of Review.

B. Lumber Standards: Comply with DOC PS 20, "American Softwood Lumber Standard," and with applicable grading rules of inspection agencies certified by ALSC's Board of Review.
1. NELMA - Northeastern Lumber Manufacturers Association
2. NLGA - National Lumber Grades Authority (Canadian)
3. SPIB - Southern Pine Inspection Bureau
4. WCLIB - West Coast Lumber Inspection Bureau
5. WWPA - Western Wood Products Association

C. Grade Stamps: Provide lumber with each piece factory marked with grade stamp of inspection agency evidencing compliance with grading rule requirements and identifying grading agency, grade, species, moisture content at time of surfacing, and mill.

D. Provide dressed lumber, S4S, manufactured to actual sizes required by DOC PS 20 for moisture content specified, to comply with requirements indicated below:
1. Provide dry lumber with 19 percent maximum moisture content at time of dressing.

E. Grade and Species: Provide dimension lumber of any species for truss chord and web members, graded visually or mechanically, and capable of supporting required loads without exceeding allowable design values according to AFPA's "National Design Specification for Wood Construction" and its "Supplement."

2.03 WOOD-PRESERVATIVE-TREATED MATERIALS

A. General: Where lumber is indicated as preservative treated or is specified to be treated, comply with applicable requirements of AWPA C2 (lumber). Mark each treated item with the Quality Mark Requirements of an inspection agency approved by ALSC's Board of Review.
1. Lumber that is not in contact with the ground and is not used in areas subject to water comply with AWPA C31 with inorganic boron (SBX).
2. Do not use chemicals containing chromium or arsenic.

B. Pressure treat aboveground items with waterborne preservatives to a minimum retention of 0.25 lb/cu. ft. After treatment, kiln-dry lumber to a maximum moisture content of 19 percent.

C. Complete fabrication of treated items before treatment, where possible. If cut after treatment, apply field treatment complying with AWPA M4 to cut surfaces. Inspect each piece of lumber after drying and discard damaged or defective pieces.

2.04 FIRE-RETARDANT-TREATED MATERIALS

A. General: Where fire-retardant-treated wood is indicated, comply with applicable requirements of AWPA C20 (lumber). Identify fire-retardant-treated wood with appropriate classification marking of UL, U.S. Testing, Timber Products Inspection, or another testing and inspecting agency acceptable to authorities having jurisdiction.

1. Research or Evaluation Reports: Provide fire-retardant-treated wood acceptable to authorities having jurisdiction and for which a current model code research or evaluation report exists that evidences compliance of fire-retardant-treated wood for application indicated.

B. Interior Type A: For interior locations, use chemical formulation that produces treated lumber with the following properties under conditions present after installation:

1. Bending strength, stiffness, and fastener-holding capacities are not reduced below values published by manufacturer of chemical formulation under elevated temperature and humidity conditions simulating installed conditions when tested by a qualified independent testing agency.

2. No form of degradation occurs due to acid hydrolysis or other causes related to treatment.

3. Contact with treated wood does not promote corrosion of metal fasteners.

C. Exterior Type: Use for exterior locations and where indicated.

D. Inspect each piece of treated lumber after drying and discard damaged or defective pieces.

2.05 METAL CONNECTOR PLATES

A. General: Fabricate connector plates from metal complying with requirements indicated below.

B. Interior locations:

1. Hot-Dip Galvanized Steel Sheet: Structural-quality steel sheet, zinc coated by hot-dip process complying with ASTM A653, Structural Steel, (SS), high strength low alloy steel, Type A, G60 coating designation; Grade 33 and not less than 0.0359 inch thick.

2. Electrolytic Zinc-Coated Steel Sheet: ASTM A591, structural-(physical) quality steel sheet, zinc coated by electrodeposition; 33,000-psi minimum yield strength, coating class C, and not less than 0.0474 inch thick.

C. Exterior Locations, or where otherwise indicated:

1. Stainless-Steel Sheet: ASTM A666, Type 304 or 316, chromium nickel steel sheet; 33,000-psi minimum yield strength and not less than 0.035 inch thick.

2.06 FASTENERS

A. General: Provide fasteners of size and type indicated that comply with requirements specified below for material and manufacture.

1. Where truss members are exposed to weather, in ground contact or in high humidity areas, provide fasteners of stainless steel, Type 304 or 316.

B. Nails, Wire, Brads, and Staples: ASTM F1667.

C. Power-Driven Fasteners: ICC NER-272.

D. Wood Screws: ASME B18.2.1.

E. Lag Bolts and Screws: ASME B18.2.1.

F. Bolts: Steel bolts complying with ASTM A307, Grade A; with ASTM A563 hex nuts and, where indicated, flat washers.

G. Truss Tie-Downs: Bent strap tie for fastening roof trusses to wall studs below, 1-1/2 inches wide by 0.050 inch thick. Tie fastens to one side of truss, top plates, and side of stud below.

H. Truss Tie-Downs (Hurricane or Seismic Ties): Bent strap tie for fastening roof trusses to wall studs below, 2-1/4 inches wide by 0.062 inch thick. Tie fits over top of truss and fastens to both sides of truss, top plates, and one side of stud below.

I. Roof Truss Clips: Angle clips for bracing bottom chord of roof trusses at non-load-bearing walls, 1-1/4 inches wide by 0.050 inch thick. Clip is fastened to truss through slotted holes to allow for truss deflection.

J. Floor Truss Hangers: U-shaped hangers, full depth of floor truss, with 1-3/4-inch- long seat; formed from metal strap 0.062 inch thick with tabs bent to extend over and be fastened to supporting member.

2.07 METAL FRAMING ANCHORS

A. General: Provide metal framing anchors of structural capacity, type, size, metal, and finish indicated that comply with requirements specified, including the following:

1. Research or Evaluation Reports: Provide products for which model code research or evaluation reports exist that are acceptable to authorities having jurisdiction and that evidence compliance of metal framing anchors for application indicated with building code in effect for this Project.

2. Allowable Design Loads: Provide products with allowable design loads, as published by manufacturer, that meet or exceed those indicated. Manufacturer's published values shall be determined from empirical data or by rational engineering analysis, and demonstrated by comprehensive testing performed by a qualified independent testing agency.

B. Galvanized Steel Sheet: Hot-dip, zinc-coated steel sheet complying with ASTM A653, G60 coating designation; structural, commercial, or lock-forming quality, as standard with manufacturer for type of anchor indicated.

C. Stainless-Steel Sheet: ASTM A666, Type 304 or 316, chromium nickel steel sheet; 33,000-psi minimum yield strength.

2.08 MISCELLANEOUS MATERIALS

A. Galvanizing Repair Paint: SSPC-Paint 20 or DOD-P-21035, with dry film containing a minimum of 94 percent zinc dust by weight.

2.09 FABRICATION

A. Cut truss members to accurate lengths, angles, and sizes to produce close-fitting joints.

B. Fabricate metal connector plates to size, configuration, thickness, and anchorage details required to withstand design loadings for types of joint designs indicated.

C. Assemble truss members in design configuration indicated using jigs or other means to ensure uniformity and accuracy of assembly with joints closely fitted to comply with tolerances of ANSI/TP1 1. Position members to produce design camber indicated.

1. Fabricate wood trusses within manufacturing tolerances of ANSI/TP1 1.

D. Connect truss members by metal connector plates located and securely embedded simultaneously into both sides of wood members by air or hydraulic press.

PART 3 EXECUTION

3.01 INSTALLATION

A. Do not install wood trusses until supporting construction is in place and is braced and secured. B. Before installing, splice trusses delivered to Project site in more than one piece.

C. Hoist trusses in place by lifting equipment suited to sizes and types of trusses required, exercising care not to damage truss members or joints by out-of-plane bending or other causes.

D. Install and brace trusses according to recommendations of TPI and as indicated.

E. Install trusses plumb, square, and true to line and securely fasten to supporting construction.

F. Space, adjust, and align trusses in location before permanently fastening and as indicated on drawings.

G. Anchor trusses securely at all bearing points using metal framing anchors. Install fasteners through each fastener hole in metal framing anchor according to manufacturer's fastening schedules and written instructions.

H. Securely connect each truss ply required for forming built-up girder trusses.

1. Anchor trusses to girder trusses as indicated.

I. Install and fasten permanent bracing during truss erection and before construction loads are applied. Anchor ends of permanent bracing where terminating at walls or beams.

1. Install and fasten strongback bracing vertically against vertical web of parallel-chord floor trusses at centers indicated on Drawings.

J. Install wood trusses within installation tolerances of ANSI/TP1

1. K. Do not cut or remove truss members.

L. Return wood trusses that are damaged or do not meet requirements to fabricator and replace with trusses that do meet requirements.

1. Do not alter trusses in the field.

3.02 REPAIRS AND PROTECTION

A. Repair damaged galvanized coatings on exposed surfaces with galvanized repair paint according to ASTM A780 and manufacturer's written instructions.

B. Protective Coating: Clean and prepare exposed surfaces of embedded-metal connector plates. Brush apply primer, when part of coating system, and one coat of protective coating.

1. Apply materials to provide minimum dry film thickness recommended by manufacturer of coating system.

END OF SECTION

SECTION 06 20 00 - FINISH CARPENTRY

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Wood Millwork
    a. Interior Standing and Running Trim
    b. Exterior Standing and Running Trim
2. Wood Shelving

B. Related Sections:

1. Section 32 31 29 - Wood Fences and Gates
2. Section 06 10 00 - Rough Carpentry
3. Section 09 21 16 - Gypsum Board Assemblies
4. Section 09 90 00 - Painting
5. Section 12 30 00 - Architectural Woodwork

1.02 REFERENCES

A. American Wood Council / American Forest & Paper Association (AF&PA) Publications:

1. ANSI/AF&PA NDS-2005: "National Design Specification (NDS) for Wood Construction".

B. Architectural Woodwork Institute (AWI) Publications:

1. "Architectural Woodwork Quality Standards"

C. American Wood-Preservers's Association (AWPA) Publications:

1. C20 "Structural Lumber - Fire-Retardant Treatment by Pressure Processes"

D. ASTM International Publications:

1. E84-03: Test Method for Surface-Burning Characteristics of Building Materials
2. A153 "Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware"
3. C1185 "Standard Test Methods for Sampling and Testing Non-Asbestos Fiber-Cement Flat Sheet, Roofing and Siding Shingles, and Clapboards."
4. C1186 "Standard Specification for Flat Non-Asbestos Fiber-Cement Sheets."

E. U.S. Department of Commerce, National Institute of Standards and Technology (NIST)

1. DOC PS 1 "Construction and Industrial Plywood"
2. DOC PS 20 "American Softwood Lumber Standard"

F. Hardwood Plywood & Veneer Association (HPVA)

1. ANSI/HPVA HP-1: "American National Standard for Hardwood and Decorative Plywood"

1.03 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

B. Submit “Letter of Conformance” in accordance with Section 01 33 00 (01330) indicating specified items selected for use in project with the following supporting data.

1. Product Data indicating component profiles and fastening and joining details.
2. Samples for initial selection of the following in the form of manufacturer's color charts consisting of actual units or sections of units showing the full range of colors, textures, and patterns available for each type of material indicated.
3. Samples for verification of the following:
    a. Lumber products with factory-applied finish, 50 sq. in. for lumber for each finish system and color.
    b. Linear Moldings: 2-foot-long section with finished joint. Show complete pattern.
    c. Nonlinear Shapes: Full-size unit.
4. Shop Drawings: Show profiles, thicknesses, finishes, joints, ornamentation, installation tolerances, and anchorage details. Indicate attachment methods, embedded supports, reinforcement, fabrication methods, joint treatments, clearances, and supports.
    a. Show connection to suspension system and cutouts for sprinklers, diffusers, grilles, speakers, and lighting fixtures.

1.04 QUALITY ASSURANCE

A. Factory-mark each piece of lumber and plywood with type, grade, mill, and grading agency identification; except omit marking from surfaces to receive transparent finish, and submit mill certificate that material has been inspected and graded in accordance with requirements if it cannot be marked on a concealed surface.

B. Perform finish carpentry work in accordance with AWI Quality Standards, Custom Grade.

C. Fire-Test-Response Characteristics: Provide glass-reinforced gypsum fabrications with the following surface-burning characteristics as determined by testing identical products per ASTM E84 by UL or another independent testing and inspecting agency acceptable to authorities having jurisdiction:
1. Flame Spread: 25 or less.
2. Smoke Developed: 450 or less.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Protect finish carpentry materials during transit, delivery, storage, and handling to prevent damage, soiling, and deterioration.

B. Do not deliver finish carpentry materials, until painting, wet work, grinding, and similar operations which could damage, soil, or deteriorate woodwork have been completed in installation areas. If, due to unforeseen circumstances, finish carpentry materials must be stored in other than installation areas, store only in areas meeting requirements specified for installation areas.

C. Ship and store glass-reinforced gypsum fabrications in factory-wrapped crates, packaged to keep units dry. Avoid cracking, warping, or staining the units.

1.06 PROJECT CONDITIONS

A. Conditioning: Installer shall advise Contractor of temperature and humidity requirements for finish carpentry installation areas.

B. Environmental Limitations: Do not deliver or install interior finish carpentry until building is enclosed and weatherproof, wet-work in space is completed and nominally dry, and HVAC system is operating and will maintain temperature and relative humidity at occupancy levels throughout the remainder of construction period.
1. Maintain temperature and humidity in installation area as required to maintain moisture content of installed finish carpentry within a 1.0 percent tolerance of optimum moisture

content, from date of installation through remainder of construction period. The fabricator of woodwork shall determine optimum moisture content and required temperature and humidity.

2. Acclimatize glass-reinforced gypsum fabrications to ambient temperature and humidity of spaces in which they will be installed. Remove packaging and move units into installation spaces not less than 48 hours before installing them.

C. Weather Limitations: Proceed with installing exterior finish carpentry only when existing and forecasted weather conditions will permit work to be performed according to manufacturer's recommendations and warranty requirements and at least one coat of specified finish to be applied without exposure to rain, snow, or dampness.

D. Field Measurements: Where glass-reinforced gypsum fabrications are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication and indicate measurements on Shop Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

1.07 COORDINATION

A. Coordinate layout and installation of glass-reinforced gypsum fabrications and suspension system components with other construction, including ceilings, light fixtures, HVAC equipment, fire-suppression-system components, and partition assemblies.

PART 2 PRODUCTS

2.01 MATERIALS, GENERAL

A. Lumber Standards: Comply with DOC PS 20, "American Softwood Lumber Standard," and with applicable grading rules of inspection agencies certified by ALSC's Board of Review.

B. Inspection Agencies: Inspection agencies, and the abbreviations used to reference them, include the following:

1. Northeastern Lumber Manufacturers Association (NeLMA)
2. National Lumber Grades Authority (Canadian) (NLGA)
3. Redwood Inspection Service (RIS)
4. SPIB - Southern Pine Inspection Bureau
5. West Coast Lumber Inspection Bureau (WCLIB)
6. Western Wood Products Association (WWPA)

C. Grade Stamps: Provide lumber with each piece factory marked with grade stamp of inspection agency evidencing compliance with grading rule requirements and identifying grading agency, grade, species, moisture content at time of surfacing, and mill.

1. For exposed lumber, furnish pieces with grade stamps applied to ends or back of each piece, or omit grade stamps entirely and provide certificates of grade compliance issued by inspection agency.

D. Softwood Plywood: Comply with DOC PS 1, "U.S. Product Standard for Construction and Industrial Plywood."

E. Hardwood Plywood: Comply with ANSI/HPVA HP-1, "Interim Voluntary Standard for Hardwood and Decorative Plywood."

2.02 INTERIOR STANDING AND RUNNING TRIM

A. Hardwood Lumber: PS 58; Premium Grade in accordance with AWI; maximum moisture content of 15 percent.

1. Stained Interior Wood Trim and Millwork: Species as shown below, solid lumber stock, sizes and shapes shown on Drawings, of grain type sufficient to receive stained finish, smooth surfaced.

    a. In all Public Areas, species of wood used for Stained Interior Wood Trim and Millwork shall match species of wood used for wood doors. Refer to Section 08 14 00, provide one of the following:

        1) Hard Maple - "Select White" (Sapwood), Grade 1

        2) Yellow Birch - "Select White" (Sapwood), Grade 1

2. Painted Interior Wood Trim and Millwork: Species as shown below, solid lumber stock, sizes and shapes shown on Drawings, of grain type sufficient to receive painted finish, smooth surfaced.

    a. Poplar, Paint Grade.

B. Nominal sizes are indicated, except as shown by detailed dimensions. Provide dressed or worked and dressed lumber, as applicable, manufactured to the actual sizes as required by PS 20 or to actual sizes and patterns as shown, unless otherwise indicated.

2.03 WOOD EXTERIOR STANDING AND RUNNING TRIM

A. Lumber Trim: Provide finished lumber and moldings complying with the following requirements including those of the grading agency listed with species:

1. Species: Redwood or Western Red Cedar; WCLIB, grade as follows:

    a. Cedar Grade: Select and Quality Knotty

    b. Redwood Grade: Clear

2. Texture: Smooth surfaced

3. Lumber for Transparent Finish (Stained or Clear): Solid lumber stock.

B. Nominal sizes are indicated, except as shown by detailed dimensions. Provide dressed or worked and dressed lumber, as applicable, manufactured to the actual sizes as required by PS 20 or to actual sizes and patterns as shown, unless otherwise indicated.

2.04 MISCELLANEOUS MATERIALS

A. Fasteners and Anchorages: Provide nails, screws, and other anchoring devices of the type, size, material, and finish required for application indicated to provide secure attachment, concealed where possible, and complying with applicable Federal Specifications. Provide in sufficient length to penetrate minimum of 1-1/2 inches into substrate, unless otherwise recommended by manufacturer.

1. Where finish carpentry is exposed on exterior or in areas of high relative humidity, provide fasteners and anchorages with a hot-dipped zinc coating complying with ASTM A153, or stainless steel.

2.05 SHEET MATERIALS

A. Shelving: 3/4" thick by width shown on Drawings, Hardwood Plywood; custom grade in accordance with AWI; core material of veneer; type of bond recommended for application; with minimum 3/4" x 1-1/4" hardwood nosing.

B. Softwood Plywood: DOC PS 1, Medium Density Overlay.

2.06 FIRE RETARDANT TREATED (FRT) LUMBER

A. Approved Manufacturers:

1. Lumber:

a. Dricon FRT"; Lonza Wood Protection (678-627-2000)

b. "Pyro-Guard"; Hoover Treated Wood Products, Inc. (877-722-6292, ext. 211)

c. "FirePRO FR Lumber"; Osmose Wood Preserving, Inc. (404-228-8434)

2. Plywood:

a. "FRX Exterior FRT"; Lonza Wood Protection (678-627-2000)

b. "Exterior Fire-X"; Hoover Treated Wood Products, Inc. (877-722-6292, ext. 211)

B. Comply with performance requirements in AWPA C20, Exterior type. Kiln dry after treatment to a maximum moisture content of 19 percent.

C. Flamespread and smoke developed ratings of 25 or less by ASTM E84, with no sign of progressive combustion when test is extended to 30 minutes.

D. Toxicity/IEQ: Fire-retardant-treated wood products shall be free of halogens, sulfates, ammonium phosphate and formaldehyde.

2.07 FABRICATION – WOOD FINISH CARPENTRY

A. Wood Moisture Content: Comply with requirements of specified inspection agencies and manufacturer's recommendations for moisture content of finish carpentry on relative humidity conditions existing during time of fabrication and in installation areas.

B. Fabricate finish carpentry to dimensions, profiles, and details indicated.

1. Back out or kerf backs of the following members, except members with ends exposed in finished work:

a. Interior standing and running trim, except shoe mold and crown mold.

2. Ease edges of lumber less than 1 inch (25 mm) in nominal thickness to 1-1/6 inch (1.5 mm) radius.

PART 3 EXECUTION

3.01 EXAMINATION

A. Examine substrates, with Installer present, for compliance with requirements for installation tolerance and other conditions affecting installation and performance of finish carpentry. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.02 PREPARATION

A. Clean substrates of projections and substances detrimental to application.

B. Condition finish carpentry to average prevailing humidity conditions in installation areas before installation, for a minimum of 24 hours unless longer conditioning is recommended by manufacturer.

C. Prime and backprime lumber for painted finish exposed on the exterior not indicated as factory prefinished. Comply with requirements for surface preparation and application in Division 09 Section "Painting."

D. Ensure that all electrical or other services are in place.

3.03 INSTALLATION – FINISH CARPENTRY

A. Discard units of material which are unsound, warped, bowed, twisted improperly treated, not adequately seasoned or too small to fabricate work with minimum of joints or optimum jointing arrangements. Do not use manufactured units with defective surfaces, sizes, or patterns.

B. Install the work plumb, level, true, and straight with no distortions. Shim as required using concealed shims. Install to a tolerance of 1/8" in 8'-0" for plumb and level countertops; and with 1/16" maximum offset in flush adjoining 1/8" maximum offsets in revealed adjoining surfaces.

C. Scribe and cut work to fit adjoining work, and refinish cut surfaces or repair damaged finish at cuts.

D. Countersink nails, fill surface flush, and sand where face nailing is unavoidable.

E. Install to tolerance of 1/8 inch in 96 inches for plumb and level. Install adjoining finish carpentry with 1/32 inch maximum offset for flush installation and 1/16 inch maximum offset for reveal installation.

F. Coordinate finish carpentry with materials and systems in or adjacent to standing and running trim and rails. Provide cutouts for mechanical and electrical items that penetrate exposed surfaces of trim and rails.

G. Finish according to specified requirements.

H. Anchor finish carpentry work to anchorage devices or blocking built-in or directly attached to substrates. Secure to grounds, stripping and blocking with countersunk, concealed fasteners and blind nailing as required for a complete installation. Except where prefinished matching fastener heads are required, use fine finishing nails for exposed nailings, countersunk and filled flush with finished surface, and matching final finish where transparent is indicated.

3.04 STANDING AND RUNNING TRIM INSTALLATION

A. Install with minimum number of joints practical, using full-length pieces from maximum lengths of lumber available. Do not use pieces less than 24 inches (610 mm) long, except where necessary. Stagger joints in adjacent and related standing and running trim. Cope at returns and miter at corners to produce tight-fitting joints with full-surface contact throughout length of joint. Use scarf joints for end-to-end joints. Plane backs of casings to provide uniform thickness across joints, if required.

1. Match color and grain pattern across joints.
2. Install trim after gypsum board joint finishing operations are completed.
3. Drill pilot holes in hardwood before fastening to prevent spitting. Fasten to prevent movement or warping. Countersink fastener heads on exposed carpentry work and fill holes.
4. Fit exterior joints to exclude water. Apply flat grain lumber with bark side exposed to weather.

3.05 ADJUSTMENT, CLEANING, FINISHING, AND PROTECTION

A. Repair damaged and defective finish carpentry work wherever possible to eliminate defects functionally and visually; where not possible to repair properly, replace woodwork. Adjust joinery for uniform appearance.

B. Clean finish carpentry work on exposed and semi-exposed surfaces. Touch-up factory-applied finishes to restore damaged or soiled areas.

C. Preparation for Finishing: Sand work smooth and set all nails and screws. Apply wood filler in exposed nail and screw indentations.

D. Cleaning: Keep premises in a neat, safe, and orderly condition at all times during execution of this portion of the work, free from the accumulation of sawdust, cut-ends, and debris.

E. Refer to Division 09 sections for final finishing of installed finish carpentry work.

F. Protection: Installer of finish carpentry work shall advise Contractor of final protection and maintained conditions necessary to ensure that work will be without damage or deterioration at time of acceptance.

END OF SECTION

SECTION 06 61 13 - CULTURED MARBLE FABRICATIONS

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Cast Polymer

a. Tub and Shower Surrounds

B. Related Sections:

1. Section 06 10 00 - Rough Carpentry
2. Section 06 20 00 - Finish Carpentry
3. Section 12 35 30.13 - Kitchen Casework
4. Section 12 36 40 - Cut Natural Stone Tile: Granite Countertops
5. Division 22 for Plumbing Fixtures

1.02 REFERENCES

A. ASTM International (ASTM) Publications:

1. E84 "Standard Test Method for Surface Burning Characteristics of Building Materials"

B. Architectural Woodwork Institute (AWI) Publications:

1. "Architectural Woodwork Quality Standards"

C. Federal Specifications (FS) Publications:

1. FS MMM-A-130 - Adhesive, Contact

1.03 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

B. Submit “Letter of Conformance” in accordance with Section 01 33 00 indicating specified items selected for use in project with the following supporting data.

1. Include materials, component profiles, fastening methods, assembly methods, joint details, accessory listings, and schedule of finishes.

a. Include data for fire-retardant treatment from chemical treatment manufacturer and certification by treating plant that treated materials comply with requirements.

1.04 QUALITY ASSURANCE

A. Tub/Shower surrounds, window stools, and lavatory/vanity countertops shall be supplied by one manufacturer. Where shown to be the same color, the color of the components shall match for all items. Refer to Interior Finish Index for colors.

B. Allowable Tolerances:

1. Variation in component size: +/- 1/8 inch.
2. Location of openings: +/- 1/8 inch from indicated location.

C. Perform work to (custom) quality in accordance with "Quality Standards" of the Architectural Woodwork Institute (AWI).

D. Fire-Test-Response Characteristics: Where fire-retardant materials or products are indicated, provide materials and products with specified fire-test-response characteristics as determined by testing identical products per test method indicated by UL, ITS, or another testing and inspecting agency acceptable to authorities having jurisdiction. Identify with appropriate markings of applicable testing and inspecting agency in the form of separable paper label or, where required by authorities having jurisdiction, imprint on surfaces of materials that will be concealed from view after installation.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Do not deliver cast polymer materials until painting and similar operations that could damage synthetic marble have been completed in installation areas. If cast polymer materials must be stored in other than installation areas, store only in areas where environmental conditions comply with requirements specified in "Project Conditions" Article.

B. Handle materials to prevent damage to finished surfaces. Provide protective coverings to prevent physical damage or staining following installation for duration of project.

1.06 PROJECT CONDITIONS

A. Environmental Limitations: Do not deliver or install cast polymer materials until building is enclosed, wet work is complete, and HVAC system is operating and maintaining temperature and relative humidity at occupancy levels during the remainder of the construction period.

B. Field Measurements: Where cast polymer materials are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication and indicate measurements on Shop Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

1. Locate concealed framing, blocking, and reinforcements that support cast polymer materials work by field measurements before being enclosed and indicate measurements on Shop Drawings.

1.07 SPECIAL WARRANTY

A. Cast polymer materials:

1. Provide one (1) year Warranty against manufacturing defects.

PART 2 PRODUCTS

2.01 CAST POLYMER:

A. Manufacturers:

1. Approved Manufacturers:

a. Simulated Tile Tub/Shower Surrounds:

1) Mincey Marble Manufacturing Co. (800-533-1806)

2) Imperial Marble Corporation (815-498-2303)

3) MPL Corporation (317-835-9000)

B. Fire Hazard Ratings:

1. Classified in accordance local codes and ordinances, ASTM E84 and the following:

a. Class C III

b. Flame Spread: Class A: 0-25

c. Smoke Developed: 0-450

2. Subject to compliance with requirements, all products shall be permanently marked on the back side and provided with a temporary removable label on the front side with language clearly certifying compliance with ASTM E84 and identifying the required Flame Spread Class Rating.

C. Tub/Shower Surrounds:

1. Homogeneous minimum 1/4" thick molded panels. Surrounds to be cast polymer wall panels; installed as indicated on Drawings. No horizontal seams or trim strips permitted. Provide one piece for each wall. Joints will be permitted at corners only. Sizes as shown on Drawings. Color as shown on Interior Finish Index.

a. Surround Pattern:

1) Provide custom pattern as shown on Drawings and Interior Finish Index.

b. Provide required ceramic soap dishes, in same color as wall panels.

1) Provide soap dishes in locations, configurations, and sizes as shown on Drawings.

2.02 INSTALLATION MATERIALS

A. Anchors: Select material, type, size, and finish required for each substrate for secure anchorage. Provide nonferrous-metal or hot-dip galvanized anchors and inserts on inside face of exterior walls and elsewhere as required for corrosion resistance. Provide toothed-steel or lead expansion sleeves for drilled-in-place anchors.

B. Adhesive and Sealant (Installer to verify products are approved by Cast polymer materials Manufacturer):

1. Approved Manufacturers:

a. "OSI SF400"; OSI Sealants, Inc. (800-999-8920)

1) VOC Content: <50 g/L

b. "PL Premium 'Polyurethane' Adhesive"; OSI Sealants, Inc. (800-999-8920)

1) VOC Content: <50 g/L

c. "LN-902 Liquid Nails", Liquid Nails, Macco Division of ICI Paints, (800-634-0015)

1) VOC Content: <20 g/L

d. "DAP 27404", DAP, Inc. (888-327-8477)

1) VOC Content: <12.1 g/L

e. Or as recommended by cast polymer manufacturer.

2.03 FABRICATION

A. General:

1. Shop assemble cast polymer materials for delivery to site in units easily handled and to permit passage through building openings.

2. Shop cut openings, to maximum extent possible, to receive hardware, appliances, plumbing fixtures, electrical work, and similar items. Locate openings accurately and use templates or roughing-in diagrams to produce accurately sized and shaped openings.

   a. Rout and finish component edges with clean, sharp returns. Rout cutouts, radii and contours to template. Smooth edges. Repair or reject defective and inaccurate work.

3. When necessary to cut and fit on site, provide materials with ample allowance for cutting.
   Provide trip for scribing and site cutting.

4. Provide cutouts for plumbing fixtures, inserts, appliances, outlet boxes, and other fixtures and fittings.

5. Provide for mounting of soap dishes, grab rails, etc., as indicated on the Drawings.

PART 3 EXECUTION

3.01 INSPECTION

A. Verify adequacy of backing and support framing.

3.02 PREPARATION

A. Condition cast polymer materials to average prevailing humidity conditions in installation areas before installation.

3.03 INSTALLATION

A. All surrounds shall be installed as shown on Drawings and as specified by manufacturer.

B. Install components plumb, level and rigid, scribed to adjacent finishes, in accordance with approved shop drawings and product data.

C. Tub/Shower Surrounds:

1. Remove all dust and other contaminants from the back side of all panels before installation.

2. Secure soap dishes to panels with adhesive as recommended by Manufacturer.

3. Hold bottom edge of wall panel above rim of tub and shower for application of sealant as shown on Drawings.

3.04 ADJUSTING AND CLEANING

A. Keep components clean during installation. Remove adhesives, sealants and other stains. Keep clean until Date of Substantial Completion. Replace stained and damaged components.

B. Protect surfaces from damage until Date of Substantial Completion. Repair work or replace damaged work which cannot be repaired to Owner's Representative's satisfaction.

END OF SECTION

SECTION 07 10 00 - DAMPPROOFING AND WATERPROOFING

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Sheet Membrane Waterproofing
2. Under-Slab-On-Grade Vapor Retarder

B. Related Sections:

1. Section 03 30 00 - Cast-In-Place Concrete
2. Section 07 20 00 – Thermal Protection

1.02 REFERENCES

A. ASTM International Publications:

1. D4263 "Standard Test Method for Indicating Moisture in Concrete by the Plastic Sheet Method"
2. D6506 “Standard Specification for Asphalt Based Protection for Below Grade Waterproofing”
3. E1745 "Standard Specification for Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs"

1.03 SYSTEM DESCRIPTION

A. General: Provide waterproofing that prevents the passage of liquid water under hydrostatic pressure and complies with requirements as demonstrated by testing performed by an independent testing agency of manufacturer’s current sheet membrane.

1.04 SUBMITTALS

A. Submit "Letter of Conformance" in accordance with Section 01 33 00 with the following supporting data:

1. Include product data on each type of dampproofing and waterproofing product specified, including data substantiating that materials comply with specified requirements.
    a. Mark each copy to identify applicable products, characteristics, models, options and other supplemental data to clearly communicate information specific to this project.

B. Samples, 3 x 6 inches minimum size, of each fluid-applied and sheet membrane waterproofing material specified for Project.

1.05 QUALITY ASSURANCE

A. Installer Qualifications: Engage an experienced Installer who has completed fluid-applied and sheet membrane waterproofing applications similar in material, design, and extent to that indicated for Project and that has resulted in construction with a record of successful in-service performance.

1. Assign work closely associated with waterproofing, including (but not limited to) waterproofing accessories, and flashings used in conjunction with waterproofing, expansion joints in membrane, insulation, and protection course on membrane, to Installer of fluid-applied waterproofing, for single, undivided responsibility.

B. Single-Source Responsibility: Obtain primary waterproofing materials of each type required from a single manufacturer.

C. Pre-Installation Conference: A pre-installation conference shall be held prior to commencement of field operations to establish procedures to maintain optimum working conditions and to coordinate this work with related and adjacent work. Agenda for meeting shall include review of special details and flashing.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials to Project site in original packages with seals unbroken, labeled with manufacturer'' name, product, date of manufacturer, and directions for storage.

B. Store materials in their original undamaged packages in a clean, dry, protected location and within temperature range required by waterproofing manufacturer. Protect stored materials from direct sunlight.

1.07 PROJECT CONDITIONS

A. Environmental Conditions: Apply waterproofing within range of ambient and substrate temperatures recommended by waterproofing manufacturer. Do not apply waterproofing to a damp or wet substrate.

1. Do not apply waterproofing in snow, rain, fog, or mist.

B. Maintain adequate ventilation during penetration and application of waterproofing materials.

PART 2 PRODUCTS

2.01 MATERIALS, GENERAL

A. General Compatibility: Provide products that are recommended by manufacturer to be fully compatible with indicated substrates.

2.02 SHEET MEMBRANE WATERPROOFING

A. Approved Manufacturers:

1. “Bituthene 4000”; Grace Construction Products (800-444-6459)
2. "CCW MiraDRI 860/861"; Carlisle Coatings and Waterproofing Inc. (800-527-7092)
3. “650 Waterproofing Membrane”; Polyguard Products Inc. (800-541-4994)

2.03 UNDER-SLAB-ON-GRADE VAPOR BARRIER:

A. Vapor Barrier Under-Slabs-On-Grade:

1. Plastic Vapor Retarder: ASTM E1745, Class A, with maximum performance rating of 0.018 perm. Provide in lengths and widths required for least number of seams.
   a. Under Slab: 15 mils thick.
2. Vapor- Barrier Tape: Pressure-sensitive tape of type recommended by vapor retarder manufacturer for sealing joints and penetrations in vapor retarder.
3. Manufacturers:
   a. “Stego Wrap (15 mil) Vapor Barrier”; Stego Industries, LLC (877-464-7834)
   b. "Perminator (15 mil) Underslab Vapor Retarder"; W.R. Meadows, Inc. (800-342-5976)
   c. “Griffoyln (15 mil) Griffiolyn a Division of Reef Industries) (800-231-6074)
   d. “Moistop Ultra (15 mil)”; Fortifiber Corporation (800-773-4777)
   e. “Viper VaporCheck (16 mil)”; Insulation Solutions, Inc.(866-698-6562)

f. “VaporBlock 15“; Raven Engineered Films Division, Raven Industries (800-635-3456)

2.04 MISCELLANEOUS MATERIALS

A. In addition to primary waterproofing materials, provide the following:

1. Primer/Filler/Sealer: As recommended by waterproofing manufacturer.

2. Flashings, Cant Strips, and Accessories: As recommended by waterproofing manufacturer.

3. Protection Course: Board as approved by system manufacturer, premolded, 1/8 inch (3 mm) thick, semirigid board consisting of mineral-stabilized asphalt core sandwiched between layers of asphalt-saturated felt, surface-coated with asphalt and sealed to core under heat and pressure, and provided with polyethylene film facings complying with ASTM D6506.

PART 3 EXECUTION

3.01 EXAMINATION

A. Examine substrates, areas, and conditions under which waterproofing systems will be applied, with Installer present, for compliance with requirements. Do not proceed with installation until unsatisfactory conditions have been corrected.

1. Do not proceed with installation until after minimum concrete curing period recommended by waterproofing manufacturer.

2. Verify substrate is visibly dry and free of moisture. Test for capillary moisture by plastic sheet method according to ASTM D4263.

B. Inspect concrete and concrete masonry surfaces for:

1. Contamination: Algae, chalkiness, dirt, dust, efflorescence, form oil, fungus, grease, mildew or other foreign substances.

2. Surface absorption and chalkiness.

3. Cracks: Measure crack width and record location of cracks.

4. Damage and deterioration.

5. Moisture content and moisture damage:

a. Use a moisture meter to determine if the surface is dry enough to receive the air and moisture barrier and record any areas of moisture damage or excess moisture.

6. Compliance with specification tolerances:

a. Record areas that are out of tolerance (greater than 1/4 inch in 8-0 feet deviation in plane).

C. Notify Owner’s Representative in writing of anticipated problems using waterproofing over substrate.

3.02 PREPARATION

A. Clean substrate of projections and substances detrimental to work; comply with instructions of prime materials manufacturer.

B. Install cant strips and similar accessories as shown and as recommended by prime materials manufacturer even though not shown.

C. Fill voids, seal joints, and apply bond breakers as recommended by prime materials manufacturer.

D. Prime substrate as recommended by prime materials manufacturer.

3.03 INSTALLATION - GENERAL

A. Comply with manufacturer's written installation recommendations, including preparation of substrate surfaces, detail coatings of joints and planar changes in substrate, and priming of substrates.

B. Mix separately packaged components in accordance with manufacturer's written recommendations.

3.04 INSTALLATION - SHEET MEMBRANE WATERPROOFING

A. Apply waterproofing membrane material to substrates and adjoining surfaces indicated to receive membrane. Apply in accordance with manufacturer's recommendations to obtain thicknesses specified and using applicators and techniques best suited for slope and type of substrate to which applied.

1. If two-coat application is required to obtain membrane thickness specified below, apply second coat only after initial coat has cured as recommended by manufacturer.

2. Provide 60 mil (average) membrane thickness, with minimum 50 mil thickness.

B. Install sheet membrane waterproofing material to substrates and adjoining surfaces indicated to receive membrane. Install in accordance with manufacturer's recommendations using applicators and techniques best suited for type of substrate to which applied.

C. Install sheet-type flashings and joint covers where indicated and as recommended by prime materials manufacturer. Extend flashings onto perpendicular surfaces and other work penetrating substrate to not less than 6 inches beyond finished surface to be applied over waterproofing.

D. Permit membrane to cure under conditions that will not contaminate or deteriorate waterproofing material. Block off traffic and protect membrane from physical damage.

E. Install protection course on cured membrane (after testing, if required) without delay to minimize period of membrane exposure.

1. On vertical surfaces comply with waterproofing manufacturer's recommendations for adhesion of protection course to membrane.

2. In-Place Testing: Before completed membranes on horizontal surfaces are covered by protection course or other work, test for leaks with 2 inch depth of water maintained for 24 hours. Repair any leaks revealed by examination of substructure, and repeat test until no leakage is observed.

F. Provide separation between waterproofing membrane and non-compatible substrates and materials in accordance with manufacturers published instructions.

3.05 INSTALLATION - UNDER-SLAB-ON-GRADE VAPOR RETARDER

A. General: Extend vapor and moisture barriers to extremities of areas to be protected from vapor transmission. Extend vapor and moisture barriers to cover miscellaneous voids in insulated substrates, including those which have been stuffed with loose fiber-type insulation.

B. Seal joints caused by pipes, conduits, electrical boxes, and similar items penetrating vapor retarders with vapor-retarder tape of type recommended by vapor retarder manufacturer to create an air-tight seal between penetrating objects and vapor retarder.

C. Repair any tears or punctures in vapor and moisture barriers immediately before concealment by other work. Cover with vapor-retarder tape or another layer of vapor retarder.

D. Refer to Section 07 20 00 for installation of Under-slab-on-grade insulation.

3.06 PROTECTING AND CLEANING

A. Protect waterproofing from damage and wear during application and remainder of construction period, according to manufacturer's written instructions.

B. Clean spillage and soiling from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.

END OF SECTION

SECTION 07 19 00 - WATER REPELLENTS

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Water Repellent Coating Applied to All Exterior Exposed Masonry Unit Walls

B. Related Sections:

1. Section 04 20 00 - Masonry Units

1.02 REFERENCES

A. FS SS-W-110 - Water Repellent, Colorless, Silicone Resin Base.

1.03 SUBMITTALS

A. Submit “Letter of Conformance” in accordance with Section 01 33 00 with the following supporting data:

1. Submit product data including detailed test results of materials applied to surfaces similar to requirements of this Section.

2. Submit manufacturer's instructions for methods and application procedures.

3. Submit manufacturer's certification indicating water repellent coating conforms to or exceeds requirements stated herein.

1.04 QUALITY ASSURANCE

A. The Contractors involved with work covered by this Section shall have had a minimum of five years experience using specified techniques for water repellent application.

B. Tradesman must be competent and experienced and shall demonstrate reasonable care during performance of operations described in this Section.

C. Tests and Approvals:

1. Sample Area: Contractor shall apply a test area of wall surface from two to four square feet in size for inspection and approval by the Owner’s Representative. Samples of adjacent materials shall be tested for possible reaction with the water repellent. Such samples shall be available for inspection by the Owner’s Representative.

2. If any part of this work shall be found defective (because of improper preparation of surfaces or application of coating) at any time before the final acceptance of the item, the Contractor shall, at his own expense, make good such defect to the satisfaction of the Owner’s Representative.

1.05 PROJECT CONDITIONS

A. Protection:

1. Contractor shall provide, at all times, covered access to premises and necessary utilities, space for storage of material and equipment, etc.

2. All activities shall be in compliance with local and governmental regulations and codes.

3. The surface and atmospheric temperature should be at least 40 degrees F. and rising during application. Surfaces should be dry. Apply only in well ventilated areas. All caulking (sealants) should be applied a minimum of 24 hours prior to application, or as required by sealant manufacturer, whichever is greater, before application of water repellent.

4. The Contractor shall require applicators to observe safety precautions as outlined on containers and labels. It is the responsibility of the Contractor to provide well ventilated areas for all workmen as well as to observe safety precautions as stipulated on labels and instructions of all materials used, and as required by governing authorities.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Approved Manufacturers:

1. “Hydrozo Enviroseal Double 7"; BASF Building Systems (800-433-9517)
2. "Sure Klean Weather Seal Siloxane WB"; ProSoCo, Inc. (800-255-4255)

PART 3 EXECUTION

3.01 PREPARATION

A. Verify surfaces to receive water repellent coatings are clean, free of efflorescence, oil, grease, or other foreign matter detrimental to application.

B. Remove loose particles and foreign matter. Remove grease or oil with a solvent, effective alkaline cleaner, or detergent as instructed by coating manufacturer. Scrub surfaces with water.

C. Allow surfaces to dry prior to application.

D. Protect all surrounding areas as recommended by the manufacturer or as directed by the Owner’s Representative.

1. Windows: Windows shall be protected from contact with materials by masking with polyethylene or other approved techniques.
2. All polished stone, metal, or non-masonry surfaces shall be protected from contact with the material by masking with polyethylene.
3. Masonry surfaces must be in good repair. All new construction or repointed surfaces must be allowed to cure for a minimum of 28 days prior to application. Surfaces must be completely dry.

3.02 APPLICATION

A. Test each surface and/or material to be treated to ensure compatibility and desired water repellency results. The surface to be treated must be clean and free of all foreign matter and as dry as possible to ensure penetration of the water repellent.

B. Apply material as supplied - do not dilute or alter material as packaged. Preferred method of application is with low pressure, airless diaphragm-type spray equipment or with a heavily saturated roller or brush. Apply in coverage rate as recommended by manufacturer for type of material.

C. Protect adjacent surfaces not scheduled to receive coating. If applied on unscheduled surfaces, remove immediately, by manufacturer approved method.

END OF SECTION

SECTION 07 20 00 - THERMAL PROTECTION

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Batt Insulation
    a. Unfaced
    b. Faced
2. Sound Attenuation Insulation
    a. Mineral Fiber
3. Vapor Retarder

B. Related Sections:

1. Section 06 10 00 - Rough Carpentry
2. Section 06 20 00 - Finish Carpentry
3. Section 07 10 00 – Dampproofing and Waterproofing
4. Section 07 24 19 – Water Drainage Exterior Insulation and Finish Systems (EIFS)
5. Section 07 54 23 – Thermoplastic-Polyolefin (TPO) Membrane Roofing
6. Section 07 62 00 - Sheet Metal Flashing and Trim
7. Section 07 84 00 - Firestopping
8. Section 07 81 29 - Ceramic Fiber Fireproofing
9. Section 09 21 16 - Gypsum Board Assemblies

1.02 REFERENCES

A. ASTM International Publications:

1. C578 "Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation"
2. C665 "Standard Specification for Mineral-Fiber Blanket Thermal Insulation for Light Frame Construction and Manufactured Housing"
3. D4397 "Standard Specification for Polyethylene Sheeting for Construction, Industrial, and Agricultural Applications"
4. E84 "Standard Test Method for Surface Burning Characteristics of Building Materials"
5. E96 "Standard Test Methods for Water Vapor Transmission of Materials"
6. E119 "Standard Test Methods for Fire Tests of Building Construction and Materials"
7. E136 "Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C"
8. E1677 "Standard Specification for an Air Retarder (AR) Material or System for Low-Rise Framed Building Walls"
9. E1745 "Standard Specification for Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs"

B. Code of Federal Regulations (CFR) Publications:

1. 40 CFR 763, "Asbestos: Appendix A - Transmission Electron Microscopy Analytical Methods"
2. 2021 INTERNATIONAL ENERGY CONSERVATION CODE (2021 I.E.C.C.)

C. Underwriter's Laboratories, Inc. (UL) Standards

1. "Fire Resistance Directory"

1.03 DEFINITIONS

A. Thermal Resistivity: Where thermal resistivity properties of insulation materials are designated by R-values, they represent the rate of heat flow through a homogeneous material exactly 1" thick, measured by test method included in referenced material standard or otherwise indicated. They are expressed by the temperature difference in degrees F between the two exposed faces required to cause one BTU to flow through one square foot per hour at mean temperatures indicated.

1.04 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

B. Product Data: Submit “Letter of Conformance” in accordance with Section 01 33 00 indicating specified items selected for use in project with the following supporting data.

C. Certified Test Reports: With product data, submit copies of certified test reports showing compliance with specified performance values, including R-values (aged values for plastic insulations), densities, compression strengths, fire performance characteristics, perm ratings, water absorption ratings and similar properties.

1.05 QUALITY ASSURANCE

A. Fire Test Response Characteristics: Provide insulation materials which are identical to those whose fire-test-response characteristics, as listed for each material or assembly of which insulation is a part, have been determined by testing, per methods indicated below, by UL or other testing and inspecting agency acceptable to authorities having jurisdiction.

1. Surface Burning Characteristics: ASTM E84
2. Fire Resistance Ratings: ASTM E119
3. Combustion Characteristics: ASTM E136

B. Asbestos Content of Inorganic Insulations: provide insulations composed of mineral fibers or mineral ores which contain no asbestos of any type of mixture of types occurring naturally as impurities as determined by polarized light microscopy test per Appendix A of 40 CFR 763.

C. All insulation in roof and wall assemblies shall be approved for use without an additional thermal barrier in accordance with Local Building Codes.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Deliver insulation in original labeled bundles.

B. General Protection: Protect insulations from physical damage and from becoming wet, soiled, or covered with ice or snow. Comply with manufacturer's recommendations for handling, storage, and protection during installation.

C. Protection for Plastic Insulation:

1. Do not expose to sunlight, except to extent necessary for period of installation and concealment.
2. Protect against ignition at all times. Do not deliver plastic insulating materials to project site ahead of installation time.

3. Complete installation and concealment of plastic materials as rapidly as possible in each area of work.

1.07 PROJECT CONDITIONS

A. The Installer must examine the substrate and the conditions under which insulation work is to be performed and notify the Architect in writing of unsatisfactory conditions. Do not proceed with the work until unsatisfactory conditions have been corrected in a manner acceptable to the Installer.

B. Weather Conditions: Proceed with work only when weather conditions are in compliance with manufacturer's recommended limitations, and when conditions will permit the work to proceed in accordance with requirements and the manufacturer's recommendations.

C. Do not apply insulation to damp, frozen, dirty, dusty, or surfaces unacceptable to manufacturer.

D. Coordinate this work with all trades and protect it after installation.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Unfaced Glass Fiber Batt Insulation:

1. Approved Manufacturers:

a. Johns-Manville (800-654-3103)

B. Faced Glass Fiber Blanket Insulation:

1. Approved Manufacturers:

a. “ComfortTherm”; Johns-Manville (800-654-3103)

C. Mineral Fiber Sound-Attenuation Insulation:

1. Approved Manufacturers:

a. "Thermafiber SAFB"; Thermafiber (888-834-2371)

D. Vapor Retarders - Walls and Ceilings:

1. Approved Manufacturer:

a. “MemBrain Smart Vapor Retarder”; CertainTeed Corp. (800-223-8990).

2.02 INSULATING MATERIALS

A. General: Provide insulating materials which comply with requirements indicated for materials, compliance with referenced standards, and other characteristics.

B. Unfaced Glass Fiber Batt Insulation:

1. ASTM C665, Type I (blankets without membrane facing); consisting of fibers; with maximum flame-spread and smoke-developed indexes of 25 and 50, respectively; passing ASTM E136 for combustion characteristics. Product shall be free of formaldehyde.

C. Faced Mineral-Fiber Blanket Insulation:

1. ASTM C665, Type II, Class C, Category 1; consisting of fibers; with maximum flame-spread and smoke-developed indexes of 25 and 50, respectively; passing ASTM E136 for combustion characteristics. Product shall be free of formaldehyde.

2. Mineral-Fiber Type: Fibers manufactured from glass.

3. Flanged Units: Provide blankets fabricated with facing incorporating 5-inch - wide flanges along edges for attachment to framing members, or Polyethylene Wrapped Batts with stapling flaps.

D. Mineral Fiber Sound-Attenuation Insulation:

1. Unfaced mineral-fiber blanket insulation produced by combining mineral fibers of type described below with thermosetting resins to comply with ASTM C665 for Type I (blankets without membrane facing), passing ASTM E136 for combustion characteristics.

2. Mineral-Fiber Type: Slag Wool-Fiber/Rock-Wool-Fiber.

E. Vapor Retarders – Walls and Ceilings:

1. Approved Manufacturer:

a. "MemBrain Smart Vapor Retarder"; CertainTeed Corp. (800-223-8990).

2. Polyimide film vapor retarder for use with unfaced, vapor permeable glass fiber and mineral wool insulation in wall and ceiling cavities. Material has a permeance of 1 perm or less when tested to ASTM E 86, dry cup method and increases to greater than 10 perms using the wet cup method.

a. Water Vapor Permeance:

1) ASTM E86, dry cup method: 1.0 perms.

2) ASTM E86, wet cup method: 10.0 perms.

3. Vapor-Retarder Accessories:

a. Vapor-Retarder Tape: Pressure-sensitive tape of type recommended by vapor retarder manufacturer for sealing joints and penetrations in vapor retarder.

F. Eave Ventilation Troughs:

1. Preformed rigid fiberboard or plastic sheets designed and sized to fit between roof framing members and to provide cross ventilation between insulated attic spaces and vented eaves.

PART 3 EXECUTION

3.01 EXAMINATION

A. Require Installer to examine substrates and conditions under which insulation work is to be performed. A satisfactory substrate is one that complies with the requirements of the section in which substrate and related work is specified. Obtain Installer's written report listing conditions detrimental to performance of work in this section. Do not proceed with installation of insulation until unsatisfactory conditions have been corrected.

1. Verify adjacent materials are dry and ready to receive insulation.

2. Verify mechanical and electrical services within insulated spaces have been installed and tested.

3. Verify substrate surface is flat, free of honeycomb, fins, irregularities, and materials that will impede adhesive bond.

3.02 PREPARATION

A. Clean substrates of substances harmful to insulations or vapor retarders, including removal of projections which might puncture vapor retarders.

3.03 INSTALLATION, GENERAL

A. Comply with manufacturer's instructions for particular conditions of installation in each case. If printed instructions are not available or do not apply to project conditions, consult manufacturer's technical representative for specified recommendations before proceeding with work.

1. Verify insulation boards are unbroken and free of damage.

B. Extend insulation full thickness as shown over entire area to be insulated. Cut and fit tightly around obstructions, and fill voids with insulation. Remove projections which interfere with placement.

C. Apply a single layer of insulation of required thickness, unless otherwise shown or required to make up total thickness.

D. Trim insulation neatly to fit spaces. Use boards free of damage.

E. Fit insulation tight in spaces and tight to exterior side of mechanical and electrical services within the plane of insulation. Leave no gaps or voids.

F. Install all insulation in accordance with manufacturer's specifications.

G. Water-Piping Coordination: If water piping is located within insulated exterior walls, coordinate location of piping to ensure that it is placed on warm side of insulation and insulation encapsulates piping.

3.04 INSTALLATION - GENERAL BUILDING INSULATION

A. Apply insulation units to substrate by method indicated, complying with manufacturer's recommendations. If no specific method is indicated, bond units to substrate with adhesive or use mechanical anchorage to provide permanent placement and support of units.

B. Set vapor retarder faced units with vapor retarder to warm side of construction, except as otherwise indicated. Do not obstruct ventilation spaces, except for firestopping.

1. Tape joints and ruptures in vapor retarder, and seal each continuous area of insulation to surrounding construction to ensure air-tight installation.

C. Install glass fiber blankets in cavities formed by framing members according to the following requirements.

1. Use blanket widths and lengths that fill cavities formed by framing members. Where more than one length is required to fill cavity, provide lengths that will produce a snug fit between ends.

2. Place blankets in cavities formed by framing members to produce a friction fit between edges of insulation and adjoining framing members.

3.05 INSTALLATION - VAPOR RETARDERS

A. General: Extend vapor retarder to extremities of areas to be protected from vapor transmission. Extend vapor retarder to cover miscellaneous voids in insulated substrates, including those which have been stuffed with loose fiber-type insulation.

B. Seal vertical joints in vapor retarders over framing by lapping not less than 2 wall studs. Fasten vapor retarders to framing at top, end and bottom edges, at perimeter of wall openings, and at lap joints; space fasteners 16" o.c.

C. Seal overlapping joints in vapor retarders with adhesives per vapor retarder manufacturer's printed directions. Seal butt joints and fastener penetrations with tape of type recommended by vapor retarder manufacturer. Locate all joints over framing members or other solid substrates. Firmly attach vapor retarders to substrates with mechanical fasteners or adhesives as recommended by vapor retarder manufacturer.

D. Seal joints caused by pipes, conduits, electrical boxes, and similar items penetrating vapor retarders with vapor-retarder tape of type recommended by vapor retarder manufacturer to create an air-tight seal between penetrating objects and vapor retarder.

E. Repair any tears or punctures in vapor retarders immediately before concealment by other work. Cover with vapor-retarder tape or another layer of vapor retarder.

3.06 PROTECTION

A. General: Protect installed insulation and vapor retarders from harmful weather exposures and from possible physical abuses, where possible by non-delayed installation of concealing work or, where that is not possible, by temporary covering or enclosure.

PART 4 SCHEDULES

4.01 SCHEDULES

A. Attic Insulation: R=38, loose blown fiber insulation to thickness required to obtain the "R" rating if applied in joist void areas.

B. Roof Insulation: R=25, Continuous insulation value if insulation is applied entirely above roof deck.

C. Exterior Wall Insulation: R=13 faced batt fiberglass or blown loose fiber insulation + R=3.8 Continuous Insulation at external face side of exterior wall sheathing Completely fill void to thickness of wall to meet STC requirements or alternately a total wall R-value of R=20 minimum.

D. Acoustic Insulation in Walls: Mineral Fiber Sound-Attenuation, batt fiberglass insulation friction fit, completely fill void to thickness of wall to STC requirements required.

E. Acoustic Insulation in Floor/Ceiling assemblies: Faced or Unfaced batt or blown fiberglass insulation to meet STC-50. Fill truss void to with-in 1½" of truss depth to meet fire code requirements for cavity fill.

END OF SECTION

SECTION 07 24 19 - WATER DRAINAGE EXTERIOR INSULATION AND FINISH SYSTEMS

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Water Management Exterior Insulation and Finish Coating Systems Application with secondary air/moisture barrier system as described and specified herein.

B. Related Sections:

1. Section 06 10 00 - Rough Carpentry
2. Section 07 20 00 - Thermal Protection
3. Section 07 62 00 - Sheet Metal Flashing and Trim
4. Section 07 92 00 - Joint Sealants

1.02 REFERENCES

A. ASTM International Publications:

1. B117 "Standard Practice for Operating Salt Spray (Fog) Apparatus"
2. C150 “Standard Specification for Portland Cement“
3. C1063 “Standard Specification for Installation of Lathing and Furring to Receive Interior and Exterior Portland Cement-Based Plaster”
4. C1177/C1177M “Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing”
5. C1397 “Standard Practice for Application of Class PB Exterior Insulation and Finish Systems”
6. C1481 “Standard Guide for Use of Joint Sealants with Exterior Insulation and Finish Systems (EIFS)"
7. D1784 “Standard Specification for Rigid Poly(Vinyl Chloride) (PVC) Compounds and Chlorinated Poly(Vinyl Chloride) (CPVC) Compounds”
8. D4258 "Standard Practice for Surface Cleaning Concrete for Coating"
9. D4261“Standard Practice for Surface Cleaning Concrete Unit Masonry for Coating”
10. E 84 "Standard Test Method for Surface Burning Characteristics of Building Materials"
11. E331 “Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference”
12. E2098 “Standard Test Method for Determining Tensile Breaking Strength of Glass Fiber Reinforcing Mesh for Use in Class PB Exterior Insulation and Finish Systems (EIFS), after Exposure to a Sodium Hydroxide Solution”
13. E2110 “Standard Terminology for Exterior Insulation and Finish Systems (EIFS)”
14. E2273 “Standard Test Method for Determining the Drainage Efficiency of Exterior Insulation and Finish Systems (EIFS) Clad Wall Assemblies”

B. EIFS Industry Members Association (EIMA) Publications.

1. EIMA “Test Method 101.01 Freeze/Thaw”
2. EIMA “Test Method 101.02 Water Penetration”

3. EIMA “EPS Insulation Board Specification”
4. EIMA Guide to EIFS Construction

C. Gypsum Association (GA) Publications:
1. GA-253 "Recommended Specifications for the Application of Gypsum Sheathing"

D. International Code Council (ICC)

1.03 DEFINITIONS

A. Class PB Exterior Insulation and Finish System (EIFS), per ASTM E2110 are systems applied over insulation board, in which the base coat ranges from not less than 1 /16 in. (1.6 mm) to 1/4 in. (6.4 mm) in dry thickness, depending upon the number of nonmetallic reinforcing mesh layers encapsulated in the base coat. The base coat is then covered with a finish coat of various thickness in a variety of textures and colors.

1.04 SYSTEM DESCRIPTION

A. Design Requirements:
1. Polymer-based protective coating 100% pure acrylic resin based materials. No materials using non-acrylic resins in their formulas will be accepted.
2. Exterior insulation and finish system refers to a non-structural exterior wall assembly composed of the following components:
a. An approved substrate
b. An approved air/moisture barrier compatible with substrate and with adhesively attached insulation system.
c. UV treated PVC perforated Drainage track
d. Thermal insulation board adhesively attached to the substrate
e. Polyethylene, self-adhering flashing tape compatible with substrate coatings.
f. A reinforced base coat applied to the insulation board
g. A 100% acrylic based textured coating applied over the reinforced base coat.
h. Approved sealants are required at all dissimilar materials as well as EIFS to EIFS expansion and control joints, and are specified in Section 07 92 00.

B. Performance Requirements:
1. General: Provide systems that comply with the following performance requirements:
a. Bond Integrity: Free from bond failure within system components or between system and supporting wall construction, resulting from exposure to fire, wind loads, weather, or other in-service conditions.
b. Weathertightness: Resistant to water penetration from exterior into system and assemblies behind it or through them into interior of building that results in deterioration of thermal-insulating effectiveness or other degradation of system and assemblies behind it, including substrates, supporting wall construction, and interior finish.
c. Water Penetration: No water penetration when tested in accordance with ASTM E331 and EIMA 101.02.
d. Moisture Resistance: No deleterious effects after 14 days when tested in accordance with ASTM D 2247.
e. Drainage: Greater than 90% drainage efficiency when tested in accordance with ASTM E2273.

f. Salt Spray Resistance: No deleterious effects after 300 hours when tested in accordance with ASTM B117.

g. Freeze/Thaw: No deleterious effects when tested in accordance with EIMA 101.01.

h. Mildew Resistance: No growth supported during 28 day exposure period when tested in accordance with ASTM D3273.

2. Impact Resistance:

a. EIMA 101.86 minimum valves without cracking:

1) EIMA Impact Classification Level 2 - Adhesive/Base Coat – 50-89 in/lb

2) EIMA Impact Classification Level 3 – Adhesive/Base Coat – 90-150 in/lb

3) EIMA Impact Classification Level 4 - Adhesive/Base Coat – >150 in/lb

b. From grade to 2nd floor, a minimum 90-150 inch/pounds impact system is required.

c. From 2nd floor up to a minimum 50-89 in/lb impact system is required.

d. High traffic areas: provide 150 in/lb or greater impact system.

1.05 SUBMITTALS

A. Submit "Letter of Conformance" in accordance with Section 01 33 00 (01330) with the following supporting data:

1. Product Data: Submit technical product data, test reports, installation instructions and recommendations from manufacturer, including data that materials comply with requirements.

2. Submit one 1 ft. x 1 ft. sample of the wall system for each finish, color, and texture selected using same tools and techniques as for the actual project.

3. Shop Drawings: Show fabrication and installation of system including plans, elevations, sections, details of components, joint locations and configurations within system and between system and construction penetrating it, termination details, and attachments to construction behind system which are project-specific..

4. Manufacturer's written certification of installer.

5. Certification that materials meet or exceed requirements.

B. Field-Constructed Mock-Up: Prior to installation of exterior insulation and finish systems, erect mock-ups for each form of wall construction, including typical caulked joints and/or rustication type joints, etc., and finish required to verity selections made under sample submittals. Build mock-ups to comply with the following requirements, using materials indicated for final work:

1. Locate mock-ups on site in location and of size indicated or, if not indicated, as directed by the Owner's Representative.

2. Obtain the Owner's Representative acceptance of mock-up's visual qualities before start of final work.

C. Affidavits:

1. Where mandated by applicable building codes, provide affidavits from EIFS and sealant applicators confirming full compliance to all manufacturer's application requirements.

2. Refer to Marriott Exterior Insulation and Finish Affidavit at the end of this Section. This Contractor shall complete the document and submit it as an attachment to the EIFS warranty.

D. As part of Contract close-out, submit with warranty, copies of all "Field Inspection Reports" from EIFS manufacturing representative and a letter from the approved EIFS manufacturer confirming the following:

1. The EIFS as installed has been tested per Code requirements and does not affect the fire rating of the exterior wall assembly.
2. The EIFS application and installation has been inspected by manufacturer's representative and are confirmed to be in full compliance to the manufacturer's minimum application requirements.
3. The specific brand and type of sealants used on this project are compatible with the correctly installed in conjunction with the approved EIFS. Document to also list the approved sealant manufacturer.

1.06 QUALITY ASSURANCE

A. Qualifications:

1. The Applicator, Fabricator, and Insulation Board Manufacturer shall be approved by the manufacturer in writing on company letterhead. Attach this letter to warranty.
2. The manufacturer shall be a member of the Exterior Insulation Manufacturer's Association - EIMA.
3. The manufacturer shall have manufactured Exterior Insulation and Finish Systems in the United States for at least five years.
4. The installer shall have had a minimum of five years experience installing the specified product on projects similar in scope, and with a record of successful in-service performance.

B. Design and Detailing:

1. The Manufacturer's Applicator shall verify that the proposed Substrate is acceptable prior to the application of the System.
2. The System shall be installed in accordance with manufacturer's published details and specific recommendations for this project.

C. Approvals, Listings, and Classifications:

1. Fire-Test-Response Characteristics: Provide system assemblies and components with the following fire-test-response characteristics as determined by testing identical products per test method indicated below by UL or another testing and inspecting agency acceptable to authorities having jurisdiction. Identify products with appropriate markings of applicable testing and inspecting agency.
    a. Insulation Board: Flame Spread Index of 25 or less and a Smoke Developed Index of 450 or less when tested individually per ASTM E84.
    b. Finish Coats: Flame Spread Index of 20 or less and a Smoke Developed Index of 10 or less when tested individually per ASTM E84.
2. Code Approvals:
    a. The EIFS system shall maintain a research report with the applicable building codes and agencies within the jurisdiction of the Project. Code compliance must be based on full scale diversified fire testing in its end use configuration by independent agencies whose classifications and requirements have general acceptance as regulator.
    b. The EIFS system shall meet or exceed the Energy Standards as set by the applicable building codes and agencies within the jurisdiction of the project.

c. The System shall be evaluated, listed, and classified as described in the following documents:

1) ICC Research Report

2) Local Approval

D. Pre Installation meeting: The EIFS installer's foreman or superintendent for this project and a representative of the EIFS system manufacturer shall attend the Pre-installation meeting prior to the start of the EIFS application.

E. The performance of the EIFS shall be the sole responsibility of the EIFS manufacturer. The EIFS installer shall comply with the manufacturer's recommendations.

F. Inspections

1. Provide independent third party inspection where required by applicable building codes and agencies within the jurisdiction of the Project.

2. Conduct inspections in accordance with code requirements and contract documents.

1.07 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials in original, unopened packages with manufacturer's labels intact and clearly identifying products.

B. Store materials inside and under cover; keep them dry and protected from the weather, direct sunlight, surface contamination, aging, corrosion, damaging temperatures, construction traffic, and other causes.

1. Protect coatings delivered in pails from freezing and temperatures in excess of 90°F. Store away from direct sunlight.

2. Protect bagged Portland cement based materials from moisture and humidity. Store under cover and off the ground in a dry location.

3. Stack insulation board flat and off the ground.

4. Protect plastic insulation against ignition at all times. Do not deliver plastic insulating materials to Project site before installation time.

5. Complete installation and concealment of plastic materials as rapidly as possible in each area of construction.

1.08 PROJECT CONDITIONS

A. Environmental Limitations: Do not install system when ambient outdoor air and substrate temperatures are 40 deg F and falling unless temporary protection and heat are provided to maintain ambient temperatures above 40 deg F during installation of wet materials and until they have dried thoroughly and become weather resistant, but for at least 24 hours after installation of Air/Moisture barrier and EIFS.

B. Adjacent materials and the wall system shall be protected during installation, while curing and/or unattended, from weather and other damaging conditions.

1.09 COORDINATION

A. The work of this Section shall be coordinated with the work specified in related Sections.

B. Provide site grading such that the EIFS terminates above finished grade a minimum of 8 inches or as required by governing code.

C. Coordinate installation of foundation waterproofing, roofing membranes, windows, doors and other wall penetrations to provide a continuous air/moisture barrier.

D. Coordinate location of system terminations at adjoining materials and around penetrations to provide a minimum joint size as required by the system manufacturer for application of sealant but no less than ½ inches.

E. Provide protection of rough openings through walls per IBC requirements prior to installation of windows, doors and other items which penetrate the exterior walls.

F. Coordinate installation of windows and doors so air/moisture barrier components are installed per manufacturer's recommendations and details.

G. Install window and door head flashing immediately after windows and doors are installed.

H. Install diverter flashings wherever water can enter the wall assembly to direct water to the exterior.

I. Install copings and sealant immediately after installation of the EIFS and when EIFS coatings are dry.

J. Attach penetrations through EIFS to structural support and provide water tight seal at penetrations. Follow EIFS manufacturers recommendations on fastening through the System.

K. Temporary protection shall be provided during the wall system application and prior to the installation of the sealant and flashing systems at all locations that could allow moisture penetration. Do not allow water to penetrate behind EIFS.

L. All joints to be sealed shall be done immediately after completion of field applied wall system.

M. The tops of all walls must immediately be covered with either the final trim or temporary protection to prevent water infiltration behind the system. Coping shall be installed as soon as possible after the installation of the system.

1.10 MAINTENANCE

A. Maintenance Kit:

1. Supply maintenance kit and store at site where directed by Owner's Representative.

a. Containers of liquids shall be unopened.

2. Maintenance kit shall contain the following components:

a. Printed maintenance instructions

b. One gallon of adhesive

c. Minimum one gallon of finish color coating for each color used

d. 32 square feet of each type reinforcing fabric

e. 32 square feet of insulation board

1.11 WARRANTY

A. Manufacturer shall provide a 10-year limited warranty on the labor and materials associated with the EIFS and 10 year materials and labor moisture drainage warranty. This warranty is exclusive of flashings.

1. This warranty shall be assignable subject to the requirements as stipulated in the Marriott Quality Assurance Program.

2. This installer shall provide a 2-year warranty for all workmanship related to EIFS application.

B. Work is warrantied against:

1. Material defects, including, but not limited to, peeling, cracking, delamination, flaking, or similar failures.

2. Seepage and leakage of water or excessive moisture into the building or wall cavities through the system. EIFS to EIFS and EIFS to dissimilar sealer joints.

C. Inspection:

1. The manufacturer shall provide final inspection at the completion of application of the system including all contiguous sealant joints as per the submitted Marriott Quality Assurance Program.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Approved Manufacturers:

1. “Sto Essence Therm NEXT”; Sto Finish Systems Div. (888-786-3437)
2. “Senerflex Channeled Adhesive Design” System; BASF Wall Systems, Inc. (800-221-9255).
3. "Outsulation Plus System"; Dryvit Systems, Inc. (800-556-7752)

2.02 GENERAL:

A. All components of the wall system shall be obtained from one manufacturer. No substitutions or addition of other materials will be allowed.

2.03 MATERIALS

A. Compatibility: Provide substrates, air/moisture barrier, adhesive, board insulation, reinforcing meshes, base- and finish-coat materials, sealants, and accessories that are compatible with one another and approved for use by system manufacturer for Project.

B. Air/Moisture Barrier: A ready mixed acrylic based, fiber reinforced, waterproof coating.

1. Install layer of air infiltration barrier to completely cover sheathing before installation of EIFS system.
2. Air/Moisture Barrier System Accessories: For use at substrate joints and at openings in the substrate and penetrations through the substrate.
   a. Joint Treatment: ready mixed acrylic based, flexible joint compound as recommended by the manufacturer for use the air/moisture barrier.
   b. Grid Tape: Open weave fiberglass mesh tape with pressure sensitive adhesive.
   c. Flashing Tape: Self-adhesive type as recommended by the manufacturer for use with the air/moisture barrier system.
   d. Flashing Tape Surface Conditioner: as recommended by manufacturer for use with system flashing tape.

C. Insulation Board:

1. Molded-Expanded-Polystyrene Board Insulation: Rigid, cellular thermal insulation formed by expansion of polystyrene resin beads or granules in a closed mold. Comply with system manufacturer's requirements, ASTM C578 for Type I, and "EIMA EPS Insulation Board Specification" for more stringent requirements for material performance and qualities of insulation, including dimensions and permissible variations, and the following:
   a. Before cutting and shipping, age insulation in block form by air drying for not less than six weeks or by another method approved by EIMA that produces equivalent results.

1) Nominal 1.0 pcf, of the thickness and shape as shown on the Drawings.

2) Flamespread and smoke development shall be less than or equal to 25 and 450 respectively when tested by ASTM E84.

3) Minimum thickness shall be as shown on Drawings and not less than 1".

4) Maximum thickness: Per building code requirements.

5) Labeling and quality control shall comply with the building code.

D. Adhesive: Factory blended, polymer modified, cement based adhesive as recommended by the Manufacturer to be compatible with the substrate and insulation being utilized.

E. Reinforcing Mesh: Balanced, alkali-resistant, interlaced open-weave glass-fiber mesh treated for compatibility with other system materials, made from continuous multi-end strands with retained mesh tensile strength of not less than 120 lbf/in per EIMA 105.01, complying with ASTM D578 and the following requirements for minimum weight:

1. Standard weight, as recommended by manufacturer to meet EIMA Impact Classification Level 2, not less than 4.3 oz.

2. Intermediate weight, as recommended by manufacturer to meet EIMA Impact Classification Level 3, not less than 6 oz.

3. Heavy-duty impact resistant to meet EIMA Impact Classification Level 4 in locations as shown on Drawings, and as selected below, not less than 20 oz..

F. Base-Coat Materials: System manufacturer's standard mixture complying with, Type I, white or natural color, and compatible with system manufacturer's standard polymer-based Adhesive.

G. Finish Coat: Materials System manufacturer's standard mixture, complying with the following requirements for material composition and method of combining materials:

1. Factory mixed acrylic polymer emulsion texture finish with color fast mineral pigments forming integral finish color.

2. Color: Refer to Exterior Finish Index.

3. Texture: Refer to Exterior Finish Index.

H. Wall System:

1. Shall have been tested for the environmental tests specified in Paragraph 1.5 and the properties shall meet or exceed the listed values.

2. Shall have been tested by large scale diversified fire test, Modified ASTM E108 - Results - The wall system does not contribute to vertical or horizontal flame spread propagation nor produce large quantities of smoke.

I. Cement: Type I Portland Cement, ASTM C150.

J. Water:

1. Water shall be clean and potable. Water shall be tested by the installer for excessive levels of iron and all other potentially damaging substances prior to its incorporation in accordance with the manufacturer's published instructions.

K. Sheathing (Vertical and Horizontal Applications):

1. Glass Mat Water-Resistant Gypsum Sheathing Board, per Section 06 10 00. Conform to ASTM C1177.

L. Air Infiltration Barrier:

1. Material: Refer to Section 07 20 00.

2. Install layer of specified air infiltration barrier to completely cover all sheathings before installation of EIFS system.

M. Mechanical Fasteners: System manufacturer's recommended corrosion-resistant fasteners consisting of thermal cap, standard washer and shaft attachments, and fastener indicated below; selected for properties of pullout, tensile, and shear strength required to resist design loads of application indicated; capable of pulling fastener head below surface of insulation board.

N. Trim Accessories: Type as designated or required to suit conditions indicated and to comply with system manufacturer's written requirements, manufactured from vinyl plastic and complying with ASTM C1063.

1. Casing Bead: If required by specified system, provide prefabricated one-piece type for attachment behind insulation, of depth required to suit thickness of coating and insulation, with face leg perforated for bonding to coating.

2. Drainage/Starter Track: UV Treated PVC Perforated “J” channel with weep holes, complying with ASTM D1784 and ASTM C1063.

a. Drainage Strip: Corrugated plastic sheet material.

O. Elastomeric Sealant Products: Provide system manufacturer's listed and recommended chemically curing, elastomeric sealant that is in accordance with ASTM C1382 and compatible with joint fillers, joint substrates, and other related materials, and complies with requirements for products and testing indicated in "ASTM C1481 Standard Guide for Use of Joint Sealants with Exterior Insulation and Finish Systems (EIFS)" and with requirements in Section 07 92 00 “Joint Sealants" for products.

2.04 MIXING

A. General: Comply with system manufacturer's requirements for combining and mixing materials. Do not introduce admixtures, water, or other materials except as recommended by system manufacturer. Mix materials in clean containers. Use materials within time period specified by system manufacturer or discard.

PART 3 EXECUTION

3.01 EXAMINATION

A. Prior to application of the wall system, the substrate shall be examined by the installer for compliance with the Contract Documents and manufacturer's specifications. The Contractor and Owner’s representative shall be advised of all discrepancies. All substrates shall be free of surface and excessive internal moisture. Work shall not proceed until unsatisfactory conditions are corrected.

1. Inspect sheathing application for compliance with GA-253.

3.02 PREPARATION

A. Protect contiguous work from moisture deterioration and soiling caused by application of systems. Provide temporary covering and other protection needed to prevent spattering of exterior finish coats on other work.

B. Protect system, substrates, and wall construction behind them from inclement weather during installation. Prevent infiltration of moisture behind system and deterioration of substrates.

C. Prepare and clean substrates to comply with system manufacturer's written requirements to obtain optimum bond between substrate and adhesive for insulation.

1. Apply primer-sealer over substrates where required by system manufacturer for improving adhesion or for protecting substrates from degradation.

3.03 INSTALLATION

A. Comply with EIMA Guide to EIFS Construction and system manufacturer's written instructions for installation of system as applicable to each type of substrate indicated.

1. Avoid all sources of open flame in immediate are of application.

2. Under no circumstances shall accelerators, retarders, or other admixtures be used.

3. Use clean non-metal container, free of all foreign substance, for mixing and preparing material. Do not use container which has been used for or cleaned with a petroleum product.

B. Install Air Infiltration Barrier in accordance with EIFS manufacturer's instructions.

C. Attach insulation to substrates to comply with EIMA Guide to EIFS Construction, system manufacturer's written requirements, and the following:

1. Apply boards over dry substrates in courses.

2. Joints:

a. Stager vertical joints in successive courses to produce running bond pattern.

1) Offset joints of insulation from joining in sheathing.

b. EIFS to EIFS joints, vertical or horizontal: Install insulation board with a clear ¾" space prior to backwrap application. The finish joint shall be ½" clear space to receive sealant. Provide vertical expansion joints at a maximum 70'-0" within EIFS (keep substrate continuous).

c. EIFS to EIFS joints where building frame has expansion joints or underlying substrate will have localized movement.

1) Horizontal expansion joints at floor lines where localized shrinkage of solid wood floor framing members is anticipated.

2) Expansion joints within building structural frame: Same basic installation as an EIFS to EIFS joint above. The width of sealant join is a function of pre-determined expansion joint size. The finish joint width should be 4 times the anticipated joint movement.

d. EIFS to Dissimilar materials: (windows, doors, louvers, etc where anticipated movement of sealant joint is static. Installation board shall be installed with a clear 3/4" space prior to the backwrap application. Finish sealant joint width to be minimum 1/2" wide.

e. EIFS to Dissimilar materials (strip windows, or louvers etc. where the anticipated movement of sealant joint is dynamic). Similar condition to EIFS to EIFS where movement is anticipated. The width of sealant joint is a function of overall calculated movement of the step window or louvers. The finish joint width should be 4 times the anticipated joint movement.

3. Interlock ends at internal and external corners.

4. Rasp or sand flush any irregularities projecting more than 1/32" from surface of insulation; do not create depressions deeper than 1/16". Fill all gaps within insulation boards with EPS.

5. Cut insulation to fit openings, corners, and projections and to produce edges and shapes conforming to details indicated.

6. Sealants shall be applied to reinforced base coat only. Application to finish coat will not be acceptable.

7. Treat exposed edges of insulation board by encapsulating with base coat, reinforcing fabric, and finish coat.

8. Coordinate flashing installation with installation of insulation.

D. Apply base coat to exposed surfaces of insulation in thickness specified by EIMA and system manufacturer.

1. Minimum thickness of base coat to be 1/8 inch

2. Prior to application of base coat, remove yellow dust deposits resulting from excessive UV exposure.

E. Fully embed reinforcing fabric of weight indicated below in wet base coat to produce wrinkle free installation so that no mesh color or pattern is visible:

1. Fabric Weight: Standard, unless otherwise indicated. Minimum 4.3 oz. mesh.

2. Heavy-Duty Impact Resistant: From ground level to minimum 8'-0" high, at all corners of doors and windows, all column surrounds and in other locations as shown on Drawings. Minimum 20 oz. mesh.

3. Mesh to be continuous at corners and overlapped not less than 2-1/2". Do not lap reinforcing mesh within 8" of corners.

F. Apply finish coat over dry base coat in thickness required by system manufacturer to produce a uniform finish of texture and color matching approved sample.

3.04 MASONRY AND CONCRETE CEMENTITIOUS COATING

A. Remove surface contaminants per ASTM D4258 and D4261.

B. Repair surface defects including honeycombs, voids or pitted areas with approved patching material.

C. Repair surface cracks per manufacturers recommendations.

D. Apply surface conditioner to chalking or absorbent surfaces.

E. Skim coat entire surface with leveler material to fill all voids and make all mortar joints flush with the surface.

F. Inspect surface to ensure there will be no telegraphing of surface defects to finish coating.

G. Apply finish coating to primed surfaces in strict accordance with manufacturer's specifications.

3.05 INSTALLATION OF JOINT SEALANTS

A. Prepare joints for sealants, of type and at locations indicated, to comply with applicable requirements in Section 07920 "Joint Sealants" and in "EIMA Guide for Use of Sealants with Exterior Insulation and Finish Systems, Class PB."

1. Clean surfaces to receive sealants to comply with indicated requirements and system manufacturer's written instructions.

2. Joint sealants to be applied after base coat has cured but before applying finish coat.

3.06 CLEANING AND PROTECTING

A. Remove temporary covering and protection of other work. Promptly remove coating materials from window and door frames and other surfaces outside areas indicated to receive system coatings.

B. Provide final protection and maintain conditions, in a manner acceptable to Installer and system manufacturer, that ensure system is without damage or deterioration at the time of Substantial Completion.

EXTERIOR INSULATION AND FINISH AFFIDAVIT
(ATTACH TO EIFS PROJECT WARRANTY)

EIFS Applicator Sub-Contractor:

Completion Date:

THE EXTERIOR INSULATION AND FINISH SYSTEM (EIFS) INSTALLED ON THE STRUCTURE LOCATED AT THE ADDRESS BELOW:

_____CONFORMS _____ DOES NOT CONFORM

TO: (EIFS manufacturer) _____

RECOMMENDED INSTALLATION PRACTICES AND PROJECT MANUAL SECTION 07 24 00 (EIFS SPECIFICATION)

Name & Address of Structure
._____
._____
._____
._____
._____
._____

Product Component Names	
Adhesive(s):	_____
EPS Molder's Name:	_____
Fasteners (mechanical):	_____
Base Coat:	_____
Reinforcing Fabric:	_____
Finish Coat(s):	_____

Installation	Conforms	Does Not Conform
A. Substrate Type and Installation	_____	_____
B. EIFS	_____	_____
1. Adhesive and/or Fasteners	_____	_____
2. Insulation	_____	_____
3. Reinforcing Fabric	_____	_____
4. Base Coat	_____	_____
5. Finish	_____	_____

C. The information entered above is offered in testimony that the EIFS installation conforms with the listed EIFS manufacturer's installation methods and procedures and all applicable model or jurisdiction building codes.

Note: An affidavit shall be received from the sealant installer indicating that the sealant installation conforms with the EIFS minimum application requirements and sealant manufacturer's installation methods and procedures must accompany this declaration. These affidavits must be attached to the EIFS project warranty for this project.

EIFS Contractor Company Name & Address:

._____
._____
._____
._____

Signature of responsible officer: _____
Typed Name and Title of Officer: _____
Telephone: _____
Date: _____

END OF SECTION

SECTION 07 2500
WEATHER BARRIERS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Air Barriers: Materials that form a system to stop passage of air through exterior walls, joints between exterior walls and roof, joints around frames of openings in exterior walls, and joints at base of wall.

1.02 RELATED REQUIREMENTS

A. Section 04 2000 - Unit Masonry.

B. Section 05 4000 - Cold-Formed Metal Framing.

C. Section 06 1000 - Rough Carpentry.

D. Section 07 2100 - Thermal Insulation:

1.03 DEFINITIONS

A. Weather Barrier: Assemblies that form either water-resistive barriers, air barriers, or vapor retarders.

B. Air Barrier: Air tight barrier made of material that is relatively air impermeable but water vapor permeable, both to the degree specified, with sealed seams and with sealed joints to adjacent surfaces. Note: For the purposes of this specification, vapor impermeable air barriers are classified as vapor retarders.

1.04 REFERENCE STANDARDS

A. ASTM D412 - Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers--Tension; 2006a (Reapproved 2013).

B. ASTM D1970/D1970M - Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection; 2013.

C. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2015a.

D. ASTM E96/E96M - Standard Test Methods for Water Vapor Transmission of Materials; 2014.

E. ICC-ES AC148 - Acceptance Criteria for Flexible Flashing Materials; ICC Evaluation Service, Inc; 2011.

1.05 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements, for submittal procedures.

B. Product Data: Provide data on material characteristics, performance criteria, and limitations.

C. Shop Drawings: Provide drawings of special joint conditions.

D. Manufacturer's Installation Instructions: Indicate preparation, installation methods, and storage and handling criteria.

1.06 QUALITY ASSURANCE

A. Manufacturer: Minimum 10-years experience in the production and marketing of waterproofing materials.

B. Air/water-resistive barrier membrane manufacturer shall provide an ICC-ES Evaluation Report confirming compliance with AC212 Acceptance Criteria for Water-Resistive Coatings used as Water-Resistive Barriers over Exterior Sheathing.

C. Applicator Qualifications: An applicator experienced in applying air barrier materials similar in material, design and extent to those indicated for this project, whose work has resulted in applications with a record of successful in-service performance.
   1. Knowledgeable in the proper use and handling of specified products.

2. Employ skilled installers who are experienced and knowledgeable in air and water-resistive barrier application, and familiar with the requirements of the specified work.
3. Provide the proper equipment, manpower and supervision on the job site to install the system in compliance with manufacturers published specifications.

D. Regulatory Requirements: Conform to applicable code requirements for air/water resistive barriers.

E. Primary materials including fluid-applied air/water-resistive barrier membrane, sheathing fabric, flashing primer and transition membranes shall be sourced from one manufacturer regularly engaged in production of air barrier materials.

F. Pre-Installation Conference: A pre-installation conference shall be held prior to commencement of field operations to establish procedures to maintain optimum working conditions and to coordinate this work with related and adjacent work. Preinstallation conference shall include the Architect, General Contractor and Applicator. Agenda for meeting shall include but not be limited to the following:
1. Review of submittals.
2. Review of surface preparation, minimum curing period and installation procedures.
3. Review of special details and flashings.
4. Sequence of construction, responsibilities and schedule for subsequent operations.
5. Review of mock-up requirements.
6. Review of inspection, testing, protection and repair procedures.

G. Coordination of trades
1. The Architect, General Contractor and Applicator shall evaluate adjacent materials such as windows, doors, etc. for conformance to project details. Adjacent trades shall provide scaled shop drawings for review by the Architect.
2. The General Contractor shall make provision for installation of air seals between the primary air barrier and other wall components (penetrations, etc.) in order to maintain continuity of an air barrier system.
3. The Applicator shall provide protection of rough openings before installing windows, doors, and other penetrations through the wall.

1.07 MOCK-UP

A. Mockups: Before beginning installation of air/water-resistive barrier, provide air/water-resistive barrier work for exterior wall assembly mockups, incorporating backup wall construction, external cladding, window, door frame and sill, insulation, and flashing to demonstrate surface preparation, crack and joint treatment, and sealing of gaps, terminations, and penetrations of air barrier membrane.
1. Coordinate construction of mockup to permit inspection by Owner's testing agency of air/water-resistive barrier before external insulation and cladding is installed.
2. If Architect determines mockups do not comply with project requirements, reconstruct mockups and apply air/water-resistive barrier until mockups are approved.

B. Install air barrier materials in mock-up specified in Section 04 2000.

1.08 FIELD CONDITIONS

A. Maintain temperature and humidity recommended by the materials manufacturers before, during and after installation.

PART 2 PRODUCTS

2.01 WEATHER BARRIER ASSEMBLIES

A. General: Air/water-resistive barrier shall be capable of performing as a continuous vapor-permeable air barrier and as a liquid-water drainage plane flashed to discharge to the exterior incidental condensation or water penetration. At wall cladding transitions, the air/water-resistive barrier shall form a continuous air barrier and shall make provision for water drainage, either by creation of an unobstructed drainage plane that extends across the cladding transition or by flashing to discharge to the exterior at the transition. Air barrier assemblies shall

be capable of accommodating substrate movement and sealing substrate expansion and control joints, construction material changes, and transitions at perimeter conditions without deterioration and air leakage exceeding specified limits, or interruption of the drainage plane.

B. The weather barrier assembly, including but not limited to, fluid applied air/water-resistive barrier membrane, sheathing fabric, transition membrane and flashing primer shall be obtained or approved as a single-source from the membrane manufacturer to ensure system compatibility and integrity.

C. Air Barrier:
   1. On outside surface of inside wythe of exterior masonry cavity walls use air barrier coating wall surface and related flashings for rough openings.
   2. On outside surface of sheathing of exterior walls use air barrier coating wall surface and related flashings for rough openings.
   3. For ICF wall system provide air barrier for flashing of rough openings only. The overall wall surface is not nequired to recieve a coating.

2.02 AIR BARRIER MATERIALS (WATER VAPOR PERMEABLE AND WATER-RESISTIVE)

A. Air Barrier Coating:
   1. Acceptable Substrates: Stated by manufacturer as suitable for installation on visibly damp surfaces and concrete that has hardened but is not fully cured ("green" concrete) without requiring a primer.
   2. Adhesion to Paper and Glass Mat Faced Sheathing: Sufficient to ensure failure due to delamination of sheathing.
   3. Wet Film Thickness: 20 mils (0.020 inch), minimum. Final mil thickness shall be as specified by the manufacturer in regard to the substrate to which it is applied.
   4. Water Vapor Permeance: 10 perms, minimum, when tested in accordance with ASTM E96/E96M, Procedure B.
   5. Ultraviolet and Weathering Resistance: Approved in writing by manufacturer for minimum of 6 months weather exposure after application.
   6. Elongation: 300 percent, minimum, when tested in accordance with ASTM D412.
   7. Surface Burning Characteristics: Flame spread index of 25 or less, smoke developed index of 450 or less, when tested in accordance with ASTM E84.
   8. Nail Sealability: Pass, when tested in accordance with ASTM D1970/D1970M.
   9. VOC Content: 50 g per L or less.
   10. Sealants, Tapes and Accessories: As recommended by coating manufacturer.
   11. Products:
      a. BASF Corporation; MasterSeal AWB 660: www.master-builders-solutions.basf.us.
      b. DuPont Building Innovations; Tyvek Fluid Applied WB: www.dupont.com.
      c. PROSOCO, Inc; R-GUARD Spray Wrap MVP: www.prosoco.com/r-guard/#sle.
      d. Sto Corp; Sto EmeraldCoat: www.stocorp.com/sle.
      e. Substitutions: See Section 01 6000 - Product Requirements.

2.03 ACCESSORIES

A. Sealants, Tapes, and Accessories for Sealing Weather Barrier and Sealing Weather Barrier to Adjacent Substrates: As specified or as recommended by weather barrier manufacturer.

B. Flexible Flashing: Sheathing fabric saturated with air barrier coating and complying with the applicable requirements of ICC-ES AC148.

C. Liquid Flashing: One part, fast curing, non-sag, elastomeric, gun grade, trowelable liquid flashing.

D. Thinners and Cleaners: As recommended by material manufacturer.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that surfaces and conditions are ready to accept the work of this section.

B. Walls

1. Substrates
    a. Wall sheathing must be securely fastened per applicable building code and sheathing manufacturer's requirements.
    b. Examine surfaces to receive air/water resistive barrier and verify that substrate and adjacent materials are dry, clean, sound, and free of releasing agents, paint, or other residue or coatings. Verify substrate is flat, free of fins or planar irregularities greater than 6.4 mm in 3 m (1/4" in 10'). Verify that no excess mortar exists on masonry ties, shelf angles and other obstructions.
    c. Verify that concrete is visibly dry and free of moisture.
    d. Verify that masonry joints are struck flush and completely filled with mortar.
2. Flashings
    a. All flashings must be installed in accordance with specific design and building code requirements. Where appropriate, end-dams must be provided.
    b. Openings must be flashed prior to window/door, HVAC, etc. installation. Windows and openings shall be flashed according to design and building code requirements.
    c. Individual windows that are ganged to make multiple units require continuous head flashing and the joints between the units must be fully sealed.
3. Kick-out flashing
    a. Kick-out flashing must be installed leak-proof and angled (min 100°) to allow for proper drainage and water diversion.
4. Air Seals
    a. Install between the primary air/weather barrier and other wall components (penetrations, etc.) in order to maintain continuity of the air barrier system

C. Report all unsatisfactory conditions to the General Contractor. Application of fluid-applied air/water-resistive barrier shall not proceed until all unsatisfactory conditions have been corrected.

3.02 PREPARATION

A. General: No additives are permitted unless specified in product mixing instructions. Close containers when not in use. Prepare in a container that is clean and free of foreign substances. Do not use a container which has contained or been cleaned with a petroleum-based product. Clean tools and equipment with water immediately after use. Dried material can only be removed mechanically.

B. Remove projections, protruding fasteners, and loose or foreign matter that might interfere with proper installation.

C. Clean and prime substrate surfaces to receive adhesives and sealants in accordance with manufacturer's instructions.

3.03 INSTALLATION

A. Install materials in accordance with manufacturer's instructions.

B. Air Barriers: Install continuous air tight barrier over surfaces indicated, with sealed seams and with sealed joints to adjacent surfaces.

C. Apply sealants and adhesives within recommended application temperature ranges. Consult manufacturer if temperature is out of this range.

D. Coatings:
1. Prepare substrate in manner recommended by coating manufacturer; treat joints in substrate and between dissimilar materials as recommended by manufacturer.
2. Where exterior masonry veneer is to be installed, install masonry anchors before installing weather barrier over masonry; seal around anchors air tight.
3. Use flashing to seal to adjacent construction and to bridge joints.

E. Openings and Penetrations in Exterior Weather Barriers:
1. Install flashing over sills, covering entire sill frame member, extending at least 5 inches onto weather barrier and at least 6 inches up jambs; mechanically fasten stretched edges.

2. At openings to be filled with frames having nailing flanges, seal head and jamb flanges using a continuous bead of sealant compressed by flange and cover flanges with at least 4 inches wide; do not seal sill flange.
3. At openings to be filled with non-flanged frames, seal weather barrier to all sides of opening framing, using flashing at least 9 inches wide, covering entire depth of framing.
4. At head of openings, install flashing under weather barrier extending at least 2 inches beyond face of jambs; seal weather barrier to flashing.
5. At interior face of openings, seal gap between window/door frame and rough framing, using joint sealant over backer rod.
6. Service and Other Penetrations: Form flashing around penetrating item and seal to weather barrier surface.

3.04 FIELD QUALITY CONTROL

A. See Section 01 4000 - Quality Requirements, for additional requirements.

B. Do not cover installed weather barriers until required inspections have been completed.

C. Obtain approval of installation procedures by the weather barrier manufacturer based on a mock-up installed in place, prior to proceeding with remainder of installation.

D. Take digital photographs of each portion of the installation prior to covering up.

3.05 PROTECTION

A. Do not leave materials exposed to weather longer than recommended by manufacturer.

END OF SECTION

SECTION 07 54 23 - THERMOPLASTIC-POLYOLEFIN (TPO) MEMBRANE ROOFING

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Extent of flexible sheet roofing (FSR) is indicated on Drawings and is hereby defined to include non-traffic-bearing sheet membrane system intended for weather exposure as primary roofing.

2. Types of roofing systems specified in this Section utilizing flexible sheet roofing membranes include the following:

a. Fully Adhered System

3. Flexible sheet roofing membranes include the following:

a. Thermoplastic Polyolefin (TPO) Membrane Roofing

4. Roof insulation for use under TPO system and all counterflashing and accessory items

B. Related Sections:

1. Section 06 10 00 - Rough Carpentry

2. Section 07 20 00 - Thermal Protection

3. Section 07 62 00 - Sheet Metal Flashing and Trim

4. Section 07 92 00 – Joint Sealants

5. Division 22 Section for Roof Drains

1.02 DEFINITIONS

A. Roofing Terminology: Refer to ASTM D1079 for definition of terms related to roofing work not otherwise defined in this Section.

B. Design Uplift Pressure: The uplift pressure, calculated according to procedures in SPRI's "Wind Load Design Guide for Fully Adhered and Mechanically Fastened Roofing Systems," before multiplication by a safety factor.

1.03 SUBMITTALS

A. Submit "Letter of Conformance" in accordance with Section 01 33 00 with the following supporting data:

1. Product Data: Submit specifications, installation instructions and general recommendations for manufacturers of flexible sheet roofing system materials, for types of roofing required. Include data substantiating that materials comply with requirements. Submit manufacturer's standard warranty form for review.

2. Provide certification or other data substantiating compliance with the requirements. Indicate by transmittal form that the installer has received a copy of manufacturer's installation instructions and recommendations.

B. Shop Drawings: Submit complete Shop Drawings showing roof configuration, sheet layout, seam locations, colors, vent and venting distribution strip locations, details at perimeter, and special conditions.

1.04 QUALITY ASSURANCE

A. Manufacturer: Obtain primary flexible sheet roofing from a single manufacturer. Provide secondary materials as recommended by manufacturer of primary materials.

B. Installer: A firm with not less than five years of successful experience in the installation of roofing systems similar to those required for this project and which is certified by the manufacturer of the primary roofing materials.

1. Work associated with flexible sheet roofing, including (but not limited to) vapor retarders, insulation, flashing and counterflashing, expansion joints, and flexible sheet joint sealers, is to be performed by installer of flexible sheet roofing.

C. Pre-Roofing Conference: Prior to installation of roofing and associated work, meet at project site, or other mutually agreed location, with installer, roofing sheet manufacturer, installers of related work, and other entities concerned with roofing performance, including (where applicable) Owner's insurer, test agencies, governing authorities, Architect, and Owner. The General Contractor shall record discussions and agreements and furnish copy to each participant. Provide at least 72 hours advance notice to participants prior to convening pre- roofing conference.

1. General Contractor's Superintendent and Roofing Subcontractor's Superintendent shall be present.

2. Agenda for Conference:

a. Purpose shall be to verify readiness of project requirements; review details, last minute changes, or corrections; review anticipated schedule of progress.

b. Warranties, guarantees, bonds, and other related issues.

D. Regulatory Requirements:

1. FM Global (FMG) Listing: Provide roofing system and component materials that have been evaluated by FM Global System for fire spread, wind uplift, and hail damage and are listed in "FM Global Approval Guide" for Class I construction, and use with other roofing materials, including insulation.

a. Provide roof-covering materials bearing FMG approval marking on bundle, package, or container indicating that material has been subjected to FMG's examination and follow-up inspection service.

2. FM Global (FMG): Roof Assembly Classification, 1-90 Construction.

3. All insulation in roof and wall assemblies shall be approved for use without an additional thermal barrier in accordance with IBC Section 2603.4. Contractor to submit test reports to local building department showing compliance.

E. Provide roofing system with initial Solar Reflectance Index (SRI) equal or greater than 78 when calculated according to ASTM E1980 based on testing identical products by a qualified testing agency.

F. Fire-Test-Response Characteristics: Provide roofing materials with the fire-test-response characteristics indicated as determined testing identical products per test method below by UL, FMG, or another testing and inspection agency acceptable to authorities having jurisdiction. Materials shall be identified with appropriate markings of applicable testing and inspecting agency.

1.05 PROJECT CONDITIONS

A. Weather: Proceed with roofing work when existing and forecasted weather conditions permit work to be performed in accordance with manufacturers' recommendations and warranty requirements.

B. Proceed with roofing work only after substrate construction and penetrating work have been completed.

C. The Installer must examine the substrate and the conditions under which roofing work is to be performed and notify the Architect in writing of unsatisfactory conditions. Do not proceed with the work until unsatisfactory conditions have been corrected in a manner acceptable to the Installer.

D. Do not apply roofing to damp, frozen, dirty, dusty, or deck, surfaces unacceptable to manufacturer. The roof surface shall be free of ponded water, ice or snow.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Storage of all insulation and roofing materials at site shall be in a dry place properly protected from the elements, as approved by the manufacturer.

B. Wet Materials:

1. Insulation that has become wet before or after installation shall be removed and replaced. Drying out of wet insulation will not be permitted or acceptable for installation.

1.07 WARRANTY

A. Special Warranty:

1. The General Contractor, in conjunction with the authorized Roofing Contractor and the manufacturer of materials used, shall provide written warranty, agreeing to replace/repair defective materials and workmanship as required to maintain completed roofing system in watertight condition.

a. Warranty shall cover, at no cost to the Owner, all labor and materials required to repair or replace roofing, flashing, sheet metal, copings, and metal work against leaks or faulty workmanship. All costs for any of the above shall be absorbed by the General Contractor primarily, and his Roofing Contractor and materials manufacturer secondarily.

b. Warranty period is 15 years after date of Substantial Completion for labor and material with an additional five-year warranty (total of 20 years) on membrane material.

1) System shall be warrantied for all requirements specified, including for wind uplift as required under factory mutual classifications specified.

PART 2 PRODUCTS

2.01 GENERAL

A. Compatibility: Provide products which are recommended by manufacturers to be fully compatible with indicated substrates or provide separation materials as required to eliminate contact between incompatible materials.

2.02 FULLY ADHERED SYSTEM, TPO MEMBRANE

A. Approved Manufacturers:

1. Johns Manville International, Inc.
2. Carlisle Roofing Systems, Inc
3. Duro-Last Roofing, Inc.
4. Firestone Building Products
5. Or Approved Substitution

B. Membrane: Fabric-Reinforced Thermoplastic Polyolefin Sheet, ASTM D 6878/D6778M, uniform, flexible sheet formed from a thermoplastic polyolefin, internally fabric or scrim reinforced, manufacturers largest standard size as required by each installation. Color to be white.

1. Thickness: 60 mils (.060 inch), nominal.
2. Sheet Width: Factory fabricated into largest sheets possible.
3. Solar Reflectance: 0.75, minimum, initial, and 0.65, minimum, 3-year, certified by Cool Roof Rating Council.
4. Thermal Emissivity: 0.80, minimum, initial, and 0.79, minimum, 3-year certified by Cool Roof Rating Council.
5. Color: White
6. Breaking Strength: Minimum of 300 lbf as tested using ASTM D751
7. Tearing Strength: Minimum of 85 lbs as tested using ASTM D751

C. Sheet Flashing: Manufacturer's sheet flashing of same material, type, reinforcement, thickness, and color as sheet membrane. Factory applied adhesive backing, or field applied adhesive, as recommended by the manufacturer.

1. Sheet Flashing: Manufacturer's unreinforced sheet flashing of same material as sheet membrane. Factory applied adhesive backing, or field applied adhesive, as recommended by the manufacturer.

E. Bonding Adhesive: Manufacturer's standard solvent based bonding adhesive for membrane, and solvent-based bonding adhesive for base flashings.

F. Slip Sheet: Manufacturer's recommended slip sheet, of type required for application.

G. Metal Termination Bars: Manufacturer's standard predrilled stainless-steel or aluminum bars, with anchors.

H. Fasteners: Factory-coated steel fasteners and metal or plastic plates meeting corrosion-resistance provisions in FMG 4470, designed for fastening membrane to substrate, and acceptable to membrane roofing system manufacturer.

I. Miscellaneous Accessories: Provide pourable sealers, preformed cone and vent sheet flashings, preformed inside and outside corner sheet flashings, T-joint covers, termination reglets, cover strips, and other accessories.

J. Stack Boots: Prefabricated flexible boot and collars for pipe stacks through roof membrane; same material as membrane.

K. Other Materials: Furnish other materials not shown or specified required for complete and proper installation of roof system, as recommended by the roofing manufacturer.

2.03 WALKWAY PADS

A. Flexible Walkway Pads: Factory-formed, nonporous, heavy-duty, solid-rubber, slip-resisting, surface-textured walkway pads, and acceptable to membrane roofing system manufacturer.

a. Thickness:

1) Minimum: 0.162 inches
2) Maximum: 0.202 inches

b. Size: 30-inches x 30-inches

c. Color: White

B. Approved Substitution by other listed manufacturer.

2.04 ROOF INSULATION SYSTEM

A. Approved Manufacturers:

1. Johns Manville, Inc.
2. Firestone Building Products
3. Celotex Corporation
4. Approved substitution by TPO Manufacturer.

B. General: Provide insulating materials which comply with requirements indicated for materials, compliance with referenced standards, and other characteristics.

D. Polyisocyanurate Roof Insulation System: Insulation shall be manufactured for use with Roofing Systems specified and approved for use by roofing manufacturer. Material shall be factory fabricated from Polyisocyanurate Rigid Roof Insulation Board. FMG Class I approved and Underwriters Laboratories classified Class A. Board shall be cut, cleaned and vacuumed at the factory to form a rigid installation. Rated R-Value shall be tested in accordance with Long Term Thermal Resistance (LTTR) values.

E. Asbestos Content of Insulations: Provide insulations which contain no asbestos of any type of mixture of types occurring naturally as impurities as determined by polarized light microscopy test per Appendix A of 40 CFR 763.

F. Roof Insulation System: Two (2) layer insulation system: as follows:

1. First Layer to Deck: Rigid Foam Board Insulation.
2. Second Layer (Top): Perlite or Board Roof Insulation.

G. Rigid Foam Board Insulation: Rigid, closed-cell, polyurethane board with integrally bonded top and bottom facing sheets. Provide manufacturer's standard sizes.

1. Polyisocyanurate Board Insulation: ASTM C 1289, Type ll, felt or glass-fiber may facer on both major surfaces.
2. Thickness: Each layer minimum of 3.3 inches; R- value of 20.4
3. Approved Manufacturers: Celotex Corporation, Firestone Building Products, Johns Manville International, GAF Materials Corporation, or approved substitutions.

H. Rigid Board Roof Insulation: Rigid, noncombustible, perlite/fiber boards of thickness indicated, integrally skinned surfaces; comply with FS HH-I-529; manufacturer's standard sizes.

1. Thickness: One layer of 1 inch; R-value of 2.08.
2. Perlite Board Insulation: ASTM C 728; composed of expanded perlite, cellulose fibers, binders, and waterproofing agents with top surface seal-coated.
3. Approved Manufacturers: Celotex Corporation, Johns Manville International, GAF Materials Corporation, or approved substitutions.
4. Cellulosic-Fiber Board Insulation: ASTM C 208, Type II, Grade 1, fibrous-felted wood fiber or other cellulosic-fiber and water-resistant binders, asphalt impregnated, chemically treated for deterioration.
5. Approved Manufacturers: Celotex Corporation, Johns Manville International, GAF Materials Corporation, or approved substitutions.

I. Tapered Insulation: Tapered Insulation: ASTM C 1289, provide factory-tapered insulation boards fabricated to slope of 1/4 inch per 12 inches, unless otherwise indicated.

2.05 INSULATION ACCESSORIES

A. General: Roof insulation accessories recommended by insulation manufacturer for intended use and compatible with membrane roofing.

B. Provide factory preformed saddles, crickets, tapered edge strips, and other insulation shapes where indicated for sloping to drain. Fabricate to slopes indicated.

C. Fasteners: Factory-coated steel fasteners and metal or plastic plates meeting corrosion-resistance provisions in FMG 4470, designed for fastening roof insulation to substrate, and furnished by roofing system manufacturer.

D. Urethane Adhesive: Manufacturer's two component urethane adhesive formulated to adhere insulation to substrate.

E. Wood Nailer Strips: Comply with requirements in Division 06 Section **"**Rough Carpentry**."**

2.06 AUXILIARY ROOFING SYSTEM COMPONENTS

A. Expansion Joints: Provide factory fabricated weatherproof, exterior covers for expansion joint openings consisting of flexible rubber membrane, supported by a closed cell foam to form flexible bellows, with two metal flanges, adhesively and mechanically combined to the bellows by a bifurcation process. Provide products manufactured and marketed by single-source membrane supplier.

B. Coping System: Prefinished formed cap flashing.

C. Metal Flashing Sheet: Metal flashing sheet is specified in Division 07 Section "Sheet Metal Flashing and Trim."

PART 3 EXECUTION

3.01 PREPARATION OF SUBSTRATE

A. General: Comply with manufacturers' instructions for preparation of substrate to receive FSR system.

B. Clean substrate of dust, debris, and other substances detrimental to FSR system work. Remove sharp projections. Do not apply sheet roofing to damp, frozen, dirty, dusty, or deck surfaces unacceptable to manufacturer. Roof surface shall be free of ponding water, ice, or snow.

C. Install flashings, and accessory items as shown, and as recommended by manufacturer even though not shown.

D. Prime substrates where recommended by the manufacturer of materials being installed.

E. Ensure Roof Drains are installed and prepared for roofing system installation.

F. Prevent compounds from entering and clogging drains and conductors, and from spilling or migrating onto surfaces of other work.

3.02 INSPECTION

A. The Contractor shall be responsible for providing a proper substrate to receive the roofing system. Installation shall not proceed until the substrate is inspected and approved by the Owner's Representative.

B. Substrate shall have positive drainage and shall be verified by Contractor prior to installation of new materials.

C. Surface joints shall be less than 1/4" wide. All joints wider than 1/4" must be repaired with proper materials.

D. Verify that drains, sleeves, and curbs which pass through surfaces to receive roofing are rigidly installed.

E. Surfaces to receive new materials shall be as required by manufacturer to ensure a proper bond.

F. Verify that surfaces are free of cracks, depressions, waves, or projections which may be detrimental to successful installation. Remove foreign materials.

G. Starting work of this Section means acceptance of substrate and site conditions.

3.03 INSTALLATION - GENERAL

A. Comply with the instructions and recommendations of the roofing materials manufacturer, except to the extent more stringent requirements are indicated.

B. Confinement of Materials: Do not allow fluid and plastic materials to spill or migrate beyond surfaces of intended application, or to flow into drains, conductors, or ceilings below.

C. Performance: It is required that roofing work be watertight for normal weather exposures, and not deteriorate in excess of the manufacturer's published limitations.

3.04 INSTALLATION OF ROOF DECK INSULATION

A. The insulation shall be installed mechanically fastened to deck according to the roofing manufacturer's recommendations. Mechanical fasteners shall penetrate into the decking as required by FM Global and manufacturer of roofing materials.

1. Stagger joints in boards, forming a complete thermal envelope.

2. Fasteners shall be spaced a maximum of 2'-0" o.c. and there shall be one fastener installed at each and every corner of each board, and in addition, the pattern of fasteners shall conform to building code specified Requirements for wind uplift.

B. Multiple Layer Installation:

1. First Layer: Lay insulation units with long edge joints continuous and end joints staggered.

2. Second Layer: Install in same manner as first layer with joints between layers staggered. Mechanically fasten insulation to deck in accordance with FMG Loss Prevention Data Sheets 1-28 and 1-29S patterns in field, perimeter, and corners for 90 psf wind uplift resistance.

C. Lay insulation boards to moderate contact without forcing joints. Cut insulation to fit neatly to perimeter blocking and around protrusions through roof.

1. System shall fit tight within limitations of roofing manufacturer’s specifications and not exceeding ¼” apart. All gaps greater than ¼” must be filled.

D. Place roof crickets and tapered insulation to required slope pattern in accordance with manufacturer's instructions.

E. Exposure: Do not install more insulation each day than will be covered by waterproofing by end of same day.

3.05 MEMBRANE INSTALLATION

A. Edges of roofing shall be sealed at the end of each day's work and if inclement weather is expected during the work period.

3.06 PROTECTION

A. After completing roofing (including associated work), institute appropriate procedures for surveillance and protection of roofing during remainder of construction period. At the end of the construction period, or at a time when remaining construction will in no way affect or endanger roofing, make a final inspection of roofing and prepare a written report to Owner, describing nature and extent or deterioration or damage found.

B. Repair or replace (as required) deteriorated or defective work found at the time of final inspection to a condition free of damage and deterioration at the time of substantial completion and according to requirements of the specified warranty.

3.07 DEFECTIVE WORK

A. Refinish or remove and replace insulation surfaces not acceptable to receive roofing or where physical properties do not meet specified requirements.

END OF SECTION

SECTION 07 61 00 - SHEET METAL ROOFING

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Extent of metal roofing is shown on the Drawings and indicated by provisions of this Section.
2. The following types of work are specified in this Section:
    a. Standing Seam Roof System
    b. Flashings
    c. Matching Fascia
    d. Underlayment.
        1) Self-Adhering Sheet Underlayment

B. Related Sections:

1. Section 06 10 00 - Rough Carpentry
2. Section 07 20 00 - Thermal Protection
3. Section 07 62 00 - Sheet Metal Flashing and Trim

1.02 REFERENCES

A. ASTM International Publications:

1. A653 “Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process”
2. D1970 “Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection”
3. E1646 “Standard Test Method for Water Penetration of Exterior Metal Roof Panel Systems by Uniform Static Air Pressure Difference”
4. E1680 “Standard Test Method for Rate of Air Leakage Through Exterior Metal Roof Panel Systems”

B. Sheet Metal and Air Conditioning Contractors' National Association (SMACNA) Publications:

1. "Architectural Sheet Metal Manual", Current Edition

C. American Institute of Steel Construction Inc. (AISC) Standards.

D. Underwriter's Laboratories, Inc. (UL) Standards:

1. 580 "Tests for Uplift Resistance of Roof Assemblies"

1.03 SYSTEM DESCRIPTION

A. General: Provide complete sheet metal roofing system, including, but not limited to metal roof panels, cleats, clips, anchors and fasteners, sheet metal flashing integral with sheet metal roofing, drainage components related to sheet metal roofing, fascia panels, trim, underlayment, and accessories as indicated and as required for a weathertight installation.

B. Air Infiltration: Provide Roof Panel System with no air leakage of not more than 0.09 cfm/sq. ft. of fixed roof area when tested in accordance with ASTM E1680 at a static-air-pressure difference of 4.0 lbf/sq. ft.

C. Water Penetration: Provide Roof Panel System with no water penetration as defined in the test method when tested with ASTM E1646 at a minimum differential pressure of 20 percent of inward acting, wind-load design pressure of not less than 6.24 PSF and not more than 12.0 PSF.

D. Metal roof system shall be grounded in accordance with local Codes, as approved by the Building Department. This Contractor shall provide a provision for connection of roof grounding system to building ground system by Electrical Contractor. Coordinate with Electrical Contractor as required for complete grounding system.

1.04 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

B. Product Data: Submit "Letter of Conformance" in accordance with Section 01 33 00 indicating specified items selected for use in project with the following supporting data.

1. Submit metal manufacturers and fabricator's specifications, installation instructions, and general recommendations for roofing applications. Include certification or other data substantiating that materials comply with requirements.

2. Samples: 12 inches long by actual width of unit, including finished seam and in required profile. Include fasteners, cleats, clips, and other attachments.

C. Shop Drawings: Show fabrication and installation layouts of sheet metal roofing, including plans, elevations, and keyed references to termination points. Distinguish between shop- and field-assembled work. Include the following:

1. Details for forming sheet metal roofing, including seams and dimensions.

2. Details for joining and securing sheet metal roofing, including layout of fasteners, clips, and other attachments. Include pattern of seams.

3. Details of termination points and assemblies, including fixed points.

4. Details of expansion joints, including showing direction of expansion and contraction.

5. Details of edge conditions, including eaves and counterflashings.

6. Details of special conditions.

7. Details of connections to adjoining work.

1.05 QUALITY ASSURANCE

A. Installer: A firm with five years of prior successful experience with installation of metal roofing of type and scope equivalent to work of this Section. Installer shall be certified in writing by the manufacturer to be an authorized and franchised dealer of the system to be furnished. Certification shall state date on which authorization was granted.

B. Industry Standard: Except as otherwise shown or specified, comply with applicable recommendations and details of the SMACNA "Architectural Sheet Metal Manual". Conform to dimensions and profiles shown.

C. The intent of these Specifications is to establish a quality and performance level for structural design, material, durability, and workmanship.

D. All bidders must conform strictly to these Specifications in their Bid.

E. The metal roofing manufacturer shall be United States based and demonstrate it has been in the business of furnishing (and/or erecting) complete building systems of similar size and complexity for a minimum of ten (10) years.

1. Building system manufacturer shall be American Institute of Steel Construction Inc. (AISC), Category MB Certified.
2. All materials shall be new, unused, free from defect.

F. The following criteria shall also be applicable in other phases of design:
1. Building Code having jurisdiction over the area in which the site is located.
2. Structural Steel Painting Council Standards
3. Federal, Military, and Commercial Standards
4. ASTM Standards
5. Written Certification of Rating by: Underwriter's Laboratories, Inc. (UL) Class 90 Rating (UL. Test 580). Factory Mutual Engineering Association: Class 1 and 1-90 Windstorm Classification.

G. Certification: Submit written certification prepared and signed by a professional engineer registered to practice in the State in which the Project is located, verifying that the system design (including panels, clips, and support system components) meet indicated loading requirements and codes of authorities having jurisdiction.

H. Mockups: Build mockups to verify selections made under sample submittals and to demonstrate aesthetic effects and qualities of materials and execution.
1. Build mockup of typical roof area, as shown on Drawings; approximately 48 inches square by full thickness, including attachments, underlayment, and accessories.
2. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless such deviations are specifically approved by Architect in writing.
3. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Materials shall be delivered to the site in a dry and undamaged condition and stored out of contact with the ground. Materials other than framing and structural members shall be covered with weathertight coverings and kept dry. Storage accommodations for roof and wall covering shall provide good air circulation and protection from surface staining.

1.07 WARRANTY

A. The following guarantees shall be provided by the metal roofing manufacturer:
1. Durability of the roof panels against rupture, structural failure, or perforation shall be guaranteed for a period of ten (10) years.
2. The color finish for the roof and wall panels shall be guaranteed by the building manufacturer for standard term against blistering, peeling, cracking, flaking, checking, and chipping. Excessive color change and chalking shall be guaranteed for ten (10) years.

B. Provide manufacturer's written weathertightness warranty for a maximum of ten (10) years against leaks in roofing system. Warranty shall be signed by both the manufacturer of the metal roofing system and the metal roofing system installer.

PART 2 PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

A. Approved Manufacturers:

1. "Standing Seam Tee-Panel System"; Berridge Manufacturing Company (800-231-8127)
2. "Dutch Seam (MRD) Panel System"; ATAS International, Inc. (800-468-1441)
3. “Snap-On-Seam SS10-12 Panel System”; Dimensional Metals Inc. (DMI) (800-828-1510)
4. "Snap-Clad Panels"; Petersen Aluminum Corporation (PAC-CLAD) (800-722-7150)

2.02 DESIGN LOADS

A. The basic design loads shall include roof live and snow (where applicable), wind (both external and internal), and earthquake (where applicable), in addition to dead load. All other foreign loads, whether they be of static, dynamic, or kinetic nature, shall be considered as auxiliary loads. Refer to Drawings for design loads.

2.03 ROOF COVERING

A. All roof constructions shall carry the Underwriter's Laboratories, Inc. (UL) Construction (Uplift) rating of not less than Class 90.

B. Roof System

1. The roof system shall be composed of the following:
   a. Panels shall be nominal 12-3/4" seam on center with snap-on seam. Fabricate from 24 gauge hot dipped galvanized (G-90) steel in accordance with ASTM A653.
   b. Flouropolymer finish to be Kynar 500. Coating to be two-coat, thermo-cured, full-strength 70% "Kynar 500" fluouropolymer coating. Manufacturer warrants that coating shall not blister, peel, crack, chip, or experience rust-through for ten (10) years.
   c. Custom panel widths at both ends of panel run to provide a continuous panel formed to the shape of the substrate allowing the panel leg to extend vertically and counterflash at the rake condition.
   d. All panels to be in one continuous length without lap joints within the individual run.
   e. Color: As shown on Exterior Finish Index.
2. Deflection of the roof panel shall not exceed L/180 of its span when supporting the applicable vertical live loads previously prescribed.

C. Roof Openings

1. Openings 12" or smaller shall be flashed by the metal roofing manufacturer.

2.04 UNDERLAYMENT MATERIALS

A. Self-Adhering Sheet Underlayment:

1. Type 2 (Heat Resistant Type):
   a. Self-Adhering Sheet Underlayment, Polyethylene Faced: ASTM D1970, minimum of 30 mils thick; slip-resisting, polyethylene-film-reinforced top surface laminated to a heat resistive adhesive, with release-paper backing; cold applied. Provide primer when recommended by underlayment manufacturer.
   b. Approved Products:
      1) "CCW WIP 300HT"; Carlisle Coatings & Waterproofing, Div. of Carlisle Companies Inc.
      2) "Grace Ultra"; W. R. Grace & Co.

B. Slip Sheet: Building paper, minimum 3 lb/100 sq. ft., rosin sized.

2.05 MISCELLANEOUS MATERIALS

A. Accessories: Except as indicated as work of another specification section, provide components required for a complete roof and wall panel system, including gable and other trim, perforated and non-perforated soffit panels, closures, clips, seam covers, battens, flashings, sealants, gaskets, fillers, and similar items. Match materials and finishes of panels.

1. This Contractor shall provide and install all additional structural material required to install the roof and wall systems that has not been shown on the Drawings.

2. Refer to Section 07 60 00 (07600) for additional flashing requirements.

B. Unless noted otherwise, provide the following sheet metal accessories, factory-formed of the same material in the same finish as roof panels:

1. Ridge Covers

2. Vented Ridge Cap

3. Fascias

4. Soffit System

5. Flashings

6. Gutters (When adjacent to metal roofing)

C. Sealing Tape: Pressure-sensitive, 100 percent solids gray polyisobutylene compound sealing tape with release paper backing. Provide permanently elastic, non-sag, nontoxic, non-staining tape 1/2" wide and 1/8" thick.

D. Joint Sealant: One-part elastomeric polyurethane, polysulfide, or silicone rubber sealant, as recommended by the building manufacturer.

PART 3 EXECUTION

3.01 PREPARATION

A. Coordinate metal roofing and wall system with rain drainage work, flashing, trim and construction of decks, parapets, walls, and other adjoining work, to provide a permanently leakproof, secure and non-corrosive installation.

3.02 INSTALLATION - UNDERLAYMENT

A. Self-Adhering Sheet Underlayment: Install self-adhering sheet underlayment, wrinkle free, on roof sheathing under sheet metal roofing. Apply primer if required by underlayment manufacturer. Comply with temperature restrictions of underlayment manufacturer for installation; use primer rather than nails for installing underlayment at low temperatures. Apply over entire roof, in shingle fashion to shed water, with end laps of not less than 6 inches staggered 24 inches between courses. Overlap side edges not less than 3-1/2 inches. Roll laps with roller. Cover underlayment within 14 days.

B. Install flashings to cover underlayment to comply with requirements specified in Division 07 Section "Sheet Metal Flashing and Trim."

C. Apply slip sheet over underlayment before installing sheet metal roofing.

3.03 INSTALLATION - SHEET METAL ROOFING

A. Manufacturer's Recommendations: Except as otherwise shown or specified, comply with recommendations and instructions of manufacture of sheet metal being fabricated and installed.

B. Separate dissimilar metals from each other by painting each metal surface in area of contact with a bituminous coating, or by applying adhesive polyethylene underlayment to each metal surface, or by other permanent separation as recommended by manufacturers of dissimilar metals.

C. Form and fabricate sheets, seams, strips, cleats, valleys, ridges, edge treatments, integral flashings and other components of metal roofing to profiles, patterns and drainage arrangements shown, and as required for permanently leakproof construction. Provide for thermal expansion and contraction of the work. Seal joints as shown, and as required for leakproof construction. Shop fabricate materials to greatest extent possible.

D. Sealant Type Joints: Where sealant filled joints are used, embed hooked flanges of joint members not less than 1" into sealant. Form joints to completely conceal sealant. When ambient temperature is moderate at time of installation (40 deg. to 70 deg. F), set joint members for 50% movement either way. Adjust setting proportionately for installation at higher ambient temperatures. Do not install sealant type joints at temperatures below 40 deg. F. Comply with requirements of Division 07 - Sealant section for the handling and installation of sealants.

E. Fabricate and install work with lines and corners of exposed units true and accurate. Form exposed faces flat and free of buckles, excessive waves and avoidable tool marks considering temper and reflectivity of metal. Provide uniform, neat seams with minimum exposure of solder, welds, and sealant. Except as otherwise shown, fold back sheet metal to form a hem on concealed side of exposed edges.

F. Conceal fasteners and expansion provisions where possible in exposed work, and locate so as to minimize possibility of leakage. Cover and seal fasteners and anchors as required for a tight installation.

G. Erection shall be in accordance with the approved erection instructions and Drawings and the requirements herein.

H. Sheets with improper or mislocated drill holes will be rejected.

I. Exposed surfaces shall be kept clean and free from sealant, metal cuttings, and other foreign materials.

J. Field cutting or burning of misaligned connections, openings and/or wall framing shall not be permitted.

K. Stained, discolored, or damaged sheets shall be removed from the site.

L. Arrange and next side-lap joints so prevailing winds blow over, not into, lapped joints. Lap ribbed or fluted sheets one full rib corrugation. Apply panels and associated items for neat and weathertight enclosure. Avoid "panel creep" or application not true to line. Protect factory finishes from damage.

    1. Provide weather seal under ridge cap where shown in construction documents or noted elsewhere. Flash and seal roof panels at eave and rake with rubber, neoprene, or other closures to exclude weather.

M. Roof System: Fasten panels in accordance with the manufacturer's instructions.

N. All exposed fasteners shall be approved in advance by the Architect.

O. Side laps and end laps of roof and wall covering and joints at accessories shall be sealed.

P. Exposed fasteners shall be driven normal to the surface and to a uniform depth to properly seat the gasketed washers.

Q. Accessories shall be fastened into framing members, except as otherwise approved.

R. Provide expansion joints in the roofing and/or roof framing as required to prevent damage and distress due to temperature changes.

S. Flashing and Trim: Comply with performance requirements, manufacturer's written installation instructions, and SMACNA's "Architectural Sheet Metal Manual." Provide concealed fasteners where possible, and set units true to line and level as indicated. Install work with laps, joints, and seams that will be permanently watertight and weather resistant.

T. Sheet Metal Accessories: Install curbs and other sheet metal accessories in accordance with manufacturer's recommendations for positive anchorage to building and weathertight mounting.

3.04 CLEANING AND PROTECTION

A. Remove protective film (if any) from exposed surfaces of metal roofing, promptly upon installation. Strip with care to avoid damage to finishes.

B. Cleaning and Touch-up: Clean component surfaces of matter that could preclude paint bond. Touch up abrasions, marks, skips, or other defects to shop-primed surfaces with same type
material as shop primer.

C. Replace panels that have been damaged or have deteriorated beyond successful repair by finish touchup or similar minor repair procedures.

D. Provide final protection in a manner acceptable to installer, which ensures metal roofing being without damage or deterioration at time of substantial completion.

END OF SECTION

SECTION 07 62 00 - SHEET METAL FLASHING AND TRIM

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Flashing at Roof, Windows, Doors, and other locations as shown on Drawings.
2. Roof Drainage Systems:
    a. Gutters
    b. Downspouts
3. Louvers
4. Prefinished Formed Cap Flashings (Copings)
5. Fasteners

B. Related Sections:

1. Section 06 10 00 - Rough Carpentry
2. Section 07 20 00 - Thermal Protection
3. Section 07 24 00 - Exterior Insulation and Finish Systems (EIFS)
4. Section 07 54 23 - Thermoplastic Polyolefin (TPO) Membrane Roofing
5. Section 07 61 00 - Sheet Metal Roofing
6. Section 07 72 33 - Roof Specialties: Roof Hatches
7. Section 07 92 00 – Joint Sealants
8. Section 08 11 13 - Steel Doors and Frames
9. Section 08 32 13 - Sliding Aluminum-Framed Glass Doors
10. Section 08 41 13 - Aluminum Entrances and Storefronts
11. Section 08 42 29 - Automatic Entrance Doors
12. Section 08 51 13 - Aluminum Windows
13. Section 23 81 13 - Packaged Terminal Air-Conditioning Units
14. Section 23 37 00 - Air Inlets & Outlets

1.02 REFERENCES

A. ASTM International Publications:

1. B32 "Standard Specification for Solder Metal"
2. B117 "Standard Practice for Operating Salt Spray (Fog) Apparatus"
3. B209 "Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate"
4. D226 “Standard Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing”
5. C920 “Standard Specification for Elastomeric Joint Sealants”
6. D523 “Standard Test Method for Specular Gloss”
7. D1079 “Standard Terminology Relating to Roofing, Waterproofing, and Bituminous Materials”

8. D1970 “Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection”
9. D2244 “Standard Practice for Calculation of Color Tolerances and Color Differences from Instrumentally Measured Color Coordinates”
10. D2247 “Standard Practice for Testing Water Resistance of Coatings in 100% Relative Humidity”
11. D2843 “Standard Test Method for Density of Smoke from the Burning or Decomposition of Plastics”
12. D3359 “Standard Test Methods for Measuring Adhesion by Tape Test”
13. D6221 “Standard Specification for Reinforced Bituminous Flashing Sheets for Roofing and Waterproofing”

B. American Architectural Manufacturers Association (AAMA) Publications:
1. 1402 “Standard Specifications for Aluminum Siding, Soffit and Fascia”
2. 2603 “Voluntary Specification, Performance Requirements and Test Procedures for Pigmented Organic Coatings on Aluminum Extrusions and Panels”
3. 2604 “Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusion and Panels”

C. FM Global (FMG) Standards

D. Sheet Metal and Air Conditioning Contractors' National Association (SMACNA) Publications:
1. "Architectural Sheet Metal Manual", Current Edition

E. Single Ply Roofing Industry (SPRI) Publications:
1. ANSI/SPRI ES-1 “Wind Design Standard for Edge Systems Used with Low Slope Roofing Systems”

F. The Society for Protective Coatings (SSPC) Publications:
1. “SSPC Painting Manual”
2. Paint 12, Cold-Applied Asphalt Mastic (Extra Thick Film)

G. National Association of Architectural Metal Manufacturers (NAAMM) Publications:
1. "Metal Finishes Manual"

1.03 PERFORMANCE REQUIREMENTS

A. General: Install sheet metal flashing and trim to withstand wind loads, structural movement, thermally induced movement, and exposure to weather without failing.

B. Copings and roof edge flashings, except for gutters, shall be designed and installed in accordance with Chapter 16 of the International Building Code (IBC) and tested for resistance in accordance with ANSI/SPRI ES-1 and capable of resisting the following design pressure.
1. Design Pressure: Based on the following values:
   a. Wind Speed: 90 mph
   b. Horizontal Design Pressure: 34 psf
   c. Vertical Design Pressure: 56 psf

C. Thermal Movements: Provide sheet metal flashing and trim that allow for thermal movements resulting from the following maximum range in ambient and surface temperatures by preventing buckling, opening of joints, hole elongation, overstressing of components, failure of joint sealants, failure of connections and other detrimental effects. Provide clips that resist rotation and avoid sheer stress as a result of sheet metal and trim thermal movements.

1. Temperature Change (Range): 120 Degree F ambient; 180 Degree F material surfaces.

D. Water Infiltration: Provide sheet metal flashing and trim that do not allow water infiltration to building interior

1.04 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

B. Product Data: Submit "Letter of Conformance" in accordance with Section 01 33 00 indicating specified items selected for use in project with the following supporting data.

1. Submit Shop Drawings, color samples, product information, and samples clearly detailing shaping, jointing, length of sections, fastening, and installation details.

2. Manufacturer's standard color charts for selection purposes.

1.05 QUALITY ASSURANCE

A. Installer Qualifications: Engage an experienced installer who has completed sheet metal flashing and trim work similar in material, design, and extent to that indicated for this project and with a record of successful in-service performance.

B. Do not proceed with the installation of flashing and sheet metal work until curb and substrate construction, cant strips, blocking, reglets, and other construction to receive the work is completed.

C. Flashing and sheet metal shall be installed in accordance with:

1. FM Global (FMG) Standards (Factory Mutual Engineering and Research Requirements)

2. SMACNA's Architectural Sheet Metal Manual"

3. Conform to dimensions and profiles shown unless more stringent requirements are indicated.

D. The installer must examine the substrate and the conditions under which flashing and sheet metal work is to be performed, and notify the Architect in writing of unsatisfactory conditions. Do not proceed with the work until unsatisfactory conditions have been corrected in a manner acceptable to the installer.

1.06 PROJECT CONDITIONS

A. Existing Conditions:

1. Exercise care when working on or about roof surfaces to avoid damaging or puncturing membrane or flexible flashings.

2. Place plywood panels on roof surfaces adjacent to work of this Section and on access routes. Keep in place until completion of work.

B. Roofing and flashing shall not be applied during precipitation and shall not be started in the event there is a probability of precipitation during application. Metal faced flashing shall not be applied when ambient temperature is below 35 degrees F.

C. Do not install Membrane Flashing Systems on wet or damp surfaces. Surfaces should also be free from dirt, oils, lubricants or other debris that may inhibit adhesion of the flashing tape to the substrate. After precipitation, allow a minimum of 24 hours for drying before installing the flashing tape. For optimal performance, install at temperatures above 40 degrees F.

D. Coordinate Work of this Section with interfacing and adjoining Work for proper sequencing of each installation. Ensure best possible weather resistance, durability of Work, and protection of materials and finishes.

1.07 DELIVERY, STORAGE, AND HANDLING

A. Delivery: Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.

B. Storage and Protection: Protect materials from rain and physical damage. Provide cover on top and on all sides, allowing for adequate ventilation. Store flashing where temperatures will not exceed 90 degrees F for extended periods. Store all products in a dry area away from high heat, flames or sparks.

C. Store Membrane Flashing System products in manufacturer's unopened packaging until ready for installation and dispense the needed amounts of materials from the manufacturer box.

1.08 WARRANTY

A. Provide Owner with warranty stating that flashing material and metal wall fascia will properly shed water and protect roof and wall from physical damage for a minimum period of five years from date of Substantial Completion and the damage resulting from failure to provide above stated performances will be repaired to satisfaction of Owner at no additional cost.

PART 2 PRODUCTS

2.01 ALUMINUM FLASHING AND SHEET METAL

A. Materials:

1. Aluminum Sheet: ASTM B209, Alloy 3003, Temper H14, AA-C22A41, minimum .032 inch thick (20 ga) sheet.

a. Finish: 5-year Fluoropolymer 2-Coat System: Manufacturer's standard 2-coat, thermo-cured system consisting of specially formulated inhibitive primer and fluouropolymer color topcoat containing not less than 70 percent polyvinylidene fluoride resin by weight; complying with AAMA 2604 where exposed.

2. Fasteners: Concealed type; of same material as flashings; sized to suit application.

3. Size and shape as shown on Drawings.

4. Color: Refer to Exterior Finish Color and Drawings of Building Elevations.

2.02 GUTTERS & DOWNSPOUTS

A. Approved Manufacturers:

1. Alcoa Building Products (800-962-6973)

2. Alside, Inc. (800-257-4335)

3. Approved substitution

B. Materials:

1. Seamless, continuous, gutters to be minimum 032" thick, downspouts to be minimum .024" thick, sheet aluminum conforming to requirements of ASTM B209, Alloy 3003, Temper H14, finish to be thermo-setting acrylic enamel conforming to AAMA 603.8.

2. Color: As shown on Exterior Finish Index.

3. Size and Shape:

a. Gutters: As shown on Drawings.

b. Downspouts: Minimum 3-3/4" x 5" rectangular shape, or as indicated on Drawings.

4. Accessories:

a. Gutters:

1) End caps

2) Hangers: Concealed

3) Non-corrosive leaf screens at gutters.

b. Downspouts:

1) Elbows

2) Straps: Minimum two per downspout

3) Strainers

c. Transition from downspout to underground storm piping: Advanced Drainage Systems, Inc. (800-821-6710), Model 4-465.

1) Provide splash-blocks where required. Units shall be concrete, minimum 3,000 psi at 28 days with 5% air entrainment. Size and profile to suit application.

2.03 LOUVERS

A. Avendra, LLC Preferred Manufacturers:

1. None

B. Approved Manufacturers:

1. “Model SLX4.KB-45”; Cesco Products (888-422-3726) or approved equal.

C. Provide channel frame design, 45-degree blade angle, extruded aluminum stationary louver.

D. Color: Refer to Exterior Finish Index.

2.04 PREFINISHED FORMED CAP FLASHING

A. Avendra, LLC Preferred Manufacturers:

1. None

B. Prefinished Formed Cap Flashing shall be factory painted (Kynar 500) 24 gauge steel. Formed in 10’-0” sections. Cover top of wall with 20 mil flashing, lap and cement 6 inch end joints. Cross joints shall be made with 3/16 Inch expansion joint, 6 inch wide cover plate, sealed with mastic. Secure in place with continuous cleats of same material as coping; attached at 6 inch intervals. Coping corners shall be mitered, seamed, sealed with sealant.

1. Color as shown on Exterior Finish Index.

2.05 MEMBRANE FLASHING

A. Wall Flashing:

1. Approved Manufacturers:

a. "Perm-A-Barrier" wall flashing and "Perm-A-Barrier" primer and stainless steel drip edge; W.R. Grace & Company (800-778-2880)

b. “Hyload SA with Stainless Steel Drip Edge”; Hyload Flashing (800-457-4056)

c. “Flex Flash SA with Stainless Steel Drip Edge”; Hohman and Bernard, Inc. (800-645-0616)

d. “DuPont Thru-Wall Flashing System with Integrated Drip Edge”; DuPont Company (800-448-9835).

B. Door & Window Opening Flashing System

1. Manufacturer:

a. Approved Manufacturers:

1) "Tyvek FlexWrap" and "Tyvek StraightFlash"; DuPont Company (800-448-9835)

2. Elasticized Flexible Flashing Tape complying with the following:

a. Face Material composition: Elasticized polyethylene laminate.

b. Face color: White.

c. Adhesive composition; Butyl adhesive containing non-halogen fire retardant additive

d. Thickness: > 60 mils.

e. Release liner: 2 part siliconized paper.

f. Elastic Elongation, MD (length @ Full Extension / Length @ Relaxed): >230% @ 70 F.

g. Dimension: 8 or 10 inch width

3. Straight Polyethylene Laminate Flashing Tape complying with the following:

a. Face Material composition: Polyethylene laminate

b. Face color: White

c. Adhesive Composition: Butyl adhesive containing fire retardant additive

d. Thickness: 30 mils

e. Release liner: 1 piece siliconized paper

f. Dimension: 4 inch width

4. Accessories:

a. Sealing Tape:

1) Material: Pressure sensitive, polypropylene substrate with acrylic based adhesive. Provides permanently elastic, nonsag, nontoxic, nonstaining tape, which is compatible with Tyvek Weatherization Systems products.

2) Finish Product Brand Name: DuPont Tyvek Contractor Tape.

b. Fasteners:

1) Material: 1" diameter plastic cap, nail length (1", 11/2", 2") for wood frame construction, or 2" diameter plastic cap with 1 5/8" drill point self tapping screw for metal stud applications, designed to withstand designed loads.

2) Finish Product Brand Name: DuPont Tyvek Wrap Caps.

c. Sealants: ASTM C 920, elastomeric polymer sealant, of type, grade, class, and use classifications required to seal joints and remain watertight and are compatible with DuPont Tyvek.

1) OSI Quad Pro-Series; solvent release kraton rubber sealant.

2) DAP DynaFlex 230™.

3) Other products as approved and recommended by the flashing manufacturer.

d. Primer:

1) 3M High Strength 90

2) Other products as approved and recommended by the flashing manufacturer.

e. End Dams:

1) Contractor Option: Provide min. 4" preformed end dams by DuPont Company (800-448-9835)

2) Contractor Option: Provide min. 4" preformed end dams by Hyload Flashing., 800-457-4056.

C. Thru-Wall Flashing:

1. Approved Manufacturers:

a. "5 oz. Copper Flashing with Stainless Steel Drip Edge", York Manufacturing, Inc. (800-551-2828)

b. "Flex Flashing with Stainless Steel Drip Edge", Hohman and Bernard, Inc. (800-645-0616)

c. "Perm-A-Barrier" wall flashing and "Perm-A-Barrier" primer and stainless steel drip edge as manufactured by W.R. Grace & Company (800-778-2880)

d. "Hyload SA with Stainless Steel Drip Edge", Hyload Flashing (800-457-4056)

e. "DuPont Thru-Wall Flashing System with Integrated Drip Edge"; DuPont Company (800-448-9835).

1) System to include preformed inside/outside corners and end dams to match the wall design.

2. Provide fasteners, primers, sealants, and mastic as approved by manufacturer, as required.

2.06 MISCELLANEOUS MATERIALS AND ACCESSORIES

A. Bituminous Paint: Acid and alkali-resistant type; black color; FS TT-C-494 or SSPC-Paint 12 solvent type, nominally free of sulfur, compounded for 15-mil dry film thickness per coat.

B. Fasteners: Same metal as sheet metal flashing or other noncorrosive metal as recommended by sheet metal manufacturer. Match finish of exposed heads with material being fastened.

C. Elastomeric Sealant: Generic type recommended by sheet metal manufacturer and fabricator of components being sealed and complying with requirements for joint sealants as specified in Division 07 Section " Joint Sealants".

D. Epoxy Seam Sealer: Two-part, noncorrosive, aluminum seam-cementing compound, recommended by aluminum manufacturer for exterior and interior nonmoving joints, including riveted joints.

E. Adhesives: Type recommended by flashing sheet metal manufacturer for waterproof and weather-resistant seaming and adhesive application of flashing sheet metal.

F. Metal Accessories: Provide sheet metal clips, straps, anchoring devices, and similar accessory units as required for installation of work, matching or compatible with material being installed; noncorrosive; size and thickness required for performance.

2.07 FABRICATION, GENERAL

A. Sheet Metal Fabrication Standard: Fabricate sheet metal flashing and trim to comply with recommendations of SMACNA's "Architectural Sheet Metal Manual" that apply to the design, dimensions, metal, and other characteristics of the item indicated.

B. Comply with details shown to fabricate sheet metal flashing and trim that fit substrates and result in waterproof and weather-resistant performance once installed. Verify shapes and dimensions of surfaces to be covered before fabricating sheet metal.

C. Form exposed sheet metal work that is without excessive oil canning, buckling, and tool marks and that is true to line and levels indicated, with exposed edges folded back to form hems.

D. Seams: Fabricate nonmoving seams in aluminum with flat-lock seams. Form seams and seal with epoxy seam sealer. Rivet joints for additional strength.

E. Expansion Provisions: Comply with SMACNA standards. Space movement joints at maximum of 10 feet with no joints allowed within 24 inches of corner or intersection. Where lapped or bayonet-type expansion provisions in work cannot be used or would not be sufficiently weatherproof and waterproof, form expansion joints of intermeshing hooked flanges, not less than 1 inch deep, filled with mastic sealant (concealed within joints).

F. Sealed Joints: Form non-expansion, but movable, joints in metal to accommodate elastomeric sealant to comply with SMACNA standards.

G. Separate metal from noncompatible metal or corrosive substrates by coating concealed surfaces at locations of contact with asphalt mastic or other permanent separation as recommended by manufacturer.

H. Conceal fasteners and expansion provisions where possible. Exposed fasteners are not allowed on faces of sheet metal exposed to public view.

I. Fabricate cleats and attachment devices from same material as sheet metal component being anchored or from compatible, noncorrosive metal recommended by sheet metal manufacturer.

1. Size: As recommended by SMACNA manual or sheet metal manufacturer for application, but never less than thickness of metal being secured.

J. Form gutters and downspouts of profiles and sizes indicated and as required to properly collect and remove water. Fabricate complete with required connection pieces.

1. Form sections square, true, and accurate in size, in maximum possible lengths and free of distortions and defects detrimental to appearance or performance hem exposed edges. Allow for expansion at joints. Miter gutter corners.

2.08 FABRICATION - FLASHINGS AND PREFINISHED FORMED CAP FLASHINGS

A. Form sections square true, and accurate to size, free from distortion and other defects detrimental to appearance or performance.

B. Form sections in maximum lengths. Make allowances for expansion at joints.

C. Seams are to be standing lock or batten type except corners. Fabricate corners minimum 18 inches mitered, soldered, or welded, and sealed as one piece.

D. Wipe and wash clean, soldered joints, to remove traces of flux immediately after soldering.

E. Hem exposed edges of flashings on underside 1/2 inch.

F. Backpaint flashings with bituminous paint where expected to be in contact with cementitious materials or dissimilar metals.

PART 3 EXECUTION

3.01 INSTALLATION - GENERAL

A. Comply with manufacturer's instructions and recommendations for handling and installation of flashing and sheet metal work.

B. Performance: Coordinate the work with other work for the correct sequencing of items which make up the entire membrane or system of weatherproofing or waterproofing and rain drainage. It is required that the flashing and sheet metal work be permanently watertight, and not deteriorate in excess of manufacturer's published limitations.

C. Examine substrates and conditions under which sheet metal flashing and trim are to be installed and verify that work may properly commence. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.02 INSTALLATION – SHEET METAL

A. General: Unless otherwise indicated, install sheet metal flashing and trim to comply with performance requirements, manufacturer's installation instructions, and SMACNA's "Architectural Sheet Metal Manual". Anchor units of work securely in place by methods indicated, providing for thermal expansion of metal units; conceal fasteners where possible, and set units true to line and level as indicated. Install work with laps, joints, and seams that will be permanently watertight and weatherproof.

B. Install exposed sheet metal work that is without excessive oil canning, buckling, and tool marks and that is true to line and levels indicated, with exposed edges folded back to form hems. Install sheet metal flashing and trim to fit substrates and to result in waterproof and weather-resistant performance. Verify shapes and dimensions of surfaces to be covered before fabricating sheet metal.

C. Sealed Joints: Form non-expansion, but movable, joints in metal to accommodate elastomeric sealant to comply with SMACNA standards. Fill joint with sealant and form metal to completely conceal sealant.

1. Use joint adhesive for nonmoving joints specified not to be soldered.

D. Seams: Fabricate nonmoving seams in sheet metal with flat-lock seams. Tin edges to be seamed, form seams, and solder. Fabricate nonmoving seams in aluminum with flat-lock seams. Form seams and seal with epoxy seam sealer. Rivet joints for additional strength.

E. Separations: Separate metal from noncompatible metal or corrosive substrates by coating concealed surfaces, at locations of contact, with asphalt mastic or other permanent separation as recommended by manufacturer.

F. Counter-flash mechanical, electrical, and other items projecting through membrane roofing.

1. Pipes and Conduit Penetrations:

a. Flash with lead sheet extending flanges 9" from wall or pipe.

b. Extend flashing up pipe and turn down inside pipe a minimum 2".

c. On tall pipe extend flashing a minimum of 9" up side of pipe and cover with galvanized malleable iron collar with draw band; seal top of collar against vent pipe.

d. Set flanges on top of sheet roofing and strip in with a 12" wide section of roofing.

G. Roof-Drainage System: Install drainage items fabricated from sheet metal, with straps, adhesives, and anchors recommended by SMACNA's Manual or the item manufacturer, to drain roof in the most efficient manner. Coordinate roof-drain flashing installation with roof-drainage system installation. Spike type anchors will not be permitted. Coordinate flashing and sheet metal items for steep-sloped roofs with roofing installation.

3.03 INSTALLATION - WALL FLASHINGS

A. Membrane Wall Flashing:

1. Install at all windows, doors, and other locations as shown on Drawings in strict accordance with manufacturer's specifications to provide a watertight enclosure.
2. Substrate must be smooth, clean, dry and free of voids, spalled areas, loose substrate, loose nails, other sharp protrusions or other matter that will hinder the adhesion or regularity of the flashing tape installation. Clean loose dust or dirt from surface wherever flashing tape is to be applied as recommended by flashing manufacturer.
3. Apply membrane over approved primer. Membrane wall flashings shall overlap one to two inches, as recommended by manufacturer. All membrane overlaps shall be firmly rolled immediately following installation to minimize bubbles caused by outgassing air vapor.
4. Apply a bead of sealant along top edge of flashing membrane and along seams and cuts as required.

B. Install window and door flashings AFTER installation of Air Infiltration Barrier as follows:

1. Prepare Air Infiltration Barrier for window or door installation.
2. Make a modified “I-cut” in the Air Infiltration Barrier.
3. Cut a flap above the rough opening to allow head flashing installation.
4. Fold side and bottom flaps into rough opening and secure. Flip head flap up and temporarily secure.
5. Cut Elasticized Flexible Flashing Tape at least 12” longer than width of rough opening sill.
6. Remove first piece of release paper, align edge of sill flashing with inside edge of sill, and adhere into rough opening across sill and up jambs (minimum 6”). Sill flashing should not wrap onto interior surface of framing.
7. Remove the second release paper.
8. Fan Elasticized Flexible Flashing Tape at bottom corners onto face of wall.
9. Firmly press sill flashing to insure full adhesion.
10. Secure edges of bottom corners with approved sealing tape or mechanical fasteners.
11. Apply continuous bead of sealant to wall or backside of window mounting flange across jambs and head. Do NOT apply sealant across sill.
12. Install window or door in to opening.
13. Remove release paper and install Straight Polyethylene Laminate Flashing Tape jamb flashings overlapping entire mounting flange of both jambs. Extend jamb flashings 6-inches above top of rough opening to below bottom of sill flashing.
14. Remove release paper and install Straight Polyethylene Laminate Flashing Tape as head flashing overlapping entire mounting flange. Head flashing should extend beyond outside edges of both jamb flashings.
15. Flip head flap down over the head flashing.

16. Secure flap above window with approved sealing tape.

17. Install Sealant (using backer rod if necessary) to seal rear of window/door frame to rough opening.

C. Door Head Flashing:

1. Cut head flashing at least 12” longer than the arc length of Door Head.

2. Remove both release papers and install conforming around top of door, covering entire mounting flange. Head flashing should overlap jamb flashings at least 6”.

3. To facilitate installation to door heads, remove short lengths of release papers, begin installation, and repeat to work flashing into position and complete installation.

4. Secure outer edges of head flashing with approved sealing tape or mechanical fasteners.

5. Secure flap above door head with approved sealing tape.

D. Other Openings and Penetrations: Provide flashings for other openings as required to provide weathertight barrier. Install lapped components to direct water to exterior of building.

3.04 INSTALLATION - SOFFITS

A. Install soffits and accessories in accordance with manufacturer's standard published details and installation instructions.

B. Installation of materials specified within this Section shall be in accordance with the best practice, with all joint members true and plumb.

C. Provide for expansion and contraction. Do not drive nail heads tight against nailing lock. Nail size shall be in accordance with the manufacturer's printed instruction.

D. Provide sealant applications at all locations as recommended by the soffit manufacturer.

3.05 CLEANING AND PROTECTION

A. Clean exposed metal surfaces, removing substances that might cause corrosion of metal or deterioration of finishes.

B. Provide final protection and maintain conditions that ensure sheet metal flashing and trim work during construction is without damage or deterioration other than natural weathering at the time of Substantial Completion.

END OF SECTION

SECTION 07 7200

ROOF ACCESSORIES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Manufactured curbs and equipment rails.

B. Roof hatches, manual and automatic operation, including smoke vents.

C. Slab Void Pressure Relief Vent Cap.

D. Pipe Stands.

1.02 RELATED REQUIREMENTS

A. Section 05 3100 - Steel Decking.

B. Section 07 5400 - Thermoplastic Membrane Roofing.

C. Section 07 6113 - Standing Seam Sheet Metal Roofing.

D. Section 07 6200 - Sheet Metal Flashing and Trim: Roof accessory items fabricated from sheet metal.

1.03 REFERENCE STANDARDS

A. 29 CFR 1910.23 - Ladders; current edition.

B. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2015.

C. ASTM B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes; 2014.

D. ASTM B221M - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes (Metric); 2013.

E. FM (AG) - FM Approval Guide; current edition.

F. UL (DIR) - Online Certifications Directory; current listings at database.ul.com.

1.04 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements, for submittal procedures.

B. Product Data: Manufacturer's data sheets on each product to be used.
   1. Preparation instructions and recommendations.
   2. Storage and handling requirements and recommendations.
   3. Installation methods.
   4. Maintenance requirements.
   5. For smoke hatches, submit evidence of approval by evaluation agency specified.

C. Certificate: For smoke hatches, provide certificate of approval from authority having jurisdiction.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Store products in manufacturer's unopened packaging until ready for installation.

B. Remove protective wrapping immediately after installation.

C. Store products under cover and elevated above grade.

D. The contractor shall thoroughly inspect product upon receipt and report damaged material immediately to delivering carrier and note such damage on the carrier’s freight bill of lading.

1.06 WARRANTY

A. Comply with requirements of Section 01 7800 – Closeout Submittals.

B. Submit a written warranty, executed by the Contractor, Installer, and Manufacturer, agreeing to repair or replace roof accessories that fail in materials or workmanship within the specified warranty period.
   1. Roof Scuttle Warranty Period: Five (5) years after date of Substantial Completion.

2. Automatic Smoke/Fire Vent Warranty Period: Five (5) years after date of Substantial Completion.
3. Roof Pipe Stands Warranty Period: One (1) year after date of Substantial Completion.

PART 2 PRODUCTS

2.01 MANUFACTURED CURBS

A. Manufactured Curbs, Equipment Rails, and Other Roof Mounting Assemblies:
   1. Thybar Corporation: www.thybar.com.
   2. Substitutions: See Section 01 6000 - Product Requirements.

B. Manufactured Curbs, Equipment Rails, and Other Roof Mounting Assemblies:
   Factory-assembled hollow sheet metal construction with fully mitered and welded corners, integral counterflashing, internal reinforcing, and top side and edges formed to shed water.
   1. Sheet Metal: Hot-dip zinc coated steel sheet complying with ASTM A653/A653M, SS Grade 33 ; G60 coating designation; 18 gage, 0.048 inch thick.
   2. Manufacture curb bottom and mounting flanges for installation directly on roof deck, not on insulation; match slope and configuration of roof deck.
   3. Provide the layouts and configurations shown on the drawings.
   4. Curb shall be sized to allow space for flashing. Reference drawings for flashing detail. Roof curb shall allow for units to be set prior to roof material completion. Coordinate curb size with Mechanical drawings.

C. Curbs Adjacent to Roof Openings: Provide curb on all sides of opening, with top of curb horizontal for equipment mounting.
   1. Provide preservative treated wood nailers along top of curb.
   2. Insulate inside curbs with 1-1/2 inch thick fiberglass insulation.
   3. Height Above Finished Roof Surface: 6 inches, minimum.
   4. Height Above Roof Deck: 18 inches, minimum.
   5. Model TC-2 for equipment support curbs.
   6. Model TC-3 for roof curbs.

D. Equipment Rails: Two-sided curbs in straight lengths, with top horizontal for equipment mounting.
   1. Provide preservative treated wood nailers along top of rails.
   2. Height Above Roof Deck: 12 inches, minimum.
   3. Equipment supports shall span a minimum of two structural members.
   4. Model TEMS-3 for equipment rails

2.02 ROOF HATCHES, MANUAL AND AUTOMATIC OPERATION

A. Manufacturers - Roof Hatches:
   1. Babcock-Davis: www.babcockdavis.com/sle.
   2. Bilco Company: www.bilco.com/sle.
   3. Milcor, Inc: www.milcorinc.com.
   4. Elmdor/Stoneman Manufacturing Company: www.elmdorstoneman.com
   5. Nystrom, Inc: www.nystrom.com.
   6. Substitutions: See Section 01 6000 - Product Requirements.

B. Roof Hatches and Smoke Vents, General: Factory-assembled steel frame and cover, complete with operating and release hardware.
   1. Style: Provide flat metal covers unless otherwise indicated.
      a. Basis of Design: Bilco Scuttle Type S, size width: 3'-0" x length: 2'-6". Length denotes hinge side. The roof scuttle shall be single leaf. The roof scuttle shall be pre-assembled from the manufacturer.
   2. Mounting: Provide frames and curbs suitable for mounting conditions indicated on the drawings.

C. Smoke and Heat Vents: Where "smoke" or "smoke/heat" operation is indicated, provide the following additional features and omit manual operation for access:

1. Basis of Design: Bilco Fire vent Type DSH, size: width (60”) x length (120”). Length denotes hinge side. The roof fire vent shall be double leaf. The roof fire vent shall be preassembled from the manufacturer.
2. Smoke Release Mechanism: Automatic opening on melting of replaceable UL (DIR) listed fusible link at 165 deg F.
3. UL (DIR) or FM (AG) listed as automatically operated smoke and heat vent.

D. Frames/Curbs: One-piece curb and frame with integral cap flashing to receive roof flashings; extended bottom flange to suit mounting.
1. Material: Galvanized steel, 14 gage, 0.0747 inch thick.
2. Finish: Factory prime paint.
3. Insulation: Manufacturer's standard; 1 inch rigid glass fiber, located on outside face of curb.

E. Metal Covers: Flush, insulated, hollow metal construction.
1. Capable of supporting 40 psf live load.
2. Material: Galvanized steel; outer cover 14 gage, 0.0747 inch thick, liner 22 gage, 0.03 inch thick.
3. Finish: Factory prime paint.
4. Insulation: Manufacturer's standard 1 inch rigid glass fiber.
5. Gasket: EPDM, continuous around cover perimeter.
6. Entire scuttle shall be weather tight with fully welded corner joints on cover and curb.

F. Safety Railing System: Manufacturer's standard accessory safety rail system mounted directly to curb. Provide where hatch is locted within 10' of the roof edge or as required by OSHA standards.
1. Comply with 29 CFR 1910.23, with a safety factor of two.
2. Posts and Rails: Fiberglass reinforced polymer.
3. Gate: Same material as railing; automatic closing with latch.
4. Finish: Manufacturer's standard; molded in integral safety yellow.
5. Gate Hinges and Post Guides: ASTM B221 (ASTM B221M), 6063 alloy, T5 temper aluminum.
6. Mounting Brackets: Hot dipped galvanized steel, 1/4 inch thick, minimum.
7. Fasteners: Type 316 stainless steel.

G. Hardware: Steel, zinc coated and chromate sealed, unless otherwise indicated or required by manufacturer.
1. Lifting Mechanisms: Compression spring operator with shock absorbers that automatically opens upon release of latch; capable of lifting covers despite 10 psf load.
2. Hinges: Heavy duty pintle type.
3. Hold open arm with vinyl-coated handle for manual release.
4. Latch: Upon closing, engage latch automatically and reset manual release.
5. Manual Release: Pull handle on interior and exterior.
6. Smoke Hatches: Manual release operation not to disturb automatic release mechanisms; easy resetting by Owner's maintenance personnel; provide latch designed to prevent relatching unless the automatic release mechanism has been properly reset for automatic operation.
7. Locking: Padlock hasp on interior and exterior.

2.03 SLAB VOID PRESSURE RELIEF VENT CAP

A. Acceptable Manufacturers: Subject to compliance with requirements herein, provide products from one of the following manufacturers.
1. Studor, Inc., Maxi-Filtra: www.ipscorp.com
2. Substitutions: See Section 01 6000 - Product Requirements.

B. Vent Cap
1. Cap shall be UV rated operate as a two way vent, filtering air in both directions
2. Equip with replaceable carbon filter

2.04 PIPE STANDS

A. Acceptable Manufacturers: Subject to compliance with requirements herein, provide products from one of the following manufacturers.
   1. Miro Industries, Inc.: www.miroind.com
   2. MAPA Products: www.mapaproducts.com
   3. Substitutions: See Section 01 6000 - Product Requirements.

B. Gas Piping
   1. Provide a "roller-bearing" pipe support used to support roof-mounted gas piping. Pipes rest on a self-lubricating roller system which is made of a stainless steel rod and a sturdy polycarbonate resin roller. The pipe support base is made of polycarbonate resin, the roller rod is made of glass-filled nylon, and all metal parts are made of stainless steel. Pipe stand will accommodate up to 4" pipe (inside diameter) up to 5" outside diameter pipes. Pipes shall be supported at a minimum distance of 6” off of the roof deck.
   2. Product Requirements
      a. Load Weight: Maximum load weight may not exceed 125 lbs. per pipestand.
      b. Model Number: 4-RAH – Miro Industries
      c. Size: Base - 9" x 15.12", with adjustment from 2.75" to 7.0" above roof membrane.
      d. Spacing: Not to exceed ten (10) foot centers.

C. Condensate Piping
   1. Provide a threaded rod "clamp" pipe support used to support roof-mounted condensate piping. Pipes are stabilized by a rubber cushion provides vibration isolator. System is made of a stainless steel rod and pipe clamp. The pipe support base is made of Molded 33% Fiberglass Reinforced 6/6 nylon. Support pad is .125 ml black Neoprene.
   2. Pipe stand will accommodate up to 2" copper pipe. Pipes shall be supported at a minimum distance of 6” off of the roof deck.
   3. Product Requirements
      a. Load Weight: Maximum load weight may not exceed 75 lbs. per pipestand.
      b. Model Number: MS-1 – MAPA Products
      c. Threaded rod: 3/8” - Grade 304 SS ATR
      d. Size: Base – 8” Octagonal, with an adjustment from 6" to 10" above roof membrane.
      e. Spacing: Not to exceed ten (10) foot centers.

PART 3 EXECUTION

3.01 EXAMINATION

A. Do not begin installation until substrates have been properly prepared.

B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.02 PREPARATION

A. Clean surfaces thoroughly prior to installation.

B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.03 INSTALLATION

A. Install in accordance with manufacturer's instructions, in manner that maintains roofing weather integrity.

B. Pipe Stands
   1. Pipe stand shall be adjusted in height to distribute load evenly.
   2. Provide an additional sheet of roofing material under all pipe stands.
   3. All loose aggregate shall be removed from the area directly beneath the pipe stand.

3.04 CLEANING

A. Clean installed work to like-new condition.

3.05 PROTECTION

A. Protect installed products until completion of project.

B. Touch-up, repair or replace damaged products before Date of Substantial Completion.

END OF SECTION

SECTION 07 72 33 - ROOF HATCHES

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Prefabricated roof hatches with integral support curbs, operable hardware, and counter flashings.
2. Prefabricated Rail System
3. Ladder Safety Post

B. Related Sections:

1. Section 07 54 23 - Thermoplastic-Polyolefin (TPO) Membrane Roofing
2. Section 07 62 00 - Sheet Metal Flashing and Trim

1.02 SUBMITTALS

A. Submit “Letter of Conformance” in accordance with Section 01 33 00 (01330) with the following supporting data:

1. Submit product data which shall include general construction, configurations, jointing methods, and locations when applicable, and fastening methods. Include manufacturer's instructions.

1.03 QUALITY ASSURANCE

A. Standards: Comply with the following:

1. SMACNA’s Architectural Sheet Metal Manual” details for fabrication of units, including flanges and cap flashing to coordinate with type of roofing indicated.
2. NRCA’s “Roofing and Waterproofing Manual” details for installing units.

1.04 PROJECT CONDITIONS

A. Verify that other trades with related work are complete before installing roof hatch and rail system. Coordinate installation with roof membrane and roof insulation manufacturer’s instructions.

B. Refer to the Construction Documents, shop drawings, and manufacturer’s installation instructions.

C. Mounting surfaces shall be straight and secure; substrates shall be of proper width.

D. Observe all appropriate OSHA safety guidelines for this work

E. Coordinate layout and installation of roof accessories with interfacing and adjoining construction to provide a leak-proof, weather-tight, secure, and non-corrosive installation.

1. With Architect's approval, adjust location of roof accessories that would interrupt roof drainage routes

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Approved Manufacturers:

1. The Bilco Company (203-934-6363)

2. Milcor, Inc., a brand of Commercial Products Group of Hart & Cooley, Inc. (800-624-8642)
3. O'Keeffe's, Inc. (888-653-3333)
4. Nystrom Building Products, Inc. (800-547-2635)
5. Approved Substitution.

2.02 ROOF HATCHES

A. Unit: 3'-0" x 3'-0" size, single leaf type "E", with roof railing system, conforming to UL 790, Class A, as manufactured by Bilco or approved substitution by listed manufacturer.

B. Curb: 12" height, 11 gauge aluminum, mill finish, with one inch rigid insulation; integral cap flashing to receive roof flashing system; extended flange for mounting. Furnish & Install fire retardant treated wood blocking, thickness as required, to maintain a min. of 8" between cover and finished roof.

C. Cover: 11 gauge aluminum with one inch glass fiber insulation retained by 18 gauge inner liner. Continuous gasket to provide weatherproof seal.

D. Hardware: Manufacturer's standard manually operated type with compression spring operators, positive snap latch with turn handles inside and out and padlock hasp inside; automatic hold-open arm with vinyl covered grip handle for easy release, cadmium plated finish.

E. Hinges: Manufacturer's recommended type.

F. Insulation: Manufacturer's standard rigid or semirigid glass-fiber board of thickness indicated.

2.03 HATCH RAIL SYSTEM

A. Furnish and install where indicated on plans hatch rail system Model RL-NB as manufactured by Bilco Co. or approved Substitution. The hatch rail system shall be field assembled and installed per the manufacturer's instructions.

B. Performance characteristics:

1. High visibility safety yellow color shall be molded in.
2. Hatch rail system shall attach to the capflashing of the roof hatch and shall not penetrate any roofing material.
3. Hatch rail system shall satisfy the requirements of OSHA 29 CFR 1910.23 and shall meet OSHA strength requirements with a factor of safety of two.
4. UV and corrosion resistant construction with a twenty-five year warranty.
5. Self-closing gate shall be provided with hatch rail system.

C. Posts and Rails: Shall be round pultruded reinforced fire retardant yellow fiberglass treated with a UV inhibitor.

D. Hardware: Mounting brackets shall be ¼" thick hot dip galvanized steel. Hinges and post guides shall be 6063T5 aluminum. Fasteners shall be Type 316 stainless steel.

2.04 ACCESSORIES

A. Wood Nailers: Softwood lumber, fire retardant pressure treated with waterborne preservatives for aboveground use, complying with AWPA C2; not less than 1-1/2" thick.

B. Fasteners: Same metal as metals being fastened, or nonmagnetic stainless steel or other noncorrosive metal as recommended by manufacturer. Match finish of exposed fasteners with finish of material being fastened.

1. Where removing exterior exposed fasteners affords access to building, provide non-removeable fastener heads.

C. Bituminous Coating: SSPC-Paint 12, solvent-type bituminous mastic, nominally free of sulfur and containing no asbestos fibers, compounded for 15-mil dry film thickness per coating.

PART 3 EXECUTION

3.01 INSTALLATION

A. General: Comply with manufacturer's written instructions. Coordinate installation of roof accessories with installation of roof deck, roof insulation, flashing, roofing membranes, penetrations, equipment, and other construction involving roof accessories to ensure that each element of the Work performs properly and that combined elements are waterproof and weathertight. Anchor roof accessories securely to supporting structural substrates so they are capable of withstanding lateral and thermal stresses, and inward and outward loading pressures.

B. Install roof accessory items according to construction details of NRCA's "Roofing and Waterproofing Manual," unless otherwise indicated.

C. Separation: Separate metal from incompatible metal or corrosive substrates, including wood, by coating concealed surfaces, at locations of contact, with bituminous coating or providing other permanent separation.

D. Cap Flashing: Where required as component of accessory, install cap flashing to provide waterproof overlap with roofing or roof flashing (as counterflashing). Seal overlap with thick bead of mastic sealant.

E. Operational Units: Test operate units with operable components. Clean and lubricate joints and hardware. Adjust for proper operation.

3.02 CLEANING AND PROTECTION

A. Clean exposed surfaces according to manufacturer's written instructions. Touch up damaged metal coatings.

END OF SECTION

SECTION 07 81 00 - APPLIED FIREPROOFING

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Concealed Sprayed-on Fireproofing

a. New structural steel, unpainted.

2. Protection of Adjacent Surfaces from Overspraying

B. Related Sections:

1. Section 05 12 00 - Structural Steel

1.02 QUALITY ASSURANCE

A. Fire-Test-Response Characteristics: Provide sprayed-on fireproofing products identical to those used in assemblies tested for the following fire-test-response characteristics, per test method indicated below, by UL or another testing and inspecting agency acceptable to authorities having jurisdiction. Identify packages (bags) containing fireproofing with appropriate classification markings of applicable testing and inspecting agency.

1. Fire-Resistance Ratings: As indicated by reference to fire-resistive designs listed in UL "Fire Resistance Directory", or in the comparable publication of another testing and inspecting agency acceptable to authorities having jurisdiction, for fire-resistive assemblies where sprayed-on fireproofing serves as direct-applied protection, tested per ASTM E119.

2. Surface-burning Characteristics: As indicated for each sprayed-on fireproofing product required, tested per ASTM E84.

B. Installer Qualifications: Engage an experienced installer certified, licensed, or otherwise qualified by the sprayed-on fireproofing manufacturer as having the necessary experience, staff, and training to install manufacturer's products per specified requirements. A manufacturer's willingness to sell its sprayed-on fireproofing products to the Contractor or to an installer engaged by the Contractor does not in itself confer qualification on the buyer.

C. Single-Source Responsibility: Obtain sprayed-on fireproofing materials from a single manufacturer for each different product required.

D. Provide fireproofing products containing no detectable asbestos as determined according to the method specified in 40 CFR Part 763, Subpart F, Appendix A, Section 1, Polarized Light Microscopy.

1.03 REFERENCES

A. ASTM International Publications:

1. E84 "Standard Test Method for Surface Burning Characteristics of Building Materials"

2. E119 "Standard Test Methods for Fire Tests of Building Construction and Materials"

3. E605 “Standard Test Methods for Thickness and Density of Sprayed Fire-Resistive Material (SFRM) Applied to Structural Members”

4. E736 “Standard Test Method for Cohesion/Adhesion of Sprayed Fire-Resistive Materials Applied to Structural Members”

5. E759 “Standard Test Method for Effect of Deflection on Sprayed Fire-Resistive Material Applied to Structural Members”

6. E760 “Standard Test Method for Effect of Impact on Bonding of Sprayed Fire-Resistive Material Applied to Structural Members”

7. E761 “Standard Test Method for Compressive Strength of Sprayed Fire-Resistive Material Applied to Structural Members”

8. E859 “Standard Test Method for Air Erosion of Sprayed Fire-Resistive Materials (SFRMs) Applied to Structural Members”

9. E937 “Standard Test Method for Corrosion of Steel by Sprayed Fire-Resistive Material (SFRM) Applied to Structural Members”

B. Association of the Wall and Ceiling Industry (AWCI) Publications:

1. Technical Manual 12-A, “Standard Practice for the Testing and Inspection of Field Applied Sprayed Fire-Resistive Materials”

C. Code of Federal Regulations (CFR) Publications:

1. 40 CFR 763, Subpart F, Appendix A, Section 1 “Polarized Light Microscopy"

D. Underwriter's Laboratories, Inc. (UL) Standards”

1. (UL) Fire Resistance Directory.

1.04 QUALITY ASSURANCE

A. Fire-Test-Response Characteristics: Provide sprayed-on fireproofing products identical to those used in assemblies tested for the following fire-test-response characteristics, per test method indicated below, by UL or another testing and inspecting agency acceptable to authorities having jurisdiction. Identify packages (bags) containing fireproofing with appropriate classification markings of applicable testing and inspecting agency.

1. Fire-Resistance Ratings: As indicated by reference to fire-resistive designs listed in UL "Fire Resistance Directory", or in the comparable publication of another testing and inspecting agency acceptable to authorities having jurisdiction, for fire-resistive assemblies where sprayed-on fireproofing serves as direct-applied protection, tested per ASTM E119.

2. Surface-burning Characteristics: As indicated for each sprayed-on fireproofing product required, tested per ASTM E84.

B. Installer Qualifications: Engage an experienced installer certified, licensed, or otherwise qualified by the sprayed-on fireproofing manufacturer as having the necessary experience, staff, and training to install manufacturer's products per specified requirements. A manufacturer's willingness to sell its sprayed-on fireproofing products to the Contractor or to an installer engaged by the Contractor does not in itself confer qualification on the buyer.

C. Single-Source Responsibility: Obtain sprayed-on fireproofing materials from a single manufacturer for each different product required.

D. Provide fireproofing products containing no detectable asbestos as determined according to the method specified in 40 CFR Part 763, Subpart F, Appendix A, Section 1, Polarized Light Microscopy.

1.05 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

B. Submit “Letter of Conformance” in accordance with Section 01 33 00 (01330) indicating specified items selected for use in project with the following supporting data.

1. Product data for each product indicated, including manufacturer's instructions for bonding and applying sprayed fireproofing.

2. Provide manufacturer's certification or independent test reports confirming that materials meet or exceed performance criteria specified and reports from reputable independent testing agencies, of product proposed for use, which indicated conformance to ASTM E84 and E119.

   a. Include certification by manufacturer that products supplied comply with local regulations controlling use of volatile organic compounds (VOC).

3. Provide submittal stating that fireproofing materials meet or exceed specified requirements include the following:

   a. Where and what kinds of surface preparations are required before applying fireproofing.

   b. Extent of sprayed-on fireproofing for each different construction and fire-resistance rating including the following:

      1) Applicable fire-resistive design designations of inspecting and testing agency acceptable to authorities having jurisdiction.

      2) Minimum thicknesses needed to achieve required fire-resistance ratings of structural components and assemblies.

      3) Treatment of fireproofing after its application.

4. Product certificates from fireproofing manufacturers that each sprayed-on fireproofing product indicated for project complies with specified requirements including those for fire-test-response characteristics and compatibility with adhesives, primers, and other surface coatings on substrates indicated to receive fireproofing.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials in original unopened packages bearing the name of the manufacturer, the brand and proper Underwriters Laboratories, Inc. labels for fire hazard and fire resistance classifications.

B. Keep materials dry, off the ground, under cover, and away from sweating walls and other damp surfaces until ready for use. Bags exposed to water before use shall be discarded. Rotate stock material and use before expiration date.

1.07 ENVIRONMENT REQUIREMENTS

A. Maintain an air and substrate temperature of 40 deg. F. for 24 hours before and a minimum of 24 hours after application of the fireproofing. Air temperature and available ventilation based on job conditions will determine length of drying time required following initial application of the product.

B. In areas lacking natural ventilation, provide forced air circulation.

1.08 WARRANTY

A. General: The warranty specified in this Article shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and shall be in addition to and run concurrent with other warranties made by the Contractor under requirements of the Contract Documents.

B. Warranty: Submit a written warranty, executed by Contractor and cosigned by installer, agreeing to repair or replace sprayed-on fireproofing that has failed within the specified warranty period. Failures include, but are not limited to, the following:

1. Cracking, flaking, eroding in excess of specified requirements, peeling, and delaminating of sprayed-on fireproofing from substrates due to defective materials and workmanship within the specified warranty period.

2. Not covered under the warranty are failures attributable to damage by occupants and Owner's maintenance personnel, exposure to environmental conditions other than those investigated and approved during fire-response testing, and to other causes not reasonably foreseeable under conditions of normal use.

C. Warranty Period: Two years from date of Substantial Completion.

PART 2 PRODUCTS

2.01 CONCEALED SPRAYED-ON FIREPROOFING MATERIALS

A. Manufacturers:

1. Approved Manufacturers

a. "Monokote Type MK-6"; Grace Construction Products, W.R. Grace & Co. (800-778-2880)

b. "Cafco 300", Isolatek International Corp. (800-631-9600)

B. General: For concealed applications of sprayed-on fireproofing, provide manufacturer's standard products complying with requirements indicated in this article for material composition and physical properties representative of installed products.

C. Material Composition: Composition indicated below:

1. Cementitious fireproofing consisting of factory-mixed, dry formulation of gypsum or portland cement binders and lightweight mineral or synthetic aggregates mixed with water at project site to form a slurry or mortar for conveyance and application.

D. Physical Properties: Minimum values, unless otherwise indicated, or higher values required to attain designated fire-resistance ratings, measured per standard test methods referenced with each property listed below:

1. Bond Strength: 150 lbf per sq. ft. as determined per ASTM E736 under the following conditions:

a. Field-test sprayed-on fireproofing that is applied to flanges of wide-flange structural steel members on surfaces matching those that will exist for remainder of steel receiving fireproofing.

b. Minimum sprayed-on fireproofing thickness tested in laboratory shall be 0.75 inch.

2. Compressive Strength: 5.21 lbf per sq. inch as determined in the laboratory per ASTM E761. Minimum sprayed-on fireproofing thickness tested shall be 0.75 inch and the minimum dry density shall be as specified, but not less than 15 pcf.

3. Corrosion Resistance: No evidence of corrosion as determined per ASTM E937.

4. Deflection: No cracking, spalling, delamination or the like as determined per ASTM E759.

5. Effect of Impact on Bonding: No cracking, spalling, delamination or the like as determined per ASTM E760.

6. Air Erosion: Maximum weight loss of 0.025 gram per sq. ft. in 24 hours as determined per ASTM E859. For laboratory tests, the minimum sprayed-on fireproofing thickness is 0.75 inch, the maximum dry density is 15 pcf, test specimens are not pre-purged by mechanically-induced air velocities, and tests are terminated after 24 hours.

7. Dry Density: 15 pcf for average and individual densities regardless of density indicated in referenced fire-resistive design, or greater if required to attain fire-resistance ratings

indicated as determined per ASTM E 605 or Appendix A "Alternate Method for Density Determination" of AWCI Technical Manual 12-A.

8. Thickness: Provide minimum average thickness required for fire-resistive design indicated according to the following criteria, but not less than 0.375 inch, as determined per ASTM E605.

   a. Where the referenced fire-resistive design lists a thickness of one inch or greater, the minimum allowable individual sprayed-on fireproofing thickness is the design thickness minus 0.25 inch.

   b. Where the referenced fire-resistive design lists a thickness of less than one inch, but more than 0.375 inch, the minimum allowable individual sprayed-on fireproofing thickness is the greater of 0.375 inch or 75 percent of the design thickness.

   c. No reduction in average thickness is permitted for those fire-resistive designs whose fire resistance ratings were established at densities of less than 15 pcf.

9. Surface-burning Characteristics: Maximum flame-spread value of 10 and smoke-developed value of 0.

E. Reinforcing Mesh: Metallic mesh reinforcement of type, weight, and form required to comply with fire-resistive designs indicated, approved by manufacturer of intumescent mastic fire-resistive material. Include pins and attachment.

F. Mixing water shall be clean, fresh, and suitable for domestic consumption and free from such amounts of mineral or organic substances as would affect the set of the fireproofing material.

G. Sprayed fireproofing materials shall be free of all forms of asbestos and asbestos contamination, including actinolite, amosite, anthophyllite, chrysotile, crocidolite and tremolite.

PART 3 EXECUTION

3.01 EXAMINATION

A. Examine substrates with installer present to determine if they are in satisfactory condition to receive sprayed-on fireproofing. A substrate is in satisfactory condition if it complies with the following:

1. Substrates comply with requirements in the Section where the substrate and related materials and construction are specified.

2. Substrates are free of oil, grease, rolling compounds, incompatible primers, loose mill scale, dirt, or other foreign substances capable of impairing bond of fireproofing with substrate under conditions of normal use or fire exposure.

3. Objects penetrating fireproofing, including clips, hangers, support sleeves, and similar items, are securely attached to substrates.

4. Substrates are not obstructed by ducts, piping, equipment, and other suspended construction that will interfere with applying the fireproofing.

5. Verify that ducts, piping, equipment, or other items which would interfere with application of fireproofing materials are not positioned until fireproofing work is complete.

6. Fill voids and cracks in substrate, remove projections and level where sprayed fireproofing is exposed to view as finish material.

7. Remove incompatible materials which may affect bond of sprayed fireproofing.

8. Conduct tests according to sprayed-on fireproofing manufacturer's recommendations to verify that substrates are free of oil, rolling compounds, and other substances capable of interfering with bond where there is any doubt as to their presence.

9. Do not proceed with installation of fireproofing until unsatisfactory conditions have been corrected.
10. Starting of installation indicates acceptance of substrate by installer of fireproofing.

3.02 PREPARATION

A. Clean substrates of substances that could impair bond of fireproofing, including oil, grease, rolling compounds, incompatible primers, and loose mill scale.

3.03 INSTALLATION, GENERAL

A. Comply with fireproofing manufacturer's instructions for mixing materials, application procedures, and types of equipment used to convey and spray on fireproofing materials, as applicable to the particular conditions of installation and as required to achieve fire-resistance ratings indicated.

B. Apply sprayed-on fireproofing that is identical to products tested as specified in Part 1 under "Test Reports" in "Submittals" article, with respect to rate of application, use of sealers, topcoats, tamping, troweling, water overspray, or other materials and procedures affecting test results.

1. Apply fireproofing in sufficient thickness to achieve rating with as many passes as necessary to cover with monolithic blanket of uniform density and texture.

C. Extend fireproofing in full thickness over entire area of each substrate to be protected. Unless otherwise recommended by fireproofing manufacturer, install body of fireproof covering in a single course.

D. Apply fireproofing materials by sprayed-on method to maximum extent possible. Following the spraying operation in each area, complete the coverage by trowel application or other placement method recommended by manufacturer.

E. Where sealers are used, apply products that are tinted to differentiate it from the sprayed-on fireproofing over which it is applied.

3.04 PROTECTION

A. Protect adjacent surfaces and equipment from damage by overspray fallout and dusting.

B. Close-off and seal ductwork in areas where fireproofing is being applied.

C. Protect applied sprayed fireproofing from damage.

3.05 FIELD QUALITY CONTROL

A. Verify the thickness and density of the fireproofing in accordance with provisions of ASTM E605 or in accordance with governing Building Code

B. Correct unacceptable work and provide inspection to verify compliance with requirements.

3.06 CLEANING, REPAIR, AND PROTECTION

A. Cleaning: Immediately after completing spraying operations in each containable area of project, remove material over-spray and fallout from surfaces of other construction and clean exposed surfaces to remove evidence of soiling.

B. Cure exposed cementitious fireproofing materials according to fireproofing manufacturer's recommendations to prevent premature drying.

C. Protect fireproofing, according to advice of fireproofing manufacturer and installer, from damage resulting from construction operations or other causes so that fireproofing will be without damage or deterioration at time of Substantial Completion.

D. Coordinate installation of fireproofing with other construction to minimize the need to cut or remove fireproofing. As installation of other construction proceeds, inspect fireproofing and patch any areas where fireproofing was removed or damaged.

1. Repair or replace work that has not been successfully protected.

E. Remove fireproofing from materials and surfaces not specifically required to be fireproofed.

PART 4 SCHEDULES

4.01 Sprayed-on Fireproofing Rating Schedule or as shown on drawings.

CONSTRUCTION	FIRE RATED VALUE	THICKNESS OF FIREPROOFING MATERIAL	UL ASSEMBLY
Steel Columns	1 Hour	Per Manufacturer	X772, X790
Steel Floor Beams	1 Hour	Per Manufacturer	D916
Steel Roof Girder Trusses & Beams	1 Hour	Per Manufacturer	P732

END OF SECTION

SECTION 07 84 00 - FIRESTOPPING

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Penetrations through fire-resistance-rated floor and roof construction, including both empty openings and openings containing cables, pipes, ducts, conduits, and other penetrating items.
2. Penetrations through fire-resistance-rated walls and partitions, including both empty openings and openings containing cables, pipes, ducts, conduits, and other penetrating items.
3. Joints at walls, floors, top of wall (head of wall) at floor and roof assemblies, edge of floor slabs at exterior walls, and openings around structural members which penetrate floor and wall assemblies.

B. Related Sections:

1. Section 07 81 00 – Applied Fireproofing
2. Refer to Divisions 21/22/23 and 26/27 Sections for additional requirements.

1.02 REFERENCES

A. ASTM International Publications:

1. E119 "Standard Test Methods for Fire Tests of Building Construction and Materials"
2. E814 “Standard Test Method for Fire Tests of Through-Penetration Fire Stops”
3. E1966, “Standard Test Method for Fire Resistive Joint Systems”
4. E2174, “Standard Practice for On-site Inspection of Installed Fire Stops”
5. E2307, “Standard Test Method for Determining Fire Resistance of Perimeter Fire Barrier Systems Using Intermediate-Scale, Multi-story Test Apparatus”

B. Code of Federal Regulations (CFR) Publications:

1. 40 CFR 763, Subpart F, Appendix A, Section 1 “Polarized Light Microscopy"

C. Underwriter's Laboratories, Inc. (UL) Standards

1. "Fire Resistance Directory"
2. 1479 “Fire Tests of Through-Penetration Firestops”
3. 2079 “Tests for Fire Resistance of Building Joint Systems”

D. Warnock Hersey, ETL SEMKO division of Intertek (WHI) Publications:

1. "Certification Listings"

E. Omega Point Laboratories, Inc. ETL SEMKO division of Intertek (OPL) Publications:

1. “Directory of Listed Building Products, Materials and Assemblies”

1.03 SYSTEM DESCRIPTION

A. General: Provide firestopping systems that are produced and installed to resist the spread of fire, according to requirements indicated, and the passage of smoke and other gases.

B. System Performance Requirements:

1. F-Rated Through-Penetration Firestop Systems: Provide through-penetration firestop systems with F ratings indicated, as determined per ASTM E814, but not less than that equaling or exceeding the fire-resistance rating of the constructions penetrated.

2. T-Rated Through-Penetration Firestop Systems: Provide through-penetration firestop systems with T ratings, in addition to F ratings, as determined per ASTM E814, where indicated and where systems protect penetrating items exposed to contact with adjacent materials in occupiable floor areas. T-rated assemblies are required where the following conditions exist:

   a. Where firestop systems protect penetrations located outside of wall cavities.

   b. Where firestop systems protect penetrations located outside fire-resistive shaft enclosures.

   c. Where firestop systems protect penetrations located in construction containing doors required to have a temperature-rise rating.

   d. Where firestop systems protect penetrating items larger than a 4-inch-diameter nominal pipe or 16 sq. in. in overall cross-sectional area.

3. Fire-Resistive Joint Sealants: Provide joint sealants with fire-resistance ratings indicated, as determined per ASTM E119, but not less than that equaling or exceeding the fire-resistance rating of the construction in which the joint occurs.

4. For firestopping exposed to view, traffic, moisture, and physical damage, provide products that do not deteriorate when exposed to these conditions.

   a. For piping penetrations for plumbing and wet-pipe sprinkler systems, provide moisture-resistant through-penetration firestop systems.

   b. For floor penetrations with annular spaces exceeding 4 inches or more in width and exposed to possible loading and traffic, provide firestop systems capable of supporting the floor loads involved either by installing floor plates or by other means.

C. For penetrations involving insulated piping, provide through-penetration firestop systems not requiring removal of insulation.

1.04 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

1. Product Data: Submit “Letter of Conformance” in accordance with Section 01 33 00 (01330) indicating specified items selected for use in project with the following supporting data.

   a. Certification by firestopping manufacturer that products supplied comply with local regulations controlling use of volatile organic compounds (VOCs) and are nontoxic to building occupants.

2. Provide product certificates signed by manufacturers of firestopping products certifying that their products comply with specified requirements.

3. Provide product test reports from, and based on tests performed by, a qualified testing and inspecting agency evidencing compliance of firestopping with requirements based on comprehensive testing of current products.

4. Provide manufacturer's engineering judgment identification number and drawing details when there is no UL, Warnock Hersey or OPL system available for an application. Engineering judgment must include both Project name and the contractor’s name who will install firestop system as described in judgment drawing.

1.05 QUALITY ASSURANCE

A. Fire-Test-Response Characteristics: Provide firestopping that complies with the following requirements and those specified under the "System Performance Requirements" article:

1. Firestopping tests are performed by a qualified testing and inspecting agency. A qualified testing and inspecting agency is UL, Warnock Hersey, OPL, or another agency performing testing and follow-up inspection services for firestop systems that is acceptable to authorities having jurisdiction.

2. Through-penetration firestop systems are identical to those tested per ASTM E814 under conditions where positive furnace pressure differential of at least 0.01 inch of water is maintained at a distance of 0.78 inch below the fill materials surrounding the penetrating items in the test assembly. Provide rated systems complying with the following requirements:

a. Through-penetration firestop system products bear classification marking of qualified testing and inspecting agency.

b. Through-penetration firestop systems correspond to those indicated by reference to through-penetration firestop system designations listed by UL in their "Fire Resistance Directory", by Warnock Hersey, OPL or by another qualified testing and inspecting agency.

B. Information within construction documents referring to specific design designations of through-penetration firestop systems is intended to establish requirements for performance based on conditions that are expected to exist during installation. Any changes in conditions and designated systems require the Architect's prior approval. Submit documentation showing that the performance of proposed substitutions equals or exceeds that of the systems they would replace and are acceptable to authorities having jurisdiction.

C. Single-Source Responsibility: Obtain through-penetration firestop systems for each kind of penetration and construction condition indicated from a single manufacturer.

D. Provide firestopping products containing no detectable asbestos as determined by the method specified in 40 CFR Part 763, Subpart F, Appendix A, Section 1, "Polarized Light Microscopy".

E. Coordinate Work: Coordinate construction of openings and penetrating items to ensure that designated through-penetration and joint firestop systems are installed per specified requirements.

F. A manufacturer's direct representative shall be on-site during initial installation of firestop systems to train appropriate contractor personnel in proper selection and installation procedures per manufacturer's written recommendations.

G. Engineering Judgements:

1. For those firestop applications that exist for which no UL tested system is available through a manufacturer, an engineering judgment derived from similar UL system designs or other tests shall be submitted to local authorities having jurisdiction for their review and approval prior to installation. Engineering judgment drawings must follow requirements set forth by the International Firestop Council.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Deliver firestopping products to project site in original, unopened containers or packages with intact and legible manufacturers' labels identifying product and manufacturer, date of manufacture, lot number, shelf life, if applicable, qualified testing and inspecting agency's classification marking applicable to project, curing time, and mixing instructions for multicomponent materials.

B. Store and handle firestopping materials to prevent their deterioration or damage due to moisture, temperature changes, contaminants, or other causes.

1.07 PROJECT/SITE CONDITIONS

A. Environmental Conditions: Do no install firestopping when ambient or substrate temperatures are outside limits permitted by firestopping manufacturers or when substrates are wet due to rain, frost, condensation, or other causes.

B. Ventilation: Ventilate firestopping per firestopping manufacturers' instructions by natural means or, where this is inadequate, forced air circulation.

PART 2 PRODUCTS

2.01 APPROVED MANUFACTURERS:

A. Avendra, LLC Preferred Manufacturers:

1. None

B. Approved Manufacturers:

1. 3M Brand Fire Protection Products (800-328-1687)
2. Hilti, Inc. (800-879-6000)
3. Specified Technologies Inc. (STI) (800-992-1180)
4. ProSet Systems, Inc. (800-262-5355)

2.02 FIRESTOPPING - GENERAL

A. Use only firestop products that have been UL 1479 or ASTM E814 tested for specific fire-rated construction conditions conforming to construction assembly type, penetrating item type, annular space requirements, and fire-rating involved for each separate instance.

B. Compatibility: Provide firestopping composed of components that are compatible with each other, the substrates forming openings, and the items, if any, penetrating the firestopping under conditions of service and application, as demonstrated by firestopping manufacturer based on testing and field experience.

1. For penetrations involving CPVC piping, provide through-penetration firestop systems which include materials that have been tested to be compatible with CPVC piping.

C. Accessories: Provide components for each firestopping system that are needed to install fill materials and to comply with the "System Performance Requirements" paragraph under “System Description” in Part 1. Use only components specified by the firestopping manufacturer and approved by the qualified testing and inspecting agency for the designated fire-resistance-rated systems. Accessories include, but are not limited to, the following items:

1. Permanent Forming/Damming/Backing Materials, Including the following:
    a. Semi-refractory Fiber (mineral wool) Insulation
    b. Ceramic Fiber
    c. Sealants Used in Combination with Other Forming/Damming Materials to Prevent Leakage of Fill Materials in Liquid State
    d. Fire-rated Formboard
2. Temporary Forming materials
3. Substrate Primers
4. Collars
5. Steel Sleeves

D. Under normal environmental conditions, all material used shall be non-corrosive to metal and compatible with synthetic cable jackets.

E. Provide all miscellaneous items required to attach materials as specified and shown on Drawings.

2.03 INSTALLATION DETAILS

A. Refer to Details on Drawings.

B. Systems shall include all necessary items for use in areas as shown on the Drawings.

PART 3 EXECUTION

3.01 EXAMINATION

A. Examine substrates and conditions, with installer present, for compliance with requirements for opening configurations, penetrating items, substrates, and other conditions affecting performance of firestopping. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.02 PREPARATION

A. Surface Cleaning: Clean out openings and joints immediately prior to installing firestopping to comply with recommendations of firestopping manufacturer and the following requirements:

1. Remove all foreign materials from surfaces of opening and joint substrates and from penetrating items that could interfere with adhesion of firestopping.

2. Clean opening and joint substrates and penetrating items to produce clean, sound surfaces capable of developing optimum bond with firestopping. Remove loose particles remaining from cleaning operation.

3. Remove laitance and form release agents from concrete.

B. Priming: Prime substrates where recommended by firestopping manufacturer using that manufacturer's recommended products and methods. Confine primers to areas of bond. Do not allow spillage and migration onto exposed surfaces.

C. Masking Tape: Use masking tape to prevent firestopping from contacting adjoining surfaces that will remain exposed upon completion of work and that would otherwise be permanently stained or damaged by such contact or by cleaning methods used to remove smears from firestopping materials. Remove tape as soon as it is possible to do so without disturbing firestopping's seal with substrates.

3.03 INSTALLATION - THROUGH-PENETRATION FIRESTOPS

A. General: Comply with the "System Performance Requirements" paragraph under “System Description” in Part 1, and the firestop manufacturer's installation instructions and drawings pertaining to products and applications indicated.

B. Install forming/damming materials and other accessories of types required to support fill materials during their application and in the position needed to produce the cross-sectional shapes and depths required to achieve fire ratings of designated through-penetration firestop systems. After installing fill materials, remove combustible forming materials and other accessories not indicated as permanent components of firestop systems.

C. Install fill materials for through-penetration firestop systems by proven techniques to produce the following results:

1. Completely fill voids and cavities formed by openings, forming materials, accessories, and penetrating items.

2. Apply materials so they contact and adhere to substrates formed by openings and penetrating items.

3. For fill materials that will remain exposed after completing work, finish to produce smooth, uniform surfaces that are flush with adjoining finishes.

3.04 FIELD QUALITY CONTROL

A. Examine sealed penetration areas to ensure proper installation before concealing or enclosing areas.

B. Keep areas of work accessible until inspection by applicable code authorities.

C. Inspection of through-penetration firestopping shall be performed in accordance with ASTM E2174, “Standard Practice for On-Site Inspection of Installed Fire Stops” or other recognized standard.

D. Perform under this section patching and repairing of firestopping caused by cutting or penetrating of existing firestop systems already installed by other trades.

3.05 CLEANING

A. Clean-off excess fill materials and sealants adjacent to openings and joints as work progresses by methods and with cleaning materials approved by manufacturers of firestopping products and of products in which opening and joints occur.

B. Protect firestopping during and after curing period from contact with contaminating substances or from damage resulting from construction operations or other causes so that they are without deterioration or damage at time of Substantial Completion. If, despite such protection, damage or deterioration occurs, cut out and remove damaged or deteriorated firestopping immediately and install new materials to produce firestopping complying with specified requirements.

C. Promptly remove any excess materials from any exposed finish surfaces. Repair floors, walls, or other surfaces which have been stained, marred, or otherwise damaged during installation of fire barrier materials.

END OF SECTION

SECTION 07 92 00 - JOINT SEALANTS

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Clean and Prepare Joint Surfaces
2. Sealant and Backing Materials including primers, backer rods, bond breakers and accessories.

B. Related Sections:

1. Section 04 20 00 - Unit Masonry
2. Section 07 24 19 - Water Drainage Exterior Insulation and Finish Systems (EIFS)
3. Section 07 62 00 - Sheet Metal Flashing and Trim
4. Section 07 84 00 - Firestopping
5. Section 08 11 13 - Steel Doors and Frames
6. Section 08 32 13 - Sliding Aluminum-Framed Glass Doors
7. Section 08 14 00 - Wood and Plastic Doors
8. Section 08 41 13 - Aluminum Framed Entrances and Storefronts
9. Section 08 51 13 - Aluminum Windows
10. Section 08 80 00 - Glazing
11. Section 09 21 16 - Gypsum Board Assemblies
12. Section 09 30 00 - Tiling
13. Section 09 72 00 - Wall Coverings
14. Section 09 90 00 - Painting

1.02 REFERENCES

A. ASTM International Publications:

1. C834 “Standard Specification for Latex Sealants”
2. C920 “Standard Specification for Elastomeric Joint Sealants”
3. C1193 "Standard Guide for Use of Joint Sealants"
4. C1248 “Standard Test Method for Staining of Porous Substrate by Joint Sealants”
5. ASTM D1056 “Standard Specification for Flexible Cellular Materials-Sponge or Expanded Rubber”

B. Code of Federal Regulations (CFR) Publications:

1. 21 CFR, Part 177 “Indirect Food Additives: Polymers”

C. Federal Specifications (FS) Publications:

1. TT-S-1543B Sealing Compound; Silicone Rubber Base (For Caulking, Sealing)

D. Underwriter's Laboratories, Inc. (UL) Standards

1. "Fire Resistance Directory"

E. Warnock Hersey, ETL SEMKO division of Intertek (WHI) Publications:

1. "Certification Listings"

1.03 SYSTEM DESCRIPTION

A. Work shall include providing sealant at intersection of construction components within and exterior to building, including, but not limited to the following:

1. Exterior joints in the following vertical surfaces and nontraffic horizontal surfaces:
   a. Control and expansion joints in cast-in-place concrete.
   b. Joints between architectural precast concrete units.
   c. Control and expansion joints in unit masonry.
   d. Joints in exterior insulation and finish systems (EIFS).
   e. Joints between different materials listed above.
   f. Perimeter joints between materials listed above and frames of doors and windows.
   g. Control and expansion joints in ceiling and overhead surfaces.
   h. Under thresholds.
   i. Refrigerant lines and other Div. 22/23 (15) and 26 (16) items entering building.
   j. Joints in coping caps and exposed roof counter flashing.
   k. Other joints as indicated.
2. Exterior joints in the following horizontal traffic surfaces:
   a. Control, expansion, and isolation joints in cast-in-place concrete slabs.
   b. Tile control and expansion joints.
   c. Joints between different materials listed above.
   d. Other joints as indicated.
3. Interior joints in the following vertical surfaces and horizontal nontraffic surfaces:
   a. Control and expansion joints on exposed interior surfaces of exterior walls. b. Perimeter joints of exterior openings where indicated.
   c. Tile control and expansion joints.
   d. Perimeter joints between interior wall surfaces and frames of interior doors, windows, and elevator entrances.
   e. Joints between plumbing fixtures and adjoining walls, floors, and counters.
   f. Edge of all vinyl wallcovering installations at junctions with other materials, including ceiling joint.
   g. Bottom edge of mirror channels
   h. Top of tub surround
   i. Other joints as indicated
4. Interior joints in the following horizontal traffic surfaces:
   a. Control and expansion joints in cast-in-place concrete slabs.
   b. Control and expansion joints in tile flooring.
   c. Joints at countertops, vanities.

d. Under thresholds except marble.

e. Door bucks not flush with thresholds.

f. Tubs, lavatories, water closets, and other plumbing fixtures.

g. Perimeters of fixed kitchen equipment.

h. Joints of mirrors in wet areas.

i. Other joints as indicated.

1.04 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

1. Product Data: Submit “Letter of Conformance” in accordance with Section 01 33 00 (01330) indicating specified items selected for use in project with the following supporting data.

a. Include manufacturer's surface preparation and installation instructions.

b. List of primers recommended for each application.

2. Submit samples of each color required for each type of joint sealer exposed to view in duplicate.

3. Certifications: Indicate compliance with standards specified in duplicate.

B. Where required by local building codes, provide certification from sealant manufacturer that sealants used in conjunction with EIFS installations is in compliance with EIFS manufacturers requirements.

1. Affidavit Form at end of this Section shall be completed by sealant applicator and submitted with EIFS warranty.

1.05 QUALITY ASSURANCE

A. Installer Qualifications: An experienced installer who has specialized in installing joint sealants similar in material, design, and extent to those indicated for this Project and whose work has resulted in joint-sealant installations with a record of successful in-service performance.

B. Source Limitations: Obtain each type of joint sealant through one source from a single manufacturer.

C. All materials shall be verified by this Contractor to be compatible with adjacent materials.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials to Project site in original unopened containers or bundles with labels indicating manufacturer, product name and designation, color, expiration date, pot life, curing time, and mixing instructions for multicomponent materials.

B. Store and handle materials in compliance with manufacturer's written instructions to prevent their deterioration or damage due to moisture, high or low temperatures, contaminants, or other causes.

1.07 PROJECT CONDITIONS

A. Environmental Limitations: Do not proceed with installation of joint sealants under the following conditions:

1. When ambient and substrate temperature conditions are outside limits permitted by joint sealant manufacturer or are below 40 degrees F. and less than 100 degrees F.

2. When joint substrates are wet.

B. Joint-Width Conditions: Do not proceed with installation of joint sealants where joint widths are less than those allowed by joint sealant manufacturer for applications indicated.

1.08 WARRANTY

A. Special Warranty:

1. Submit two copies of a written guarantee agreeing to repair or replace joint sealers which fail to perform as air tight and water-tight joints; or fail in joint adhesion, cohesion, abrasion resistance weather resistance, or general durability; or appear to deteriorate or become unserviceable or causing an objectionable appearance resulting from either defective or non-conforming materials and workmanship or in any other manner not clearly specified by submitted manufacturer's data as an inherent quality of the material for the exposure indicated. Provide one-year Warranty.

a. Defects shall include, but are not limited to:

1) Staining from abutting materials or filler.

2) Migrating, bleeding into, or staining abutting materials.

3) Unsightly surface deformation by causes other than movement.

4) Excessive color change, chalking, or dust pick-up.

5) Railing adhesively or cohesively where maximum elongation is less than 25% of designed width of exposed joints.

6) Hardening to more than 25% over specified hardness.

b. Replace sealants which fail because of loss of cohesion or adhesion or do not cure.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Products listed below shall be as offered by one of the following manufacturers:

1. Approved Manufacturers:

a. Dow Corning Corp. (800-248-2481)

b. General Electric (GE) Silicones (800-255-8886)

c. BASF Building Systems (952-496-6000)

d. Bostik Inc. (800-523-2678)

e. Pecora Corp. (800-523-6688)

f. Tremco, Inc., an RPM Company (800-562-2728)

2.02 JOINT SEALANTS

A. General:

1. Colors: As shown on Interior Finish Index and Exterior Finish Index, or if not shown, match sealant material to colors of adjacent materials, as approved by Architect, unless indicated otherwise.

2. Elastomeric Sealant Standard: Comply with ASTM C920 and other requirements indicated for each liquid-applied chemically curing sealant, including those referencing ASTM C920 classifications for type, grade, class, and uses.

3. Stain-Test-Response Characteristics: Where elastomeric sealants are specified to be nonstaining to porous substrates, provide products that have undergone testing according to ASTM C1248 and have not stained porous joint substrates indicated for Project.

4. Suitability for Contact with Food: Where elastomeric sealants are indicated for joints that will come in repeated contact with food, provide products that comply with 21 CFR 177.2600.

B. Sanitary Sealant, Interior Use:

1. One component silicone rubber sealant, complying with ASTM C920, Type S, Grade NS, for Use NT, Class 25, and FS-TT-S-001543, Class A. Provide acid cure, nonporous bond type, mildew resistant silicone rubber where both joint faces are metal, glass, plastic, tile, or other non-porous material.

2. Acceptable Products:

a. "Omni-Plus"; BASF Building Systems (952-496-6000)

b. "786 Mildew Resistant"; Dow Corning Corp. (800-248-2481)

c. "Sanitary SCS1700"; General Electric (GE) Silicones (800-255-8886)

d. "Tremsil 200 Sanitary"; Tremco, Inc., an RPM Company (800-562-2728)

e. "898"; Pecora Corp. (800-523-6688)

C. Interior Joints not subject to Movement:

1. One part, gun grade, acrylic latex meeting the requirements of ASTM C834, Type OP, Grade NF, with 10 year life expectancy.

2. Acceptable Products:

a. "Chem-Calk 600"; Bostik Inc. (800-523-2678)

b. "AC-20+"; Pecora Corp. (800-523-6688)

c. "Tremflex 834"; Tremco, Inc., an RPM Company (800-562-2728)

d. "Sonolac"; BASF Building Systems (952-496-6000)

D. Exterior joints greater than 1/2" (except E.I.F.S. areas):

1. Two-part non-sag, polyurethane type, meeting ASTM C920, Type M, Grade NS, Class 50, Use NT, with 20 year life expectancy.

2. Acceptable Products:

a. "Chem-Calk 2000"; Bostik Inc. (800-523-2678)

b. "Dymeric 240 or 240FC" ; Tremco, Inc., an RPM Company (800-562-2728)

c. "Dynatrol II"; Pecora Corp. (800-523-6688)

d. "Sonolastic NP2"; BASF Building Systems (952-496-6000)

E. Exterior joints less than 1/2" (except E.I.F.S. areas):

1. One-part, non-sag acrylic Terpolymer formulation meeting the requirements of ASTM C920, Type S, Grade NS, Class 25, Use FT, with 20-year life expectancy.

2. Acceptable Products:

a. "Dynatrol I-XL"; Pecora Corp. (800-523-6688)

b. "Dymonic"; Tremco, Inc., an RPM Company (800-562-2728)

c. "Vulkem 116"; Tremco, Inc. , an RPM Company (800-562-2728)

d. "Sonolastic NP1"; BASF Building Systems (952-496-6000)

F. Exterior Joints at E.I.F.S. Areas:

1. The following sealant materials are known to be compatible with the exterior insulation finish system (E.I.F.S.) specified in Section 07 24 00 (07240). Product utilized shall be verified by this Contractor for approval with E.I.F.S. manufacturer utilized on this Project.

a. Tremco, Inc., an RPM Company (800-562-2728)

1) Primer: "No. P1"

2) Sealant: "Dymeric 240 or Dymeric 240FC"

b. BASF Building Systems (952-496-6000)

1) Primer: "No. 733"

2) Sealant: "Sonolastic NP 2"

c. Pecora Corp. (800-523-6688)

1) Primer: "P-75"

2) Sealant: "Dynatrol II"

G. Sealant Materials - Glazing:

1. Sealant composition shall be a silicone base, single component, solvent curing, capable of withstanding movement of up to 50 percent of joint width and shore a hardness of 26. Sealant shall conform to ASTM C920, TTS-S-001543A and TT-S-00230C (COM-NBS).

2. Acceptable Products:

a. "SILGLAZE N"; General Electric (GE) Silicones (800-255-8886)

b. "SPECTRUM 2"; Tremco, Inc., an RPM Company (800-562-2728)

c. "Dow Corning 790"; Dow Corning Corp. (800-248-2481)

2.03 ACCESSORIES

A. Primer: Non-staining type, recommended by sealant manufacturer to suit application.

B. Joint Cleaner: Non-corrosive and non-staining type, recommended by sealant manufacturer; compatible with joint forming materials.

C. Joint Filler Backer Rod: ASTM C1330; round, closed cell polyethylene, non-gassing rod, with surface skin, sized to produce 25% compression when installed in joint.

1. Approved Manufacturers:

a. "Soft Backer Rod"; BASF Building Systems (952-496-6000)

b. "Sof Rod"; Nomaco Inc. (800-345-7279)

c. "Ethafoam Rod"; Dow Chemical (800-447-4361)

D. Bond Breaker Tape:

1. Approved Manufacturers:

a. Pressure Sensitive 470 or 481 Polyethylene"; 3M Adhesives, Coatings and Sealers Div., (800-328-1687)

b. Approved Substitution

E. Cleaners for Nonporous Surfaces: Provide nonstaining, chemical cleaners of type which are acceptable to manufacturers of sealants and sealant backing materials, which are not harmful to substrates and adjacent nonporous materials, and which do not leave oily residues or otherwise have a detrimental effect on sealant adhesion or in-service performance.

1. Provide cleaner conditioner required for glass and glazed surfaces as recommended by sealant manufacturer.

F. Masking Tape: Provide nonstaining, nonabsorbent type compatible with joint sealants and to surfaces adjacent to joints.

PART 3 EXECUTION

3.01 EXAMINATION

A. Examine joints indicated to receive joint sealers, with Installer present, for compliance with requirements for joint configuration, installation tolerances and other conditions affecting joint sealer performance. Do not proceed with installation of joint sealers until unsatisfactory conditions have been corrected. Beginning of Installation means acceptance of all existing conditions making this Contractor responsible for correcting all unsatisfactory and defective work encountered at his expense.

3.02 PREPARATION

A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealers to comply with recommendations of joint sealer manufacturers and the following requirements:

1. Remove all foreign material from joint substrates which could interfere with adhesion of joint sealer, including dust; paints, except for permanent, protective coatings tested and approved for sealant adhesion and compatibility by sealant manufacturer; old joint sealers; oil; grease; waterproofing; water repellents; water; surface dirt; and frost.

2. Clean concrete, masonry, unglazed surfaces of ceramic tile and similar porous joint substrate surfaces, by brushing, grinding, blast cleaning, mechanical abrading, or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond with joint sealers. Remove loose particles remaining from above cleaning operations by vacuuming or blowing out joints with oil-free compressed air. Remove laitance and form release agents from concrete.

B. Joint Priming: Prime joint substrates where indicated or where recommended by joint sealer manufacturer based on preconstruction joint sealer-substrate tests or prior experience. Apply primer to comply with joint sealer manufacturer's recommendations. Confine primers to areas of joint sealer bond, do not allow spillage or migration onto adjoining surfaces.

C. Masking Tape: Use masking tape where required to prevent contact of sealant with adjoining surfaces which otherwise would be permanently stained or damaged by such contact or by cleaning methods required to remove sealant smears such as masonry or EIFS materials. Remove tape immediately after tooling without disturbing joint seal.

3.03 INSTALLATION - JOINT SEALERS

A. General: Comply with joint sealer manufacturers' printed installation instructions applicable to products and applications indicated, except where more stringent requirements apply. Surfaces and air temperature shall be greater than 30 degrees F and less than 100 degrees F.

B. Joint Priming: Prime joint substrates where recommended in writing by joint sealant manufacturer, based on reconstruction joint-sealant-substrate tests or prior experience. Apply primer to comply with joint sealant manufacturer's written instructions. Confine primers to areas of joint-sealant bond; do not allow spillage or migration onto adjoining surfaces.

1. Ensure that primer fully covers surfaces to which sealant is to adhere.
2. Apply with bristle brush. Do not flood surfaces.
3. Allow primer to dry 30 minutes minimum or as recommended by manufacturer prior to application of backing rod and sealant.

C. Install sealant backings of type indicated to support sealants during application and at position required to produce cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.

1. Do not leave gaps between ends of sealant backings.
2. Do not stretch, twist, puncture, or tear sealant backings.
3. Remove absorbent sealant backings that have become wet before sealant application and replace them with dry materials.

D. Install bond breaker tape between sealants and joint fillers, compression seals, or back of joints where adhesion of sealant to surfaces at back of joints would result in sealant failure. Bond breaker must be used in all conditions where three-sided adhesion may be possible.

E. Install sealants by proven techniques to comply with the following and at the same time backings are installed:

1. Place sealants so they directly contact and fully wet joint substrates.
2. Completely fill recesses provided for each joint configuration.
3. Produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.
4. Joint Size:
   a. Depth of joint shall not exceed width of joint.
   b. Minimum depth: ¼”
   c. Maximum depth: ½”

F. Tooling of Nonsag Sealants: Immediately after sealant application and before skinning or curing begins, tool sealants according to requirements specified below to form smooth, uniform beads of configuration indicated; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint.

1. Remove excess sealants from surfaces adjacent to joint.
2. Use tooling agents that are approved in writing by sealant manufacturer and that do not discolor sealants or adjacent surfaces.
   a. Provide concave joint configuration per Figure 5A in ASTM C 1193, unless otherwise indicated.
   b. Provide flush joint configuration, per Figure 5B in ASTM C 1193, where indicated.
   c. Provide recessed joint configuration, per Figure 5C in ASTM C 1193, of recess depth and at locations indicated.
      1) Use masking tape to protect adjacent surfaces of recessed tooled joints.
      2) All joints shall be free of air pockets, foreign embedded matter, ridges, and sags.

3.04 CURE:

A. Cure sealant in compliance with manufacturer's instructions and recommendations to obtain high, early bond strength, internal cohesion strength and surface durability.

3.05 CLEANING:

A. Clean off excess sealants or sealant smears adjacent to joints as work progresses by methods and with cleaning materials approved by manufacturers of joint sealers and of products in which joints occur. Remove masking material immediately following sealant application.

3.06 PROTECTION:

A. Protect joint sealers during and after curing period from contact with contaminating substances or from damage resulting from construction operations or other causes so that they are without deterioration or damage at time of Substantial Completion. If, despite such protection, damage and deterioration occurs, cut out and remove damaged or deteriorated joint sealers immediately and reseal joints with new materials to produce joint sealer installations with repaired areas indistinguishable from original work.

JOINT SEALANT AFFADIVIT
(ATTACH TO EIFS PROJECT WARRANTY)

EIFS Applicator Sub-Contractor:

Completion Date:

THE SEALANT INSTALLED IN CONJUNCTION WITH _____(EIFS Manufacturer) EXTERIOR INSULATION AND FINISH SYSTEM (EIFS) INSTALLED ON THE STRUCTURE LOCATED AT THE ADDRESS BELOW:

_____CONFORMS _____DOES NOT CONFORM

TO: (EIFS manufacturer) _____

TO: (Sealant Manuf. Name)_____

RECOMMENDED INSTALLATION PRACTICES AND PROJECT MANUAL SECTION 07 92 00 (JOINT SEALANT SPECIFICATION)

Name & Address of Structure	Product Component Names	
._____	Primer(s):	_____
._____	Sealer:	_____
._____	Bond Breakers:	_____
._____	Base Coat:	_____
._____	Sealant Material:	_____

Installation	Conforms	Does Not Conform
A. Designer's requirements & details	_____	_____
B. Sealant Manufacturer's details & requirements.	_____	_____
C. Exterior insulation details & requirements.	_____	_____

D. The information entered above is offered in testimony that the Sealant installation conforms with the listed sealant manufacturer's installation methods and procedures and the EIFS manufacturer's minimum recommended.

Note: These affidavits must be attached to the EIFS project warranty for this project.

Sealant Installer Company Name & Address:

._____

._____

._____

._____

Signature of responsible officer: _____

Typed Name and Title of Officer: _____

Telephone: _____

Date: _____

END OF SECTION

SECTION 08 11 13 - HOLLOW METAL DOORS AND FRAMES

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Interior Hollow Metal Doors and Frames
2. Exterior Hollow Metal Doors and Frames

B. Related Sections:

1. Section 07 92 00 - Joint Sealants
2. Section 08 14 00 - Wood Doors
3. Section 08 71 00 - Door Hardware
4. Section 08 80 00 - Glazing
5. Section 09 90 00 - Painting

1.02 REFERENCES

A. ASTM International (ASTM) Publications:

1. A153 "Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware"
2. A568 "Standard Specification for Steel Sheet, Carbon, and High-Strength, Low-Alloy, Hot-Rolled and Cold-Rolled, General Requirements for"
3. A591 "Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hop-Dip Process"
4. A653 "Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process"
5. A924 "Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process"
6. A1008 "Standard Specification for Steel Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability"
7. A1011 "Standard Specification for Steel Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability"
8. C143 “Standard Test Method for Slump of Hydraulic Cement Concrete”
9. C476 “Standard Specification for Grout for Masonry”
10. E90 "Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements"
11. E413 “Classification for Rating Sound Insulation”
12. E2074 "Standard Test Method for Fire Tests of Door Assemblies, Including Positive Pressure Testing of Side-Hinged and Pivoted Swinging Door Assemblies"

B. American National Standards Institute (ANSI) Publications:

1. ANSI/SDI A250.3 "Test Procedure and Acceptance Criteria for Factory Applied Finish Painted Steel Surfaces for Steel Doors and Frames"
2. ANSI/SDI A250.4 "Test Procedure and Acceptance Criteria for Physical Endurance for Steel Doors, Frames, Frame Anchors and Hardware Reinforcing’s"

3. ANSI/SDI A250.6 "Recommended Practice for Hardware Reinforcing on Standard Steel Doors and Frames"
4. ANSI/SDI A250.8 - SDI-100 "Recommended Specifications for Standard Steel Doors and Frames"
5. ANSI/SDI A250.10 "Test Procedure and Acceptance Criteria for Prime Painted Steel Surfaces for Steel Doors and Frames"
6. ANSI/SDI A250.11 "Recommended Erection Instructions for Steel Frames (Formerly SDI-105)"

C. ANSI/DHI Publications:
1. DHI A115.1G "Installation Guide for Doors and Hardware"

D. Commercial Standards
1. CS-242-62

E. National Association of Architectural Metal Manufacturers (NAAMM) Publications:
1. "Metal Finishes Manual for Architectural and Metal Products"

F. National Fire Protection Association (NFPA) Publications:
1. NFPA 80 "Standard for Fire Doors and Windows"
2. NFPA 105 "Hot Smoke Test"
3. NFPA 252 “Standard Methods of Fire Tests of Door Assemblies”

G. National Association of Architectural Metal Manufacturers (NAAMM) Publications:
1. "Metal Finishes Manual for Architectural and Metal Products"

H. Steel Door Institute (SDI) Publications:
1. SDI 105 through 128

I. Underwriter's Laboratories, Inc. (UL) Standards
1. UL Building Materials Directory; Underwriters Laboratories Inc.
2. UL 10B "Standard for Fire Tests of Door Assemblies"
3. UL 10C "Positive Pressure Fire Tests of Door Assemblies"
4. UL 1784 "Air Leakage Tests of Door Assemblies"
5. Procedure No. R-3791
6. Procedure No. R-3821

J. Warnock Hersey, ETL SEMKO division of Intertek (WHI) Publications:
1. "Certification Listings"

1.03 DEFINITIONS

A. Steel Sheet Thicknesses: Thickness dimensions, including those referenced in ANSI A250.8, are minimums as defined in referenced ASTM standards for both uncoated steel sheet and the uncoated base metal of metallic-coated steel sheets.

1.04 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

B. Submit “Letter of Conformance” in accordance with Section 01 33 00 (01330) indicating specified items selected for use in project with the following supporting data.

1. Product Data: Include construction details, material descriptions, core descriptions, label compliance, fire-resistance and temperature-rise ratings, and finishes for each type of steel door and frame specified.

2. Submit Shop Drawings and product data indicating pertinent dimensioning, construction, component connections and locations, anchorage methods and locations, hardware locations and installation details, and the following:

   a. Elevations of each door design.

   b. Details of doors including vertical and horizontal edge details.

   c. Frame details for each frame type including dimensioned profiles.

   d. Details and locations of reinforcement and preparations for hardware.

   e. Details of each different wall opening condition.

   f. Details of anchorages, accessories, joints, and connections.

   g. Coordination of glazing frames and stops with glass and glazing requirements.

3. Door Schedule: Submit schedule of doors and frames using same reference numbers for details and openings as those on Contract Drawings.

   a. Indicate coordination of glazing frames and stops with glass and glazing requirements.

1.05 QUALITY ASSURANCE

A. Hollow metal doors and frames shall be fabricated in accordance with standards and specifications established by Steel Door Institute, complying with ANSI A250.8-1998 (SDI-100) “Recommended Specifications for Standard Steel Doors and Frames” and as specified.

B. Acoustical qualities: Doors shall have a minimum sound transmission classification (STC) of 29 per ASTM E413. when tested in a fixed position according to ASTM E90..

C. Fire-Rated Door Assemblies: Units that comply with NFPA 80 are identical to door and frame assemblies tested for fire-test-response characteristics per ASTM E2074, and are labeled and listed by UL, Warnock Hersey, or another testing and inspecting agency acceptable to authorities having jurisdiction for fire-protection ratings indicated. Test pressure shall be tested in accordance with NFPA 252, or UL 10C to comply with local code requirements.

D. Opening assemblies shall meet the requirements of NFPA 105 Hot Smoke Test.

E. Installer Qualifications: Installer experienced in performing work of this section who has specialized in the installation of work similar to that required for this project.

   1. Certificate: When requested, submit certificate indicating qualification.

F. Inspection: General Contractor shall provide in writing to Owner an inspection of all steel doors and frames for conformance to specifications. Inspection shall include checking for fit tolerance plumb and level as well as proper hardware and operation.

   1. Comply with the requirements of the International Building Code with testing in accordance with UL 10C for positive pressure door test.

      a. Test Pressure: After 5 minutes into the test, the neutral pressure level in furnace shall be established at 40 inches or less above the sill.

      b. Doors shall be labeled to certify compliance.

      c. Provide installation instructions attached to each door in a manner that assures availability to the installer and building official.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Deliver hollow metal work cardboard wrapped or crated to provide protection during transit and job storage.

1. Provide additional protection to prevent damage to finish of factory-finished doors and frames.

2. Deliver welded frames with two removable spreader bars across bottom of frames.

B. Label each item, before shipping, with metal or plastic tags to show their location, size, door swing, and other pertinent information.

C. Inspect doors and frames on delivery for damage, and notify shipper and supplier if damage is found. Minor damages may be repaired provided refinished items match new work and are acceptable to Owner's Representative. Remove and replace damaged items that cannot be repaired as directed.

D. Store doors and frames at building site under cover. Place units on minimum 4-inch-high wood blocking. Avoid using non-vented plastic or canvas shelters that could create a humidity chamber. If door packaging becomes wet, remove cartons immediately. Provide minimum 1/4-inch spaces between stacked doors to permit air circulation.

1.07 PROJECT CONDITIONS

A. Field Measurements: Verify openings by field measurements before fabrication and indicate measurements on Shop Drawings.

B. Maintain environmental conditions (temperature, humidity, and ventilation) recommended by manufacturer for optimum results. Do not install products environmental conditions outside manufacturer's absolute limits.

1.08 COORDINATION

A. Coordinate installation of anchorages for standard steel frames. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Approved Manufacturers:

1. The Steelcraft Door and Frame Products, Division of Ingersoll-Rand (800-930.8585)

2. Ceco Door Products, an ASSA ABLOY Group Company (615-661-5030)

3. Republic Builders Products, Division of MAGNATRAX Corporation (800-733-3667)

4. CURRIES Company, an ASSA ABLOY Group Company (800-377-3948)

2.02 MATERIALS

A. Hot-Rolled Steel Sheets: ASTM A1011 and A568, Commercial Steel (CS), Type B; free of scale, pitting, or surface defects; pickled and oiled.

B. Cold-Rolled Steel SheetsASTM A1008 and A568, Commercial Steel (CS), Type B; suitable for exposed applications.

C. Electrolytic Zinc-Coated Steel Sheet: ASTM A591, Commercial Steel (CS), Class B coating; mill phosphatized; suitable for unexposed applications; stretcher-leveled standard of flatness where used for face sheets.

D. Hot dipped zinc coated steel shall be of the alloyed type and comply with ASTM A924 and A653.

E. Supports and Anchors: After fabricating, galvanize units to be built into exterior walls according to ASTM A153, Class B.

F. Inserts, Bolts, and Fasteners: Provide items to be built into exterior walls, hot-dip galvanized according to to ASTM A153.

G. Grout: ASTM C476, except with a maximum slump of 4 inches, as measured according to ASTM C143.

H. Bituminous Coating: Cold-applied asphalt mastic, SSPC-Paint 12, compounded for 15-mil dry film thickness per coat. Provide inert-type noncorrosive compound free of asbestos fibers, sulfur components, and other deleterious impurities.

I. Galvanizing Repair Paint: High zinc dust content paint for regalvanizing welds in galvanized steel, with dry film containing not less than 94 percent zinc dust by weight, and complying with DOD-P-21035 or SSPC Paint 20.

J. Hardware reinforcing on doors and frames shall comply with ANSI/SDI A250.6. The physical performance levels shall be in accordance with ANSI/SDI A250.4.

2.03 HOLLOW METAL FRAMES

A. General:

1. Fabricate steel frame units to comply with ANSI/SDI A250.8 and to be rigid, neat in appearance, and free from defects including warp and buckle. Where practical, fit and assemble units in manufacturer's plant. Clearly identify work that cannot be permanently factory assembled before shipment, to assure proper assembly at Project site. Conceal fastenings, unless otherwise indicated.

A. Location and Type: All metal frames for doors shall be formed of steel to sizes and shapes indicated. Frames shall be fabricated with continuously welded corners unit type construction at joints. Frames shall be furnished with Underwriter's Laboratories label, as required, at the place of manufacturer.

B. Type and Gauges of Metal: Metal for frames shall be cold-rolled or hot-rolled, pickled and oiled, steel sheets with clean, smooth surfaces. Except where other gauges are indicated or specified, frames shall be fabricated from steel, not lighter than the standard Manufacturers Standard Gauge (MSG) as referenced in ANSI A250.8 :

1. Interior Frames of 16-gauge (0.053-inch) thick steel sheet for:

   a. Door openings wider than 48 inches.

   b. Level 2 steel doors.

   c. Wood doors, unless otherwise indicated.

2. Exterior Frames of 16-gauge (0.053-inch) thick steel sheet for:

   a. Door openings wider than 48 inches.

b. Level 2 steel doors.

c. Level 3 steel doors.

3. Exterior frames shall be 0.30 per square foot per side, hot-dipped galvanized or electrolytic zinc-coated steel with a stretcher level degree of flatness.

C. Workmanship and Design: The finished work shall be strong and rigid, neat in appearance, and free from defects. Fabricate members straight and true with corner joints well-formed, in true alignment and fastenings concealed where practicable.

D. Forming Corner Joints: Joints for welded-type frames shall be mitered and continuously arc-welded for full depth and width of frame and trim. All contact edges shall be closed tight and all welds on exposed surfaces dressed smooth and flush.

E. Provision for Hardware: Frames shall be prepared at the factory for the installation of hardware. Comply with applicable requirements in ANSI A250.6 and ANSI A115 Series specifications for door and frame preparation for hardware, unless more stringent requirements are indicated. Welding of hinges to frames will not be permitted. Frames shall be mortised, reinforced, drilled, and tapped to templates to receive all mortised hardware. Provide cover boxes in back of all hardware cut-outs. Lock strikes shall be set out and adjusted to provide clearance for silencers.

1. Provide preparation for rubber silencers on interior room door frames; three per strike jamb at single doors.

2. Provide concealed metal reinforcements for hardware as required. The gauges of metal for reinforcement shall be in accordance with the manufacturer's recommendations for the type of hardware and the thickness and width of doors to be hung in the frame, provided that the gauges used are not lighter than those required by Commercial Standard CS-242-62.

a. Galvanized for exterior doors.

3. All frames shall have a security anchor system installed on strike jamb consisting of a compression anchor at 3-1/2” from head of door frame and a “Z” type security anchor at 45” above floor.

F. Wall Anchors: Provide metal anchors of shapes and sizes required for the adjoining type of wall construction. Locate anchors on jambs near the top and bottom of each frame and at intermediate points not over 24 inches apart. Galvanized anchors for exterior frames.

1. Anchor types shall be varied to provide positive fastening to adjacent construction.

2. Provide UL approved anchors for UL labeled frames. Anchorage of UL label frames shall conform to printed UL test report for door frame manufactured.

G. Plaster Guards: Provide 0.016-inch-thick, steel sheet plaster guards or mortar boxes to close off interior of openings; place at back of hardware cutouts where mortar or other materials might obstruct hardware operation. Required at all door strikes.

H. Floor Anchors: Provide floor clips of not less than 16-gauge steel and fasten to bottom of each jamb member for anchoring frame to floor construction. Clips shall be adjustable and drilled for 3/8" diameter anchor bolts.

I. Shipment: For welded type frames, provide temporary steel spreaders fastened across bottom of frames. Where construction will permit concealment, leave spreaders in place after installation. Otherwise, remove spreaders after frames are set and anchored. In place of spreaders, frames may be strapped together in pairs with heads inverted for bracing during shipment. Before shipping, label each frame with metal or plastic tapes to show their location, size, door swing, and other pertinent information.

2.04 PREFINISHED FRAMES (PF)

A. Manufacturers:

1. Approved Manufacturers:

a. "C-Series Frames"; Timely Industries, Inc. (800-247-6242)

b. Rediframe Products Division, Dunbarton Corporation, Inc. (800-633-7553)

B. Materials:

1. Frame: Provide minimum 18 gauge, cold-rolled steel sheet conforming to ASTM A366.

2. Fasteners: Types and sizes specified in manufacturer's installation instructions for project conditions.

3. Workmanship and Design: The finished work shall be strong and rigid, neat in appearance, and free from defects. Fabricate members straight and true with corner joints well-formed, in true alignment and fastenings concealed where practicable.

4. Provision for Hardware: Frames shall be prepared at the factory for the installation of hardware. Welding of hinges to frames will not be permitted. Frames shall be mortised, reinforced, drilled, and tapped to templates to receive all mortised hardware. Provide cover boxes in back of all hardware cut-outs. Lock strikes shall be set out and adjusted to provide clearance for silencers.

a. Provide preparation for rubber silencers on interior room door frames; three per strike jamb at single doors.

b. Provide concealed metal reinforcements for hardware as required. The gauges of metal for reinforcement shall be in accordance with the manufacturer's recommendations for the type of hardware and the thickness and width of doors to be hung in the frame, provided that the gauges used are not lighter than those required by Commercial Standard CS-242-62.

c. All frames shall have a security anchor system installed on strike jamb

1) Provide safeguard at strike to prevent entry by prying.

5. Wall Anchors: Provide metal anchors of shapes and sizes required for the adjoining type of wall construction. Locate anchors on jambs near the top and bottom of each frame and at intermediate points not over 24 inches apart. Anchor the frame to the wall with fasteners every 11-inches around the perimeter of the frame.

a. Anchor types shall be varied to provide positive fastening to adjacent construction.

6. Provide UL approved anchors for UL labeled frames. Anchorage of UL label frames shall conform to printed UL test report for door frame manufactured.

7. Finishes:

a. Factory-Applied Paint Finish: Manufacturer's standard, factory-applied baked enamel paint finish complying with ANSI A250.3 for performance and acceptance criteria.

1) Color: Standard color to match color as shown on Interior Finish Index.

2.05 FRAME INSULATION

A. Glass fiber, semi-rigid board, 2" thickness, unfaced, 3 lb. density.

1. Approved Manufacturers:

a. "Type 703" - Owens-Corning Fiberglass Corp (800-438-7465)

2.06 HOLLOW METAL DOORS

A. General:

1. Fabricate steel door units to comply with ANSI/SDI A250.8. and to be rigid, neat in appearance, and free from defects including warp and buckle. Where practical, fit and assemble units in manufacturer's plant. Clearly identify work that cannot be permanently factory assembled before shipment, to assure proper assembly at Project site.

B. Hollow Metal Doors:

1. Interior Doors: Provide doors complying with requirements indicated below by referencing ANSI/SDI A250.8.for level and model and ANSI/SDI A250.4 for physical-endurance level.

2. Interior Flush Door:

a. Model: "L Series"; Steelcraft Manufacturing Company, or approved substitution by other listed manufacturers.

b. Level 2, Heavy Duty, 18-gage, and Physical Performance Level B (Heavy Duty), Model 2 (Seamless).

c. Thickness: 1-3/4"

d. Cores: Per ANSI/SDI A250.8

1) Doors shall be reinforced, stiffened, sound deadened and insulated with impregnated Kraft honeycomb core completely filling the inside of the doors and laminated to inside faces of both panels using contact adhesive applied to both panels and honeycomb core.

e. Minimum hardware reinforcing gages shall comply with Table 4 of ANSI/SDI A250.8.

3. Interior Temperature Rise Doors

a. Temperature rise doors shall be the same as flush door construction except core material shall be designed to produce the 450 degree temperature rise rating.

b. Cores: Per ANSI/SDI A250.8:

c. Mineral-Fiber Board: For labeled doors if a temperature-rise limit is required.

4. Exterior Doors: Provide doors complying with requirements indicated below by referencing ANSI/SDI A250.8 for level and model and ANSI/SDI A250.4 for physical-endurance level:

a. Flush Door:

1) Thickness: 1-3/4"

2) Model: "L Series"; Steelcraft Manufacturing Company, or approved substitution by other listed manufacturers.

3) Level 3, Extra Heavy Duty, 16-gage, and Physical Performance Level B (Extra Heavy Duty), Model 2 (Seamless).

b. Exterior doors shall be fabricated as thermal insulating door and frame assemblies and tested in accordance with ASTM C236 or ASTM C976 on fully operable door assemblies. Provide thermal-rated assemblies with U-factor of 0.24 or better. Hot-

dipped galvanized or electrolytic zinc-coated steel with a stretcher level degree of flatness.

c. All exterior swing-out doors shall have the top and bottoms closed to eliminate moisture penetration. Door tops shall not have holes or openings.

C. Door Louvers:

1. Furnish and install louvers for interior doors, where indicated, that comply with SDI 111C, with blades or baffles formed of 0.020-inch thick, cold-rolled steel sheet set into 0.032-inch thick steel frame.

a. Provide stationary sight-proof louvers with inverted V-Shaped or Y-Shaped blades of sizes and locations as shown on the Drawings.

b. Provide Fire-Rated Automatic Louvers of sizes and locations as shown on the Drawings at fire-rated openings.

1) Louvers to be constructed with movable blades closed by actuating fusible links and listed and labeled for use in fire-rated door assemblies of type and fire-resistance rating indicated by the same testing and inspecting agency that established fire-resistance rating of door assembly.

D. Door Fabrication:

1. Fabricate doors and frames in accordance with ANSI/SDI A250.8.

2. Workmanship: The finished work shall be rigid, neat in appearance, and free from defects; form molding members straight and true with joints coped or mitered, well formed and in true alignment. All welded joints on exposed surfaces shall be dressed smooth so they are invisible after finishing.

3. Door Sizes and Clearances: Doors shall be of type, sizes, and design indicated. The clearances for doors shall be 1/8" at jambs and heads and 3/4" at bottom, unless indicated or specified otherwise. Clearances at meeting edges of pairs of doors shall be 1/4" (1/8" on fire doors).

a. Clearances for Fire-Rated Doors: As required by ANSI/NFPA 80.

4. Exterior Doors: Provide weep-hole openings in bottom of exterior doors to permit moisture to escape. Seal joints in top edges of doors against water penetration.

5. Provisions for Hardware: Mortise, reinforce, drill, and tap doors at factory to receive all mortise-type hardware. Provide reinforcing only for doors to receive surface-applied hardware, except push plates and kick plates; drilling and tapping for surface-applied hardware will be done in the field. Provide metal reinforcing plates for surface-applied hardware as required. The gauges of metal for reinforcing plates shall comply with manufacturer's recommendation for the type of hardware used and the size and thickness of doors, provided that the minimum requirements are as follows:

a. Hinge Reinforcement - 3/16 Inch

b. Strike Reinforcement - 11 Gauge

c. Closers and Bracket Reinforcement - 12 Gauge

d. Mortise Covers - 26 Gauge

e. The gauges used shall not be lighter than those required by Commercial Standard CS 242-62.

6. Glazing Preparation:

a. Doors indicated to have glass shall have non-removable glazing stops on the exterior sides of the openings and removable or snap-on type stops on the inside of the openings.

b. Provide manufacturer's vision lites of sizes and locations as shown on Drawings, recessed into the door face similar to "Dezigner Trim" by Steelcraft, or approved substitution by listed manufacturers.

c. Stops shall be UL approved for UL labeled doors.

E. Doors with labels shall carry Underwriters label on the door and on the frame. They shall be constructed to meet Procedure No. R-3791 and R-3821, as listed by Underwriters Laboratories.

2.07 FINISHES

A. General: Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.

1. Finish steel doors and frames after assembly.

B. Factory Prime Coating for Field Painted Finish: Unless specified otherwise, provide manufacturer's standard, factory-applied coat of rust-inhibiting primer complying with ANSI/SDI A250.10 for acceptance criteria.

1. Clean and chemically treat metal surfaces to assure maximum paint adherence. Follow with a dip or spray coat of lead-free, rust-inhibitive metallic oxide, zinc chromate, or synthetic resin primer on all exposed surfaces. Finished surfaces shall be smooth and free from irregularities and rough spots.

PART 3 EXECUTION

3.01 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of standard steel doors and frames.

1. Examine roughing-in for embedded and built-in anchors to verify actual locations of standard steel frame connections before frame installation.

3.02 GENERAL

A. Fabricate and install hollow metal units and their accessories in strict accordance with these Specifications and manufacturer's data.

B. Hardware: For installation see Division 08, "Door Hardware" Section of these Specifications.

3.03 PLACING FRAMES

A. Comply with the provisions of the "Steel Door Institute" 105, unless otherwise indicated.

B. Set frames accurately in position, plumbed, aligned, and braced until permanent anchors are set.

1. Except for frames located in existing walls or partitions, place frames before construction of enclosing walls and ceilings.

C. Frame Insulation: Install insulation in frames of gypsum board partitions. Cut insulation to full width of frame throat and friction fit within the jamb and head. Pack solid around perimeter of the frame.

D. Anchor bottom of frames to floors with expansion bolts, or with power fasteners. Build wall anchors into walls or secure to adjoining construction as indicated or specified. Where frames require ceiling struts or other structural overhead bracing, they shall be anchored securely to ceiling or structural framing above as indicated and specified.

1. In masonry construction, provide at least three wall anchors per jamb; install adjacent to hinge location on hinge jamb and at corresponding heights on strike jamb. Acceptable anchors include masonry wire anchors and masonry T-shaped anchors.

2. In metal-stud partitions, provide at least three wall anchors per jamb; install adjacent to hinge location on hinge jamb and at corresponding heights on strike jamb. Attach wall anchors to studs with screws.

3. For openings 90 inches or more in height, install an additional anchor at hinge and strike jambs.

E. Install fire-rated frames in accordance with NFPA Standard No. 80.

3.04 DOOR INSTALLATION

A. Door Installation: Comply with ANSI A250.8. Fit hollow metal doors accurately in their respective frames within clearances specified in ANSI A250.8. Shim as necessary to comply with SDI 122 and ANSI/DHI A115.1G .

B. Place fire-rated doors with clearances as specified in NFPA Standard No.

80. C. Smoke-Control Doors: Install to comply with NFPA 105.

3.05 ADJUSTMENT

A. Check and re-adjust operating finish hardware items in hollow metal work just prior to final inspection.

B. Remove and replace defective work including doors or frames which are warped, bowed, or otherwise damaged.

C. Finished Doors: Refinish or replace doors damaged during installation.

D. Protect doors as recommended by door manufacturer to ensure that doors will be without damage or deterioration at time of Substantial Completion.

3.06 TOUCH-UP

A. Prime-Coat Touchup: Immediately after installation, sand smooth any rusted or damaged areas of prime coat and apply touch up of compatible air-drying primer.

B. Repairs: Fill surface depressions with metallic paste filler, allow to cure, and sand flush for invisible joint with adjacent metal surfaces. Sand rust areas and apply touch-up paint using air drying paints compatible with shop finish. Damaged doors or frames that cannot be repaired shall be replaced.

3.07 CLEANING:

A. Protection Removal: Immediately before final inspection, remove protective wrappings from doors and frames.

B. Upon completion, metal surfaces of doors and frames that are completely factory finished shall be thoroughly cleaned and touched-up as recommended by the door manufacturer.

END OF SECTION

SECTION 08 14 00 - WOOD DOORS

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Types of doors required include the following:

a. Composite Wood Doors:

1) Flush Design at Public Space, Back-of-House, Guestroom Entry, and Guestroom Connecting Doors.

2) Flush Design at Guestroom Bath, Bedroom, and Closet Doors.

2. Types of Frames required include the following:

a. Hollow Metal Frames throughout.

b. Knock down metal frames at non-rated wall locations. (Option)

B. Related Sections:

1. Section 06 10 00 - Rough Carpentry
2. Section 06 20 00 - Finish Carpentry
3. Section 08 11 13 – Hollow Metal Doors and Frames
4. Section 08 41 13 – Aluminum Framed Entrances and Storefronts
5. Section 08 71 00 - Door Hardware
6. Section 08 80 00 - Glazing
7. Section 09 90 00 - Painting

1.02 REFERENCES

A. Window and Door Manufacturers Association (WDMA) Publications:

1. I.S.1-A "Architectural Wood Flush Doors"

B. Architectural Woodwork Institute (AWI) Publications:

1. "Architectural Woodwork Quality Standards"

C. American National Standards Institute (ANSI) Publications:

1. ANSI/AHA A135.4 "Basic Hardboard"
2. ANSI 208.1 "Standards for the Performance of Particleboard"
3. ANSI Z97.1 "Performance Specifications and Methods of Test for Safety Glazing Materials Used in Buildings"

D. ASTM International (ASTM) Publications:

1. C920 “Standard Specification for Elastomeric Joint Sealants”
2. C1036 “Standard Specification for Flat Glass”
3. E90 “Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements”
4. E413 “Classification for Rating Sound Insulation”

E. Door and Hardware Institute (DHI) Publications:

1. DHI-WDHS-3 "Recommended Hardware Locations for Wood Flush Doors"
2. DHI A115 "Steel Door Preparation Standards"

F. National Fire Protection Association (NFPA) Publications:

1. NFPA 80 “Standard for Fire Doors, Fire Windows”

G. Underwriter's Laboratories, Inc. (UL) Standards

1. UL 10B "Standard for Fire Tests of Door Assemblies"
2. UL 10C "Positive Pressure Fire Tests of Door Assemblies"

1.03 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

B. Submit “Letter of Conformance” in accordance with Section 01 33 00 (01330) indicating specified items selected for use in project with the following supporting data.

1. Product Data: Door manufacturer's technical data for each type of door, including details of core and edge construction, trim for openings and louvers, and factory-finishing specifications.
2. Shop Drawings: Submit Shop Drawings indicating location and size of each door, elevation of each kind of door, details of construction, location and extent of hardware blocking, fire ratings, requirements for factory finishing and other pertinent data.
    a. Submittals shall use the same designations for door and hardware numbers as shown on the Drawings.

1.04 QUALITY ASSURANCE

A. Quality Standards: Comply with the following standards:

1. WDMA Quality Standard: I.S.1-A "Architectural Wood Flush Doors", and I.S.6, "Industry Standard for Wood Stile and Rail Doors" of Window and Door Manufacturers Association (WDMA).
2. AWI Quality Standard: "Architectural Woodwork Quality Standards", including Section 1300 "Architectural Flush Doors", and Section 100-S-3 "Moisture Content", of Architectural Woodwork Institute (AWI) for grade of door, core construction, finish and other requirements exceeding those of WDMA quality standard.

B. Sound Transmission Class:

1. All guestroom entrance doors from interior corridors, together with their perimeter seals shall have a minimum Sound Transmission Class (STC) of 31 per ASTM E413. when tested in an operable condition according to ASTM E90.
2. All guestroom communicating doors, at each of the two doors in the opening, together with their perimeter seals shall have a minimum Sound Transmission Class (STC) of 35 per ASTM E413. when tested in an operable condition according to ASTM E90.
3. All other entrance doors from interior corridors, together with their perimeter seals shall have a minimum Sound Transmission Class (STC) of 26 per ASTM E413. when tested in a fixed position according to ASTM E90.

C. Safety Glass: Provide products complying with ANSI Z97.1 and testing requirements of 16 CFR, Part 1201, for Category II materials, unless those of Category I are expressly indicated and permitted.

D. Fire-Rated Wood Doors: Provide wood doors that comply with NFPA 80, are identical in materials and construction to units tested in door and frame assemblies per ASTM E152, and which are labeled and listed for ratings indicated by Underwriters Laboratory (UL), Warnock Hersey, ETL SEMKO division of Intertek (WHI), or other testing and inspection agency acceptable to authorities having jurisdiction.

1. Provide rated stiles on fire rated doors.

2. Comply with the requirements of the International Building Code with testing in accordance with UL 10C for positive pressure door test.

   a. Test Pressure: After 5 minutes into the test, the neutral pressure level in furnace shall be established at 40 inches or less above the sill.

   b. Doors shall be labeled to certify compliance.

   c. Provide installation instructions attached to each door in a manner that assures availability to the installer and building official.

E. Manufacturer: Obtain doors from one source.

F. Inspection: General Contractor shall provide in writing to Owner's Representative, an inspection of all doors and frames for conformance to specifications. Inspection shall include checking for fit tolerance, plumb and level, as well as proper hardware and operation.

1.05 PRODUCT DELIVERY, STORAGE, AND HANDLING

A. Protect doors during transit, storage and handling to prevent damage, soiling and deterioration. Comply with requirements of referenced standards and recommendations of WDMA pamphlet "How to Store, Handle, Finish, Install, and Maintain Wood Doors", as well as with manufacturer's instructions.

1. Individually Package doors in vented poly bags with identifying marks prior to shipment. Doors shall not be removed from bags until ready to hang. After hanging, bags shall be placed over doors to provide protection until area in which doors are hung is free of construction traffic.

2. Store doors off the floor at least 3" in an area that is not susceptible to standing water or high moisture. Store doors in an upright position with spacers or corner caps separating each door.

B. Identify each door with individual opening numbers which correlate with designation system used on Shop Drawings for door, frames, and hardware, using temporary, removable or concealed markings.

1.06 PROJECT CONDITIONS

A. Conditioning: Do not deliver or install doors until building is enclosed, wet work is complete, and conditions for temperature and relative humidity have been stabilized and will be maintained in storage and installation areas during remainder of construction period to comply with the following requirements applicable to Project's geographical location:

1. Referenced AWI quality standard including Section 100-S-11, "Relative Humidity and Moisture Content".

1.07 SPECIAL WARRANTY

A. General: Warranties shall be in addition to and run concurrent with, and not be a limitation of, other rights the Owner may have under the Contract Documents.

B. Door Manufacturer's Warranty: Submit written agreement on door manufacturer's standard form signed by manufacturer, Installer and General Contractor, agreeing to repair or replace defective doors that have warped (bow, cup or twist) more than 1/4 inch in a 42" x 84" section, or that show telegraphing of core construction in face veneers exceeding 0.01 inch in a 3 inch span, or do not conform to tolerance limitations of referenced quality standards.

1. Warranty shall also include reinstallation and finishing that may be required due to repair or replacement of defective doors where defect was not apparent prior to hanging.
2. Warranty shall be in effect during the following period after date of Substantial Completion:
    a. Solid-Core and Composite Wood Interior Doors: Life of installation.
    b. Wood Interior Doors:
        1) Non-Rated: Life of installation.
        2) 20 minute Fire Rated: Life of installation.
        3) 45, 60, or 90 minute Fire Rated: One year from date of Substantial Completion.

C. Contractor's Responsibilities: Replace or refinish doors where Contractor's work contributed to rejection or to voiding of manufacturer's Warranty.

PART 2 PRODUCTS

2.01 INTERIOR FLUSH WOOD DOORS

A. Manufacturers:
1. Approved Manufacturers:
    a. VT Industries Inc. (800-827-1615)
    b. Mohawk Flush Doors, a Masonite Company (570-473-3557)
    c. Eggers Industries (920-793-1351)
    d. Marshfield Door Systems, a Masonite Company (800-869-3667)

B. Solid Core Doors for Transparent Finish: Comply with the following requirements:
1. Faces: Select White, Plain Sliced Birch, ANSI/HPVA A Grade, Pair and Book-Matched for uniform color and grain pattern.
2. AWI Grade: Custom
3. Construction: 5-Ply
    a. Solid Core Doors: Particleboard, ANSI/208.1, 1-LD-2
4. Thickness: 1-3/4"
5. Factory seal top and bottom rails.

C. Blocking: Provide either hardwood or Structural Composite Lumber (SCL) wood blocking in particleboard-core doors as follows:
1. Top Rail (No Closer): Minimum 1-1/8 inch.
a. Top Rail (Closer): Minimum 5-inch with remaining after installation, or as required to provide proper blocking surface mounted hardware to avoid through-bolts and maintain warranty. Verify with closer manufacturer.

b. Bottom Rail: Minimum 1-1/8 inch after undercut; 5-inch bottom-rail in doors indicated to have kick, mop, or armor plates.

2. Midrail: 5-inch midrail blocking, in doors indicated to have exit devices at location of exit device.

3. Stiles: Provide stiles consisting of two plys.

a. The inner ply shall be minimum 1-1/8 inches of hardwood or LSL engineered lumber.

b. The outer ply shall be the face veneer.

c. Bond stiles and rails to core, then sand entire unit prior to applying face veneers.

D. Fire-Rated Solid Core Doors: Comply with the following requirements.

1. Faces and AWI Grade: Provide faces and grade to match non-rated doors in same area of building, unless otherwise indicated.

a. Construction: Manufacturer's core construction as required to provide fire-resistance rating indicated.

2. Blocking: Provide either hardwood or structural composite lumber wood blocking in particleboard-core doors or as required to meet specified fire rating and as follows:

a. Top Rail (No Closer): Minimum 1-1/8 inch.

b. Top Rail (Closer): Minimum 5-inch with remaining after installation, or as required to provide proper blocking surface mounted hardware to avoid through-bolts and maintain warranty. Verify with closer manufacturer.

c. Bottom Rail: Minimum 1-1/8 inch after undercut.

d. Bottom Rail: 5-inch bottom-rail in doors indicated to have kick, mop, or armor plates.

e. Midrail: 5-inch midrail blocking, in doors indicated to have exit devices at location of exit device.

3. Stiles: Provide stiles consisting of two plys.

a. The inner-ply shall be minimum 1-1/8 inches Structural Composite Lumber (SCL) or approved non-combustible material on 20 minute rated doors. On 45, 60, and 90 minute rated doors, the inner-ply shall be 1-inch of Structural Composite lumber or approved combustible material.

b. The outer ply shall be the face veneer.

1) Veneer tape will not be permitted.

c. Bond stiles and rails to core, then sand entire unit prior to applying crossbanding and face veneers.

2.02 COMPOSITE WOOD DOORS

A. Approved Manufacturers:

1. Flush Doors:

a. Marshfield DoorSystems, a Masonite Company (800-869-3667)

B. Flush Composite Wood Doors:

1. Approved Manufacturers:

   a. Marshfield Door Systems, a Masonite Company (800-869-3667)

      1) Guestroom Entrance Doors, Guestroom Connector Doors, and Public Space Doors: Flush Fire-Rated 1-3/4" Doors: " Cendura Series, Model C-SCLC-B-FR20" or approved equal.

      2) Guestroom Bedroom and Bath Doors: Flush 1-3/8" Doors: "Cendura Series, Model C-PC-B-NR" or approved equal.

      3) Guestroom Closet Doors: Flush 1-3/8" Doors: "Cendura Series, Model C-PC-B-NR" or approved equal.

      4) Surface Applied Mirror with trim molding (Guestroom Bath): " Cendura Series, Model C-PC-B-NR" or approved equal. Full panel mirror on flush bathroom side. Note, mirror and moldings provided by others in lieu of factory installation.

      5) HPDL Door finishes shall be allowed with prior approved model and finish. Approval by Architect.

2. Door Construction:

   a. Outer Stile and Rail: Hinge style to be modified to include wood inserts or modified MDF edge as required for proper screw holding if other than model specified. Edges shall match faces.

   b. Factory Finish: Primed, top and bottom rails factory sealed.

3. Size: Size as shown on Drawings.

4. Thickness: 1-3/4 inches and 1-3/8 inches, as indicated.

5. Mullion Width: 3 inches, unless otherwise noted.

6. Rails:

   a. Top Rail Width: 6 inch, unless otherwise noted.

   b. Lock Rail Width: 8-3/4 inch, unless otherwise noted.

   c. Cross Rail Width: 3 inch, unless otherwise noted.

   d. Bottom Rail Width: 10 inch, unless otherwise noted.

7. Routed Panel Thickness: Not Allowed

12. Finish: Factory Primed.

13. Mirror:

   a. Mirror Facing: Smooth-edged, silvered, mirrored, vinyl-backed safety glass complying with CPSC 16 CFR 1201 for Category II safety glass with ANSI Z97.1 test procedures; with ASTM C1036 for Type I (transparent, flat), Class 1(clear), Quality q2 (mirror) annealed float glass; with FS DD-M-411 for coating system applied to second glass surface; and with the following:

   b. Glass Thickness: 1/8" thickness

   c. Mirror to be secured to door with adhesive as recommended by door and mirror manufacturer.

D. Glazing:

1. Interior Doors: 1/4" Uncoated, clear, fully tempered float glass by manufacturer.

E. Fire-Rated Doors: Comply with the following requirements.

1. Faces: Provide faces to match non-rated doors in same area of building, unless otherwise indicated.

a. Construction: Manufacturer's standard core construction as required to provide fire-resistance rating indicated.

2.04 FABRICATION - GENERAL

A. Fabricate wood doors to produce doors complying with following requirements:

1. Fabricate fire rated doors in accordance with AWI Quality Standards and to UL or Warnock Hersey requirements. Attach fire rating label to door and frame.

2. Stiles, rails and core shall be fully bonded together with adhesive and sanded smooth prior to laminating of face veneer.

3. Cross bands and faces for PC and FD type doors shall be laminated to core by the hot or cold plate process.

4. Solid Core Doors for Laminate Finish:

a. Vertical Exposed Edge of Stiles: Plastic laminate same as door facing.

b. Laminate edge to be applied before the face laminate.

5. Factory-prefit and pre-machine doors to fit frame opening sizes indicated with the following uniform clearances and bevels:

a. Coordinate measurements of hardware mortises in metal frames to verify dimensions and alignment before proceeding with factory pre-machining.

b. Comply with clearance requirements of referenced quality standard for fitting. Comply with requirements in NFPA 80 for fire-rated doors.

c. Locate hardware to comply with Door and Hardware Institute (DHI) DHI-WDHS-3. Comply with final hardware schedules, door frame Shop Drawings, DHI A115-W series standards, and hardware templates.

d. Factory drill pilot holes for hinge and lock face plate screws.

e. Coordinate measurements of hardware mortises in metal frames to verify dimensions and alignment before proceeding with factory pre-machining.

6. Undercut:

1) Guestroom Entry Door = 1/4" above threshold.

2) Guestroom Connector = 1/2" above threshold as coordinated with door bottom. (15/16" above concrete)

3) Guest Bathroom Door = 3/8" above threshold.

4) Doors swinging over carpet = 3/4" above top of concrete subfloor.

B. Openings: Cut and trim openings through doors to comply with applicable requirements of referenced standards for kind(s) of doors required.

1. Light Openings: Trim openings with moldings of material and profile indicated.

2. Louvers: Factory install louvers in prepared openings.

C. Transom and Side Panels: Fabricate matching panels with same construction, exposed surfaces, and finish as specified for associated doors. Finish bottom edges of transoms and top edges of rabbeted doors same as door stiles.

1. Fabricate door and transom panels with full-width, solid-lumber, rabbeted, meeting rails.

D. Pre-Assembled Doors and Frames:

1. Coordinate with Section 08 71 00 (08710) for all hardware requirements, including installation.

2.05 FACTORY FINISHING

A. Transparent (Stain) Finish:

1. Factory-applied by Manufacturer following AWI Section 1500 requirements for Custom Grade "TR-6". Finish shall consist of a four-coat process with a minimum 3-mil dry film thickness on all surfaces.

a. Apply vinyl wash coat by spray or roller; fully pad into surfaces and wipe off.

b. Apply stain by spray or roller; fully pad surfaces and wipe off.

c. Sand lightly using 220-grit paper.

d. Apply final finish of two coats of clear, transparent, catalyzed vinyl resin by spray or roller.

e. Stain Color: Satin-finish stain in color as approved by the Marriott Representative to match a finished stain sample in color as shown on Interior Finish Index.

B. Opaque (Painted) Finish:

1. Factory-applied by Manufacturer following AWI Section 1500 requirements for Custom Grade. Color as shown on Interior Finish Schedules.

PART 3 EXECUTION

3.01 EXAMINATION

A. Examine installed door frames prior to hanging door.

1. Verify that frames comply with indicated requirements for type, size, location, and swing characteristics and have been installed with plumb jambs and level heads.

2. Reject doors with defects.

B. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.02 INSTALLATION

A. Hardware: For installation see Section 08 71 00 “Door Hardware”.

B. Manufacturer's Instructions: Install wood doors to comply with manufacturer's instructions and of referenced AWI standard and as indicated.

1. Install fire-rated doors in corresponding fire-rated frames in accordance with requirements of NFPA 80.

C. Job-Fit Doors:

1. Field-verify dimensions of each new installed door frame; trim each door as required to properly fit each frame within specified dimensional tolerances; unequal trimming may be required.

2. Align and fit doors in frames with uniform clearances and bevels as indicated below; do not trim stiles and rails in excess of limits set by manufacturer or permitted with fire-rated doors. Machine doors for hardware. Seal cut surfaces after fitting and matching.

a. Trim non-rated doors equally from both sides when fitting for width and from top and bottom when fitting for height. Do not trim more than 3/4" from each edge.

3. Fitting Clearances for Non-Rated Doors: Provide 1/8" at jambs and heads; 1/16" per leaf at meeting stiles for pairs of doors; and 1/8" from bottom of door to top of decorative floor finish or covering. Where threshold is shown or scheduled, provide 1/4" clearance from bottom of door to top of threshold.

4. Fitting Clearances for Fire-Rated Doors: Complying with NFPA 80.

5. Bevel non-rated doors 1/8" in 2" at lock and hinge edges.

6. Bevel fire-rated doors 1/8" in 2" at lock edge, trim stiles and rails only to extent permitted by labeling agency.

D. Hang doors and adjust for proper clearances and smooth operation without binding.

1. Factory-Fitted Doors: Align in frames for uniform clearance at each edge.

2. Factory-Finished Doors: Restore finish before installation if fitting or machining is required at Project site.

E. Field-Finished Doors: Refer to the following for finishing requirements:

1. Section 09 90 00, "Painting"

2. Seal field cuts in top and bottom rails and for hardware with 2 coats of a VOC compliant paint or varnish.

3.03 ADJUSTING, CLEANING, AND PROTECTION

A. Operation: Rehang or replace doors which do not swing or operate freely.

B. Finished Doors: Refinish or replace doors damaged during installation.

C. Clean door and dry wipe with a soft cloth.

D. After installation, protect doors from damage as recommended by manufacturer during subsequent construction activities. Damaged doors will be rejected and shall be replaced at no additional cost to Owner.

E. Protect doors from damage. Replace damaged units at no cost to the Owner.

END OF SECTION

SECTION 08 31 00 - ACCESS DOORS AND PANELS

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Access Doors and Frames of the Following Types:

a. Wall Access Doors

b. Moisture Resistant Access Doors

c. Ceiling Access Doors

d. Floor/Ceiling System Access Doors

e. Sprinkler System Access Doors

B. Related Sections:

1. Section 09 21 16 - Gypsum Board Assemblies

2. Section 09 90 00 - Painting

3. Division 21, 22 and 23 Sections for coordination of access to valves and other concealed items.

1.02 REFERENCES

A. ASTM International (ASTM) Publications:

1. E119 "Standard Test Methods for Fire Tests of Building Construction and Materials"

B. National Association of Architectural Metal Manufacturers (NAAMM) Publications:

1. "Metal Finishes Manual"

C. National Fire Protection Association (NFPA) Publications:

1. NFPA 80 “Standard for Fire Doors, Fire Windows”

2. NFPA 252 “Standard Methods of Fire Tests of Door Assemblies”

D. Underwriter's Laboratories, Inc. (UL) Standards

1. UL 10B "Standard for Fire Tests of Door Assemblies"

2. UL 263 "Standard for Fire Tests of Building Construction and Materials"

1.03 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

B. Submit “Letter of Conformance” in accordance with Section 01 33 00 indicating specified items selected for use in project with the following supporting data.

1. Shop Drawings and Samples:

a. Submit copies of Shop Drawings of all items specified herein to Architect for approval. Obtain approval of Drawings prior to proceeding with manufacturing. Shop Drawings shall indicate: Elevations of each door type; Details of each frame type; Location in the building for each item; Conditions at openings with various wall thicknesses and material; Typical and special details of construction; Methods of assembling sections; Locations and installation requirements for hardware; Size, shape, and thickness of materials; Joints and connections.

1.04 QUALITY ASSURANCE

A. Access doors shall be fabricated in accordance with standards and specifications established by Steel Door Institute.

B. Fire Rated Access Doors and Frames: Comply with NFPA 80. Provide products listed by UL or another testing agency acceptable to local jurisdictions on each fire rated access door. Where required by local codes comply with the following:

C. Access panels shall be flush with finished wall or ceilings, except where panels are located in acoustic tile or paneling, the door shall be recessed to receive adjacent finish material.

D. Access panel finishes shall be coordinated with the finish treatment of the area.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Deliver access doors cartooned or crated to provide protection during transit and job storage.

PART 2 PRODUCTS

2.01 SHOP PAINTING

A. Apply a primed finish to all ferrous metal surfaces furnished under this Section. Clean and chemically treat metal surfaces to assure maximum paint adherence. Follow with a dip or spray coat of rust-inhibitive metallic oxide, zinc chromate, or synthetic resin primer on all exposed surfaces. Finished surfaces shall be smooth and free from irregularities and rough spots. Each coat of paint shall be separately baked or oven dried. The time and temperature for drying shall be in accordance with manufacturer's recommendations for developing maximum hardness and resistance to abrasion.

2.02 ACCESS UNITS

A. Wall Access Doors (Non-rated):

1. Approved Manufacturers:

a. "WB Series"; J.L. Industries (800-554-6077)

b. "Type RDW"; Karp Associates, Inc. (800-888-4212)

c. "Model NW Series"; Nystrom Building Products (800-547-2635)

d. "Style DW"; Milcor, Inc., a brand of Commercial Products Group of Hart & Cooley, Inc. (800-624-8642)

2. Door Size: Select from manufacturer's standard sizes to suit required opening.

3. Designed for flush installation in wall construction. Construct of metal with concealed continuous hinge, having recessed screwdriver latch, size as indicated.

B. Wall Access Doors (Fire-Rated):

1. Approved Manufacturers:

a. "FDWB Series"; J.L. Industries (800-554-6077)

b. "Type KRP-450 FR"; Karp Associates, Inc. (800-888-4212)

c. "IW Model Series"; Nystrom Building Products (800-547-2635)

2. Door Size: Select from manufacturer's standard sizes to suit required opening.

3. Fire Rating: 1-1/2 hour labeled.

C. Moisture Resistant Access Doors (Non-rated):

1. Approved Manufacturers:

a. Larsen "L-MPSS" stainless steel frame and "L-MPSS" stainless steel door, by Larsen's Manufacturing Co, with continuous, offset and concealed hinge, security fastener. (800-527-7367)

D. Ceiling Access Doors (Non-rated):

1. Approved Manufacturers:
   a. “Model RDW”; Karp Associates, Inc.. (800-888-4212)
   b. "Style DW"; Milcor, Inc., a brand of Commercial Products Group of Hart & Cooley, Inc. (800-624-8642)
   c. Model WB-DW; Williams Brothers Corporation of America (800-255-5515)
   d. “WB Series”; J.L. Industries (800-554-6077)
   e. “NW Series”; Nystrom Building Products (800-447-2635)
2. Performance Criteria
   a. Door Size: Select from manufacturer’s standard sizes to suit required opening.
   b. Sheet metal construction with concealed continuous hinge, flush design. Provide each door with self-closing mechanism and standard flush design “self-latching” latch.

E. Ceiling Access Doors (Fire-Rated):

1. Approved Manufacturers:
   a. “Model KRP-350FR”; Karp Associates, Inc. (800-888-4212)
   b. "Model WB-FRC"; Williams Brothers Corporation of America (800-255-3515)
   c. "FDWB Series”; J.L. Industries (800-554-6077)
   d. "IW Series”; Nystrom Building Products (800-447-2635)
2. Performance Criteria:
   a. Door Size: Select from manufacturer’s standard sizes to suit required opening. b.

      Fire Rating: 1 hour labeled.
   c. Sheet metal construction with concealed continuous hinge, flush design. Provide each door with self-closing mechanism and standard flush design “self-latching” latch.

F. Floor/Ceiling System Access Doors (Fire Rated)

1. Approved Manufacturers:
   a. “Model 3210”; Milcor, Inc., a brand of Commercial Products Group of Hart & Cooley, Inc. (800-624-8642)
   b. Approved substitution by Williams Brothers Corporation of America c. Approved substitution by J.L. Industries (800-554-6077)
   d. Approved substitution by Nystrom Building Products (800-447-2635)
   e. Approved Substitution by Karp Associates, Inc. (800-888-4212)
2. Performance Criteria:
   a. Size: Select from manufacturer's standard sizes to suit required opening.
   b. Fire Rating: 1 hour labeled.
   c. Sheet metal construction with concealed continuous hinge, flush design. Provide each door with self-closing mechanism and standard flush design "self-latching" latch.

d. Finish: Bonderized galvanized steel.

G. Sprinkler System Access Doors (Fire-rated)

1. Performance Criteria:

a. UL B (1-1/2 hr.) rated with automatic closer, UL rated anchors for construction in which door will be installed, and lockset with knob released keyed as directed by Owner.

2. Approved Manufacturers:

a. Milcor, Inc., a brand of Commercial Products Group of Hart & Cooley, Inc. (800-624-8642)

b. Karp Associates, Inc. (718-784-2105)

c. Williams Brothers Corporation of America (309-796-2371)

2.03 FABRICATION

A. Grind exposed welds smooth and flush with adjacent surfaces.

B. Provide all required attachment devices and fasteners to secure units to substrates.

2.04 FINISHES

A. Base Metal Protection: Factory prime coat units with electrostatic baked on electrostatic powder. Prime exposed edges with coat of white rust-inhibitive paint.

1. For steel finishes comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products".

B. For fire-rated access doors, furnish units with ceramic fiberboard panel insert, attach to outside face of door, ready for field painting.

PART 3 EXECUTION

3.01 GENERAL

A. Verify rough openings for door and frame are correctly sized and located.

B. Beginning of installation means acceptance of existing conditions.

3.02 INSTALLATION

A. Install units and their accessories in accordance with final Shop Drawings, manufacturer's data, and as herein specified.

B. Install frame plumb and level in wall and ceiling openings. Position to provide convenient access to concealed work requiring access. Secure rigidly in place.

3.03 ADJUSTMENT

A. Check and readjust operating finish hardware items in work just prior to final inspection.

B. Remove and replace defective work including doors or frames which are warped, bowed, or otherwise damaged.

3.04 TOUCH-UP

A. Immediately after erection of work, sand smooth any rusted or damaged areas of prime coat and touch-up of compatible air drying primer.

3.05 PROTECTION:

A. Protect doors and frames from damage during transportation and at the job site; store at the site under cover on wood blocking or on suitable floors. After installation, protect doors and frames from damage during subsequent construction activities. Damaged work will be rejected and shall be replaced with new work. Factory enameled finished work shall be shipped in cartons or other suitable containers.

3.06 CLEANING:

A. Upon completion, metal surfaces of doors and frames that are completely factory finished shall be thoroughly cleaned and touched-up as recommended by the door manufacturer.

END OF SECTION

SECTION 08 41 13 - ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Interior and Exterior Aluminum Storefront Framing, Doors, Door Frames, Lights, and Fixed Windows.
2. Anchors, Brackets, and Attachments
3. Door Hardware
4. Perimeter Sealant

B. Work Installed but Furnished Under Other Sections:

1. Section 08 71 00 - Door Hardware: Additional Door hardware items other than specified in this Section, and keying requirements.

C. Related Sections:

1. Section 07 92 00 - Joint Sealants
2. Section 08 51 13 - Aluminum Windows
3. Section 08 71 00 - Door Hardware
4. Section 08 80 00 - Glazing

1.02 REFERENCES

A. American Architectural Manufacturers Association (AAMA) Publications:

1. AAMA “Storefront and Entrance Manual”
2. 10 "Care and Handling of Architectural Aluminum from Shop to Site"
3. 609 / 610-02 "Cleaning and Maintenance Guide for Architecturally Finished Aluminum"
4. 2603 "Voluntary Specification, Performance Requirements and Test Procedures for Pigmented Organic Coatings on Aluminum Extrusions and Panels"

B. American National Standards Institute (ANSI) Publications:

1. ANSI/AAMA 101 "Voluntary Specifications for Aluminum, Vinyl (PVC) and Wood Windows and Glass Doors"

C. ASTM International (ASTM) Publications:

1. A36 “Standard Specification for Carbon Structural Steel”
2. A123 “Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products’
3. A653 "Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process"
4. B221 "Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes"
5. E236 "Standard Specification for Apparatus For Microdetermination Of Alkoxyl Groups"

6. E283 “Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen”
7. E330 “Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference”
8. E331 “Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference”

D. National Fenestration Rating Council (NFRC)

E. Underwriter's Laboratories, Inc. (UL) Standards

1.03 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

1. Submit Shop Drawings and product data and manufacturer's installation instructions. Include system and component dimensions; components within assembly; framed opening requirements and tolerances; anchorage and fasteners; glass and infills; door hardware requirements; and affected related work.

1.04 QUALITY ASSURANCE

A. System to provide for expansion and contraction within system components caused by a cycling temperature range of 170 degrees F. without causing detrimental effects to system or components.

B. Design for windload of 30 PSF with maximum deflection in both vertical and horizontal mullions not to exceed 1/175 of span.

C. Comply with the applicable standards of ANSI/AAMA 101 and the following:

1. AAMA 10
2. AAMA 2603
3. AAMA 609/610

D. Certify that the proposed products have been tested to the following performance standards at an Independent Testing Laboratory accredited by AAMA and using the referenced ASTM standards:

1. Water Penetration: ASTM E331 no water penetration at a test pressure of 6.24 PSF.
2. Structural Properties: 30 PSF acting inward and outward per ASTM E330. Deflection not to exceed 1/175 of span.
3. Air Leakage per ASTM E283:
    a. Fixed window walls - maximum of 0.06 CFM per sq. ft. of total exterior surface areas.
4. Thermal Performance: Composite glass wall shall meet or exceed the "U" value shown on the Drawings and as tested per ASTM E236.

E. Drain water entering joints, condensation occurring in glazing channels, or migrating moisture occurring within system, to exterior.

F. System to accommodate, without damage to system or components, or deterioration of perimeter seal: Movement within system; movement between system and perimeter framing components; dynamic loading and release of loads; and deflection of structural support framing.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Transportation and Handling: Transport products by methods to avoid product damage; deliver in undamaged condition in manufacturer's unopened containers or packaging, dry. Provide equipment and personnel to handle products by method to prevent soiling or damage. Promptly inspect shipments to assure that products comply with requirements, quantities are correct, and products are undamaged.

B. Storage and Protection: Store products in accordance with manufacturer's instructions, with seals and labels intact and legible. Store sensitive products in weather-tight enclosures; maintain within temperature and humidity ranges required by manufacturer's instructions.

1.06 SPECIAL WARRANTY

A. The work of this Section shall be jointly guaranteed by the manufacturer for a period of five (5) years after the date of Substantial Completion.

B. All materials shall be free from manufacturing defects and defects in installation workmanship. Any material or workmanship judged defective during this period shall be removed and replaced at no cost to the Owner.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. For purpose of designating design and quality of aluminum storefront system, fixed window system, Drawings and Specifications are based on the following:

1. Storefront and Fixed Window Framing System: Insulated Glazing (Tempered)

a. Approved Manufacturers:

1) "Trifab VersaGlaze 451T", Kawneer North America, an Alcoa Company. (770-449-5555)

2) “FG-3000 MultiPlane", Oldcastle BuildingEnvelope (formally Vistawall) (866-653-2278)

3) "Series TR-7850 Multi-Glaze Storefront System"; Traco Commercial Group (800-837-7002)

4) “System 403 T”, EFCO Corporation (800-221-4169)

2. Entry Doors:

a. Style and rail tubular member door framing system by same manufacturer of storefront framing system, compatible with specified framing system.

b. Style: Wide style, as indicated on Drawings.

c. Thermal Construction: High-performance plastic connectors separate aluminum members exposed to the exterior from members exposed to the interior.

d. Provide nonremovable glazing stops on outside of door.

2.02 MATERIALS

A. All framing members shall be extruded aluminum of 6063T-5 alloy and shall be of the size, shape, and intended function as shown on the Drawings. Performance requirements shall conform to standards established by the Architect in relation to wind load and deflection limits.

B. Fasteners: Stainless Steel

2.03 FINISH:

A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes

B. All exposed aluminum surfaces shall have a manufactured-applied, 20-year warrantied, AAMA 2604 Fluoropolymer coating not less than 70% polyvinylidene fluoride resin by weight finish, free from blemishes and surface defects.

C. Color: Refer to Exterior Finish Index.

2.04 FABRICATION

A. Aluminum door shall have tight hairline joints where rails are fitted against stiles and shall be fastened by means of tensioned steel tie rods in top and bottom rails. Doors shall have an adjusting mechanism in the toprail to provide for minor clearance adjustments. Glass stops shall be snap-in type with bulb type glazing strips. Weather stripping shall be pile.

B. Store front sections shall be square cut and assembled with the proper clips and screws as provided by the manufacturer to form neat hairline joints. All fastenings shall be concealed except those specifically detailed by the Architect at certain transition areas. All glazing gaskets shall be cut over length and installed in slight linear compression to prevent shrinkage from the corners. All framing shall be erected square and true into correct size rough openings prepared by others and in strict accord with the Architectural Drawings.

C. Doors: Reinforce doors as required for installing hardware, including electronic strikes and card readers.

1. At pairs of exterior doors, provide sliding weather stripping retained in adjustable strip mortised into door edge.

2. At exterior doors, provide weather sweeps applied to door bottoms.

D. Hardware Installation: Factory install hardware to the greatest extent possible. Cut, drill, and tap for factory-installed hardware before applying finishes.

2.05 HARDWARE

A. Entrance door hardware shall be supplied with doors as follows, unless indicated otherwise:

1. Continuous Hinges, 780-112 HD, Hager, Kynar finish, color to match door.

2. Push/Pull, Style “CO-12” by Kawneer, or approved substitution by other listed manufacturer, No. 26D Finish.

3. Closers, surface mounted type, LCN 4041-CUSH, cover to be 689 finish.

4. Weather Stripping (3 sides)

5. Bottom Sweep

6. Handicapped Threshold, clear aluminum mill finish.

7. Provide construction cylinder and replace with final cylinder specified in Section 08 71 00.

8. Final cylinders, panic devices, electric strikes and card readers by Section 08 71 00.

2.06 JOINT SEALANTS

A. For metal to metal joints use Standard Products Company Stan Pro Urethane Epoxy Sealant No. 103, Dow Corning Silicone Rubber Sealant, or other as acceptable to [Architect][Owner’s Representative], color to match finish of aluminum to which applied.

B. For perimeter of framing members, refer to Section 07 92 00 – Joint Sealants.

PART 3 EXECUTION

3.01 INSPECTION

A. Verify wall openings and adjoining air and vapor seal materials are ready to receive work of this Section.

B. Beginning of installation means acceptance of existing conditions.

3.02 INSTALLATION

A. Install doors, frames, glazing and hardware in accordance with manufacturer's instructions and AAMA "Storefront and Entrance Manual" guide specifications.

B. Use anchorage devices to securely attach frame assembly to structure.

C. Align assembly plumb and level, free of warp or twist. Maintain assembly dimensional tolerances, aligning with adjacent work.

D. Coordinate attachment and seal of air and vapor barrier materials. Install sill flashings where required.

E. Weathertight Construction: Install sill members and other members in a bed of sealant or with joint filler or gaskets, to provide weathertight construction.

1. Refer to Division 07 Joint Treatments (Sealants) for installation requirements.

F. Apply one coat of bituminous paint to concealed aluminum and steel surfaces in contact with cementitious, stone or other dissimilar materials.

G. Install glass and infill panels in accordance with Section 08 80 00 using exterior wet method of glazing.

H. Install perimeter non-hardening, non-skinning type sealant, and installation requirements in accordance with Section 07 92 00.

I. Adjust operating hardware

3.03 TOLERANCES

A. Variation from Plane: 0.03 inches per foot maximum or 0.25 inches per 30 feet, whichever is less.

B. Misalignment of Two Adjoining Members Abutting in Plane: 0.015 inches.

3.04 CLEANING

A. Remove protective material from prefinished aluminum surfaces.

B. Wash-down exposed surfaces using a solution of mild detergent in warm water, applied with soft, clean wiping cloths. Take care to remove dirt from corners. Wipe surfaces clean.

C. Remove excess sealant by moderate use of mineral spirits or other solvent acceptable to sealant manufacturer.

END OF SECTION

SECTION 08 42 29 - AUTOMATIC ENTRANCES

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Bi-Parting Sliding Units, with Fixed Sidelites

B. Related Sections:

1. Section 07 92 00 - Joint Sealants
2. Section 08 41 13 - Aluminum Entrances and Storefront
3. Section 08 71 00 - Door Hardware
4. Section 08 80 00 - Glazing
5. Division 26 - Electrical: Wiring

1.02 REFERENCES

A. American Architectural Manufacturers Association (AAMA) Publications:

1. 2604 "Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels"
2. 2605 "Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels"

B. American Society of Civil Engineers (ASCE) Publications:

1. 7 "Minimum Design Loads for Buildings and Other Structures"

C. ASTM International (ASTM) Publications:

1. B209 "Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate"
2. B221 "Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes"
3. E283 “Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen”

D. American National Standards Institute (ANSI) /Builders Hardware Manufacturers Association (BHMA) Publications:

1. ANSI/BHMA A156.10, "Power Operated Pedestrian Doors"
2. ANSI/BHMA A156.19 – “Power Assist and Low Energy Power Operated Doors”

E. American Welding Society (AWS) Publications:

1. D1.2 "Structural Welding Code--Aluminum"
2. A5.10 "Specification For Bare Aluminum And Aluminum-Alloy Welding Electrodes And Rods"
3. BHMA A156.19 – American National Standard for Power Assist and Low Energy Power Operated Doors.

F. National Fire Protection Association (NFPA) Publications:

1. 70 "National Electric Code"

G. The Society for Protective Coatings (SSPC) Publications:

1. Paint 12, Cold-Applied Asphalt Mastic (Extra Thick Film)

1.03 DEFINITIONS

A. Refer to BHMA A156.10 for definitions of terms.

B. Activation Device: Device that, when actuated, sends an electrical signal to the door operator to open the door.

C. Fixed Sidelight System: Exterior sliding active leaves swing out from any position in sliding mode.

D. Full Breakout System: Interior sliding active leave and sidelites swing out from any position in sliding mode.

E. Safety Device: Device that prevents a door from opening or closing.

1.04 PERFORMANCE REQUIREMENTS

A. General: Provide automatic entrance door systems that have the following capabilities based on testing manufacturer's standard units in assemblies similar to those indicated for this Project:

1. Thermal Movements: Provide automatic entrance doors that allow for thermal movements resulting from the following maximum change (range) in ambient and surface temperatures by preventing buckling, opening of joints, overstressing of components, failure of joint sealants, failure of connections, and other detrimental effects. Base engineering calculation on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.

a. Temperature Change (Range): 120 deg F, ambient; 180 deg F, material surfaces.

2. Operating Temperature Range: Provide automatic entrance door operators capable of operating between minus 10 deg F and plus 120 deg F.

3. Structural Performance: Provide automatic entrance doors capable of withstanding the effects of gravity loads and the following loads and stresses within limits and under conditions indicated:

a. Basic Wind Speed: As indicated in miles per hour (meters per second) at 33 feet (10 m) above grade. Determine wind loads and resulting design pressures applicable to Project according to the following, based on mean roof heights above grade as indicated on Drawings:

1) Wind Loads: ASCE 7, "Minimum Design Loads for Buildings and Other Structures": Section 6.4.2, "Analytic Procedure."

4. Air Infiltration:

a. Maximum air leakage through fixed glazing and framing areas of 1.25 cfm/sq. ft. of door area when tested at an inward pressure differential of 1.57 lb/sq. ft. according to ASTM E283.

b. Maximum air leakage for full breakout glazing and framing areas of 1.30 cfm/sq. ft. of door area when tested at an inward pressure differential of 1.57 lb/sq. ft. according to ASTM E283.

5. Opening Force: Maximum opening force of 5 lbf in accordance with Americans with Disabilities Act (ADA). Not more than 50 lbf required to manually set door in motion of power fails, and not more than 15 lbf required to open door to minimum required width.

6. Entrapment Force Requirements: Not more than 30 lbf required to prevent stopped door from closing.

1.05 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

B. Submit "Letter of Conformance" in accordance with Section 01 33 00 indicating specified items selected for use in project with the following supporting data.

1. Product Data: Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for automatic entrance doors.

2. Product Certificates: Signed by manufacturers of automatic entrance doors certifying that products furnished comply with emergency exit door requirements.

3. Maintenance Data: For door operators and control systems to include in maintenance manuals specified in Division 01. Include instructions on how to perform safety tests, and the name, address, and telephone number of nearest authorized service representative.

C. Shop Drawings: Include plans, elevations, sections, details, hardware mounting heights, and attachments to other Work.

1. For installed products indicated to comply with design loads, include structural analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

2. Wiring Diagrams: Detail wiring for power, signal, and control systems and differentiate between manufacturer-installed and field-installed wiring.

1.06 QUALITY ASSURANCE

A. Installer Qualifications: An experienced installer who is an authorized representative of the automatic entrance door manufacturer for both installation and maintenance of units required for this Project.

1. Maintenance Proximity: Not more than two hours' normal travel time from Installer's place of business to Project site.

B. Source Limitations: Obtain automatic entrance doors through one source from a single manufacturer.

C. Welding Standards: Comply with AWS D1.2, "Structural Welding Code--Aluminum."

D. Comply with ANSI/BHMA A156.10, "Power Operated Pedestrian Doors."

E. Electrical Componenets, Devices and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

F. Emergency Exit Door Requirements: Comply with requirements of authorities having jurisdiction for automatic entrance doors serving as a required means of egress.

1.07 PROJECT CONDITIONS

A. Field Measurements: Verify automatic entrance door openings by field measurements before fabrication and indicate measurements on Shop Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

1.08 COORDINATION

A. Coordinate size and location of recesses in concrete floors for recessed sliding tracks. Concrete, reinforcement, and formwork requirements are specified in Section 03 30 00 - "Cast-in-Place Concrete."

B. Electrical System Rough-In: Coordinate layout and installation of automatic entrance door assemblies with connections to power supplies and security access control system.

1.09 WARRANTY

A. General Warranty: Special warranty specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.

B. Special Warranty: Written warranty, executed by manufacturer agreeing to repair or replace components of the automatic entrance door system that fail in materials or workmanship within specified warranty period. Failures include, but are not limited to, the following:

1. Lateral deflection of glass lite edges in excess of 1/175 of their length or 3/4 inch, whichever is less.
2. Excessive air leakage.
3. Faulty operation of operators and hardware.
4. Deterioration of metals, metal finishes, and other materials beyond normal weathering.

C. Warranty Period: Two years from date of Substantial Completion.

1.10 MAINTENANCE SERVICE

A. Maintenance: Beginning at Substantial Completion, provide 12 months' full maintenance by skilled employees of automatic entrance door Installer. Include bi-annual planned and preventive maintenance, repair or replacement of worn or defective components, lubrication, cleaning, and adjusting as required for proper entrance door operation at rated speed and capacity. Provide parts and supplies as used in the manufacture and installation of original equipment.

1. Perform maintenance, including emergency callback service, during normal working hours.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Approved Manufacturers:

1. "Assa Abloy SL500 F Rugged Frame Series Bi-parting"; Besam, An Assa Abloy Group Company
    a. Exterior: "SL500 F" 4 Panel Beam mounted
    b. Interior: "SL500 F" 4 Panel Beam mounted with Control Package
2. “Dura-Glide, Series 3000 – Bi-Parting”; Stanley Access Technologies LLC, Security Solutions Product Group
    a. Exterior: “Dura-Glide, Series 3000” B-parting with transom.
    b. Interior: “Dura-Glide, Series 3000” B-parting with transom and Access Control Package
3. "Series 2003 Belt Drive, Bi-parting"; Horton Automatics, Division of Overhead Door Corporation
    a. Exterior: "Type 110, Model O-SX,SX-O" with transom.
    b. Interior: "Type 110, Model O-SX,SX-O with transom and optional muntin"

2.02 AUTOMATIC SLIDING ENTRANCE SYSTEM

A. System shall consist of sliding aluminum doors and sidelights, header, operator, cylinders, actuating controls, and directional motion sensors.

1. Exterior: Model as shown above with half-beveled threshold.

2. Interior: Model as shown above with electronic access control fail secure lock, panic exit devise on active door leaves [and surface mounted threshold]. Provide manufacturer's standard switch to allow an exit only "night-time" mode to engage the electronic access lock system.

B. Automatic Sliding Door System: The system shall consist of sliding aluminum doors, sidelights, header, operator, and actuating controls. All components shall be factory assembled in the header, adjusted and tested.

C. Sliding Aluminum Doors: Provide door units to dimension heights and widths with corresponding glazing as shown on Drawings with standard narrow stile. Door holders shall be provided for all panels to control the doors as they swing in the direction of egress. All door panels shall have security glass stops. All doors shall have intermediate rails. The bi-part sliding door system shall include a two-point lock securing the lead edges of the door stiles together and to the hanger assembly.

D. Door Operation: Shall be bi-parting directional operation. In compliance with NFPA 101, the sliding door panels shall allow “breakout” to the full open position to provide instant egress at any point in the door’s movement. To allow safe egress, automatic operation shall be discontinued when the sliding panel is in the “breakout” mode. Doors and sidelights shall be sized to prevent pinch points at meeting stiles.

1. Emergency Breakaway Capability: Sliding leaves only

2. Safety Search Circuitry: Shall be provided which will recycle the doors when an object is encountered during the closing cycle. The circuitry shall search for that object on the next closing cycle by reducing the door speed at the position the object was previously encountered, and will continue to close in check speed until the doors are fully closed, at which time the doors will reset to normal speed. If the obstruction is encountered again, the doors shall come to a full stop. The door shall remain stopped until the obstruction is removed and an operate signal is given, resetting the door to its normal speed.

3. The doors shall be provided with a "Fail-Secure Electric Carriage Lock" in the header to prevent the doors from sliding in the night mode. This device shall not interfere with emergency breakout function.

E. The doorway presence-sensing device shall be the "BEA Wizard Threshold" by Besam, “STAN-GUARD Threshold Sensor” by Stanley, or "Optional Sensor with added threshold scan", by Horton. The sensor shall be factory-installed to the underside of the header. The interior door sensing device shall be disabled (night mode) by a key switch furnished by others and installed by Division 08 71 00.

F. Interior Door to be activated during night-mode by remote card reader or push button override located at the front desk furnished by Others. Refer to Section 08 71 00.

G. Glazing: Refer to Section 08 80 00. Match adjacent storefront system

2.03 MATERIALS

A. Aluminum: Alloy and temper recommended by manufacturer for type of use and finish indicated.

1. Extruded Bars, Rods, Profiles, and Tubes: ASTM B221.

2. Sheet and Plate: ASTM B209.

3. Welding Rods and Bare Electrodes: AWS A5.10.

B. Glazing: Refer to Section 08 80 00. Match adjacent storefront system.

C. Sealants and Joint Fillers: Refer to Section 07 92 00 “Joint Sealants.”

D. Bituminous Paint: Cold-applied, asphalt-mastic paint complying with SSPC-Paint 12 requirements, except containing no asbestos; formulated for 30-mil thickness per coat.

2.04 COMPONENTS

A. Framing Members: Manufacturer's standard extruded aluminum, minimum 0.125 inch thick and reinforced as required to support imposed loads.

B. Stile and Rail Doors: Manufacturer's standard 1-3/4-inch-thick glazed doors with minimum 0.125-inch-thick, extruded-aluminum tubular stile and rail members. Mechanically fasten corners with reinforcing brackets that are welded, or incorporate concealed tie-rods that span full length of top and bottom rails.

C. Sidelites: Manufacturer's standard 1-3/4-inch-deep sidelites with minimum 0.125-inch-thick, extruded-aluminum tubular stile and rail members matching door design.

D. Headers: Fabricated from minimum 0.125-inch-thick extruded aluminum and extending full width of automatic entrance door units to conceal door operators, carrier assemblies, and roller tracks. Provide hinged or removable access panels for service and adjustment of door operators and controls. Secure panels to prevent unauthorized access.

E. Carrier Assemblies and Overhead Roller Tracks: Manufacturer's standard carrier assembly that allows vertical adjustment; consisting of nylon- or delrin-covered ball-bearing-center steel wheels operating on a continuous roller track, or ball-bearing-center steel wheels operating on a nylon- or delrin-covered continuous roller track. Support doors from carrier assembly by cantilever and pivot assembly.

F. Threshold: Manufacturer's standard threshold members and bottom-guide track system, with stainless-steel ball-bearing-center roller wheels.

G. Brackets and Reinforcements: Manufacturer's standard high-strength aluminum with nonstaining, nonferrous shims for aligning system components.

H. Fasteners and Accessories: Manufacturer's standard corrosion-resistant, nonstaining, nonbleeding fasteners and accessories compatible with adjacent materials.

I. Emergency Breakaway Sign: ANSI/BHMA A156.10; red background with 1-inch high contrasting letters with the words "IN EMERGENCY PUSH TO OPEN."

2.05 FABRICATION

A. General: Fabricate automatic entrance door system components to designs, sizes, and thicknesses specified and to comply with indicated standards.

B. Prefabrication: Provide automatic entrance doors as prefabricated assemblies. Complete fabrication, assembly, finishing, hardware application, and other work before shipment to Project site.

1. Do not drill and tap for surface-mounted hardware items until time of installation at Project site.

2. Perform fabrication operations, including cutting, fitting, forming, drilling, and grinding of metalwork in manner that prevents damage to exposed finish surfaces. For hardware, perform these operations before applying finishes.

3. Form shapes with sharp profiles, straight and free of defects or deformations, before finishing.

4. Prepare components to receive concealed fasteners and anchor and connection devices.

5. Fabricate components with accurately fitted joints with ends coped or mitered to produce hairline joints free of burrs and distortion.

2.06 FINISHES

A. High-Performance Organic Finish: AA-C12C42R1x (Chemical Finish: cleaned with inhibited chemicals; Chemical Finish: acid-chromate-fluoride-phosphate conversion coating; Organic Coating: as specified below). Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.

1. Fluoropolymer Two-Coat System: Manufacturer's standard two-coat, thermocured system consisting of specially formulated inhibitive primer and fluoropolymer color topcoat containing not less than 70 percent polyvinylidene fluoride resin by weight; complying with AAMA 2604 and 2605.

2. Color: As shown on Exterior Finish Index.

PART 3 EXECUTION

3.01 INSPECTION

A. The automatic entrance door installer must examine the areas and conditions under which the automatic entrances are to be installed and notify the General Contractor in writing of conditions detrimental to the proper functioning of the entrance and the timely completion of the work. Do not proceed with the work until unsatisfactory conditions have been corrected in a manner acceptable to the installer.

3.02 INSTALLATION

A. Comply with manufacturer's specifications and recommendations. Set units plumb, level, and true. Fit frame joints to produce hairline joints free of burrs and distortion. Rigidly secure non- movement joints. Seal joints watertight.

1. Where aluminum will contact dissimilar metals, protect against galvanic action by painting contact surfaces with primer or by applying sealant or tape recommended by manufacturer for this purpose.

2. Where aluminum will contact concrete or masonry, protect against corrosion by painting contact surfaces with bituminous paint.

B. Sealants:

1. Set framing members, thresholds, bottom-guide track system, and flashings in full sealant bed.

2. Seal perimeter of framing members with sealant.

3.03 ADJUS Γ AND CLEAN

A. After repeated operation of completed installation, readjust door operators and controls for optimum operating condition and safety, comply with requirements in BHMA A156.10. Clean glass and aluminum surfaces promptly after installation. Advise General Contractor of protective treatment and other precautions required through the remainder of the construction period to ensure that automatic entrances will be without damage or deterioration (other than normal weathering) at the time of acceptance.

B. Readjust door operators and controls after repeated operation of completed installation equivalent to three days' use by normal traffic (100 to 300 cycles). Lubricate hardware, operating equipment, and other moving parts.

END OF SECTION

SECTION 08 51 13 - ALUMINUM WINDOWS

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Operating and Fixed Aluminum Window Units
    a. Horizontal Sliding Units
2. Perimeter Sealant
3. Glass and Glazing
4. Wood Blocking, Shims, Anchors, Clips, and all accessories necessary for a complete installation.
5. All Aluminum Trim and Closure Pieces
6. All Operable Window and Door Hardware

B. Related Sections:

1. Section 07 62 00 - Sheet Metal Flashing and Trim
2. Section 0792 00 – Joint Sealants
3. Section 08 41 13 - Aluminum Entrances and Storefront
4. Section 08 80 00 - Glazing

1.02 REFERENCES

A. The Aluminum Association (AA)

1. "Aluminum Design Manual 2000: Specifications for Aluminum Structures"

B. American Architectural Manufacturers Association (AAMA) Publications:

1. 1503 "Voluntary Test Method for Thermal Transmittance and Condensation Resistance of Windows, Doors and Glazed Wall Sections"
2. 2400 "Standard Practice for Installation of Windows with a Mounting Flange in Stud Frame Construction"
3. 2604 "Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels"
4. 2605 "Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels"

C. American National Standards Institute (ANSI) Publications:

1. Z97.1 "Performance Specifications and Methods of Test for Safety Glazing Materials Used in Buildings"

D. ASTM International (ASTM) Publications:

1. C1036 “Standard Specification for Flat Glass”
2. C1048 “Standard Specification for Heat-Treated Flat Glass—Kind HS, Kind FT Coated and Uncoated Glass”
3. E90 “Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements”

4. E283 “Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen”
5. E330 “Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference”
6. E331 “Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference”
7. E413 “Classification for Rating Sound Insulation”
8. E547 "Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Cyclic Static Air Pressure Difference"
9. E774 “Standard Specification for Sealed Insulating Glass Units”
10. E1886 "Standard Test Method for Performance of Exterior Windows, Curtain Walls, Doors, and Impact Protective Systems Impacted by Missile(s) and Exposed to Cyclic Pressure Differentials"
11. E1996 "Standard Specification for Performance of Exterior Windows, Curtain Walls, Doors and Impact Protective Systems Impacted by Windborne Debris in Hurricanes"
12. F588 "Standard Test Methods for Measuring the Forced Entry Resistance of Window Assemblies, Excluding Glazing Impact"

E. Glass Association of North America (GANA)
   1. "GANA Glazing Manual"

F. Federal Specifications (FS) Publications:
   1. FS-RR-W-365A "Wire Fabric (Insect Screening)"

G. Insulating Glass Certification Council (IGCC)

H. Insulating Glass Manufacturers Alliance (IGMA) Publications:
   1. Glazing Guidelines

I. National Fenestration Rating Council (NFRC)

J. Screen Manufacturers Association (SMA) Publications:
   1. 1004 "Specifications for Aluminum Tubular Frame Screens for Windows"

K. U.S. Consumer Product Safety Commission (CPSC) Publications:
   1. 16 CFR Part 1201 "Safety Standard For Architectural Glazing Materials"

L. Window and Door Manufacturers Association (WDMA) Publications:
   1. ANSI/AAMA/WDMA 101/I.S.2/NAFS-02 “Voluntary Performance Specification for Windows, Skylights and Glass Doors”
   2. AAMA/WDMA/CSA 101/I.S.2/A440-08 “Standard/Specification for Windows, Doors and Unit Skylights

1.03 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

B. Submit “Letter of Conformance” in accordance with Section 01 33 00 indicating specified items selected for use in project with the following supporting data.

1. Product data for each type of aluminum window specified, including standard construction details, dimensions of individual components, profiles, finishes, hardware, and accessories.
2. Shop drawings for each type of window specified, including 1/4-inch scale wall elevations, typical unit elevations at 3/4 inch scale glazing details, full-size details of typical composite members and the following:
    a. Panning Details.
    b. Flashing and drainage details.
    c. Mullion details, including reinforcement and stiffeners.
    d. Joinery details.
3. Samples: Provide full-size or partial-size sample of window illustrating glazing system, quality of construction and finish.
    a. Hardware: Full-size units with factory-applied finish.
4. Product certificates signed by the window manufacturer certifying that window units comply with specified performance requirements.

1.04 DEFINITIONS

A. Performance grade number, included as part of the AAMA/WDMA/CSA 101/I.S.2/A440-08 product designation code, is the actual design pressure in pounds force per square foot used to determine structural test pressure and water test pressure.

1.05 QUALITY ASSURANCE

A. All window units shall be manufactured by a single source.
    1. All windows in any one project must be by the same manufacturer and with comparable frame depth, profile, glazing bite and installation requirements. Manufacturer must provide a window system that can incorporate all window configurations used on the project.
    2. Standards: Requirements for aluminum windows, terminology and standard of performance, and fabrication workmanship are those specified and recommended in AAMA/WDMA/CSA 101/I.S.2/A440-08 and The Aluminum Association (AA).
        a. All window units shall be labeled as conforming to AAMA/WDMA/CSA 101/I.S.2/A440-08. The label shall state the name of the manufactuer, the approved labeling agency and the product designation as specified in AAMA/WDMA/CSA 101/I.S.2/A440-08 .
        b. All testing shall be conducted using AAMA/WDMA/CSA 101/I.S.2/A440-08 Gateway Performance minimum specified test sizes.
    3. Provide aluminum windows of the performance class and grade indicated that comply with AAMA/WDMA/CSA 101/I.S.2/A440-08.

B. Sections 08 41 13, 08 51 13, and 08 80 00 to be furnished by single source insuring product compatibility and coordination.

C. Certify that windows have been tested in accordance with American Architectural Manufacturers Association (AAMA/WDMA) Specification for Performance Class specified complying with the following performance standards:
    1. AAMA/WDMA/CSA 101/I.S.2/A440-08 Performance Requirements: Provide aluminum windows of the performance class and grade indicated that comply with AAMA/WDMA/CSA 101/I.S.2/A440-08.
        a. Performance Class: CW

b. Performance Grade: 40

2. Uniform Structural Properties (ASTM E330): Pressure acting inward and outward. Window to be operable and maximum .4% permanent deformation, per member, when tested at a static air pressure difference of the following:

a. Class CW-40: 60.0 PSF

3. Water Resistance (ASTM E331 and ASTM E547): No water penetration at test pressures indicated.

a. Class CW-40: 6.00 PSF

4. Air Leakage (ASTM E283):

a. Sliding Windows: Maximum 0.37 CFM per sq./ft. of total exterior surface area, when tested at a static air pressure difference of 1.57 PSF minimum .

b. Fixed Windows: Maximum 0.15 CFM per sq. ft. of total exterior surface area, when tested at a static air pressure difference of 1.57 PSF minimum.

c. Forced Entry Resistance (ASTM F588): To performance level 10.

D. Glazing Standards: Comply with recommendations of Glass Association of North America (GANA) "Glazing Manual" and "Sealant Manual" except where more stringent requirements are indicated. Refer to those publications for definitions of glass and glazing terms not otherwise defined in this section or other referenced standards.

1. Safety Glazing Products: Comply with testing requirements in CPSC 16 CFR Part 1201.

a. Subject to compliance with requirements, obtain safety glazing products permanently marked with certification label of the Safety Glazing Certification Council or another certification agency acceptable to authorities having jurisdiction.

2. Insulating glass shall comply with standard for construction and insulating value as established by:

a. Insulating Glass Manufacturers Alliance (IGMA). b.

Insulating Glass Certification Council (IGCC)

3. Glazing and Sealant: Per manuals published by the Flat Glass Marketing Association (FGMA). Glazing and sealant to match approved colors for all aluminum framing.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Transportation and Handling: Transport products by methods to avoid product damage; deliver in undamaged condition in manufacturer's unopened containers or packaging. Provide equipment and personnel to handle products by method to prevent soiling or damage. Promptly inspect shipments to assure that products comply with requirements, quantities are correct, and products are undamaged.

B. Storage and Protection: Store products in accordance with manufacturer's instructions, with seals and labels intact and legible. Store sensitive products in weather-tight enclosures; maintain with temperature and humidity ranges required by manufacturer's instruction.

PART 2 PRODUCTS

2.01 MATERIALS

A. Window Units:

1. Approved Manufacturers:
   a. Traco, A Division of Kawneer, a part of Alcoa Building & Construction Systems
      1) Horizontal Sliding: TR-6400 Series
      2) Fixed Units: TR-7400 Series
   b. Quaker Window Products Company, Inc.
      1) Horizontal Sliding: “1300 SL Series”
      2) Fixed: “2000PW Series”
   c. Wojan Window and Door Corporation
      1) Horizontal Sliding: “M-85 Series”
      2) Fixed: “M-85 Series”

B. All fasteners, tools, equipment, and other materials necessary for a complete installation shall be furnished by this Contractor.

1. Aluminum, nonmagnetic stainless steel, epoxy adhesive, or other materials warranted by manufacturer to be noncorrosive and compatible with all window members, cladding, trim, hardware, anchors, and other components

C. Insect Screens: Provide removable insect screen panel for each moveable glazed sash.

1. Screen Fabric: 18 by 16 mesh of 0.013" diameter aluminum wire. Comply with FS-RRW-365, Type VII, except black anodized or "gun metal" coating on wire.
2. Screen Frame: Provide formed or extruded aluminum frames and removable vinyl fabric-retainer spline.
   a. Finish shall match window.

D. Accessories:

1. Safety Device Stops: For operable windows, provide stops to prevent opening greater than 4". Stops shall be constructed of stock window frame, or durometer material and attached with tamper-resistant screw.
   a. If local code requires window units to open fully, provide the following:
      1) “Charlie-Bar” security device by Charles Bar-Lok Corp. (708-333-0071).
      2) Size to fit window opening, Bronze finish.
2. Sills: Manufacturer's standard exterior sills,type as shown on Drawings.
   a. Nailing fin: manufacturer's standard nailing fin.
   b. Sill Flashing: Manufacturer’s standard snap-on sill flashing for use with EIFS exterior finishes.
3. Trim: Manufacturer's standard interior snap trims, type as shown on Drawings.
4. Head Flashing: Manufacturer’s standard head flashing for use with EIFS exterior finishes.
5. Mullions: Provide mullions and cover plates as shown, matching window units, complete with anchors for support to structure and installation of window units. Allow for erection tolerances and provide for movement of window units due to thermal expansion and building deflections, as indicated. Provide mullions and cover plates capable of withstanding design loads of window units.

E. Hardware:

1. Sash lock: Manufacturers' standard.
2. Wheels and Sliding Mechanism: Manufacturer's standard.

F. Maximum operating force: once sash in motion:

1. Horizontal Sliding Windows: 20 LBF

G. Operating sash in guest rooms to be located closest to center of room.

2.02 GLASS MATERIALS

A. Glass I: Clear Float Glass: ASTM C1036, Type 1 (transparent glass, flat), Class 1 (clear), Quality q3 (glazing select), as manufactured by one of the following:

1. Approved Manufacturers:
   a. PPG Industries Inc., Glass Group (800-377-5267)
   b. Pilkington North America (800-221-0444)
   c. AFG Industries, Inc. (800-251-0441)
   d. Old Castle Glass, a CRH Company (800-899-8455)
   e. Viracon, Inc. (800-533-2080)
   f. Guardian Industries, (248-340-1800)
   g. Approved Substitution by Window Manufacturer.

B. Glass II: Tempered Glass: Condition A (uncoated surfaces), Type 1 (transparent glass, flat), Class 1 (clear), Quality q3, clear, fully tempered safety glass (meet requirements of ANSI Z97.1).

1. All tempered glass shall conform to ASTM C1048, ANSI Z97.1, and CPSC 16 CFR Part 1201. Tempered glass shall bear permanent monogram indicating tempered quality. Fabrication marks on tempered glass shall be located to be concealed in completed installation.
2. Color: Clear to match aluminum windows glazing, Section 08 51 13.

C. Glass III: Coated Low Emissitivity Glass: Condition C (other coated glass), Type I (transparent glass, flat), Class I (clear), Quality q3 (glazing select), with coating type and performance characteristics complying with requirements specified below:

1. Low E Coating: Side 2 on insulated units.
2. Approved Manufacturers:
   a. "Sungate 500 Low-E Glass"; PPG Industries Inc., Glass Group (800-377-5267)
   b. "Energy Advantage Low-E"; Pilkington North America (419-247-3201)
   c. "Comfort E2"; AFG Industries, Inc. (800-251-0441)
   d. Approved Substitution by Window Manufacturer.
   e. ClimaGuard 70/36"; Guardian Industries (248-340-1800)
      1) Visible Light Transmittance (VLT): 70
      2) Solar Heat Gain Coefficient (SHGC): 0.38
      3) Light to Solar Gain (LSG) Ratio: 1.84

D. Windows shall be glazed as follows:

1. Insulating Glass: Manufacturer's standard low "E" units consisting of manufacturer's special design to conform to required STC and thermal ratings, as approved by the Architect.

a. Provide preassembled units consisting of organically sealed panes of glass enclosing a hermetically sealed dehydrated air space and complying with ASTM E774 for performance classification indicated as well as with other requirements specified for glass characteristics, air, space, sealing system, sealant, space material, and desiccants.

1) Total Thickness: 5/8".

2) Thickness of Each Pane: 1/8".

3) Air Space Thickness: 3/8".

a. Thermal Performance (Full Frame Performance): Minimum Winter U-Value: 0.40

b. Exterior Pane of Glass: Glass Type I

1) Provide Tempered Glass where shown on Drawings and as required by local Codes and Ordinances.

c. Sealing System: Manufacturer's Standard Dual Seal

1) Desiccant: Manufacturer's Standard - Either Molecular Sieve or Silica Gel or Blend of Both

2) Spacer Material: Manufacturer's Standard Metal, with Bronze Anodized Finish.

2.03 FINISHES

A. All exposed aluminum surfaces shall have a manufactured-applied, 15 -year warrantied, Kynar 500 fluorocarbon finish containing 70% fluoropolymer, free from blemishes and surface defects which meets AAMA 2605 specifications.

1. Color to be as shown on Exterior Finish Index.

2.04 JOINT SEALANTS – FRAMING SYSTEM

A. For metal to metal joints use Manufacturer's standard, recommended by manufacturer for joint type, color to match finish of aluminum to which applied.

B. For perimeter of framing members, refer to Section 07 92 00 (07920) – Joint Sealants.

2.05 FABRICATION

A. Fabricate windows allowing for minimum clearances and shim spacing around perimeter of assembly, yet enabling installation.

B. Rigidly fit joints and corners. Accurately fit and secure corners tight. Make corner joints flush, hairline, and weatherproof. Seal corner joints with sealant.

C. Develop drainage holes with moisture pattern to exterior.

D. Prepare components to receive anchor devices. Fabricate anchorage items.

PART 3 EXECUTION

3.01 INSTALLATION – GENERAL

A. Installation Details: Before proceeding with the manufacturing of the windows and doors, the Window Contractor shall submit complete installation details for approval by the Architect. These Drawings shall show elevations of windows, full-sized details of all sections of windows, collateral materials and details of anchorage. Supplemental data shall contain calculations of moments of inertia on frames and mullion connections plus instructions for storage, handling, and erection of windows and sliding doors. Conform to AAMA 2400 for Nail Fin Installation.

B. Verify wall openings and adjoining air and vapor seal materials are ready to receive work of

this Section.

C. Beginning of installation means acceptance of existing conditions.

D. Align window frame plumb and level, free of wrap or twist. Maintain dimensional tolerances, aligning with adjacent work.

E. Coordinate attachment and seal of air and vapor barrier materials. Install under sill flashings, if required.

F. Pack fibrous insulation in shim spaces at perimeter to maintain continuity of thermal barrier.

G. Install perimeter sealant, backing materials, and installation requirements in accordance with Section 07 92 00. Apply sealant to ends of sill for watertight seal.

H. Windows shall be installed by experienced workmen in exact accordance with the manufacturer's instructions and approved Shop Drawings.

I. Erection Tolerances:

1. Maximum deviation from established vertical or horizontal reference lines:

a. 1/8 inch per 12 feet of length of any member.

b. 1/4 inch in any continuous run.

2. Maximum offset from true alignment between two adjoining members in line, end to end, 1/16 inch.

J. Adequately anchor frames to surrounding construction. Place anchors at 2'-0" on center maximum or as required to maintain position of frames when subjected to thermal and building movement and specified wind load.

1. Anchorage method to be integral nailing fin. Alternate anchoring methods will not be acceptable.

3.02 ADJUSTING AND CLEANING

A. After completion of window installation, windows shall be inspected, adjusted, put into working order and left clean, free of labels, dirt, etc. Protection from this point shall be responsibility of General Contractor.

B. Remove protective material from prefinished aluminum surfaces.

C. Wash down exposed surfaces using a solution of mild detergent in warm water, applied with soft, clean wiping cloths. Take care to remove dirt from corners. Wipe surfaces clean.

D. Remove excess sealant by moderate use of mineral spirits or other solvent acceptable to sealant manufacturer.

END OF SECTION

SECTION 08 71 00 - DOOR HARDWARE

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. All the required finish hardware including all screws, bolts, and other devices required to complete the work.
2. Lock cylinders for locks specified in other Sections.
3. Miscellaneous hardware.
4. Hardware furnished for shop or factory installation on doors and frames.
5. Keys and Keying.

B. Related Sections:

1. Section 08 11 13 - Steel Doors and Frames
2. Section 08 14 00 - Wood and Plastic Doors
3. Division 26 Sections - Coordination with items requiring electrical connections.

1.02 REFERENCES

A. Perform all work in accordance with the following:

1. American National Standards Institute (ANSI) Publications:
   a. ICC A117.1-2009 “Accessible and Useable Buildings and Facilities”
   b. ANSI/BHMA A 156.1 "Butts & Hinges"
   c. ANSI/BHMA A 156.2 "Bored and Preassembled Locks and Latches"
   d. ANSI/BHMA A 156.3 "Exit Devices"
   e. ANSI/BHMA A 156.4 "Door Controls - Closers"
   f. ANSI/BHMA A 156.5 "Auxiliary Locks and Associated Products"
   g. ANSI/BHMA A 156.6 "Architectural Door Trim"
   h. ANSI/BHMA A 156.13 "Mortise Locks & Latches"
   i. ANSI/BHMA A 156.17 "Self-Closing Hinges & Pivots"
   j. ANSI/BHMA A 156.18 "Materials & Finishes"
   k. ANSI/BHMA A 156.21 "Thresholds"
   l. ANSI/BHMA A 156.22 "Gasketing and Edge Seal Systems"
   m. ANSI/BHMA A 156.23 "Electromagnetic Locks"
   n. ANSI/BHMA A 156.26 "Continuous Hinges"
   o. ANSI/BHMA A 156.28 "Keying Systems"
2. ANSI/DHI Publications:
   a. ANSI/DHI A115.1G "Installation Guide for Doors and Hardware"
3. Builders Hardware Manufacturers Association (BHMA)

4. Door and Hardware Institute (DHI) Publications:
    a. DHI-WDHS-3 "Recommended Hardware Locations for Wood Flush Doors"
    b. "Recommended Locations for Builders Hardware for Standard Steel Doors and Frames"
5. National Fire Protection Association (NFPA) Publications:
    a. 80 “Standard for Fire Doors, Fire Windows”
    b. 101 "Life Safety Code"
    c. 252 “Standard Methods of Fire Tests of Door Assemblies”
6. Underwriter's Laboratories, Inc. (UL) Standards
    a. 10B "Standard for Fire Tests of Door Assemblies"
    b. 10C "Positive Pressure Fire Tests of Door Assemblies"
    c. 305 "Panic Hardware"
7. Window and Door Manufacturers Association (WDMA)

B. Regulatory Requirements:
1. Conform to NFPA 80, and other applicable codes for requirements applicable to fire rated doors and frames.
2. Products Requiring Electrical Connection: Listed and classified by Underwriters' Laboratories, Inc., and acceptable to the public authority as suitable for the purpose specified and indicated.
3. Conform to requirements of ADA (Americans with Disabilities Act)
4. Accessibility: Hardware for doors used by the disabled shall comply with all state and local codes which shall supersede this Section. [Notify the Architect] [Owner’s Representative] of conflicts between regulations and this specification prior to providing hardware.
    a. Provide operating devices that do not require tight grasping, pinching, or twisting of the wrist and that operate with a force of not more than 5 lbf.
    b. Adjust door closer sweep periods so that, from an open position of 70 degrees, the door will take at least 3 seconds to move to a point 3 inches from the latch, measured to the leading edge of the door.

1.03 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

B. Submit “Letter of Conformance” in accordance with Section 01 33 00indicating specified items selected for use in project with the following supporting data.
1. Product data including manufacturers' technical product data for each item of door hardware, installation instructions, maintenance of operating parts and finish, and other information necessary to show compliance with requirements.
2. Final hardware schedule coordinated with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.
    a. Final Hardware Schedule Content: Based on hardware indicated, organize schedule into "hardware sets" indicating complete designations of every item required for each door or opening. Include the following information:

1) Type, style, function, size, and finish of each hardware item.

2) Name and manufacturer of each item.

3) Fastenings and other pertinent information.

4) Location of each hardware set cross referenced to indications on Drawings both on floor plans and in door and frame schedule. Submittals shall use the same designations for door and hardware numbers as shown on the Drawings.

5) Explanation of all abbreviations, symbols, and codes contained in schedule.

6) Mounting locations for hardware.

7) Door and frame sizes and materials.

8) Keying information.

3. Submittal Sequence: Submit final schedule at earliest possible date particularly where acceptance of hardware schedule must precede fabrication of other work that is critical in the Project construction schedule. Include with schedule the product data, samples, Shop Drawings of other work affected by door hardware, and other information essential to the coordinated review of schedule.

4. Keying Schedule: Submit separate detailed schedule indicating clearly how the Owner's final instructions on keying of locks has been fulfilled.

5. Templates for doors, frames, and other work specified to be factory-prepared for the installation of door hardware. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing door hardware to comply with indicated requirements.

1.04 QUALITY ASSURANCE

A. Supplier Qualifications: A recognized architectural door hardware supplier, with warehousing facilities in the Project's vicinity, that has a record of successful in-service performance for supplying door hardware similar in quantity, type, and quality to that indicated for this Project and that employs an experienced Architectural Hardware Consultant (AHC) who is available at reasonable times during the course of the work, for consultation about Project's hardware requirements.

1. Require supplier to meet with Owner to finalize keying requirements and to obtain final instructions in writing.

2. The Guest Room security system shall be installed by a Contractor certified by the manufacturer of the system.

3. Hardware supplier for Guest Room security system shall provide supervision during installation as well as training for Courtyard personnel prior to opening of facility.

B. Fire-rated Openings: Provide door hardware for fire-rated openings that complies with NFPA 80, based on testing per NFPA 252, and requirements of authorities having jurisdiction. Provide only items of door hardware that are listed and are identical to products tested by Underwriter's Laboratories, Inc. (UL), Warnock Hersey, ETL SEMKO division of Intertek (WHI), FM Global (FMG), or other testing and inspecting organization acceptable to authorities having jurisdiction for use on types and sizes of doors indicated in compliance with requirements of fire-rated door and door frame labels.

1. Comply with the requirements of the International Building Code with testing in accordance with UL 10C for positive pressure door test.

a. Test Pressure: After 5 minutes into the test, the neutral pressure level in furnace shall be established at 40 inches or less above the sill.

b. Doors shall be labeled to certify compliance.

c. Provide installation instructions attached to each door in a manner that assures availability to the installer and building official.

C. Inspection: General Contractor shall provide in writing to Architect an inspection of all doors and frames for conformance to specifications. Inspection shall include checking for fit tolerance plumb and level as well as proper hardware and operation.

1.05 MAINTENANCE

A. Maintenance Tools and Instructions: Furnish a complete set of specialized tools and maintenance instructions as needed for Owner's continued adjustment, maintenance, and removal and replacement of door hardware.

1.06 CERTIFICATIONS

A. Conform to governing Building Codes for requirements applicable to the work specified herein.

B. Conform to NFPA 101 with regard to requirements for fire-rated doors and frames.

C. Hardware for doors in accessible locations as defined by the Americans with Disability Act (ADA) shall comply with all state and local codes which shall supersede this section. The Architect shall be notified of any conflicts between regulations and the specifications prior to the purchase and installation of any hardware.

1.07 SCHEDULING

A. Reinforcement for all hardware for metal doors and frames shall be installed at the factory and be made to template and furnished with machine screws. The face of locks shall be beveled to match the bevel edge of metal doors. All hardware for the metal doors shall be ordered as soon as possible after the Contract is awarded.

1.08 DELIVERY, STORAGE AND HANDLING

A. Legibly mark and label each package, indicating item and location for which it is intended. Each marking shall correspond to the number shown on the approved hardware schedule. Each package shall contain all the required screws, bolts and fasteners necessary for installation of each hardware item.

1. Packaging of door hardware is responsibility of supplier. As material is received by hardware supplier from various manufacturers, sort and repackage in containers clearly marked with appropriate hardware set number to match set numbers of approved hardware schedule. Two or more identical sets may be packed in same container.

2. Include basic installation instructions with each item or package.

B. Construction keys: Tagged and plainly marked on face of envelope with the key change number, door designation and all other required information and mailed directly to the Owner.

C. Permanent keys: Identified by lock manufacturer and opening to which they apply. Lock manufacturer shall place each set of keys into an envelope and label same with door numbers for rooms or areas. Mark boxes of keys with project name and location and ship Change Keys, Master Keys, and Grandmaster Keys via prepaid registered mail to Owner.

D. Guest Room Security Systems: Guest room card keys, master keys, and maids keys to be keyed in accordance with instructions provided by Owner's Loss Prevention Technical Service Department.

1.09 SPARE MATERIALS

A. Refer to Section 01 78 43.

1.10 WARRANTY

A. Furnish a written guarantee which shall cover the periods stated below from and after the completion of the building and its acceptance by the Owner.

B. For a period of one (1) year after final acceptance by the Owner. Hardware failing to comply with warranty shall be removed and replaced with new material including labor at no cost to Owner.

C. Provide the following special warranties starting from the date of substantial completion:

1. Door Locksets: Two (2) years.
2. Computer Systems: One (1) year.
3. Card Readers and other electrical equipment: Two (2) years.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Hardware manufacturers are specified for each hardware item to establish a standard of quality and minimum functional requirements. In the hardware schedule at the end of this Section, product model numbers are used as part of this description to assist in identifying individual items.

B. Items of a particular hardware category, i.e., locksets, closers, hinges shall be of the same manufacturer.

C. Approved Manufacturers and abbreviations:

1.	VING	VingCard, An ASSA ABLOY Group Company	(800-225-8464)
1.	ABH	Architectural Builders Hardware Mfg., Inc.	(630-875-9900)
2.	ARM	Adams Rite Manufacturing Co., An ASSA ABLOY Group Co.	(800-872-3267)
3.	AIP	Aiphone Corporation	(800-692-0200)
4.	CBL	Charles Bar-Lok Corp.	(708-333-0071)
5.	DE	Detex Corp.	(800-729-3839)
6.	DCI	Door Controls International	(800-742-3634)
7.	DOM	Dor-O-Matics, an IR Ingersoll-Rand Business	(800-243-4830)
8.	DOR	DORMA Americas	(800-523-8483)
9.	EDL	J. G. Edelen Company, Inc.	(410-918-1200)
10.	FAS	Folger Adam., An ASSA ABLOY Group Company	(800-260-9001)
11.	HAG	Hager Companies	(800-255-3590)
12.	HAF	Häfele America Co.	(800-423-3531
13.	HES	HES, An ASSA ABLOY Group Company	(800-626-7590)
14.	ILCO	Ilco a Kaba Group Company	(877-468-3555)

15. IVES Ives, an IR Ingersoll-Rand Business (877-424-8494)
16. JOH Johnson Hardware (800-837-5664)
17. LCN LCN Closers, an IR Ingersoll-Rand Business (800-526-2400)
18. LOK Locknetics by Schlage, an IR Ingersoll-Rand Business (860-584-9158)
19. MCK McKinney Products Company, An ASSA ABLOY Group Company (800-346-7707)
20. NGP National Guard Products, Inc. (NGP) (800-647-7874)
21. NOR Norton Door Controls, An ASSA ABLOY Company (800-438-1951)
22. ONT Onity (800-424-1433)
23. PDQ PDQ Manufacturing (800-441-9692)
24. PEM Pemko Manufacturing Company (800-283-9988)
25. PRE Precision Hardware, Stanley Security Solutions, Inc. (317-849-2250)
26. PUL JAI PULNiX America, Inc. (800-445-5444)
27. RIX Rixson Specialty Door Controls An ASSA ABLOY Group Company (800-457-5670)
28. RO Rockwood Manufacturing Co. (800-458-2424)
29. SAF Saflok, a Kaba Group Company (800-999-6213)
30. SAR Sargent Manufacturing Co., An ASSA ABLOY Group Company (800-727-5477)
31. SCH Schlage, an IR Ingersoll-Rand Business (800-847-1864)
32. SEC Securitron, An ASSA ABOLY Group Company (800-624-5625)
33. SIM SimplexGrinnell, A Tyco Company (800-746-7539)
34. STA Stanley Hardware (860-225-5111)
35. TOW TownSteel, Inc. (626-858-5080)
36. TRM Trimco/BBW (323-262-4191)
37. VDI Von Duprin, an IR Ingersoll-Rand Business (317-613-8944)
38. VING VingCard, An ASSA ABLOY Group Company (800-225-8464)
39. YAL Yale, An ASSA ABLOY Group Company (800-438-1951)

2.03 GENERAL REQUIREMENTS

A. Electronic Security Lock System Description

1. Install an electronic lock system, complete and including without limitation, the following components:

2. Approved Manufacturers:

a. “Saflok Odyssey”; Saflok, a Kaba Group Company (800-523-9605)

1) Provide Auto Deadbolt Option (ADB) at all Guestroom Entry Doors.

b. "Classic"; VingCard, An ASSA ABLOY Group Company (800-225-8464)

1) Provide Auto Deadbolt Option (ADB) at all Guestroom Entry Doors.

c. “Saflok MT”; Saflok, a Kaba Group Company (800-523-9605)

1) Provide Auto Deadbolt Option (ADB) at all Guestroom Entry Doors.

d. “Ilco 760”; Ilco a Kaba Group Company (877-468-3555)

1) Provide Auto Deadbolt Option (ADB) at all Guestroom Entry Doors

e. “Onity HT-24”; Onity (800-749-2983)

1) Provide Auto Deadbolt Option (ADB) at all Guestroom Entry Doors.

3. Guest Room Locking System, Front Desk System

a. “Saflok System 6000”, or approved substitution by listed manufacturer.

b. Microprocessor based Front Desk Controller System shall be a PC base motorized key encoding system with remote system printer and lock integration (LPI) feature. Include the following:

1) Main PC Base computer, RS232 Cable and support hardware.

1) 1 Each Motorized keycard encoder station and power supply.

2) 1 Each Basic System Items: Manuals, etc.

3) 1 Each System Printer with Serial Cable

4) Keycards: Generic reusable plastic magnetic keycards. Quantity: 2000. .

c. System shall be designed for the following features:

1) Password access to front desk system

2) Transaction log of last 4,000 transactions

3) Simple three-step check in progress

4) Encoder to be motorized or insertion type

5) Encoder must encode and validate cards

6) Encoder must be able to "read a card"

7) Fail-safe key cards in case of catastrophic power failure

8) Portable programmer interrogator: Password protected and be able to program up to 250 locks. Shall be separate from Front Desk Controller, furnish two Front Desk Controllers. Program shall include:

(a) Set time clock
(b) Perform diagnostic check
(c) Interrogate up to last 100 entries: time, date and card identification

d. Guest Room: Locks shall be opened by a correctly coded card, upon removal after insertion. Use of a newly issued card shall automatically re-key the lock to void the previous card, and guest cards shall additionally self-cancel by date and time automatically. Perimeter door reader to allow authorized guest cards. Canceled cards must not access perimeter reader.

1) Audit trail in lock of last 100 entries - time, date, and card identification

2) Office/passage function by card for offices, entry doors or hospitality suites

3) Reusable ABA standard magstripe cards

4) Up to Four (4) standard AA batteries or a (4) battery pack.

5) Non-volatile memory lock will not lose program even if the batteries are removed

6) Four levels of master/staff cards; 50 masters per level

7) Staff cards shall be individualized to identify individual card holder via lock audit

8) All cards are time limited

9) For Finish and Lever design see hardware sets

10) Deadbolt override cards for emergency level.

11) Simultaneous retraction of deadbolt and latchbolt (1" steel dead bolt with security pins and 3/4" anti-friction latch bolt).

12) Intelligent power shutdown feature. Batteries remain deactivated until keycard is inserted. Master level card key will activate a flashing LED “Low Battery” light warning system 30 days in advance of battery failure.

13) Mortise lockset to conform to BHMP Grade One, and meet UL Fire Rating C through A

14) Exterior door applications shall have special weather protection stand. B.

Intercom System:

1. Products:

   a. Basis-of-Design Product: Subject to compliance with requirements, provide “LEM-1 DLS System” by Aiphone Corporation.

      1) No Substitutions

2. Complete intercom system including, but not limited to, master unit, door station, power supply and substations, if applicable.

   a. Master Unit LEM-1

   b. Door Station Transmitter L-ED

   c. Power Supply PT120NS

C. Butt Hinges: Unless otherwise scheduled, shall be five-knuckle, full mortise template, ball bearing type with non-rising loose pin, flat button tip. Exterior hinges, and certain others as scheduled, shall have non-removable pins by use of set screw in the barrel. These are identified in the schedule as "NRP".

1. Products:

   a. Basis-of-Design Product: Subject to compliance with requirements, provide Butt Hinges listed in hardware sets by McKinney Products Company, An ASSA ABLOY Group Company, or comparable product by one of the following:

      1) Hager Companies

      2) Stanley Hardware

2. Sizes:

   a. Size of hinges to be 3-1/2" x 3-1/2" for 1-3/8" doors

   b. Size of hinges to be 4-1/2" x 4-1/2" for 1-3/4" doors up to 36" wide; 37" to 48 hinges to be 5" x 4-1/2" unless listed otherwise in hardware sets.

D. Standard Locks and Latches: Locks shall utilize standard cutouts to facilitate interchange without further mortising. Strikes for locks and latches shall have only the minimum lip projection required to protect trim. Lock and trim shall conform to ANSI/BHMA A156.2. Levers shall match Electronic Lock Levers.

1. Products:

    a. Basis-of-Design Product: Subject to compliance with requirements, provide Butt Standard Locks and Latches listed in hardware sets by one of the following:

        1) Schlage, an IR Ingersoll-Rand Business

        2) Yale Commercial Locks & Hardware, An ASSA ABLOY Group Company

E. Exit Devices for Exterior Doors and High-Frequency Doors: Shall be listed under "Panic Hardware" in accident equipment lists of Underwriters Laboratories. Where labeled fire doors are used as exits, they shall be equipped with labeled "Fire Exit Hardware". Exit devices shall conform to ANSI/BHMA A156.3

1. Products:

    a. Basis-of-Design Product: Subject to compliance with requirements, provide Exit Devices listed in hardware sets by Von Duprin, an IR Ingersoll-Rand Business, or comparable product by one of the following:

        1) Precision Hardware, Stanley Security Solutions, Inc

        2) Sargent Manufacturing Co., An ASSA ABLOY Group Company

        3) Yale Commercial Locks & Hardware, An ASSA ABLOY Group Company

F. Exit Devices for Interior Doors and Standard-Frequency Doors: Shall be listed under "Panic Hardware" in accident equipment lists of Underwriters Laboratories. Where labeled fire doors are used as exits, they shall be equipped with labeled "Fire Exit Hardware". Exit devices shall conform to ANSI/BHMA A156.3

1. Products:

    a. Basis-of-Design Product: Subject to compliance with requirements, provide Exit Devices listed in hardware sets by Von Duprin, an IR Ingersoll-Rand Business, or comparable product by one of the following:

        1) Precision Hardware, Stanley Security Solutions, Inc

        2) Sargent Manufacturing Co., An ASSA ABLOY Group Company

        3) Yale Commercial Locks & Hardware, An ASSA ABLOY Group Company

G. Push/Pulls

1. Products:

    a. Basis-of-Design Product: Subject to compliance with requirements, provide Psuh/Pulls listed in hardware sets by Trimco/BBW, or comparable product by one of the following:

        1) Ives, an IR Ingersoll-Rand Business

        2) McKinney Products Company, An ASSA ABLOY Group Company

        3) Rockwood Manufacturing Co., An ASSA ABLOY Group Company

        4) Hager Companies

H. Electric Strikes

1. Products:

    a. Basis-of-Design Product: Subject to compliance with requirements, provide Electric Strikes listed in hardware sets by Folger Adam EDC, An ASSA ABLOY Group Company, or comparable product by one of the following:

1) HES, An ASSA ABLOY Group Company

2) Locknetics by Schlage, an IR Ingersoll-Rand Business

3) Von Duprin, an IR Ingersoll-Rand Business

I. Electromagnetic Hold-Open

1. Products:

a. Basis-of-Design Product: Subject to compliance with requirements, provide Electromagnetic Hold-Opens listed in hardware sets by Rixson Specialty Door Controls An ASSA ABLOY Group Company, or comparable product by one of the following:

1) Architectural Builders Hardware Mfg., Inc.

2) LCN Closers, an IR Ingersoll-Rand Business

3) Sargent Manufacturing Co., An ASSA ABLOY Group Company

4) Hager Companies

J. Electric Power Transfer Devices

1. Electric power transfer devices shall be used that may contain one of the following combinations of conductors:

a. Ten (10) or more conductors minimum 24AWG

b. Two (2) conductors 18AWG and four (4) conductors minimum 24AWG

2. Power transfer device shall be concealed

3. The power transfer device shall be separate from the door hinges and shall not support any of the door weight.

K. Door Closers(Except for Concealed): Except where other device for automatically closing and controlling the action of swing doors is noted, shall be hydraulic type of rack and pinion design with working parts enclosed in a cast iron or aluminum case. For doors subject to positive or negative HVAC pressures, closer size shall be adjusted accordingly. All Closers shall **NOT** be fastened with Through Bolts through doors. All Wood Doors with closers to be provided with 5" wood top block.

1. Products:

a. Basis-of-Design Product: Subject to compliance with requirements, provide Door Closers listed in hardware sets by Yale Commercial Locks & Hardware, An ASSA ABLOY Group Company, or comparable product by one of the following:

1) LCN Closers, an IR Ingersoll-Rand Business

2) Sargent Manufacturing Co., An ASSA ABLOY Group Company

3) Hager Companies

4) DORMA Americas

5) Norton Door Controls, An ASSA ABLOY Group Company

2. Materials and Features:

a. ANSI/BHMA A156.4, Grade 1 b.

ICC/ANSI A117.1-2003

c. UL. listed. Provide closers for fire rated openings in compliance with NFPA 80, NFPA 101, and local building codes.

d. Provide closers with full molded plastic covers

e. Extreme temperature fluid (temperature range from -30 degrees F to 120 degrees F.)

f. Provide delayed action closers where required by code

g. Provide sex nuts and bolts (SNB) or thru bolts (TB) on all labeled mineral core doors.

h. Finish: Provide factory painted or powder finish on exposed metal to match hardware, unless indicated otherwise.

i. Mounting: Hinge face mounting, unless otherwise indicated. Do not mount closers on exterior of building.

j. Size and mount units indicated or, if not indicated, to comply with manufacturer's recommendations for exposure conditions. Reinforce substrate as recommended.

k. Closers to be installed to allow direction of door swing as shown on Drawings and as required to meet field conditions.

l. Door pull force:

1) Exterior Doors: Maximum 8.5 lbs.

2) Interior Doors: Maximum 5.0 lbs.

m. Provide mounting or drop plates as required by job conditions.

L. Door Closers (Concealed): Rack-and-pinion hydraulic type with adjustable sweep and latch speeds controlled by key-operated valves. Comply with manufacturer's written recommendations for size of door closers depending on size of door, exposure to weather, and anticipated frequency of use. Provide factory-sized closers, adjustable to meet field conditions and requirements for opening force.

1. Products:

a. Basis-of-Design Product: Subject to compliance with requirements, provide Concealed Door Closers listed in hardware sets by Rixson Specialty Door Controls An ASSA ABLOY Group Company, or comparable product by one of the following:

1) LCN Closers, an IR Ingersoll-Rand Business

2) Sargent Manufacturing Co., An ASSA ABLOY Group Company

3) Yale Commercial Locks & Hardware, An ASSA ABLOY Group Company

2. Materials and Features:

a. ANSI/BHMA A156.4, Grade 1 b.

ICC/ANSI A117.1-2003

c. UL. listed. Provide closers for fire rated openings in compliance with NFPA 80, NFPA 101, and local building codes.

d. Extreme temperature fluid (temperature range from -30 degrees F to 120 degrees F.)

e. Provide delayed action closers where required by code

f. Concealed Overhead Closer: Mortised into head frame; with cast-metal body and exposed cover plate.

g. Size and mount units indicated or, if not indicated, to comply with manufacturer's recommendations for exposure conditions. Reinforce substrate as recommended.

h. Closers to be installed to allow direction of door swing as shown on Drawings and as required to meet field conditions.

i. Door pull force:

1) Exterior Doors: Maximum 8.5 lbs.

2) Interior Doors: Maximum 5.0 lbs.

M. Door Stops: Wall type door bumpers shall be in accordance with ANSI/BHMA A156.16 and provided for all openings where conditions permit. In the event a wall type bumper cannot be used, an overhead stop shall be provided.

1. Products:

a. Basis-of-Design Product: Subject to compliance with requirements, provide Wall or Floor Stops listed in hardware sets by Trimco/BBW, or comparable product by one of the following:

1) Ives, an IR Ingersoll-Rand Business

2) McKinney Products Company, An ASSA ABLOY Group Company

3) Rockwood Manufacturing Co., An ASSA ABLOY Group Company

4) Hager Companies

2. Door Stop Mounting: Methods to suit substrates encountered (plastic anchor, drywall anchor, expansion shield, etc.)

3. Provide gray rubber exposed resilient parts

4. Do not furnish aluminum floor stops

5. Adjust height of floor stops to suit undercut of adjacent door.

N. Manual Flush Bolts:

1. Manual Flush Bolts: ANSI/BHMA A156.16; minimum 3/4-inch throw; designed for mortising into door edge.

2. Manual-Extension Flush Bolts: Grade 1, fabricated from extruded brass or aluminum, with 12-inch rod actuated by flat lever; listed and labeled for fire-rated doors, where required. Provide with dustproof strike.

3. Slide Flush Bolts: Grade 1, cast brass, with rod actuated by slide. Provide with dustproof strike.

4. Dustproof Strikes: Grade 1, polished wrought brass, with 3/4-inch- diameter, spring- tension plunger.

O. Automatic And Self-Latching Flush Bolts:

1. Automatic Flush Bolts: Grade 1, fabricated from steel and brass components, with spring-activated bolts that automatically retract when active leaf is opened and that automatically engage when active door depresses bolt trigger; listed and labeled for fire- rated doors where required. Provide brass or stainless-steel cover plate, top and bottom dustproof strikes, guides, guide supports, wear plates, and shims.

2. Self-Latching Flush Bolts: Grade 1, fabricated from steel and brass components, with spring-activated bolts that automatically engage when active door depresses trigger; listed and labeled for fire-rated doors where required. Bolts are manually retracted by a slide in the bolt face. Provide brass or stainless-steel cover plate, dustproof top and bottom strikes, guides, guide supports, wear plates, and shims.

3. Dustproof Strikes: Grade 1, polished wrought brass, with 3/4-inch- diameter, spring- tension plunger.

P. Door Viewers:

1. 180 degree angle of view. Provide Guestroom side sliding metal cover to match viewer at guestrooms. (Slide Cover to be of a damage proof type under normal use conditions)

2. Products:

a. Basis-of-Design Product: Subject to compliance with requirements, provide Door Viewers listed in hardware sets by Rockwood Manufacturing Co., An ASSA ABLOY Group Company, or comparable product by one of the following:

1) No Substitutions

Q. Door Guards: Provide all guest room entry door guards with edge guards.

1. Products:

a. Basis-of-Design Product: Subject to compliance with requirements, provide Door Guards listed in hardware sets by Ives, an IR Ingersoll-Rand Business, or comparable product by one of the following:

1) Rockwood Manufacturing Co., An ASSA ABLOY Group Company

2) McKinney Products Company, An ASSA ABLOY Group Company

3) Hager Companies

R. Thresholds:

1. Thresholds at all doors usable by the handicapped shall not exceed 1/2" in height above finished floor with a maximum slope of 1:2 in accordance with ADA, and shall be in accordance with ANSI/BHMA 156.21.

2. Products:

a. Basis-of-Design Product: Subject to compliance with requirements, provide Door Thresholds listed in hardware sets by Pemko Manufacturing Company, or comparable product by one of the following:

1) McKinney Products Company, An ASSA ABLOY Group Company

2) National Guard Products, Inc. (NGP)

3) Hager Companies

S. Weatherstrip, Sound Seals, Door Sweeps and Astragals.

1. Products:

a. Basis-of-Design Product: Subject to compliance with requirements, provide weatherstrip, triple-finned sound seals, door sweeps and astragals listed in hardware sets by Pemko Manufacturing Company, or comparable product by one of the following:

1) McKinney Products Company, An ASSA ABLOY Group Company

2) National Guard Products, Inc. (NGP)

T. Protective Plates and Trim: Materials: Protection plates conforming to ANSI/BHMA 156.6, .050 minimum thickness, beveled edges (B4E) four sides. Mount centered, flush with bottom of door. Screws: Phillips head sheet metal screws plated to match plate.

1. Products:

a. Basis-of-Design Product: Subject to compliance with requirements, provide Protective Plates and Trim listed in hardware sets by Trimco/BBW, or comparable product by one of the following:

1) Ives, an IR Ingersoll-Rand Business

2) McKinney Products Company, An ASSA ABLOY Group Company

3) Rockwood Manufacturing Co., An ASSA ABLOY Group Company

4) Hager Companies

U. Silencers for Metal Door Frames: ANSI/BHMA 156.16 Grade 1; neoprene or rubber, minimum diameter 1/2-inch; fabricated for drilled application to frame.

V. Safety Device: For operable patio doors, provide stops to prevent opening greater than 4". Stops shall be constructed of stock window frame, or durometer material and attached with tamper-resistant screw.

a. Basis-of-Design Product: Subject to compliance with requirements, provide "Charlie-Bar" security device by Charles Bar-Lok Corp.

1) No Substitutions

b. Size to fit door opening.

W. Bi-passing Sliding Door System:

a. Basis-of-Design Product: Subject to compliance with requirements, provide Bi-passing Sliding Door System by Häfele America Co.

1) No Substitutions

X. Key Control Box:

1. Products:

a. Basis-of-Design Product: Subject to compliance with requirements, provide Model "Regent RWC Series" by Telkee, Inc.

1) No Substitutions

2. Wall mounted lockable key cabinet complying with ANSI/BHMA A156.5.

3. Size: Sized for actual quantities of keys, plus 25%, plus additional capacity for 12 housekeeper pouches.

4. One wall mounted lockable key cabinet for four (4) key rings.

5. One key control log book.

6. Provide two (2) sets of color coded and numbered tags for key ring identification.

2.04 CYLINDERS AND KEYING

A. Hotel System-Permanent Keying:

1. Products:

a. Basis-of-Design Product: Subject to compliance with requirements, provide Cylinder Model "VA" by Sargent Manufacturing Co., An ASSA ABLOY Group Company, or comparable product by one of the following:

1) "1345"; Schlage, an IR Ingersoll-Rand Business

2. All locksets shall have manufacturer's restricted keyway, reserved for Owner's use only.

3. All locksets shall be construction masterkeyed.

4. Owner will provide keying requirements for hotel system.

5. Locksets and cylinders shall contain 6-pin tumblers.

6. Furnish the following quantities of keys:

a. Grandmaster Keys (GMK) 10 each

b. Master Keys (each MK set) 5 each

c. Change Keys per lock 3 each

d. Keyed alike sets (each set) 4 each

e. Removable core control keys 4 each

7. Hotel System-Master Keying: Coordinate with Owner based upon the following general requirements.

   a. Administrative Master Key "AA" - Operates all locks in the administrative and office areas of the hotel.

   b. Engineering Master Key "AB" - Operates all locks in the engineering and maintenance areas, (i.e., engineer's office, entire maintenance section, mechanical and electrical rooms, utility closets, janitors closets, and all exterior doors, including the roof).

   c. Food and Beverage Master Key "AC" - Operates all locks under the direct supervision of the steward, (i.e. kitchen, banquet rooms, food storage rooms, dining rooms and kitchen offices).

   d. Housekeeping Master Key "AD" - Operates all locks under the direct supervision of the housekeeper, (i.e., housekeeper's office, pantries, linen rooms and linen chutes on guest floors and laundry room area).

   e. Health and Exercise Master Key "AE" - Operates all locks in the health/exercise areas, (i.e., swimming pool, exercise room, pool lockers and game room).

   f. Grand Master Key “A” – Operates locks as noted in paragraphs a through e above. Upon authorization of the Owner, keyblanks shall be sold only by direct main from the door lock manufacturer.

   g. Keyed alike in sets, each set different.

      1) Electrical and telephone closets.

      2) Two or more doors to or from the same room area or space.

      3) Public meeting room doors in accordance to areas subdivided by operable partitions.

      4) Linen rooms and chute area doors.

B. Hotel System - Temporary Construction Keying:

   1. Furnish temporary construction keying for use during construction. Prior to Owner occupancy of the building, the General Contractor with the Owner's Representative shall void out the construction keys.

   2. Furnish 25 Construction Master Keys.

2.05 MISCELLANEOUS REQUIREMENTS

A. The hardware shall be the proper kind for its required use and shall fit its intended location. Should any hardware, as specified, fail to meet the intended requirements or require modification to suit the intended location, this matter, or any other necessary advance information, shall be brought to the attention of the Architect for correction or decision in ample time to avoid delay in the manufacture and delivery of hardware.

B. The finish hardware listed herein shall not be construed as necessarily being a complete hardware schedule, but shall be considered as an indication of the hardware requirements desired by the Architect. It shall be the Contractor's responsibility to examine the Drawings

and door schedules and provide all necessary or additional hardware as required but not scheduled herein. Such items of hardware shall be of the same type, quality, and quantity as that scheduled for similar doors or similar purposes.

C. In the accompanying hardware list, catalog numbers used are those of specific manufacturers, used to establish a minimum standard of quality and requirements as to type, weight, mechanical construction and operation to which hardware shall conform. That list indicates manufacturers on which catalog numbers are based, as well as acceptable equivalent manufacturers.

D. Proposals shall be based on specified (base or acceptable equivalent) brands. If the Contractor wishes to submit other brands as equivalent to those specified, they shall enter such proposed substitutions separately from their basic proposal. For each item proposed, they shall enter the amount to be added to or deducted from his base bid in the event the proposed substitution is accepted by the Owner's representative. Substitute items shall not be used without the approval of Marriott International.

E. Finish:

1. All hardware items not otherwise scheduled shall have the following finish:

a. Refer to Hardware Sets in Hardware Schedule

2. Finish and Base Material Designations: Numbers indicate ANSI/BHMA A156.18 Finish Standards, or nearest traditional U.S. Commercial Finish Standards, or manufacturer's finish designation.

PART 3 EXECUTION

3.01 INSPECTION

A. Verify that doors and frames are ready to receive work and dimensions, are as indicated on Shop Drawings, and as instructed by the manufacturer.

B. Beginning of installation means acceptance of existing conditions.

3.02 INSTALLATION

A. Install each hardware item in compliance with manufacturer's instructions and recommendations. Wherever cutting and fitting is required to install hardware onto or into surfaces which are later to be painted or finished in another way, install each item completely and then remove and store in a secure place during the finish application. After completion of the finished, reinstall each item. Do not install surface-mounted items until finishes have been completed on the substrate.

B. Conform to 2010 ADA Standards for positioning requirements for the Disabled.

C. All door closers shall be installed out of public sight wherever possible.

3.03 FASTENINGS

A. Suitable size, quantity, and material with finish to match the hardware.

B. Machine screws for attaching hardware to metal.

C. Self-tapping screws for attaching kickplate to hollow metal or wood mineral core doors.

D. Full thread type screws for attaching butt hinges to wood or mineral core doors.

E. Sex bolts and sleeves for attaching surface closers or arm to mineral core doors.

F. Non-ferrous or corrosion resistant steel fasteners for items exposed to weather.

3.04 HARDWARE LOCATIONS

A. Hardware mounting heights shall conform to the following unless otherwise indicated on the

drawings.

1. Hinges: Top - 5" from head to top of hinge leaf.

   Bottom - 10" from bottom of hinge to finished floor. Intermediates.

   Intermediates - Equal distance between top and bottom hinges (Maximum 3'-0")

2. Card Readers: 40" from finish floor to centerline

3. Locks/Latches (Other than Card Readers): 38" from finish floor to center of lock/latch.

   For Panel Doors: If lock escutcheon plate aligns with or overlaps the door stile, then mount escutcheon plate to minimize overlap occurring above door rail (align top of escutcheon plate 1/2" higher than top of rail). Center line of lever typically 45-1/2" from top of door. If escutcheon doesn't align with or overlap stile, then mount lock on stile so height of lever is at center of rail. Custom strike locations on door frames may be required.

4. Deadlocks/Deadbolts: 48" from finished floor to center of cylinder.

5. Door Guards: 60" from finished floor to center line.

   At Accessible Guest Rooms maximum 48" from finished floor to center line.

6. Door Viewer: 57" from finished floor to center line.

   At Accessible Guest Rooms, provide two door viewers with mounting heights at 45" and 57" from finish floor to centerline.

7. Doorpulls, Pushplates Pushbars: 45" from finish floor to centerline.

8. Exit Device Crossbars: 38" from finish floor to center of crossbar.

9. Electromagnetic Hold- Open: Set wall mounted type 72" from finish floor to centerline. Wall mounted templates shall be issued by hardware supplier.

3.05 HARDWARE INSTALLATION

A. Coordination:
   1. Fit and adjust hardware in accordance with manufacturer's packaged instructions.
   2. Coordinate installation with all trades, millwork, finish hardware, door frames and electrical.

B. Sound and Smoke Seals:
   1. Install adhesive seals per manufacturer's instructions. Pre-cut pieces to fit before installing. Do not install as one continuous piece. Install jamb pieces first and header piece last. Position jamb pieces on the door frame rabbet 1/16" from the header rabbet to allow for header piece clearance. Install header piece on the header rabbet with ends overlapping and fitting above jamb piece.
   2. Install adhesive seals on astragal of double doors.

C. Door Viewers: 190 degree viewers at Guest Room doors. 190 degree extra wide angle view at ballroom and meeting room doors.

D. Door Guards: Guest Room entry door guards shall have strike plate furnished standard with door guard.

3.06 ADJUSTING

A. Adjustments:
   1. Weatherstripping and sound/smoke seals shall not interfere with operation of doors and shall be adjusted accordingly.
   2. Secure door bottom in strict accordance with manufacturer's printed instructions and as required to seal door to threshold.
   3. Door seals to provide intended functions. Replace seals which do not perform.
   4. Adjust door so that lockset can be easily opened with a key/card key without binding between the latchbolt and strike. Doors too tight (or too loose) will not be accepted.
   5. Clearances between door and frame, at jambs and head: No greater than 1/8" +/- 1/16".
   6. Prior to Owner's "soft opening" replace Guest Room battery power supply units with new alkaline batteries.

3.07 PROTECTION

A. Reinstall wrappings furnished by manufacturer for protecting items such as levers, handles and pulls.

B. Do not remove manufacturer's protective covering of flat items such as kickplates and push plates until just prior to final acceptance of the building.

3.08 CLEANING

A. After installation, clean metal surfaces on both interior and exterior of all mortar, plaster, paint and other contaminants. After cleaning, protect work against damage.

3.09 FINAL ADJUSTMENT

A. Whenever hardware is installed more than one month prior to acceptance or occupancy of a space or area, return during the week prior to acceptance or occupancy and make a final check and adjustment of all hardware items in such space or area.

B. At the completion of the project, manufacturers' suppliers or representatives shall inspect their hardware and make any corrections required due to errors or improper installation.

PART 4 HARDWARE SCHEDULE

4.01 HW SET - T01 GUEST ENTRY
SINGLE DOORS ********
EACH DOOR TO HAVE:

3 EA	HINGES	TA2714 4.5 X 4.5	US15	MCK
1 EA	LOCK	ODYSSEY X ADB X APOGEE	619	SAF
1 EA	CLOSER	2501	689	YAL
1 EA	KICKPLATE	K0050 8" X 2" LDW	US32D	TRM
1 EA	DOOR GUARD	482B X EDGE GUARD	B15	IVES
1 EA	DOOR VIEWER	628 (WITH HINGED COVER)	US26D	RO
1 EA	WALL STOP	1270WV	619	TRM
1 SET	DOOR SEALS	S773D		PEM
1 EA	AUTO DOOR BOTTOM	434APKL (ROUTED INTO BOTTOM OF DOOR)		PEM
1 EA	MAG SWITCH	REFER TO SECTION 25 51 10		

4.02 HW SET – T01A ACCESSIBLE GUEST ENTRY
SINGLE DOORS ********
EACH DOOR TO HAVE:

3 EA	HINGES	TA2714 4.5 X 4.5	US15	MCK
1 EA	LOCK	ODYSSEY X ADB X APOGEE	619	SAF
1 EA	CLOSER	2501	689	YAL
1 EA	KICKPLATE	K0050 8" X 2" LDW	US32D	TRM
1 EA	DOOR GUARD	482B X EDGE GUARD	B15	IVES
2 EA	DOOR VIEWER	628 (WITH HINGED COVER)	US26D	RO
1 EA	WALL STOP	1270WV	619	TRM
1 SET	DOOR SEALS	S773D		PEM
1 EA	AUTO DOOR BOTTOM	434APKL (ROUTED INTO BOTTOM OF DOOR)		PEM
1 EA	MAG SWITCH	REFER TO SECTION 25 51 10		

4.03 HW SET – T02 GUEST BATH / ACCESSIBLE BATH
SINGLE DOORS ********
EACH DOOR TO HAVE:

3 EA	HINGES	T2714 3.5 X 3.5	US15	MCK
1 EA	PRIVACY SET	TLP X APOGEE	US15	TOW
1 EA	WALL STOP	1270WV	619	TRM
3 EA	SILENCERS	1229A		TRM

NOTE: DELETE WALL STOP AT LOCATIONS WHERE DOOR DOES NOT SWING AGAINST WALL.
NOTE: DELETE HINGES IF DOOR/FRAME ARE FURNISHED PREHUNG.

4.04 HW SET – T03 GUEST BEDROOM
SINGLE DOORS *******
EACH DOOR TO HAVE:

3 EA	HINGES	T2714 3.5 X 3.5	US15	MCK

1 EA	PRIVACY SET	TLP X APOGEE	US15	TOW
1 EA	WALL STOP	1270WV	619	TRM
3 EA	SILENCERS	1229A		TRM

NOTE: DELETE WALL STOP AT LOCATIONS WHERE DOOR DOES NOT SWING AGAINST WALL.
NOTE: DELETE HINGES IF DOOR/FRAME ARE FURNISHED PREHUNG.

4.05 HW SET – T04A GUEST CLOSET
SINGLE DOORS ********
EACH PAIR TO HAVE:

3 EA	HINGES	T2714 3.5 X 3.5	US15	MCK
1 EA	PASSAGE SET	TLL X APOGEE	US15	TOW
3 EA	SILENCERS	1229A		TRM

NOTE: FOR CLOSETS SHOWN TO HAVE A LIGHT FIXTURE, INCLUDE THE FOLLOWING:

1 EA	DOOR POSITION SWITCH	DPS-M-WH	WHITE	SEC

NOTE: DELETE HINGES IF DOOR/FRAME ARE FURNISHED PREHUNG.

4.06 HW SET – T04B GUEST CLOSET
PAIR DOORS *******
EACH PAIR TO HAVE:

6 EA	HINGES	T2714 3.5 X 3.5	US15	MCK
2 EA	DUMMY LEVER	TLD X APOGEE	US15	TOW
2 EA	BALL CATCH	347	US15	IVES
6 EA	SILENCERS	1229A		TRM

NOTE: FOR CLOSETS SHOWN TO HAVE A LIGHT FIXTURE, INCLUDE THE FOLLOWING:

1 EA	DOOR POSITION SWITCH	DPS-M-WH	WHITE	SEC
1 EA	RELAY	110 V (BY OTHERS)		
1 EA	POWER SUPPLY	LOW VOLTAGE (BY OTHERS)		

NOTE: DELETE HINGES IF DOOR/FRAME ARE FURNISHED PREHUNG.

4.07 HW SET - T10 INTERIOR STAIRS
SINGLE DOORS ******
EACH DOOR TO HAVE:

3 EA	HINGES	TA2714 4.5 X 4.5	US15	MCK
1 EA	PASSAGE SET	TLL X APOGEE	US15	TOW
1 EA	CLOSER	2501	689	YAL
1 EA	FLOOR STOP	1231	US15	TRM
1 EA	WALL MAGNET	FM998	689(SA)	RIX
1 SET	DOOR SEALS	S773D		PEM

NOTE: WALL MAGNET TO BE TIED INTO FIRE ALARM SYSTEM.

4.08 HW SET - T11 EXTERIOR STAIRS/EXTERIOR ENTRANCE (REAR)
SINGLE DOORS ****
EACH DOOR TO HAVE:

2 EA	HINGES ELEC	TA2314 4.5 X 4.5 NRP	US26D	MCK
1 EA	HINGE	TA2314-CC4 4.5 X 4.5	US26D	MCK
1 EA	ELEC EXIT DEV.	EL99NL-OP	US26D	VDI
1 EA	CYLINDER	20-510	US26D	SCH
1 EA	CLOSER	2521	689	YAL
1 EA	POWER SUPPLY	PS872		VDI
1 EA	SAFLOK REMOTE CONTROL UNIT	US26D	SAF	
1 EA	THRESHOLD	172B	US26D	PEM
1 EA	DOOR SWEEP	315GN	ALUM	PEM
1 SET	DOOR SEALS	S773D		PEM

4.09 HW SET - T13 EXTERIOR BREAKFAST
SINGLE DOORS ****
EACH DOOR TO HAVE:

1 EA	OH CONCEALED CLOSER	0608090N X LCP	US26D	RIX
1 EA	EXIT DEVICE	EL33NL-OP	US26D	VDI
1 EA	CYLINDER	34	US26D	SCH
1 EA	LOCK	MT (LESS DEAD BOLT) X APOGEE EXTERIOR LOCK	US32D	SAF
1 EA	FLOOR STOP	1233	US26D	TRM

NOTE: CONTINUOUS HINGES, PULLS, THRESHOLD & DOOR SEALS BY DOOR MANUFACTURER

4.10 HW SET - T13 EXTERIOR MEETING ROOM
SINGLE DOORS *****
EACH DOOR TO HAVE:

1 EA	OH CONCEALED CLOSER	0608090N X LCP	US26D	RIX
1 EA	EXIT DEVICE	EL33NL-OP	US26D	VDI
1 EA	CYLINDER	34	US26D	SCH
1 EA	LOCK	MT (LESS DEAD BOLT) X APOGEE EXTERIOR LOCK	US32D	SAF
1 EA	DOOR VIEWER	U696B	US26D	IVES
1 EA	FLOOR STOP	1233	US26D	TRM
1 EA	THRESHOLD	172G	ALUM	PEM
1 EA	DOOR SWEEP	315GN	ALUM	PEM
1 SET	DOOR SEALS	S773D		PEM

4.11 HW SET - T15 EXTERIOR VESTIBULE ENTRY (AUTOMATIC SLIDING DOORS)
BI-PARTING SLIDE DOORS ****
EACH PAIR TO HAVE:

NOTE: AUTOMATIC DOOR HARDWARE & ACCESSORIES BY DOOR MANUFACTURER

4.12 HW SET - T15A INTERIOR VESTIBULE ENTRY (AUTOMATIC SLIDING DOORS)
BI-PARTING SLIDE DOORS ****
EACH PAIR TO HAVE:

1 EA	PUSH BUTTON RELEASE	MUSHROOM BUTTON 32310		SAF
1 EA	KEYSWITCH	643-04	US32D	LOK
1 EA	CYLINDER	41 (@ KEYSWITCH)	US32D	SAR
1 EA	REMOTE CONTROL UNIT	FLUSH MTD. 94770		SAF
1 EA	POWER SUPPLY	32280		SAF
1 EA	AIPHONE INTERCOM SYSTEM	LEM-1 DLS		AIP

NOTE: AUTOMATIC DOOR HARDWARE & ACCESSORIES BY DOOR MANUFACTURER

4.13 HW SET - T16 ELECTRICAL / SERVER CLOSET / STORAGE / LAUNDRY STORAGE
SINGLE DOORS *******
EACH DOOR TO HAVE:

3 EA	HINGES	TA2714 4.5 X 4.5	US15	MCK
1 EA	LOCK	ODYSEEY (LESS DEAD BOLT) X APOGEE 619		SAF
1 EA	CLOSER	2501	689	YAL
1 EA	WALL STOP	1270WVCP	US15	TRM
1 SET	DOOR SEALS	S773D		PEM

4.14 HW SET - T17 LINEN STORAGE / LINEN CHUTE / STORAGE
SINGLE DOORS *****
EACH DOOR TO HAVE:

3 EA	HINGES	TA2714 4.5 X 4.5	US15	MCK
1 EA	LOCK	ODYSEEY (LESS DEAD BOLT) X APOGEE 619		SAF
1 EA	CLOSER	2501	689	YAL
1 EA	WALL STOP	1270WVCP	US15	TRM
1 SET	DOOR SEALS	S773D	PEM	

4.15 HW SET - T17A FIRST FLOOR LINEN CHUTE
SINGLE DOORS *****
EACH DOOR TO HAVE:

3 EA	HINGES	TA2714 4.5 X 4.5	US15	MCK
1 EA	LOCKSET	F51 MHN	619	SCH
1 EA	CLOSER	2501	689	YAL
1 EA	FLOOR STOP	1231	US15	TRM
1 SET	DOOR SEALS	S773D		PEM

4.16 HW SET – T18 ELEVATOR MACHINE ROOM, MECHANICAL ROOM (EACH FLOOR)
SINGLE DOORS ******
EACH DOOR TO HAVE:

3 EA	HINGES	TA2714 4.5 X 4.5	US15	MCK
1 EA	LOCK	ODYSEEY (LESS DEAD BOLT) X APOGEE 619		SAF
1 EA	CLOSER	2501	689	YAL

1 EA	FLOOR STOP	1231	US15	TRM
1 SET	DOOR SEALS	S773D		PEM

4.17 HW SET - T19 EXTERIOR MECHANICAL / EXTERIOR ELECTRICAL

SINGLE DOORS ****
EACH DOOR TO HAVE:

3 EA	HINGES	TA2314 4.5 X 4.5 NRP	US26D	MCK
1 EA	LOCKSET	L9464 12A	626	SCH
1 EA	CLOSER	2521	689	YAL
1 EA	THRESHOLD	172B	US26D	PEM
1 EA	DOOR SWEEP	315BN	US26D	PEM
1 SET	DOOR SEALS	S773D		PEM
1 SET	DOOR HEAD SEAL	347A	ALUM	PEM

4.18 HW SET - T23 MEN / WOMEN

SINGLE DOORS ****
EACH DOOR TO HAVE:

1 EA	PRIVACY SET	TLP X APOGEE	US15	SCH
1 EA	CLOSER	2501	689	YAL
1 EA	WALL STOP	1720WVCP	US15	TRM
1 SET	DOOR SEALS	S773D		PEM

4.19 HW SET - T24 EXERCISE / GUEST LAUNDRY

SINGLE DOORS ****
EACH DOOR TO HAVE:

3 EA	HINGES	TA2714 4.5 X 4.5	US15	MCK
1 EA	LOCK	ODYSEEY (LESS DEAD BOLT) X APOGEE 619		SAF
1 EA	CLOSER	2501	689	YAL
1 EA	WALL STOP	1270WVCP	US15	TRM
1 SET	DOOR SEALS	S773D		PEM

4.20 HW SET - T28 EMPLOYEE LOUNGE / WORK AREA

SINGLE DOORS ****
EACH DOOR TO HAVE:

3 EA	HINGES	T4A3786 4.5 X 4.5	US15	MCK
1 EA	LOCKSET	ODYSEEY (LESS DEAD BOLT) X APOGEE 619		SCH
1 EA	CLOSER	2501	689	YAL
1 EA	WALL STOP	1270WVCP	US15	TRM
3 EA	SILENCERS	1229A		TRM

4.21 HW SET - T30 OFFICES, ENGINEERS OFFICE

SINGLE DOORS *****
EACH DOOR TO HAVE:

3 EA	HINGES	TA2714 4.5 X 4.5	US15	MCK
1 EA	LOCKSET	ODYSSEY (LESS DEAD BOLT) X APOGEE 619		SCH
1 EA	WALL STOP	1270WVCP	US15	TRM
3 EA	SILENCERS	1229A		TRM

4.22 HW SET - T31 FOOD PREP / HOUSE LAUNDRY / MECHANICAL

SINGLE DOORS *****

EACH DOOR TO HAVE:

3 EA	HINGES	TA2714 4.5 X 4.5	US15	MCK
1 EA	LOCK	ODYSEEY (LESS DEAD BOLT) X APOGEE 619		SAF
1 EA	CLOSER	2501	689	YAL
1 EA	WALL STOP	1270WVCP	US15	TRM
3 EA	SILENCERS	1229A		TRM

4.23 HW SET - T33 CROSS CORRIDOR

PAIR DOORS ****

EACH PAIR TO HAVE:

6 EA	HINGES	T4A3786 4.5 X 4.5	US26D	MCK
2 EA	EXIT DEVICE	99L-F-BE	US26D	VDI
2 EA	CLOSER	2501	689	YAL
2 EA	WALL STOP	1270WVCP	US26D	TRM
2 EA	WALL MAGNET	FM998	689	RIX
1 SET	DOOR SEALS	S773D		PEM

NOTE: WALL MAGNET TO BE TIED INTO FIRE ALARM SYSTEM.

4.24 HW SET - T34 NOT USED

PAIR DOORS ****

EACH DOOR TO HAVE:

1 EA	SLIDING DOOR FITTING SET	940.81.007 HAWA TELESCOPIC 80/2		HAF
2 EA	FITTING SETS	940.80.001 HAWA JUNIOR 80/Z		HAF
2 EA	UPPER TRACKS	940.80.300 9'-10 1/8" (3.0m)	628	HAF
2 EA	PULLS	3489-288-BN 288mm (11-5/16' C/C) 368mm (14-1/2") OA	US15	EDL
	PROVIDE THREADED RODS FOR BACK TO BACK MOUNTING AND FACTORY DRILL AND TAP ONE PULL TO RECEIVE RODS AND SET SCREWS.			
1 EA	DEADBOLT	5017-00	US32	ARM
1 EA	BOX STRIKE	4810	US32	ARM
1 EA	CYLINDER PULL	4026	ALUM	ARM
1 EA	TURN	1015	ALUM	ARM

4.25 HW SET - T35 DRYERS

SINGLE DOOR ****

EACH DOOR TO HAVE:

3 EA	HINGES	TA2714 4.5 X 4.5	US15	MCK
1 EA	PASSAGE SET	F10 MHN	619	SCH
1 EA	CLOSER	2501 (ACTIVE LEAF)	689	YAL
1 EA	WALL STOP	1270WVCP	US15	TRM
3 EA	SILENCERS	1229A		TRM

4.26 HW SET – T36 MEETING ROOM

PAIR DOORS ***
EACH DOOR TO HAVE:

6 EA	HINGES	TA2714 4.5 X 4.5	US26D	MCK
2 EA	EXIT DEVICE	99L-F-BE	US26D	VDI
2 EA	CLOSER	2501	689	YAL
2 EA	WALL STOP	1270WVCP	US26D	TRM
1 EA	DOOR VIEWER	U696B	US26D	IVES
1 EA	WALL MAGNET	FM998	US32D	RIX
1 SET	DOOR SEALS	S773D		PEM

NOTE: WALL MAGNET TO BE TIED INTO FIRE ALARM SYSTEM. NOTE: DOOR VIEWER TO VIEW IN TO ROOM FROM CORRIDOR

4.27 HW SET - T36A MEETING ROOM CLOSET

PAIR DOORS ***
EACH DOOR TO HAVE:

6 EA	HINGES	T2714 4.5 X 4.5	US26D	MCK
2 EA	DUMMY LEVER	TLD X APOGEE	US15	TOW
2 EA	BALL CATCH	347	US15	IVES
2 EA	WALL STOP	1270WVCP	US26D	TRM
6 EA	SILENCERS	1229A		PEM

4.28 HW SET - T41 EXTERIOR GATES

SINGLE GATE ***
EACH GATE TO HAVE:

1 EA	EXIT DEVICE	MT SERIES(LESS DEAD BOLT) X APOGEE X F18-R	US26D	SAF/MN

NOTE: MT IS BATTERY OPERATED CARD LOCK.
F-18-R MECHANICAL RIM DEVICE CAN BE CUT DOWN TO SIZE IN FIELD.
DIMENSIONS OF INSIDE LATCH ARE 2-1/2"W X 8-1/2" H.
NOTE: HINGES AND CLOSER PROVIDED BY GATE MANUFACTURER.

END OF SECTION

SECTION 08 80 00 - GLAZING

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Types of work in this Section include glass and glazing for:

a. Float Glass

b. Tempered Glass

c. Insulated Units

d. Mirrors

e. Spandrel Glass

B. Related Sections:

1. Section 07 92 00 – Joint Sealants
2. Section 08 11 13 - Steel Doors and Frames
3. Section 08 14 00 - Wood Doors
4. Section 08 41 13 - Aluminum-Framed Entrances and Storefronts
5. Section 08 42 29 – Automatic Entrance Doors
6. Section 08 51 13 - Aluminum Windows

1.02 REFERENCES

A. American Architectural Manufacturers Association (AAMA) Publications:

1. 800-92 “Voluntary Specifications and Test Methods for Sealants”

B. American National Standards Institute (ANSI) Publications:

1. ANSI/AAMA 101 "Voluntary Specifications for Aluminum, Vinyl (PVC) and Wood Windows and Glass Doors"

C. ASTM International (ASTM) Publications:

1. C920 “Standard Specification for Elastomeric Joint Sealants”
2. C1036 “Standard Specification for Flat Glass”
3. C1048 “Standard Specification for Heat-Treated Flat Glass—Kind HS, Kind FT Coated and Uncoated Glass”
4. C1172 “Standard Specification for Laminated Architectural Flat Glass”
5. C1376 “Standard Specification for Pyrolytic and Vacuum Deposition Coatings on Glass”
6. E1300 “Standard Practice for Determining Load Resistance of Glass in Buildings”
7. E2190 “Standard Specification for Insulating Glass Unit Performance and Evaluation”

D. Consumer Product Safety Commission (CPSC) Publications:

1. 16 CFR 1201 - “Safety Standard for Architectural Glazing Materials “

E. Glass Association of North America (GANA)

1. "GANA Glazing Manual"
2. "FGMA Sealant Manual"

F. Insulating Glass Manufacturers Alliance (IGMA) Publications:

1. SIGMA TM-3000, "Glazing Guidelines for Sealed Insulating Glass Units"

G. National Fenestration Rating Council (NFRC)

H. National Glass Association (NGA)

1. Glazier Certification Program

I. Underwriter's Laboratories, Inc. (UL) Standards:

1. 10C "Positive Pressure Fire Tests of Door Assemblies"

1.03 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

B. Submit “Letter of Conformance” in accordance with Section 01 33 00 indicating specified items selected for use in project with the following supporting data.

1. Product Data: Submit manufacturer's technical data for each glazing material and fabricated glass product required, including installation and maintenance instructions.

2. Compatibility and Adhesion Test Report: Submit statement from sealant manufacturer indicating that glass and glazing materials have been tested for compatibility and adhesion with glazing sealants and interpreting test results relative to material performance, including recommendations for primers and substrate preparation needed to obtain adhesion.

C. Samples: Submit, for verification purposes, 12" square samples of each type of glass indicated except for clear single pane units, and 12" long samples of each color required (except black) for each type of sealant or gasket exposed to view. Install sealant or gasket sample between two strips of material representative of adjoining framing system in color. Sample requirement may be waived by Owner’s Representative at their discretion.

1.04 QUALITY ASSURANCE

A. Glazing Standards: Comply with recommendations of the Glass Association of North America (GANA) "Glazing Manual" and "Sealant Manual" except where more stringent requirements are indicated. Refer to those publications for definitions of glass and glazing terms not otherwise defined in this section or other referenced standards.

B. Installer Qualifications: An experienced installer who has completed glazing similar in material, design, and extent to that indicated for this Project; whose work has resulted in glass installations with a record of successful in-service performance; and who employs glass installers for this Project who are certified under the National Glass Association Glazier Certification Program as Level 2 (Senior Glaziers) or Level 3 (Master Glaziers).

C. Safety Glazing Products: Comply with testing requirements in 16 CFR 1201.

1. Subject to compliance with requirements, obtain safety glazing products permanently marked with certification label of the Safety Glazing Certification Council (SGCC) or another certification agency acceptable to authorities having jurisdiction.

D. Glazing Publications: Comply with published recommendations of glass product manufacturers and organizations below, unless more stringent requirements are indicated. Refer to these publications for glazing terms not otherwise defined in this Section or in referenced standards.

1. IGMA Publication for Insulating Glass: SIGMA TM-3000, "Glazing Guidelines for Sealed Insulating Glass Units."

E. Single Source Responsibility for Glass: To ensure consistent quality of appearance and performance, provide materials produced by a single manufacturer or fabricator for each kind and condition of glass indicated and composed of primary glass obtained from a single source for each type and class required.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Protect glass and glazing materials during delivery, storage and handling to comply with manufacturer's directions and as required to prevent edge damage to glass, and damage to glass and glazing materials from effects of moisture including condensation, of temperature changes, of direct exposure to sun, and from other causes.

1.06 PROJECT CONDITIONS

A. Environmental Conditions: Do not proceed with glazing when ambient and substrate temperature conditions are outside the limits permitted by glazing material manufacturer or when joint substrates are wet due to rain, frost, condensation or other causes.

1.07 WARRANTY

A. General: Warranties shall be in addition to, and not a limitation of, other rights the Owner may have under the Contract Documents.

B. All material shall be free from manufacturer defects and installation workmanship. Any material or workmanship judged to be defective shall be replaced at no cost to the Owner.

C. Insulating glass units shall be jointly guaranteed for a period of ten (10) years by the manufacturer and installer against obstruction of vision between interior glass surfaces caused by failure of the hermetic seal. Units damaged during guarantee period shall be replaced at no cost to the Owner.

PART 2 PRODUCTS

2.01 ACCEPTABLE GLASS MANUFACTURERS

A. All glass shall be new material, graded under ASTM 1036.

B. All glass in related area shall be from one manufacturer.

2.02 GLASS MATERIALS

A. Refer to Drawings for location of glass.

B. Glass I: Clear Float Glass: ASTM C1036, Type 1 (transparent glass, flat), Class 1 (clear), Quality q3 (glazing select), as manufactured by one of the following:

1. Approved Manufacturers:

a. PPG Industries (800-377-5267)

b. Pilkington North America (800-221-0444)

c. Old Castle Glass, a CRH Company (800-899-8455)

d. Viracon, Inc. (800-533-2080)

e. AGC Flat Glass North America (800-251-0441)

f. Guardian Industries (248-340-1800)

g. Approved Substitution

C. Glass II: Tempered Glass: 1/4", Condition A (uncoated surfaces), Type 1 (transparent glass, flat), Class 1 (clear), Quality q3, clear, fully tempered safety glass.

1. All tempered glass shall conform to ASTM C1048, and Federal Standard CPSC 16 CFR 1201. Tempered glass shall bear permanent monogram indicating tempered quality. Fabrication marks on tempered glass shall be located to be concealed in completed installation.
2. Color: Clear to match aluminum windows glazing, Section 08 51 13.
3. Approved Manufacturers:
    a. PPG Industries (800-377-5267)
    b. Pilkington North America (800-221-0444)
    c. Old Castle Glass, a CRH Company (800-899-8455)
    d. Viracon, Inc. (800-533-2080)
    e. AGC Flat Glass North America (800-251-0441)
    f. Guardian Industries (248-340-1800)

D. Glass III: Coated Low Emissitivity Glass: 1/4", Condition C (other coated glass), Type I (transparent glass, flat), Class I (clear), Quality q3 (glazing select), with coating type and performance characteristics complying with requirements specified below:
1. Low E Coating: Side 2 on insulated units.
2. Approved Manufacturers:
    a. "Sungate 500 Low-E Glass"; PPG Industries (800-377-5267)
    b. "Energy Advantage Low-E"; Pilkington North America (800-221-0444)
    c. "Comfort E2"; AFG Industries, Inc. (800-251-0441)

E. Sealed Insulating Glass Units
1. Approved Manufacturers:
    a. Oldcastle BuildingEnvelope (formally Vistawall) (866-653-2278)
    b. Viracon, Inc. (800-533-2080)
    c. AGC Flat Glass North America (800-251-0441)
2. Provide preassembled units consisting of organically sealed panes of glass enclosing a hermetically sealed dehydrated air space and complying with ASTM E2190 for performance classification indicated as well as with other requirements specified for glass characteristics, air, space, sealing system, sealant, space material, and desiccants.
    a. Total Thickness: 1”
    b. Thickness of Each Pane: 1/4"
    c. Air Space Thickness: 1/2"
    d. Thermal Performance (Full Frame Performance): Maximum Winter U-Value: 0.45 with the SHGC rating of 0.25
    e. Exterior Pane of Glass: Glass Type I or II, tempered in locations shown on Drawings
    f. Interior Pane of Glass: Glass I or III, tempered in locations shown on Drawings.

g. Sealing System: Manufacturer's Standard Dual Seal.

1) Desiccant: Manufacturer's Standard - Either Molecular Sieve or Silica Gel or Blend of Both.

2) Spacer Material: Manufacturer's Standard Metal, with Bronze Anodized Finish.

F. Processed Spandrel Glass

1. Approved Manufacturers:

a. Viracon, Inc. (800-533-2080) or Approved equal.

2. Provide Viracon Solarscreen Monolithic Reflective Spandrel Glass or approved equal.

a. Total Thickness: 1/4" VS2-08 monolithic spandrel glass

b. VS-08 coating on number two surface with polyester opacifier applied to number two surface

c. Glass Ply: 1/4" heat strengthened ASTM C1036 class 2 heat absorbing and light reducing, Quality q3

d. ASTM C1048 condition C, heat strengthened

e. ASTM C1376 coated glass product to be magnetically sputtered vacuum deposited (MSVD)

2.03 MIRRORS

A. Approved Manufacturers:

1. Binswanger Mirror, Division of Vitro America (800-238-6057)

2. Guardian Consolidated, (276-236-5196)

3. Gardner Glass Products (800-334-7267)

B. Mirror glazing "select" quality float glass complying with ASTM C1036 and CPSC 16 CFR 1201, 1/4" thick.

C. Silvering: Provide electro-deposited silvering in two coats.

D. Exposed edges ground smooth and polished.

E. Mirror sizes indicated on the drawings. Extend mirror to within 1" of adjacent walls, on each end, in one piece.

F. Mirror Adhesive System:

1. Approved Manufacturers:

a. Edge Seal:

1) "UC-4401" - PPG Industries Inc., Glass Group; (800-377-5267)

2) "Seal-Kwik Edge Sealer" Gunther Mirror Mastics, a Royal Adhesives and Sealants, LLC Company (800-227-6181)

3) Approved Substitution as recommended by mirror manufacturer.

G. Exposed Mirror Clips:

1. Approved Manufacturers:

a. Top Clip: 9/16” wide x 1-1/4” long; Model No. 318; Knape & Vogt (800-253-1561)

b. Bottom Clip: Continuous low-profile clip at base.

c. Approved substitution

2.04 ELASTOMERIC GLAZING SEALANTS AND PREFORMED GLAZING TAPES

A. General: Provide products of type indicated and complying with the following requirements:

1. Compatibility: Select glazing sealants and tapes of proven compatibility with other materials with which they will come into contact, including glass products, seals of insulating glass units, and glazing channel substrates, under conditions of installation and service, as demonstrated by testing and field experience.

2. Suitability: Comply with recommendations of sealant and glass manufacturers for selection of glazing sealants and tapes which have performance characteristics suitable for applications indicated and conditions at time of installation.

3. Elastomeric Sealant Standard: Provide manufacturer's standard chemically curing, elastomeric sealant of base polymer indicated which complies with ASTM C920 requirements, including those for Type, Grade, Class and Uses.

4. Colors: Provide color of exposed sealants indicated or, if not otherwise indicated, as selected by Owner’s Representative from manufacturer's standard colors.

B. Preformed Butyl-Polyisobutylene Glazing Tape: Provide manufacturer's standard solvent-free butyl-polyisobutylene formulation with a solids content of 100 percent; complying with AAMA A 804.1; in extruded tape form; non-staining and non-migrating in contact with nonporous surfaces; packaged on rolls with a release paper on one side; with or without continuous spacer rod as recommended by manufacturers of tape and glass for application indicated.

C. Sealants: Provide structural and weatherseal sealants recommended by the manufacturer of the glazing system.

1. As manufactured by the following:

a. GE Silicones (800-255-8886)

b. Tremco, Inc., Sealant/Weatherproofing Division, an RPM Company (800-562-2728)

2. Refer to Section 07 92 00 (07920) - for requirements.

D. Spacers, Setting Blocks, Gaskets, and Bond Breakers: Provide the curtain wall manufacturer's permanent nonmigrating types compatible with sealants and suitable for joint movement and sealing requirements.

2.05 MISCELLANEOUS GLAZING MATERIALS

A. Compatibility: Provide materials with proven record of compatibility with surfaces contacted in installation.

B. Cleaners, Primers and Sealers: Type recommended by sealant or gasket manufacturer.

C. Setting Blocks: Neoprene, EPDM or silicone blocks as required for compatibility with glazing sealants, 80 to 90 Shore A durometer hardness.

D. Spacers: Neoprene, EPDM or silicone blocks, or continuous extrusions, as required for compatibility with glazing sealant, of size, shape and hardness recommended by glass and sealant manufacturers for application indicated.

E. Edge Blocks: Neoprene, EPDM or silicone blocks as required for compatibility with glazing sealant, of size and hardness required to limit lateral movement (side-walking) of glass.

F. Compressible Filler Rods: Closed-cell or waterproof-jacketed rod stock of synthetic rubber or plastic foam, flexible and resilient, with 5-10 psi compression strength for 25 percent deflection.

PART 3 EXECUTION

3.01 EXAMINATION: Require Glazier to inspect work of glass framing erector for compliance with manufacturing and installation tolerances, including those for size, squareness, offsets at corners; for presence and functioning of weep system; for existence of minimum required face or edge clearances; and for effective sealing of joinery. Obtain Glazier's written report listing conditions detrimental to performance of glazing work. Do not allow glazing work to proceed until unsatisfactory conditions have been corrected.

3.02 PREPARATION: Clean glazing channels and other framing members to receive glass, immediately before glazing. Remove coatings which are not firmly bonded to substrates. Remove lacquer from metal surfaces where elastomeric sealants are indicated for use.

3.03 GLAZING - GENERAL

A. Comply with combined printed recommendations of glass manufacturers, of manufacturers of sealants, gaskets and other glazing materials, except where more stringent requirements are indicated, including those of referenced glazing standards.

B. Protect glass from edge damage during handling and installation; use a rolling block in rotating glass units to prevent damage to glass corners. Do not impact glass with metal framing. Use suction cups to shift glass units within openings; do not raise or drift glass with a pry bar. Rotate glass with flares or bevels along one horizontal edge which would occur in vicinity of setting blocks so that these are located at top of opening. Remove from project and dispose of glass units with edge damage or other imperfections of kind that, when installed, weakens glass and impairs performance and appearance.

C. Apply primers to joint surfaces where required for adhesion of sealants, as determined by preconstruction sealant-substrate testing.

D. Anchor components securely in place in the manner indicated. Shim and allow for movement resulting from changes in thermal conditions. Provide separators and isolators to prevent corrosion, electrolytic deterioration, and "freeze-up" of moving joints.

E. Glazing: Inspect glass and framing for compliance with manufacturing and installation tolerances, including size, squareness, and offsets at corners; for existence of minimum face or edge clearances; and for effective sealing of joinery.

1. Avoid point loading of glass. Do not proceed with glazing work until unsatisfactory conditions have been corrected. Do not field-cut glass.

2. Field-Glazed Structural Silicone Glazing Work: Clean frames and glass surfaces with an approved solvent. Prime surfaces and apply structural sealant in accordance with manufacturer's recommendations. Clean excess structural sealant before curing. Mechanically hold glass firmly in place until sealant is sufficiently cured. Install compressible backer rods in joint before applying weatherseal sealant.

F. Erection Tolerances: Install curtain wall components plumb, level, accurately aligned, and located in reference to column lines and floor levels. Erection tolerances indicated below are the maximum allowable for both no-load and full-load conditions and are not cumulative. Adjust work to conform to the following tolerances:

1. Plumb: 1/8 inch in 10 feet; 1/4 inch in 40 feet.
2. Level: 1/8 inch in 20 feet; 1/4 inch in 40 feet.
3. Alignment: Limit offset of member alignment to 1/16 inch where surfaces are flush or less than 1/2 inch out of flush and separated by less than 3 inches by protruding work; otherwise limit offsets to 1/8 inch.
4. Location: 3/8 inch maximum deviation from the measured theoretical location of any member at any location.

3.04 GLAZING - INSTALLATION

A. Install setting blocks of proper size in sill rabbet, located one quarter of glass width from each corner, but with edge nearest corner not closer than 6" from corner, unless otherwise required. Set blocks in thin course of sealant which is acceptable for heel bead use.

B. Provide spacers inside and out, of correct size and spacing to preserve required face clearances, for glass sizes larger than 50 united inches (length plus height), except where gaskets or glazing tapes with continuous spacer rods are used for glazing. Provide 1/8" minimum bite of spacers on glass and use thickness equal to sealant width, except with sealant tape use thickness slightly less than final compressed thickness of tape.

C. Provide edge blocking to comply with requirements of referenced glazing standard, except where otherwise required by glass unit manufacturer. Set units of glass in each series with uniformity of pattern, draw, bow and similar characteristics.

D. Provide compressible filler rods or equivalent back-up material, as recommended by sealant and glass manufacturers, to prevent sealant from extruding into glass channel weep systems and from adhering to joints back surface as well as to control depth of sealant for optimum performance, unless otherwise indicated. Force sealants into glazing channels to eliminate voids and to ensure complete "wetting" or bond of sealant to glass and channel surfaces.

3.05 MIRROR - INSTALLATION

A. Do not install mirrors on new plaster, freshly painted walls, or where airborne solvents, heavy-duty cleaners, etc., are in the air. Sub-surfaces shall be allowed to cure for a minimum of 72 hours.

B. Use exposed clips at top and continuous bottom clip at base of mirror.

C. Seal bottom edges of mirror track with clear sanitary sealant. Refer to Section 07 92 00. Allow to dry.

D. Apply adhesive to 60% of back of mirror.

E. Set mirror supported by setting blocks and press against substrate to ensure bond of adhesive.

F. Hold mirror in place until adhesive fully sets.

3.06 PROTECTION AND CLEANING

A. Protect exterior glass from breakage immediately upon installation by use of crossed streamers attached to framing and held away from glass. Do not apply markers to surfaces of glass. Remove nonpermanent labels and clean surfaces.

B. Protect glass from contact with contaminating substances resulting from construction operations. If, despite such protection, contaminating substances do come into contact with glass, remove immediately by method recommended by glass manufacturer.

C. Examine glass surfaces adjacent to or below exterior concrete and other masonry surfaces at frequent intervals during construction, but not less often than once a month, for build-up of dirt, scum, alkali deposits or staining. When examination reveals presence of these forms of residue, remove by method recommended by glass manufacturer.

D. Remove and replace glass which is broken, chipped, cracked, abraded or damaged in other ways during construction period, including natural causes, accidents and vandalism.

E. Wash glass on both faces not more than 4 days prior to date scheduled for inspections intended to establish date of substantial completion.

END OF SECTION

SECTION 09 21 16 - GYPSUM BOARD ASSEMBLIES

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Non-Load Bearing Interior Steel Framing
    a. Suspended and Furred Ceilings
2. Gypsum Board, Screw-Attached to Wood Framing and Furring Members, and Required Accessories
3. Glass-Mat, Mold & Mildew Resistant Interior Wall Panel
4. Tile-Backer Boards
5. Clothes Dryer Recessed Vent Box.

B. Related Sections:

1. Section 01 73 29 – Cutting and Patching.
2. Section 06 10 00 - Rough Carpentry
3. Section 06 20 00 - Finish Carpentry
4. Section 07 20 00 - Thermal Protection
5. Section 07 84 00 - Firestopping
6. Section 07 92 00 – Joint Sealants
7. Section 09 21 16.23 - Gypsum Board Shaft-Wall Assemblies
8. Section 09 30 00 - Tiling
9. Section 09 94 13 - Textured Finishing
10. Section 09 51 23 - Acoustical Tile Ceilings
11. Section 09 90 00 - Painting

1.02 REFERENCES

A. American Iron and Steel Institute (AISI) Publications:

1. “AISI’s Code of Standard Practice for Cold-Formed Steel Structural Framing”
2. "North American Specification for the Design of Cold Formed Steel Structural Members"

B. American National Standards Institute (ANSI) Publications:

1. A108/A118/A136.1 “American National Standards for the Installation of Ceramic Tile”
2. A118.9 “Specifications for Cementitious Backer Units (included in ANSI A108)”

C. ASTM International (ASTM) Publications:

1. A510 “Standard Specification for General Requirements for Wire Rods and Coarse Round Wire, Carbon Steel”
2. A653 “Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process”
3. A641/A641M “Standard Specification for Zinc-Coated (Galvanized) Carbon Steel Wire”

4. A1003/A1003M - 08 Standard Specification for Steel Sheet, Carbon, Metallic- and Nonmetallic-Coated for Cold-Formed Framing Members
5. C475 “Standard Specification for Joint Compound and Joint Tape for Finishing Gypsum Board”
6. C514 “Standard Specification for Nails for the Application of Gypsum Board”
7. C557 “Standard Specification for Adhesives for Fastening Gypsum Wallboard to Wood Framing”
8. C645 “Standard Specification for Nonstructural Steel Framing Members“
9. C754 “Standard Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Panel Products”
10. C834 “Standard Specification for Latex Sealants”
11. C840 “Standard Specification for Application and Finishing of Gypsum Board”
12. C919 “Standard Practice for Use of Sealants in Acoustical Applications”
13. C954 “Standard Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Steel Studs from 0.033 in. to 0.112 in. in Thicknes”
14. C1002 “Standard Specification for Steel Self-Piercing Tapping Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs”
15. C1047 “Standard Specification for Accessories for Gypsum Wallboard and Gypsum Veneer Base”
16. C1177 “Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing”
17. C1178 “Standard Specification for Glass Mat Water-Resistant Gypsum Backing Panel”
18. C1396 “Standard Specification for Gypsum Board”
19. D3273 “Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber”
20. E84 “Standard Test Method for Surface Burning Characteristics of Building Materials”
21. E90 “Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements”
22. E119 “Standard Test Methods for Fire Tests of Building Construction and Materials”
23. E413 “Classification for Rating Sound Insulation”
24. E488 “Standard Test Methods for Strength of Anchors in Concrete and Masonry Elements”
25. E736 “Standard Test Method for Cohesion/Adhesion of Sprayed Fire-Resistive Materials Applied to Structural Members”
26. E 759 “Standard Test Method for Effect of Deflection on Sprayed Fire-Resistive Material Applied to Structural Members”
27. E761 “Standard Test Method for Compressive Strength of Sprayed Fire-Resistive Material Applied to Structural Members”

D. Gypsum Association (GA) Publications:

1. GA-214 “Recommended Levels of Gypsum Board Finish”
2. GA-216 “Application and Finishing Of Gypsum Panel Products”
3. GA-505 for definitions of terms for gypsum board assemblies not defined in this Section

4. GA-600 "Fire Resistance Design Manual"

E. FM Global (FMG):

1. "Approval Guide, Building Products"

F. ICC Evaluation Service Reports:

1. ES-AC86 "Cold-formed Steel Framing Members---Interior Nonload-bearing Wall Assemblies"

G. Underwriters Laboratory (UL):

1. "Fire Resistance Directory"
2. 723 "Test for Surface Burning Characteristics of Building Materials"

H. United States Gypsum Co. (USG):

1. "Gypsum Construction Handbook"

I. U.S. Consumer Product Safety Commission (CPSC):

1. "CPSC Staff Preliminary Evaluation of Drywall Chamber Test Results" by the Lawrence Berkeley National Laboratory (LBNL).

1.03 DEFINITIONS

A. Gypsum Board Construction Terminology: Refer to ASTM C1396 and GA-505 for definitions of terms for gypsum board construction not otherwise defined in this Section or other referenced standards.

1.04 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

B. Product Data: Submit "Letter of Conformance" in accordance with Section 01 33 00 (01330) indicating specified items selected for use in project with the following supporting data.

1. Asbestos Content: Provide written certification that materials contain no asbestos of any type of mixture of types occurring naturally as impurities as determined by polarized light microscopy test per Appendix A of 40 CFR 763 will be utilized on this Project.

1.05 QUALITY ASSURANCE

A. Fire-Resistance Ratings: Where indicated, provide materials and construction which are identical to those of assemblies whose fire-resistance rating has been determined per ASTM E119 by a testing and inspecting organization acceptable to authorities having jurisdiction.

1. Provide fire-resistance-rated assemblies identical to those indicated by reference to GA 600 "Fire Resistance Design Manual", to design designations in U.L. "Fire Resistance Directory", to FMG's "Approval Guide, Building Products", or in listing of other testing and agencies acceptable to authorities having jurisdiction.

B. Single-Source Responsibility for Steel Framing: Obtain steel framing members for gypsum board assemblies from a single manufacturer, unless otherwise indicated.

C. Single-Source Responsibility for Panel Products: Obtain each type of gypsum board and other panel products from a single manufacturer.

D. Single-Source Responsibility for Finishing Materials: Obtain finishing materials from either the same manufacturer that supplies gypsum board and other panel products or from a manufacturer acceptable to gypsum board manufacturer.

E. Sound Transmission Characteristics: For gypsum board assemblies indicated to have STC ratings, provide materials and construction identical to those of assemblies whose STC ratings were determined per ASTM E90 and classified per ASTM E413 by a qualified independent testing agency.

F. Gypsum board products shall contain low or no detectable emissions of hydrogen sulfide or other harmful chemicals as determined according to testing by the U.S. Consumer Product Safety Commission (CPSC)

1.06 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials in original packages, containers, or bundles bearing brand name and identification of manufacturer or supplier.

B. Store materials inside under cover and keep them dry and protected against damage from weather, direct sunlight, surface contamination, corrosion, construction traffic, and other causes. Neatly stack gypsum panels flat to prevent sagging.

C. Handle gypsum board to prevent damage to edges, ends, and surfaces. Do not bend or otherwise damage metal corner beads and trim.

D. Steel framing and related accessories shall be stored and handled in accordance with “AISI’s Code of Standard Practice for Cold-Formed Steel Structural Framing”.

1.07 PROJECT CONDITIONS

A. Environmental Conditions, Gypsum Board, General: Establish and maintain environmental conditions for application and finishing gypsum board to comply with ASTM C840 and with gypsum board manufacturer's recommendations.

B. Room Temperatures: For nonadhesive attachment of gypsum board to framing, maintain not less than 40 deg. F. For adhesive attachment and finishing of gypsum board maintain not less than 50 deg. F. for 48 hours prior to application and continuously thereafter until drying is complete. Do not exceed 95 deg. F when using temporary heat sources.

C. Ventilate building spaces to remove water not required for drying joint treatment materials. Avoid drafts during dry, hot weather to prevent materials from drying too rapidly.

1. Provide adequate ventilation to permit drying during curing.

D. Environmental Conditions, Textured Finish: Comply with manufacturers recommendations as to environmental conditions under which coating can be applied.

1. Maintain temperature at not less than 55 degrees F during installation.

PART 2 PRODUCTS

A. Furring:

1. Steel Rigid Furring Channels: ASTM C645, hat shaped, depth and minimum thickness of base (uncoated) metal to be 0.0179 inch, unless otherwise indicated. Depth of 7/8 inches.

2.02 STEEL FRAMING COMPONENTS FOR SUSPENDED AND FURRED CEILINGS

A. Manufacturers of Grid Suspension Systems

1. Approved Manufacturers:

a. Armstrong World Industries, Inc. (800-442-4212)

b. Chicago Metalic Corp. (800-323-7164)

c. USG Interiors, Inc. (800-950-3839)

B. General: Provide components complying with ASTM C754 for conditions indicated.

C. Grid Suspension System for Interior Ceilings: ASTM C645, manufacturer's standard direct-hung grid suspension system composed of main beams and cross furring members that interlock to form a modular supporting network.

D. Wire for Hangers and Ties: ASTM A641, Class 1 Zinc Coating, Soft Temper, minimum 0.162 inch diameter.

E. Hanger Rods: ASTM A510 mild steel and zinc coated or protected with rust-inhibitive paint. Diameter as indicated.

F. Channels: Cold-rolled steel, 0.0538-inch-minimum thickness of base (uncoated) metal and 1/2-inch-wide flanges, and as follows:

1. Carrying Channels: 2 inches deep, 590 lb. per 1,000 feet, unless otherwise indicated.

2. Furring Channels: 3/4 inch deep, 300 lb. per 1,000 feet, unless otherwise indicated.

3. Finish: G-60 hot-dip galvanized coating per ASTM A653 for framing for toilet rooms and where indicated.

a. Rust-inhibitive paint, unless otherwise indicated.

G. Steel Studs for Furring Channels: ASTM C645, with flange edges bent back 90 deg. and doubled over to form 3/16-inch minimum lip (return), minimum thickness of base (uncoated) metal and minimum depth as follows:

1. Thickness: Minimum 0.0179 inch, unless otherwise indicated.

2. Depth: 1-5/8" inch, unless otherwise indicated.

3. Protective Coating: ASTM A653 or ASTM A1003, G40 Hot-Dip Galvanized Coating.

H. Steel Rigid Furring Channels: ASTM C645, hat-shaped, depth of 7/8 inch, and minimum thickness of base (uncoated) metal as follows:

1. Thickness: Minimum 0.0179 inch, unless otherwise indicated.

2. Protective Coating: G40 Hot-Dip Galvanized Coating per ASTM A653 or ASTM A1003.

I. Steel Resilient Furring Channels: Manufacturer's standard product designed to reduce sound transmission, fabricated from steel sheet complying with ASTM A653 or ASTM A568 to form 1/2-inch-deep channel of the following configuration:

1. Single-Leg Configuration: Asymmetric-shaped channel with face connected to a single flange by a single-slotted leg (web) or hat-shaped channel, with 1-1/2-inch-wide face connected to flanges by double-slotted or expanded-metal legs (webs).

J. Cast-in-Place and Post-installed Anchors in Concrete: Anchors of type indicated below, fabricated from corrosion-resistant materials, with holes or loops for attaching hanger wires, and with capability to sustain, without failure, a load equal to 5 times that imposed by ceiling construction, as determined by testing according to ASTM E488 conducted by a qualified independent testing agency.

1. Post-installed expansion anchor

2.03 GYPSUM BOARD PRODUCTS

A. General: Provide gypsum board of types indicated in maximum lengths available that will minimize joints in each area and correspond with support system indicated.

1. Thickness: Provide gypsum board in widths of 48 inches and thickness indicated or, if not otherwise indicated, in 5/8 inch thickness to comply with ASTM C840 for application system and support spacing indicated.

B. Gypsum Wallboard: ASTM C1396 and as follows:

1. Approved Manufacturers:

a. G-P Gypsum Corporation (800-225-6119)

b. National Gypsum Company. (800-628-4662)

c. United States Gypsum Co. (800-950-3839)

d. CertainTeed Corporation, a subsidiary of Saint-Gobain (800-233-8990)

e. Lafarge North America Inc. (866-349-7786)

f. Temple-Inland Forest Products Corp. - Gypsum Products (800-231-6060)

2. Type: Regular for vertical surfaces, unless otherwise indicated

3. Type: Type X where required for fire-resistance-rated assemblies.

4. Type: Type C where required for sound rated wall assemblies.

5. Type: Sag-resistant Type for Ceiling Surfaces

6. Edges: Tapered and Featured (rounded or beveled) for prefilling. C. Tile-Backer Boards

1. Glass-Mat, Water-Resistant Gypsum Backing Board: ASTM C1178, of type and thickness indicated below:

a. Type and Thickness: Regular, [1/2 inch][5/8-inch] thick, unless otherwise indicated.

b. Type and Thickness: Type X, 5/8 inch thick, where required for fire-resistance-rated assemblies and where indicated.

2. Approved Manufacturers:

a. "Dens-Shield TileGuard"; G-P Gypsum Corporation (800-225-6119)

b. "Diamondback GlasRoc Tile Backer"; CertainTeed Corporation, a subsidiary of Saint-Gobain (800-233-8990)

D. Cement Board: ANSI A118.9.

1. Approved Manufacturers:

a. "DUROCK Cement Board"; United States Gypsum Co (800-950-3839)

b. "Wonderboard"; Custom Building Products (800-272-8786)

c. "PermaBase"; National Gypsum Company. (800-628-4662)

2. Thickness: As shown on Drawings.

2.04 TRIM ACCESSORIES

A. Accessories for Interior Installation: Corner beads, edge trim, and control joints complying with ASTM C1047 and requirements indicated below:

1. Approved Manufacturer

a. "Paper Faced Metal Bead and Trim Series" United States Gypsum Co (800-950-3839)

b. "Goldline Platinum Tape-On Drywall Trims"; Dietrich Metal Framing, Inc., A Worthington Industries Company (412-281-2805)

c. No Substitutions

2. Material: Formed metal combined with paper, with metal complying with the following requirement:

a. Sheet steel zinc-coated by hot-dip process.

3. Shapes indicated below by reference to Fig. 1 designations in ASTM C1047:

a. Cornerbead on outside corners, unless otherwise indicated.

b. LC-bead (J-Bead) with both face and back flanges; face flange formed to receive joint compound. Use LC-beads at exposed panel edges unless otherwise indicated.

c. L-bead with face flange only; face flange formed to receive joint compound. Use L-bead where indicated.

d. U-bead with face and back flanges; face flange formed to be left without application of joint compound. Use U-bead where indicated.

e. One-piece control joint formed with V-shaped slot, with removable strip covering slot opening. Use where indicated.

B. Zinc Accessories for Exterior Installations: Corner beads, edge trim, and control joints formed from rolled zinc complying with ASTM C1047, in shapes indicated below by reference to ASTM C1047:

1. Corner bead on outside corners, unless otherwise indicated.

2. Shape LC-Bead (J-Bead), use at exposed panel edges, unless otherwise indicated.

3. One-piece control joint formed with V-shaped slot, with removable strip covering slot opening. Use where indicated.

A. Clothes Dryer Recessed Vent Box:

1. Approved Manufacturers:

a. "The Dryerbox Model DB-425"; In-O-Vate Technologies, Inc. (888-443-7937)

2. Recessed 22 gage molded steel dryer box for use in providing a receptacle in the wall to house dryer flex transition hose. Dryer Box shall be approved as a UL Through Penetration Firestop receptacle where required for use in fire-rated assemblies.

2.05 JOINT TREATMENT MATERIALS

A. General: Provide materials complying with ASTM C475, ASTM C840, and recommendations of manufacturer of both gypsum board and joint treatment materials for the application indicated.

B. Joint Tape: ASTM C475, 2-inch nominal width, paper reinforcing tape, unless otherwise indicated.

C. Joint Compound for Interior Gypsum Board

1. General: For each coat use formulation that is compatible with other compounds applied on previous or for successive coats. Products shall not contain asbestos.

2. Setting-Type Joint Compounds for Gypsum Board: Factory-packaged, job-mixed, chemical-hardening powder products formulated for uses indicated.

a. Approved Manufacturers:

1) "SHEETROCK Brand DURABOND Setting-Type Joint Compounds"; United States Gypsum Co. (800-950-3839)

2) "SHEETROCK Brand Easy Sand Lightweight Setting-Type Joint Compounds"; United States Gypsum Co. (800-950-3839)

3) "ToughRock Setting Compounds"; G-P Gypsum Corporation (800-225-6119)

4) "ToughRock Sandable Setting Compounds"; G-P Gypsum Corporation (800-225-6119)

5) "Lafarge Rapid Joint Lightweight Setting Compound"; Lafarge North America Inc. (866-349-7786)

6) "ProForm Brand Sta-Smooth Joint Compound"; National Gypsum Company. (800-628-4662)

7) "ProForm Brand Sta-Smooth Lite Joint Compound"; National Gypsum Company. (800-628-4662)

3. Drying Type Joint Compound: Vinyl type factory pre-mixed compound; formulated for uses indicated.

a. Approved Manufacturers:

1) "SHEETROCK Brand All-Purpose Joint Compound"; United States Gypsum Co. (800-950-3839)

2) "SHEETROCK Brand Plus 3 Lightweight All-Purpose Joint Compound"; United States Gypsum Co. (800-950-3839)

3) "ToughRock Ready-Mix All-Purpose Joint Compound"; G-P Gypsum Corporation (800-225-6119)

4) "ToughRock Lightweight Joint Compound"; G-P Gypsum Corporation (800-225-6119)

5) "Lafarge Rapid Coat All Purpose Compound"; Lafarge North America Inc. (866-349-7786)

6) "ProForm Brand All Purpose Joint Compound"; National Gypsum Company. (800-628-4662)

7) "ProForm Lite Ready Mix Joint Compound"; National Gypsum Company. (800-628-4662)

4. Joint Compound for Paper Faced Gypsum Board:

a. Prefilling: At open joints and damaged surface areas, use setting-type taping compound.

b. Embedding and First Coat: For embedding tape and first coat on joints, fasteners, and trim flanges, use setting-type topping, or non-lightweight drying-type all purpose compound.

1) Use setting-type compound for installing paper-faced metal trim accessories.

c. Fill Coat: For second coat, use setting-type, sandable topping or drying-type all purpose compound.

d. Finish Coat: For third coat, use setting-type, sandable topping or drying-type all purpose compound.

e. Skim Coat: For final coat of Level 5 finish, use setting-type, sandable topping or drying-type all purpose compound.

5. Joint Compound for Glass-Mat Faced Gypsum Board:

a. Prefilling: At open joints and damaged surface areas, use setting-type taping compound.

1) For filling joints and treating fasteners of water-resistant gypsum backing board behind base for ceramic tile, use formulation recommended by the gypsum board manufacturer for this purpose.

2) Apply water resistant tile adhesive to all cut or exposed edges, utility holes, and joints including those at wall intersections when installing moisture-resistant gypsum board panels.

b. Embedding and First Coat: For embedding tape and first coat on joints, fasteners, and trim flanges, use setting-type taping compound.

1) Use setting-type compound for installing paper-faced metal trim accessories.

c. Fill Coat: For second coat, use setting-type, sandable topping compound.

d. Finish Coat: For third coat, use setting-type, sandable topping compound.

e. Skim Coat: For final coat of Level 5 finish, use setting-type, sandable topping compound.

2.06 CEMENT BOARD ACCESSORY MATERIALS

A. Fasteners: Provide the kind, type, and size recommended by the cement board manufacturer for the application shown.

B. Joint Reinforcement: 2-inch wide glass fiber, open-weave tape, Durock Type P, as manufactured by United States Gypsum Co., or approved substitution.

C. Joint sealer and joint compound as recommended by manufacturer for the application shown.

2.07 ACOUSTICAL SEALANT

A. Approved Manufacturers:

1. Acoustical Sealant for Exposed and Concealed Joints:

a. Approved Manufacturers:

1) "AC-20 FTR Acoustical and Insulation Sealant"; Pecora Corp. (800-523-6688) / VOC Level: 31 g/L.

2) "SHEETROCK Acoustical Sealant"; United States Gypsum Co. (800-950-3839) / VOC Level: 65 g/L.

B. Latex Acoustical Sealant: Manufacturer's standard nonsag, paintable, nonstaining latex sealant complying with ASTM C834 and the following requirements:

1. Product is effective in reducing airborne sound transmission through perimeter joints and openings in building construction as demonstrated by testing representative assemblies per ASTM E90.

2. Product has flame-spread and smoke-developed ratings of less than 25 per ASTM E84.

2.08 MISCELLANEOUS MATERIALS

A. General: Provide auxiliary materials for gypsum drywall construction which comply with referenced installation standards and the recommendations of the manufacturer of the gypsum board.

B. Laminating Adhesive: Adhesive or joint compound recommended for directly adhering gypsum boards to continuous substrates.

C. Spot Grout: ASTM C475, setting-type joint compound of type recommended for spot grouting hollow metal door frames.

D. Fastening Adhesive for Wood: ASTM C557.

E. Fastening Adhesive for Metal: Special adhesive recommended for attaching gypsum panels to steel framing.

F. Steel drill screws complying with ASTM C1002 for the following applications:

1. Fastening gypsum board to steel members less than 0.03 inch thick.

2. Fastening gypsum board to wood members.

3. Fastening gypsum board to gypsum board.

G. Steel drill screws complying with ASTM C954 for fastening gypsum board to steel members from 0.033 to 0.112 inch thick.

H. Gypsum Board Nails: ASTM C514.

I. Water: All water used in joint system shall be clean and free from deleterious amounts of foreign material.

J. Other Materials: All other materials not specifically described but required for a complete and proper installation of gypsum drywall shall be as selected by the Contractor, subject to approval by the Owner's representative.

a. Factory-Finished Edge Straightness: Plus or minus 1/8 inch.

b. Plane Surface Straightness: Plus or minus 1/8 inch.

c. Overall Assembled Length and Width: Plus or minus 1/8 inch per 10 feet .

d. Chords, Radii, and Diameters: Plus or minus 1/8 inch.

e. Squareness: Not more than 1/4-inch difference between diagonals in 16 sq. ft.

PART 3 EXECUTION

3.01 EXAMINATION

A. Examine substrates with Installer present, to which gypsum board assemblies attach or abut, installed hollow metal frames, cast-in-anchors, and structural framing, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of assemblies specified in this Section. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.02 CEILING ANCHORAGES

A. Coordinate installation of ceiling suspension systems with installation of overhead structural assemblies to ensure that inserts and other provisions for anchorages to building structure have been installed to receive ceiling hangers that will develop their full strength and at spacing required to support ceilings.

3.03 APPLICATION AND FINISHING OF GYPSUM BOARD, GENERAL

A. Gypsum Board Application and Finishing Standards: Install and finish gypsum board to comply with ASTM C840 and GA-216.

B. Install sound attenuation blankets where indicated, prior to gypsum board unless readily installed after board has been installed on one side.

C. Locate exposed end-butt joints as far from center of walls and ceilings as possible and stagger not less than 24 inches in alternate courses of board.

D. Install ceiling boards across framing in the manner which minimizes the number of end-butt joints and which avoids end joints in the central area of each ceiling. Stagger end joints at least 24 inches, but not less than one framing member.

E. Install wall/partition boards in manner which minimizes the number of end-butt joints or avoids them entirely where possible. At stairwells and similar high walls, install boards horizontally with end joints staggered over studs. Gypsum boards shall extend tight to floors and ceilings with no gaps.

F. Install exposed gypsum board with face side out. Do not install imperfect, damaged, or damp boards. Butt boards together for a light contact at edges and ends with not more than 1/16 inch open space between boards. Do not force into place.

G. Locate either edge or end joints over supports, except in horizontal applications where intermediate supports or gypsum board back-blocking is provided behind end joints. Position boards so that like edges abut, tapered edges against tapered edges and mill-cut or field-cut ends against mill-cut or field-cut ends. Do not place tapered edges against cut edges or ends. Stagger vertical joints over different studs on opposite sides of partitions.

H. Attach gypsum board to steel studs so that leading edge or end of each board is attached to open (unsupported) edge of stud flanged first.

I. Attach gypsum board to supplementary framing and blocking provided for additional support at openings and cutouts.

J. Form control joints and expansion joints at locations indicated, with space between edges of boards, prepared to receive trim accessories. If not shown on Drawings, control joints shall be installed as follows, in locations as approved by Architect:

1. A control joint shall be installed where a partition, wall, or ceiling traverses a construction joint (expansion, seismic, or building control element) in the base building structure.

2. Control joints shall be installed where a wall or partition runs in an uninterrupted straight plane exceeding 30 linear feet.

3. Control joints in interior ceilings with perimeter relief shall be installed so that linear dimensions between control joints do not exceed 50 feet and total area between control joints does not exceed 2500 sq. ft.

4. Control joints in interior ceilings without perimeter relief shall be installed so that linear dimensions between control joints do not exceed 30 feet and total area between control joints does not exceed 900 sq. ft.

5. A control joint or intermediate blocking shall be installed where ceiling framing members change direction.

K. Where a control joint occurs in an acoustical or firerated system, blocking shall be provided behind the control joint by using a backing material consisting of 5/8" type X gypsum board.

L. Isolate perimeter of non-load-bearing drywall partitions at structural abutments. Provide 1/4 inch to 1/2 inch space and trim edge with "U" bead edge trim. Seal joints with acoustical sealant.

M. Where STC-rated gypsum board assemblies are indicated, seal construction at perimeters, control and expansion joints, openings and penetrations with a continuous bead of acoustical sealant including a bead at both faces of partitions. Comply with ASTM C919 and manufacturer's recommendations for location of edge trim and close off sound-flanking paths around or through construction, including sealing of partitions above acoustical ceilings.

N. Space fasteners in gypsum boards in accordance with referenced gypsum board application and finishing standard and manufacturer's recommendations.

3.04 INSTALLATION - GYPSUM BOARD

A. Single-Layer Application: Install gypsum wallboard as follows:

1. On ceilings, apply gypsum board prior to wall/partition board application to the greatest extent possible, and at right angles to framing, unless noted otherwise.

2. On partitions/walls, apply gypsum board vertically (parallel to framing), unless otherwise indicated, and provide sheet lengths which will minimize end joints.

B. Multi-layer Application: Install gypsum backing board for base layer and gypsum wallboard for face layer.

1. On ceilings, apply base layer prior to applying base layer on walls/partitions; apply face layers in same sequence. Offset face-layer joints one framing member, but not less than 16 inches from parallel base-layer joints. Apply base layers at right angles to framing members unless otherwise indicated.

2. On partitions/wall, apply base layer and face layers vertically (parallel to framing) with joints of base layer over supports and face layer joints offset at least, one stud or furring member, not less than 10 inches with base layer joints.

3. On Z-furring members, apply base layer vertically (parallel to framing) and face layer either vertically (parallel to framing) or horizontally (perpendicular to framing) with vertical joints offset at least one furring member. Locate edge joints of base layer over furring members.

C. Single-Layer Fastening Methods: Apply gypsum boards to supports with steel drill screws.

D. Multi-Layer Fastening Methods: Apply base layer of gypsum board and face layer to base layer as follows:

1. Fasten both base layers and face layers separately to supports with screws.

E. Direct-Bonding (Laminating) to Substrate: Where gypsum panels are indicated as directly adhered to a substrate (other than studs, joists, furring members or base layer of gypsum board), comply with gypsum board manufacturer's recommendations, and temporarily brace or fasten gypsum panels until fastening adhesive has set.

F. Install gypsum wallboard panels with tapered edges taped and finished to produce a flat surface except at showers, tubs, and other locations indicated to receive water-resistant panels.

G. Wall Tile Substrates: For substrates indicated to receive thin-set ceramic tile and similar rigid applied wall finishes, comply with the following:

1. Install water-resistant Tile-Backer Board panels at all areas to receive tile.

2. Tile Backing Panels:

a. Glass-Mat, Water-Resistant Backing Panel: Comply with manufacturer's written installation instructions and install at [showers, tubs, indoor pools, and where indicated] [locations indicated to receive tile]. Install with ¼ inch gap where panels abut other construction or penetrations.

b. Cementitious Backer Units: ANSI A108.11, at [showers, tubs, indoor pools, and where indicated] [locations indicated to receive tile].

c. Guestroom Bath Areas Not Subject to Wetting: Install Glass-Mat, Mold & Mildew Resistant Interior Wall Panel to product a flat surface except at locations to receive water-resistant backing panels.

d. All Other Areas Not Subject to Wetting: Install standard gypsum wallboard panels to product a flat surface, except at locations to receive water-resistant backing panels or Glass-Mat, Mold & Mildew Resistant Wall Panels.

e. Where tile backing panels abut other types of panels in the same plane, shim surface to produce a uniform plane across panel surfaces.

3.05 INSTALLATION - TRIM ACCESSORIES

A. General: Where feasible, use the same fasteners to anchor trim accessory flanges as required to fasten gypsum board to the supports. Otherwise, fasten flanges to comply with manufacturer's recommendations.

B. Install corner beads at external corners.

C. Install edge trim where edge of gypsum panels would otherwise be exposed or semi-exposed. Provide edge trim type with face flange formed to receive joint compound except where other types are indicated.

D. Install edge trim where edge of gypsum board would otherwise be exposed or semi-exposed. Provide edge trim-type with face flange to receive joint compound except where other types are indicated.

1. Install "LC" bead where gypsum panels are tightly abutted to other construction and back flange can be attached to framing or supporting substrate.

2. Install "L" bead where edge trim can only be installed after gypsum board is installed.

3. Install U-type trim where edge is exposed, revealed, gasketed, or sealant-filled (including expansion joints).

3.06 FINISHING OF GYPSUM BOARD ASSEMBLIES

A. General: Apply joint treatment at gypsum board joints (both directions), flanges of corner bead, edge trim, and control joints, penetrations, fastener heads, surface defects and elsewhere as required to prepare work for decoration and level of gypsum board finish indicated.

1. Prefill open joints, rounded or beveled edges, and damaged areas, using setting-type joint compound.

2. Apply joint tape over gypsum board joints except those with trim accessories having concealed face flanges not requiring taping to prevent cracks from developing in joint treatment at flange edges.

B. Levels of Gypsum Board Finish: Provide the following levels of gypsum board finish per GA-214.

1. Level 1 for ceiling plenum areas, concealed areas, and where indicated, unless a higher level of finish is required for fire-resistive-rated assemblies and sound-rated assemblies.

2. Level 2 where water-resistant gypsum backing board panels form substrates for tile, and where indicated.

3. Level 4 for gypsum board surfaces indicated to receive light-textured finishes, wallcoverings, and flat paints over light textures.

4. Level 4 for gypsum board surfaces indicated to receive gloss and semi-gloss enamels, nontextured flat paints, and where indicated.

C. For Level 4 gypsum board finish, embed tape in finishing compound plus two separate coats applied over joints, angles, fastener heads, and trim accessories using one of the following combinations of joint compounds (not including prefill), and sand between coats and after last coat.

D. Where Level 5 gypsum board finish is indicated, apply joint compound combination specified for Level 4 plus a thin, uniform skim coat of joint compound over entire surface. Use joint compound specified for the finish (third coat) or a product specially formulated for this purpose and acceptable to gypsum board manufacturer. Produce surfaces free of tool marks and ridges ready for decoration of type indicated.

E. Where Level 2 gypsum board finish is indicated, apply joint specified for first coat in addition to embedding coat.

F. Where Level 1 gypsum board finish is indicated, apply joint compound specified for embedding coat.

G. Allow not less than 24 hours drying time between coats.

H. Glass-Mat Gypsum Interior Wall Panel:

1. Finish according to manufacturer's written instructions for use in interior applications.

3.07 CEMENT BOARD FINISHING

A. Seal cement board per manufacturer's recommendations.

B. Embed fiberglass reinforcement tape over joints and treat fasteners with joint compound as specified in Paragraph 3.11.

C. Do not apply joint treatment over unsealed board.

D. Apply skim coating of “Durabond 210 Joint Compound” by United States Gypsum Co, or approved substitution, over entire cement board surface. All joints, fasteners, and imperfections shall be covered provide smooth level surface for final finish.

3.08 ADJUST AND CLEAN

A. Cut, patch, repair, and point-up gypsum board as required. Repair cracks and indented surfaces.

B. Promptly remove compound from door frames, windows, and other surfaces. Repair floors, walls, and other surfaces which have been stained, marred, or otherwise damaged during the framing and gypsum board work. Daily remove unused materials, containers, and equipment. Clean floors of all gypsum board and wood debris and leave broom clean.

C. Clean spilled or splattered materials from adjacent surfaces not to be coated, immediately before coating has achieved an initial set. Do not scratch or damage adjacent finished surfaces.

3.09 PROTECTION

A. Provide final protection and maintain conditions, in a manner suitable to installer, which ensures gypsum drywall construction being without damage or deterioration at time of Substantial Completion.

END OF SECTION

SECTION 09 21 16.23 - GYPSUM BOARD SHAFT WALL ASSEMBLIES

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Shaft Enclosures
2. Chase Enclosures
3. Stair Enclosures

B. Related Sections:

1. Section 07 84 00 - Firestopping
2. Section 07 92 00 – Joint Sealants
3. Section 09 21 16 - Gypsum Board Assemblies
4. Section 09 90 00 - Painting

1.02 DEFINITIONS

A. Gypsum Board Construction Terminology: Refer to ASTM C1396 for definitions of terms for gypsum board construction not defined in this Section or in other referenced standards.

1.03 REFERENCES

A. ASTM International (ASTM) Publications:

1. A653 "Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process"
2. C442 “Standard Specification Gypsum Backing Board, Gypsum Coreboard, and Gypsum Shaftliner Board”
3. C475 “Standard Specification for Joint Compound and Joint Tape for Finishing Gypsum Board”
4. C645 “Standard Specification for Nonstructural Steel Framing Members“
5. C754 “Standard Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Panel Products”
6. C834 “Standard Specification for Latex Sealants”
7. C840 “Standard Specification for Application and Finishing of Gypsum Board”
8. C919 “Standard Practice for Use of Sealants in Acoustical Applications
9. C954 “Standard Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Steel Studs from 0.033 in. to 0.112 in. in Thickness”
10. C1002 “Standard Specification for Steel Self-Piercing Tapping Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs”
11. C1047 “Standard Specification for Accessories for Gypsum Wallboard and Gypsum Veneer Base”
12. C1278 “Standard Specification for Fiber-Reinforced Gypsum Panel"
13. C1325 “Standard Specification for Non-Asbestos Fiber-Mat Reinforced Cement Interior Substrate Sheets”
14. C1396 “Standard Specification for Gypsum Board”

15. D3273 "Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber"
16. E72 “Standard Test Methods of Conducting Strength Tests of Panels for Building Construction”
17. E84 “Standard Test Method for Surface Burning Characteristics of Building Materials”
18. E90 “Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements”
19. E119 "Standard Test Methods for Fire Tests of Building Construction and Materials"
20. E413 “Classification for Rating Sound Insulation”

B. FM Global (FM) Standards:
1. "Approval Guide, Building Products"

C. Underwriters Laboratory (UL):
1. "Fire Resistance Directory"
2. UL 723 “Test for Surface Burning Characteristics of Building Materials”

D. United States Gypsum Co. (USG):
1. "Gypsum Construction Handbook"

E. U.S. Consumer Product Safety Commission (CPSC):
1. “CPSC Staff Preliminary Evaluation of Drywall Chamber Test Results” by the Lawrence Berkeley National Laboratory (LBNL).

1.04 PERFORMANCE REQUIREMENTS

A. Structural Performance:
1. Provide gypsum board shaft-wall assemblies capable of withstanding the full air-pressure loads indicated for maximum heights of partitions without failing and while maintaining an airtight and smoke-tight seal. Evidence of failure includes deflections exceeding limits indicated, bending stresses causing studs to break or to distort, and end-reaction shear causing track (runners) to bend or to shear and studs to become crippled.

1.05 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

B. Product Data: Submit “Letter of Conformance” in accordance with Section 01 33 00 indicating specified items selected for use in project with the following supporting data.
1. Fire-Test-Response Reports: From a qualified independent testing and inspecting agency substantiating each gypsum board shaft-wall assembly's required fire-resistance rating.
a. Include data substantiating that elevator entrances and other items that penetrate each gypsum board shaft-wall assembly do not negate fire-resistance rating.

1.06 QUALITY ASSURANCE

A. Fire-Resistance Ratings: Where indicated, provide materials and construction which are identical to those of assemblies whose fire-resistance rating has been determined per ASTM E119 by a testing and inspecting organization acceptable to authorities having jurisdiction.
1. Provide fire-resistance-rated assemblies identical to those indicated by reference to GA 600 "Fire Resistance Design Manual", to design designations in U.L. "Fire Resistance

Directory", to FMG's "Approval Guide, Building Products", or in listing of other testing and agencies acceptable to authorities having jurisdiction.

B. Sound Transmission Characteristics: For gypsum board shaft-wall assemblies indicated to have STC ratings, provide assembly materials and construction complying with requirements of assemblies whose STC ratings were determined per ASTM E90 and classified per ASTM E413 by a qualified independent testing agency.

C. Gypsum board products shall contain low or no detectable emissions of hydrogen sulfide or other harmful chemicals as determined according to testing by the U.S. Consumer Product Safety Commission (CPSC)

1.07 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials in original packages, containers, and bundles bearing brand name and identification of manufacturer or supplier.

B. Store materials inside under cover and keep them dry and protected against damage from weather, direct sunlight, surface contamination, corrosion, construction traffic, and other causes. Stack gypsum panels flat on leveled supports off the ground to prevent sagging.

C. Handle gypsum board to prevent damage to edges, ends, and surfaces. Do not bend or otherwise damage metal corner beads and trim.

1.08 PROJECT CONDITIONS

A. Comply with requirements for environmental conditions, room temperatures, and ventilation specified in Section 09 21 16 (09255) - Gypsum Board Assemblies.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Approved Manufacturers:

1. G-P Gypsum Corporation (800-225-6119)
2. National Gypsum Company, Gold Bond Building Products Div. (800-628-4662)
3. United States Gypsum Co. (800-950-3839)
4. CertainTeed Corporation, a subsidiary of Saint-Gobain (800-233-8990)
5. Temple-Inland Forest Products Corp. - Gypsum Products (800-231-6060)

2.02 ASSEMBLY MATERIALS

A. General: Provide materials and components complying with requirements of fire-resistance-rated assemblies indicated.

1. Provide panels in maximum lengths available to eliminate or minimize end-to-end butt joints.
2. Provide auxiliary materials complying with gypsum board shaft-wall assembly manufacturer's written recommendations.

B. Steel Framing: Comply with ASTM C645 requirements for metal and ASTM C754 for conditions indicated.

1. Protective Coating: G40 (Z120) hot-dipped galvanized steel, complying with ASTM A1003 or ASTM A653, or equivalent corrosion resistant coating. A40 gavannealed products are not acceptable.

2. Studs: Manufacturer's standard profile for repetitive members and corner and end members and for fire-resistance-rated assembly indicated.

   a. Thickness: Minimum base metal (uncoated) thickness shall be 0.0179 inch, unless otherwise indicated.

   b. Depth: As shown on Drawings.

3. Runners (Tracks):

   a. Depth: J-Profile track with manufacturer's standard long leg length, but at least 2-inches long and matching studs in depth.

   b. Thickness: Track thickness to match wall stud thickness, unless otherwise indicated.

   c. Provide firestop track at locations as shown on Drawings.

4. Jamb Struts: Manufacturer's standard J-profile strut with long-leg length of 3 inches, in depth matching studs, and not less than 0.0329 inch thick.

C. Gypsum Shaft-Liner Panels:

1. Acceptable Manufacturer:

   a. "Dens-Glass Ultra Shaftliner"; G-P Gypsum Corporation

   b. "Sheetrock Gypsum Liner Panels – Mold Tough"; United States Gypsum Co

   c. "GreenGlass Liner Panels"; Temple-Inland Forest Products Corp. - Gypsum Products (800-231-6060)

2. Type "X" or "SLX", 1" thick water resistant gypsum core surfaced with coated glass mat facings that resist growth of mold and mildew and does not support fungus growth per ASTM D3273 "Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber".

D. Gypsum Wallboard: ASTM C1396, core type as required by fire-resistance-rated assembly indicated.

1. Refer to Section 09 21 16 - Gypsum Board Assemblies

E. Accessories: Cornerbead, edge trim, and control joints of material and shapes specified in Section 09 21 16 - Gypsum Board Assemblies, that comply with gypsum board shaft- wall assembly manufacturer's written recommendations for application indicated.

F. Gypsum Wallboard Joint-Treatment Materials: ASTM C475 and as specified in Section 09 21 16 - Gypsum Board Assemblies.

G. Steel Drill Screws: ASTM C1002, unless otherwise indicated.

1. Use screws complying with ASTM C954 for fastening panels to steel members from 0.033 to 0.112 inch thick.

H. Track (Runner) Fasteners: Power-driven fasteners of size and material required to withstand loading conditions imposed on shaft-wall assemblies without exceeding allowable design stress of track, fasteners, or structural substrates in which anchors are embedded.

I. Acoustical Sealant: As specified in Section 09 21 16 - Gypsum Board Assemblies.

2.03 GYPSUM BOARD SHAFT WALL

A. Basis-of-Design Product: As indicated on Drawings by design designation of a qualified testing and inspecting agency.

B. Deflection Limit: L/360

C. STC Rating: As indicated on Drawings.

PART 3 EXECUTION

3.01 EXAMINATION

A. Examine substrates to which gypsum board shaft-wall assemblies attach or abut, with Installer present, including hollow-metal frames, elevator hoistway door frames, cast-in anchors, and structural framing. Examine for compliance with requirements for installation tolerances and other conditions affecting performance. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 INSTALLATION

A. General: Install gypsum board shaft-wall assemblies to comply with requirements of fire-resistance-rated assemblies indicated, manufacturer's written installation instructions, and the following:

1. ASTM C754 for installing steel framing.
2. Section 09 21 16 - Gypsum Board Assemblies, for applying and finishing panels.

B. Do not bridge building expansion joints with shaft-wall assemblies; frame both sides of joints with furring and other support.

C. Install supplementary framing in gypsum board shaft-wall assemblies around openings and as required for blocking, bracing, and support of gravity and pullout loads of fixtures, equipment, services, heavy trim, furnishings, and similar items that cannot be supported directly by shaft-wall assembly framing.

1. At elevator hoistway door frames, provide jamb struts on each side of door frame.
2. Where handrails directly attach to gypsum board shaft-wall assemblies, provide galvanized steel reinforcing strip, accurately positioned and secured behind at least 1 face-layer panel. Size of reinforcing plate as shown on Drawings.

D. Integrate stair hanger rods with gypsum board shaft-wall assemblies by locating cavity of assemblies where required to enclose rods.

E. At penetrations in shaft wall, maintain fire-resistance rating of shaft-wall assembly by installing supplementary steel framing around perimeter of penetration and fire protection behind boxes containing wiring devices, elevator call buttons, elevator floor indicators, and similar items.

F. Isolate gypsum finish panels from building structure to prevent cracking of finish panels while maintaining continuity of fire-rated construction.

G. Install control joints to maintain fire-resistance rating of assemblies.

H. Seal gypsum board shaft walls with acoustical sealant at perimeter of each assembly where it abuts other work and at joints and penetrations within each assembly. Install acoustical sealant to withstand dislocation by air-pressure differential between shaft and external spaces; maintain an airtight and smoke-tight seal; and comply with manufacturer's written instructions or ASTM C919, whichever is more stringent.

I. In elevator shafts where gypsum board shaft-wall assemblies cannot be positioned within 2 inches of the shaft face of structural beams, floor edges, and similar projections into shaft, install 5/8-inch-thick, gypsum board cants covering tops of projections.

1. Slope cant panels at least 75 degrees from horizontal. Set base edge of panels in adhesive and secure top edges to shaft walls at 24 inches o.c. with screws fastened to shaft-wall framing.
2. Where steel framing is required to support gypsum board cants, install framing at 24 inches o.c. and extend studs from the projection to the shaft-wall framing.

END OF SECTION

SECTION 09 30 00 - TILING

PART 1 PRODUCTS

1.01 SUMMARY

A. Section Includes:

1. Floor and Wall Tile and Accessories
2. Crack Suppression Membrane
3. Leveling Coat, Mortar, Grouts, and Adhesives
4. Shower Pan Liners
5. Thresholds

B. Related Sections:

1. Section 03 30 00 – Cast-In-Place Concrete
2. Section 07 92 00 – Joint Sealants
3. Section 09 21 16 - Gypsum Board Assemblies

1.02 REFERENCES

A. Tile Council of North America, Inc. (TCNA):

1. "Hand Book for Ceramic, Glass, and Stone Tile Installation", 2011 Edition or later.

B. American National Standards Institute (ANSI)

1. A108/A118/A136.1 - “American Standard Specification for the Installation of Ceramic Tile”.
2. A108.5 - Ceramic Tile Installed with Dry-Set Portland Cement Mortar.
3. A108.6 - Specifications for Ceramic Tile Installed with Chemical-Resistant, Water-Cleanable Tile-Setting and -Grouting Epoxy
4. A108.10 - Specifications for Installation of Grout in Tilework.
5. A118 - Latex-Portland Cement Mortar4
6. A118.1 - Dry-Set Portland Cement Mortar
7. A118.3 - Chemical-Resistant, Water-Cleanable, Tile-Setting and -Grouting Epoxy and Water-Cleanable Tile-Setting Epoxy Adhesive
8. A118.4 – “Latex-Portand Cement Mortar”
9. A118.7 – “Polymer Modified Cement Grouts”
10. A118.12 “Crack Isolation Membranes for Thin-set Ceramic Tile and Dimension Stone Installation”
11. A136.1 - Organic Adhesives for Installation of Ceramic Tile
12. A137.1 - Recommended Standard Specifications for Ceramic Tile

C. ASTM International (ASTM) Publications: (Former American Society for Testing and Materials)

1. C241 “Standard Test Method for Abrasion Resistance of Stone Subjected to Foot Traffic”
2. C503 “Standard Specification for Marble Dimension Stone (Exterior)”

3. C627 “Standard Test Method for Evaluating Ceramic Floor Tile Installation Systems Using the Robinson-Type Floor Tester”

4. C1028 “Standard Test Method for Determining the Static Coefficient of Friction of Ceramic Tile and Other Like Surfaces by the Horizontal Dynamometer Pull-Meter Method”

D. International Organization for Standards (ISO) Publications:

1. ISO 13007-1, “Ceramic tiles -- Grouts and adhesives -- Part 1: Terms, definitions and specifications for adhesives”

2. ISO 13007-2, “Ceramic tiles -- Grouts and adhesives -- Part 2: Test methods for adhesives”

3. ISO 13007-3, “Ceramic tiles -- Grouts and adhesives -- Part 3: Terms, definitions and specifications for grouts”

4. ISO 13007-4, “Ceramic tiles -- Grouts and adhesives -- Part 4: Test methods for grouts”

1.03 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

B. Product Data: Submit “Letter of Conformance” in accordance with Section 01 33 00 indicating specified items selected for use in project with the following supporting data.

1.04 DEFINITIONS

A. Large Format Tiles (LFT): 8-inches x 8-inches or greater tile size.

B. Wet Area: Includes tile surfaces that are either soaked, saturated, or regularly and frequently subjected to moisture such as tub enclosures, showers, swimming pools, commercial kitchens and exterior areas.

1.05 QUALITY ASSURANCE

A. In addition to complying with all pertinent codes and regulations, conform to ANSI A108/A118/A136.1 – “American Standard Specification for the Installation of Ceramic Tile” and ISO Classifications for Ceramic Tiles, Grouts and Adhesives.

B. A single manufacturer shall produce all tiles and accessories.

C. Provide surface preparation products in combination with crack isolation and waterproof, setting mortar, and grout from a single manufacturer to provide a single source system warranty.

D. Performance Requirements:

1. Static Coefficient of Friction: For tile installed on walkway surfaces, provide products with the following values as determined by testing identical products per ASTM C1028:

a. All horizontal Surfaces: Minimum 0.6 Wet

b. Step Treads: Minimum 0.6. Wet

1.06 DELIVERY, STORAGE, AND HANDLING:

A. Deliver packaged materials and store in original containers with seals unbroken and labels intact until time of use in accordance with manufacturer's directions. Protect adhesives from freezing or overheating in accordance with manufacturer's instructions.

B. Comply with ANSI A137.1 for labeling sealed tile packages.

C. Prevent damage or contamination to materials by water, freezing, foreign matter, and other causes.

1.07 PROJECT CONDITIONS

A. Substrate shall be prepared to receive new tile in a manner acceptable to the tile manufacturer; and in accordance with ANSI Standard Installation Specification A108.1 through A108.13; and TCNA's "Handbook for Ceramic, Glass, and Stone Tile Installation".

B. Environmental Limitations: Do not install tile until construction in spaces is completed and ambient temperature and humidity conditions are being maintained to comply with referenced standards and manufacturer's written instructions.

1.08 EXTRA MATERIALS

A. Refer to Section 01 78 43 (01790)

PART 2 PRODUCTS

2.01 FLOOR AND WALL TILE

A. Approved Manufacturers:

1. Ceramic Technics Ltd. (770-740-0050)
2. Crossville, Inc. (931-484-2110)
3. Dal-Tile Corporation (630-789-1479)

B. Floor Tile: Refer to Interior Finish Index

C. Wall Tile: Refer to Interior Finish Index

D. Tile Base and Accessories: Provide special shapes such as bull-nose edges and other accessories as required, to match wall tile.

1. Provide matching bull-nose tile at all exposed edges.

2.02 CRACK SUPPRESSION MEMBRANE

A. Approved Manufacturers:

1. Sheet Membrane:

a. "Dal-Seal TS", Dal-Tile (800-933-Tile).

b. "Laticrete 170 Sound & Crack Isolation Mat"; Laticrete International Inc. (800-243-4788).

c. "Mapeguard 2, Crack Isolation and Sound Control"; Mapei Corp. (800-426-2734).

d. "ECB Green Anti-Fracture Membrane" National Applied Construction Products, Inc., (800-633-4622).

e. "Nobleseal CIS Crack Isolation Sheet", The Noble Co., (800-878-5788).

f. "TEC Hydraflex Waterproofing Crack IsolationMembrane", TEC Specialty Products, H.B. Fuller Construction Products, Inc. (800-832-9023).

B. General: Product that complies with ANSI A118.12 and is recommended by the manufacturer for the application indicated. Include reinforcement and accessories recommended by manufacturer.

D. Provide self-bonding elastomeric membrane capable of heavy-duty service per ASTM C627. Liquid-applied products will not be allowed.

E. Primer: As required by the membrane manufacturer.

F. Furnish in 12 inch and 36 inch wide sheets in lengths required.

2.03 LEVELING COAT

A. Concrete Leveling and Patching Compounds:

1. Verify with manufacturer of the setting materials that the product utilized is compatible with their products.

2. For areas up to 4 square feet:

a. Feather finish, use to smooth ridges, fill cracks, gouges and joints.

1) "SD-F"; Ardex (724-203-5000)

2) “Planiprep FF”; Mapei Corp. (800-426-2734)

3) “Versa Patch”; TEC Specialty Products, H.B. Fuller Construction Products, Inc. (800-832-9023)

b. Trowelable underlayment patch for thickness from feather edge to 3 inch without aggregate

1) “Quickpatch”; Mapei Corp. (800-426-2734)

2) “Fast Set Deep Patch”; TEC Specialty Products, H.B. Fuller Construction Products, Inc. (800-832-9023)

c. Trowelable underlayment patch for thickness up to ½ inch without aggregate; up to 1 inch with aggregate. Can be feather edged.

1) "SD-P/ Primer P-82"; Ardex (724-203-5000)

3. For areas exceeding 4 square feet:

a. Self-leveling, pourable or pumpable underlayment for thicknesses up to 5 inches. Can be feather edged. Must be installed a minimum of 1/4 inch.

1) "K-15/Primer P-51"; Ardex (724-203-5000)

2) “Novoplan 2/Primer”; Mapei Corp. (800-426-2734) (Note: Refer to product datasheet for specific requirements based on substrates).

3) “EZ Level TA-323/Multi Purpose Primer”; TEC Specialty Products, H.B. Fuller Construction Products, Inc. (800-832-9023)

B. Maximum variation in surface of leveling coat shall not exceed 1/8" in 8'-0" from required plane.

C. Leveling coat shall be cured at least 24 hours before tile is applied.

D. Surface to which leveling coat is to be applied shall be free of any coatings, oil, and wax.

2.04 MORTAR MATERIALS: FLOOR TILE

A. Approved Manufacturers:

1. Bonsal America, Inc., A division of Oldcastle APG (800-738-1621)

2. Custom Building Products (800-272-8786)

3. Hydroment (Bostick Findley,Inc.) (800-523-2678)
4. Laticrete International Inc. (800-243-4788)
5. Mapei Corp. (800-426-2734)
6. TEC Specialty Products, H.B. Fuller Construction Products, Inc. (800-832-9023)
7. Ardex (724-203-5000)

C. Acceptable Products: Refer to Setting and Grout Material Schedule at end of this Section.

D. Bond Coat: Thin Set Mortar with Polymer or Acrylic/Latex Additive

2.05 WALL ADHESIVE MATERIALS - CERAMIC TILE – MASTIC TYPE

A. High strength latex-based, non-flammable adhesive formulated to meet or exceed the requirements of ANSI A136.1, Type 1 and ISO 13007 D2TE.

B. Gypsum Wallboard:

1. Approved Manufacturers:
   a. Bonsal America, Inc., A division of Oldcastle APG (800-738-1621)
   b. Custom Building Products (800-272-8786)
   c. Hydroment (Bostick Findley,Inc.) (800-523-2678)
   d. Laticrete International Inc. (800-243-4788)
   e. Mapei Corp. (800-426-2734)
   f. TEC Specialty Products, H.B. Fuller Construction Products, Inc. (800-832-9023)
   g. Ardex (724-203-5000)
2. Acceptable Products: Refer to Setting and Grout Material Schedule at end of this Section.

2.06 GROUT MATERIALS

A. Latex Portland Cement Grout consisting of mortar with an acrylic latex or polymer epoxy additive. Use in conformance with ANSI A108.5 and ANSI A108.10 Materials shall conform to ANSI A118.3 and ANSI A118.7.

1. Color as shown on Interior Finish Index.

B. Avendra, LLC Preferred Manufacturers:

1. None

C. Approved Manufacturers:

1. Laticrete International Inc. (800-243-4788)
   a. Epoxy Grout (All Joint Widths - Floor and Wall)
      1) All areas except Swimming Pool Decks and Prep-Kitchens: “SpectraLOCK Pro Epoxy Grout”
      2) Swimming Pool Decks and Prep-Kitchens: “SpectraLOCK 2000 IG”
2. Mapei Corp. (800-426-2734)
   a. Epoxy Grout (All Joint Widths - Floor and Wall)
      1) All areas except Swimming Pool Decks and Prep-Kitchens: “Opticolor”

2) "TEC Accucolor Sanded Grout / 869 Latex Additive"

2.07 SHOWER FLOOR PAN LINER WATERPROOF MEMBRANE

A. Waterproof Membrane Material for lining concrete subfloor of tile showers that comply with ANSI 118.10, in locations shown on Drawings shall be one of the following products:

1. Avendra, LLC Preferred Manufacturers:

a. None

2. Approved Manufacturers:

a. “Laticrete HydroBan"; Laticrete International Inc. (800-243-4788)

b. “Mapelastic AquaDefense”; Mapei Corp. (800-426-2734)

c. "Chloraloy"; The Noble Co. (800-878-5788)

d. "DITRA"; Schluter Systems L.P. (800-472-4588)

e. “TEC Hydraflex Waterproofing Crack Isolation Membrane”, TEC Specialty Construction Brands (800-832-9023).

f. "Bituthene 3100"; W.R. Grace Masonry Products (800-558-7006)

B. Provide all required accessories including preformed inside and outside corners, cap strips, and pipe protrusion collars.

2.08 THRESHOLDS

A. Georgia Marble, complying with ASTM C503 requirements, Grade A, free from cracks, chips, stains, or other defects, uniform in tone and coloring. Minimum abrasive-hardness value of 10 per ASTM C241. Finish to be fine sand-honed on faces and beveled edges.

B. Color and size as shown in Interior Finish Index.

2.09 ACCESSORIES

A. Edging and Transition Strips for floor tile:

1. Approved Manufacturers:

a. Schluter Systems (800-574-8481)

b. Ceramic Tool Company, Inc. (800-236-5230)

c. Approved Substitution

2. Miter corners and angles. Install in longest lengths possible with closely fitted and aligned butt joints, and with horizontal leg keyed into the mortar bed. Top edge shall be set flush with finished floor tile. Clean and remove any mortar stains.

3. Refer to Interior Finish Schedule for model, material and color.

2.10 OTHER MATERIALS:

A. Joint Sealant to include sealing of ceramic tile surfaces at internal and external corners, transitions in plane and where ceramic tile work abuts dissimilar materials.

1. Refer to Section 07920 for sealant specifications.

B. Other materials, including adhesives not specifically described but required for a complete and proper installation of tiles, shall be only as recommended by the manufacturer of material to which it is applied.

2.11 MIXING MORTARS AND GROUT

A. Mix mortars and grouts to comply with referenced standards and mortar and grout manufacturers' written instructions.

B. Add materials, water, and additives in accurate proportions.

C. Obtain and use type of mixing equipment, mixer speeds, mixing containers, mixing time, and other procedures to produce mortars and grouts of uniform quality with optimum performance characteristics for installations indicated.

PART 3 EXECUTION

3.01 INSPECTION:

A. Installer must examine the areas and conditions under which flooring and accessories are to be installed and notify the Contractor in writing of conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions have been corrected in a manner acceptable to the installer.

3.02 PREPARATION:

A. Prior to laying flooring, vacuum and remove all contaminates from surfaces to be covered and inspect subfloor. Start of flooring installation indicates acceptance of subfloor conditions and full responsibility for completed work. Use leveling compound as recommended by flooring manufacturer for filling small cracks and depressions in subfloors.

1. Concrete Subfloors:

a. Slab substrates are dry and free of curing compounds, sealers, hardeners, residual adhesives, adhesive removers, and other materials whose presence would interfere with bonding of tile adhesive or mortar and comply with surface finish requirements of ANSI A108.01. Determine adhesion and dryness characteristics by performing bond and moisture tests recommended by manufacturer.

b. Subfloor Moisture Conditions: Before installing flooring Contractor shall verify that Moisture emission rate of not more than 3 lb/1000 sq. ft./24 hours when tested by calcium chloride moisture test in compliance with CRI 104, 6.2.1 and does not exceed the capacity of the specified adhesive or mortar, with subfloor temperatures not less than 55 deg F, or as recommended by manufacturer.

c. New concrete surfaces shall be wood-floated or broom finished. Over troweled slabs are not acceptable.

B. For installations of Tiles 24" x 24", 18" x 38" or larger:

1. Interior Floors: This Contractor shall use cement based, self leveling underlayment to insure flat substrate to receive tile, full mortar coverage of tile and substrate, and tile installation free of lippage.

2. Interior Walls: This Contractor shall use cement based trowelable patch to remedy all wall surfaces to receive large unit tile. Install tile with minimum 95% mortar coverage to tile & substrate. Tile installation shall be free of lippage.

C. Apply concrete slab primer for ceramic tile, if recommended by flooring manufacturer, prior to application of adhesive. Apply in compliance with manufacturer's directions.

3.03 CRACK SUPPRESSION MEMBRANE

A. Install membrane in strict accordance with manufacturer's specifications and ANSI A108.17.

B. Provide width of membrane as recommended by membrane manufacturer, but no less than three (3) times the width of the tile used at all control joints, existing cracks in concrete floor and other locations as required to comply with TCNA's "Handbook for Ceramic Tile Installation".

3.04 TILE INSTALLATION - GENERAL

A. Comply with the ANSI Standard Installation Specification A108.1 through A108.13 and TCNA's "Handbook for Ceramic, Glass, and Stone Tile Installation".

B. Handle, store, mix, and apply mortar and grout in compliance with manufacturer's instructions.

C. Extend tile work into recesses and under equipment and fixtures to form a complete covering without interruptions. Terminate work neatly at obstructions, edges, and corners without disruption of pattern, joint alignment, or bridging of Expansion Joints or Control Joints.

D. Install tile after finishing operations, including painting, have been completed. Moisture content of concrete slabs, building air temperature, and relative humidity must be within limits recommended by the flooring manufacturer.

E. Expansion Joints: Provide expansion joints, control joints and pressure relieving joints of widths and locations according to TCNA Handbook Construction No. EJ171, and as approved by Architect. Do not saw cut joints after application.

F. Lay tile from center marks established from center of area so that tile at opposing edges of the area are of equal width. Adjust as necessary to avoid use of cut widths less than 1/2 tile at edge perimeters. Lay tile square to room axis unless otherwise shown.

G. Match tiles for color and pattern by using tile from cartons in same sequence as manufactured and packaged. Cut tile neatly in and around all fixtures. Broken, cracked, chipped, or deformed tile are not acceptable.

H. Lay tile with grain in tile running in same direction. Accurately form intersections and returns. Perform cutting and drilling of tile without marring visible surfaces. Grind cut edges of tile abutting trim, finish, or built-in items.

I. Sound tile after setting and replace hollow sounding units.

J. Grout tile to comply with the requirements of the ANSI A18.10 tile installation standards:

3.05 SHOWER FLOOR PAN LINER WATERPROOF MEMBRANE INSTALLATION

A. Install materials to comply with and ANSI A108.13 and as directed by manufacturer to provide a concealed waterproof membrane. All seams shall be adhered to prevent delamination as specified by manufacturer. Upon completion, test for leaks by plugging the drain and filling with water. Make necessary adjustments to stop all leakage and retest until watertight, before top layers are installed.

1. Do not install tile or setting materials over waterproof membrane until waterproofing has cured and been tested to determine that it is watertight.

3.06 FLOOR TILE INSTALLATION

A. General: Install tiles designated for floor installations in accordance with TCNA's "Handbook for Ceramic Tile Installation,

B. Back Buttering: For installations indicated, obtain 100% mortar coverage by complying with applicable special requirements for back buttering of tile in referenced ANSI A108 series of tile installation standards:

1. Exterior tile floors.
2. Tile floors in wet areas, including showers, tub enclosures, laundries, and swimming pools.
3. Tile floors composed of tiles 8"x 8" or larger.
4. Tile floors composed of rib-backed tiles.
5. Thin porcelain veneer tile floors composed of tile less than 8mm in thickness.

6. All Tiles larger than 16” x 16”, or with at least one edge 24” or greater.

C. Large Format Tiles (LFT) shall be installed in a medium bed of setting material.

D. Stone Thresholds: Install stone thresholds at locations indicated; set in same type of setting bed as abutting field tile, unless otherwise indicated.

E. Metal Edge Strips: Install at locations indicated or at all locations where exposed edge of tile flooring meets carpet, wood, or other flooring, unless otherwise indicated.

3.07 WALL TILE INSTALLATION

A. General: Install tiles designated for wall installations in accordance with TCNA’s “Handbook for Ceramic Tile Installation,

B. Back Buttering: For installations indicated, obtain 100% mortar coverage by complying with applicable special requirements for back buttering of tile in referenced ANSI A108 series of tile installation standards:

1. Exterior tile wall installations.

2. Tile wall installations in wet areas, including showers, tub enclosures, laundries, and swimming pools.

3. Tile wall installations composed of tiles 8”x 8” or larger.

4. Thin porcelain veneer tile walls composed of tile less than 8mm in thickness.

3.08 GROUTING

A. Joints shall be packed full and free of all voids or pits, joints shall not be raked. Excess grout shall be cleaned from the surface with water as work progresses. Cleaning shall be done while mortar is fresh and before it hardens on the surface.

B. Grout shall be installed in accordance with ANSI A108.10 (A108.6 for epoxy) and the manufacturer’s recommended procedures and precautions during application and cleaning.

1. Tile shall be grouted using latex Portland cement grout unless noted otherwise.

2. Tile in kitchen and associated adjacent areas shall be grouted using chemical resistant epoxy grout.

C. Grout Sealer: Apply grout sealer to grout joints according to grout-sealer manufacturer's written instructions. As soon as grout sealer has penetrated grout joints, remove excess sealer and sealer from tile faces by wiping with soft cloth.

D. Sealing Tile Floors

1. Before tile is grouted apply sealer following manufacturers printed instructions.

2. Apply evenly over tile using a clean soft cotton cloth or a lambs wool applicator; buff off surface and allow to cure.

3. After tile has been grouted and cleaned, apply a second coat of sealer to tile and grout joints.

E. Regrouting:

1. Mix dry ingredients with admixture first and in accordance with manufacturer's recommendations.

a. Do not add water, additional grout or other ingredients after slaking period.

b. Color as shown on Interior Finish Schedule.

2. Do not grout joint between side of bathtub and tile. Seal with sanitary sealant.

3. Install grout in accordance with ANSI A108.10. Use rubber float, firmly pull grout diagonally across joints to force grout into and uniformly fill all joints.

4. Fill all gaps and skips. Finished grout shall be uniform in color, smooth and without voids, pin holes or low spots.

5. Remove excess grout from face of tile using sponges and clean water. Change water frequently.

F. Final Cleaning:

1. After grout has set, thoroughly rinse tile surfaces with sponges and clean water to remove any remaining grout film from face of tile.

2. Immediately following rinse, remove all water with wet/dry vacuum or clean sponge.

3. Clean tile to remove all grout haze and residue. Utilize specified cleaning products to leave floor thoroughly cleaned as approved by Owner's Representative.

4. At floors, apply coat of sealer to tile and grout joints.

3.09 ADJUST AND CLEAN

A. Clean grout and setting material from face of tile while materials are workable. Leave tile face clean and free of all foreign matter.

B. Leave finished installation clean and free of cracked, chipped, broken, unbonded, or otherwise defective work.

C. Protection: When recommended by tile manufacturer, apply a protective coat of neutral protective cleaner to completed surface. Protect installed tile work with Kraft paper or other heavy covering during the construction period to prevent damage. Prohibit all foot and wheel traffic from using tiled floors for at least 3 days, preferably 7 days.

D. Before final inspection, remove protective coverings and rinse neutral cleaner from all tile surfaces.

3.10 SETTING AND GROUT MATERIAL SCHEDULE

	Tile (< 8" x 8")	Large Format Tile (≥ 8" x 8")	Indoor Pool/Spa (< 8" x 8")	Prep Kitchen (< 8" x 8")
A. Laticrete International				
Mortar - Floor	"Laticrete 254 Platinum Multipurpose Thinset Mortar"	"Laticrete 255 MultiMax MultiPurpose Thinset Mortar"	"Laticrete 254 Platinum Multipurpose Thinset Mortar"	"Laticrete 254 Platinum Multipurpose Thinset Mortar"
Adhesive – Gypsum Wall Board	"Laticrete 15 Premium Multi-Mastic Adhesive"	"Laticrete 255 MultiMax MultiPurpose Thinset Mortar"	"Laticrete 254 Platinum Multipurpose Thinset Mortar"	"Laticrete 254 Platinum Multipurpose Thinset Mortar"
Adhesive – Gypsum Wall Board (LVP)	"Laticrete 255 MultiMax MultiPurpose Thinset Mortar"	"Laticrete 255 MultiMax MultiPurpose	"Laticrete 254 Platinum Multipurpose Thinset Mortar"	"Laticrete 254 Platinum Multipurpose Thinset Mortar"
Grout	"Spectra LOCK Pro Epoxy Grout"	"Spectra LOCK Pro Epoxy Grout"	"Spectra LOCK 2000 IG"	"Spectra LOCK 2000 IG"
B. Mapei Corp.				

	Tile (< 8” x 8”)	Large Format Tile (≥ 8” x 8”)	Indoor Pool/Spa (< 8” x 8”)	Prep Kitchen (< 8” x 8”)
Mortar - Floor	“Ultraflex 3”	“UltraFlex LFT”		
Adhesive – Gypsum Wall Board	“Type 1 Mastic’	“UltraFlex LFT”		
Adhesive – Gypsum Wall Board (LVP)	“Ultraflex LFT”			
Grout	“Opticolor”	“Opticolor”		
C. Bonsal America				
Mortar - Floor	“Pro Spec PermaFlex 400”			
Adhesive – Gypsum Wall Board	“Pro Spec B-4050 Multi-Purpose Adhesive”			
Adhesive – Gypsum Wall Board (LVP)	“PermaFlex 500 Thinset Mortar”			
Grout	See Note 1	See Note 1		
D. Hydroment				
Mortar - Floor	“Hydroment Flex-A-Lastic/Tile-Mate”			
Adhesive – Gypsum Wall Board	“Hydroment D2001”			
Adhesive – Gypsum Wall Board (LVP)	"ReFlex”			
Grout	See Note 1	See Note 1		
E. Custom Building Prod				
Mortar - Floor	“FlexBond Premium Flexible Bonding Mortar”			
Adhesive – Gypsum Wall Board	“AcrylPro Ceramic Tile Adhesive”			
Adhesive – Gypsum Wall Board (LVP)	"AcrylPro Ceramic Tile Adhesive"			
Grout	See Note 1	See Note 1		
F. TEC				
Mortar - Floor	“TEC Superflex Thinset Mortar”	“TEC Ultimate Large Tile Mortar”	“TEC Superflex Thinset Mortar”	“TEC Superflex Thinset Mortar”
Adhesive – Gypsum Wall Board	“TEC Double Duty Plus”	“TEC 3N1 Performance Mortar”		
Adhesive – Gypsum Wall Board (LVP)	“TEC Double Duty Plus”			

		Tile (< 8” x 8”)	Large Format Tile (≥ 8” x 8”)	Indoor Pool/Spa (< 8” x 8”)	Prep Kitchen (< 8” x 8”)
	Grout	See Note 1	See Note 1		
G.	ARDEX				
	Mortar - Floor	“ARDEX X-5”	“ARDEX X-5”	“ARDEX X-5”	“ARDEX X-5”
	Adhesive – Gypsum Wall Board	“ARDEX D14 Type I Premixed Tile Adhesive (Mastic)”	“ARDEX X 5 Flexible Thinset Mortar”	“ARDEX X 5 Flexible Thinset Mortar”	“ARDEX X 5 Flexible Thinset Mortar”
	Adhesive – Gypsum Wall Board (LVP)	“ARDEX X 5 Flexible Thinset Mortar”	“ARDEX X 5 Flexible Thinset Mortar”	“ARDEX X 5 Flexible Thinset Mortar”	“ARDEX X 5 Flexible Thinset Mortar”
	Grout	See Note 1	See Note 1		
Note 1: Laticrete "Spectra LOCK Pro Grout" and Mapei “Opticolor” are the grout products recommended by Marriott					

END OF SECTION

SECTION 09 51 23 - ACOUSTICAL TILE CEILINGS

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Suspended Metal Grid Systems Complete With Wall Trim
2. Ceiling Tiles

B. Related Sections:

1. Divisions 21 (13), 23 (15), and 26 (13) Sections for light fixtures, sprinklers, and air-distribution components.

1.02 REFERENCES

A. ASTM International Publications:

1. E84 "Standard Test Method for Surface Burning Characteristics of Building Materials"
2. C635 “Standard Specification for the Manufacture, Performance, and Testing of Metal Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings”
3. C636 “Standard Practice for Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-In Panels”
4. E1264 “Standard Classification for Acoustical Ceiling Products”

B. United States Department of Agriculture Food Safety and Inspection Service (USDA FSIS) Requirements

1.03 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

B. Product Data: Submit “Letter of Conformance” in accordance with Section 01 33 00 indicating specified items selected for use in project with the following supporting data.

1. Manufacturer's product and maintenance data for each type of ceiling system and accessory.
2. Samples: Min 6” x 6” samples of specified acoustical panel, 8” long samples of exposed wall molding, trim and suspension system (main runner and cross-tee).

1.04 QUALITY ASSURANCE

A. Qualifications of Installers:

1. The suspended ceiling Subcontractor shall have a record of successful installations of similar ceilings acceptable to the Architect.
2. For the actual fabrication and installation of all components of the system, use only personnel who are thoroughly trained and experienced in the skills required and completely familiar with the requirements established for this work.

B. In addition to complying with all pertinent codes and regulations, suspension system shall be installed according to ASTM C636, Installation of Metal Ceiling Suspension System for Acoustical Tile and Lay-in Panels.

C. Acoustical Tile Standard: Provide manufacturer's standard tiles of configuration indicated that comply with ASTM E1264 classifications as designated by types, patterns, acoustical ratings, and light reflectance, unless otherwise indicated.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Use all means necessary to protect the materials of this Section before, during, and after installation and to protect work and materials of all other trades.

1.06 PROJECT CONDITIONS

A. Do not install acoustical ceilings until building is enclosed, sufficient heat is provided, dust- generating activities have terminated, and overhead work is completed, tested, and approved.

1.07 REPLACEMENT STOCK

A. Refer to Section 01 78 43.

PART 2 PRODUCTS

2.01 STRUCTURAL EXPOSED SUSPENSION

SYSTEM A. Preferred Manufacturers:

1. Armstrong World Industries, Inc. (888-234-5464)

B. Approved Manufacturers:

1. System used shall be as shown in Interior Finish Index or approved substitution by:
   a. Chicago Metallic Corp. (800-323-7164)
   b. USG Interiors, Inc. (800-950-3839)

C. Type I Grid:

a. Acceptable Products:
   1) “Donn Brand DXT-24 Grid System”; USG Interiors, Inc.
   2) “Suprafine XL 9/16” Exposed Tee System”; Armstrong World Industries, Inc.
   3) “EZ Stab Elite Narrow Grid System”; Certainteed.com

2. System used shall be double web, direct hung exposed system.
   a. General: The systems shall be such that the ceiling panels may be removed without damage; that the main runner and cross runners may be removed and replaced without deforming the runners or disturbing the balance of the grid system.

3. Main Runners
   a. Acceptable Products:
      1) “Number 7500” with 1-11/16" ht., 9/16" face, steel; Armstrong World Industries, Inc.
      2) “Number DXT-24” with 1-1/2" ht., 9/16" face, steel; USG Interiors, Inc.
      3) “Number EZES12-12-19” with 1-11/16" ht., 9/16" face, steel; Certainteed.com
   b. The main runner shall have a non-directional bayonet coupling.

4. Cross Runners: Designed to support lay-in lighting fixtures and to receive acoustical tile at sides of fixture opening.
   a. Acceptable Products:
      1) “Number XL-7520/8520 Cross Tee”; Armstrong World Industries, Inc.
      2) “DXT-222/422 Cross Tee”; USG Interiors, Inc.
      3) “Number EZES2-12-19/EZES4-12-19 Cross Tee”; Certainteed.com

5. Perimeter Wall Angles: Hemmed edge, 7/8" x 7/8".
6. Accessories: Provide all accessories needed for proper installation of system.
7. Finish: All exposed surfaces shall be finished white.

2.02 ACOUSTICAL MATERIALS

A. Acceptable Products;
   1. TYPE I – Standard Ceiling, Sag resistant Panels
      a. Armstrong, Fine Fissured-Tegular, Optima
      b. Certainteed –Fine Fissured, Narrow Reveal Customline
      c. USG, Eclipse “Number FL-76975-E”
      d. Physical Characteristics:
         1) Type: III
         2) Form: 2
         3) Surface Pattern: Non-Directional Fine Texture
         4) Size, Nominal: 24” x 24” x 5/8” lay-in
         5) Edge Detail: Tegular Square
         6) Color: White (Standard)
      e. Performance Criteria:
         1) Noise Reduction Coefficient (NRC): min 0.55, pursuant to ASTM C 423.
         2) Ceiling Attenuation Class (CAC): min. 33, pursuant to ASTM E 1414 / ASTM E 413.
         3) Minimum Light Reflectance Coefficient (LR): 0.82, pursuant to ASTM E 1477.

2.03 LIGHTING: Contractor shall be responsible for providing sufficient support on grid systems to support light fixtures. All fixtures shall be supported at each and every corner.

PART 3 EXECUTION

3.01 SURFACE CONDITIONS

A. Inspection: Prior to all work of this Section, carefully inspect the installed work of all other trades and verify that all such work is complete to the point where this installation may properly commence. Verify that suspended ceiling systems are installed in strict accordance with all pertinent codes and regulations, and the manufacturer's recommendations.

B. Discrepancies: In the event of discrepancy, immediately notify the Owner’s Representative. Do not proceed in areas of discrepancy until all such discrepancies have been fully resolved.

3.02 INSTALLATION

A. General:

1. Install acoustical panel, suspension system and accessories in compliance with manufacturers instructions and requirements of ASTM C636.

2. Install ceiling system in a true and even plane with straight line courses laid out symmetrically about center lines of area or as indicated. Border tile shall be minimum 6" wide and neatly fit against vertical surfaces to form a tight fit.

3. Provide metal edge angle at perimeter of units as detailed on Drawings. Cut and fit around light fixtures, diffusers, etc.

B. Lay-In Ceiling System:

1. Hanging main tees parallel in a flat plane by means of #10 gauge wire hangers attached to construction above. Hangers shall be spaced not over 4'-0" along the main tees and within 6" of the ends and splices of main tees, and other interruptions. Main tees shall be spaced 2'- 0" o.c. Cross tees shall be interlocked to main tees and spaced as required to support tile edges.

2. Attachment to ducts, pipes, etc. will not be permitted. Bridge under obstructions with a grid of 1-1/2" cold rolled channels or other suitable members to support ceiling grid.

3. Install wall angle at perimeter of walls, partitions, columns, pipes, and other obstructions that extend above the ceiling. Securely attach with appropriate fastening devices at maximum 16" o.c. Form reveal of same depth and width as that formed between edge of panel and flange at exposed suspension grid. Neatly cut and fit around light fixtures, diffusers, etc. Provide wall angles fabricated to diameter required to fit penetrations.

4. Insert ceiling panels, installing hold-down clips on panels extending over partitions and where required to maintain fire ratings.

5. At all locations where ceiling tiles are cut, the cut edges of the tiles shall match the premanufactured edges (i.e. cut edges are to be beveled to match beveled edged tiles). Exposed cut edges are to be painted to match face of tile with paint as approved by tile manufacturer.

3.03 ADJUSTING AND CLEANING

A. Completely remove all fingerprints and traces of soil and damage from the surfaces of grid and acoustical materials, using only those cleaning materials recommended for that purpose by the manufacturer of the material being cleaned.

B. Replace units which are damaged or improperly installed.

END OF SECTION

SECTION 09 65 00 - RESILIENT FLOORING

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Vinyl Composition Tile
2. Sheet Vinyl Flooring
3. Resilient Base
4. PVC Thresholds
5. Solid Vinyl Transition Edges
6. Stair Nosings

B. Related Sections:

1. Section 09 30 00 - Tiling
2. Section 09 68 00 - Carpeting
3. Section 14 21 23 – Electric Traction Elevators

1.02 REFERENCES

A. ASTM International Publications:

1. C241 “Standard Test Method for Abrasion Resistance of Stone Subjected to Foot Traffic”
2. C503 “Standard Specification for Marble Dimension Stone (Exterior)”
3. D2047 “Standard Test Method for Static Coefficient of Friction of Polish-Coated Flooring Surfaces as Measured by the James Machine”
4. D2240 “Standard Test Method for Rubber Property—Durometer Hardness”
5. D3389 “Standard Test Method for Coated Fabrics Abrasion Resistance (Rotary Platform, Double-Head Abrader)”
6. E648/NFPA 253 “Standard Test Method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source”
7. E662/NFPA 258 “Standard Test Method for Specific Optical Density of Smoke Generated by Solid Materials”
8. F710 “Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring”
9. F1066 “Standard Specification for Vinyl Composition Floor Tile”

B. Carpet & Rug Institute (CRI)

1. Standard for Installation of Commercial Carpet CRI 104, Current Edition

C. Code of Federal Regulations (CFR)

1. 40 CFR 763 - Asbestos: Appendix A - Transmission Electron Microscopy Analytical Methods

D. Occupational Safety & Health Administration (OSHA) Regulations:

1. OSHA Regulation 29 CFR Toxic and Hazardous Substances 1910-1200 Hazard Communication

1.03 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

B. Submit "Letter of Conformance" in accordance with Section 01 33 00 indicating specified items selected for use in project with the following supporting data.

1. Submit manufacturer's product and maintenance data for each type of resilient flooring and accessory.

a. Certification by resilient flooring manufacturer that products supplied for flooring installation comply with local regulations controlling use of volatile organic compounds (VOCS).

b. Asbestos Content: Provide written certification that tile and adhesive materials contain no asbestos of any type of mixture of types occurring naturally as impurities as determined by polarized light microscopy test per Appendix A of 40 CFR 763 will be utilized on this Project.

2. Submit color selection in the form of actual sections of resilient flooring, including accessories, for each type of resilient flooring required showing full range of colors and patterns available.

3. Submit shop drawings, seaming plan, and coving details for flooring and accessories.

C. Installer Certificates: Signed by sheet vinyl flooring system manufacturer certifying that Installer is approved, authorized, or licensed by manufacturer to install sheet vinyl flooring system.

1.04 QUALITY ASSURANCE

A. Single-Source Responsibility for Flooring: Obtain each type, color and pattern of flooring from a single source with resources to provide products of consistent quality in appearance and physical properties without delaying progress of the work.

B. Installer: A firm with not less than five years of successful experience in installation of sheet vinyl flooring systems with chemically welded seams similar to those required for this project and which is certified by manufacturer of the sheet vinyl materials.

C. Fire-Test-Response Characteristics: Provide products with the following fire-test-response characteristics as determined by testing identical products per test method indicated below by a testing and inspecting agency acceptable to authorities having jurisdiction.

1. Critical Radiant Flux: 0.45 W/sq. cm or greater when tested per ASTM E648.

2. Smoke Density: Maximum specific optical density of 450 or less when tested per ASTM E662.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Deliver tiles and installation accessories to Project site in original manufacturer's unopened cartons and containers each bearing names of product and manufacturer, Project identification, and shipping and handling instructions.

B. Store flooring materials in dry spaces protected from the weather with ambient temperatures maintained between 65 degrees F. and 90 degrees F. Store tile flooring materials on flat surfaces. Move resilient flooring and installation accessories into spaces where they will be installed at least 48 hours in advance of installation.

C. Store sheet vinyl rolls upright. Move sheet vinyl floor coverings and installation accessories into spaces where they will be installed at least 48 hours before installation, unless longer conditioning periods are recommended in writing by manufacturer.

1.06 PROJECT CONDITIONS

A. Maintain a minimum temperature of 70 degrees F. in spaces to receive tiles for at least 48 hours prior to installation, during installation, and for not less than 48 hours after installation. After this period, maintain a temperature of not less than 55 degrees F.

B. Do not install resilient flooring until they are at the same temperature as the space where they are to be installed. Close spaces to traffic during resilient flooring installation.

C. Protect all materials from the direct flow of heat from hot-air registers, radiators, or other heating fixtures and appliances.

1.07 SEQUENCING AND SCHEDULING

A. Do not install resilient flooring materials over concrete slabs until the slabs have cured and are sufficiently dry to bond with adhesive as determined by tile manufacturer's recommended bond and moisture test.

1.08 EXTRA MATERIALS

A. Refer to Section 01 78 43

PART 2 PRODUCTS

2.01 VINYL COMPOSITION TILES:

A. Preferred Manufactures:

1. Armstrong World Industries, Inc. (800-442-4212)

B. Approved Manufacturers:

1. Tarkett Inc., a Tarkett Sommer Company (800-877-8453)

C. All vinyl tile shall be the maximum extent possible of a single batch number. Tile should have uniform disbursement of color and texture throughout the thickness of the tile. Comply with ASTM F1066, Composition 1 (nonasbestos formulated).

D. Product, Size and Color: Refer to Interior Finish Index.

2.02 SHEET VINYL FLOORING: All sheet vinyl shall be the maximum extent possible of a single batch number.

A. Preferred Manufactures:

1. Armstrong World Industries, Inc. (800-442-4212)

B. Approved Manufacturers:

1. Mannington Mills, Inc. (706-629-7301)
2. Substitution as approved by Marriott International

C. Sheet Vinyl:

1. Vinyl sheet flooring shall meet ASTM F1303, Type I, Grade 1, with Class B backing.
2. Sheet Width: Refer to Interior Finish Index
3. Nominal Thickness: Refer to Interior Finish Index
4. Size: As shown on Drawings.
5. Color and Pattern: As shown in Interior Finish Index
6. Seams: Install seamless installation unless otherwise approved by Owner's Representative.
7. Static Load Limit: ASTM F970 (modified) 750 psi (52.73 kg/sq cm) (Modified by specifying a higher load on a smaller diameter tip. All other conditions are standard).

8. Meet the following fire test performance criteria as tested by a recognized independent testing laboratory:
    a. Flame Spread Rating: 75 or less by ASTM E84.
    b. Smoke Density: Less than 450 by ASTM E662.
    c. Critical Radiant Flux: 0.45 minimum by ASTM E468.

2.03 RESILIENT BASE

A. Preferred Manufactures:
    1. IPC Door and Wall Protection Systems, Inpro Corp. (800-543-1729)

B. Approved Manufacturers:
    1. Johnsonite (800-899-8916).
        a. Representative: 856-912-1896
    2. Burke Mercer Flooring Products, A Division of Burke Industries (800-669-7010).

C. Resilient bases shall be 1/8" thick, size as shown in Interior Finish Index. Provide cove type at sheet vinyl, resilient tile flooring, and other hard surfaces. Job mitering of corners will not be permitted.

D. Color: Refer to Interior Finish Index.

2.04 PVC THRESHOLD:

A. Preferred Manufactures:
    1. None

B. Approved Manufacturers:
    1. "Carpet Insert Threshold Mouldings"; Johnsonite (800-899-8916)
        a. Guestroom Entry Door: “Model VT-XX-M6”, 1-3/4" wide by 1/2" thick.
        b. Guestroom Connecting Door: “Model VT-XX-M2”, 5-1/2" wide by 1/2" thick.
    2. Approved Substitutions by Architect

C. Manufactured from a homogeneous composition of polyvinyl chloride (PVC), high quality additives, and colorants. All Threshold Mouldings shall comply with A.D.A. requirements of Section 4.5.2 Changes of Level. Standard formulation exceeds ASTM E648 Class 1 Flammability requirements.
    1. Hardness - ASTM D2240 - Not less than 85 Shore A
    2. Abrasion Resistance - ASTM D3389 - 0.22 mg/cycle
    3. Slip Resistance - ASTM D2047 - Exceeds Federal Standards and ADA requirements of 0.6 for flat surfaces.
    4. Fire Resistance:
        a. ASTM E648/NFPA 253 (Critical Radiant Flux) - Class 1.
        b. ASTM E662/NFPA 258 (Smoke Density) - 450 or less.
    5. Adhesive: As recommended by Manufacturer for use intended.
    6. Color: Refer to Interior Finish Index for color and other additional requirements.

2.05 TRANSITION EDGES:

A. Preferred Manufactures:

1. Resilient Edge Trims and Transitions:
   a. None
2. Straight Metal Edge Trims:
   a. None
3. Curved Metal Edge Trims:
   a. None

B. Approved Manufacturers:

1. Resilient Edge Trims and Transitions:
   a. Marley Flexco Co., A Soflex Company (800-633-3151)
   b. Johnsonite (800-899-8916)
      1) Representative: 856-912-1896
   c. Burke Mercer Flooring Products, A Division of Burke Industries (800-669-7010).
2. Straight Metal Edge Trims:
   a. Schluter Systems (800-574-8481)
   b. Ceramic Tool Company, Inc. (CTC) (800-236-5230)
3. Curved Metal Edge Trims:
   a. Schluter Systems (800-574-8481)

C. Model, Size and Color: Refer to Interior Finish Index. D.

Furnish transition edges at the following locations:

1. Vinyl Composition Tile to Concrete
2. Vinyl Composition Tile to Carpet
3. Sheet Vinyl Flooring to Concrete
4. Sheet Vinyl Flooring to Carpet
5. Carpet to Carpet (Where thickness varies)
6. Carpet to Ceramic Tile

2.06 RESILIENT STAIR ACCESSORIES A.

Stair Nosings:

1. Avendra, LLC Preferred Manufactures:
   a. None
2. Approved Manufacturers:
   a. Johnsonite (800-899-8916).
      1) Representative: 856-912-1896
   b. Burke Mercer Flooring Products, A Division of Burke Industries (800-669-7010). c. Roppe Corporation (800-537-9527)

B. Model, Size and Color: Refer to Interior Finish Index.

2.07 INSTALLATION ACCESSORIES

A. Concrete Leveling and Patching compounds:

1. For areas up to 4 square feet:

a. Feather finish, use to smooth ridges, fill cracks, gouges and joints.

1) "SD-F"; Ardex (724-203-5000)

2) “Planiprep FF”; Mapei Corp. (800-426-2734)

b. Trowelable underlayment patch for thickness from feather edge to 3 inch without aggregate

1) “Quickpatch”; Mapei Corp. (800-426-2734)

c. Trowelable underlayment patch for thickness up to ½ inch without aggregate; up to 1 inch with aggregate. Can be feather edged.

1) "SD-P/ Primer P-82"; Ardex (724-203-5000)

2. For areas exceeding 4 square feet:

a. Self-leveling, pourable or pumpable underlayment for thicknesses up to 5 inches. Can be feather edged.

1) "K-15/Primer P-51"; Ardex (724-203-5000)

2) “Novoplan 2/Primer”; Mapei Corp. (800-426-2734) (Note: Refer to product datasheet for specific requirements based on substrates)

B. Concrete Slab Primer:

1. Vinyl Composition Tiles

a. Non-staining type as recommended by flooring manufacturer.

2. Sheet Vinyl Flooring:

a. Preferred Manufactures:

1) "S-185 Latex Primer and Additive"; Armstrong World Industries, Inc. (800-442-4212 x 2)

b. Approved Manufacturers:

1) Approved Substitutions by Architect

C. Trowelable Underlayments and Patching Compounds: Latex-modified, portland-cement-based formulation provided or approved by manufacturer for applications indicated.

1. Vinyl Composition Tiles

a. As recommended by flooring manufacturer.

2. Sheet Vinyl Flooring:

a. Preferred Manufactures:

1) "S-184 Fast-Setting Cement-Based Patch and Skim Coat"; Armstrong World Industries, Inc. (800-442-4212 x 2)

b. Approved Manufacturers:

1) Approved Substitution

D. Sheet Vinyl Adhesives:

1. Preferred Manufactures:

a. "S-599 Premium Vinyl-Back Flooring Adhesive"; Armstrong World Industries, Inc.

(800-442-4212)

2. Approved Manufacturers:
    a. Approved Substitution

E. Sheet Vinyl Seam Sealing Adhesive:
    1. Preferred Manufactures:
        a. "S-553 Seam Sealing Adhesive "; Armstrong World Industries, Inc. (800-442-4212)
    2. Approved Manufacturers:
        a. Approved Substitution

F. Resilient Floor Tile Adhesives: Provide water-resistant type recommended by tile manufacturer to suit floor tile and substrate conditions indicated.
    1. Preferred Manufactures:
        a. None
    2. Approved Manufacturers:
        a. “Ultrabond ECO 360”; Mapei Corp. (800-426-2734)
        b. Approved Substitution as approved by tile manufacturer.

G. Resilient Base Adhesives to be Non-Toxic, Low Odor, and Solvent Free with no alcohol, glycol, or ammonia. Adhesive shall be antimicrobial with no hazardous vapors and contain no carcinogenic materials, per OSHA Regulation 29 CFR 1910-1200. Provide product as recommended for intended installation, as approved by resilient base manufacturer.
    1. Avendra, LLC Preferred Manufactures:
        a. None
    2. Approved Manufacturers:
        a. “Ultrabond ECO 575”; Mapei Corp. (800-426-2734)
        b. Approved Substitution as approved by resilient base manufacturer.

H. Other materials, including edge strips not specifically described, but required for a complete and proper installation of resilient flooring, shall be only as recommended by the manufacturer of material to which it is applied.

PART 3 EXECUTION

3.01 INSPECTION

A. Installer must examine the areas and conditions under which resilient flooring and accessories are to be installed and notify the Contractor in writing of conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions have been corrected in a manner acceptable to the Installer.
    1. Visually inspect for evidence of moisture, alkaline salts, carbonation, dusting, mold, or mildew.
    2. Failure to call attention to defects or imperfections will be construed as acceptance and approval of the subfloor. Installation indicates acceptance of substrates with regard to conditions existing at the time of installation.

3.02 CONCRETE SUBFLOORS OR GYPSUM CEMENT FLOOR UNDERLAYMENT

A. Verify that concrete slabs comply with ASTM F710 and the following:
    1. Slab substrates are dry and free of curing compounds, sealers, hardeners, residual adhesives, adhesive removers, and other materials whose presence would interfere with

bonding of adhesive. Determine adhesion and dryness characteristics by performing bond and moisture tests recommended by manufacturer.

2. Finishes of subfloors comply with tolerances and other requirements specified in Division 03 Section, "Cast-In-Place Concrete" for slabs receiving resilient flooring.

3. Subfloor Moisture Conditions: Before installing flooring Contractor shall verify that Moisture emission rate of not more than 3 lb/1000 sq. ft./24 hours when tested by calcium chloride moisture test in compliance with CRI 104, 6.2.1, with subfloor temperatures not less than 55 deg F, or as recommended by manufacturer.

4. Subfloor Alkalinity Conditions: Before installing flooring Contractor shall verify that a pH range of 5 to 9 when subfloor is wetted with potable water and pHydrion paper is applied

3.03 PREPARATION

A. General: Comply with manufacturer's installation specifications for preparing substrates to receive products indicated.

1. Comply with Armstrong Guaranteed Installation Manual F-5061, or equivalent by other listed manufacturers.

B. Sweep and vacuum clean substrates to be covered by floor coverings immediately before installation. After cleaning, examine substrates for moisture, alkaline salts, carbonation, and dust. Proceed with installation only after unsatisfactory conditions have been corrected.

C. This Contractor to remove coatings, including curing compounds, adhesives, plastics, and other substances that are incompatible with flooring adhesives and that contain soap, wax, oil, or silicone, by using a terrazzo or concrete grinder, a drum sander, or a polishing machine equipped with a heavy-duty wire brush. Surface to receive new flooring shall be fully prepared, including removal of existing materials not acceptable for proper installation of new materials, as required by manufacturer. Do not use solvents.

1. Prep floor according to ASTM F710 criteria.

D. Slab Primers:

1. Gypsum Cement Floor Underlayment: Apply Armstrong "S-185 Latex Primer and Additive", or approved substitution, to gypsum subfloor liberally with a short nap paint roller or a coarse fiber brush. Avoid puddling. Use at full strength, DO NOT DILUTE.

2. 2. Allow to dry thoroughly before skimming with floor patch

E. Underlayment or Leveling Compound: Use leveling compound as recommended by flooring manufacturer for filling small cracks and depressions in subfloors. All rough areas, projections, ridges, and bumps shall be removed.

1. Vinyl Composition Floor Tile: Apply underlayment or leveling compound in compliance with manufacturer's directions.

2. Sheet Vinyl Flooring: Skim coat the entire subfloor with Armstrong "S-184 Fast-Setting Cement-Based Patch and Skim Coat", or approved substitution, using a smooth-edge finishing trowel filling in the recessed areas to provide a smooth finished substrate to receive the sheet vinyl.

3.04 INSTALLATION - GENERAL

A. Install flooring after finishing operations, including painting, have been completed. Moisture content of concrete slabs, building air temperature, and relative humidity must be within limits recommended by flooring manufacturer's directions.

B. Patch and repair floors and walls to receive flooring for proper installation of flooring, stair accessories, and base.

C. Place flooring with adhesive cement in strict compliance with manufacturer's recommendations. Butt tightly to vertical surfaces and edgings. Scribe around obstructions and to produce neat joints, laid tight, even, and straight. Extend flooring into toe spaces.

D. Maintain reference markers, holes, or openings that are in place or plainly marked for future cutting by repeating on finish flooring as marked on subfloor. Use chalk or other non- permanent marking device.

E. Install flooring on covers for telephone and electrical ducts and other such items as occur within finished floor areas.

F. Maintain overall continuity of color and pattern with pieces of flooring installed in these covers. Tightly cement edges to perimeter of floor around covers and to covers.

G. Tightly cement flooring to subbase without open cracks, voids, raising and puckering at joints, telegraphing of adhesive spreader marks, or other surface imperfections.

3.05 INSTALLATION - VINYL COMPOSITION TILE FLOORS

A. Lay tile from center marks established from center of area so that tile at opposite edges of the area are of equal width. Adjust as necessary to avoid use of cut widths less than 1/2 tile at edge perimeters. Lay tile square to room axis unless otherwise indicated.

B. Match tiles for color and pattern by using tile from cartons in same sequence as manufactured and packaged. Cut tile neatly in and around all fixtures. Broken, cracked, chipped, or deformed tiles are not acceptable. Lay tile with grain in tile running in same direction.

C. Scribe, cut, and fit tiles to butt neatly and tightly to vertical surfaces and permanent fixtures including built-in furniture, cabinets, pipes, outlets, edgings, door frames, thresholds, and nosings.

D. Extend tiles into toe spaces, door reveals, closets, and similar openings.

E. Maintain reference markers, holes, and openings that are in place or marked for future cutting by repeating on floor tiles as marked on substrates. Use chalk or other nonpermanent, nonstaining marking device.

F. Adhere tiles to flooring substrates using a full spread of adhesive applied to substrate to produce a completed installation without open cracks, voids, raising and puckering at joints, telegraphing of adhesive spreader marks, and other surface imperfections.

3.06 INSTALLATION - SHEET VINYL FLOORING

A. General: Comply with sheet vinyl floor covering manufacturer's written installation instructions.

1. Install flooring in strict accordance with the latest edition of "Armstrong Guaranteed Installation System", F-5061, or equivalent by other listed manufacturers.

B. Unroll sheet vinyl floor coverings and allow them to stabilize before cutting and fitting, if recommended in writing by manufacturer.

C. Lay out sheet vinyl floor coverings to comply with the following requirements:

1. Maintain uniformity of sheet vinyl floor covering direction.

2. Arrange for a minimum number of seams and place them in inconspicuous and low-traffic areas, and not less than 6 inches away from parallel joints in flooring substrates.

3. Match edges of sheet vinyl floor coverings for color shading and pattern at sump according to manufacturer's written recommendations.

4. Avoid cross seams.

D. Install flooring wall-to-wall before the installation of floor-set cabinets, casework, furniture, equipment, moveable partitions and similar moveable objects.

E. Scribe, cut, and fit or flash cove to permanent fixtures, built-in furniture and cabinets, pipes and outlets, and permanent columns, walls, and partitions as shown on Drawings.

F. Extend sheet vinyl floor coverings into toe spaces, door reveals, closets, and similar

openings. G. Maintain reference markers, holes, and openings that are in place or marked for

future cutting

by repeating on finish flooring as marked on subfloor. Use chalk or other nonpermanent,
nonstaining marking device.

H. Install sheet vinyl floor coverings on covers for telephone and electrical ducts, and similar items in finished floor areas. Maintain overall continuity of color and pattern with pieces of flooring installed on covers. Tightly adhere edges to perimeter of floor around covers and to covers.

I. Adhere sheet vinyl floor coverings to flooring substrates to comply with floor covering manufacturer's written instructions, including those for trowel notching, adhesive mixing, and adhesive open and working times.

1. Produce completed installation without open cracks, voids, raising and puckering at joints, telegraphing of adhesive spreader marks, and other surface imperfections.

J. Chemically-Welded Seams: Chemically weld seams with Armstrong "S-553 Seam Sealer" into a seamless floor covering. Prepare, weld, and finish seams according to manufacturers written instructions and ASTM F1516 to produce surfaces flush with adjoining floor covering surfaces.

K. Hand roll sheet vinyl floor coverings directions with a 100 pound roller in both directions from center out to embed floor coverings in full spread of adhesive and eliminate trapped air. At walls, door casings, and other locations where access by roller is impractical, press floor coverings firmly in place with flat-bladed instrument.

B. Do not reverse pieces (TM edge to non-TM edge)., if a seam is needed, seams should be positioned so that the ends of the planks are offset 3” to 6”. Install with Full Spread of Armstrong "S-575" adhesive using a fine notched trowel 1/32” deep x 1/16” wide x 5/64” apart.

3.07 RESILIENT WALL BASE INSTALLATION

A. At areas where base is required, apply resilient base to walls, columns, pilasters, casework, and other permanent fixtures, as coordinated with type of flooring. Install base in as long lengths as practicable. Tightly bond base to backing throughout the length of each piece with continuous contact at horizontal and vertical surfaces. On irregular surfaces, fill voids along top edge of resilient wall base with manufacturer's recommended adhesive filler material.

B. Job-Formed Corners:

1. Outside Corners: Use straight pieces of maximum lengths possible. Form without producing discoloration (whitening) at bends. Shave back of base at points where bends occur and remove strips perpendicular to length of base that are only deep enough to produce a snug fit without removing more than half the wall base thickness.

2. Inside Corners: Use straight pieces of maximum lengths possible. Form by cutting an inverted V-shaped notch in toe of wall base at the point where corner is formed. Shave back of base where necessary to produce a snug fit to substrate.

3.08 ACCESSORIES

A. Place resilient edge strips tightly butted to adjacent materials of type indicated and bond to substrates with adhesive. Install edging strips at all unprotected edges of flooring unless otherwise shown. Apply resilient accessories to stairs and risers as indicated and according to manufacturer's installation instructions.

B. Stair Nosings:

1. Use stair-tread-nose filler, according to resilient tread manufacturer's written instructions, to fill nosing substrates that do not conform to tread contours.

2. Apply resilient products to stairs as indicated and according to manufacturer's written installation instructions.

3.09 CLEANING AND PROTECTION

A. Perform the following operations immediately after installing resilient floor coverings:

1. Remove adhesive and other surface blemishes using cleaner recommended by floor covering manufacturer.

2. Sweep or vacuum floor thoroughly.

3. Do not wash floor covering until after time period recommended by floor covering manufacturer.

4. Damp-mop floor to remove marks and soil.

B. Protect flooring against mars, marks, indentations, and other damage from construction operations and placement of equipment and fixtures during remainder of construction period. Use protection methods indicated or recommended by manufacturer of resilient product involved.

C. Cover sheet vinyl floor coverings with undyed, untreated building paper or the application of two coats of a high quality acrylic floor finish such as Ecolabs "Gemini Gemstar" or Armstrong "S-480 Commercial Floor Polish "can be applied to protect the floor during construction until inspection for Substantial Completion. Clean products specified in this Section not more than four days prior to dates scheduled for inspections intended to establish date of Substantial Completion in each area of Project. Clean products using method recommended by manufacturer. Strip protective floor polish that was applied after completing installation, prior to cleaning.

D. Do not move heavy and sharp objects directly over resilient floor coverings. Place plywood or hardboard panels over floor coverings and under objects while they are being moved. Slide or roll objects over panels without moving panels.

3.10 FINISHING

A. After completion of project and just prior to final inspection of work, thoroughly clean floors and accessories.

1. Vinyl Composition Tile: Apply wax and buff with type of wax, number of coats, and buffing procedures in compliance with flooring manufacturer's instructions.

B. Sheet Vinyl Flooring: Apply two (2) coats of a high quality acrylic floor matte shine finish (high gloss is not permitted) such as "Taski's Ombra Matte Shine Floor Finish" by Lever Industrial (800-827-5487), or approved substitution by Ecolabs, as approved by flooring manufacturer.

END OF SECTION

SECTION 09 65 66 - RESILIENT ATHLETIC FLOORING

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Resilient Athletic Flooring

a. Adhesive and Accessories

B. Related Sections:

1. Section 09 65 00 – Resilient Flooring

1.02 REFERENCES

A. ASTM International (ASTM) Publications: (Former American Society for Testing and Materials)

1. D2047 “Standard Test Method for Static Coefficient of Friction of Polish-Coated Flooring Surfaces as Measured by the James Machine”
2. D2240 “Standard Test Method for Rubber Property—Durometer Hardness”
3. D5516 “Standard Test Method for Evaluating the Flexural Properties of Fire-Retardant Treated Softwood Plywood Exposed to Elevated Temperatures”
4. E648/NFPA 253 “Standard Test Method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source”
5. E662/NFPA 258 “Standard Test Method for Specific Optical Density of Smoke Generated by Solid Materials”
6. E1745 "Standard Specification for Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs"
7. F710 “Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring”
8. F970-00 “Standard Test Method for Static Load Limit”
9. F1869 “Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride”
10. G21-96 “Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi”

B. Carpet & Rug Institute (CRI) Publications:

Standard for Installation of Commercial Carpet CRI 104, Current Edition

C. Occupational Safety & Health Administration (OSHA) Regulations:

1. OSHA Regulation 29 CFR Toxic and Hazardous Substances 1910-1200 Hazard Communication

1.03 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

B. Submit “Letter of Conformance” in accordance with Section 01 33 00 indicating specified items selected for use in project with the following supporting data.

1. Submit manufacturer's product and maintenance data for each type of Resilient Athletic Flooring and accessory.

a. Certification by Resilient Athletic Flooring manufacturer that products supplied for flooring installation comply with local regulations controlling use of volatile organic compounds (VOCS).

2. Submit color selection in the form of actual sections of Resilient Athletic Flooring, including accessories, for each type of Resilient Athletic Flooring required showing full range of colors and patterns available.

1.04 QUALITY ASSURANCE

A. Single-Source Responsibility for Flooring: Obtain each type, color and pattern of flooring from a single source with resources to provide products of consistent quality in appearance and physical properties without delaying progress of the work.

B. Fire-Test-Response Characteristics: Provide products with the following fire-test-response characteristics as determined by testing identical products per test method indicated below by a testing and inspecting agency acceptable to authorities having jurisdiction.

1. Critical Radiant Flux: 0.45 W/sq. cm or greater when tested per ASTM E648.

2. Smoke Density: Maximum specific optical density of 450 or less when tested per ASTM E662.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Deliver Resilient Athletic Flooring and installation accessories to Project site in original manufacturer's unopened containers each bearing names of product and manufacturer, Project identification, and shipping and handling instructions.

B. Store flooring materials in dry spaces protected from the weather with ambient temperatures maintained between 50 degrees F. and 90 degrees F. Store flooring materials on flat surfaces. Move Resilient Athletic Flooring and installation accessories into spaces where they will be installed at least 48 hours in advance of installation.

1.06 PROJECT CONDITIONS

A. Maintain a minimum temperature of 70 degrees F. in spaces to receive tiles for at least 48 hours prior to installation, during installation, and for not less than 48 hours after installation. After this period, maintain a temperature of not less than 55 degrees F.

B. Do not install Resilient Athletic Flooring until they are at the same temperature as the space where they are to be installed. Close spaces to traffic during Resilient Athletic Flooring installation.

1.07 SEQUENCING AND SCHEDULING

A. Do not install Resilient Athletic Flooring materials over concrete slabs until the slabs have cured and are sufficiently dry to bond with adhesive as determined by tile manufacturer's recommended bond and moisture test.

1.08 EXTRA MATERIALS

A. Refer to Section 01 78 43 (01790)

PART 2 PRODUCTS

2.01 RESILIENT ATHLETIC FLOORING:

A. Preferred Manufactures:

1. None

B. Approved Manufacturers:

1. Johnsonite (800-899-8916).

C. All Resilient Athletic Flooring shall be the maximum extent possible of a single batch number.

D. Product, Size, Thickness, Finish and Color: Refer to Interior Finish Index.

2.02 INSTALLATION ACCESSORIES

A. Concrete Slab Primer: Nonstaining type as recommended by flooring manufacturer.

B. Trowelable Underlayments and Patching Compounds: to be supplied and/or recommended and approved by rubber athletic flooring Manufacturer for applications indicated.

C. Concrete Leveling and Patching compounds:

1. For areas up to 4 square feet:

a. Feather finish, use to smooth ridges, fill cracks, gouges and joints.

1) "SD-F"; Ardex (724-203-5000)

b. Trowelable underlayment patch for thickness up to ½ inch without aggregate; up to 1 inch with aggregate. Can be feather edged.

1) "SD-P/ Primer P-82"; Ardex (724-203-5000)

2. For areas exceeding 4 square feet:

a. Self-leveling, pourable or pumpable underlayment for thicknesses up to 5 inches. Can be feather edged.

1) "K-15/Primer P-51"; Ardex (724-203-5000)

D. Resilient Athletic Flooring Adhesives to be certified by the flooring manufacturer to suit flooring and substrate conditions.

E. Other materials, including edge strips not specifically described, but required for a complete and proper installation of Resilient Sport Flooring, shall be only as recommended by the manufacturer of material to which it is applied.

PART 3 EXECUTION

3.01 INSPECTION:

A. Installer must examine the areas and conditions under which resilient flooring and accessories are to be installed and notify the Contractor in writing of conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions have been corrected in a manner acceptable to the Installer.

1. Visually inspect for evidence of moisture, alkaline salts, carbonation, dusting, mold, or mildew.

2. Failure to call attention to defects or imperfections will be construed as acceptance and approval of the subfloor. Installation indicates acceptance of substrates with regard to conditions existing at the time of installation.

3.02 PREPARATION

A. General: Comply with manufacturer's installation specifications for preparing substrates to receive products indicated.

B. Sweep and vacuum clean substrates to be covered by floor coverings immediately before installation. After cleaning, examine substrates for moisture, alkaline salts, carbonation, and dust. Proceed with installation only after unsatisfactory conditions have been corrected.

C. This Contractor to remove coatings, including curing compounds, adhesives, plastics, and other substances that are incompatible with flooring adhesives and that contain soap, wax, oil, or silicone, by using a terrazzo or concrete grinder, a drum sander, or a polishing machine equipped with a heavy-duty wire brush. Surface to receive new flooring shall be prepared, including removal of existing materials not acceptable for proper installation of new materials, as required by manufacturer. Do not use solvents.

1. Prep floor according to ASTM F710 criteria.

D. Use leveling compound as recommended by flooring manufacturer for filling small cracks and depressions in subfloors.

E. Apply concrete slab primer, if recommended by flooring manufacturer, prior to application of adhesive. Apply in compliance with manufacturer's directions.

3.03 CONCRETE SUBFLOORS

A. Concrete subfloors to be placed a minimum of twenty-eight (28) days prior to the installation of rubber athletic flooring.

B. Verify that concrete slabs comply with ASTM F710 and the following:

1. Slab substrates are dry and free of curing compounds, sealers, hardeners, residual adhesives, adhesive removers, and other materials whose presence would interfere with bonding of adhesive. Determine adhesion and dryness characteristics by performing bond and moisture tests recommended by manufacturer.

2. Finishes of subfloors comply with tolerances and other requirements specified in Division 03 Section, "Cast-In-Place Concrete" for slabs receiving resilient flooring.

3. Subfloor Moisture Conditions: Before installing flooring Contractor shall verify that Moisture emission rate of not more than 3 lb/1000 sq. ft./24 hours when tested by calcium chloride moisture test in compliance with CRI 104, 6.2.1 and does not exceed the capacity of the specified adhesive, with subfloor temperatures not less than 55 deg F, or as recommended by manufacturer.

4. Subfloor Alkalinity Conditions: Before installing flooring Contractor shall verify that a pH range of 7 to 8.5 when subfloor is wetted with potable water and pHydrion paper is applied.

3.04 INSTALLATION

A. Install flooring after finishing operations, including painting, have been completed. Moisture content of concrete slabs, building air temperature, and relative humidity must be within limits recommended by flooring manufacturer's directions.

B. Patch and repair floors and walls to receive flooring for proper installation of flooring, stair accessories, and base.

C. Place flooring with adhesive cement in strict compliance with manufacturer's recommendations. Butt tightly to vertical surfaces and edgings. Scribe around obstructions and to produce neat joints, laid tight, even, and straight. Extend flooring into toe spaces.

D. Maintain reference markers, holes, or openings that are in place or plainly marked for future cutting by repeating on finish flooring as marked on subfloor. Use chalk or other non- permanent marking device.

E. Install flooring on covers for telephone and electrical ducts and other such items as occur within finished floor areas.

F. Maintain overall continuity of color and pattern with pieces of flooring installed in these covers. Tightly cement edges to perimeter of floor around covers and to covers.

G. Tightly cement flooring to subbase without open cracks, voids, raising and puckering at joints, telegraphing of adhesive spreader marks, or other surface imperfections.

3.05 CLEANING AND PROTECTION

A. Perform the following operations immediately after installing resilient floor coverings:

1. Remove adhesive and other surface blemishes using cleaner recommended by floor covering manufacturer.

2. Sweep or vacuum floor thoroughly.

3. Do not wash floor covering until after time period recommended by floor covering manufacturer.

    a. Initial cleaning should only be performed 72 hours after the rubber athletic surface has been completely installed.

4. Damp-mop floor to remove marks and soil.

B. Protect flooring against mars, marks, indentations, and other damage from construction operations and placement of equipment and fixtures during remainder of construction period. Use protection methods indicated or recommended by manufacturer of resilient product involved.

C. Initial cleaning should only be performed 72 hours after the rubber athletic surface has been completely installed.

D. Clean products specified in this Section not more than four days prior to dates scheduled for inspections intended to establish date of Substantial Completion in each area of Project. Clean products using method recommended by manufacturer. Strip protective floor polish that was applied after completing installation, prior to cleaning.

E. Do not move heavy and sharp objects directly over floor coverings. Place plywood or hardboard panels over floor coverings and under objects while they are being moved. Slide or roll objects over panels without moving panels.

3.06 FINISHING:

A. After completion of project and just prior to final inspection of work, thoroughly clean floors and accessories in accordance with Manufacturer's recommendations.

END OF SECTION

SECTION 09 68 00 - CARPETING

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Preparation of Surfaces to Receive Carpeting.
2. Carpet:
    a. Furnished by Owner, installed by Contractor
    b. Stretch-in Installation
    c. Direct-Glue-Down Installation
    d. Double-Glue-Down Installation
    e. Carpet with Attached-Cushion Installation
    f. Carpet with Preapplied Adhesive Installation
3. Carpet Cushion:
    a. Furnished by Owner, installed by Contractor
4. Accessories, including tack strips, adhesives tapes and all other required accessories.
5. Transition edges
6. Carpet stair nosings

B. Related Documents:

1. Proposed Seam Layout Drawings provided by Manufacturer
2. Brand FF & E Finishes Specification Sections.

C. Related Sections:

1. Section 03 30 00 - Cast-in-Place Concrete
2. Section 03 54 13 - Cementitious Decks and Underlayment
3. Section 09 65 00 - Resilient Flooring

1.02 REFERENCES

A. ASTM International (ASTM) Publications: (Former American Society for Testing and Materials):

1. D5116 “Standard Guide for Small-Scale Environmental Chamber Determinations of Organic Emissions From Indoor Materials/Products”
1. F710 “Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring“
2. F1869 “Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride”

B. Federal Specifications (FS)

1. FS DDD-C-0095 Carpet and rugs, wool, nylon, acrylic, modacrylic, polyester, polypropylene

C. Carpet & Rug Institute (CRI) Publications:

1. CRI 104 Carpet Installation Standard

D. Occupational Safety & Health Administration (OSHA) Regulations:

1. OSHA Regulation 29 CFR Toxic and Hazardous Substances 1910-1200 Hazard Communication

E. U.S. Department of Commerce (DOC) Publications:

1. Federal Flammability Standard DOC FF 1-70 (Methenamine Pill test ASTM D2859).

1.03 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

B. Submit "Letter of Conformance" in accordance with Section 01 33 00 (01330) indicating specified items selected for use in project with the following supporting data.

1. A copy of the manufacturer's printed installation manual shall accompany Bid for review and approval by the Owner's Representative.

2. Shop Drawings showing layout and seaming diagrams. Indicate pile or pattern direction and locations and types of edge strips. Indicate columns, doorways, enclosing walls or partitions, built-in cabinets, and locations where cutouts are required in carpet. Show installation details at special conditions.

1.04 QUALITY ASSURANCE

A. Installer Qualifications: Firm with not less than 5 years of experience in installation of commercial carpeting of type, quantity, and installation methods similar to work of this Section, or can demonstrate compliance with its certification program requirements.

B. Successful vendor shall be responsible for field measurements to determine carpet layout.

C. Carpet Surface Burning Characteristics: Provide carpet identical to that tested for the following fire performance characteristics, per test method indicated below, by UL, ASTM E648, or other testing and inspecting organizations acceptable to authorities having jurisdiction. Identify carpet with appropriate markings of applicable testing and inspecting organization.

1. Test Method: DOC FF 1-70

2. Rating: Pass

D. The carpet contractor is responsible for reviewing carpet manufacturer's published installation instructions prior to installation. This includes understanding dye lots, pattern sequencing, pattern matching and any special instructions. Failure to abide by the manufacturer's instructions could result in a backcharge to contractor for corrections to the installation.

E. Contractor is responsible for damages to work performed by others including but not limited to telephone or television wires placed in front of the tack-strip running the perimeter of the room.

F. The installation contractor is responsible for verification of quantities within fourteen (14) days on new construction. The contractor shall provide take-offs of all carpet and padding, as required for a complete installation. No compensation will be allowed to the installation contractor for materials and labor that may be required to install additional carpeting because of incorrect quantity takeoffs.

1.05 DELIVERY, STORAGE, AND HANDLING

A. General: Comply with the Carpet and Rug Institute's CRI 104, Section 05: "Storage and Handling".

B. Do not deliver carpet until areas of building are ready for carpet installation. Provide protection from loss or damage.

C. Store materials in original undamaged packages and containers, inside well-ventilated, dry area protected from weather, moisture, soilage, extreme temperatures and humidity. Lay flat, blocked off ground. Maintain minimum temperature of 68 degrees F. (20 degrees C.) at least three days prior to and during installation in area where materials are stored. Never stack carpet more than two rolls high or stand up on roll ends on job site. Do not bend or fold carpet in storing.

D. Carpet shall never be stacked more than five (5) rolls high.

1.06 PROJECT CONDITIONS

A. General: Comply with CRI 104, Section 07: "Site Conditions".

B. Do not commence with carpet installation until painting and finishing work is complete and ceilings and overhead work has been tested, approved, and completed.

C. In areas to receive carpet, room temperatures shall be maintained at 65-90 degrees F and with relative humidity ranging between 20 and 65 percent minimum for 72 hours prior to, during, and 72 hours following application. Materials shall be conditioned at application temperature and humidity at least 24 hours prior to application. Provide sufficient lighting for carpet installation.

D. Contractor shall provide method approved by the [Architect] [Owner's Representative] to mechanically exhaust all spaces to receive carpet to the exterior during installation and a minimum of 72 continuous hours, or length of time required by the manufacturer or Owner after installation.

E. Subfloor Moisture Conditions: Before installing carpet Contractor shall verify that Moisture emission rate of not more than 3 lb/1000 sq. ft./24 hours when tested by calcium chloride moisture test in compliance with CRI 104, 6.2.1, with subfloor temperatures not less than 55 deg F, or as recommended by manufacturer.

F. Subfloor Alkalinity Conditions: Before installing carpet Contractor shall verify that a pH range of 5 to 9 when subfloor is wetted with potable water and pHydrion paper is applied.

1.07 WARRANTY

A. Stretch-in installation labor shall be guaranteed for one (1) year. Sixty days after installation, the Subcontractor is to re-stretch all carpet where necessary and as directed by Marriott Representative.

B. Tred-Mor Dubl-Stik installation labor shall be guaranteed for five (5) years.

C. The adhesive manufacturers offer five (5) year warranty on their adhesives used on a Tred-Mor Dubl-Stik installation.

D. It is the carpet Contractors responsibility to fill out the adhesive manufacturer warranties. The warranty must be returned to the adhesive manufacturer and a copy sent to the Contractor's representative.

1.08 EXTRA MATERIALS

A. Refer to Section 01 78 43 for requirements.

PART 2 PRODUCTS

2.01 MATERIALS

A. Carpet: Refer to Interior Finish Index

2.02 CARPET CUSHIONS

A. The following carpet cushion information is provided solely for use by the Contractor to determine locations.

B. Rubber padding - 50 oz. Badger waffle type pad shall be installed in Guest Rooms and suites unless TredMor pad is specified.

2.03 ACCESSORIES

A. Seaming: Hot-melt seaming adhesive or similar product recommended by carpet manufacturer for taping seams and buttering cut edges at backing to form secure seams and prevent pile loss at seams.

B. Hot melt tape – (all stretch installation areas except Dubl-Stik installations)

1. Preferred Manufacturers:

a. None

2. Approved Manufacturers:

a. "6 inch - Super 3S Tape"; ORCON (800-227-0601)

C. Carpet and Accessory Adhesives: (All direct glue-down areas except double-stik installations)

1. Non-staining type as recommended by carpet manufacturer for use intended, complying with the following:

a. Adhesive: As recommended by carpet manufacturer for use intended, complying with the following: Adhesive shall be antimicrobial with no hazardous vapors and contain no carcinogenic materials, per OSHA Regulation 29 CFR 1910-1200. All containers shall contain material safety data sheets (MSDS) and be available at job site for inspection.

D. Carpet Adhesive - Dubl-Stik Installation

1. Preferred Manufacturers:

a. None

2. Approved Manufacturers:

a. "SS-5" ("Safe-Set"); CHAPCO (Chicago Adhesive Products, Co.) (800-621-0220)

b. "Parabond" Dubl-Stik DS-902; Para-Chem, Inc. (800-763-7272)

c. "ECO 220"; Mapei Corp. (800-426-2734)

E. Carpet Seam Adhesive - Dubl-Stik Installation

1. This product shall be used to join the primary backs of tufted carpet and the woven backs of Axminster carpet together.

a. All seam adhesives shall be latex type.

2. Preferred Manufacturers:

a. None

3. Approved Manufacturers:

a. "Seam Cement #112"; CHAPCO (Chicago Adhesive Products, Co.) (800-621-0220)

b. "Parabond Premium Latex Seam Sealer M267"; Para-Chem, Inc. (800-763-7272)

c. "Ultrabond ECO 2085"; Mapei Corp. (800-426-2734)

d. Substitution as approved by Marriott International

F. Hot Melt Tape - Dubl-Stik Installation

1. Preferred Manufacturers:

a. None

2. Approved Manufacturers:

a. “CT-7DS”; ORCON (800-227-0601)

3. NOTE: MANDATORY USE WITH BRINTONS AND COURISTAN CARPETS

4. The use of hot melt tape is optional and depends on the carpet installer's preference. There are instances during some installations, such as pattern matching, where the hot melt tape may simplify and speed up installation.

5. CAUTION: DO NOT USE A SILICONE TREATED TAPE. THE SILICON WILL PREVENT THE ADHESIVE FROM ADHERING TO THE BACK SIDE OF THE TAPE.

G. Tack Strips:

1. Water-resistant plywood strips as required to match pad thickness and in compliance with CRI 104, Section 11.3.

2. Commercial with 3 rows of pins.

a. Type 1: Pre-nailed (Concrete) for anchoring into concrete sub-floor.

b. Type 2: Extra long nails for cementitious leveling bed over plywood sub-floor.

H. Concrete Leveling and Patching compounds:

1. For areas up to 4 square feet:

a. Feather finish, use to smooth ridges, fill cracks, gouges and joints.

1) "SD-F"; Ardex (724-203-5000)

2) “Planiprep FF”; Mapei Corp. (800-426-2734)

b. Trowelable underlayment patch for thickness from feather edge to 3 inch without aggregate

1) “Quickpatch”; Mapei Corp. (800-426-2734)

c. Trowelable underlayment patch for thickness up to ½ inch without aggregate; up to 1 inch with aggregate. Can be feather edged.

1) "SD-P/ Primer P-82"; Ardex (724-203-5000)

2. For areas exceeding 4 square feet:

a. Self-leveling, pourable or pumpable underlayment for thicknesses up to 5 inches. Can be feather edged.

1) "K-15/Primer P-51"; Ardex (724-203-5000)

2) “Novoplan 2/Primer”; Mapei Corp. (800-426-2734) (Note: Refer to product datasheet for specific requirements based on substrates)

2.04 TRANSITION EDGES

A. Carpet Transition Edges: Refer to Interior Finish Index and Section 09 65 00 (09650).

PART 3 EXECUTION

3.01 EXAMINATION

A. Examine substrates, areas, and conditions for compliance with requirements for maximum moisture content, alkalinity range, installation tolerances, and other conditions affecting carpet performance. Verify that substrates and conditions are satisfactory for carpet installation and comply with requirements specified.

B. Concrete Subfloors: General Contractor shall verify that concrete slabs comply with ASTM F710 and the following:

1. Slab substrates are dry and free of curing compounds, sealers, hardeners, and other materials that may interfere with adhesive bond. Determine adhesion and dryness characteristics by performing bond and moisture tests recommended by the carpet and carpet cushion manufacturers, including ASTM F1869. It is essential that moisture tests be taken on all concrete floors regardless of age and grade level. The test should be in accordance with ASTM F1869 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride. One test should be conducted for every 1000 sq. ft. of flooring and the results not exceed 3 lbs. Per 1000 sq. ft. in 24 hours. If the test results exceed the limitations, the installation must not proceed until the problem has been corrected.
2. Subfloor Alkalinity Conditions: Before installing carpet Contractor shall verify that a pH range of 5 to 9 when subfloor is wetted with potable water and pHydrion paper is applied.
3. Subfloor finishes comply with requirements specified in Division 03 Section "Cast-in-Place Concrete" for slabs receiving carpet.
4. Subfloors are free of cracks, ridges, depressions, scale and foreign deposits. Sand smooth or fill voids to obtain a smooth level substrate, any noticeable deviation in flooring may be rejected.
5. Ensure floors are level with maximum surface variation of ¼" in 10'.

C. Report conditions contrary to Contract requirements which would prevent a satisfactory installation. Proceed with installation only after unsatisfactory conditions have been corrected, as approved by General Contractor.

1. Failure to call attention to any defects or imperfections will be construed as acceptance and approval of the subfloor.
2. Installation indicates acceptance of substrate conditions at the time of installation.

3.02 SITE ENVIRONMENTAL PROCEDURES

A. Indoor Air Quality:

1. Temporary ventilation:

a. Ventilate products prior to installation. Remove from packaging and ventilate in a secure, dry, well-ventilated space free from strong contaminant sources and residues. Provide a temperature range of 60 degrees F minimum to 90 degrees F maximum for minimum 72 hours. Do not ventilate within limits of Work unless otherwise approved by Architect.

2. Immediately after installation, clean carpet thoroughly with a high-efficiency particulate air (HEPA) filtration vacuum.

3.03 PREPARATION

A. General: Comply with CRI 104, Section 6.2, "Site Conditions; Floor Preparation," and carpet manufacturer's written instructions for preparing substrates indicated to receive carpet installation.

B. Use trowelable leveling and patching compounds, according to manufacturer's written instructions, to fill cracks, holes, and depressions in substrates.

1. Level subfloor within 1/4" in 10', noncumulative, in all directions. Sand or grind protrusions, bumps, and ridges. Patch and repair cracks and rough areas. Fill depressions.

C. Remove coatings, including curing compounds, and other substances that are incompatible with adhesives and that contain soap, wax, oil, or silicone, without using solvents. Use mechanical methods recommended in writing by the following:

1. Carpet manufacturer
2. Carpet cushion manufacturer

3.04 INSTALLATION

A. Direct-Glue-Down Installation: Comply with CRI 104, Section 8, “Direct Glue-Down Installation”

1. In the case of direct glue-down, carpet glued to floor, no padding required, follow the manufacturers specifications.
2. Milliken modular carpets and Collins & Aikman uniback carpet requires the use of their own adhesives when installing their products.

B. Double-Glue-Down Installation: Comply with CRI 104, Section 9, “Double Glue-Down Installation”

C. Carpet with Attached-Cushion Installation: Comply with CRI 104, Section 10, “Attached Cushion”

D. Carpet with Preapplied Adhesive Installation: Comply with CRI 104, Section 10.4, “Pre-Applied Adhesive Systems”

E. Stretch-In Installation: Comply with CRI 104, Section 11, “Stretch-In Installation”

1. Install tack strip with adhesive, drill and pin, or nailing, or combination, where required for adequate strength.
2. Locate Tack strip 1/4 inch from wall to conceal carpet edge between stripping and base of wall. Strip entire perimeter of each carpeted space and at obstructions and cutouts.
3. Tap down tackstrip pins in Guestrooms at Entrances, Bathroom, Closets, and Balconies.
4. Tred-Mor Pad Installation
    a. Refer to Scope of Work, and the Interior Design Drawings, for Tred-Mor pad locations. Tred-Mor padding will be installed using the stretch-in installation method listed above unless Tred-Mor Dubl-Stik is specified.
5. Power stretch carpet uniformly in both directions the exact amount recommended by carpet manufacturer; trim edges, secure to stripping and conceal behind edge of stripping.
    a. Stretch-in installations must be power stretched uniformly length and width 1% to 1.5% using a power stretcher.
    b. When Graphic Action Back Carpet is specified, a uniform length and width power stretch of .75 % to 1% is acceptable.
6. Use a carpet covered minimum 48 inch long 4 x 4 buffer block between power stretcher and wall to prevent damage to wall. Use a wall trimmer to trim carpet along walls and abutments. This Contractor shall be responsible for wall damage caused by installation Work.
    a. Trimmer must be adjusted to leave sufficient excess carpet to tuck into gullies.

F. Stair Installation: Comply with CRI 104, Section 12, “Carpet on Stairs”

G. Comply with carpet manufacturer’s written recommendations for seam locations and direction of carpet; maintain uniformity of carpet direction and lay of pile. At doorways, center seams under the door in closed position.

1. Level adjoining border edges

H. Do not bridge building expansion joints with carpet.

I. Cut and fit carpets to butt tightly to vertical surfaces, permanent fixtures, and built-in furniture including cabinets, pipes, outlets, edgings, thresholds, and nosings. Bind or seal cut edges as recommended by carpet manufacturer.

1. Check matching of carpet before cutting and ensure there is no visible variation between cut pieces.

2. Cut carpet, where required, in a manner to allow proper seam and pattern match. Ensure cuts are straight and true and unfrayed.

J. Carpet shall extend to the back of all toe spaces, under all millwork, cabinetwork, convectors, bookshelving, and similar items to the limiting planes of the floor surface. Where carpet terminates at a doorway, termination of carpet shall occur under the edge of the closed door, or at the side of the threshold where this is required. Cut and fit carpeting to all obstructions protruding from the floor surface, such as columns, pipes, thresholds, electrical, and telephone outlets, etc. All raw edges shall be sealed and securely and neatly tucked into place.

K. Maintain reference markers, holes, and openings that are in place or marked for future cutting by repeating on finish flooring as marked on subfloor. Use nonpermanent, nonstaining marking device.

L. Install pattern parallel to walls and borders.

M. Carpet shall be installed by experienced carpet layers in an approved manner, using Marriott's recommended adhesive and procedures, as approved by carpet manufacturer. Install carpet with pile running in the same direction, unless specifically directed to do otherwise.

N. Install carpet cushion seams at 90-degree angle with carpet seams.

O. The final carpet pattern, layout, edge binding locations shall be as directed and approved by Owner's Representative. All associated installation shall be by this Contractor.

3.05 SEALING CUT EDGES

A. To prevent fraying and raveling at all seams and transition areas, a continuous bead of seam adhesive must be applied to the first edge where the face yarn enters the backing.

B. On woven carpet, all cut edges at seams and transition areas must be secured with a latex seam adhesive immediately following the seam trimming.

3.06 SEAMING

A. Install pad and carpet seams in accordance with manufacturer's published instructions.

B. Locate pad seams at right angles to carpet seams. Where not possible to locate at right angles, locate pad seam minimum 6 inches away from carpet seams. Butt pad edges tightly together to form seams without gaps. Tape pad seams.

C. Maintain uniformity of carpet direction and lay of pile. At doors, center seams under doors; do not place seams in traffic direction at doorways.

D. Orcon Super 3S Wide tape will be used on all public area seams specifying hot melt tape.

E. The seaming iron with heat shield must be of proper size, matching the hot melt tape being used.

F. The proper head setting and exposure time must be used to assure proper transfer without creating damage to backing or pile yarn.

G. Orcon Super 3S tape will be used in Guest Rooms and suites where seams are specified.

H. Cutting and Seaming Plan:

1. Guest Room and Suites: Refer to the Interior Design Drawings seaming layouts.

2. Public Areas: Refer to the Interior Design Drawings seaming layouts and the carpet suppliers seaming layouts.

I. Where conflicts between Owner's requirements and manufacturer's requirements occur, use Owner's requirements.

3.07 ACCESSORIES

A. Provide carpet edge guard where edge of carpet is exposed; anchor guards to substrate. Edge guard shall be used in all doorways or openings where no sill is installed or as required.

B. Stair Nosing: Coordinate with installation of carpet so that edge of the carpet is installed under edge of nosing or otherwise protected from unraveling.

C. Base (in corridors): Carpet Base, to match adjacent floor.

1. Install carpet base prior to installing carpet, aligned straight and level. Neatly fit against floor carpet.

2. Fix the carpet base to walls using a manufacturer approved adhesive. Mechanically attach the base to the wall at the bottom edge of surging when required. Staples shall not be permitted.

3.08 ADJUSTING

A. Stretch-In Installation: Restretch carpet sixty days after Substantial Completion, as directed by Owner.

3.09 CLEANING AND PROTECTION

A. Comply with CRI 104, Section 15, "Protection of Indoor Installation".

B. Remove and dispose of debris and unusable scraps daily.

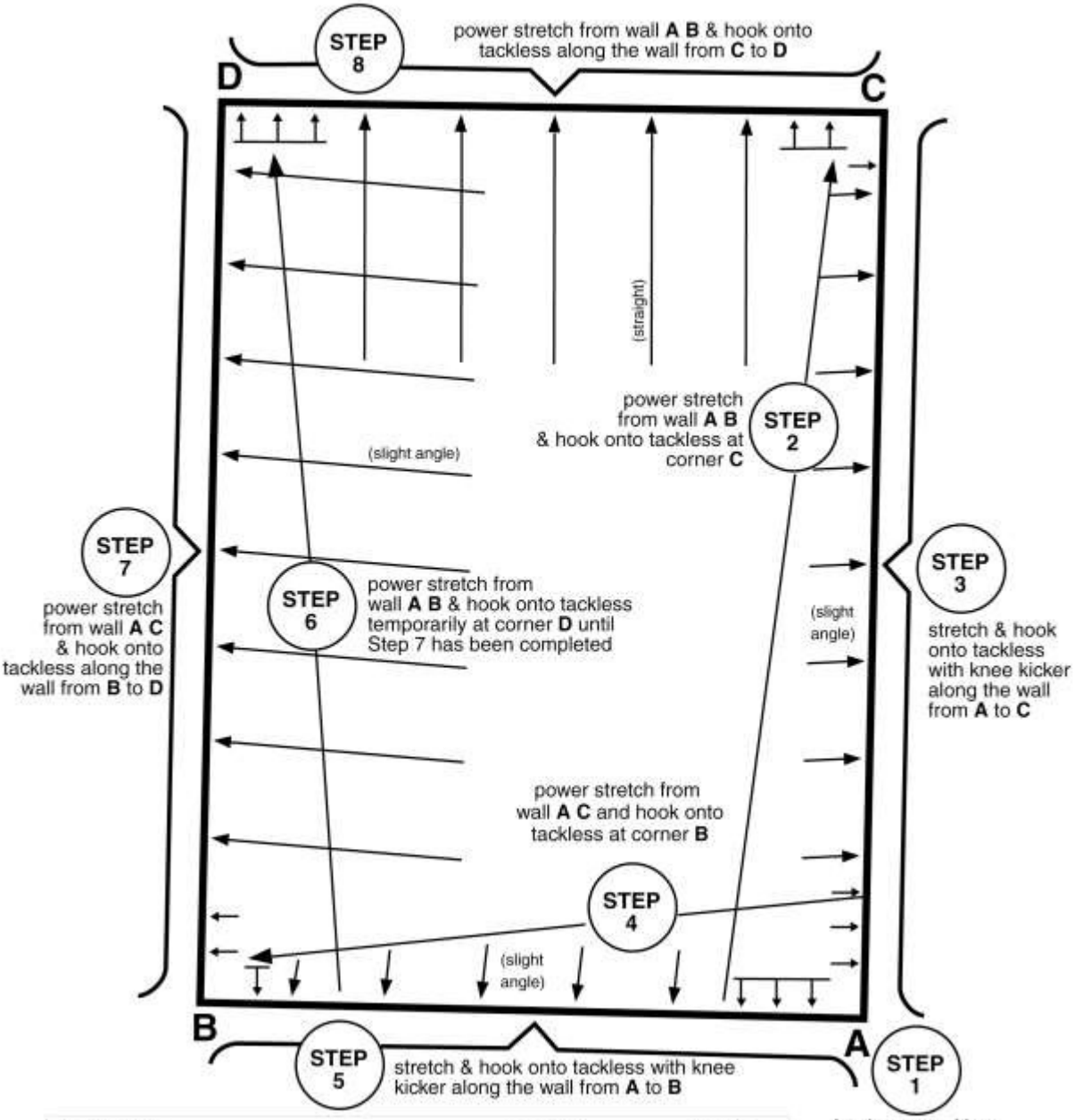
C. Vacuum carpet daily using commercial machine with face-beater element. Remove spots and replace carpet where spots cannot be removed. Remove any protruding face yarn using sharp scissors. Knock down tacks at entries to baths and guest rooms (to protect feet).

D. Maintenance Materials: Deliver specified overrun (if any) and usable scraps of carpet to Owner's designated storage space, properly packaged (paper wrapped) and identified. Usable scraps are defined to include roll ends of less than 9'-0" length, and 3'-0" wide. Dispose of smaller pieces as "construction waste".

E. Protect carpet against damage from construction operations and placement of equipment and fixtures during the remainder of construction period. Use protection methods indicated or recommended in writing by carpet manufacturer.

TUFTED

Amount of Stretch as per the Carpet Manufacturer's Recommendation
In Absence of Carpet Manufacturer's Recommendation, Use Diagram Below



STRETCH:	Length	Width
Jute Secondary Backing:	"drum tight"	"drum tight"
Synthetic Secondary Backing:	1% - 1 1/2%	1% - 1 1/2%

NOTE: TO BE USED FOR ALL BRANDS

END OF SECTION

SECTION 09 90 00 - PAINTING

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. This Section includes surface preparation and the application of paint materials to exposed interior and exterior items and surfaces scheduled. Surface preparation, prime and finish coats specified are in addition to shop-priming and surface treatments.

2. Paint all exposed surfaces, whether or not colors are designated, except where a surface or material is indicated not to be painted or is to remain natural. Where an item or surface is not mentioned, paint the same color as similar adjacent materials or surfaces. If color or finish is not designated, the Owner will select from standard colors or finishes available.

3. Except in mechanical and electrical rooms, paint all exposed plumbing, heating, fire protection, and electrical material to match the walls and ceilings of that area unless noted otherwise. This shall include, but not be limited to, pipes, sprinkler piping, insulation, conduit, ducts, access panels, grilles, diffusers, hangers, exposed steel and iron supports, HVAC and electrical equipment that do not have a factory applied finish, whether the adjacent surfaces receive paint or not, and the like. Include dampers or baffles behind grilles.

4. Unless noted otherwise, painting is not required on pre-finished items, finished metal surfaces, concealed surfaces, operating parts, sprinkler heads, or labels.

a. All louvers and grilles to be painted to match adjacent surfaces.

b. Labels: **Do not** paint over Underwriter's Laboratories, FMG or other code-required labels, or equipment names, identification, performance rating, or nomenclature plates.

B. Related Sections:

1. Section 08 11 13 - Steel Doors and Frames: Prime coat on new hollow metal work shall be furnished under this Section.

2. Prime coat on lintels shall be furnished under the Division 05 Sections.

3. Section 09 21 16 - Gypsum Board Assemblies: Spray applied textured coating specified in Section.

4. Section 09 96 00 - High-Performance Coatings: Prime and finish coat for exposed exterior ferrous metal items shall be furnished under that Section. Refer to that Section for items included.

1.02 REFERENCES

A. Underwriter's Laboratories, Inc. (UL) Standards

B. FM Global (FMG): Standards

C. ASTM International (ASTM) Publications:

1. D16 “Standard Terminology for Paint, Related Coatings, Materials, and Applications”

2. D2824 “Standard Specification for Aluminum-Pigmented Asphalt Roof Coatings, Non-fibered, Asbestos Fibered, and Fibered without Asbestos”

3. D1187 “Standard Specification for Asphalt-Base Emulsions for Use as Protective Coatings for Metal; 1997 (Re-approved 2002)”

D. Society of Protective Coatings (SSPC)

1. Surface Preparation Standards and Specifications

a. SSPC-SP 1, “Solvent Cleaning”

b. SSPC-SP 11, “Power Tool Cleaning to Bare Metal”

E. The Painting and Decorating Contractors of America (PDCA)

1. PDCA P5-94 “Benchmark Sample Procedures for Paint and Other Decorative Coating Systems”

F. Code of Federal Regulations (CFR) Publications:

1. 40 CFR, Part 59, Subpart D 2001, "National Volatile Organic Compound Emission Standards for Architectural Coatings"

G. Green Seal, Inc. Publications:

1. GS-11 “Green Seal Environmental Standard for Paints”, First Edition 1993.

H. U.S. Green Building Council's (USGBC) Publications:

1. (LEED-NC) Version 2.2 “LEED for New Construction and Major Renovations”

1.03 DEFINITIONS:

A. General: Standard coating terms defined in ASTM D16 apply to this Section.

B. "Paint" includes coating systems materials, primers, emulsions, enamels, stains, sealers and fillers, and other applied materials whether used as prime, intermediate or finish coats.

1.04 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

B. Submit “Letter of Conformance” in accordance with Section 01 33 00 (01330) indicating specified items selected for use in project with the following supporting data.

1. Product Data: Submit manufacturer's technical information, label analysis, and application instructions for each paint material proposed for use.

2. Samples: Submit two representative samples of each major type of surface or material. Do not proceed with final painting until samples are approved.

3. Color Charts: In duplicate, for all paints, stains and special coatings. Identify with numbers used on the “Interior Finish Index” or on the Drawings.

4. Painting Schedule: In a form similar to the schedule herein outlining the type of paint to be used for each category, application, and color. Indicate each material and cross-reference specific coating, finish system, and application. Identify each material by manufacturer's catalog number and general classification.

5. Quality Control Submittals:

a. Certifications: Manufacturer's statement that paint materials conform to current regulations relating to lead content and air pollution emission requirements.

C. Written Permission in writing by the Owner's Representative for the use of Mechanical application methods.

1. Submit Green Seal Certification to GS-11 and description of the basis for certification.

2. Submit environmental data in accordance with Table 1 of E2129 for products provided under work of this Section.

3. Emission Test Reports.

1.05 QUALITY ASSURANCE

A. Single Source Responsibility: Provide primers and undercoat paint produced by the same manufacturer as the finish coats.

B. Coordination of Work: Review Sections in which primers are provided to ensure compatibility of the total systems for various substrates.

C. Material Quality: Provide the manufacturer's best quality trade sale type paint material of the various types specified. Paint material containers not displaying manufacturer's product identification will not be acceptable. Proprietary names used to designate colors or materials are not intended to imply that products named are required or to exclude of equal products of other manufacturers.

1.06 DELIVERY AND STORAGE

A. Deliver materials to the job site in manufacturer's original, unopened packages and containers bearing manufacturer's name and label with trade name and manufacturer's instructions.

1. Product Name or Title of Material
2. Product Description (Generic Classification or Binder Type)
3. Manufacturer's Stock Number and Date of Manufacture
4. Contents by Volume, for Pigment and Vehicle Constituents
5. Thinning Instructions
6. Application Instructions
7. Color Name and Number
8. VOC Content

B. Approved materials without the above information will **NOT** be allowed on the Project site.

C. Store materials not in actual use in tightly covered containers at a minimum ambient temperature of 50 degrees F. in a well-ventilated area. Maintain containers used in storage of coatings in a clean condition, free of foreign materials and residue.

1. Protect from freezing. Keep storage area neat and orderly. Remove oily rags and waste daily. Take necessary precautionary measures to ensure that workmen and work areas are adequately protected from fire hazards and health hazards resulting from handling, mixing, and application of coatings.

1.07 PROJECT CONDITIONS:

A. Do not apply coatings in snow, rain, fog, or mist, or when the relative humidity exceeds 85 percent, or at temperatures less than 5 degrees F. above the dew point, or to damp or wet surfaces, unless otherwise permitted by manufacturer's printed instructions. Allow wet surfaces to dry thoroughly and attain the temperature and conditions specified before proceeding with or continuing the coating operation.

1.08 WASTE MANAGEMENT AND DISPOSAL

A. Paint, stain and wood preservative finishes and related materials (thinners, solvents, etc.) are regarded as hazardous products and are subject to regulations for disposal. Obtain information on these controls from applicable government agencies having jurisdiction

B. Set aside and protect surplus and uncontaminated finish materials not required by the Owner and deliver or arrange collection for verifiable re-use or re-manufacturing.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Except where noted otherwise, all finishing materials, thinners, etc., shall be the best quality, first line materials as manufactured by one of the following manufacturers:

1. Preferred Manufacturers:

a. Sherwin-Williams Co. (S-W) (800-321-8194)

2. Approved Manufacturers:

a. Benjamin Moore & Co. (BM) (888-236-6667)

b. Glidden Professional, an AkzoNobel Brand (888-615-8169)

c. PPG Architectural Finishes, Inc. - Pittsburgh Paints (888-441-9695)

2.02 PAINT MATERIALS - GENERAL

A. Material Compatibility: Provide block fillers, primers, and finish-coat materials that are compatible with one another and with the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.

B. Material Quality: Provide manufacturer's best-quality paint material of the various coating types specified that are factory formulated and recommended by manufacturer for application indicated.

1. Paint-material containers not displaying manufacturer's product identification will **NOT** be acceptable.

a. Recycled content paints and primers will not be permitted for interior or exterior application.

b. Toxicity/IEQ: Comply with applicable regulations regarding toxic and hazardous materials, and as specified. Paints and coatings must meet or exceed the VOC and chemical component limits of Green Seal requirements.

1) Interior paint: Comply with Green Seal GS-11.

2) Exterior paint: Comply with Green Seal GS-11.

C. Raw linseed oil, turpentine, benzene, gloss oil, or coal oil shall not be used in any of the materials for painting work.

D. Chemical Components of Interior Paints and Coatings: Provide products that comply with the following limits for VOC content when calculated according to 40 CFR 59, Subpart D (EPA Method 24) and the following chemical restrictions:

2.03 SPAR VARNISH

A. Modified alkyd resin meeting federal regulations for lead and other heavy metals.

B. Clear, gloss finish.

C. Apply varnish on exposed ends of millwork as required in Section 12 30 00 (06400) - Architectural Woodwork and all field cuts in top and bottom rails of wood doors shall be sealed with two coats of varnish.

2.04 PROTECTIVE COATINGS

A. Bituminous Paint: Acid and alkali resistant type conforming to ASTM D1187.

B. Zinc Chromate Primer: Standard zinc chromate primer, selected from manufacturers listed in this Section.

C. Aluminum Pigmented Paint: Fibrated aluminum complying with ASTM D2824, Type IV.

D. Apply protective coating, bituminous paint, to isolate aluminum member as required.

2.05 PAINT SCHEDULE

A. Detailed specifications for the various surfaces are shown in the Paint Schedule. If these specifications conflict with the recommendations of the manufacturer, this discrepancy shall be brought to the attention of the Owner's Representative, the Owner's Representative shall decide which method shall be followed.

B. Refer to Paint Schedule at the end of this Section.

2.06 COLOR SAMPLES:

A. The Contractor shall furnish samples of all finishes in triplicate and obtain the approval of color match before starting work. Final colors must match exactly with the approved sample. Colors selection and quantity of different colors, as shown on Drawings, and approved by Owner's Representative.

B. Where a different manufacturer is utilized that product identified in Interior Finish Index, color must match listed name or number.

PART 3 EXECUTION

3.01 EXAMINATION

A. Examine substrates and conditions under which painting will be performed for compliance with requirements. Do not begin application until unsatisfactory conditions have been corrected.

1. Start of painting will be construed as Applicator's acceptance of surfaces and conditions within a particular area.

3.02 SURFACES TO BE COATED

A. Paint access doors, panels, registers, diffusers, light fixture trim, metal speaker covers and grilles the same color as adjacent surfaces. Paint access doors and panels in open position.

B. Paint interiors of ducts showing through registers and grilles flat black.

C. Paint prime coated or previously painted hinges the same as door frame to which they are attached.

D. Finish edges of doors to match faces.

E. Do not paint electrical device face plates or devices, sprinkler heads, smoke alarms or thermostats/covers.

F. Unless otherwise directed, remove and spray paint metal items/products that are removable such as vents, registers, access panels, covers, louvers and diffusers. Reinstall upon completion.

3.03 PREPARATION:

A. Remove hardware and hardware accessories, plates, machined surfaces, lighting fixtures, and items in place that are not to be painted, or provide protection prior to surface preparation and painting. Remove items if necessary for complete painting of the items and adjacent surfaces. Following completion of painting, reinstall items removed using workmen skilled in the trades involved.

B. Clean surfaces before applying paint or surface treatments. Schedule cleaning and painting so dust and other contaminants will not fall on wet, newly painted surfaces.

C. Provide protection for adjacent surfaces as necessary to prevent paint from coming into contact with adjacent materials not scheduled for painting.

3.04 SURFACE PREPARATION:

A. Clean and prepare surfaces to be painted in accordance with manufacturer's instructions for each particular substrate condition. Notify Architect in writing of problems anticipated using specified finish coat material with substrates primed by others.

B. Ferrous Metals: Clean non-galvanized ferrous metal surfaces that have not been shop-coated; remove oil, grease, dirt, loose mill scale and other foreign substances. Use solvent or mechanical cleaning methods that comply with recommendations of the Steel Structures Painting Council.

1. Touch-up shop-applied prime coats that have been damaged, and bare areas. Wire-brush, clean with solvents, and touch-up with the same primer as the shop coat.

2. At areas to receive epoxy paint, prepare steel surfaces to SSPC-SPII power tool clean.

C. Galvanized Surfaces: Utilize SSPC-SP1 solvent cleaning and chemical wash (tri-sodium phosphate). Power wash with tri-sodium phosphate type cleaner (5% solution at 140 degrees F.) and solvent clean after rinsing and drying with a non-petroleum based solvent cleaner so that surface is free of oil and surface contaminants. Remove pretreatment from galvanized sheet metal fabricated from coil stock, by mechanical methods.

1. Touch-up shop-applied prime coats that have been damaged, and bare areas. Wire-brush clean with solvents, and touch-up with the same primer as the shop coat.

D. Wood Surfaces:

1. General:

a. Clean surfaces of dirt, oil, and other foreign substances with scrapers, mineral spirits, and sandpaper, as required. Sand surfaces exposed to view smooth and dust off.

b. Scrape and clean small, dry, seasoned knots, and apply a thin coat of white shellac or other recommended knot sealer before applying primer. After priming, fill holes and imperfections in finish surfaces with putty or plastic wood filler. Sand smooth when dried.

c. Delete subparagraphs below if these requirements are specified in other Sections.

d. Prime, stain, or seal wood to be painted immediately on delivery. Prime edges, ends, faces, undersides, and backsides of wood, including cabinets, counters, cases, and paneling.

e. When transparent finish is required, back prime with spar varnish.

f. Back prime paneling on interior partitions where masonry, plaster, or other wet wall construction occurs on backside.

g. Seal tops, bottoms, and cutouts of unprimed wood doors with a heavy coat of varnish or sealer immediately on delivery.

3.05 MATERIALS PREPARATION:

A. Mix and prepare paint in accordance with manufacturer's directions.

B. Stir material before application to produce a mixture of uniform density; stir as required during application. Do not stir surface film into material. Remove film and, if necessary, strain before using.

C. Use only thinners approved by manufacturer, and only within recommended limits.

3.06 APPLICATION:

A. Apply paint in accordance with manufacturer's directions. Use applicators and techniques best suited for substrate and type of material being applied. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to formation of a durable paint film.

B. Paint colors, surface treatments, and finishes are indicated in "schedules."

C. The number of coats and film thickness required is the same regardless of application method. Do not apply succeeding coats until previous coat has cured. Sand between applications where required to produce a smooth, even surface. Apply additional coats when undercoats or other conditions show through final coat, until paint film is of uniform finish, color, and appearance.

D. The term "exposed surfaces" includes areas visible when permanent or built-in items are in place. Extend coatings in these areas to maintain system integrity and provide desired protection.

E. Paint back sides of access panels and removable or hinged covers to match exposed surfaces.

F. Omit primer on metal surfaces that have been shop-primed, unless primer becomes worn, damaged, or more than six months old from date of delivery to job site.

G. Paint all edges of every door to match faces, including top and bottoms.

3.07 MINIMUM COATING THICKNESS:

A. Apply materials at the manufacturer's recommended spreading rate. Provide total dry film thickness of the system as recommended by the manufacturer.

3.08 BLOCK FILLERS:

A. Apply block fillers at a rate to ensure complete coverage with pores filled.

3.09 PRIME COATS:

A. Before application of finish coats, apply a prime coat as recommended by the manufacturer to material required to be painted or finished, and has not been prime coated by others.

B. Tinting of primers will not be permitted.

C. Re-coat primed and sealed substrates where there is evidence of suction spots or unsealed areas in the first coat to assure a finish coat with no burn-through or other defects due to insufficient sealing.

D. Back Priming:

1. All wood trim shall be back primed before installation. Spot prime all ends of trim.

3.10 BRUSH APPLICATION:

A. Brush-out and work brush coats into surfaces in an even film. Eliminate cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, or other surface imperfections. Draw neat glass lines and color breaks. Apply primers and first coats by brush unless manufacturer's instructions permit use of mechanical applicators.

3.11 ROLLER APPLICATION

A. Rollers: Use rollers of carpet, velvet-back, or high-pile sheep's wool as recommended by manufacturer for material and texture required.

3.12 MECHANICAL APPLICATIONS:

A. Mechanical methods for paint application will **ONLY** be permitted by written permission of the Architect. All suite entry doors must be brush applied.

3.13 FIELD QUALITY CONTROL

A. Match approved samples for color, texture and coverage. Remove, refinish or repaint work not in compliance with specified requirements.

B. Where touch-ups occur, match color and sheen of existing surface. Touch-ups must blend invisibly, or painting must be extended to nearest corner or other termination point, as acceptable to the Owner's Representative.

C. Painted exterior and interior surfaces shall be considered to lack uniformity and soundness if any of the following defects are apparent to the Owner's Representative:

1. Brush / roller marks, streaks, laps, runs, sags, drips, heavy stippling, hiding or shadowing by inefficient application methods, skipped or missed areas, and foreign materials in paint coatings.

2. Evidence of poor coverage at rivet heads, plate edges, lap joints, crevices, pockets, corners and re-entrant angles.

3. Damage due to touching before paint is sufficiently dry or any other contributory cause.

4. Damage due to application on moist surfaces or caused by inadequate protection from the weather.

5. Damage and/or contamination of paint due to blown contaminants (dust, spray paint, etc.).

6. Visible defects are evident on vertical surfaces when viewed at normal viewing angles from a distance of not less than 48".

7. Visible defects are evident on horizontal surfaces when viewed at normal viewing angles from a distance of not less than 48".

8. Visible defects are evident on ceiling, soffit and other overhead surfaces when viewed at normal viewing angles.

9. When the final coat on any surface exhibits a lack of uniformity of color, sheen, texture, and hiding across full surface area.

3.14 CLEANING

A. At the end of each work day, remove empty cans, rags, rubbish, and other discarded paint materials from the site.

1. Clean equipment and dispose of wash water / solvents as well as all other cleaning and protective materials (e.g. rags, drop cloths, masking papers, etc.), paints, thinners, paint removers / strippers in accordance with the safety requirements of authorities having jurisdiction

B. Upon completion of painting, clean glass and paint-spattered surfaces. Remove spattered paint by washing, scraping, or other proper methods, using care not to scratch or damage adjacent finished surfaces.

C. Protect work of other trades, whether to be painted or not, against damage from painting.
Correct damage by cleaning, repairing or replacing, and repainting, as acceptable to Architect.

D. Provide "Wet Paint" signs to protect newly-painted finishes. Remove temporary protective wrappings provided by others for protection of their work after completion of painting operations. At completion of construction activities of other trades, touch-up and restore damaged or defaced painted surfaces.

END OF SECTION

SECTION 09 94 13 - TEXTURED FINISHING

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Spray Applied Textured Finish and Primer

a. Textured Finish for Ceilings.

b. Textured Finish for Walls.

B. Related Sections:

1. Section 06 20 00 - Finish Carpentry
2. Section 07 92 00 – Joint Sealants
3. Section 09 21 16 – Gypsum Board Assemblies
4. Section 09 21 16.23 - Gypsum Board Shaft-Wall Assemblies
5. Section 09 90 00 - Painting

1.02 REFERENCES

A. ASTM International (ASTM) Publications:

1. C11 “Standard Terminology Relating to Gypsum and Related Building Materials and Systems”
2. C475 “Standard Specification for Joint Compound and Joint Tape for Finishing Gypsum Board”
3. C840 “Standard Specification for Application and Finishing of Gypsum Board”
4. E84 “Standard Test Method for Surface Burning Characteristics of Building Materials”
5. E90 “Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements”
6. E119 “Standard Test Methods for Fire Tests of Building Construction and Materials”
7. E413 “Classification for Rating Sound Insulation”

B. Gypsum Association (GA) Publications:

1. GA-214 “Recommended Levels of Gypsum Board Finish”
2. GA-216 “Application and Finishing Of Gypsum Panel Products”
3. GA-505 for definitions of terms for gypsum board assemblies not defined in this Section

C. United States Gypsum Co. (USG):

1. "Gypsum Construction Handbook"

1.03 DEFINITIONS

A. Gypsum Board Construction Terminology: Refer to ASTM C11 and GA-505 for definitions of terms for gypsum board construction not otherwise defined in this Section or other referenced standards.

1.04 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

B. Submit “Letter of Conformance” in accordance with Section 01 33 00 indicating specified items selected for use in project with the following supporting data.

1. Submit Product Data for each type of product specified.

2. Samples: Submit two representative samples of each major type of surface or material. Do not proceed with final application of textured finish until samples are approved.

3. Shop Drawings: Show locations, fabrication, and installation of control and expansion joints including plans, elevations, sections, details of components, and attachments to other units of Work.

4. Written Certification by the manufacturer of applicator's certification to install textured finish system.

1.05 QUALITY ASSURANCE

A. Spray applied textured finish installers shall have successfully completed within last three years, at least three textured coating applications similar in type and size of this project and which is approved and certified by manufacturer of textured finish system materials.

B. Benchmark Samples (Mockups): Provide a full-coat benchmark finish sample for each type of coating and substrate required.

1. Provide an application in one Guest Room for acceptance by the Owner's Representative and to represent surfaces and conditions for application of each type of coating and substrate and serve as a sample standard of quality for the balance of the work.

2. Apply benchmark samples, according to requirements for the completed Work, after permanent lighting and other environmental services have been activated. Provide required color and texture on each surface.

3. Rework sample room if necessary to obtain Owner Representative’s acceptance.

4. Final approval of textures and colors will be from benchmark samples.

C. Coordination:

1. Review other sections of these specifications in which prime paints, raw substrates, or other substances might be present to ensure compatibility of the total coatings system. Upon request from other trades, furnish information, or characteristics of coating materials to ensure compatible substrate materials and finishes are used.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials in original packages, containers, or bundles bearing brand name and identification of manufacturer or supplier.

1. Product Name or Title of Material

2. Product Description (Generic Classification or Binder Type)

3. Manufacturer's Stock Number and Date of Manufacture

4. Contents by Volume, for Pigment and Vehicle Constituents

5. Application Instructions

6. Color Name and Number

7. VOC Content

B. Approved materials without the above information will **NOT** be allowed on the Project site.

C. Store materials inside under cover and keep them dry and protected against damage from weather, direct sunlight, surface contamination, corrosion, construction traffic, and other causes in strict accordance with manufacturer’s recommendations.

1.07 PROJECT CONDITIONS

A. Environmental Conditions, General: Establish and maintain environmental conditions for finishing gypsum board to comply with ASTM C840 manufacturers recommendations as to environmental conditions under which coating can be applied, whichever are more stringent.

B. Room Temperatures: Maintain temperature at not less than 65 degrees F during installation. Do not exceed 95 deg. F when using temporary heat sources.

C. Ventilate building spaces to remove water not required for drying joint treatment materials. Avoid drafts during dry, hot weather to prevent materials from drying too rapidly.

1. Provide adequate ventilation to permit drying during curing.

1.08 EXTRA MATERIALS

A. Furnish extra textured top coating materials from the same production run as the materials applied in the quantities described below. Package textured coating materials in unopened, factory-sealed containers for storage.

1. Quantity: Furnish the Owner with two gallons of each material and color applied in addition to any leftover amounts.

2. All cans shall be labeled with color names and color formula numbers.

1.09 WARRANTY

A. Special Warranty:

1. Warranty period is 5 years after date of Substantial Completion for labor and material against Mold, Mildew and Algae.

PART 2 PRODUCTS

2.01 SPRAY APPLIED TEXTURED FINISH

A. Texture finish for Ceilings:

1. Additional Instructions:

a. Refer to Section 2514.02.B for Brand Standard Requirements for Texture Products.
b. Provide Samples of proposed finish materials for Review by Hilton with the required information included with the samples. Refer to Section 2514 Brand Standard Requirements.

2. Approved Manufacturers:

a. "Imperial QT Easy Spray"; United States Gypsum Co. (800-950-3839)

b. "Perfect Spray"; National Gypsum Company, Gold Bond Building Products Div. (800-628-4662)

B. Texture Finish for Walls:

1. Additional Instructions:

a. Refer to Section 2514.02.B for Brand Standard Requirements for Texture Products.
b. Provide Samples of proposed finish materials for Review by Hilton with the required information included with the samples. Refer to Section 2514 Brand Standard Requirements.

2. Approved Manufacturers:

a. "Sheetrock Wall and Ceiling Spray Texture "Tuf Tex" - Spatter Knockdown, United States Gypsum Co. (312-606-4000)

b. "Perfect Spray EM" Spatter Knockdown; National Gypsum Company, Gold Bond Building Products Div. (800-628-4662)

C. Textured Finish for Walls – Mildew Prone Locations:

1. General: Rating of 10 "No Mold Growth" as tested for 4 weeks according to ASTM D3273.

   a. Texture: Refer to Interior Finish locations above.

   b. Finish color: Refer to Interior Finish locations above and Brand Standards for Color Scheme color requirements.

   c. Uniform color with no areas or spots of discoloration.

   d. System must have integral color throughout thickness of system.

2. Preferred Manufacturers:

   a. None

3. Approved Manufacturers:

   a. "Texturi Systems 3"; Comex Paints USA (210-639-6069)

      1) VOC: <50 g/L

      2) Total System Dry Film Thickness (DFT): 15 to 20 mils

   b. "Supreme-Tex Acrylic Textures"; U.S. Textures, Inc. (800-414-8805)

      1) VOC: <50 g/L

      2) Total System Dry Film Thickness (DFT): 16 to 25 mils

   c. “Commercial Texture System 3000”; Litex Finishing Systems, Inc. (800-340-0361)

      1) VOC: <50 g/L

      2) Total System Dry Film Thickness (DFT): 12 to 20 mils

D. Textured Finish for Walls:

1. General: Rating of 10 "No Mold Growth" as tested for 4 weeks according to ASTM D3273.

   a. Texture: Refer to Interior Finish locations above.

   b. Finish color: Refer to Interior Finish locations above and Brand Standards for Color Scheme color requirements.

   c. Uniform color with no areas or spots of discoloration.

   d. Textured System must have integral color throughout thickness of system.

2. Preferred Manufacturers:

   a. None

3. Approved Manufacturers:

   a. "Texturi Systems 3"; Comex Paints USA (210-639-6069)

      1) VOC: <50 g/L

      2) Total System Dry Film Thickness (DFT): 15 to 20 mils

   b. "Supreme-Tex Acrylic Textures"; U.S. Textures, Inc. (800-414-8805)

      1) VOC: <50 g/L

      2) Total System Dry Film Thickness (DFT): 16 to 25 mils

   c. “Commercial Texture System 3000”; Litex Finishing Systems, Inc. (800-340-0361)

      1) VOC: <50 g/L

      2) Total System Dry Film Thickness (DFT): 12 to 20 mils

4. Polystyrene Aggregated Finish for Ceilings: Factory-packaged proprietary powder product formulated with polystyrene aggregates for mixing with water at Project site to produce the texture indicated below by spray application, with flame-spread and smoke-developed ratings of not more than 25 per ASTM E84:

   a. Texture: Refer to Interior Finish locations above.

   b. Finish color: Refer to Interior Finish locations above and Brand Standards for Color Scheme color requirements.

   c. Flat finish - no gloss.

   d. Uniform color with no areas or spots of discoloration.

5. Water: All water used in system shall be clean and free from deleterious amounts of foreign material.

6. Other Materials: All other materials not specifically described but required for a complete and proper installation of the textured finish shall be as selected by the Contractor, subject to approval by the Owner's Representative.

PART 3 EXECUTION

3.01 EXAMINATION

A. Examine substrates with Installer present, to which textured finish will be applied, for compliance with requirements for installation tolerances and other conditions affecting performance of finishes specified in this Section.

B. Installer shall examine areas and conditions under which coating work is to be applied and notify the Contractor in writing of conditions detrimental to proper and timely completion of the work.

C. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.02 PREPARATION - SPRAY APPLIED TEXTURED FINISH

A. General: Remove hardware and hardware accessories, plates, machined surfaces, light fixtures, and similar items already installed that are not to be coated. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and coating.

   1. After completing coating operations in each area, reinstall items removed using workers skilled in trades involved.

B. Cleaning: Before applying coatings or other surface treatments, clean substrates of substances in accordance with manufacturer's recommendations that could impair bond of coating systems. Remove oil and grease before cleaning.

   1. Schedule cleaning and coating application so dust and other contaminants from cleaning operations will not fall on wet, newly coated surfaces.

C. Surface Preparation: Clean and prepare surfaces to be coated according to the manufacturer's written instructions for the particular substrate conditions, and as specified.

   1. Surface Preparation and Primer: Prepare and apply primer to gypsum panels and other surfaces receiving texture finishes according to texture finish manufacturer's instructions. Apply primer only to surfaces that are clean, dry, and smooth. Primer: Apply at not less than manufacturer's recommended spreading rate, to establish a total dry film thickness recommended by coating manufacturer.

   2. Accent Walls may require special wall preparation, refer to manufacturer's recommendations.

3. Gypsum Board Preparation:

   a. Treat joints and fastener heads in accordance with spray applied finish manufacturer's recommendations and Section 09 21 16 "Gypsum Board Assemblies".

   b. Fill and smooth scratches and scuffs in gypsum board surfaces.

   c. Allow gypsum board joint treatment and fillers to thoroughly dry before application.

4. Install sealant in joints. Refer to Section 07 92 00 "Joint Sealants".

5. Material Preparation: Carefully mix and prepare materials according to the manufacturer's written instructions to achieve a smooth, heavy-batter consistency. Mixing of paint with texture finish as recommended by the manufacturer or applying paint to substrate prior to applying texture finish as recommended by the manufacturer is suggested to achieve uniform color without dark spots from holes without staining.

3.03 INSTALLATION - SPRAY APPLIED TEXTURED FINISH

A. General: Apply finish to exposed surfaces indicated.

1. Textured Finish Application: Mix and apply finish to gypsum panels, concrete, and other surfaces indicated to receive texture finish according to texture finish manufacturer's directions. Using power spray equipment acceptable to texture finish manufacturer, produce a uniform texture matching approved field samples, free of starved spots, pin-holes, or other evidence of thin application or of application patterns, and free of excessive globules.

2. Prevent textured finishes from coming into contact with surfaces not indicated to receive texture finish by covering them with masking agents, polyethylene film, or other means. If despite these precautions, texture finishes contact these surfaces, immediately remove droppings and overspray as recommended by texture finish manufacturer to prevent damage.

3. Minimum Coating Thickness: Apply each material at not less than the manufacturer's recommended spreading rate. Provide total cured material thickness indicated or as recommended by the manufacturer.

   a. Coverage shall be complete including precast joints.

   b. Dark accent-colored walls may require additional application methods. Include all work as required to achieve approved colors and textures.

4. Lightly sand the entire surface with extra fine grit paper 24 hours after application to remove all rough spots or abrasive burrs and then remove dust.

5. Remove the masking tape and clean all adjacent surfaces at the end of each workday. Do not leave masking tape or waste materials in place for more than thirty-six (36) hours

B. Application Procedures - Spatter Knockdown Finish:

1. Apply primer to wallboard after all wallboard joints are finished, prior to spatter application.

2. Mix spatter to heavy latex paint-like consistency. Do not add paint to spatter mixture.

3. When the primer is fully dry, apply spatter with spray gun in a rapid random fashion standing approximately six feet from surface.

4. For Knockdown Finish: After splattering surface, wait 3 to 20 minutes, then lightly flatten only tops of spatters with clear knockdown blade, flat blade or flat hand trowel. Application may vary based on wall conditions, projects conditions, and selected finish.

5. Amount, size or density of spatters depends on pressures used, preference and humidity. Final texture as approved by the Owner's Representative.

3.04 ADJUST AND CLEAN

A. Touch-up, repair or replace damaged finishes as necessary to restore coating work to a new and unblemished condition.

B. Clean spilled or splattered materials from adjacent surfaces not to be coated, immediately before coating has achieved an initial set. Do not scratch or damage adjacent finished surfaces.

C. Repair floors, walls, and other surfaces which have been stained, marred, or otherwise damaged during the textured finish application. Daily remove unused materials, containers, and equipment. Clean floors and leave broom clean.

1. When installing more than one batch, definable areas where each batch was applied. Then, retain an appropriate amount of this material to complete punch-out touch ups.

3.05 PROTECTION

A. Provide final protection and maintain conditions, in a manner suitable to installer, which ensures textured finishes being without damage or deterioration at time of Substantial Completion.

END OF SECTION

2514.02 Walls

2514.02.A Vinyl Wall covering

2514.02.A.1 All vinyl wall covering must meet the following requirements:

2514.02.A.1.a Class A ASTM E84-12c tunnel test (www.astm.org).

2514.02.A.1.b Not Applicable to this Brand

2514.02.A.1.c All wall covering adhesives must be strippable and must contain mildew inhibitors.

2514.02.A.1.d 20 oz. per linear yard/ 460 g per square meter, Type II or heavier must be used in public areas and back-of-house areas.

2514.02.A.1.e 15 oz. per linear yard /350 g per square meter, Type I or heavier must be used in guest suites.

2514.02.A.1.f 15 oz. per linear yard /350 g per square meter, Type I or heavier must be used in guestroom bathrooms.

2514.02.A.1.g 54"/1.3 m

2514.02.A.1.h Fabric backing is required. Non-woven wallcoverings of paper backed vinyl can be used within niches and protected areas with Hilton approval.

2514.02.A.1.i Not Applicable to this Brand

2514.02.A.1.j When microvented wallcovering is used it is required to meet ASTM E96-02, Method B. Minimum 21 ounce rated at 10 perms and approximately 25,000 holes per square foot is required. A sample is required for review and approval from Hilton prior to ordering.

2514.02.A.2 Hotel must not install wall vinyl over existing wall vinyl in any areas of the hotel. Old wall vinyl must be completely removed before new wall vinyl is installed.

2514.02.B Acrylic Knockdown

2514.02.B.1 Acrylic knockdown is permitted in guest suites where noted on prototype drawings.

2514.02.B.2 In areas with high humidity levels, 100 percent acrylic knockdown may be considered for exterior walls in public areas. Prior approval is required.

2514.02.B.3 Proposed products must have the following information forwarded to Hilton for approval:

2514.02.B.3.a Two samples (8”/200 mm x 8”/200 mm minimum) showing the specific color and texture of the knockdown finish must be submitted. If the product is approved, one sample must be retained and one must be returned and must be kept on file at the jobsite for reference.

2514.02.B.3.b All submitted products must meet the following minimum performance characteristics and supportive documentation must be provided to verify conformance.

2514.02.B.3.b.1 Perm rating of greater than 16 for the system, including basecoat, primers, texture coats, etc.

2514.02.B.3.b.2 Scrub resistance of a minimum of 2500 scrubs before failure ASTM D2486-06 (www.astm.org).

2514.02.B.3.b.3 Minimum dry film thickness of 10 mils or greater.

2514.02.B.3.b.4 VOC levels of 1.0 lbs. per gallon/120 grams per liter or less ASTM-D3960-05 (www.astm.org).

2514.02.B.3.b.5 Minimum of a five year product performance warranty and a five year warranty against mold and mildew growth. (The product must have been in commercial use for a time period that meets or exceeds the factory-stated warranty period.)

2514.02.B.3.b.6 A product listing a “sealer” as part of the system is not permitted.

2514.02.B.3.c All submittals must be accompanied by Independent Laboratory Test Results to support manufacturer claims. Submitted Independent Lab Test Results must be on the testing lab letterhead. Test results on the manufacturer’s letterhead will not be accepted.

2514.02.B.3.d Substitutions must all be submitted for review with sufficient time allowed for evaluation.

2514.02.B.3.e No product will be considered acceptable until Hilton has reviewed the product's written specifications and inspected a sample installation on site.

2514.02.B.4 Wall finish using drywall mud or non-acrylic finishes with paint is not permitted in all instances.

2514.02.C Wall Tile

2514.02.C.1 Tile must be natural stone, ceramic or porcelain tile, minimum 1/4”/6 mm thick. Large format porcelain slabs 4'-0"/1.2M and over are allowed. Tiles must be dimensionally accurate, flat and straight edged. Tile must conform to ISO 13006 2018-09 Types BI, BIa, BIIa, BIIb, BIII and can be either calibrated pressed edge or rectified providing size tolerances of: ISO 10545-2 STRAIGHTNESS OF SIDES <0.15% / RECTANGULARITY DEVIATION <0.15% / CURVATURE SURFACE FLATNESS DEVIATION <0.15%.

2514.02.C.2 Tile grout must be non-shrink-type epoxy or latex Portland cement to minimize staining and the minimum grout joint must comply with ISO and ANSI guidelines. Non shrink epoxy must meet ANSI A118.3 minimum. 1/8"/3 mm is the maximum width allowed. Tile grout must be ISO 13888 Type CG2 minimum polymer modified cement and be anti-microbial, water resistant, anti-mold and color fast-efflorescence free.

2514.02.C.3 Tile must not be installed over old wall tile in any areas of the property. Old tile must be completely removed before new tile is installed. Thin tile (1/4"/6mm thick) may be installed over existing tile in vertical wall applications only where critical room dimensions will not be impacted and must be approved by Hilton Design.

2514.02.C.4 Not Applicable to this Brand

2514.02.C.5 Must pass ASTM C373 for water absorption and ASTM C650 for chemical resistance or must comply with ISO 10545 -3 Determination of Water Absorption and ISO 10545-13 Chemical Resistance Class A cleaning chemicals / Class B acid bases.

2514.02.C.6 Must pass ASTM CTI 81-7D for stain resistance or must comply with ISO 10545-14 Stain Resistance Class 4 Minimum.

2514.02.C.7 Porcelain tile must be through-body color material or a glazed porcelain that meets Mohs scratch hardness minimum rating of 4.0 for wall applications and C648 breaking strength for ceramic wall tile 120 - 230 lbs. Porcelain tile must have a rectified or pressed edge.

2514.02.C.8 Tile must pass ISO 10545-11 Crazing Resistance.

2514.02.D Stone

2514.02.D.1 All natural stone must be sealed.

2514.02.E Paint

2514.02.E.1 All paints must be low VOC (less than 50 VOC grams per liter) and low odor.

2514.02.E.2 Paint in high humidity areas must be satin or semi-gloss finish with a mildew-resistant formulation.

2514.02.E.3 Paint used in high contact areas must be satin or eggshell finish that is durable, washable and stain resistant.

2514.02.E.4 Paint used on the interior walls of an indoor swimming pool room must be epoxy paint.

2514.02.F Not Applicable to this Brand

2514.02.G Chair Rails/Corner Guards

2514.02.G.1 When chair rails are used, they must have a decorative profile and be constructed of a material resistant to wear.

2514.02.G.2 Not Applicable to this Brand

2514.02.G.3 Provide full height corner guards at outside corners in all high traffic public and guestroom areas. Corner guards must be a resilient vinyl to coordinate with the wall color and must be adhesive mount. The flanges must be a maximum width of 1”/25 mm.

SECTION 09 96 00 - HIGH-PERFORMANCE COATINGS

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Special coating for exterior, indoor pool area and exposed ferrous metals.
2. Epoxy Floor Coating
3. Concrete Stain/Sealer
4. This Section includes surface preparation and the application of special coating materials to items scheduled.
    a. Surface preparation, prime and finish coats specified are in addition to shop-priming and surface treatments.
5. Paint all exposed surfaces, whether or not colors are designated, except where a surface or material is indicated not to be painted or is to remain natural. Where an item or surface is not mentioned, paint the same color as similar adjacent materials or surfaces. If color or finish is not designated, the Architect will select from standard colors or finishes available.
6. Painting is not required on pre-finished items, operating parts, or labels.
    a. Labels: Do not paint over Underwriter's Laboratories, Factory Mutual or other code-required labels, or equipment name, identification, performance rating, or nomenclature plates.

B. Related Sections:

1. Section 03 30 00 - Cast-in-Place Concrete
2. Section 03 54 13 - Cementitious Decks and Underlayment
3. Section 05 52 00 - Handrails and Railings
4. Section 08 11 13 - Steel Doors and Frames
5. Section 09 90 00 - Painting

1.02 REFERENCES

A. ASTM International (ASTM) Publications:

1. D16 “Standard Terminology for Paint, Related Coatings, Materials, and Applications”

B. The Society for Protective Coatings (SSPC) Publications:

1. SP - Surface Preparation Standards and Specifications
    a. SSPC-SP 1, “Solvent Cleaning”
    b. SSPC-SP 3 "Power Tool Cleaning"
    c. SSPC-SP 6/NACE No. 3, “Commercial Blast Cleaning” d.

    SSPC-SP 10/NACE No. 2, “Near-White Blast Cleaning” e.

    SSPC-SP 11, “Power Tool Cleaning to Bare Metal”

C. The Painting and Decorating Contractors of America (PDCA)

1. PDCA P5-94 “Benchmark Sample Procedures for Paint and Other Decorative Coating Systems”

1.03 DEFINITIONS:

A. "Special Coatings" includes coating systems materials, primers, emulsions, enamels, stains, sealers and fillers, and other applied materials whether used as prime, intermediate or finish coats.

1.04 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

B. Submit “Letter of Conformance” in accordance with Section 01 33 00 indicating specified items selected for use in project with the following supporting data.

1. Product Data: Submit manufacturer's technical information, including basic materials analysis and application instructions for each coating material specified.

a. List each material and cross-reference the specific coating and finish system and application. Identify each material by the manufacturer's catalog number and general classification.

2. Color Charts: In duplicate, for all paints, stains and special coatings. Identify with numbers used on the “Finish Index” on Drawings.

3. Ferrous Metal: Provide two 4" square samples of metal surfaces for each type of color and finish. Define by steps.

1.05 QUALITY ASSURANCE

A. Single Source Responsibility: Provide primers and undercoat paint produced by the same manufacturer, unless noted otherwise. Use only thinners recommended by the manufacturer, and only within recommended limits.

B. Coordination of Work: Review sections in which other coatings are provided to ensure compatibility of the total systems for various substrates.

1. Notify the Owner’s Representative of problems anticipated using the materials specified.

C. All ferrous metal shall be inspected for conformance with these Specifications and manufacturer specifications shall be for:

1. Surface Preparation

2. Prime and Intermediate Coats

1.06 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials to the job site in manufacturer's original, unopened packages and containers bearing manufacturer's name and label with trade name and manufacturer's instructions.

1. Product Name or Title of Material

2. Product Description (Generic Classification or Binder Type)

3. Manufacturer's Stock Number and Date of Manufacture

4. Contents by Volume, for Pigment and Vehicle Constituents

5. Thinning Instructions

6. Application Instructions

7. Color Name and Number

8. VOC Content

B. Store materials not in actual use in tightly covered containers at a minimum ambient temperature of 50 degrees F. in a well-ventilated area. Maintain containers used in storage of coatings in a clean condition, free of foreign materials and residue.

1. Protect from freezing. Keep storage area neat and orderly. Remove oily rags and waste daily. Take necessary precautionary measures to ensure that workmen and work areas are adequately protected from fire hazards and health hazards resulting from handling, mixing, and application of coatings.

1.07 PROJECT CONDITIONS

A. Apply coatings only when the temperature of surfaces to be coated and surrounding air temperatures are above 50 degrees F., unless otherwise permitted by manufacturer's printed instructions. High solids products require temperature range of 70-90 degrees F.

B. Do not apply coatings in snow, rain, fog, or mist, or when the relative humidity exceeds 85 percent, or at temperatures less than 5 degrees F. above the dew point, or to damp or wet surfaces, unless otherwise permitted by manufacturer's printed instructions. Allow wet surfaces to dry thoroughly and attain the temperature and conditions specified before proceeding with or continuing the coating operation.

1.08 WASTE MANAGEMENT AND DISPOSAL

A. Paint, stain and wood preservative finishes and related materials (thinners, solvents, etc.) are regarded as hazardous products and are subject to regulations for disposal. Obtain information on these controls from applicable government agencies having jurisdiction

B. All waste materials shall be separated and recycled. Where paint recycling is available, collect waste paint by type and provide for delivery to recycling or collection facility. Materials that cannot be reused must be treated as hazardous waste and disposed of in an appropriate manner.

C. Set aside and protect surplus and uncontaminated finish materials not required by the Owner and deliver or arrange collection for verifiable re-use or re-manufacturing.

1.09 WARRANTY

A. Provide a five-year material and labor warranty from the manufacturer and the applicator.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Preferred Manufacturers:

1. Exterior Exposed Ferrous Metals:

a. The Sherwin-Williams Company (800-321-8194)

2. Epoxy Coating for Concrete Floors (Interior):

a. The Sherwin-Williams Company (800-321-8194)

3. Concrete Stain/Sealer

a. The Sherwin-Williams Company (800-321-8194)

B. Approved Manufacturers:

1. Exterior Exposed Ferrous Metals:

a. Tnemec Company, Inc. (800-356-3041)

2. Epoxy Coating for Concrete Floors (Interior):

a. Euclid Chemical Co, An RPM Company (800-321-7628)

b. Selby, BASF Building Systems (800-433-9517)

c. Dur-A-Flex, Inc. (800-253-3539)

3. Concrete Stain/Sealer

a. "Col-R-Tone III"; Kemiko, Epmar Corporation, a Subsidiary of Quaker Chemical Corporation (562-946-8781)

b. Approved Substitution; L. M. Scofield (800-800-9900)

2.02 MATERIALS

A. Material Compatibility: Provide block fillers, primers, finish coats, and related materials that are compatible with one another and the substrates indicated under conditions of service and application as demonstrated by the manufacturer based on testing and field experience.

B. Material Quality: Provide manufacturer's best-quality paint material of the various coating types specified that are factory formulated and recommended by manufacturer for application indicated.

1. Paint-material containers not displaying the manufacturer's product identification will **NOT** be acceptable.

a. Recycled content paints and primers will not be permitted for interior or exterior application.

C. Exterior and Ferrous Metals: All structural steel and metal fabrications, miscellaneous metal (including Lintels), handrails, uninsulated piping, mechanical and electrical equipment at exterior (including all component parts, but not including stainless steel or prefinished aluminum):

1. Shop Priming:

a. SSPC-S 6 Commercial Blast

b. Primer:

1) "Series 901K-97 Tnemec-Zinc" at 3.0 mils DFT; Tnemec.

2. Field Application:

a. SSPC-SP 3 power tool clean

b. Spot Prime:

1) "Series 901K-97, Tneme-Zinc"; Tnemec.

c. Finish (required at exposed items only). Color as selected by Owner's Representative. Apply one coat if spray applied, two coats if brush or roller applied.

1) "Series 113 (color) Tneme-Tufcoat" 5.0 – 6.0 mils DFT; Tnemec.

(a) VOC: 92 g/L

D. Decorative Epoxy Coating for Concrete Floors:

1. Prepare surface as recommended by manufacturer. Use abrasive blast cleaning method if requested.

2. Two Part Epoxy Coating:

a. Preferred Manufacturers:

1) "ArmorSeal 650 SL/RC B58-650/B60 Hardener – Broadcast with Quartz"; The Sherwin-Williams Company (800-321-8194)

b. Approved Manufacturers:

1) "Eucopoxy Tufcoat DBS Pigmented Resin System"; Euclid Chemical Co, An RPM Company

3. Comply with flooring system manufacturer's recommendations for installation.

4. Provide a minimum of two coats with total dry film thickness of nominal 20 - 25 mils, as recommended by manufacturer.

5. Color as shown on Interior Finish Index.

E. Clear Sealer for Concrete Floors

1. Refer to Section 03 30 00 and Interior Finish Index.

2.03 COLOR SAMPLES

A. The Contractor shall furnish samples of all finishes in triplicate and obtain the approval of color match before starting work. Final colors must match exactly with the approved sample. Colors selection and quantity of different colors, as shown on Drawings, and approved by Owner's Representative.

B. Where a different manufacturer is utilized that product identified in Interior Finish Index, color must match listed name or number.

PART 3 EXECUTION

3.01 EXAMINATION

A. Examine substrates and conditions under which painting will be performed for compliance with requirements. Do not begin application until unsatisfactory conditions have been corrected.

B. Start of coating work will be construed as the applicator's acceptance of surfaces within particular area.

3.02 PREPARATION

A. Remove hardware and hardware accessories, plates, machined surfaces, lighting fixtures, and items in place that are not to be painted, or provide protection prior to surface preparation and coating. Remove items, if necessary, for complete painting of the items and adjacent surfaces. Following completion of coating operation, reinstall items removed using workmen skilled in the trades involved.

3.03 SURFACE PREPARATION

A. Clean and prepare surfaces to be painted in accordance with manufacturer's instructions for each particular substrate condition.

B. Ferrous Metal: Clean ungalvanized ferrous metal surfaces that have not been shop-coated. Remove oil, grease, dirt, loose mill scale and other foreign substances. Use solvent or mechanical cleaning methods that comply with the recommendations of the Steel Structures Painting Council.

1. Blast-clean steel surfaces as recommended by the coating system manufacturer and according to the requirements of SSPC Specification SSPC-SP 10.

C. Galvanized Steel/Non Ferrous Metals: Utilize SSPC Specification SSPC-SP 1 solvent cleaning and chemical power wash (tri-sodium phosphate) to remove solvent and non-solvent soluble sealers and other substrate contaminants.

1. Touch-up shop-applied prime coats that have been damaged and bare areas. Wire-brush, solvent clean, and touch-up with the same primer as the shop coat.

D. Material Preparation: Carefully mix and prepare materials according to the coating manufacturer's directions.

1. Maintain containers used in mixing and application of coatings according to the manufacturer's directions.

2. Stir materials before applying to produce a mixture of uniform density. Stir as required during application. Do not stir surface film into the material. Remove film and, if necessary, strain the coating material before using.

3.04 APPLICATION

A. General: Apply special coatings by brush, roller, spray, squeegee, or other applicators according to the manufacturer's directions. Use brushes best suited for the material being applied. Use rollers of carpet, velvet back, or high-pile sheep's wool as recommended by the manufacturer for the material and texture required.

1. Do not apply coatings over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to forming a durable coating film.

2. Provide finish coats compatible with the primers used.

B. The number of coats and film thickness required is the same regardless of the application method. Do not apply succeeding coats until the previous coat has cured as recommended by the manufacturer. Where sanding is required, according to the manufacturer's directions, sand between applications to produce a smooth, even surface.

C. The term "exposed surfaces" includes areas visible when permanent or built-in. Extend coatings in these areas, as required, to maintain the system integrity and provide desired protection.

1. Coat surfaces behind movable equipment and furniture the same as similar exposed surfaces.

2. Coat the back sides of access panels, removable or hinged covers, and similar hinged items to match exposed surfaces.

D. Minimum Coating Thickness: Apply each material no thinner than the manufacturer's recommended spreading rate. Provide total dry film thickness (DFT) of the entire system as recommended by the manufacturer.

E. Prime Coats: Before applying finish coats, apply a prime coat of material, as recommended by the manufacturer, to the material required to be coated or finished that has not been prime-coated by others.

1. Recoat primed and sealed substrates where there is evidence of suction spots or unsealed areas in the first coat to ensure a finish coat with no burn-through or other defects caused by insufficient sealing.

F. Brush Application: Brush-out and work brush coats into surfaces in an even film. Eliminate cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, or other surface imperfections. Neatly draw glass lines and color breaks.

1. Apply primers and first coats by brush unless the manufacturer's instructions permit using mechanical applicators.

G. Mechanical Applications: Use mechanical methods to apply coating when permitted by the manufacturer's recommendations and governing regulations, only when approved by Architect.

1. Wherever using spray application, apply each coat to provide the equivalent hiding of brush-applied coats. Do not double-back with spray equipment building-up film thickness of two coats in one pass, unless recommended by the manufacturer.

H. All field connections such as bolts, nuts, and other fasteners shall be totally encapsulated with special coating system to match adjacent material.

3.05 FIELD QUALITY CONTROL

A. Applicator to maintain accurate records of the application and provide copies of the records to the manufacturer, if requested.

1. Minimum information required in the records:

a. Daily temperatures - morning and

evening b. Weather conditions

c. Total area applied daily

d. Amount of materials used daily

e. Computed square foot coverage rate

B. Manufacturer's written instructions will be kept at job site. Before application begins, all personnel involved will read these instructions.

3.06 COMPLETED WORK

A. Match approved samples for color, texture, and coverage. Remove, refinish, or repaint work not in compliance with specified requirements.

3.07 FIELD QUALITY CONTROL

A. The Owner reserves the right to engage the services of an independent testing laboratory to sample paint material being used. Samples of material delivered to the project will be taken, identified, sealed, and certified in the presence of the Contractor.

B. The testing laboratory will perform appropriate tests as required by the Owner.

C. If tests shown that material being used does not comply with specified requirements, the Contractor may be directed to stop painting and remove non-complying paint, pay for testing, repaint surfaces coated with rejected paint, remove rejected paint from previously painted surfaces if, upon repainting with specified paint, the two coatings are non-compatible.

3.08 CLEAN-UP

A. At the end of each work day, remove empty cans, rags, rubbish, and other discarded paint materials from the site.

B. Upon completion of painting, clean glass and paint-spattered surfaces. Remove spattered paint by washing, scraping, or other proper methods, using care not to scratch or damage adjacent finished surfaces.

C. Protect work of other trades, whether to be painted or not, against damage from painting.

Correct damage by cleaning, repairing or replacing, and repainting, as acceptable to Owner's
Representative.

D. Provide "Wet Paint" signs to protect newly-painted finishes. Remove temporary protective wrappings provided by others for protection of their work after completion of painting operations.

1. At completion of construction activities of other trades, touch-up and restore damaged or defaced painted surfaces.

END OF SECTION

SECTION 10 14 00 - SIGNAGE

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Interior and Exterior Graphic Plaques, Characters and Accessories.

a. Furnished by Owner, installed by Contractor:

1) Directional Signage
2) Identification Signage
3) Projection Mounted Signage
4) Stair and Elevator Signage
5) Informational Signage
6) Letters and Graphics
7) Parking Lot Signage
8) Key Card Signage
9) Porte Cochere Signage
10) Guest Room Signage
11) Exercise Room Signage
12) F ire Pit Emergency Shutoff Signage
13) Fire Pit Warning Plaque Signage

2. Exterior Signs:

a. Furnished by Owner, installed by Contractor:

1) Channel Letter Signs
2) Single-Faced, Wall Mounted Signs
3) Monument Signs
4) Pylon Signs

3. Mounting Devices and Fittings.

4. Preparation of camera-ready artwork needed to produce the complete graphics package, unless otherwise noted.

B. Related Sections:

1. Sign Manual – Interior Graphics Package
2. Sign Manual – Exterior Graphics Package
3. Section 10 31 00 – Manufactured Fireplaces: For Emergency Shut Off and Warning Plaque signage installed at Fire Pit
4. Section 14 21 23 – Electric Traction Passenger Elevators: For code required elevator signage.
5. Section 26 51 00 – Interior Lighting: For Exit Lighting.

6. Division 26 Sections: For electrical service and connections for illuminated signs.

1.02 REFERENCES

A. American National Standards Institute, Inc. (ANSI) Publications:

1. A117.1 “American National Standard for Buildings and Facilities Providing Accessibility and Usability for Physically Handicapped People”

B. Americans with Disabilities Act Accessibility Guidelines (ADAAG) C. ASTM International (ASTM) Publications:

1. B117 “Standard Practice for Operating Salt Spray (Fog) Apparatus”

2. D1735 “Standard Practice for Testing Water Resistance of Coatings Using Water Fog Apparatus”

D. American Welding Society (AWS)

1.03 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

B. Submit “Letter of Conformance” in accordance with Section 01 33 00 indicating specified items selected for use in project with the following supporting data.

1. A copy of the manufacturer's printed installation manual shall accompany Bid for review and approval by the Owner's Representative.

2. Shop Drawings showing sign layout, lettering style, materials, and other pertinent information.

a. Post and panel/pylon signage: Include plans, elevations, sections, details, and attachments to other work.

b. Show locations of electrical service connections.

1.04 QUALITY ASSURANCE

A. Graphic signs, including materials, fabrication, mounting and installation, shall conform to state and local code regulations and requirements.

B. All items shall utilize the highest standards of professional workmanship and practices.

1.05 DELIVERY, STORAGE AND HANDLING

A. Coordinate delivery of materials comprising the complete graphics package. Store materials upon approval of Owner. Take precautions to protect materials and be responsible for same until installed, inspected and accepted in writing by Owner.

1.06 PROJECT CONDITIONS

A. Coordinate work with all trades affected by Contractor's work and be fully cognizant of their requirements as pertaining to Contractor's work.

1.07 WARRANTIES

A. Special Warranty: All materials, finishes and workmanship shall be warranted for a period of two (2) years after final acceptance of the work. If during the warranty period, any defects or faulty materials are found, the Contractor shall immediately proceed at his own expense to replace and/or repair same at not cost to Owner.

PART 2 PRODUCTS

2.01 INTERIOR SIGNAGE

MANUFACTURER/FABRICATOR

A. Hilton required vendors:

a. Hotel Signs (888-273-8726)

Contact: Sandy Dalton
Email: emailus@hotelsings.com
www.hotlesigns.com

b. Harlan Graphics (513-557-2344)

Contact: Carrie Naber
Email: cnaber@harlangraphics.com
www.harlangraphics.com

d. Licensed Exterior sign Vendors as listed by location. See attached vendor list.

2.02 MATERIALS – INTERIOR SIGNAGE

A. Basis of Design: Refer to "Standard Interior Signage Package" for sign types, designs, and graphic information. Sign package shall complement the "Dusk" interior finish package color pallet as provided by Hilton.

B. Acrylic: Acrylic shall be cut straight and true, free of saw marks, burrs, scratches or other imperfections.

C. Vinyl: Pressure sensitive adhesive backed vinyl with integral color as manufactured by one of the following:

1. Approved Manufacturers:

a. 3M (888-364-3577)

b. Approved substitution

D. Polycarbonate Sheet: Manufactured by extrusion process, coated on both surfaces with abrasion-resistant coating.

E. Finishes:

1. Signs: Produced by photographic silk-screen stencils unless otherwise noted. Hand-cut, frisketed, or die-cut images will not be accepted.

2. Silk-screening inks: As manufactured by one of the following:

a. Approved Manufacturers:

1) Naz-Dar Company (800-767-9942)

2) Approved substitution

3. Ink and paint: Mixed in sufficient quantities to assure consistent coloration throughout project.

F. Adhesive: Colorless adhesive used in strict accordance with manufacturer's recommendations for conformance to the manufacturer's product warranty, as manufactured by one of the following:

1. Approved Manufacturers:

a. General Electric

b. Dow Corning, Inc. (800-248-2481)

c. Approved substitution

G. Fasteners: Non-corrosive, physically compatible with material fastened. Size, shape and type as recommended by the fabricator. Owner maintains the right to review fastening techniques to assure aesthetic conformance to design drawings.

2.03 EXTERIOR BUILDING, MONUMENT AND PYLON SIGNS

MANUFACTURER/FABRICATOR

A. Approved Manufacturers:

1. Chandler Signs (214-675-6388)
   a. Ft. Worth, TX
   b. Contact: Matthew Wilson (mwilson@chandlersigns.com)
2. Persona Inc. (800-843-9888)
   a. Watertown, SD
   b. Contact: Mike Peterson (mpeterson@personasigns.com)
3. Refer to attached vendor list for additional information on sign vendor locations.

2.04 MATERIALS – EXTERIOR SIGNAGE

A. Basis of Design: Refer to "Licensed Exterior Sign Vendors" for signage providers and information.

B. Standard approved signage. Coordinate mounting with building construction and site layout.

2.05 EXTERIOR ADA PARKING SIGNS

A. Provide exterior ADA Parking signs where indicated on the Drawings.

B. Steel Posts: Type II round post shall be manufactured from cold rolled steel, welded and have a minimum yield strength of 50,000 psi given corrosion protection by an exterior triple coating consisting on zinc-applied before of after welding, chromate conversion and a clear polymer overcoat.

1. The inside surface shall be given corrosion protection. The internal coating shall be applied before or after welding and shall protect the metal from corrosion when subjected to the following:

	ASTM	Exposure Time	End Point
Salt spray (fog)	B117	300 hours	5% Red Rust

2. The external coating shall meet the following requirements.

	ASTM	Exposure Time	End Point
Salt spray (fog)	B117	12,000 hours	5% Red
Rust Water (fog) Rust	D1735	500 hours	1st Red

3. Each steel post shall have an ornamental top of galvanized steel or aluminum alloy designed to fit snugly over the post to exclude moisture. The top shall have a method of securing it to the post to prevent easy removal.

C. Drive Posts: Drive posts shall meet Local AHJ requirements, post size No. 3.

D. Sign Type: Accessible Parking: Shall meet Local AHJ requirements

E. Mixes:

1. Concrete for Foundations: meet Local DOT requirements.
2. Quantity: Provide ADA signs in locations as shown on the Drawings.

PART 3 EXECUTION

3.01 PREPARATION

A. Examination:

1. Examine areas for conditions detrimental to completion of the delivery and installation work. Report findings to the Owner's Representative immediately. Do not proceed with work until unsatisfactory conditions have been corrected or until advised in writing by the Owner.

2. Starting work constitutes acceptance of conditions under which the work is to be performed. After such acceptance Contractor shall, at his own expense, be responsible for correcting all unsatisfactory and defective work resulting from such unsatisfactory conditions.

3.02 INSTALLATION

A. Perform all cutting and fitting necessary for installation and completion of the work while accommodating the work of other trades. Immediately repair damage to existing surfaces or finishes caused by work of this Contractor at no cost to Owner.

B. Site Verification of Conditions: Verify installation conditions previously established under other sections are acceptable for product installation in accordance with manufacturer's instructions

C. General: Locate sign units and accessories where indicated, using mounting methods of the type described and in compliance with the manufacturer's instructions.

1. Install signs level, plumb, and at the height indicated, with sign surfaces free from distortion or other defects in appearance.

D. Interior Signage:

1. Install at locations as directed by Owner's Representative.

2. Install in strict accordance to manufacturer's recommended procedures.

3. Signs indicated to be door mounted shall use a combination of vinyl tape and silastic adhesive for a permanent bond.

4. Signs indicated to be installed on the wall adjacent to the latch side of the door shall have a mounting height of 60" above finished floor to centerline of sign. Mounting location shall be so that a person may approach within 3" of signage without encountering protruding objects or standing within the swing of a door.

5. Insure level installation.

E. Exterior Signage:

1. Install exterior signage and cabinet as indicated on Drawings.

2. Install Accessible Parking signs as indicated on the Drawings. Locations and heights to meet ADA.

3.03 CLEANING AND PROTECTION

A. After installation, clean soiled sign surfaces according to the manufacturer's instructions.

Protect units from damage until acceptance by the Owner.

B. Provide cleanup and removal of debris resulting from the installation work.

END OF SECTION

SECTION 10 26 00 - WALL AND DOOR PROTECTION

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Wall Protection Corner Guards

B. Related Sections:

1.02 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

B. Submit “Letter of Conformance” in accordance with Section 01 33 00 indicating specified items selected for use in project with the following supporting data.

1. Provide manufacturer's technical data, installation instructions, setting drawings, templates, instructions, and directions for installation of anchorage devices in other work.

1.03 DELIVERY, STORAGE, AND HANDLING

A. Do not deliver guards to site until rooms in which they are to be installed are ready to receive them.

B. Store packages to prevent physical damage or wetting.

C. Pack all parts individually in a manner to protect finish.

D. Maintain protective covers on all units until final clean-up.

1.04 WARRANTY

A. Work of this Section shall be jointly warrantied by the manufacturer and the installer for a period of one year after final payment. Any material or workmanship that is judged defective during this period shall be replaced at no cost to the Owner.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Preferred Manufacturers:

1. Inpro Corporation Tape-on Corner Guards

B. Approved Manufacturers:

1. Inpro Corporation, IPC Door and Wall Protection Systems (800-222-5556) www.inprocorp.com

2.02 WALL PROTECTION CORNER GUARDS

A. Surface mounted corner guards of various materials. Provide backing in walls for mounting.

B. Corner Guards: “Rigid extruded PVC, 90-degree type”; adhesive applied.

1. Size:

a. Guest Rooms, and other locations as noted on the Drawings: ¾” x ¾”. Thickness: 0.080”

b. Corridors: 1-1/2” x 1-1/2”. Thickness: 0.080”.

c. Height to be from top of resilient or carpet base to underside of ceiling with no gaps top or bottom.

1) Where ceiling heights are greater than 8'-0", provide corner guards in one piece, no joints or seams will be permitted.

2. Color: Refer to Interior Finish specifications for coordinating color locations.

3. Attachment: Heavy Duty Adhesive cement, field applied as recommended by manufacturer.

a. Self-Adhesive tape application not recommended.

C. Stainless Steel Corner Guards “Model No. 180”, 90 degree type with 1/8” radius, adhesive applied, by IPC or approved substitution by listed manufacturer.

1. Locations: Laundry and Housekeeping

2. Size: 3-1/2” x 3-1/2”

a. Height to be from top of base to underside of ceiling.

3. Finish: No. 4, brushed finish

4. Attachment: Adhesive cement as recommended by manufacturer.

2.03 ACCESSORIES

A. Provide all appropriate mounting systems including all screws, bolts, brackets, end caps, and base plates as required for complete installation.

PART 3 EXECUTION

3.01 INSTALLATION

A. Attach retainers to wall with appropriate anchorage devices furnished by manufacturer. Snap- lock covers onto retainers after paint or wallcoverings have been applied.

B. Install guards, accessories, and items in accordance with manufacturer's printed

instructions. C. Use concealed fastenings wherever possible.

D. Install true, plumb, and level, securely and rigidly anchored to substrate in accordance with manufacturer's instructions for each item and each type of substrate construction.

1. Attach with manufacturer’s recommended adhesive.

END OF SECTION

SECTION 10 28 00 - TOILET, BATH, AND LAUNDRY ACCESSORIES

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Toilet Accessories
2. Bath Accessories
3. Attachment hardware

B. Related Sections:

1. Section 05 50 00 - Metal Fabrications
2. Section 06 10 00 - Rough Carpentry: Blocking
3. Section 08 80 00 - Glazing: Unframed mirrors, tub and shower glass
4. Section 09 30 00 - Tiling: Coordinate installation of accessories
5. Section 10 21 13 - Toilet Compartments: Coordinate installation of accessories

1.02 REFERENCES

A. ASTM International Publications:

1. A167 - “Standard Specification for Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip”
2. A666 “Standard Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar”

B. American National Standards Institute (ANSI)

1. ICC/ANSI A117.1-2003, “Accessible and Useable Buildings and Facilities”

C. Americans with Disabilities Act (2010 ADA) II Public Accommodations

1.03 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

B. Submit “Letter of Conformance” in accordance with Section 01 33 00 indicating specified items selected for use in project with the following supporting data.

1. Product Data: Mark each copy to identify applicable products, characteristics, models, options and other supplemental data to clearly communicate information specific to this project.

1.04 QUALITY ASSURANCE:

A. Provide products of the same manufacturer for each type of accessory unit and for units exposed in the same area.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Do not deliver accessories to site until rooms in which they are to be installed are ready to receive them.

B. Store packages to prevent physical damage or wetting.

C. Pack accessories individually in a manner to protect the accessory and its finish.

D. Maintain protective covers on all units until final clean-up.

E. Protection: Protect adjacent or adjoining finished surfaces and work from damage during installation of work of this Section.

1.06 WARRANTY

A. Work of this Section shall be jointly warrantied by the manufacturer and the installer for a period of one year after final payment. Any material or workmanship that is judged defective during this period shall be replaced at no cost to the Owner.

PART 2 PRODUCTS

2.01 DISTRIBUTORS

A. Contractor shall provide materials and accessories as listed in the Preferred Distributor or approved manufacturer section of this specification. All other manufacturer's shall be submitted for approval as equals as stipulated in other sections of this specification manual.

2.02 MANUFACTURERS

A. Preferred Manufacturers:

1. Franklin Brass, Liberty Hardware Manufacturing Corp., A Masco Company
2. Winglts LLC

B. Approved Manufacturers:

1. Bobrick Washroom Equipment, Inc.
2. Hafele America Co. (HEWI)
3. American Specialties, Inc. (ASI)
4. Gamco, A Bobrick Company
5. Continental Group
6. C.R. Laurence Company (CRL)
7. ProjectStone by Belstone

2.03 MATERIALS - TOILET ACCESSORIES

A. 18-8 (Type 302) stainless steel alloy of at least 22 gauge in all elements of cabinet work. Unless shown otherwise, all exposed stainless steel to have a #4 Satin finish or Satin chrome finish where applicable with all elements of a unit to have brushing in one direction.

B. Exposed surfaces to be protected with a factory applied PVC film to be left in place until final clean-up.

C. Mirrors to be 1/4" polished plate glass with 10-year guarantee against silver spoilage.

D. Stainless steel tubing: 18 ga., Type 304, seamless welded.

E. Fasteners, screws, and bolts: Hot dip galvanized. Expansion shields: Fiber, lead, or rubber as recommended by accessory manufacturer for component substrate.

F. Adhesive: Epoxy type contact cement.

G. Sealant: Silicone type as per manufacturer's recommendations

2.04 FABRICATION - TOILET ACCESSORIES

A. Provide steel anchor plates and anchor components for installation on building finishes.

B. Form surfaces flat without distortion. Maintain flat surface without scratches or dents.

C. Back paint components where contact is made with building finishes to prevent electrolysis.

D. Hot dip galvanized ferrous metal anchors and fastening devices.

E. Shop assemble components and package complete with anchors and fittings.

PART 3 EXECUTION

3.01 PREPARATION

A. Deliver inserts and rough-in frames to the job site and in appropriate time for building-in. Provide templates and rough-in measurements as required.

B. Before starting work, notify Owner's Representative in writing of any conflicts detrimental to installation or operation of units.

C. Verify with Owner's Representative exact location of accessories.

3.02 INSTALLATION

A. Install fixtures, accessories, and items in accordance with manufacturer's printed instructions.

B. Use concealed fastenings wherever possible.

C. Install true, plumb, and level, securely and rigidly anchored to substrate in accordance with manufacturer's instructions for each item and each type of substrate construction.

1. Wood blocking shall be provided at grab bars and fold down shower seats, and as shown on Drawings.

2. Strap metal may be used for all other areas, as approved by the Owner's Representative, unless indicated otherwise.

D. Fasteners for all accessory mounting to be theft resistant.

PART 4 ACCESSORY SCHEDULE

A. Refer to the following Toilet & Bath Accessory Matrix and plans for more information.

END OF SECTION

Toilet & Bath Accessory Matrix

Universal Mark	Description	Finish	Manufacturer	Model No.	Area	Location
--	Toilet Tissue Holder - Double (Surface Mtd.)	US26	American Specialties, Inc.	AS 7305-2B x R009	Public	Restroom
		US26	Bobrick Washroom Equipment, Inc	B-7686.60	Public	Restroom
		US26	Franklin Brass, a Liberty Hardware Brand, A Masco Company	FB 5507B (Century)	Public	Restroom
--	Mirror - Framed		Furnished by Others		Public	Restroom
--	Mirror		N/A	(See Section 08 80 00)	Public	Restroom
--	Feminine Napkin Vendor (Wall Mtd)	US32D	American Specialties, Inc.	AS 04684	Public	Restroom
		US32D	Bobrick Washroom Equipment, Inc	B-3500	Public	Restroom
		US32D	GAMCO, Inc., A Bobrick Company	GA NV-2-4	Public	Restroom
--	Paper Towel Disp / Disposal (Recessed)	US32D	Bobrick Washroom Equipment, Inc.	B-3974	Public	Restroom
--	Soap Dispenser (Wall Mtd., Automatic/Touch Free)	US32D	Bradley, Inc.	6A00-11	Public	Restroom
		US32D	Bobrick Washroom Equipment, Inc	B-2013	Public	Restroom
--	Seat Cover Dispenser (Single Recessed)	US32D	American Specialties, Inc.	AS 6477	Public	Restroom
		US32D	Bobrick Washroom Equipment, Inc	B-3013	Public	Restroom

Finish Codes: US26 = Chrome, Bright; US26D = Chrome, Satin; US32 = Stainless Steel, Bright (Polished); US32D = Stainless Steel, Satin; US15 = Satin Nickel; WHT = White

Note 1: When adequate blocking is not available for grab bars, install grab bars using WingIT's Grab Bar Fasteners Model #GBW40 or RESGBW35. WingIT's Grab Bar Fasteners are compatible with WingITS and Bobrick Grab Bars, for all other manufacturers, adequate blocking must be provided.

Toilet & Bath Accessory Matrix

Universal Mark	Description	Finish	Manufacturer	Model No.	Area	Location
--	Seat Cover Dispenser (Single Recessed)	US32D	GAMCO, Inc., A Bobrick Company	GA TSC-8	Public	Restroom
--	Grab Bar 18"	US32D	American Specialties, Inc.	AS 3701-18	Public	Restroom (Accessible Stall)
		US32D	Bobrick Washroom Equipment, Inc	B-5806 x 18"	Public	Restroom (Accessible Stall)
		US32D	Franklin Brass, a Liberty Hardware Brand, A Masco Company	FB 5718	Public	Restroom (Accessible Stall)
		US32D	WingIt Innovations	WGB5SS18	Public	Restroom (Accessible Stall)
--	Grab Bar 36"	US32D	American Specialties, Inc.	AS 3701-36	Public	Restroom (Accessible Stall)
		US32D	Bobrick Washroom Equipment, Inc	B-5806 x 36"	Public	Restroom (Accessible Stall)
		US32D	Franklin Brass, a Liberty Hardware Brand, A Masco Company	FB 5736	Public	Restroom (Accessible Stall)
		US32D	WingIt Innovations	WGB5SS36	Public	Restroom (Accessible Stall)
--	Grab Bar 42"	US32D	American Specialties, Inc.	AS 3701-42	Public	Restroom (Accessible Stall)

Finish Codes: US26 = Chrome, Bright US32 = Stainless Steel, Bright (Polished) US15 = Satin Nickel
US26D = Chrome, Satin US32D = Stainless Steel, Satin WHT = White

Note 1: When adequate blocking is not available for grab bars, install grab bars using WingIT's Grab Bar Fasteners Model #GBW40 or RESGBW35. WingIT's Grab Bar Fasteners are compatible with WingITS and Bobrick Grab Bars, for all other manufacturers, adequate blocking must be provided.

Toilet & Bath Accessory Matrix

Universal Mark	Description	Finish	Manufacturer	Model No.	Area	Location
--	Grab Bar 42"	US32D	Bobrick Washroom Equipment, Inc	B-5806 x 42"	Public	Restroom (Accessible Stall)
		US32D	Franklin Brass, a Liberty Hardware Brand, A Masco Company	FB 5742	Public	Restroom (Accessible Stall)
		US32D	WingIt Innovations	WGB5SS42	Public	Restroom
--	Towel Bar 18"	US26	Franklin Brass, a Liberty Hardware Brand, A Masco Company	FB 127759	Guestroom	Bathroom
--						
--	Mirror - Framed		Furnished by Others		Guestroom	Bathroom
--	Robe Hook - Double	US26	Franklin Brass, a Liberty Hardware Brand, A Masco Company	FB 9002PC (Jamestown)	Guestroom	Bathroom
--	Grab Bar 24"	US32	Franklin Brass, a Liberty Hardware Brand, A Masco Company	FB 5724BS	Guestroom	Bathroom - Tub
		US32	WingIt Innovations	WGB5PS24	Guestroom	Bathroom - Tub
-- (OPT)	Grab Bar 24" - Platinum BANDS Series	US32	WingIt Innovations	WPGB5PS24BAN	Guestroom	Bathroom - Tub
--	Shower Curtain Rod - Oval/Curved (6" Bow)	US32	Franklin Brass, a Liberty Hardware Brand, A Masco Company	211-5BS	Guestroom	Bathroom - Tub

Finish Codes: US26 = Chrome, Bright US32 = Stainless Steel, Bright (Polished) US15 = Satin Nickel
US26D = Chrome, Satin US32D = Stainless Steel, Satin WHT = White

Note 1: When adequate blocking is not available for grab bars, install grab bars using WingIT's Grab Bar Fasteners Model #GBW40 or RESGBW35. WingIT's Grab Bar Fasteners are compatible with WingITS and Bobrick Grab Bars, for all other manufacturers, adequate blocking must be provided.

Toilet & Bath Accessory Matrix

Universal Mark	Description	Finish	Manufacturer	Model No.	Area	Location
--	Shower Curtain Rod - Oval/Curved (6" Bow) *Note: Use BAWFA Face Plate.	US32	WingIt Innovations	WOCBS5-6*	Guestroom	Bathroom - Tub
--	Corner Ceramic Soap Dish	TBD	Mincy Marble Manufacturing Company	SD-07	Guestroom	Bathroom - Tub
--	Toilet Tissue Holder – Double (Surface Mtd.)	US26	Franklin Brass, a Liberty Hardware Brand, A Masco Company	FB 5507B (Century)	Guestroom	Bathroom - Water Closet
--	Towel Bar 18"	US26	Franklin Brass, a Liberty Hardware Brand, A Masco Company	FB 127759	Guestroom	Bathroom - Accessible
--	Towel Bar 24" - Double w/ shelf	US26	Franklin Brass, a Liberty Hardware Brand, A Masco Company	FB 2783PC	Guestroom	Bathroom - Accessible
--	Mirror - Frosted Glass		Furnished by Others		Guestroom	Bathroom - Accessible
--	Robe Hook - Double	US26	Franklin Brass, a Liberty Hardware Brand, A Masco Company	FB 9002PC (Jamestown)	Guestroom	Bathroom - Accessible
--	Grab Bar 18"	US26	Hafele America Co.	HEWI 988.61. 199.M	Guestroom	Bathroom - Accessible Roll- In Shower
		US26	WingIt Innovations	WGB5PU18WH	Guestroom	Bathroom - Accessible Roll-In Shower
	Corner Ceramic Footrest	TBD	Mincy Marble Manufacturing Company	FR-02	Guestroom	Bathroom - Tub
-- (OPT)	Grab Bar 18"	US26D	WingIt Innovations	WGB5YS18WH	Guestroom	Bathroom – Accessible Roll-In Shower

Finish Codes: US26 = Chrome, Bright US32 = Stainless Steel, Bright (Polished) US15 = Satin Nickel
US26D = Chrome, Satin US32D = Stainless Steel, Satin WHT = White

Note 1: When adequate blocking is not available for grab bars, install grab bars using WingIT's Grab Bar Fasteners Model #GBW40 or RESGBW35. WingIT's Grab Bar Fasteners are compatible with WingITS and Bobrick Grab Bars, for all other manufacturers, adequate blocking must be provided.

Toilet & Bath Accessory Matrix

Universal Mark	Description	Finish	Manufacturer	Model No.	Area	Location
--	Grab Bar 24" - Nylon Coated	WHT	Hafele America Co.	HEWI 988.61. 299.M	Guestroom	Bathroom - Accessible Roll-In Shower
		WHT	WingIt Innovations	WGB5PU24WH	Guestroom	Bathroom - Accessible Roll-In Shower
-- (OPT)	Grab Bar 24" - Polyester Painted (Option)	WHT	WingIt Innovations	WGB5YS24WH	Guestroom	Bathroom - Accessible Roll- In Shower
--	Grab Bar 24" - Nylon Coated with Sliding Handheld Shower Holder	WHT	Hafele America Co.	HEWI 988.61.299.M / 988.66.799	Guestroom	Bathroom - Accessible Roll- In Shower
--	Grab Bar 36" - Nylon Coated	WHT	Hafele America Co.	HEWI 988.61. 499.M	Guestroom	Bathroom - Accessible Roll-In Shower
		WHT	WingIt Innovations	WGB5PU36WH	Guestroom	Bathroom - Accessible Roll-In Shower
--	Grab Bar 36" - Polyester Painted (Option)	WHT	WingIt Innovations	WGB5YS36WH	Guestroom	Bathroom - Accessible Roll- In Shower
--	Grab Bar / Slide Bar w/Additional Vertical Grab Bar - Nylon Coated with Sliding Handheld Shower Holder.	WHT	Hafele America Co.	HEWI 988.68. 899.M	Guestroom	Bathroom - Accessible Roll- In Shower
--	Shower Curtain Rod - Oval/Straight **Note: Use BAWFA Face Plate.	US32	WingIt Innovations	WOCBST5**	Guestroom	Bathroom - Accessible Roll-In Shower

Finish Codes: US26 = Chrome, Bright US32 = Stainless Steel, Bright (Polished) US15 = Satin Nickel
US26D = Chrome, Satin US32D = Stainless Steel, Satin WHT = White

Note 1: When adequate blocking is not available for grab bars, install grab bars using WingIT's Grab Bar Fasteners Model #GBW40 or RESGBW35. WingIT's Grab Bar Fasteners are compatible with WingITS and Bobrick Grab Bars, for all other manufacturers, adequate blocking must be provided.

Toilet & Bath Accessory Matrix

Universal Mark (New)	Description	Finish	Manufacturer	Model No.	Area	Location
--	Corner Ceramic Soap Dish	WHT	Mincy Marble Manufacturing Company	SD-07	Guestroom	Bathroom Accessible Roll-In Shower
--	Shower Seat - Nylon Coated (Size complies with 2010 ADA)	WHT	WingIt Innovations	PUEXSSxxWH (xx= LH / RH)	Guestroom	Bathroom - Accessible Roll-In Shower
--	Folding Edge Water Retainer & Threshold	ALUM	Shower Solutions USA, Inc.	Shower Water Dam	Guestroom	Bathroom - Accessible Roll- In Shower
--	Grab Bar 18" - Nylon Coated	WHT	Hafele America Co.	HEWI 988.61. 199.M	Guestroom	Bathroom - Accessible Tub
		WHT	WingIt Innovations	WGB5PU18WH	Guestroom	Bathroom - Accessible Tub
-- (OPT)	Grab Bar 18" - Polyester Painted (Option)	WHT	WingIt Innovations	WGB5YS18WH	Guestroom	Bathroom - Accessible Tub
--	Grab Bar 16" - Nylon Coated	WHT	Hafele America Co.	HEWI 988.58. 099.M	Guestroom	Bathroom - Accessible Tub
		WHT	WingIt Innovations	WGB5PU16WH	Guestroom	Bathroom - Accessible Tub
-- (OPT)	Grab Bar 16" - Polyester Painted (Option)	WHT	WingIt Innovations	WGB5YS16WH	Guestroom	Bathroom - Accessible Tub
--	Grab Bar 24" - Nylon Coated	WHT	Hafele America Co.	HEWI 988.61. 299.M	Guestroom	Bathroom - Accessible Tub
		WHT	WingIt Innovations	WGB5PU24WH	Guestroom	Bathroom - Accessible Tub
-- (OPT)	Grab Bar 24" - Polyester Painted (Option)	WHT	WingIt Innovations	WGB5YS24WH	Guestroom	Bathroom - Accessible Tub
--	Grab Bar 24" - Nylon Coated with Sliding Handheld Shower Holder	WHT	Hafele America Co.	HEWI 988.61.299.M / 988.66.799	Guestroom	Bathroom - Accessible Tub

Finish Codes: US26 = Chrome, Bright US32 = Stainless Steel, Bright (Polished) US15 = Satin Nickel
US26D = Chrome, Satin US32D = Stainless Steel, Satin WHT = White

Note 1: When adequate blocking is not available for grab bars, install grab bars using WingIT's Grab Bar Fasteners Model #GBW40 or RESGBW35. WingIT's Grab Bar Fasteners are compatible with WingITS and Bobrick Grab Bars, for all other manufacturers, adequate blocking must be provided.

Toilet & Bath Accessory Matrix

Universal Mark	Description	Finish	Manufacturer	Model No.	Area	Location
--	Grab Bar / Slide Bar w/Additional Vertical Grab Bar - Nylon Coated with Sliding Handheld Shower Holder	WHT	Hafele America Co.	HEWI 990.00. 100.M	Guestroom	Bathroom - Accessible Tub
--	Shower Curtain Rod - Oval/Curved (6" Bow)	US32	Franklin Brass, a Liberty Hardware Brand, A Masco Company	211-5BS	Guestroom	Bathroom - Accessible Tub
	Shower Curtain Rod - Oval/Curved (6" Bow) *Note: Use BAWFA Face Plate.	US32	WingIt Innovations	WOCBS5-6*	Guestroom	Bathroom - Accessible Tub
--	Corner Ceramic Soap Dish	WHT	Mincy Marble Manufacturing Company	SD-07	Guestroom	Bathroom - Accessible Tub
--	Tub Seat - Nylon Coated (Size complies with 2010 ADA)	WHT	WingIt Innovations	PUTB30WH	Guestroom	Bathroom - Accessible Tub
--	Toilet Tissue Holder (Surface Mtd.)	US26	Franklin Brass, a Liberty Hardware Brand, A Masco Company	FB 9008PC (Jamestown)	Guestroom	Bathroom - Accessible Water Closet
--	Grab Bar 18" - Nylon Coated	WHT	WingIt Innovations	WGB5PU18WH	Guestroom	Bathroom - Accessible Water Closet
-- (OPT)	Grab Bar 18" - Polyester Painted (Option)	WHT	WingIt Innovations	WGB5YS18WH	Guestroom	Bathroom - Accessible Water Closet
		WHT	WingIt Innovations	WGB5YS18WH	Guestroom	Bathroom - Accessible Water Closet

Finish Codes: US26 = Chrome, Bright US32 = Stainless Steel, Bright (Polished) US15 = Satin Nickel
US26D = Chrome, Satin US32D = Stainless Steel, Satin WHT = White

Note 1: When adequate blocking is not available for grab bars, install grab bars using WingIT's Grab Bar Fasteners Model #GBW40 or RESGBW35. WingIT's Grab Bar Fasteners are compatible with WingITS and Bobrick Grab Bars, for all other manufacturers, adequate blocking must be provided.

Toilet & Bath Accessory Matrix

Universal Mark	Description	Finish	Manufacturer	Model No.	Area	Location
--	Grab Bar 36" - Nylon Coated	WHT	Hafele America Co.	HEWI 988.61. 499.M	Guestroom	Bathroom – Accessible Water Closet
		WHT	WingIt Innovations	WGB5PU36WH	Guestroom	Bathroom - Accessible Water Closet
-- (OPT)	Grab Bar 36" - Polyester Painted (Option)	WHT	WingIt Innovations	WGB5YS36WH	Guestroom	Bathroom - Accessible Water Closet
--	Grab Bar 42" - Nylon Coated	WHT	Hafele America Co.	HEWI 988.61. 599.M	Guestroom	Bathroom - Accessible Water Closet
		WHT	WingIt Innovations	WGB5PU42WH	Guestroom	Bathroom - Accessible Water Closet
-- (OPT)	Grab Bar 42" - Polyester Painted (Option)	WHT	WingIt Innovations	WGB5YS42WH	Guestroom	Bathroom - Accessible Water Closet
--	Grab Bar - One Piece Combination Set - Nylon Coated (Alternative Design in lieu of individual Grab Bars)	WHT	Hafele America Co.	HEWI 988.65. 599.M	Guestroom	Bathroom - Accessible Water Closet
		WHT	WingIt Innovations	PUTWabWH (ab=bar size a&b)	Guestroom	Bathroom - Accessible Water Closet
-- (OPT)	Grab Bar - One Piece Combination Set - Polyester Painted	WHT	WingIt Innovations	WGB5HCabWH (ab=bar size a&b)	Guestroom	Bathroom - Accessible Water Closet

Finish Codes: US26 = Chrome, Bright US32 = Stainless Steel, Bright (Polished) US15 = Satin Nickel
US26D = Chrome, Satin US32D = Stainless Steel, Satin WHT = White

Note 1: When adequate blocking is not available for grab bars, install grab bars using WingIT's Grab Bar Fasteners Model #GBW40 or RESGBW35. WingIT's Grab Bar Fasteners are compatible with WingITS and Bobrick Grab Bars, for all other manufacturers, adequate blocking must be provided.

Toilet & Bath Accessory Matrix

Universal Mark	Description	Finish	Manufacturer	Model No.	Area	Location
--	Mirror - Framed		Furnished by Others		Guestroom	Bedroom - Accessible
--	Ironing Board Caddy		Furnished by Others		Guestroom	Closet
			Furnished by Others		Guestroom	Closet - Accessible
---	Mirror - Framed		Furnished by Others		Back-of-House	Employee Restroom
--	Robe Hook - Double	US26	Franklin Brass, a Liberty Hardware Brand, A Masco Company	FB 9002PC (Jamestown)	Back-of-House	Employee Restroom
--	Paper Towel Dispenser (Recessed)	US32D	American Specialties, Inc.	AS 0457	Back-of-House	Employee Restroom
		US32D	Bobrick Washroom Equipment, Inc	B-359	Back-of-House	Employee Restroom
--	Soap Dispenser (Lavatory-Mtd., Top Load, 6" Spout, 34 oz)	US32D	American Specialties, Inc.	AS 0332D	Back-of-House	Employee Restroom
		US32D	Bobrick Washroom Equipment, Inc	B-8226	Back-of-House	Employee Restroom
--	Toilet Tissue Holder - Double (Surface Mtd.)	US26	American Specialties, Inc.	AS 7305-2B x R009	Back-of-House	Employee Restroom

Finish Codes: US26 = Chrome, Bright; US26D = Chrome, Satin; US32 = Stainless Steel, Bright (Polished); US32D = Stainless Steel, Satin; US15 = Satin Nickel; WHT = White

Note 1: When adequate blocking is not available for grab bars, install grab bars using WingIT's Grab Bar Fasteners Model #GBW40 or RESGBW35. WingIT's Grab Bar Fasteners are compatible with WingITS and Bobrick Grab Bars, for all other manufacturers, adequate blocking must be provided.

Toilet & Bath Accessory Matrix

Universal Mark	Description	Finish	Manufacturer	Model No.	Area	Location
--	Toilet Tissue Holder - Double (Surface Mtd.)	US26	Bobrick Washroom Equipment, Inc	B-7686.60	Back-of-House	Employee Restroom
		US26	Franklin Brass, a Liberty Hardware Brand, A Masco Company	FB 5507B (Century)	Back-of-House	Employee Restroom
--	Grab Bar 18" - Nylon Coated	WHT	Hafele America Co.	HEWI 988.61. 199.M	Back-of-House	Employee Restroom
		WHT	WingIt Innovations	WGB5PU18WH	Back-of-House	Employee Restroom
-- (OPT)	Grab Bar 18” - Polyester Painted	WHT	WingIt Innovations	WGB5YS18WH	Back-of-House	Employee Restroom
--	Grab Bar 36" - Nylon Coated	WHT	Hafele America Co.	HEWI 988.61. 499.M	Back-of-House	Employee Restroom
		WHT	WingIt Innovations	WGB5PU36WH	Back-of-House	Employee Restroom
-- (OPT)	Grab Bar 36” - Polyester Painted	WHT	WingIt Innovations	WGB5YS36WH	Back-of-House	Employee Restroom

Finish Codes: US26 = Chrome, Bright US32 = Stainless Steel, Bright (Polished) US15 = Satin Nickel
US26D = Chrome, Satin US32D = Stainless Steel, Satin WHT = White

Note 1: When adequate blocking is not available for grab bars, install grab bars using WingIT's Grab Bar Fasteners Model #GBW40 or RESGBW35. WingIT's Grab Bar Fasteners are compatible with WingITS and Bobrick Grab Bars, for all other manufacturers, adequate blocking must be provided.

Toilet & Bath Accessory Matrix

Universal Mark	Description	Finish	Manufacturer	Model No.	Area	Location
--	Grab Bar 42" - Nylon Coated	WHT	Hafele America Co.	HEWI 988.61. 599.M	Back-of-House	Employee Restroom
		WHT	WingIt Innovations	WGB5PU42WH	Back-of-House	Employee Restroom
-- (OPT)	Grab Bar 42" - Polyester Painted	WHT	WingIt Innovations	WGB5YS42WH	Back-of-House	Employee Restroom
--	Seat Cover Dispenser (Single Recessed)	US32D	American Specialties, Inc.	AS 6477	Back-of-House	Employee Restroom
		US32D	Bobrick Washroom Equipment, Inc	B-3013	Back-of-House	Employee Restroom
		US32D	GAMCO, Inc., A Bobrick Company	GA TSC-8	Back-of-House	Employee Restroom
--	Grab Bar 18" - Nylon Coated	WHT	Hafele America Co	HEWI 988.61. 199.M	Back-of-House	Employee Restroom
		WHT	WingIt Innovations	WGB5PU18WH	Back-of-House	Employee Restroom
-- (OPT)	Grab Bar 18” - Polyester Painted	WHT	WingIt Innovations	WGB5YS18WH	Back-of-House	Employee Restroom
--	Grab Bar 24" - Nylon Coated	WHT	Hafele America Co.	HEWI 988.61. 299.M	Back-of-House	Employee Restroom
		WHT	WingIt Innovations	WGB5PU24WH	Back-of-House	Employee Restroom
-- (OPT)	Grab Bar 24” - Polyester Painted	WHT	WingIt Innovations	WGB5YS24WH	Back-of-House	Employee Restroom

Finish Codes: US26 = Chrome, Bright
US26D = Chrome, Satin
US32 = Stainless Steel, Bright (Polished)
US32D = Stainless Steel, Satin
US15 = Satin Nickel
WHT = White

Note 1: When adequate blocking is not available for grab bars, install grab bars using WingIT's Grab Bar Fasteners Model #GBW40 or RESGBW35. WingIT's Grab Bar Fasteners are compatible with WingITS and Bobrick Grab Bars, for all other manufacturers, adequate blocking must be provided.

SECTION 10 31 00 - MANUFACTURED FIREPITS

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Cast Limestone Firepit, With Rolled Lava Stone and Electronic Ignition
2. All Required Accessories

B. Related Sections:

1. Division 23 Sections: Gas pipe to firepit and connection to burner
2. Division 26 Sections: Connection to gas firepit electronic ignition.

1.02 SUBMITTALS

A. Submit "Letter of Conformance" in accordance with Section 01 33 00 with the following supporting data:

1. Submit product data, mark each copy to identify applicable products, characteristics, models, options and other supplemental data to clearly communicate information specific to this project.
2. Shop Drawings and Samples: Submit copies of Shop Drawings of all items specified herein to Architect for approval. Obtain approval of drawings prior to proceeding with manufacturing. Shop Drawings shall indicate: elevations; details; location of each item; s; typical and special details of construction; methods of assembling sections; locations and installations requirements for hardware; size, shape, and thickness of materials; and joints and connections.

1.03 QUALITY ASSURANCE

A. Installer Qualifications: Firm with not less than 5 years of experience in installation of firepit units of type, quantity, and installation methods similar to work of this Section.

B. All materials shall be installed in accordance with the manufacturer's printed directions.

C. Comply with the fire-resistance ratings as indicated and as required by governing authority and codes. Provide materials, accessories, and application procedures which have been listed by UL.

D. Verify that components and proposed installation comply with local and state requirements for gas firepits.

1.04 DELIVERY, STORAGE, AND HANDLING

A. All materials shall be delivered in their original unopened packages and stored in an enclosed shelter providing protection from damage and exposure to the elements. Damaged or deteriorated materials shall be removed from the premises.

PART 2 PRODUCTS

2.01 GAS FIREPIT

A. Approved Manufacturers:

1. Firepit Outfitter (800-979-3267)
2. Woodland Direct (877-919-1904)
3. Patio Outfitters (303-346-9264

B. Products shown below are based on Firepit Outfitter Da Vinci Limestone Firepit, 60” and are mentioned to establish minimum quality level. Equivalent products by any of the listed manufacturers will be acceptable as approved by the Owner's Representative.

1. Provide Manufacturer's Firepit Set as listed above, and as approved by the Owner's Representative.

a. Provide complete valving, starter, automatic shut off valve, and connecting equipment for conditions indicated.

C. Accessories/Components:

1. Electronic ignition Kit with Remote Control:

PART 3 EXECUTION

3.01 GENERAL

A. Contractor shall inspect site conditions to which work is to be installed. Report discrepancies to Architect in writing.

B. Examine roughing-in for gas piping and electrical control wiring to verify actual locations of connections before equipment installation.

1. Provide underground gas line and associated trenching and filling in compliance with Division 33 Sections or the requirements of the local natural gas utility supplier and authorities having jurisdiction. Comply with requirements of Section 23 11 23 - Facility Natural Gas Piping for piping inside of building.

C. Verify that Fire Pit dimensions, clearances, and combustion air ventilation are in accordance with manufacturer’s published directions and listing requirements of the equipment being installed.

3.02 INSTALLATION

A. Install firepit equipment and surround material in strict accordance with manufacturer's instructions and as required by appropriate fire authorities.

B. Use concealed fastenings wherever possible.

C. Install true, plumb, and level, securely and rigidly anchored to substrate in accordance with manufacturer's instructions for each item and each type of substrate construction.

D. Installed gas piping, tubing, hoses and clamps, must be hidden from view.

END OF SECTION

SECTION 10 44 00 - FIRE PROTECTION SPECIALTIES

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Fire Extinguishers and Brackets
2. Fire Extinguisher Cabinets
3. Fire Hose and Valve Cabinet
4. Accessories

B. Related Sections:

1.02 REFERENCES

A. National Fire Protection Association (NFPA) Publications:

1. 10 “Portable Fire Extinguishers”

B. Underwriter's Laboratories, Inc. (UL) Standards:

1. 4A - “60BC classification”

1.03 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

B. Submit “Letter of Conformance” in accordance with Section 01 33 00 indicating specified items selected for use in project with the following supporting data.

1. Submit product data which shall include physical dimensions, operational features, color and finish, anchorage details, rough-in measurements, location, and details.
2. Submit manufacturer's installation instructions.

1.04 QUALITY ASSURANCE

A. Conform to NFPA 10 requirements for extinguishers.

1.05 OPERATION AND MAINTENANCE DATA

A. Do not install extinguishers when ambient temperatures may cause freezing.

PART 2 PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

A. Preferred Manufacturers:

1. None

B. Approved Manufacturers:

1. Larsen's Manufacturing Company (800-527-7367).
2. JL Industries, an Activar Inc. Company (800-554-6077).
3. Modern Metal Products, a Division of Technico, Inc. (800-435-5544)

2.02 EXTINGUISHERS:

A. Multi-Purpose, Dry-Chemical Type: Steel Tank, pressurized, including hose and nozzle; 10-pound, ABC classification, UL 4A/60BC.

2.03 BRACKET:

A. Furnish wall mount bracket where shown on Drawings complete with mounting hardware.

2.04 CABINETS:

A. Items specified below are by Larsen's Manufacturing Co. Equivalent products by listed manufacturer will be acceptable.

1. Wall mounted on Bracket (FE): "MP10" Extinguisher with "B2" bracket.

2. Semi-recessed Fire Extinguisher Cabinet (FEC-1): "MP10" Extinguisher with “Gemini Series Model FS-G-2409-6R"; semi-recessed cabinet, projecting 2-1/2", rough opening of 10-1/2"W x 25"H x 4"D.

3. Semi-recessed Fire Hose and Valve Cabinet with Fire Extinguisher (FVC-2): "MP10" Extinguisher with "FS-G-3238-RL"; Semi-Recessed Fire Hose and Valve Cabinet, projecting 2-1/2", rough opening of 33"W x 39"H x 6"D.

B. Cabinet:

1. Semi-Recessed Fire Extinguisher Cabinet: 18 gauge steel with acrylic thermosetting enamel finish box construction, rolled-edge trim type, matching continuous hinge, pull handle, 1/4” Frameless Acrylic door, baked enamel coated steel trim.

a. Door Style to be Larson “Gemini" series door with black vertical letters on white background stating equipment in cabinet, or approved substitution by other listed manufacturers.

1) Provide lock similar to “Larsen-Loc” on all cabinets.

b. Finish: White finish for box and trim.

c. Provide black text “FIRE EXTINGUISHER” on side of cabinet where required by code.

2. Semi-recessed Fire Hose and Valve Cabinet: 18 gauge steel with acrylic thermosetting enamel finish box construction, rolled-edge trim type, matching continuous hinge, pull handle, 1/4” Frameless Acrylic door, baked enamel coated steel trim.

a. Door Style to be Larson “Full Glass”, or approved substitution by other listed manufacturers. Glazing to be Clear Tempered Safety Glass.

1) Provide lock similar to “Larsen-Loc” on all cabinets.

b. Finish: White finish for box and trim.

c. Provide text “FIRE EXTINGUISHER” on side of cabinet where required by code.

C. Mounting Hardware: Appropriate to Cabinet

D. Fabrication

1. Form body of cabinet with tight inside corners and seams.

2. Pre-drill holes for anchorage.

3. Form perimeter trim and door stiles by welding, filling, and grinding smooth.

4. Hinge doors for 180 degree opening with continuous piano hinge. Provide pull handle and roller type catch.

2.05 FINISHES

A. Extinguishers: Red Enamel

PART 3 EXECUTION

3.01 INSPECTION

A. Verify rough openings for cabinet are correctly sized and located. B. Beginning of installation means acceptance of existing conditions.

3.02 INSTALLATION

A. Install cabinets plumb and level in wall openings. Secure rigidly in place in accordance with manufacturer's instructions.

END OF SECTION

SECTION 10 51 13 - METAL LOCKERS

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Locker Units with Hinged Doors
2. Base, Top, and Filler Panels
3. Hooks, Latches, and Hardware
4. Attachment Hardware

B. Related Sections:

1. Section 06 10 00 - Rough Carpentry: Blocking for attachment

1.02 SYSTEM DESCRIPTION

A. Lockers: Three-tier locker. Provide standard recessed padlock handle, number plate bases, end panels, filler panels, matching sloped top and top filler panels.

1.03 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

B. Submit "Letter of Conformance" in accordance with Section 01 33 00 indicating specified items selected for use in project with the following supporting data.

1. Submit Shop Drawings and product data that clearly indicate locker types, sizes, configurations, layout of groups of lockers, benches, accessories, and numbering plan.
2. Submit manufacturer's installation instructions and actual color samples, on squares of same metal to be used for fabrication.

1.04 DELIVERY, STORAGE, AND HANDLING

A. Store and protect locker finishes and adjacent surfaces from damage during installation.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Approved Manufacturers:

1. "Industrial"; Lyon Workspace Products LLC (800-433-8488)
   a. Color: No. BN 931 – B6
2. "Standard Lockers"; Republic Storage Systems Company (800-477-1255)
   a. Color: No. 89 Cork
3. "Vanguard Lockers"; Penco Products, Inc. (800-562-1000)
   a. Color: No. 073 Champagne
4. "Emperor Locker System"; Hadrian Manufacturing, Inc. (905-333-0300)
   a. Color: No. 603 Almond

2.02 LOCKER MATERIALS

A. Sheet Steel: ASTM A1008, Mild, stretcher-leveled cold-rolled carbon sheet steel free of buckling, scale, and surface imperfections of the following minimum thicknesses:

1. Body and Shelf: 24 Gauge
2. Doors: 16 Gauge
3. Door Frames: 16 Gauge
4. Hinges: Minimum 2" wide, full loop, tight pin type.

2.03 LOCKER ACCESSORIES

A. Provide each locker with metal number plate, rubber bumpers, and hat/bookshelf.

2.04 LOCKER FABRICATION

A. Locker Units: Provide the following types in locations shown on the Drawings:

1. Three tier units, each locker to be 12" wide x 15" deep x 24" high.

B. Bodies: Formed and flanged with stiffener ribs; electrically spot

welded.

C. Door Frame: Formed channel shape, welded and ground flush, welded to body.

D. Doors: Welded inner and outer faces; channel reinforced top and bottom with intermediate stiffener ribs. Finish edges smooth.

E. Hinges: Three full loop hinges. Weld securely to unit body and secure to door with no fewer than 2 factory installed fasteners that are completely concealed and tamperproof when door is closed.

F. Recessed Handle and Latch: Manufacturer's standard housing to form a recess for latch lifter and locking devices; non-protruding latch lifter containing strike and eye for padlock; and automatic, pre-locking, pry-resistant latch with latching action with not less than three-point latching. Locking device supplied by Owner.

G. Provide finished filler panels, end panels, continuous sloped 20-gauge metal tops and top filler panels to close off all openings, finished to match lockers.

1. Sloped tops are to be in lengths as long as practicable, but not less than four lockers.

H. Provide matching 12 gage, "Z" type base, 4" high at non-recessed lockers.

I. Trim: 3", 18 gauge steel matching trim for recessed lockers.

J. Provide full perimeter concealed ventilation system.

K. Finish edges smooth without

burrs. L. Provide number plates.

M. Fabricate lockers square, rigid, and without warp, with metal faces flat and free of dents or distortion. Make exposed metal edges free of sharp edges and burrs, and safe to touch. Weld frame members together to form a rigid, one-piece structure.

1. Form locker body panels, doors, shelves and accessories from one-piece steel sheet unless otherwise indicated.

N. Accessible Lockers:

1. Accessible Locker to meet ICC/ANSI A117.1-2003-Side Reach Requirement: Single tier lockers shall have a hat/book shelf and coat hooks located no more than 46-inches above the finished floor. One additional shelf shall be placed near the bottom of the locker so that it is no lower than 15-inches above finished floor.
2. Apply a decal with the international symbol of accessibility to the face of the designated handicapped accessible single tier locker, refer to Drawings for location.

2.05 FINISHES

A. Clean, degrease, and neutralize metal; prime and finish with two coats of baked enamel, color as selected by Architect from standard colors.

B. Comply with NAAMM "Metal Finishes Manual" for recommendations relative to applying and designating finishes.

C. Finish all steel surfaces and accessories, except prefinished stainless-steel and chrome-plated surfaces.

D. Protect mechanical finishes on exposed surfaces from damage by applying strippable, temporary protective covering prior to shipment.

E. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within 1/2 of the range of approved samples. Noticeable variations in the same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved samples and they are assembled or installed to minimize contrast.

PART 3 EXECUTION

3.01 PREPARATION

A. Verify bases are properly sized and located.

3.02 INSTALLATION

A. Install metal lockers complete with accessories according to manufacturer's recommendations. Install plumb, level, rigid, flush and in-line.

B. Anchor lockers with appropriate anchor devices to suit materials encountered, to floor and walls. Apply fasteners through back-up reinforcing plates where necessary to avoid metal distortion, using concealed fasteners.

C. Bolt adjoining locker units together to provide rigid installation.

D. Install end panels, filler panels, and tops to completely close-off all openings.

E. Anchor lockers to floors and walls at intervals recommended by manufacturer but no greater than 36 inches (910 mm). Install anchors through back-up reinforcing plates where necessary to avoid metal distortion, using concealed fasteners.

1. Install recess trim to recessed lockers using concealed fasteners. Provide hairline joints and concealed splice plates.
2. Install sloping top units to lockers using concealed fasteners. Provide hairline joints and concealed splice plates.
3. Install finished end panels to conceal exposed ends of non-recessed lockers.

3.03 ADJUST AND CLEAN

A. Adjust doors and latches to operate easily without bending. Verify that integral locking devices are operating properly.

B. Touch-up marred finishes, but replace units that cannot be restored to factory-finished appearance. Use only materials and procedures recommended or furnished by locker manufacturer.

C. Clean interior and exposed exterior surfaces and polish steel and non-ferrous metal surfaces.

D. Protect lockers from damage, abuse, dust, dirt, stain, or paint. Do not permit locker use during construction.

END OF SECTION

SECTION 10 56 13 - METAL STORAGE SHELVING

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Metal Storage Shelving

1.02 SUBMITTALS

A. Submit "Letter of Conformance" in accordance with Section 01 33 00 (01330) with the following supporting data:

1. Mark each copy to identify applicable products, characteristics, models, options and other supplemental data to clearly communicate information specific to this project.

2. Color Chart: Each product specified.

1.03 QUALITY ASSURANCE

A. Installer Qualifications: Manufacturer's authorized representative who is trained and approved for installation of units required for this Project.

B. Source Limitations: Obtain metal storage shelving through one source from a single manufacturer.

1.04 DELIVERY, STORAGE, AND HANDLING

A. Deliver metal storage shelving palleted, wrapped, or crated to provide protection during transit and Project-site storage.

1.05 PROJECT CONDITIONS

A. Environmental Limitations: Do not deliver or install metal storage shelving until spaces are enclosed and weatherproof, wet work in spaces is completed and dry, and ambient temperature is being maintained at the levels indicated for Project when occupied for its intended use.

1.06 COORDINATION

A. Coordinate locations and installation of metal storage shelving that may interfere with ceiling systems including lighting, HVAC, and sprinklers.

PART 2 PRODUCTS

2.01 STORAGE SHELVING

A. Preferred Manufacturers:

1. None

A. Approved Manufacturers:

1. "Open Clip Type Shelving" - Republic Storage Systems Company (800-477-1255)

2. "Clip - Support Shelving" - Adapto Storage Products, (800-923-2786)

3. "8000 Series" - - Lyon Workspace Products, LLC (800-433-8488)

4. "Clipper Shelving" - Penco Products, Inc (800-562-1000)

B. Design:

1. Stand alone clip type consisting of 4 angle posts, 2 back sway braces, 4 side sway braces and 6 shelves.

   a. 3'-0" Long Units: Minimum 800 pounds load capacity per shelf.

   b. 4'-0" Long Units: Minimum 550 pounds load capacity per shelf.

C. Components:

1. Angle posts; 13 gage steel, with slots to receive shelf clips.

2. Shelves: 18 gage steel. Front and back shelf flanges turned down to accommodate 1" x
   1" x 1/8" reinforcing angles.

3. Shelf Clips: Type recommended and used by shelving manufacturer for required loading.

4. Sway Braces: 1" x 1/8" band iron with holes at ends for attachment to shelving units.

5. Accessories: As required by classification, design and installation requirements.

D. Finish:

1. Factory finish in manufacturers standard color selected by Owner's representative.

E. Size and layout as indicated on the Drawings.

PART 3 EXECUTION

3.01 INSTALLATION

A. Set units plumb, level and square. Do not secure to adjacent walls. Adjust for rigidity.

END OF SECTION

SECTION 10 57 23.13 - WIRE CLOSET AND UTILITY SHELVING

PART 1 GENERAL

1.01 SUMMARY

1. Wire Closet Shelves

B. Related Sections:

1. Section 06 10 00 - Rough Carpentry

1.02 SUBMITTALS

A. Submit "Letter of Conformance" in accordance with Section 01 33 00 with the following supporting data:

1. Mark each copy to identify applicable products, characteristics, models, options and other supplemental data to clearly communicate information specific to this Project.

2. Color Chart: Each product specified.

1.03 QUALITY ASSURANCE

A. Installer Qualifications: Manufacturer's authorized representative who is trained and approved for installation of units required for this Project.

B. Source Limitations: Obtain metal storage shelving through one source from a single manufacturer.

1.04 DELIVERY, STORAGE, AND HANDLING

A. Deliver storage shelving palleted, wrapped, or crated to provide protection during transit and Project-site storage.

1.05 PROJECT CONDITIONS

A. Environmental Limitations: Do not deliver or install metal storage shelving until spaces are enclosed and weatherproof, wet work in spaces is completed and dry, and ambient temperature is being maintained at the levels indicated for Project when occupied for its intended use.

PART 2 PRODUCTS

2.01 WIRE CLOSET SHELVES

A. Preferred Manufacturers:

1. None

B. Approved Manufacturers:

1. “Lifetime Ventilated Series Shelf with Hanging Rod”; Schulte Corporation (800-669-3225)

C. Components:

1. Structural Performance:

a. Structural Performance: Back clips spaced 11 inches with support braces at 3 feet 6 inches.

b. Static Load: 75 lb/ft of shelf minimum.

c. For heavy duty applications in pantry and garage applications space support brace on 2 feet.

d. Back Clips and Down Back Clips shall be Tri-Loc II Patented hollow wall anchoring system.

2. Material: Minimum requirements.

   a. Steel Rod: Grade C 1008 cold drawn steel rod. Tensile strength of 100 ksi. b.

      Front Rods and Studs: 0.306 inch diameter.

   c. Back Rods: 0.243 inch diameter.

   d. Cross Wire Spacing: 1 inch spacing. 0.120 inch diameter for one inch spaced standard 20 inches shelf. 0.105 inch diameter for one inch spaced standard mesh shelf.

   e. Cross Wire Spacing: 1/2 inch spacing. 0.0915 inch diameter for one-half inch spaced tight mesh shelf.

3. Shelving:

   a. Hanging Shelf with Open Slide: 12 inches deep by length as shown on Drawings. b.

      Storage Shelf: 12 inches deep by length as shown on Drawings.

4. Mounting Hardware: Manufacturer's standard components including anchor clips, end brackets, angled support braces and end caps, including the following:

   a. Side Wall Bracket: As required. Shelf side wall interface.

   b. Support Brace: Maximum 42 inches and every open end Anchor Back Clips. c.

      Fasteners, clips, caps and touch-up all as required.

   d. Down Back Clips.

D. Finish:

1. Electrostatic applied oven cured epoxy at all surfaces to 3 to 5 mil thickness. a.

   Color: Pure White

PART 3 EXECUTION

3.01 INSTALLATION

A. Install in accordance with manufacturer's published instructions, square and plumb, secured rigidly in position.

1. Layout scheduled components prior to installation to verify wall to wall and floor to ceiling heights, widths, plumb and flatness of surfaces.

2. Prepare anchor locations and select anchor types using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

END OF SECTION

SECTION 11 23 00 - COMMERCIAL LAUNDRY AND DRY-CLEANING EQUIPMENT

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Laundry and Dry-Cleaning Equipment.

B. Related Sections:

1. Section 06 10 00 - Rough Carpentry.
2. Section 10 28 00 - Toilet, Bath, and Laundry Accessories: Coordinate equipment lists and schedules.
3. Section 12 32 16 – Manufactured Plastic Laminate Clad Casework.
4. Division 23 - Mechanical
5. Division 26 - Electrical
6. Laundry Equipment Product sheets

1.02 SUBMITTALS

A. Submit "Letter of Conformance" in accordance with Section 01 33 00 (01330) with the following supporting data:

1. Product Data: Mark each copy to identify applicable products, characteristics, models, options and other supplemental data to clearly communicate information specific to this Project.
2. Shop Drawings:
   a. Indicate cabinet sizes, materials, details of construction, methods of fastening, location of built-in appliances and erection details.
   b. Indicate locations of plumbing and electrical rough-ins.
3. Samples: Submit samples of wood finish.

1.03 QUALITY ASSURANCE

A. Reference Standards: Applicable requirements of standards and specifications referenced herein apply to the work of this Section.

B. Regulatory Requirements:

1. Conform to all applicable codes for utility requirements.
2. Products Requiring Electrical Connection: Listed and classified by UL as suitable for the purpose specified and indicated.
3. All gas-fired equipment shall be AGA-Approved and provided with 100% safety pilot lights. Any electric ignition devices or high-heat sensors shall be UL Listed and AGA-Approved.

1.04 DELIVERY, STORAGE, AND HANDLING

A. Store products clear of floor in a manner to prevent damage.

B. Coordinate size of access and route to place of installation.

1.05 PROJECT CONDITIONS

A. Coordinate the work with location and placement of utilities. Coordinate characteristics of utilities with requirements of food service equipment.

B. Schedule Work to immediately follow installation of utilities and precede installation of room finishes.

C. Sequence installation to ensure utility connections are achieved in an orderly and expeditious manner.

PART 2 PRODUCTS

2.01 EQUIPMENT

A. Refer to Laundry Equipment Product sheets.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify condition of existing conditions before starting work. Verify ventilation outlets, service connections, and supports are correct and in required location. Verify that electric power is available and of the correct characteristics.

3.02 INSTALLATION

A. Install items in accordance with manufacturers' instructions. Verify water and drains are correct and in the required locations.

B. Insulate to prevent electrolysis between dissimilar metals.

C. Weld and grind joints in steel work tight, without open seams, where necessary due to limitations of sheet sizes or installation requirements.

D. Sequence installation and erection to ensure correct mechanical and electrical utility connections are achieved.

E. Cut, fit, and patch where necessary. Provide cutting and patching of items of this section required for installation or services of equipment. Any field cutting, joining, or patching shall be shop quality, match the surrounding material, and be fully finished and re-grained.

F. Cut and drill components for service outlets, fixtures, and fittings.

G. Use anchoring devices appropriate for equipment and expected usage. Wall blocking to be provided of a size and strength necessary to support all wall mounted equipment.

H. Provide clear silicone sealant to achieve a clean joint with adjacent building finishes and between abutting components.

3.03 ADJUSTING

A. Adjust equipment and apparatus to ensure proper working order and conditions.

B. Remove and replace equipment creating excessive noise or vibration.

3.04 CLEANING

A. Remove masking or protective covering from stainless steel and other finished surfaces.

B. Wash and clean equipment.

C. Polish glass, plastic, hardware, accessories, fixtures, and fittings.

END OF SECTION

LAUNDRY

Washer/Extractor 60 Lb. - Hard Mount

Mark #

MANUFACTURER Unimac

MODEL # UWN060 T3VA

FEATURES
- 7 speed model.
- 60 lb. load capacity.
- 208 volt, 3 phase, 15.0 amp cct.
- Computer controls.
- Five liquid injection connectors.
- LED cycle phase signal lights.
- Vibration sensor and motor reduction system.
- High speed extraction.
- 235 G-Force.
- Coordinate with GC for thickened slab requirements.

AREA Back of House

LOCATION Laundry

FINISH Stainless steel

ELECTRICAL

CONNECTION	DISC	**VOLTS**	208/240	**PHASE**	3	**AMPS**	15 CCT
KW		**HP**		**ROUGH-IN HEIGHT**	DFA +66"		
ROUGH-IN COMMENTS							

PLUMBING

HW	3/4", +66"	**CW**	3/4", +66"	**WASTE**	IW, 3", to drain trough
ROUGH-IN COMMENTS	140F Hot Water				

GAS

GAS SIZE	**MBH**	**HEIGHT**
COMMENTS		

VENTILATION

CONNECTION TYPE	**CFM**	**STAT. PRESS.**
DUCT SIZE		**VENT HEIGHT**
COMMENTS		

MARK#

UW Washer Extractors – Best Selling Models

Model UW60PV Specs

Best Selling 7 Speed Models

APPLICATION:

UW PV

Our best selling 7 speed models, selected by medium to high volume laundries placing more emphasis on lower operating costs than machine selling price.

EXAMPLES:

Hotels, Nursing Homes, Industrial Laundries, Professional Sports Clubs, Fire Departments and Professional Cleaners

UW Two and Three Speed economy models also available.

SECTION 11110

LAUNDRY WASHER-EXTRACTOR, 60 LB. (27.2 KG) CAPACITY

PART 1 GENERAL

1.01 SECTION INCLUDES:

A. Automatic laundry washer-extractor for processing water-washed linen items

1.02 SYSTEM DESCRIPTION

A. DESIGN REQUIREMENTS:

1.	Construction:	304 or equal stainless steel cylinder, tub & cover panels
2.	Input voltage:	208-240/60/3 3 wire plus ground
3.	Dry weight capacity:	60 lb. (27.2 kg)
4.	Wash cylinder volume:	9.30 cu ft (263346 cu cm) minimum
5.	Overall width:	36-5/8 inches (930 mm) nominal
6.	Overall height:	64-1/2 inches (1638 mm) nominal
7.	Overall depth:	45 inches (1143 mm) nominal
8.	Number & size of water supply inlet valves:	2 at 3/4 inch (19 mm), 2 at 1/2 inch (13 mm), all with 3/4NH (19 mm) male connections
9.	Number & size of drain outlets:	1 at 3 inch (76 mm)
10.	Overflow:	Internally plumbed
11.	Control system:	Programmable microprocessor
12.	Cylinder drive:	Direct drive V belt system without brakes, gearboxes or clutches
13.	Drive motor:	5 hp

B. PERFORMANCE REQUIREMENTS:

1.	Number of selectable cylinder speeds:	7, including 1/2 wash speed for processing delicate items
2.	G-force at highest extract speed:	300 G’s

3. Chemical supply system
   a. manually filled 5 compartment dry chemical dispensing system
   b. automatic flushing & connections for 5 external supply lines & control signals for 8 external supplies
4. Configured for possible future addition of water reuse system
5. 3 independently controlled water levels
6. Spray rinse system

7. Control system
    a. programmable microprocessor
    b. 39 cycle capacity
    c. capable of precise temperature controlled fills
    d. thermal cooldown
    e. overnight soak
    f. overflow flush
8. Drain valve automatically opens in event of power failure

1.03 DELIVERY, STORAGE & HANDLING

A. ACCEPTANCE AT SITE:

1. Inspect machine for damage prior to acceptance. If damage is found, follow freight handler's procedure for claims.

B. STORAGE & PROTECTION

1. Machine should be stored in a site protected from weather, direct sunlight & temperature extremes. Do not remove packaging prior to storage.
2. If machine is to be stored for an extended period of time, consult manufacturer for special requirements.

1.04 SYSTEM STARTUP & COMMISSIONING

A. Machine installation should be inspected by local manufacturer's representative prior to startup & operation. The party installing the machine is responsible for setting the schedule for this inspection.

PART 2 PRODUCTS

A. Source quality

B. Alliance Laundry Systems LLC - UniMac, obtain commercial laundry equipment from a single manufacturer

1.02 QUALIFIED MODELS

A. UniMac model UW60PVQ (no substitution)

PART 3 EXECUTION

1.01 INSTALLATION

A. Refer to & comply with manufacturer's installation instructions, document number F232084. Do not deviate without permission from site owner, architect, general contractor & manufacturer's local representative.

SECTION 11110

LAUNDRY WASHER-EXTRACTOR, 60 LB. (27.2 KG) CAPACITY, WITH SELF-CONTAINED WATER SAVING SYSTEM

PART 1 GENERAL

1.01 SECTION INCLUDES:

A. Automatic laundry washer-extractor for processing water-washed linen items with self-contained water reclamation system capable of reclaiming water from no less than (2) rinse steps

1.02 SYSTEM DESCRIPTION

A. DESIGN REQUIREMENTS:

1.	Construction:	304 or equal stainless steel cylinder, tub & cover panels
2.	Input voltage:	208-240/60/3 3 wire plus ground
3.	Dry weight capacity:	60 lb. (27.2 kg)
4.	Wash cylinder volume:	9.3 cu ft (263346 cu cm) minimum
5.	Overall width:	41-7/16 inches (1053 mm) nominal
6.	Overall height:	91 inches (2311 mm) nominal
7.	Overall depth:	61-3/4 inches (1568 mm) nominal
8.	Number & size of water supply inlet valves	2 at 1/2 inch (13 mm), 2 at 3/4 inch (19 mm), all with 3/4NH (19 mm) male connections
9.	Number & size of drain outlets:	1 at 3 inch (76 mm)
10.	Overflow:	Internally plumbed
11.	Control system:	Programmable microprocessor
12.	Cylinder drive:	Direct drive V belt system without brakes, gearboxes or clutches
13.	Drive motor:	5 hp

B. PERFORMANCE REQUIREMENTS:

1.	Number of selectable cylinder speeds:	7, including 1/2 wash speed for processing delicate items
2.	G-force at highest extract speed:	300 G’s

3. Chemical supply system
   a. manually filled 5 compartment dry chemical dispensing system
   b. automatic flushing & connections for 5 external supply lines & control signals for 8 external supplies
4. Configured with integrated water reclamation system capable of reclaiming at least 25% of total water consumption
5. 3 independently controlled water levels
6. Spray rinse system

7. Control system
    a. Programmable microprocessor
    b. 39 cycle capacity
    c. Capable of precise temperature controlled fills
    d. Thermal cooldown
    e. Overnight soak
    f. Overflow flush
8. Drain valve automatically open in event of power failure

1.03 DELIVERY, STORAGE & HANDLING

A. ACCEPTANCE AT SITE:

1. Inspect machine for damage prior to acceptance. If damage is found, follow freight handler's procedure for claims.

B. STORAGE & PROTECTION

1. Machine should be stored in a site protected from weather, direct sunlight & temperature extremes. Do not remove packaging prior to storage.
2. If machine is to be stored for an extended period of time, consult manufacturer for special requirements.

1.04 SYSTEM STARTUP & COMMISSIONING

A. Machine installation should be inspected by local manufacturer's representative prior to startup & operation. The party installing the machine is responsible for setting the schedule for this inspection.

PART 2 PRODUCTS

A. Source quality

B. Alliance Laundry Systems LLC - UniMac, obtain commercial laundry equipment from a single manufacturer

1.01 QUALIFIED MODELS

A. UniMac model UW60PVQ with Water Saving System (no substitution)

PART 3 EXECUTION

1.01 INSTALLATION

A. Refer to & comply with manufacturer's installation instructions, document number F232084 with supplements F232122 & F800310. Do not deviate without permission from site owner, architect, general contractor & manufacturer's local representative.

ELECTRICAL REQUIREMENTS

VOLTAGE	Electric Heat	Full Load Amp	Circuit Breaker Amp	Wire Size	Sq. mm
200 - 240 / 50 - 60 / 3 / 3W	Without Heat	10	15	14	3 x 2.5
	Electric Heat	66	80	3	3 x 25
200 - 240 / 50 - 60 / 1 / 2W	Without Heat	14	25	10	2 x 6
	Electric Heat	N/A	N/A	N/A	N/A
380 - 415 / 50 - 60 / 3 / 3W	Without Heat	4	15	14	3 x 2.5
	Electric Heat	29	40	8	3 x 10
440 - 480 / 50 - 60 / 3 / 3W	Without Heat	4	15	14	3 x 2.5
	Electric Heat	33	40	8	3 x 10
NOTE: Electrically heated washers require two electrical services, one to supply washer and one to supply electrical heating system.					

Consult electrical code for local requirements. Standard electrical 3-phase model — 200 / 240 Volt, 60 Hz, 3 Phase three-wire plus ground with 120 Volt controls. Conforms to National Electrical Code, UL, Factory Mutual Systems, ANSI, and Canadian Standards*. Manufacturer recommends only three-phase circuit breakers for three-phase washers. **DO NOT USE FUSES.** Optional voltages available.

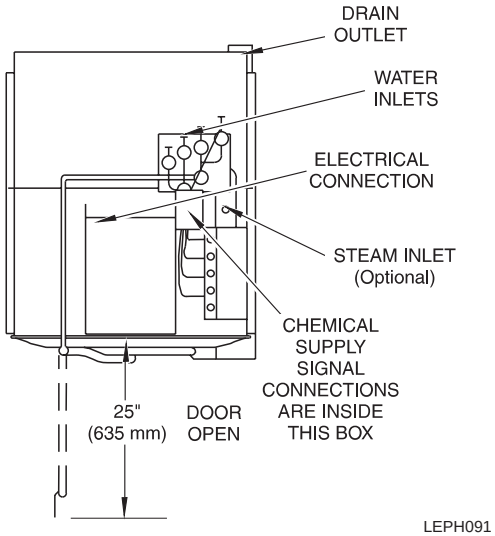
In view of company policy of continued improvement, the company reserves the right to change the specifications without notice.

* Certain models and/or voltages may not be approved by all approving agencies. Consult factory for approvals on exact models.

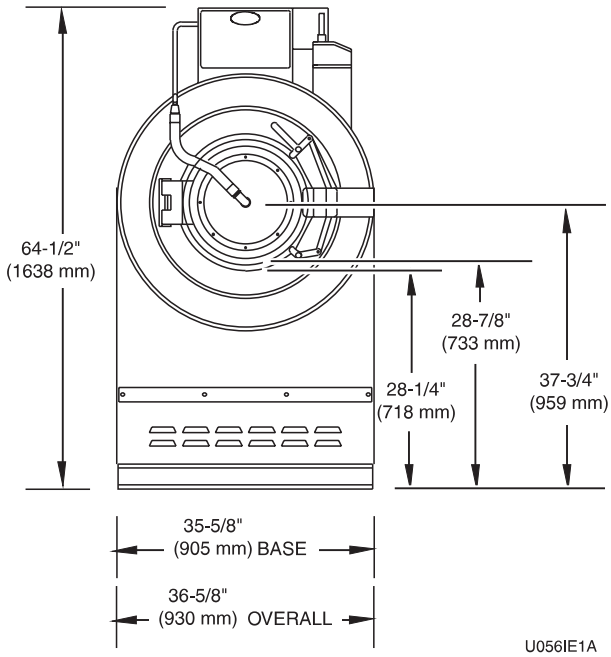
Model Dimensions

NOTE: Dimensions shown are for planning purposes only. Verify locational clearances before construction.

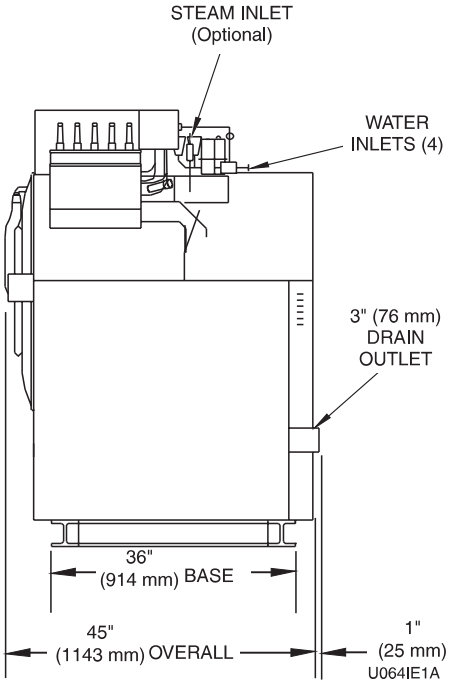
PLAN VIEW



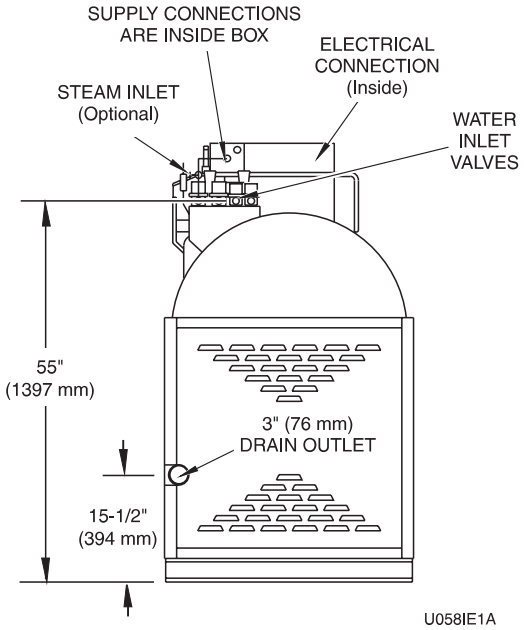
FRONT VIEW



RIGHT SIDE VIEW



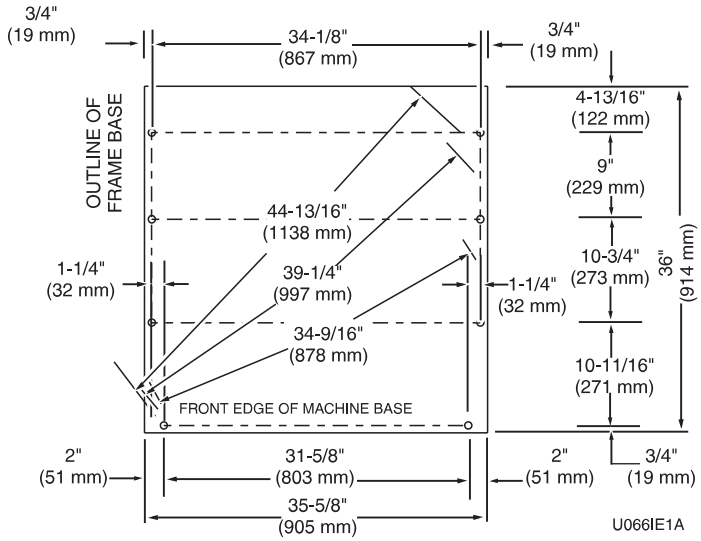
REAR VIEW



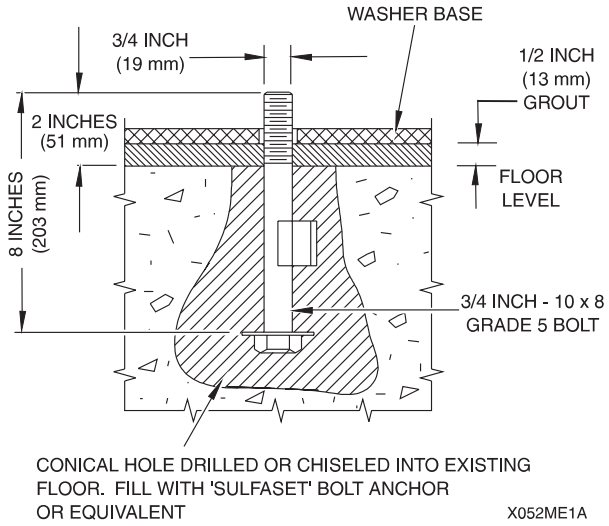
Model Installation and Foundation

IMPORTANT NOTICE: Machine must be installed on concrete floors minimum of 12" (305 mm) thick. Do not mount on wooden floors, above ground level or over basements. Installation must be “slab on grade” or equal. Do not isolate foundation from surrounding floor.

MOUNTING BOLT LAYOUT

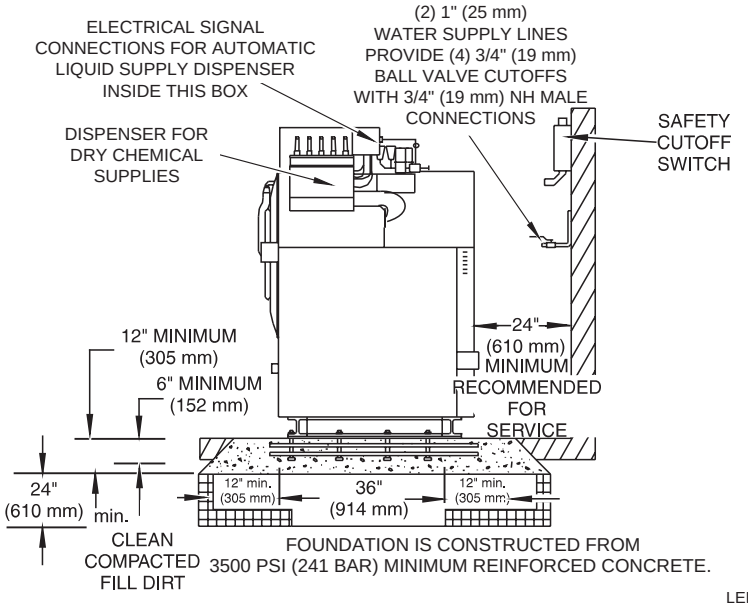


ALTERNATE METHOD OF MOUNTING

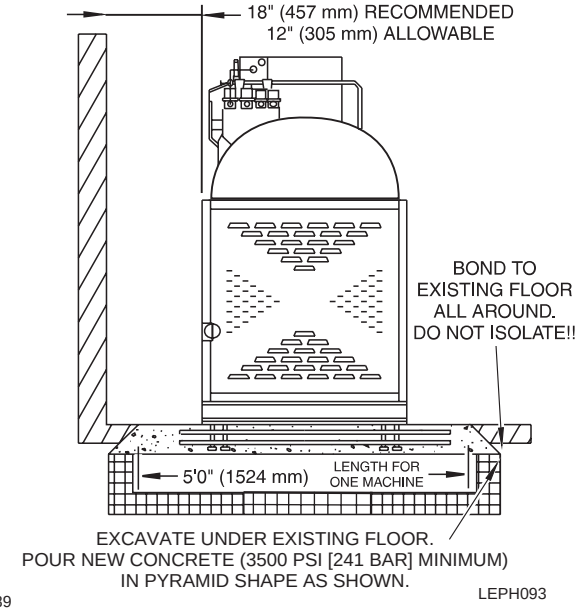


NOTE: Existing floor must be no less than 12 inches (305 mm) thick.

RIGHT SIDE VIEW



REAR VIEW



Washer/Extractor 55 Lb. - Soft Mount

Mark #

MANUFACTURER Unimac

MODEL # UX55

FEATURES
- 55 lb. load capacity.
- 208 volt, 1/3 phase, 15.0 amp cct.
- Computer controls.
- Liquid injection connectors.
- LED cycle phase signal lights.
- High speed extraction.
- 363 G-Force.
- Option to Item 311, 60 lb. washer.
- For use in operations where structural requirements for thickened slab cannot be met.

AREA Back of House

LOCATION Laundry

FINISH Stainless steel

ELECTRICAL

CONNECTION	DISC	**VOLTS**	208/240	**PHASE**	1/3	**AMPS**	15 CCT
KW		**HP**		**ROUGH-IN HEIGHT**	DFA +66"		
ROUGH-IN COMMENTS							

PLUMBING

HW	1", +54"	**CW**	1", +54"	**WASTE**	IW, 3", to drain trough
ROUGH-IN COMMENTS	140F Hot Water				

GAS

GAS SIZE	**MBH**	**HEIGHT**
COMMENTS		

VENTILATION

CONNECTION TYPE	**CFM**	**STAT. PRESS.**
DUCT SIZE		**VENT HEIGHT**
COMMENTS		

MARK#

On-P[redacted]s
Soft Mount Washer-Extractors

UniMac®

18 lb (8 kg) Washer-Extractor
25 lb (11 kg) Washer-Extractor
35 lb (16 kg) Washer-Extractor
55 lb (25 kg) Washer-Extractor
75 lb (34 kg) Washer-Extractor
100 lb (45 kg) Washer-Extractor
135 lb (61 kg) Washer-Extractor
165 lb (75 kg) Washer-Extractor

Expert Solutions from the Laundry Experts

UniMac®

Take a moment and step into the world of high tech product engineering where UniMac washer-extractors are designed with innovative features that command top performance, and durable steel construction that will stand the test of time. At UniMac, washer-extractors are considered more than just laundry equipment. They are key players in the success of commercial laundry facilities and as such must continuously achieve high levels of efficiency, quality and durability. UniMac has always maintained a standard of excellence in washer-extractor manufacturing that is recognized around the world. With over 50 years of engineering expertise you can be assured that you are getting the best washer-extractors on the market that will meet your needs now and in the future.

Tuned Suspension

Heavy-duty coil springs and strategically placed shock absorbers result in a tuned suspension system that absorbs out-of-balance load vibrations. The tuned suspension on UniMac softmount models does not require special foundations. Strategically placed center of gravity and mass weight placement aid in controlling movement and results in a reduction of force transferred to floor.

UX55 model shown.

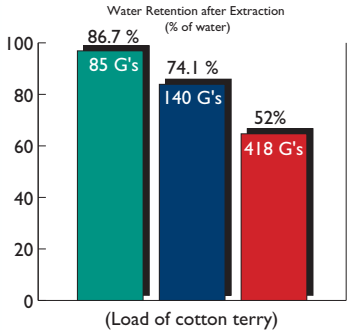
High Tech *Intelligent Drive* System

Shown with Programming Tool.

The state-of-the-art *Intelligent Drive* provides flexibility and contributes to lower operating costs. The *Intelligent Drive* actually senses the speed (RPM) of the washer allowing extreme accuracy even when the washer is reaching and maintaining high extraction speeds. The *Intelligent Drive* easily accommodates separate extraction speeds for blends, blankets and spreads or heavy cotton towels. It's like having a custom designed machine for each linen type. Unique design allows for the machine to be installed with single-phase electricity. The *Intelligent Drive* converts this to three-phase power for more efficient motor operation.

High Speed Extract

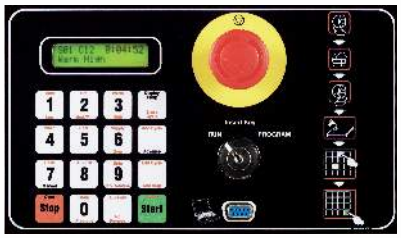
The higher the G-Force during extraction, the lower the water retention of the fabrics being processed. 400+ G-Force* will reduce the gas or electricity used during the drying process by as much as 40% over 85 G-Force extract washers. This results in reduced drying and finishing time, reduced linting and extended linen life. High speed extraction can also eliminate preconditioning of items to be ironed, saving energy while increasing production.



**UX55 model*

Advanced Computer Control

UniMac's state-of-the-art computer control provides all the features you need to make your on-premises laundry operation efficient with the linen care performance you demand.



Operation Flexibility

The extremely flexible and easy to use control offers 39 pre-programmed settings with a maximum of 99 total programs. A variety of specialized needs can be met with the advanced computer control.

Programming options include:

- Overnight soak to assist with stain removal
- Precise temperature controlled fills
- Thermal cool-down for complete control of water temperature for optimal chemical performance, wrinkle control and longer linen life

ProgressDisplay™

The easy-to-read digital text messaging, ProgressDisplay™, provides you with immediate feedback on every step in the washing process.

This feature is great for:

- Improving scheduling in your laundry operation
- Informing multiple operators of workflow
- Training new employees

Laundry Room Management

The cycle counter function assists management in monitoring proper cycle use and efficient use of time by laundry operators. The total hours run function allows management to properly schedule routine maintenance.

- Number of cycles
- Number of hours the machine has been operated

Value For Your Money

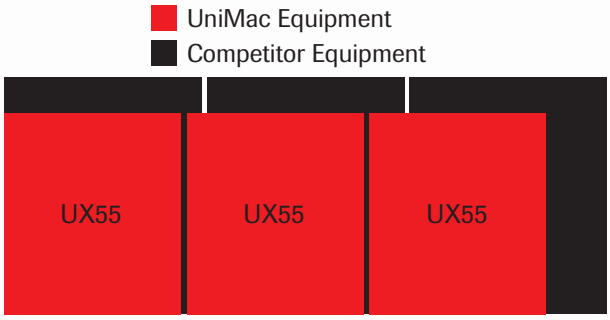
- Water reuse capable
- Ozone capable
- Three water inlets standard (18-75 lb models)
- Four water inlets standard (100-165 lb models)

Compact Design

Our unique compact design uses 34% less floor space than some competitor's models, giving our customers more room to manage their laundry.

18-55 lb models fit through a standard 36" door.

UniMac washers require 34% less space than the leading competitor



Multi-Faceted Supply Dispenser

The state-of-the-art liquid supply system for laundry chemicals offers convenience and dependability. It's factory installed for easy connection to the central liquid supply system providing six supply signals. For powder supplies, smaller models have three flush-down compartments mounted on the top of the washer. Larger models use removable cups. Laundry chemicals are mixed safely with water prior to coming in contact with fabrics.

Heavy-Duty Bearings and Seals

UniMac washer-extractors use heavy-duty precisionbearings that are permanently lubricated fortrouble-free operation. The double lip seals isolate thebearings from water and chemicals. Larger models use an automated lubrication system for ease of maintenance.

Five-Year Limited Parts Warranty

A five-year limited warranty is issued on the frame, basket, shaft, bearings and seals if failure or breakage should occur during normal operation due to defects in material or workmanship that would prohibit its further use. A three-year limited warranty is also issued to the original purchaser on all other parts.

Specifications

		UX18	UX25	UX35	UX55	UX75	UX100	UX135	UX165
Capacity - lb (kg)		18 (8)	25 (11)	35 (16)	55 (25)	75 (34)	100 (45)	135 (61)	165 (75)
Width - in (mm)		26" (660)	26" (660)	30.8" (783)	35.4" (900)	41.8" (1060)	47.3" (1200)	47.3" (1200)	51.8" (1300)
Depth - in (mm)		30.7" (780)	34.3" (870)	37.8" (960)	40" (1016)	46" (1168)	52.4"(1330)	59.1" (1500)	63.8" (1620)
Height - in (mm)		40.6" (1031)	40.6" (1031)	47" (1194)	60.8" (1544)	61.4" (1560)	75.6" (1920)	75.6" (1920)	82.7" (2100)
Cylinder Diameter - in (mm)		20.9" (530)	20.9" (530)	25.6" (650)	29.5" (750)	33.5" (850)	38.6" (980)	38.6" (980)	43.1" (1095)
Cylinder Depth - in (mm)		13.6" (345)	17.3" (440)	19.7" (500)	20.9" (530)	21.1" (537)	23.5" (597)	30.5" (775)	30.5" (775)
Cylinder Volume - cu.ft. (liters)		2.7 (76)	3.4 (97)	5.9 (167)	8.3 (234)	10.8 (305)	15.9 (451)	20.7 (585)	25.8" (730)
Door Opening Size - in (mm)		11.8" (300)	11.8" (300)	11.8" (300)	15.6" (395)	15.6" (395)	19.7" (500)	19.7" (500)	24.5" (622)
Door Bottom to Floor - in (mm)		11" (279)	11" (279)	15.6" (395)	22" (559)	22" (559)	25.5" (648)	25.5" (648)	28" (711)
Wash Speed - RPM		10-50	10-50	10-50	10-50	10-50	10-50	10-50	10-50
Distribution Speed - RPM		82	82	74	69	65	61	61	100
Extract Speed - RPM		85-1000	85-1000	100-1000	250-1000	250-1000	250-800	250-800	250-750
Extract G-Force		19-296	19-296	23-363	26-418	30-475	34-350	34-350	344
Water Inlet Conn. - in (mm)		3 x .75" (19)	3 x .75" (19)	3 x .75" (19)	3 x .75" (19)	3 x .75" (19)	4 x .75" (19)	4 x .75" (19)	3 x 1" (5.24) 1 x .75" (19)
Steam Inlet Conn. - in (mm)		.38" (10)	.38" (10)	.38" (10)	.38" (10)	.38" (10)	.38" (10)	.38" (10)	.75" (19)
Drain Connection Size - in (mm)		2" (51)	2" (51)	2" (51)	3" (76)	3" (76)	3" (76)	3" (76)	2 x 3" (76)
Motor Size - HP (kw)		1 (.75)	1 (.75)	2 (1.5)	4 (3)	5.25 (4)	7.4 (5.5)	10 (7.5)	15 (11.5)
Voltage/Hz/Phase Non-heat • Circuit Breaker-FLA		200-240/50-60 1/3 • 15-6***	200-240/50-60 1/3 • 15-6***	200-240/50-60 1/3 • 15-12***	200-240/50-60 1/3 • 15-12***	200-240/50-60/3 • 20-12	200-240/50-60/3 • 25-17	200-240/50-60/3 • 30-17	200-240/50-60/3 • 40-25
Voltage/Hz/Phase* Elect. heat • Circuit Breaker-FLA		200-240/50-60/3 • 30-28	200-240/50-60/3 • 30-29	200-240/50-60/3 • 50-41	200-240/50-60/3 • 60-58	200-240/50-60/3 • 60-58	200-240/50-60/3 • 90-88	200-240/50-60/3 • 90-88	N/A
Voltage/Hz/Phase* Non-heat • Circuit Breaker-FLA		N/A	N/A	N/A	N/A	380-415/50-60/3 • 16-12	380-415/50-60/3 • 20-17	380-415/50-60/3 • 25-17	380-415/50-60/3 • 25-20
Voltage/Hz/Phase Elect. heat • Circuit Breaker-FLA		380-415/50-60/3 • 20-17	380-415/50-60/3 • 20-18	380-415/50-60/3 • 30-26	380-415/50-60/3 • 40-36	380-415/50-60/3 • 40-36	380-415/50-60/3 • 63-55	380-415/50-60/3 • 63-55	N/A
Voltage/Hz/Phase* • Circuit Breaker-FLA		440-480/50-60/3 • 15-6	440-480/50-60/3 • 15-6	440-480/50-60/3 • 15-12	440-480/50-60/3 • 15-12	440-480/50-60/3 • 15-12	440-480/50-60/3 • 20-17	440-480/50-60/3 • 25-17	440-480/50-60/3 • 25-20
Shipping Dimensions - in (mm)	H	44.9" (1140)	48.8" (1240)	51.6" (1310)	65" (1650)	68.1" (1730)	79.1" (2010)	79.1" (2010)	90.6" (2300)
	W	28.8" (732)	28.8" (732)	33.5" (850)	40.2" (1020)	45.7" (1160)	51.2" (1300)	51.2" (1300)	57.1" (1450)
	D	32.8" (832)	37.4" (950)	43.3" (1100)	45.3" (1150)	48.4" (1230)	56.3" (1430)	64.2" (1630)	67.8" (1720)
Net Weight - lb (kg)		502 (236)	531 (241)	765 (347)	1247 (570)	1907 (865)	3351 (1520)	3626 (1645)	4630 (2100)
Shipping Weight - lb (kg)		624 (283)	639.5 (290)	1030 (467)	1380 (630)	2194 (995)	3741 (1697)	4017 (1822)	5113 (2319)
Agency Approvals**		CE, ETLus, ETLc	CE, ETLus, ETLc	CE, ETLus, ETLc	CE, ETLus, ETLc	CE, ETLus, ETLc	CE, ETLus, ETLc	CE, ETLus, ETLc	CE, ETLus, ETLc

* Special order may require longer time, check with factory.
** Agency approvals may vary depending on configuration. Consult factory for details.
*** Operates on single or 3 phase system as single phase.

Due to continuous product improvements, design and specifications subject to change without notice. Features and certifications may vary by model.
The quality management systems at all Alliance Laundry Systems manufacturing facilities are registered as ISO9001:2000 compliant.

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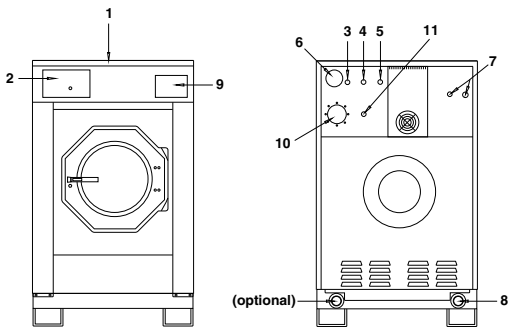
Components:

1. Top Supply Compartment (18 - 75 lb)
2. Controls
3. Cold Water Inlet
4. Hot Water Inlet
5. Cold Water Inlet
6. Vacuum Breaker
7. Electrical Connection
8. Drain Outlet (Dual Standard on 165 lb)
9. Front Supply Compartment (100 - 165 lb)
10. Supply Inlet
11. Water Inlet for Supply Box (100 - 165 lb)



www.uniwash.com

Alliance Laundry Systems
Shepard Street, Ripon, WI 54971 Telephone: 1-800-587-5458

UniMac®
Alliance Laundry Systems

Dryer - Electric 75 Lb.

MANUFACTURER Unimac

MODEL # UTF75E

FEATURES
- 75 lb. load capacity.
- 208 volt, 3 phase, 30.0 KW
- Micro-control, auto reverse, cool down.
- Option to Item 322, gas dryer.

AREA Back of House

LOCATION Laundry

FINISH Stainless steel

ELECTRICAL

CONNECTION	DISC	**VOLTS**	208	**PHASE**	3	**AMPS**	
KW	30.0	**HP**		**ROUGH-IN HEIGHT**	DFA +84"		
ROUGH-IN COMMENTS							

PLUMBING

HW	**CW**	**WASTE**
ROUGH-IN COMMENTS		

GAS

GAS SIZE	**MBH**	**HEIGHT**
COMMENTS		

VENTILATION

CONNECTION TYPE	Dryer	**CFM**	750	**STAT. PRESS.**	
DUCT SIZE	8"			**VENT HEIGHT**	+18"
COMMENTS	To outside air				

MARK#

On-Pr---
Drying Tumblers

UniMac

25 lb (11.3 kg) Tumbler
30 lb (13.6 kg) Tumbler
35 lb (15.9 kg) Tumbler
50 lb (22.0 kg) Tumbler
75 lb (33.9 kg) Tumbler

Expert Solutions from the Laundry Experts

UniMac

Take a moment and step into the world of high tech product engineering where UniMac drying tumblers are designed with innovative features that command top performance, and durable steel construction that will stand the test of time. At UniMac, drying tumblers are considered more than just laundry equipment. They are key players in the success of commercial laundry facilities and as such must continuously achieve high levels of efficiency, quality and durability. UniMac has always maintained a standard of excellence in drying tumbler manufacturing that is recognized around the world. With over 80 years of engineering expertise you can be assured that you are getting the best drying tumblers on the market that will meet your needs now and in the future.

Energy-Efficient Design

UniMac has achieved a perfect balance between drying temperature, airflow pattern and useable cylinder space to provide maximum energy efficiency while thoroughly drying linens. Our special equipment design pulls air through linens at the precise point where they fall freely to the bottom of the cylinder during the tumbling process. This enables linens to dry quickly and evenly which can shorten overall drying time thereby reducing utility and labor costs.

Reversible Steel Door

For the ultimate in workflow convenience, our tumbler door can be reversed to open right or left. In less than 15 minutes, you can reverse the door open direction and customize the optimum workflow for your laundry. Combined with our large door opening for ease of loading and unloading, you can count on Unimac drying tumblers to assist you with the lowest laundry operating costs. Constructed of high-grade steel, Unimac's heavy-duty door and hinges will stand up to the toughest laundry conditions, time and time again. In addition, our circular door glass is sealed with a 7/8" rubber gasket to secure it in place while providing greater strength and rigidity.

C.A.R.E.™ System*

(Combustion Auto Response Equipped)

Our C.A.R.E. drying tumblers provide some peace of mind in the unlikely event of a laundry fire within the cylinder. This feature senses for an abnormally high temperature within the cylinder of the dryer. If a laundry fire should start within the cylinder, water is sprayed on the linens from a multi-port manifold to saturate the load. If the system is activated, a warning signal can be sent to a remote location. The externally mounted C.A.R.E. system features multiple sensors and two water valves to assure accurate performance.

*Option available on 50 & 75 lb models.

Self-Cleaning Lint Filter

UniMac's fine mesh lint screen cleans itself automatically by depositing lint into a large storage area for easy removal. This eliminates the need to manually clean filter after each use.

Microprocessor Control

UniMac's new state-of-the-art microprocessor-controlled tumblers include an anti-wrinkle, end of cycle mode that reduces wrinkling caused by a static cylinder. It also offers variables such as time, temperature and dryness level and can be programmed to meet the exact needs of your laundry operation. And it's very easy for employees of any skill level to operate.

Manual Timers

UniMac's infinitely variable temperature controls offer 0 to 60 minutes of drying, 0 to 15 minutes of cool down and a heat range of 120° to 190° Fahrenheit (49°C to 88°C) to thoroughly dry garments while minimizing wrinkles. Manual timer feature allows the operator to select the ideal temperature, heating time and cooling time for any type of fabric before activating tumbler.

Cart Bumper and Kick Plate

UniMac incorporates a durable cart bumper and kick plate to protect tumbler fronts from possible scratches and dents incurred during the laundering process.

Ergonomic Engineering

UniMac tumblers are engineered with the laundry operator in mind. After careful research, features such as our large door opening placed approximately 32" from floor can make loading and unloading easier for employees.

Interchangeable Components

UniMac has engineered its drying tumbler to provide for quick trouble-shooting and ease of service.

Features:

- Efficient Multiple Burner Heat System provides desired temperature quickly while distributing heat evenly.
- Superior Finish. Our innovative paint system electrostatically applies paint for superior bonding and corrosion resistance. The paint is baked on the equipment inside and out to provide a tough and durable finish.
- Galvanized Pre-Coated Steel cylinder won't corrode chip, crack or pit under normal use.
- Large Baffles tumble loads efficiently to maximize airflow movement through linens.
- Embossed Steel Front and Side Panels are easy to clean and provide long-lasting beauty.
- Instant Electronic Ignition reduces drying time which saves energy.
- Modular Electrical System provides for greater reliability and convenient servicing.
- Reversing Cylinder Option helps eliminate tangling of linens during the drying cycle.
- Motors contain over-load protection feature.
- Solid steel cap over top of dryer protects internal components.

Three-Year Warranty

UniMac offers a three-year limited warranty for any part of the drying tumbler which fails as a result of a defect in material or workmanship during the first three years (36 months), after the date of original installation.

*Parts only, labor not included. See UniMac Warranty Bond for specifics.

Specifications

	25 lb Tumbler	30 lb Tumbler	35 lb Tumbler	50 lb Tumbler	75 lb Tumbler
Dry Wt. Capacity	25 lb (11.3 kg)	30 lb (13.6 kg)	35 lb (15.9 kg)	50 lb (23 kg)	75 lb (34 kg)
Cylinder Size (dia. x depth) (in/mm)	26 1/2" x 24" (673 mm x 610 mm)	26 1/2" x 30" (673 mm x 762 mm)	30" x 30" (762 mm x 762 mm)	37" x 30" (939 mm x 762 mm)	37" x 36" (937 mm x 914 mm)
Cylinder Volume	7.66 cu. ft. (217 liters)	9.57 cu. ft. (271 liters)	12.27 cu. ft. (347 liters)	18.67 cu. ft. (528.8 liters)	22.40 cu. ft. (634.4 liters)
Width (in/mm)	28" (711 mm)	28" (711 mm)	31 1/2" (800 mm)	38 5/8" (981 mm)	38 5/8" (981 mm)
Depth (in/mm)	38 7/8" (987 mm)	44 7/8" (1140 mm)	44 7/8" (1140 mm)	47" (1194 mm)	53" (1346 mm)
Height (in/mm)	63 7/8" (1622 mm)*	63 7/8" (1622 mm)*	63 7/8" (1622 mm)*	76 5/8" (1946 mm)	76 5/8" (1946 mm)
Motor HP	1/4 HP (187 W)	1/4 HP (187 W)	1/4 HP (187 W)	1/2 HP (373 W)	3/4 HP (559 W)
Air Outlet Dia. (in/mm)	6" (152 mm)	6" (152 mm)	8" (203 mm)	8" (203 mm)	8" (203 mm)
Airflow, CFM	60 Hz: 450 CFM (212 liters/sec.) 50 Hz: 410 CFM (194 liters/sec.)	60 Hz: 450 CFM (212 liters/sec.) 50 Hz: 410 CFM (194 liters/sec.)	60 Hz: 520 CFM (245 liters/sec.) 50 Hz: 470 CFM (222 liters/sec.)	750 CFM (354 liters/sec.)	**Gas and Steam 60 Hz: Models** 920 CFM (434 liters/sec.) **Electric and 50 Hz Gas and Steam** 750 CFM (354 liters/sec.)
Water Inlet Size (C.A.R.E. System)	N/A	N/A	N/A	(1) 3/4"	(1) 3/4"
Plumbing Connection (in/mm)	**Gas Models** - 1/2" NPT (13 mm) **Steam Models** - 3/4" NPT(19 mm)	**Gas Models** - 1/2" NPT (13 mm) **Steam Models** - 3/4" NPT (19 mm)	**Gas Models** - 1/2" NPT (13 mm) **Steam Models** - 3/4" NPT (19 mm)	**Gas Models** - 1/2" NPT (13 mm) **Steam Models** - 3/4" NPT (19 mm)	**Gas Models** - 1/2" NPT (13 mm) **Steam Models** - 3/4" NPT (19 mm)
Energy Data	**Gas Models** 64,000 Btu/hr (18.8 kW) **Steam Models** At 100 psig (6.9 bar): 3.5 BHP, 121,285 Btu/hr (35.5 kW) At 15 psig (1.0 bar): 2.4 BHP, 81,220 Btu/hr (23.8 kW) **Electric Models** 12 kW	**Gas Models** 73,000 Btu/hr (21.4 kW) **Steam Models** At 100 psig (6.9 bar): 3.5 BHP, 121,285 Btu/hr (35.5 kW) At 15 psig (1.0 bar): 2.4 BHP, 81,220 Btu/hr (23.8 kW) **Electric Models** 21.0 kW	**Gas Models** 90,000 Btu/hr (26.4 kW) **Steam Models** At 100 psig (6.9 bar): 4.0 BHP, 137,345 Btu/hr (40.2 kW) At 15 psig (1.0 bar): 3.4 BHP, 118,800 Btu/hr (34.8 kW) **Electric Models** 24.0 kW	**Gas Models** 120,000 Btu/hr (35.1 kw) **Steam Models** At 100 psig (6.9 bar): 5.1 BHP, 177,500 Btu/hr (52 kW) At 15 psig (1.0 bar): 3.4 BHP, 118,800 Btu/hr (34.8 kW) **Electric Models** See Below	**Gas Models** 165,000 Btu/hr (48.3 kw) **Steam Models** At 100 psig (6.9 bar): 6.1 BHP, 210,346 Btu/hr (61.6 kW) At 15 psig (1.0 bar): 4.1 BHP, 140,810 Btu/hr (41.2 kW) **Electric Models** See Below
Electrical Specifications	**Gas and Steam Models** 120/208-240/60/1; 2W/3W+G 100/200-220/60/1; 2W+G 100/200/50/1; 2W+G 230-240/50/1; 2W+G 200-208/240/60/3; 3W+G 200/50/3; 3W+G 230-240/50/3; 3W+G 380/400-415/50/3; 3W+G 460-480/60/3; 3W+G **Electric Models** 208/60/1; 3W+G 240/60/1; 3W+G 200/60/1; 2W+G 200/50/1; 2W+G **230-240/50/1; 2W+G 200-208/60/3; 3W+G 200/50/3; 3W+G 230-240/50/3; 3W+G** 240/60/3; 3W+G 380/50/3; 3W+G 400-415/50/3; 3W+G 460-480/60/3; 3W+G	**Gas and Steam Models** 120/208-240/60/1; 2W/3W+G 100/200-220/60/1; 2W+G 100/200/50/1; 2W+G 230-240/50/1; 2W+G 200-208/240/60/3; 3W+G 200/50/3; 3W+G 230-240/50/3; 3W+G 380/400-415/50/3; 3W+G 460-480/60/3; 3W+G **Electric Models** 208/60/1; 3W+G 240/60/1; 3W+G 200/60/1; 2W+G 200/50/1; 2W+G **230-240/50/1; 2W+G 200-208/60/3; 3W+G 200/50/3; 3W+G 230-240/50/3; 3W+G** 240/60/3; 3W+G 380/50/3; 3W+G 400-415/50/3; 3W+G 460-480/60/3; 3W+G	**Gas and Steam Models** 120/208-240/60/1; 2W/3W+G 100/200-220/60/1; 2W+G 100/200/50/1; 2W+G 230-240/50/1; 2W+G 200-208/240/60/3; 3W+G 200/50/3; 3W+G 230-240/50/3; 3W+G 380/400-415/50/3; 3W+G 460-480/60/3; 3W **Electric Models** 208/60/1; 3W+G 240/60/1; 3W+ 200/60/1; 2W+G 200/50/1; 2W+G **230-240/50/1; 2W+G 200-208/60/3; 3W+G 200/50/3; 3W+G 230-240/50/3; 3W+G** 240/60/3; 3W+G 380/50/3; 3W+G 400-415/50/3; 3W+G 460-480/60/3; 3W+G	**Gas and Steam Models** (Amps: Non-Rev / Rev) 120/60/1: 9.3 / NA; 208-240/60/1: 5.1 / NA; 208-240/60/3: 2.8 / 4; 200/50/3: 3.3 / 4.2; 460-480/60/3: 1.4 / 1.9; 230-240/50/1: 6.3 / 6.9; 380-415/50/3: 1.6 / 2 **Electric Models 30 kw** 200-208/60/3: 89 / 88; 240/60/3: 79 / 78; 480/60/3: 38 / 38; 200/50/3: 84 / 85; 230/50/3: 73 / 75; 240/50/3: 79 / 78; 380/50/3: 47 / 48; 400-415/50/3: 43 / 44 **Electric Models 21 kw** 240/50/1: 93 / 95	**Gas and Steam Models** (Amps: Non-Rev / Rev) 120/60/1: 13.8 / NA; 200-208/240/60/1: 7.6 / NA; 200-208/240/60/3: 3.8 / 4.3; 200/50/3: 3.5 / 4.5; 460-480/60/3: 1.9 / 2.1; 230-240/50/1: **6.7** / **7**; 380/400-415/50/3: 1.8 / 2.1 **Electric Models 30 kw** 200-208/60/3: 89 / 88; 240/60/3: 79 / 78; 480/60/3: 38 / 38; 200/50/3: 84 / 85; 230/50/3: 73 / 75; 240/50/3: 79 / 78; 380/50/3: 47 / 48; 400-415/50/3: 43 / 44
Net Wt. (approx.)	299 lb (136 kg)	331 lb (150 kg)	361 lb (164 kg)	545 lb (247 kg)	615 lb (279 kg)
Shipping Weight	332 lb (151 kg)	364 lb (165 kg)	394 lb (179 kg)	602 lb (273 kg)	677 lb (281 kg)
Agency Approvals	**Gas Models** CSA Star, CSA Flame, $_{c}$CSA$_{us}$, CE **Electric and Steam Models** $_{c}$UL$_{us}$, CE	**Gas Models** CSA Star, CSA Flame, $_{c}$CSA$_{us}$, CE **Electric and Steam Models** $_{c}$UL$_{us}$, CE	**Gas Models** CSA Star, CSA Flame, $_{c}$CSA$_{us}$, CE **Electric and Steam Models** $_{c}$UL$_{us}$, CE	**Gas Models** CSA Star, CSA Flame, $_{c}$CSA$_{us}$, CE **Electric and Steam Models** $_{c}$CSA$_{us}$, CE	**Gas Models** CSA Star, CSA Flame, $_{c}$CSA$_{us}$, CE **Electric and Steam Models** $_{c}$CSA$_{us}$, CE

***** Also available in optional heights of 72 1/4" (1835 mm) and 76 1/4" (1937 mm).

Tumbler models are made to suit a variety of electrical service characteristics. See your UniMac distributor for specifications. For further details on installation refer to Installation, Operation and Maintenance instructions supplied with the tumbler.

Due to continuous product improvements, design and specifications are subject to change without notice. Features and certifications may vary by model. The quality management systems at all Alliance Laundry Systems facilities have been awarded ISO 9001 certification.

Also complies with international Electro-Magnetic Compatibility (EMC) Standards.

www.uniwash.com

Alliance Laundry Systems
Shepard Street, Ripon, WI 54971 Telephone: 1-800-587-5458

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UniMac
Alliance Laundry Systems

Dryer - Gas 75 Lb.

Mark #

MANUFACTURER Unimac

MODEL # UTF75N

FEATURES
- 75 lb. load capacity.
- Gas-fired 165 MBtuH.
- Micro-control, auto reverse, cool down.
- 208-240 volt, three phase, 3.8 amps.

AREA Back of House

LOCATION Laundry

FINISH Stainless steel

ELECTRICAL

CONNECTION	Disc	**VOLTS**	208/240	**PHASE**	3	**AMPS**	3.8
KW		**HP**		**ROUGH-IN HEIGHT**	DFA +84"		
ROUGH-IN COMMENTS							

PLUMBING

HW		**CW**		**WASTE**			
ROUGH-IN COMMENTS							

GAS

GAS SIZE	1/2"	**MBH**	165	**HEIGHT**	POC		
COMMENTS							

VENTILATION

CONNECTION TYPE	Dryer	**CFM**	920	**STAT. PRESS.**			
DUCT SIZE	8"			**VENT HEIGHT**	+18"		
COMMENTS	To outside air						

MARK#

On-Pr---s
Drying Tumblers

UniMac

25 lb (11.3 kg) Tumbler
30 lb (13.6 kg) Tumbler
35 lb (15.9 kg) Tumbler
50 lb (22.0 kg) Tumbler
75 lb (33.9 kg) Tumbler

Expert Solutions from the Laundry Experts

UniMac

Take a moment and step into the world of high tech product engineering where UniMac drying tumblers are designed with innovative features that command top performance, and durable steel construction that will stand the test of time. At UniMac, drying tumblers are considered more than just laundry equipment. They are key players in the success of commercial laundry facilities and as such must continuously achieve high levels of efficiency, quality and durability. UniMac has always maintained a standard of excellence in drying tumbler manufacturing that is recognized around the world. With over 80 years of engineering expertise you can be assured that you are getting the best drying tumblers on the market that will meet your needs now and in the future.

Energy-Efficient Design

UniMac has achieved a perfect balance between drying temperature, airflow pattern and useable cylinder space to provide maximum energy efficiency while thoroughly drying linens. Our special equipment design pulls air through linens at the precise point where they fall freely to the bottom of the cylinder during the tumbling process. This enables linens to dry quickly and evenly which can shorten overall drying time thereby reducing utility and labor costs.

Reversible Steel Door

For the ultimate in workflow convenience, our tumbler door can be reversed to open right or left. In less than 15 minutes, you can reverse the door open direction and customize the optimum workflow for your laundry. Combined with our large door opening for ease of loading and unloading, you can count on Unimac drying tumblers to assist you with the lowest laundry operating costs. Constructed of high-grade steel, Unimac's heavy-duty door and hinges will stand up to the toughest laundry conditions, time and time again. In addition, our circular door glass is sealed with a 7/8" rubber gasket to secure it in place while providing greater strength and rigidity.

C.A.R.E.™ System*

(Combustion Auto Response Equipped)

Our C.A.R.E. drying tumblers provide some peace of mind in the unlikely event of a laundry fire within the cylinder. This feature senses for an abnormally high temperature within the cylinder of the dryer. If a laundry fire should start within the cylinder, water is sprayed on the linens from a multi-port manifold to saturate the load. If the system is activated, a warning signal can be sent to a remote location. The externally mounted C.A.R.E. system features multiple sensors and two water valves to assure accurate performance.

*Option available on 50 & 75 lb models.

Self-Cleaning Lint Filter

UniMac's fine mesh lint screen cleans itself automatically by depositing lint into a large storage area for easy removal. This eliminates the need to manually clean filter after each use.

Microprocessor Control

UniMac's new state-of-the-art microprocessor-controlled tumblers include an anti-wrinkle, end of cycle mode that reduces wrinkling caused by a static cylinder. It also offers variables such as time, temperature and dryness level and can be programmed to meet the exact needs of your laundry operation. And it's very easy for employees of any skill level to operate.

Manual Timers

UniMac's infinitely variable temperature controls offer 0 to 60 minutes of drying, 0 to 15 minutes of cool down and a heat range of 120° to 190° Fahrenheit (49°C to 88°C) to thoroughly dry garments while minimizing wrinkles. Manual timer feature allows the operator to select the ideal temperature, heating time and cooling time for any type of fabric before activating tumbler.

Cart Bumper and Kick Plate

UniMac incorporates a durable cart bumper and kick plate to protect tumbler fronts from possible scratches and dents incurred during the laundering process.

Ergonomic Engineering

UniMac tumblers are engineered with the laundry operator in mind. After careful research, features such as our large door opening placed approximately 32" from floor can make loading and unloading easier for employees.

Interchangeable Components

UniMac has engineered its drying tumbler to provide for quick trouble-shooting and ease of service.

Features:

- Efficient Multiple Burner Heat System provides desired temperature quickly while distributing heat evenly.
- Superior Finish. Our innovative paint system electrostatically applies paint for superior bonding and corrosion resistance. The paint is baked on the equipment inside and out to provide a tough and durable finish.
- Galvanized Pre-Coated Steel cylinder won't corrode chip, crack or pit under normal use.
- Large Baffles tumble loads efficiently to maximize airflow movement through linens.
- Embossed Steel Front and Side Panels are easy to clean and provide long-lasting beauty.
- Instant Electronic Ignition reduces drying time which saves energy.
- Modular Electrical System provides for greater reliability and convenient servicing.
- Reversing Cylinder Option helps eliminate tangling of linens during the drying cycle.
- Motors contain over-load protection feature.
- Solid steel cap over top of dryer protects internal components.

Three-Year Warranty

UniMac offers a three-year limited warranty for any part of the drying tumbler which fails as a result of a defect in material or workmanship during the first three years (36 months), after the date of original installation.

*Parts only, labor not included. See UniMac Warranty Bond for specifics.

Specifications

	25 lb Tumbler	30 lb Tumbler	35 lb Tumbler	50 lb Tumbler	75 lb Tumbler
Dry Wt. Capacity	25 lb (11.3 kg)	30 lb (13.6 kg)	35 lb (15.9 kg)	50 lb (23 kg)	75 lb (34 kg)
Cylinder Size (dia. x depth) (in/mm)	26 1/2" x 24" (673 mm x 610 mm)	26 1/2" x 30" (673 mm x 762 mm)	30" x 30" (762 mm x 762 mm)	37" x 30" (939 mm x 762 mm)	37" x 36" (937 mm x 914 mm)
Cylinder Volume	7.66 cu. ft. (217 liters)	9.57 cu. ft. (271 liters)	12.27 cu. ft. (347 liters)	18.67 cu. ft. (528.8 liters)	22.40 cu. ft. (634.4 liters)
Width (in/mm)	28" (711 mm)	28" (711 mm)	31 1/2" (800 mm)	38 5/8" (981 mm)	38 5/8" (981 mm)
Depth (in/mm)	38 7/8" (987 mm)	44 7/8" (1140 mm)	44 7/8" (1140 mm)	47" (1194 mm)	53" (1346 mm)
Height (in/mm)	63 7/8" (1622 mm)*	63 7/8" (1622 mm)*	63 7/8" (1622 mm)*	76 5/8" (1946 mm)	76 5/8" (1946 mm)
Motor HP	1/4 HP (187 W)	1/4 HP (187 W)	1/4 HP (187 W)	1/2 HP (373 W)	3/4 HP (559 W)
Air Outlet Dia. (in/mm)	6" (152 mm)	6" (152 mm)	8" (203 mm)	8" (203 mm)	8" (203 mm)
Airflow, CFM	60 Hz: 450 CFM (212 liters/sec.) 50 Hz: 410 CFM (194 liters/sec.)	60 Hz: 450 CFM (212 liters/sec.) 50 Hz: 410 CFM (194 liters/sec.)	60 Hz: 520 CFM (245 liters/sec.) 50 Hz: 470 CFM (222 liters/sec.)	750 CFM (354 liters/sec.)	**Gas and Steam 60 Hz: Models** 920 CFM (434 liters/sec.) **Electric and 50 Hz Gas and Steam** 750 CFM (354 liters/sec.)
Water Inlet Size (C.A.R.E. System)	N/A	N/A	N/A	(1) 3/4"	(1) 3/4"
Plumbing Connection (in/mm)	**Gas Models** - 1/2" NPT (13 mm) **Steam Models** - 3/4" NPT(19 mm)	**Gas Models** - 1/2" NPT (13 mm) **Steam Models** - 3/4" NPT (19 mm)	**Gas Models** - 1/2" NPT (13 mm) **Steam Models** - 3/4" NPT (19 mm)	**Gas Models** - 1/2" NPT (13 mm) **Steam Models** - 3/4" NPT (19 mm)	**Gas Models** - 1/2" NPT (13 mm) **Steam Models** - 3/4" NPT (19 mm)
Energy Data	**Gas Models** 64,000 Btu/hr (18.8 kW) **Steam Models** At 100 psig (6.9 bar): 3.5 BHP, 121,285 Btu/hr (35.5 kW) At 15 psig (1.0 bar): 2.4 BHP, 81,220 Btu/hr (23.8 kW) **Electric Models** 12 kW	**Gas Models** 73,000 Btu/hr (21.4 kW) **Steam Models** At 100 psig (6.9 bar): 3.5 BHP, 121,285 Btu/hr (35.5 kW) At 15 psig (1.0 bar): 2.4 BHP, 81,220 Btu/hr (23.8 kW) **Electric Models** 21.0 kW	**Gas Models** 90,000 Btu/hr (26.4 kW) **Steam Models** At 100 psig (6.9 bar): 4.0 BHP, 137,345 Btu/hr (40.2 kW) At 15 psig (1.0 bar): 3.4 BHP, 118,800 Btu/hr (34.8 kW) **Electric Models** 24.0 kW	**Gas Models** 120,000 Btu/hr (35.1 kw) **Steam Models** At 100 psig (6.9 bar): 5.1 BHP, 177,500 Btu/hr (52 kW) At 15 psig (1.0 bar): 3.4 BHP, 118,800 Btu/hr (34.8 kW) **Electric Models** See Below	**Gas Models** 165,000 Btu/hr (48.3 kw) **Steam Models** At 100 psig (6.9 bar): 6.1 BHP, 210,346 Btu/hr (61.6 kW) At 15 psig (1.0 bar): 4.1 BHP, 140,810 Btu/hr (41.2 kW) **Electric Models** See Below
Electrical Specifications	**Gas and Steam Models** 120/208-240/60/1; 2W/3W+G 100/200-220/60/1; 2W+G 100/200/50/1; 2W+G 230-240/50/1; 2W+G 200-208/240/60/3; 3W+G 200/50/3; 3W+G 230-240/50/3; 3W+G 380/400-415/50/3; 3W+G 460-480/60/3; 3W+G **Electric Models** 208/60/1; 3W+G 240/60/1; 3W+G 200/60/1; 2W+G 200/50/1; 2W+G **230-240/50/1; 2W+G 200-208/60/3; 3W+G 200/50/3; 3W+G 230-240/50/3; 3W+G** 240/60/3; 3W+G 380/50/3; 3W+G 400-415/50/3; 3W+G 460-480/60/3; 3W+G	**Gas and Steam Models** 120/208-240/60/1; 2W/3W+G 100/200-220/60/1; 2W+G 100/200/50/1; 2W+G 230-240/50/1; 2W+G 200-208/240/60/3; 3W+G 200/50/3; 3W+G 230-240/50/3; 3W+G 380/400-415/50/3; 3W+G 460-480/60/3; 3W+G **Electric Models** 208/60/1; 3W+G 240/60/1; 3W+G 200/60/1; 2W+G 200/50/1; 2W+G **230-240/50/1; 2W+G 200-208/60/3; 3W+G 200/50/3; 3W+G 230-240/50/3; 3W+G** 240/60/3; 3W+G 380/50/3; 3W+G 400-415/50/3; 3W+G 460-480/60/3; 3W+G	**Gas and Steam Models** 120/208-240/60/1; 2W/3W+G 100/200-220/60/1; 2W+G 100/200/50/1; 2W+G 230-240/50/1; 2W+G 200-208/240/60/3; 3W+G 200/50/3; 3W+G 230-240/50/3; 3W+G 380/400-415/50/3; 3W+G 460-480/60/3; 3W **Electric Models** 208/60/1; 3W+G 240/60/1; 3W+ 200/60/1; 2W+G 200/50/1; 2W+G **230-240/50/1; 2W+G 200-208/60/3; 3W+G 200/50/3; 3W+G 230-240/50/3; 3W+G** 240/60/3; 3W+G 380/50/3; 3W+G 400-415/50/3; 3W+G 460-480/60/3; 3W+G	**Gas and Steam Models** (Amps: Non-Rev / Rev) 120/60/1: 9.3 / NA; 208-240/60/1: 5.1 / NA; 208-240/60/3: 2.8 / 4; 200/50/3: 3.3 / 4.2; 460-480/60/3: 1.4 / 1.9; 230-240/50/1: 6.3 / 6.9; 380-415/50/3: 1.6 / 2 **Electric Models 30 kw** 200-208/60/3: 89 / 88; 240/60/3: 79 / 78; 480/60/3: 38 / 38; 200/50/3: 84 / 85; 230/50/3: 73 / 75; 240/50/3: 79 / 78; 380/50/3: 47 / 48; 400-415/50/3: 43 / 44 **Electric Models 21 kw** 240/50/1: 93 / 95	**Gas and Steam Models** (Amps: Non-Rev / Rev) 120/60/1: 13.8 / NA; 200-208/240/60/1: 7.6 / NA; 200-208/240/60/3: 3.8 / 4.3; 200/50/3: 3.5 / 4.5; 460-480/60/3: 1.9 / 2.1; 230-240/50/1: **6.7** / **7**; 380/400-415/50/3: 1.8 / 2.1 **Electric Models 30 kw** 200-208/60/3: 89 / 88; 240/60/3: 79 / 78; 480/60/3: 38 / 38; 200/50/3: 84 / 85; 230/50/3: 73 / 75; 240/50/3: 79 / 78; 380/50/3: 47 / 48; 400-415/50/3: 43 / 44
Net Wt. (approx.)	299 lb (136 kg)	331 lb (150 kg)	361 lb (164 kg)	545 lb (247 kg)	615 lb (279 kg)
Shipping Weight	332 lb (151 kg)	364 lb (165 kg)	394 lb (179 kg)	602 lb (273 kg)	677 lb (281 kg)
Agency Approvals	**Gas Models** CSA Star, CSA Flame, $_{c}$CSA$_{us}$, CE **Electric and Steam Models** $_{c}$UL$_{us}$, CE	**Gas Models** CSA Star, CSA Flame, $_{c}$CSA$_{us}$, CE **Electric and Steam Models** $_{c}$UL$_{us}$, CE	**Gas Models** CSA Star, CSA Flame, $_{c}$CSA$_{us}$, CE **Electric and Steam Models** $_{c}$UL$_{us}$, CE	**Gas Models** CSA Star, CSA Flame, $_{c}$CSA$_{us}$, CE **Electric and Steam Models** $_{c}$CSA$_{us}$, CE	**Gas Models** CSA Star, CSA Flame, $_{c}$CSA$_{us}$, CE **Electric and Steam Models** $_{c}$CSA$_{us}$, CE

***** Also available in optional heights of 72 1/4" (1835 mm) and 76 1/4" (1937 mm).

Tumbler models are made to suit a variety of electrical service characteristics. See your UniMac distributor for specifications. For further details on installation refer to Installation, Operation and Maintenance instructions supplied with the tumbler.

Due to continuous product improvements, design and specifications are subject to change without notice. Features and certifications may vary by model. The quality management systems at all Alliance Laundry Systems facilities have been awarded ISO 9001 certification.

Also complies with international Electro-Magnetic Compatibility (EMC) Standards.

www.uniwash.com

Alliance Laundry Systems
Shepard Street, Ripon, WI 54971 Telephone: 1-800-587-5458

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UniMac
Alliance Laundry Systems

SECTION 11 31 00 - RESIDENTIAL APPLIANCES

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Dishwashers
    a. 24 Inch Unit
    b. ADA Compliant
2. Ranges
3. Microwave Ovens
    a. Countertop Mounted
    b. Undercabinet Mounted
4. Disposals
5. Refrigerators
6. Cooktops

B. Related Sections:

1. Section 06 10 00 - Rough Carpentry
2. Section 10 28 00 - Toilet, Bath, and Laundry Accessories
3. Section 12 30 00 - Architectural Woodwork
4. Division 22 Sections: Plumbing Fixtures and Equipment
5. Division 26 Sections: Basic Electrical Materials and Methods.
6. Food Service & Laundry Equipment Product Manual

1.02 REFERENCES

A. National Fire Protection Association (NFPA) Publications:

1. 70 "National Electric Code"

B. US Environmental Protection Agency (EPA)/US Department of Energy Program:

1. ENERGY STAR Performance Rating System

1.03 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

B. Submit “Letter of Conformance” in accordance with Section 01 33 00 indicating specified items selected for use in project with the following supporting data.

1. Product Data: For each appliance type required indicating compliance with requirements, include complete operating and maintenance instructions for each appliance.
2. Appliance Schedule: Submit schedule of appliances, using the same room designations on Drawings.

1.04 QUALITY ASSURANCE

A. Installer Qualifications: An experienced installer who is an authorized representative of the residential appliance manufacturer for installation of appliances required for this Project.

B. Source Limitations: Obtain residential appliances through one source.

C. Electrical Appliances: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction.

D. UL and NEMA Compliance: Provide electrical components required as part of residential appliances that are listed and labeled by UL and that comply with applicable NEMA standards.

E. Deliver appliances only after utility rough-in is complete and construction in the spaces to receive appliances is substantially complete and ready for installation.

F. ENERGY STAR Performance Rating: Where indicated, provide ENERGY STAR qualified products that meet the energy efficiency requirements set forth in ENERGY STAR product specifications.

1.05 PROJECT CONDITIONS

A. Coordinate the work with location and placement of utilities. Coordinate characteristics of utilities with requirements of residential appliances.

PART 2 PRODUCTS

2.01 PRODUCTS

A. Products: Subject to compliance with requirements, provide the appliances as indicated in the Residential Appliance Schedule in Part 4.

2.02 MANUFACTURERS (AS IDENTIFIED IN THE APPLIANCE SCHEDULE)

A. Approved Manufacturers:

1. Kenyon International, Inc. (800-664-4906)
2. Danby “Intirion Corporation”. (800-637-7567)
3. Badger “Insinkerator”, an Emerson Brand (800-558-5700)

2.03 FINISHES

A. Exterior Finish: Provide manufacturer's standard factory-applied exterior finish, impervious to cleaning materials commonly used on kitchen appliances, over cleaned and pretreated steel sheet.

1. Color and Gloss: As indicated by manufacturer's designations.

PART 3 EXECUTION

3.01 EXAMINATION

A. Examine roughing-in for plumbing, mechanical, and electrical services, with Installer present, to verify actual locations of services before residential appliance installation.

1. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 INSTALLATION

A. General: Comply with manufacturer's written instructions.

B. Built-in Equipment: Securely anchor units to supporting cabinets or countertops with concealed fasteners. Verify that clearances are adequate for proper functioning and rough openings are completely concealed.

C. Freestanding Equipment: Place units in final locations after finishes have been completed in each area. Verify that clearances are adequate to properly operate equipment.

D. Utilities: Refer to Divisions 22 and 26 for plumbing and electrical requirements.

3.03 ADJUSTING AND CLEANING

A. Test each item of residential appliances to verify proper operation. Make necessary adjustments.

B. Verify that accessories required have been furnished and installed.

C. Remove packing material from residential appliances and leave units in clean condition, ready for operation.

PART 4 RESIDENTIAL APPLIANCE SCHEDULE

4.01 APPLIANCES

A. **Dishwasher**:

1. Description:
   a. 24” wide Standard Wash System with 6 Wash Programs and 4 temp settings.
   b. 12 place setting capacity with silverware basket.
   c. LED indicator lights
   d. Adjustable upper dish rack
2. Product:
   a. “Danby Built-in Dishwasher Model No. DDW2404EBSS”
      1) EPA/DOE ENERGY STAR Rated: Yes
      2) UL Listed: Yes
      3) Low Water Consumption: Yes
3. Size (W x D x H):
   a. 24"x 23" x 32-1/2" minimum
4. Electrical:
   a. 120V; 60Hz; 6.7A
5. Color:
   a. Black Control Panel on Stainless Steel front.

B. **Food Waste Disposal**:

1. Description:
   a. 1/3 Horsepower Motor, 1725 RPM with Line Cord Power Connection
2. Locations:
   a. As noted in Construction Documents.
3. Product:
   a. Model No. “BADGER 1”; Emerson “Insinkerator”
      1) EPA/DOE ENERGY STAR Labeled: No
      2) UL Listed: Yes
4. Electrical:
   a. 120V; 60Hz; 1/3 HP; 5.6A
   b. Wall switch control (by others) with 6' long cord and male plug.
5. Size (W x H):
   a. 6-5/16” x 11-1/2”
6. Color:
   a. Condor Grey

E. **Microwave – Countertop**:

1. Description:
   a. 1.1 Cu. Ft Microwave Oven, 1000 watts; 10 power levels.
2. Locations:
   a. As noted in Construction Documents.
3. Product:
   a. "Danby Model No. DMW111KSSDD"
      1) EPA/DOE ENERGY STAR Labeled: No.
4. Electrical:
   a. 120V; 60Hz; 11A; 1000 Watts
5. Size (W x D x H):
   a. 21-1/4"x 15-15/16"x 11-13/16"
6. Color:
   a. Black, White, Stainless Steel

F. **Microwave – Under-Cabinet**:

1. Description:
   a. 1.6 Cu. Ft Capacity Over-The-Range Microwave with Recirculating Venting; 1,000 watts; 10 power levels; Charcoal filter; Turntable.
2. Locations:
   a. As noted in Construction Documents.
3. Product:
   a. "Danby Model No. DOM16A2SSDB";
      1) EPA/DOE ENERGY STAR Labeled: No
      2) UL Listed: Yes
4. Electrical:
   a. 120V; 60Hz; 11A; 1000 Watts
5. Size (W x D x H):
   a. 29-13/16" x 18-3/16" x 16-7/8"
6. Color:
   a. Black and Stainless Steel

G. **Cooktop –Lite-Touch Q**:

1. Description:
   a. Built-in Compact two-burner Unit; Smooth Surface; Ceramic Glass Cooktop Surface; One 6" / One 8" Heating Elements
2. Locations:
   a. All Suite Rooms in project unless noted otherwise in drawings and/or specifications.
3. Product:
   a. "Kenyon Lite-Touch Q Series Cooktop, Model No. B41798"; Kenyon International, Inc.
      1) EPA/DOE ENERGY STAR Labeled: No
      2) UL Listed: Yes
4. Size (W x D x H):
   a. 21"x 17" x 2-3/4" (Cutout: 19-1/2" x 16")
5. Electrical:
   a. 120V; 60Hz; 22A (1-1200w & 1-1400w burners)
   b. #10 AWG Minimum Size Wire

6. Color:
   a. Black Ceramic

I. **Cooktop Mediterranean**:

1. Description:
   a. Kenyon: Built-In Electric Cooktop Three-burner Unit; Smooth Surface; Ceramic Glass Cooktop Surface; Three 6 1/2" Heating Elements
2. Locations:
   a. Located in One-Bedroom suites.
3. Product:
   a. "Kenyon Mediterranean Series Cooktop, Model No. B40509"; Kenyon International, Inc.
      1) EPA/DOE ENERGY STAR Labeled: No.
      2) UL Listed: Yes
4. Electrical:
   a. 240V; 60Hz, 15A (3-1200w burners)
   b. #10 AWG Minimum Size Wire.
5. Size (W x D x H):
   a. Kenyon: 21" x 17" x 3-1/4" (Cutout: 19-1/2" x 16")
6. Color:
   a. Black Ceramic

J. **Refrigerator**:

1. Description:
   a. 18 Cu. Ft Frost Free; Top-Freezer Refrigerator, Reversible hinged doors.
2. Locations:
   a. As noted in Construction Documents.
3. Product:
   a. 18 Cu. Ft: "Model No. DFF180E1BSS"; Danby
      1) EPA/DOE ENERGY STAR Labeled: Yes.
      2) ADA Compliant: Yes
4. Size (W x D x H):
   a. 29-1/2" x 32-13/16" x 64-7/8"
5. Electrical:
   a. 120V; 60 Hz; 20A
6. Color:
   a. "Black w/Stainless Steel Doors

END OF SECTION

SECTION 11 40 00 - FOOD SERVICE EQUIPMENT

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Food Service Equipment
2. Vending Equipment
3. Buffet Shield System (Sneeze Guard)

B. Related Sections:

1. Section 01 79 00 - Training
2. Section 06 10 00 - Rough Carpentry
3. Section 10 28 00 - Toilet, Bath, and Laundry Accessories
4. Section 12 30 00 - Architectural Woodwork
5. Division 23 Sections: Plumbing Fixtures and Equipment
6. Division 26 Sections: Basic Electrical Materials and Methods
7. Food Service & Laundry Equipment Product Manual

1.02 QUALITY ASSURANCE

A. Reference Standards: Applicable requirements of standards and specifications referenced herein apply to the work of this Section.

B. Regulatory Requirements:

1. Conform to all applicable codes for utility requirements.
2. Products Requiring Electrical Connection: Listed and classified by UL as suitable for the purpose specified and indicated.

   All gas-fired equipment shall be AGA-Approved and provided with 100% safety pilot lights. Any electric ignition devices or high-heat sensors shall be UL Listed and AGA-Approved.

1.03 DELIVERY, STORAGE, AND HANDLING

A. Store products clear of floor in a manner to prevent damage.

B. Coordinate size of access and route to place of installation.

1.04 PROJECT CONDITIONS

A. Coordinate the work with location and placement of utilities. Coordinate characteristics of utilities with requirements of food service equipment.

B. Schedule Work to immediately follow installation of utilities and precede installation of room finishes. Coordinate with Owner.

C. Sequence installation to ensure utility connections are achieved in an orderly and expeditious manner.

PART 2 PRODUCTS

2.01 FOOD SERVICE EQUIPMENT

A. Refer to Food Service & Laundry Equipment Product Schedule.

2.02 VENDING EQUIPMENT

A. Refer to Food Service & Laundry Equipment Product Schedule.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify condition of existing conditions before starting work. Verify ventilation outlets, service connections, and supports are correct and in required location. Verify that electric power is available and of the correct characteristics.

3.02 INSTALLATION

A. Install items in accordance with manufacturers' instructions. Verify water and drains are correct and in the required locations.

B. Insulate to prevent electrolysis between dissimilar metals.

C. Weld and grind joints in steel work tight, without open seams, where necessary due to limitations of sheet sizes or installation requirements.

D. Sequence installation and erection to ensure correct mechanical and electrical utility connections are achieved.

E. Cut, fit, and patch where necessary. Provide cutting and patching of items of this section required for installation or services of equipment. Any field cutting, joining, or patching shall be shop quality, match the surrounding material, and be fully finished and regrained.

F. Cut and drill components for service outlets, fixtures, and fittings.

G. Use anchoring devices appropriate for equipment and expected usage. Wall blocking to be provided of a size and strength necessary to support all wall mounted equipment.

H. Provide clear silicone sealant to achieve clean joint with adjacent building finishes and between abutting components.

3.03 ADJUSTING

A. Adjust equipment and apparatus to ensure proper working order and conditions.

B. Remove and replace equipment creating excessive noise or vibration.

3.04 CLEANING

A. Remove masking or protective covering from stainless steel and other finished surfaces.

B. Wash and clean equipment.

C. Polish glass, plastic, hardware, accessories, fixtures, and fittings.

END OF SECTION

HILTON
PROTOTYPE PACKAGE

913 A West Street, Annapolis, Maryland 21401

410.263.1200 www.nextstepdesign.com

PRELIMINARY FOOD SERVICE EQUIPMENT SPECIFICATIONS

NOVEMBER 2023

HILTON
PROTOTYPE PACKAGE
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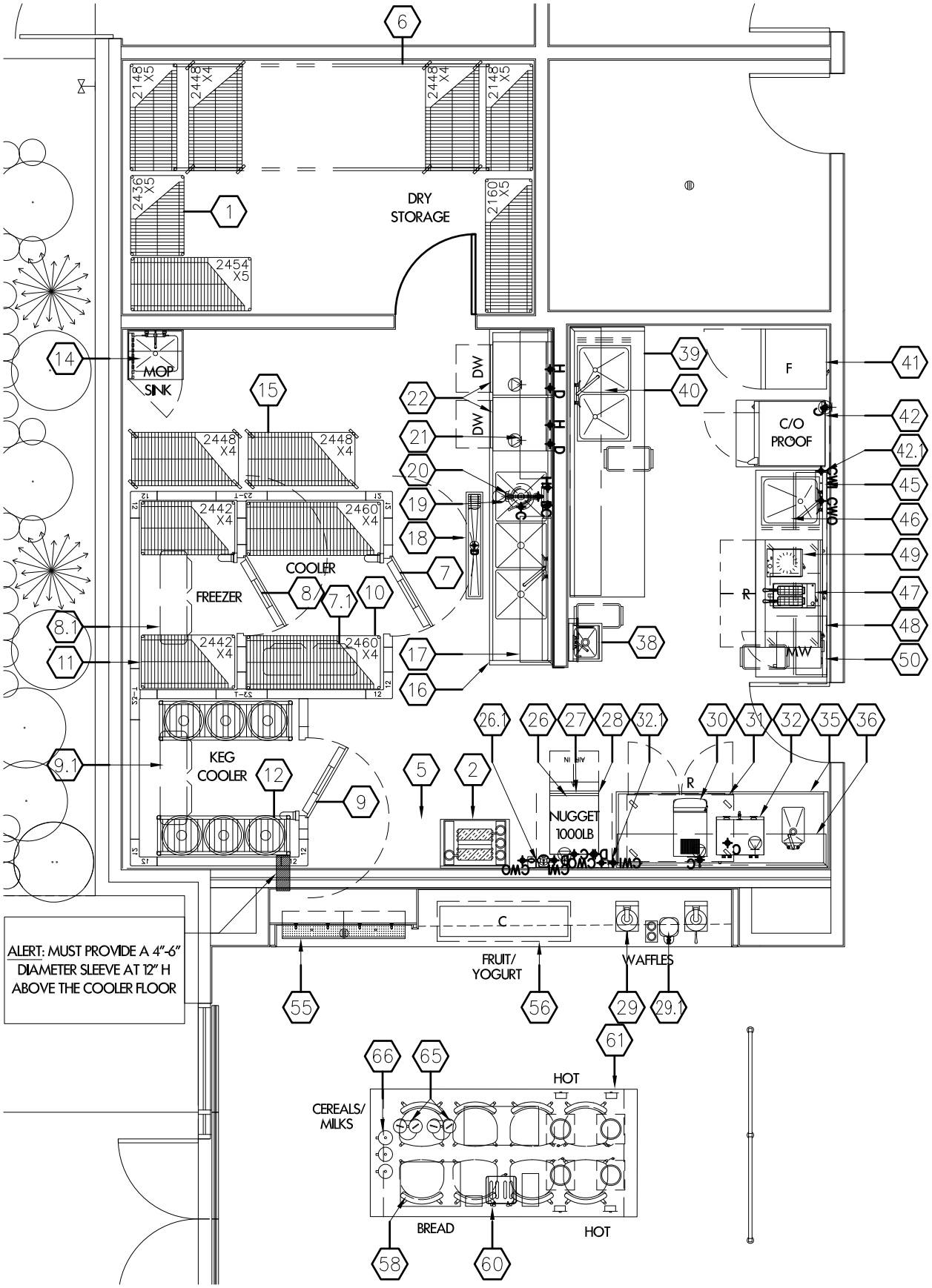
CONTENTS:

MINI PLAN VIEWS

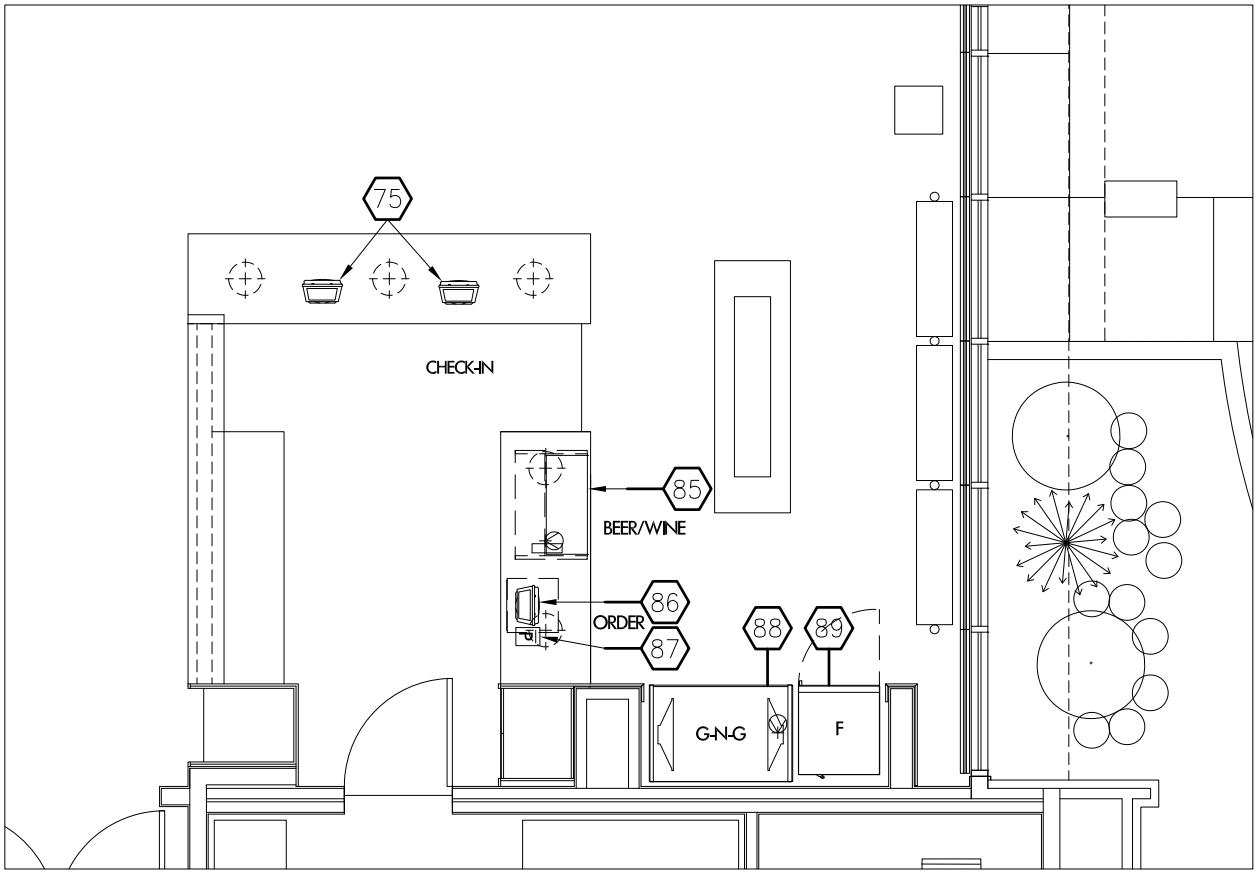
EQUIPMENT SCHEDULE

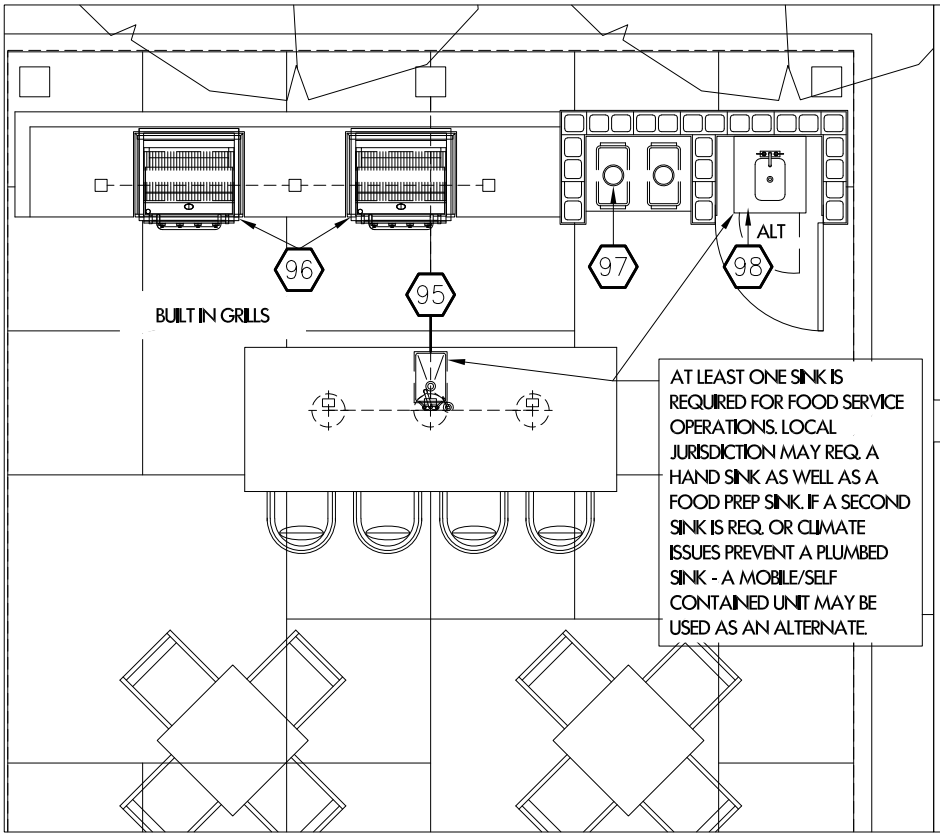
MANUFACTURER'S EQUIPMENT SPECIFICATION SHEETS

FOR REFERENCE ONLY - REFER TO CONSTRUCTION DOCUMENTS FOR ACTUAL FLOOR PLAN AND LAYOUT OF EQUIPMENT NECESSARY FOR THIS PROJECT.

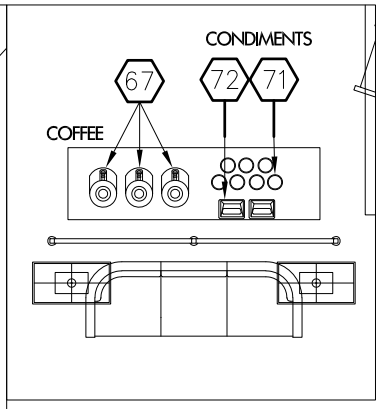


FOR REFERENCE ONLY - REFER TO CONSTRUCTION DOCUMENTS FOR ACTUAL FLOOR PLAN AND LAYOUT OF EQUIPMENT NECESSARY FOR THIS PROJECT.

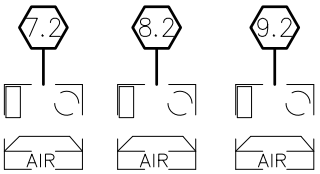




AT LEAST ONE SINK IS REQUIRED FOR FOOD SERVICE OPERATIONS. LOCAL JURISDICTION MAY REQ. A HAND SINK AS WELL AS A FOOD PREP SINK. IF A SECOND SINK IS REQ. OR CLIMATE ISSUES PREVENT A PLUMBED SINK - A MOBILE/SELF CONTAINED UNIT MAY BE USED AS AN ALTERNATE.



REMOTE AIR COOLED CONDENSING UNIT FOR WALK-INS (VERIFY LOCATION)



HILTON
PROTOTYPE PACKAGE
~

EQUIPMENT SCHEDULE

GENERIC EQUIPMENT SCHEDULE

PR	ITEM	QTY	SOURCE	DESCRIPTION
	1	1	METRO	DRY STORAGE SHELVING (LOT)
	2	1	CHILL-RITE MFG.	BEER LINE CHILLER
	3			SPARE NUMBER
	4			SPARE NUMBER
	5	1	MICRO MATIC	BACKBAR REFRIGERATOR
	6	1	METRO	TRACK SHELVING KIT
	7	1	THERMO-KOOL	WALK-IN COOLER
	7.1	1	THERMO-KOOL	EVAPORATOR COIL, MED TEMP
	7.2	1	THERMO-KOOL	REMOTE CONDENSING UNIT
	8	1	THERMO-KOOL	WALK-IN FREEZER
	8.1	1	THERMO-KOOL	EVAPORATOR COIL, LOW TEMP
	8.2	1	THERMO-KOOL	REMOTE CONDENSING UNIT
	9	1	THERMO-KOOL	WALK IN COOLER
	9.1	1	THERMO-KOOL	EVAPORATOR COIL, MED TEMP
	9.2	1	THERMO-KOOL METRO	REMOTE CONDENSING UNIT
	10	1	METRO	WALK-IN SHELVING (LOT)
	11	1	METRO	WALK-IN SHELVING (LOT)
	12	2	NEW AGE	KEG RACK
	13	1	METRO	WALK-IN SHELVING (LOT)
	14	1	ADVANCE TABCO	MOP SINK CABINET
	15	2	METRO	STEM CASTER CART
	16	1	FABRICATOR	THREE COMPARTMENT SINK
	17	1	FABRICATOR	WALL SHELF / POT RACK
	18	1	IMC/TEDDY	FLOOR TROUGH
	19	1	T&S BRASS	PRE-RINSE FAUCET ASSEMBLY
	20	1	INSINKERATOR	GARBAGE DISPOSER
	21	1	FABRICATOR	WALL SHELF
	22	2	CHAMPION	DISHWASHER, UNDERCOUNTER
	23			SPARE NUMBER
	24			SPARE NUMBER
	25			SPARE NUMBER
(OWN)	25.1	1	HOSHIZAKI	SOAP & TOWEL DISPENSER
	26	1	HOSHIZAKI	NUGGET ICE MAKER
	26.1	1	HOSHIZAKI	WATER FILTRATION SYSTEM
	27	1	HOSHIZAKI	ICE BIN FOR ICE MACHINES
	27.1	1	HOSHIZAKI	ICE SCOOP HOLDER
	28	1	IMC/TEDDY	FLOOR TROUGH
	29	2	GOLDEN MALTED	WAFFLE MAKER / BAKER
	30	1	NESTLE	BRAND MANDATED JUICE DISPENSER
	31	1	TRUE	REACH-IN UNDERCOUNTER REFRIGERATOR

PR	ITEM	QTY	SOURCE	DESCRIPTION
	32	1	FETCO	COFFEE BREWER
	32.1	1	EVERPURE	WATER FILTRATION SYSTEM
	33			SPARE NUMBER
	34			SPARE NUMBER
	35	1	FABRICATOR	BEVERAGE COUNTER
	36	1	FABRICATOR	WALL SHELF
	37			SPARE NUMBER
	38	1	IMC/TEDDY	HAND SINK
(OWN)	38.1	1	BY OWNER	SOAP & TOWEL DISPENSER
	39	1	FABRICATOR	PREP TABLE W/ SINKS
	40	1	FABRICATOR	WALL SHELF
	41	1	TRUE	REACH-IN FREEZER
	42	1	MOFFAT	CONVECTION OVEN / PROOFER, ELECTRIC
	42.1	1	EVERPURE	WATER FILTRATION SYSTEM
	43			SPARE NUMBER
	44			SPARE NUMBER
	45	1	FABRICATOR	WORK TABLE W/ SINK
	46	1	FABRICATOR	DOUBLE WALL SHELF
	47	1	WARING	PASTA COOKER, ELECTRIC
	48	1	TRUE	REFRIGERATED WORK TOP
	49	1	SPRING USA	INDUCTION RANGE, COUNTERTOP
	50	1	ACP	MICROWAVE OVEN
	51			SPARE NUMBER
	52			SPARE NUMBER
	53			SPARE NUMBER
	54			SPARE NUMBER
	55	1	MICRO MATIC	DRAFT BEER DISPENSING TOWER
	56	1	SPRING USA	FROST TOP / COLD SLAB, DROP IN
	57	1		SPARE NUMBER
	58	1	CAL-MIL	AMBIENT DISPLAY CASE
	59	1		SPARE NUMBER
	60	1	HATCO	POP UP TOASTER
	61	1	SPRING USA	CUSTOM INDUCTION TABLE
	62			SPARE NUMBER
	63			SPARE NUMBER
	64			SPARE NUMBER
	65	2	VOLLRATH	CEREAL DISPENSER
	66	3	SPRING USA	BEVERAGE DISPENSER
	67	3	FFETCO	COFFEE DISPENSER
	68			SPARE NUMBER
	69			SPARE NUMBER
	70			SPARE NUMBER

PR	ITEM	QTY	SOURCE	DESCRIPTION
	71	7	FABRICATOR	CONDIMENT BIN
(OWN)	72	2	BY OWNER	NAPKIN HOLDER
	73			SPARE NUMBER
	74			SPARE NUMBER
	75			SPARE NUMBER
	76			SPARE NUMBER
	76.1			SPARE NUMBER
	77			SPARE NUMBER
	78			SPARE NUMBER
	79			SPARE NUMBER
	80			SPARE NUMBER
	81			SPARE NUMBER
	82			SPARE NUMBER
	83			SPARE NUMBER
	84			SPARE NUMBER
	85	1	STRUCTURAL	OPEN DISPLAY MERCHANDISER
(OWN)	86	1	BY OWNER	POS - CASH REGISTER
(OWN)	87	1	BY OWNER	POS - PRINTER
	88	1	TRUE	SELF-SERVICE REFRIGERATED MERCHANDISER
	89	1	TRUE	REACH-IN FREEZER
	90			SPARE NUMBER
	91			SPARE NUMBER
	92			SPARE NUMBER
	93			SPARE NUMBER
	94			SPARE NUMBER
	95	1	FABRICATOR CROWN	DROP-IN HAND SINK
	96	2	VERITY FABRICATOR	CHARBROILER, GAS, OUTDOOR GRILL
	97	2	CROWN VERITY	TRASH CHUTE
	98	1		HAND SINK, MOBILE (ALTERNATE)

HILTON
PROTOTYPE PACKAGE
~

MANUFACTURER'S EQUIPMENT SPECIFICATION SHEETS

Item # _____

Job _____

METROMAX Q™ SHELVING

with *Microban Antimicrobial Product Protection

Part of the innovative MetroMax iQ™ Storage System, MetroMax Q™ is a longer life storage solution than conventional wire shelving. The product offers durable polymer mats that remove for easy cleaning and protect stored items from damage. Quick adjust shelves and MetroMax iQ accessories provides a very efficient use of storage space. MetroMax Q™ is integrated with online space planning tools and tutorials. **www.metro.com/iQ**

- **Longer-life performance:** Durable, corrosion proof polymer mats protect the shelves from normal wear and tear. Robust epoxy coated steel frames and posts hold as much weight as Metro's wire shelving. Weight capacity for evenly distributed loads:
  800 lbs. (363kg) per shelf for lengths of 24" to 48" (610 to 1220mm)
  600 lbs. (275kg) per shelf for lengths of 54" (1370mm) or longer
  2,000 lbs. (907kg) maximum per stationary unit.
- **Interchangeable:** MetroMax Q and MetroMax i™ shelves, posts, and most accessories are compatible on the same unit. Use MetroMax Q shelves with MetroMax i™ polymer posts for increased corrosion protection. Use MetroMax i™ solid shelves when spill containment is required or as a bottom shelf to protect supplies from dirt or backsplashes from mops.
- **Easier to clean and maintain:** Polymer mats can be easily removed and cleaned in a sink or dish machine. Microban antimicrobial product protection is built into the high contact areas of the shelf including the mats, frames, and posts to protect the product from bacteria, mold, mildew, and fungus that cause odors and product degradation. Microban protection keeps the product "cleaner between cleanings".
- **Quick to Adjust:** Patented corner release allows shelves to be unlocked without tools. Simply flip each corner release, relocate the wedge connectors on the posts, and reposition the shelf. Quickly adjust shelves to reclaim wasted vertical space.
- **Smooth, Protective Surfaces:** Smooth shelf mats protect packaged items from unwanted rips, tears, or damage.
- **Open Grid and Solid Mat Options:** MetroMax Q is available with open grid mats as standard. Open grid shelves promote air circulation and light penetration.
  MetroMax i™ solid shelves can be used with MetroMax Q grid shelves on the same unit and are available in 18" and 24" (457 and 610mm) depths. For 21" (530mm) deep MetroMax Q, solid mat overlays are available.
- **Efficient, Organized Storage:** Premium MetroMax iQ™ accessories efficiently organize, contain, and compartmentalize ***all*** space between shelves.
- **Quick to Assemble:** MetroMax Q assembles easily in minutes, without tools. Shelves can be adjusted at 1" (25mm) increments along the post. Shelf wedges have a window to locate your desired position.

MetroMax Q Mobile Unit

NSF

MetroMax Q with Accessories and MetoMax i Solid Bottom Shelf

*MICROBAN® and the MICROBAN® symbol are registered trademarks of the Microban Products Company, Huntersville, NC.

InterMetro Industries Corporation
North Washington Street
Wilkes-Barre, PA 18705
www.metro.com

EMERSON

METROMAX Q™ POLYMER AND STEEL SHELVING

Specifications

- **Shelf frames and posts:** Steel with electroplated substrate and highly durable, abrasion-resistant epoxy finish. Epoxy finish has built-in Microban antimicrobial product protection. The adjustable foot is reinforced nylon.
- **Shelf Mats:** Injection molded polypropylene with exclusive built-in Microban® antimicrobial product protection.
- **Shelf Wedge Connector:** Reinforced nylon.
- **Temperature range:** -20°F (-29°C) to 125°F (52°C) continuous use, with intermittent exposure to 200°F (93°C) for cleaning.

Standard Interchangeable Shelves

- Part number includes shelf with removable mats and one bag of wedges.
- MetroMax Q grid shelves, MetroMax i™ grid and solid shelves are all compatible on the same unit.

Nominal Width (in.)	Nominal Width (mm)	Nominal Length (in.)	Nominal Length (mm)	MetroMax Q Shelf with Grid Mat Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)	MetroMax i™ Shelf with Solid Mat Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
18	457	24	610	MQ1824G	6.2	2.8	MX1824F	12.7	5.8
18	457	30	760	MQ1830G	8.0	3.6	MX1830F	14.5	6.6
18	457	36	914	MQ1836G	9.7	4.4	MX1836F	17.2	7.8
18	457	42	1060	MQ1842G	11.4	5.2	MX1842F	20.1	9.1
18	457	48	1220	MQ1848G	13.2	6.0	MX1848F	23.1	10.5
18	457	54	1372	MQ1854G	15.0	6.8	MX1854F	21.5	9.7
18	457	60	1524	MQ1860G	16.7	7.6	MX1860F	23.2	10.5
18	457	72	1829	MQ1872G	20.0	9.1	MX1872F	27.5	12.5
21	530	24	610	MQ2124G	8.0	3.6	—		
21	530	30	760	MQ2130G	9.7	4.4	—		
21	530	36	914	MQ2136G	11.4	5.2	—		
21	530	42	1060	MQ2142G	12.8	5.8	—		
21	530	48	1220	MQ2148G	14.5	6.6	—		
21	530	54	1372	MQ2154G	16.7	7.6	—		
21	530	60	1524	MQ2160G	18.5	8.4	—		
21	530	72	1829	MQ2172G	21.7	9.9	—		
24	610	24	610	MQ2424G	9.7	4.4	MX2424F	14.2	6.4
24	610	30	760	MQ2430G	11.4	5.2	MX2430F	15.9	7.2
24	610	36	914	MQ2436G	13.1	6.0	MX2436F	19.6	8.9
24	610	42	1060	MQ2442G	14.1	6.4	MX2442F	21.5	9.8
24	610	48	1220	MQ2448G	15.8	7.1	MX2448F	25.3	11.5
24	610	54	1372	MQ2454G	18.5	8.4	MX2454F	25.0	11.3
24	610	60	1524	MQ2460G	20.3	9.2	MX2460F	26.8	12.1
24	610	72	1829	MQ2472G	23.5	10.7	MX2472F	31.0	14.1

Actual Dimensions:
Width: Add 3/8" (10mm) to nominal size.
Length: Subtract 3/16" (5mm) from nominal size.

MetroMax Q Open Grid Shelf

MetroMax i™ Solid Shelf

Heavy-Duty Dunnage Shelves

- Corrosion proof MetroMax i™ dunnage shelf is compatible with MetroMax Q.
- Open grid and solid version available.
- Weight capacity per shelf evenly distributed: 1,200 lbs. (544kg) on shelves up to and including 48" (1220mm) long; 900 lbs. (408kg) for shelves 60" (1524mm) long.
- Dunnage shelves are recommended for use on units with four posts.

Nominal Width (in.)	Nominal Width (mm)	Nominal Length (in.)	Nominal Length (mm)	Shelf with Grid Mat Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)	Shelf with Solid Mat Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
18	457	36	914	MHP1836G	18	8.2	MHP1836F	22	10.0
18	457	48	1220	MHP1848G	22	10.0	MHP1848F	26	11.8
18	457	60	1524	MHP1860G	26	11.8	MHP1860F	30	13.6
24	610	36	914	MHP2436G	21	9.5	MHP2436F	25	11.3
24	610	48	1220	MHP2448G	27	12.2	MHP2448F	31	14.1
24	610	60	1524	MHP2460G	33	15.0	MHP2460F	37	16.8

Solid Mat Overlays

- Overlays snap onto the open grid mats to create a solid surface.
- Available for 21" (530mm) deep MetroMax Q shelves.

Fits Shelf (in.)	Fits Shelf (mm)	Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
21x24	530x610	Q2124SM	0.35	0.16
21x30	530x760	Q2130SM	0.45	0.20
21x36	530x914	Q2136SM	0.50	0.23
21x42	530x1060	Q2142SM	0.60	0.27
21x48	530x1220	Q2148SM	0.70	0.32
21x54	530x1372	Q2154SM	0.80	0.36
21x60	530x1524	Q2160SM	0.90	0.41
21x72	530x1829	Q2172SM	1.00	0.45

METROMAX Q™ POLYMER AND STEEL SHELVING

Standard Interchangeable Posts

- MetroMax Q: Epoxy coated steel with Microban antimicrobial product protection.
- MetroMax i: Polymer with Microban antimicrobial product protection.
- Stationary posts include an adjustable leveling foot to compensate for uneven floors. Leveling foot can be adjusted 1" (25mm).
- When mounting a shelving unit to a dolly base, stationary posts are used.
- Special height cut posts are available. Consult your Metro representative.

MetroMax Q Steel Post

MetroMax i Polymer Post

STATIONARY POST WITH LEVELING FOOT

Nominal Height (in.)	Nominal Height (mm)	Actual Height* (in.)	Actual Height* (mm)	MetroMax Q Steel Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)	MetroMax i Polymer Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
13	370	14 3/4	375	MQ13PE	1.0	0.5	MX13P	0.5	0.2
27	685	28 3/4	730	MQ27PE	2.0	0.9	MX27P	0.9	0.4
33	875	34 3/4	883	MQ33PE	2.5	1.1	MX33P	1.0	0.5
54	1370	54 3/4	1391	MQ54PE	4.0	1.8	MX54P	1.6	0.7
63	1585	62 3/4	1594	MQ63PE	4.5	2.0	MX63P	1.8	0.8
74	1690	74 3/4	1899	MQ74PE	5.5	2.5	MX74P	2.2	1.0
86	2195	86 3/4	2203	MQ86PE	6.5	2.9	MX86P	2.5	1.1

POST FOR STEM CASTER

Nominal Height (in.)	Nominal Height (mm)	Actual Height* (in.)	Actual Height* (mm)	MetroMax Q Steel Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)	MetroMax i Polymer Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
13	370	13 3/4	349	MQ13UPE	1.0	0.5	MX13UP	0.5	0.2
27	685	27 3/4	705	MQ27UPE	2.0	0.9	MX27UP	0.9	0.4
33	875	33 3/4	857	MQ33UPE	2.5	1.1	MX33UP	1.0	0.5
54	1370	53 3/4	1365	MQ54UPE	4.0	1.8	MX54UP	1.6	0.7
63	1585	61 3/4	1568	MQ63UPE	4.5	2.0	MX63UP	1.8	0.8
70	1778	69 3/4	1765	MQ70UPE	5.0	2.3			
74	1690	73 3/4	1873	MQ74UPE	5.5	2.5	MX74UP	2.3	1.0
86	2195	85 3/4	2178	MQ86UPE	6.5	2.9	MX86UP	2.5	1.4

Replacement Leveling Foot:
Model No. RPM3-FOOT

Replacement Post Cap for Steel Post:
Model No. RPMQS-POSTCAP

Replacement Post Cap for Polymer Post:
Model No. RPMXS-POSTCAP

Replacement MetroMax Q Wedges
Model No. MQ9985 Bag of 4

Replacement MetroMax Q Wedges MQ9985

NOTE: Compatibility with existing Metro polymer mat shelving systems

- MQ9985 wedges are compatible with original MetroMax Q shelves and posts.
- The post centers on MetroMax Q have been changed to allow interchangeability with MetroMax i™ shelves. MetroMax Q shelves manufactured within or after April 2009 are not compatible with Q shelves made prior to April 2009.
- MetroMax Q is not compatible with original MetroMax manufactured prior to April 2009.
- Posts listed in above table (ex. MQ74PE, MX74PE) can be used with original MetroMax Q shelves made prior to April 2009.

Post Clamp

Adds stability by joining posts of two separate units together. With it, each unit is supported by four posts and buttressed by the adjacent unit.
Model No. 9994X

Foot Plate

Use to add stability to the shelving unit or to bolt units to the floor.
Model No. Zinc 9993Z
Model No. Stainless Steel 9993S

Stem Casters

A variety of stem casters are offered for MetroMax i™ mobile applications.
Stem caster models include bumpers.
See Catalog Sheet 11.20 for stem casters.
Load Rating: 3 x Stem Caster Load Rating, maximum — 900 lbs. (363kg) per stem caster cart.

Replacement Bumper M9992DBX

9.21

MetroMax Q™ Polymer and Steel Shelving

Job _____

METROMAX Q™ POLYMER AND STEEL SHELVING

Starter and Add-On Units

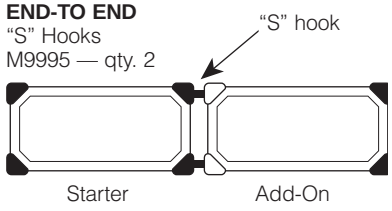
- 4- and 5-tier models available. Consult the Metro catalog for models.
- Starter units: consist of shelves and (4) posts
- Add-on units: consist of shelves, (2) posts, and "S" Hooks (M9995)

"S" Hook: Used to "add on" one or multiple MetroMax Q™ storage systems while eliminating the cost of two posts per unit. Can be used to join units end-to-end, back-to-back, at right angles, etc. Two "S" hooks are required for each shelf.
Cat. No. M9995

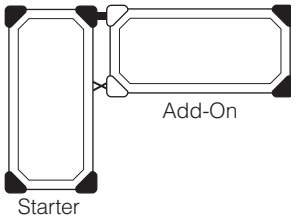
MetroMax Q™ Intermediate "S" Hook: Use when configuring MetroMax Q Starter and Add-On Units at right angles.
Model No. Q9995Z

Regular "S" Hook location
Intermediate bracket location
Post
Post not required

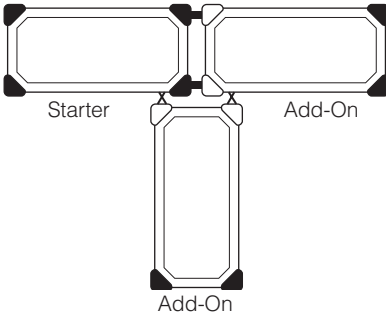
END-TO END
"S" Hooks
M9995 — qty. 2



RIGHT ANGLES
Intermediate "S" Hook Kit
Q9995Z — qty. 1; M9995 — qty. 1



COMBINATION
Intermediate "S" Hook Kits
Q9995Z — qty. 2; M9995 — qty. 2



MetroMax Q™ Carts

- 4- and 5-tier models
- Grid shelf models
- Units consist of shelves, (4) posts, (2) swivel, and (2) swivel brake casters.
- Consult the Metro catalog for models.

All Metro Catalog Sheets are available on our Web Site: **www.metro.com**

InterMetro Industries Corporation
North Washington Street, Wilkes-Barre, PA 18705
Phone: 570-825-2741
Fax: 570-825-2852

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For Product Information:
U.S. and Canada: 1.800.433.2232
Latin America: 1.561.333.3824
Europe: +31.76.587.7550
Asia/Pacific: +65.6567.8003
Middle East/Africa: +971.4.811.8286

We put space to work.

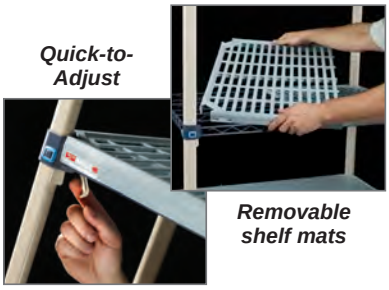
Item # _____

Job _____

MetroMax Q® Polymer / Wire Shelving

Quick-to-adjust, corrosion resistant shelving constructed of removable polymer open grid shelf mats, wire shelf frames, and corner releases. Shelf frames and steel posts have an epoxy coating over an electroplated substrate. Shelves offer a 20 year warranty against rust and corrosion. Polymer posts are rust proof. Microban® antimicrobial product protection is built into the shelf mats and posts. Shelf has a rigid four-sided frame with center truss(es). Robust corner provides complete 360° capture of the wedge and post for added stability. Stationary units have maximum capacity of 2,000 lbs. (907kg) evenly distributed. Mobile units (with stem casters) offer a maximum total unit load of 900 lbs. (408kg). Units assemble easily — shelves mount on four one-piece wedges along grooved, numbered posts and adjust on 1" (25mm) increments.

- **Forever Strong:** Proven corner connection and four-sided shelf frame with center truss(es) assures stability and strength in stationary, mobile, and high-density track shelving configurations.
  800 lbs. (363kg) per shelf for lengths of 24" to 48" (610 to 1219mm)
  600 lbs. (272kg) per shelf for lengths of 54" (1372mm) or longer
  Stationary unit: 2000lbs (907kg) evenly distributed.
  Mobile unit (with stem casters): Up to 900lbs. (408kg).
  Multiply the caster load rating by 3 to determine actual rating.
- **Long life Rust Resistance:** Shelves offer a 20 year limited corrosion warranty and are combined with rust proof polymer posts.
- **Easy to Clean and Maintain:** Polymer mats can be easily removed and cleaned in a sink or commercial washer / dish machine.
- **Microban® Antimicrobial Product Protection** is built into the shelf mats and posts to inhibit the growth of bacteria, mold, mildew, and fungus that cause odors and product degradation. Microban product protection keeps the product "cleaner between cleanings".
- **Quick-to-Adjust:** Patented corner release allows shelves to be adjusted without tools. Simply flip each corner release, relocate the wedge connectors on the posts, and reposition the shelf. Quickly adjust shelves to reclaim wasted vertical space.
- **Efficient Use of Space:** Shelves adjust on 1" (25mm) increments along the post to maximize the use of available vertical space.
- **Fast, Easy Assembly:** Shelves are ready to use right out of the box. One-piece wedges securely attach to the posts — Raised beads on the back of each wedge snap into the grooves on the post. Window on wedge aligns with numbers on the post to locate the desired shelf position. Shelf mounts on four wedges, A unit can be assembled without tools in minutes.
- **Interchangeable:** Part of the MetroMax platform, MetroMax Q shelves are compatible on the same shelving units with MetroMax i and MetroMax 4 shelves.
- **Open Grid and Solid Mat Options:** MetroMax Q is available with open grid mats. Open grid shelves promote air circulation and light penetration. For 21" (530mm) deep MetroMax Q, solid mat overlays are available. For 18" and 24" (457 and 610mm) depths, MetroMax i or MetroMax 4 solid shelves may be added when solid shelves are required.
- **NSF Listed** for all environments.
- **Optional Accessories** are on spec sheet 9.25.



Quick-to-Adjust

Removable shelf mats

*MICROBAN® and the MICROBAN® symbol are registered trademarks of the Microban® Products Company, Huntersville, NC. Microban® product protection does not by itself protect a user from food borne illness. Product must be routinely cleaned.

Supports good HACCP processes

All Metro Catalog Sheets are available on our website: **www.metro.com**

InterMetro Industries Corporation
North Washington Street, Wilkes-Barre, PA 18705
Product Information. U.S. and Canada: 1.800.992.1776
Outside U.S. and Canada: www.metro.com/contactus

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Job _____

MetroMax Q®
POLYMER / WIRE SHELVING

We put space to work.

Standard Interchangeable Shelves

Part number includes shelf with removable mats and one bag of wedges

Shelf with Grid Mat Model No.	Nominal Size Width (in.)	Nominal Size Width (mm)	Nominal Size Length (in.)	Nominal Size Length (mm)	Actual Size Width (in.)	Actual Size Width (mm)	Actual Size Length (in.)	Actual Size Length (mm)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
MQ1824G	18	457	24	610	18 3/8	467	23 13/16	605	6.2	2.8
MQ1830G	18	457	30	762	18 3/8	467	29 13/16	757	8.0	3.6
MQ1836G	18	457	36	914	18 3/8	467	35 13/16	910	9.7	4.4
MQ1842G	18	457	42	1067	18 3/8	467	41 13/16	1062	11.4	5.2
MQ1848G	18	457	48	1219	18 3/8	467	47 13/16	1215	13.2	6.0
MQ1854G	18	457	54	1372	18 3/8	467	53 13/16	1367	15.0	6.8
MQ1860G	18	457	60	1524	18 3/8	467	59 13/16	1519	16.7	7.6
MQ1872G	18	457	72	1829	18 3/8	467	71 13/16	1824	20.0	9.1
MQ2124G	21	530	24	610	21 3/8	543	23 13/16	605	8.0	3.6
MQ2130G	21	530	30	762	21 3/8	543	29 13/16	757	9.7	4.4
MQ2136G	21	530	36	914	21 3/8	543	35 13/16	910	11.4	5.2
MQ2142G	21	530	42	1067	21 3/8	543	41 13/16	1062	12.8	5.8
MQ2148G	21	530	48	1219	21 3/8	543	47 13/16	1215	14.5	6.6
MQ2154G	21	530	54	1372	21 3/8	543	53 13/16	1367	16.7	7.6
MQ2160G	21	530	60	1524	21 3/8	543	59 13/16	1519	18.5	8.4
MQ2172G	21	530	72	1829	21 3/8	543	71 13/16	1824	21.7	9.9
MQ2424G	24	610	24	610	24 3/8	619	23 13/16	605	9.7	4.4
MQ2430G	24	610	30	762	24 3/8	619	29 13/16	757	11.4	5.2
MQ2436G	24	610	36	914	24 3/8	619	35 13/16	910	13.1	6.0
MQ2442G	24	610	42	1067	24 3/8	619	41 13/16	1062	14.1	6.4
MQ2448G	24	610	48	1219	24 3/8	619	47 13/16	1215	15.8	7.1
MQ2454G	24	610	54	1372	24 3/8	619	53 13/16	1367	18.5	8.4
MQ2460G	24	610	60	1524	24 3/8	619	59 13/16	1519	20.3	9.2
MQ2472G	24	610	72	1829	24 3/8	619	71 13/16	1824	23.5	10.7

Heavy-Duty Dunnage Shelves

- Weight capacity per shelf evenly distributed: 1,200 lbs. (544kg) on shelves up to and including 48" (1219mm) long; 900 lbs. (408kg) for shelves 54" (1370mm) and longer.
- Dunnage shelves are recommended for use on units with four posts, not on an add-on unit with two posts.

Grid Mat Model No.	Nominal Width (in.)	Nominal Width (mm)	Nominal Length (in.)	Nominal Length (mm)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
MHP2436G	24	610	36	914	21	9.5
MHP2448G	24	610	48	1220	27	12.2
MHP2454G	24	610	54	1370	29	13.2
MHP2460G	24	610	60	1524	33	15.0

Material Specifications:

- **Shelf Mats:** Injection-molded polypropylene with exclusive built-in Microban® antimicrobial product protection.
- **Shelf frames:** Steel with electroplated substrate and highly durable, abrasion-resistant epoxy finish.
- **Epoxy-coated posts:** Steel with electroplated substrate and highly durable, abrasion-resistant epoxy finish. Epoxy finish has built-in Microban antimicrobial product protection. The adjustable foot is reinforced nylon.
- **Temperature range:** -20°F (-29°C) to 125°F (52°C) continuous use, with intermittent exposure to 200°F (93°C) for cleaning. Visit metro.com/service-support for cleaning guidelines.

Rust Proof Polymer Posts - Lifetime warranty against rust.

Stationary - with leveling foot

Epoxy-Coated Steel Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)	Nominal Height (in.)	Nominal Height (mm)	Actual Height (in.)	Actual Height (mm)
MX13P	0.5	0.2	13	370	14 3/16	360
MX27P	0.9	0.4	27	685	28 3/16	716
MX33P	1.0	0.5	33	875	34 3/16	868
MX54P	1.6	0.7	54	1370	54 3/16	1376
MX63P	1.8	0.8	63	1585	62 3/16	1580
MX74P	2.3	1.0	74	1690	74 3/16	1884
MX86P	2.5	1.4	86	2195	86 3/16	2189

Mobile - for stem casters

Polymer Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)	Nominal Height (in.)	Nominal Height (mm)	Actual Height (in.)	Actual Height (mm)
MX13UP	0.5	0.2	13	370	14 3/16	360
MX27PE	2.0	0.9	27	685	28 3/16	716
MX33UP	1.0	0.5	33	875	34 3/16	868
MX54UP	1.6	0.7	54	1370	54 3/16	1376
MX63UP	1.8	0.8	63	1585	62 3/16	1580
MX70UP	2.0	0.9	70	1778	69 3/16	1757
MX74UP	2.3	1.0	74	1690	74 3/16	1884
MX86UP	3.0	1.4	86	2195	86 3/16	2189

Polymer post

Stationary Mobile

Shelf Wedge Connector:
Reinforced nylon.
Replacement MetroMax Q Wedges
Cat. No. MQ9985
(Bag of 4)

Epoxy Coated Steel Posts - For heavy-duty mobile applications. 15 year limited rust warranty.

Stationary - with leveling foot

Polymer Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)	Nominal Height (in.)	Nominal Height (mm)	Actual Height (in.)	Actual Height (mm)
MQ13PE	1.0	0.5	13	370	14 3/16	360
MQ27PE	2.0	0.9	27	685	28 3/16	716
MQ33PE	2.5	1.1	33	875	34 3/16	868
MQ54PE	4.0	1.8	54	1370	54 3/16	1376
MQ63PE	4.5	2.0	63	1585	62 3/16	1580
MQ74PE	5.5	2.5	74	1690	74 3/16	1884
MQ86PE	6.5	2.9	86	2195	86 3/16	2189

Mobile - for stem casters

Epoxy-Coated Steel Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)	Nominal Height (in.)	Nominal Height (mm)	Actual Height (in.)	Actual Height (mm)
MQ13UPE	1.0	0.5	13	370	14 3/16	360
MQ27UPE	2.0	0.9	27	685	28 3/16	716
MQ33UPE	2.5	1.1	33	875	34 3/16	868
MQ54UPE	4.0	1.8	54	1370	54 3/16	1376
MQ63UPE	4.5	2.0	63	1585	62 3/16	1580
MQ70UPE	2.0	0.9	70	1778	69 3/16	1757
MQ74UPE	5.5	2.5	74	1690	74 3/16	1884
MQ86UPE	6.5	2.9	86	2195	86 3/16	2189

Epoxy-coated steel post

Stationary Mobile

METRO®

We put space to work.®

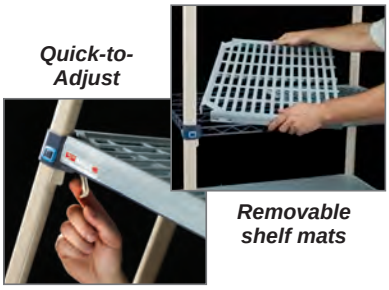
Item # _____

Job _____

MetroMax Q® Polymer / Wire Shelving

Quick-to-adjust, corrosion resistant shelving constructed of removable polymer open grid shelf mats, wire shelf frames, and corner releases. Shelf frames and steel posts have an epoxy coating over an electroplated substrate. Shelves offer a 20 year warranty against rust and corrosion. Polymer posts are rust proof. Microban® antimicrobial product protection is built into the shelf mats and posts. Shelf has a rigid four-sided frame with center truss(es). Robust corner provides complete 360° capture of the wedge and post for added stability. Stationary units have maximum capacity of 2,000 lbs. (907kg) evenly distributed. Mobile units (with stem casters) offer a maximum total unit load of 900 lbs. (408kg). Units assemble easily — shelves mount on four one-piece wedges along grooved, numbered posts and adjust on 1" (25mm) increments.

- **Forever Strong:** Proven corner connection and four-sided shelf frame with center truss(es) assures stability and strength in stationary, mobile, and high-density track shelving configurations.
  800 lbs. (363kg) per shelf for lengths of 24" to 48" (610 to 1219mm)
  600 lbs. (272kg) per shelf for lengths of 54" (1372mm) or longer
  Stationary unit: 2000lbs (907kg) evenly distributed.
  Mobile unit (with stem casters): Up to 900lbs. (408kg).
  Multiply the caster load rating by 3 to determine actual rating.
- **Long life Rust Resistance:** Shelves offer a 20 year limited corrosion warranty and are combined with rust proof polymer posts.
- **Easy to Clean and Maintain:** Polymer mats can be easily removed and cleaned in a sink or commercial washer / dish machine.
- **Microban® Antimicrobial Product Protection** is built into the shelf mats and posts to inhibit the growth of bacteria, mold, mildew, and fungus that cause odors and product degradation. Microban product protection keeps the product "cleaner between cleanings".
- **Quick-to-Adjust:** Patented corner release allows shelves to be adjusted without tools. Simply flip each corner release, relocate the wedge connectors on the posts, and reposition the shelf. Quickly adjust shelves to reclaim wasted vertical space.
- **Efficient Use of Space:** Shelves adjust on 1" (25mm) increments along the post to maximize the use of available vertical space.
- **Fast, Easy Assembly:** Shelves are ready to use right out of the box. One-piece wedges securely attach to the posts — Raised beads on the back of each wedge snap into the grooves on the post. Window on wedge aligns with numbers on the post to locate the desired shelf position. Shelf mounts on four wedges, A unit can be assembled without tools in minutes.
- **Interchangeable:** Part of the MetroMax platform, MetroMax Q shelves are compatible on the same shelving units with MetroMax i and MetroMax 4 shelves.
- **Open Grid and Solid Mat Options:** MetroMax Q is available with open grid mats. Open grid shelves promote air circulation and light penetration. For 21" (530mm) deep MetroMax Q, solid mat overlays are available. For 18" and 24" (457 and 610mm) depths, MetroMax i or MetroMax 4 solid shelves may be added when solid shelves are required.
- **NSF Listed** for all environments.
- **Optional Accessories** are on spec sheet 9.25.



Quick-to-Adjust

Removable shelf mats

*MICROBAN® and the MICROBAN® symbol are registered trademarks of the Microban® Products Company, Huntersville, NC. Microban® product protection does not by itself protect a user from food borne illness. Product must be routinely cleaned.

All Metro Catalog Sheets are available on our website: **www.metro.com**

Supports good HACCP processes

METRO®

InterMetro Industries Corporation
North Washington Street, Wilkes-Barre, PA 18705

Product Information. U.S. and Canada: 1.800.992.1776
Outside U.S. and Canada: www.metro.com/contactus

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Job _____

MetroMax Q® POLYMER / WIRE SHELVING

We put space to work.

Standard Interchangeable Shelves

Part number includes shelf with removable mats and one bag of wedges

Shelf with Grid Mat Model No.	Nominal Size Width (in.)	Nominal Size Width (mm)	Nominal Size Length (in.)	Nominal Size Length (mm)	Actual Size Width (in.)	Actual Size Width (mm)	Actual Size Length (in.)	Actual Size Length (mm)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
MQ1824G	18	457	24	610	18 3/8	467	23 13/16	605	6.2	2.8
MQ1830G	18	457	30	762	18 3/8	467	29 13/16	757	8.0	3.6
MQ1836G	18	457	36	914	18 3/8	467	35 13/16	910	9.7	4.4
MQ1842G	18	457	42	1067	18 3/8	467	41 13/16	1062	11.4	5.2
MQ1848G	18	457	48	1219	18 3/8	467	47 13/16	1215	13.2	6.0
MQ1854G	18	457	54	1372	18 3/8	467	53 13/16	1367	15.0	6.8
MQ1860G	18	457	60	1524	18 3/8	467	59 13/16	1519	16.7	7.6
MQ1872G	18	457	72	1829	18 3/8	467	71 13/16	1824	20.0	9.1
MQ2124G	21	530	24	610	21 3/8	543	23 13/16	605	8.0	3.6
MQ2130G	21	530	30	762	21 3/8	543	29 13/16	757	9.7	4.4
MQ2136G	21	530	36	914	21 3/8	543	35 13/16	910	11.4	5.2
MQ2142G	21	530	42	1067	21 3/8	543	41 13/16	1062	12.8	5.8
MQ2148G	21	530	48	1219	21 3/8	543	47 13/16	1215	14.5	6.6
MQ2154G	21	530	54	1372	21 3/8	543	53 13/16	1367	16.7	7.6
MQ2160G	21	530	60	1524	21 3/8	543	59 13/16	1519	18.5	8.4
MQ2172G	21	530	72	1829	21 3/8	543	71 13/16	1824	21.7	9.9
MQ2424G	24	610	24	610	24 3/8	619	23 13/16	605	9.7	4.4
MQ2430G	24	610	30	762	24 3/8	619	29 13/16	757	11.4	5.2
MQ2436G	24	610	36	914	24 3/8	619	35 13/16	910	13.1	6.0
MQ2442G	24	610	42	1067	24 3/8	619	41 13/16	1062	14.1	6.4
MQ2448G	24	610	48	1219	24 3/8	619	47 13/16	1215	15.8	7.1
MQ2454G	24	610	54	1372	24 3/8	619	53 13/16	1367	18.5	8.4
MQ2460G	24	610	60	1524	24 3/8	619	59 13/16	1519	20.3	9.2
MQ2472G	24	610	72	1829	24 3/8	619	71 13/16	1824	23.5	10.7

Heavy-Duty Dunnage Shelves

- Weight capacity per shelf evenly distributed: 1,200 lbs. (544kg) on shelves up to and including 48" (1219mm) long; 900 lbs. (408kg) for shelves 54" (1370mm) and longer.
- Dunnage shelves are recommended for use on units with four posts, not on an add-on unit with two posts.

Grid Mat Model No.	Nominal Width (in.)	Nominal Width (mm)	Nominal Length (in.)	Nominal Length (mm)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
MHP2436G	24	610	36	914	21	9.5
MHP2448G	24	610	48	1220	27	12.2
MHP2454G	24	610	54	1370	29	13.2
MHP2460G	24	610	60	1524	33	15.0

Material Specifications:

- **Shelf Mats:** Injection-molded polypropylene with exclusive built-in Microban® antimicrobial product protection.
- **Shelf frames:** Steel with electroplated substrate and highly durable, abrasion-resistant epoxy finish.
- **Epoxy-coated posts:** Steel with electroplated substrate and highly durable, abrasion-resistant epoxy finish. Epoxy finish has built-in Microban antimicrobial product protection. The adjustable foot is reinforced nylon.
- **Temperature range:** -20°F (-29°C) to 125°F (52°C) continuous use, with intermittent exposure to 200°F (93°C) for cleaning. Visit metro.com/service-support for cleaning guidelines.

Rust Proof Polymer Posts - Lifetime warranty against rust.

Stationary - with leveling foot

Epoxy-Coated Steel Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)	Nominal Height (in.)	Nominal Height (mm)	Actual Height (in.)	Actual Height (mm)
MX13P	0.5	0.2	13	370	14 3/16	360
MX27P	0.9	0.4	27	685	28 3/16	716
MX33P	1.0	0.5	33	875	34 3/16	868
MX54P	1.6	0.7	54	1370	54 3/16	1376
MX63P	1.8	0.8	63	1585	62 3/16	1580
MX74P	2.3	1.0	74	1690	74 3/16	1884
MX86P	2.5	1.4	86	2195	86 3/16	2189

Mobile - for stem casters

Polymer Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)	Nominal Height (in.)	Nominal Height (mm)	Actual Height (in.)	Actual Height (mm)
MX13UP	0.5	0.2	13	370	14 3/16	360
MX27PE	2.0	0.9	27	685	28 3/16	716
MX33UP	1.0	0.5	33	875	34 3/16	868
MX54UP	1.6	0.7	54	1370	54 3/16	1376
MX63UP	1.8	0.8	63	1585	62 3/16	1580
MX70UP	2.0	0.9	70	1778	69 3/16	1757
MX74UP	2.3	1.0	74	1690	74 3/16	1884
MX86UP	3.0	1.4	86	2195	86 3/16	2189

Polymer post

Stationary Mobile

Shelf Wedge Connector: Reinforced nylon. Replacement MetroMax Q Wedges Cat. No. MQ9985 (Bag of 4)

Epoxy Coated Steel Posts - For heavy-duty mobile applications. 15 year limited rust warranty.

Stationary - with leveling foot

Polymer Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)	Nominal Height (in.)	Nominal Height (mm)	Actual Height (in.)	Actual Height (mm)
MQ13PE	1.0	0.5	13	370	14 3/16	360
MQ27PE	2.0	0.9	27	685	28 3/16	716
MQ33PE	2.5	1.1	33	875	34 3/16	868
MQ54PE	4.0	1.8	54	1370	54 3/16	1376
MQ63PE	4.5	2.0	63	1585	62 3/16	1580
MQ74PE	5.5	2.5	74	1690	74 3/16	1884
MQ86PE	6.5	2.9	86	2195	86 3/16	2189

Mobile - for stem casters

Epoxy-Coated Steel Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)	Nominal Height (in.)	Nominal Height (mm)	Actual Height (in.)	Actual Height (mm)
MQ13UPE	1.0	0.5	13	370	14 3/16	360
MQ27UPE	2.0	0.9	27	685	28 3/16	716
MQ33UPE	2.5	1.1	33	875	34 3/16	868
MQ54UPE	4.0	1.8	54	1370	54 3/16	1376
MQ63UPE	4.5	2.0	63	1585	62 3/16	1580
MQ70UPE	2.0	0.9	70	1778	69 3/16	1757
MQ74UPE	5.5	2.5	74	1690	74 3/16	1884
MQ86UPE	6.5	2.9	86	2195	86 3/16	2189

Epoxy-coated steel post

Stationary Mobile

We put space to work.

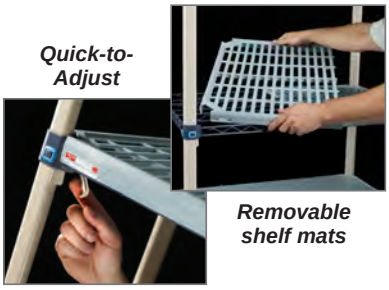
Item # _____

Job _____

MetroMax Q® Polymer / Wire Shelving

Quick-to-adjust, corrosion resistant shelving constructed of removable polymer open grid shelf mats, wire shelf frames, and corner releases. Shelf frames and steel posts have an epoxy coating over an electroplated substrate. Shelves offer a 20 year warranty against rust and corrosion. Polymer posts are rust proof. Microban® antimicrobial product protection is built into the shelf mats and posts. Shelf has a rigid four-sided frame with center truss(es). Robust corner provides complete 360° capture of the wedge and post for added stability. Stationary units have maximum capacity of 2,000 lbs. (907kg) evenly distributed. Mobile units (with stem casters) offer a maximum total unit load of 900 lbs. (408kg). Units assemble easily — shelves mount on four one-piece wedges along grooved, numbered posts and adjust on 1" (25mm) increments.

- **Forever Strong:** Proven corner connection and four-sided shelf frame with center truss(es) assures stability and strength in stationary, mobile, and high-density track shelving configurations.
  800 lbs. (363kg) per shelf for lengths of 24" to 48" (610 to 1219mm)
  600 lbs. (272kg) per shelf for lengths of 54" (1372mm) or longer
  Stationary unit: 2000lbs (907kg) evenly distributed.
  Mobile unit (with stem casters): Up to 900lbs. (408kg).
  Multiply the caster load rating by 3 to determine actual rating.
- **Long life Rust Resistance:** Shelves offer a 20 year limited corrosion warranty and are combined with rust proof polymer posts.
- **Easy to Clean and Maintain:** Polymer mats can be easily removed and cleaned in a sink or commercial washer / dish machine.
- **Microban® Antimicrobial Product Protection** is built into the shelf mats and posts to inhibit the growth of bacteria, mold, mildew, and fungus that cause odors and product degradation. Microban product protection keeps the product "cleaner between cleanings".
- **Quick-to-Adjust:** Patented corner release allows shelves to be adjusted without tools. Simply flip each corner release, relocate the wedge connectors on the posts, and reposition the shelf. Quickly adjust shelves to reclaim wasted vertical space.
- **Efficient Use of Space:** Shelves adjust on 1" (25mm) increments along the post to maximize the use of available vertical space.
- **Fast, Easy Assembly:** Shelves are ready to use right out of the box. One-piece wedges securely attach to the posts — Raised beads on the back of each wedge snap into the grooves on the post. Window on wedge aligns with numbers on the post to locate the desired shelf position. Shelf mounts on four wedges, A unit can be assembled without tools in minutes.
- **Interchangeable:** Part of the MetroMax platform, MetroMax Q shelves are compatible on the same shelving units with MetroMax i and MetroMax 4 shelves.
- **Open Grid and Solid Mat Options:** MetroMax Q is available with open grid mats. Open grid shelves promote air circulation and light penetration. For 21" (530mm) deep MetroMax Q, solid mat overlays are available. For 18" and 24" (457 and 610mm) depths, MetroMax i or MetroMax 4 solid shelves may be added when solid shelves are required.
- **NSF Listed** for all environments.
- **Optional Accessories** are on spec sheet 9.25.



Quick-to-Adjust

Removable shelf mats

*MICROBAN® and the MICROBAN® symbol are registered trademarks of the Microban® Products Company, Huntersville, NC. Microban® product protection does not by itself protect a user from food borne illness. Product must be routinely cleaned.

Supports good HACCP processes

All Metro Catalog Sheets are available on our website: **www.metro.com**

InterMetro Industries Corporation
North Washington Street, Wilkes-Barre, PA 18705
Product Information. U.S. and Canada: 1.800.992.1776
Outside U.S. and Canada: www.metro.com/contactus

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Information and specifications are subject to change without notice. Please confirm at time of order.

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Job _____

MetroMax Q®
POLYMER / WIRE SHELVING

We put space to work.

Standard Interchangeable Shelves

Part number includes shelf with removable mats and one bag of wedges

Shelf with Grid Mat Model No.	Nominal Size Width (in.)	Nominal Size Width (mm)	Nominal Size Length (in.)	Nominal Size Length (mm)	Actual Size Width (in.)	Actual Size Width (mm)	Actual Size Length (in.)	Actual Size Length (mm)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
MQ1824G	18	457	24	610	18 3/8	467	23 13/16	605	6.2	2.8
MQ1830G	18	457	30	762	18 3/8	467	29 13/16	757	8.0	3.6
MQ1836G	18	457	36	914	18 3/8	467	35 13/16	910	9.7	4.4
MQ1842G	18	457	42	1067	18 3/8	467	41 13/16	1062	11.4	5.2
MQ1848G	18	457	48	1219	18 3/8	467	47 13/16	1215	13.2	6.0
MQ1854G	18	457	54	1372	18 3/8	467	53 13/16	1367	15.0	6.8
MQ1860G	18	457	60	1524	18 3/8	467	59 13/16	1519	16.7	7.6
MQ1872G	18	457	72	1829	18 3/8	467	71 13/16	1824	20.0	9.1
MQ2124G	21	530	24	610	21 3/8	543	23 13/16	605	8.0	3.6
MQ2130G	21	530	30	762	21 3/8	543	29 13/16	757	9.7	4.4
MQ2136G	21	530	36	914	21 3/8	543	35 13/16	910	11.4	5.2
MQ2142G	21	530	42	1067	21 3/8	543	41 13/16	1062	12.8	5.8
MQ2148G	21	530	48	1219	21 3/8	543	47 13/16	1215	14.5	6.6
MQ2154G	21	530	54	1372	21 3/8	543	53 13/16	1367	16.7	7.6
MQ2160G	21	530	60	1524	21 3/8	543	59 13/16	1519	18.5	8.4
MQ2172G	21	530	72	1829	21 3/8	543	71 13/16	1824	21.7	9.9
MQ2424G	24	610	24	610	24 3/8	619	23 13/16	605	9.7	4.4
MQ2430G	24	610	30	762	24 3/8	619	29 13/16	757	11.4	5.2
MQ2436G	24	610	36	914	24 3/8	619	35 13/16	910	13.1	6.0
MQ2442G	24	610	42	1067	24 3/8	619	41 13/16	1062	14.1	6.4
MQ2448G	24	610	48	1219	24 3/8	619	47 13/16	1215	15.8	7.1
MQ2454G	24	610	54	1372	24 3/8	619	53 13/16	1367	18.5	8.4
MQ2460G	24	610	60	1524	24 3/8	619	59 13/16	1519	20.3	9.2
MQ2472G	24	610	72	1829	24 3/8	619	71 13/16	1824	23.5	10.7

Heavy-Duty Dunnage Shelves

- Weight capacity per shelf evenly distributed: 1,200 lbs. (544kg) on shelves up to and including 48" (1219mm) long; 900 lbs. (408kg) for shelves 54" (1370mm) and longer.
- Dunnage shelves are recommended for use on units with four posts, not on an add-on unit with two posts.

Grid Mat Model No.	Nominal Width (in.)	Nominal Width (mm)	Nominal Length (in.)	Nominal Length (mm)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
MHP2436G	24	610	36	914	21	9.5
MHP2448G	24	610	48	1220	27	12.2
MHP2454G	24	610	54	1370	29	13.2
MHP2460G	24	610	60	1524	33	15.0

Material Specifications:

- **Shelf Mats:** Injection-molded polypropylene with exclusive built-in Microban® antimicrobial product protection.
- **Shelf frames:** Steel with electroplated substrate and highly durable, abrasion-resistant epoxy finish.
- **Epoxy-coated posts:** Steel with electroplated substrate and highly durable, abrasion-resistant epoxy finish. Epoxy finish has built-in Microban antimicrobial product protection. The adjustable foot is reinforced nylon.
- **Temperature range:** -20°F (-29°C) to 125°F (52°C) continuous use, with intermittent exposure to 200°F (93°C) for cleaning. Visit metro.com/service-support for cleaning guidelines.

Rust Proof Polymer Posts - Lifetime warranty against rust.

Stationary - with leveling foot

Epoxy-Coated Steel Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)	Nominal Height (in.)	Nominal Height (mm)	Actual Height (in.)	Actual Height (mm)
MX13P	0.5	0.2	13	370	14 3/16	360
MX27P	0.9	0.4	27	685	28 3/16	716
MX33P	1.0	0.5	33	875	34 3/16	868
MX54P	1.6	0.7	54	1370	54 3/16	1376
MX63P	1.8	0.8	63	1585	62 3/16	1580
MX74P	2.3	1.0	74	1690	74 3/16	1884
MX86P	2.5	1.4	86	2195	86 3/16	2189

Mobile - for stem casters

Polymer Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)	Nominal Height (in.)	Nominal Height (mm)	Actual Height (in.)	Actual Height (mm)
MX13UP	0.5	0.2	13	370	14 3/16	360
MX27PE	2.0	0.9	27	685	28 3/16	716
MX33UP	1.0	0.5	33	875	34 3/16	868
MX54UP	1.6	0.7	54	1370	54 3/16	1376
MX63UP	1.8	0.8	63	1585	62 3/16	1580
MX70UP	2.0	0.9	70	1778	69 3/16	1757
MX74UP	2.3	1.0	74	1690	74 3/16	1884
MX86UP	3.0	1.4	86	2195	86 3/16	2189

Polymer post

Stationary Mobile

Shelf Wedge Connector: Reinforced nylon. Replacement MetroMax Q Wedges Cat. No. MQ9985 (Bag of 4)

Epoxy Coated Steel Posts - For heavy-duty mobile applications. 15 year limited rust warranty.

Stationary - with leveling foot

Polymer Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)	Nominal Height (in.)	Nominal Height (mm)	Actual Height (in.)	Actual Height (mm)
MQ13PE	1.0	0.5	13	370	14 3/16	360
MQ27PE	2.0	0.9	27	685	28 3/16	716
MQ33PE	2.5	1.1	33	875	34 3/16	868
MQ54PE	4.0	1.8	54	1370	54 3/16	1376
MQ63PE	4.5	2.0	63	1585	62 3/16	1580
MQ74PE	5.5	2.5	74	1690	74 3/16	1884
MQ86PE	6.5	2.9	86	2195	86 3/16	2189

Mobile - for stem casters

Epoxy-Coated Steel Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)	Nominal Height (in.)	Nominal Height (mm)	Actual Height (in.)	Actual Height (mm)
MQ13UPE	1.0	0.5	13	370	14 3/16	360
MQ27UPE	2.0	0.9	27	685	28 3/16	716
MQ33UPE	2.5	1.1	33	875	34 3/16	868
MQ54UPE	4.0	1.8	54	1370	54 3/16	1376
MQ63UPE	4.5	2.0	63	1585	62 3/16	1580
MQ70UPE	2.0	0.9	70	1778	69 3/16	1757
MQ74UPE	5.5	2.5	74	1690	74 3/16	1884
MQ86UPE	6.5	2.9	86	2195	86 3/16	2189

Epoxy-coated steel post

Stationary Mobile

We put space to work.

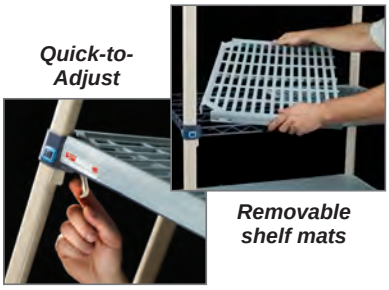
Item # _____

Job _____

MetroMax Q® Polymer / Wire Shelving

Quick-to-adjust, corrosion resistant shelving constructed of removable polymer open grid shelf mats, wire shelf frames, and corner releases. Shelf frames and steel posts have an epoxy coating over an electroplated substrate. Shelves offer a 20 year warranty against rust and corrosion. Polymer posts are rust proof. Microban® antimicrobial product protection is built into the shelf mats and posts. Shelf has a rigid four-sided frame with center truss(es). Robust corner provides complete 360° capture of the wedge and post for added stability. Stationary units have maximum capacity of 2,000 lbs. (907kg) evenly distributed. Mobile units (with stem casters) offer a maximum total unit load of 900 lbs. (408kg). Units assemble easily — shelves mount on four one-piece wedges along grooved, numbered posts and adjust on 1" (25mm) increments.

- **Forever Strong:** Proven corner connection and four-sided shelf frame with center truss(es) assures stability and strength in stationary, mobile, and high-density track shelving configurations.
  800 lbs. (363kg) per shelf for lengths of 24" to 48" (610 to 1219mm)
  600 lbs. (272kg) per shelf for lengths of 54" (1372mm) or longer
  Stationary unit: 2000lbs (907kg) evenly distributed.
  Mobile unit (with stem casters): Up to 900lbs. (408kg).
  Multiply the caster load rating by 3 to determine actual rating.
- **Long life Rust Resistance:** Shelves offer a 20 year limited corrosion warranty and are combined with rust proof polymer posts.
- **Easy to Clean and Maintain:** Polymer mats can be easily removed and cleaned in a sink or commercial washer / dish machine.
- **Microban® Antimicrobial Product Protection** is built into the shelf mats and posts to inhibit the growth of bacteria, mold, mildew, and fungus that cause odors and product degradation. Microban product protection keeps the product "cleaner between cleanings".
- **Quick-to-Adjust:** Patented corner release allows shelves to be adjusted without tools. Simply flip each corner release, relocate the wedge connectors on the posts, and reposition the shelf. Quickly adjust shelves to reclaim wasted vertical space.
- **Efficient Use of Space:** Shelves adjust on 1" (25mm) increments along the post to maximize the use of available vertical space.
- **Fast, Easy Assembly:** Shelves are ready to use right out of the box. One-piece wedges securely attach to the posts — Raised beads on the back of each wedge snap into the grooves on the post. Window on wedge aligns with numbers on the post to locate the desired shelf position. Shelf mounts on four wedges, A unit can be assembled without tools in minutes.
- **Interchangeable:** Part of the MetroMax platform, MetroMax Q shelves are compatible on the same shelving units with MetroMax i and MetroMax 4 shelves.
- **Open Grid and Solid Mat Options:** MetroMax Q is available with open grid mats. Open grid shelves promote air circulation and light penetration. For 21" (530mm) deep MetroMax Q, solid mat overlays are available. For 18" and 24" (457 and 610mm) depths, MetroMax i or MetroMax 4 solid shelves may be added when solid shelves are required.
- **NSF Listed** for all environments.
- **Optional Accessories** are on spec sheet 9.25.



Quick-to-Adjust

Removable shelf mats

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Supports good HACCP processes

All Metro Catalog Sheets are available on our website: **www.metro.com**

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Job _____

MetroMax Q®
POLYMER / WIRE SHELVING

METRO®
We put space to work.

Standard Interchangeable Shelves

Part number includes shelf with removable mats and one bag of wedges

Shelf with Grid Mat Model No.	Nominal Size Width (in.)	Nominal Size Width (mm)	Nominal Size Length (in.)	Nominal Size Length (mm)	Actual Size Width (in.)	Actual Size Width (mm)	Actual Size Length (in.)	Actual Size Length (mm)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
MQ1824G	18	457	24	610	18 3/8	467	23 13/16	605	6.2	2.8
MQ1830G	18	457	30	762	18 3/8	467	29 13/16	757	8.0	3.6
MQ1836G	18	457	36	914	18 3/8	467	35 13/16	910	9.7	4.4
MQ1842G	18	457	42	1067	18 3/8	467	41 13/16	1062	11.4	5.2
MQ1848G	18	457	48	1219	18 3/8	467	47 13/16	1215	13.2	6.0
MQ1854G	18	457	54	1372	18 3/8	467	53 13/16	1367	15.0	6.8
MQ1860G	18	457	60	1524	18 3/8	467	59 13/16	1519	16.7	7.6
MQ1872G	18	457	72	1829	18 3/8	467	71 13/16	1824	20.0	9.1
MQ2124G	21	530	24	610	21 3/8	543	23 13/16	605	8.0	3.6
MQ2130G	21	530	30	762	21 3/8	543	29 13/16	757	9.7	4.4
MQ2136G	21	530	36	914	21 3/8	543	35 13/16	910	11.4	5.2
MQ2142G	21	530	42	1067	21 3/8	543	41 13/16	1062	12.8	5.8
MQ2148G	21	530	48	1219	21 3/8	543	47 13/16	1215	14.5	6.6
MQ2154G	21	530	54	1372	21 3/8	543	53 13/16	1367	16.7	7.6
MQ2160G	21	530	60	1524	21 3/8	543	59 13/16	1519	18.5	8.4
MQ2172G	21	530	72	1829	21 3/8	543	71 13/16	1824	21.7	9.9
MQ2424G	24	610	24	610	24 3/8	619	23 13/16	605	9.7	4.4
MQ2430G	24	610	30	762	24 3/8	619	29 13/16	757	11.4	5.2
MQ2436G	24	610	36	914	24 3/8	619	35 13/16	910	13.1	6.0
MQ2442G	24	610	42	1067	24 3/8	619	41 13/16	1062	14.1	6.4
MQ2448G	24	610	48	1219	24 3/8	619	47 13/16	1215	15.8	7.1
MQ2454G	24	610	54	1372	24 3/8	619	53 13/16	1367	18.5	8.4
MQ2460G	24	610	60	1524	24 3/8	619	59 13/16	1519	20.3	9.2
MQ2472G	24	610	72	1829	24 3/8	619	71 13/16	1824	23.5	10.7

Heavy-Duty Dunnage Shelves

- Weight capacity per shelf evenly distributed: 1,200 lbs. (544kg) on shelves up to and including 48" (1219mm) long; 900 lbs. (408kg) for shelves 54" (1370mm) and longer.
- Dunnage shelves are recommended for use on units with four posts, not on an add-on unit with two posts.

Grid Mat Model No.	Nominal Width (in.)	Nominal Width (mm)	Nominal Length (in.)	Nominal Length (mm)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
MHP2436G	24	610	36	914	21	9.5
MHP2448G	24	610	48	1220	27	12.2
MHP2454G	24	610	54	1370	29	13.2
MHP2460G	24	610	60	1524	33	15.0

Material Specifications:

- **Shelf Mats:** Injection-molded polypropylene with exclusive built-in Microban® antimicrobial product protection.
- **Shelf frames:** Steel with electroplated substrate and highly durable, abrasion-resistant epoxy finish.
- **Epoxy-coated posts:** Steel with electroplated substrate and highly durable, abrasion-resistant epoxy finish. Epoxy finish has built-in Microban antimicrobial product protection. The adjustable foot is reinforced nylon.
- **Temperature range:** -20°F (-29°C) to 125°F (52°C) continuous use, with intermittent exposure to 200°F (93°C) for cleaning. Visit metro.com/service-support for cleaning guidelines.

Rust Proof Polymer Posts - Lifetime warranty against rust.

Stationary - with leveling foot

Epoxy-Coated Steel Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)	Nominal Height (in.)	Nominal Height (mm)	Actual Height (in.)	Actual Height (mm)
MX13P	0.5	0.2	13	370	14 3/16	360
MX27P	0.9	0.4	27	685	28 3/16	716
MX33P	1.0	0.5	33	875	34 3/16	868
MX54P	1.6	0.7	54	1370	54 3/16	1376
MX63P	1.8	0.8	63	1585	62 3/16	1580
MX74P	2.3	1.0	74	1690	74 3/16	1884
MX86P	2.5	1.4	86	2195	86 3/16	2189

Mobile - for stem casters

Polymer Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)	Nominal Height (in.)	Nominal Height (mm)	Actual Height (in.)	Actual Height (mm)
MX13UP	0.5	0.2	13	370	14 3/16	360
MX27PE	2.0	0.9	27	685	28 3/16	716
MX33UP	1.0	0.5	33	875	34 3/16	868
MX54UP	1.6	0.7	54	1370	54 3/16	1376
MX63UP	1.8	0.8	63	1585	62 3/16	1580
MX70UP	2.0	0.9	70	1778	69 3/16	1757
MX74UP	2.3	1.0	74	1690	74 3/16	1884
MX86UP	3.0	1.4	86	2195	86 3/16	2189

Polymer post

Stationary Mobile

Shelf Wedge Connector:
Reinforced nylon.
Replacement MetroMax Q Wedges
Cat. No. MQ9985
(Bag of 4)

Epoxy Coated Steel Posts - For heavy-duty mobile applications. 15 year limited rust warranty.

Stationary - with leveling foot

Polymer Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)	Nominal Height (in.)	Nominal Height (mm)	Actual Height (in.)	Actual Height (mm)
MQ13PE	1.0	0.5	13	370	14 3/16	360
MQ27PE	2.0	0.9	27	685	28 3/16	716
MQ33PE	2.5	1.1	33	875	34 3/16	868
MQ54PE	4.0	1.8	54	1370	54 3/16	1376
MQ63PE	4.5	2.0	63	1585	62 3/16	1580
MQ74PE	5.5	2.5	74	1690	74 3/16	1884
MQ86PE	6.5	2.9	86	2195	86 3/16	2189

Mobile - for stem casters

Epoxy-Coated Steel Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)	Nominal Height (in.)	Nominal Height (mm)	Actual Height (in.)	Actual Height (mm)
MQ13UPE	1.0	0.5	13	370	14 3/16	360
MQ27UPE	2.0	0.9	27	685	28 3/16	716
MQ33UPE	2.5	1.1	33	875	34 3/16	868
MQ54UPE	4.0	1.8	54	1370	54 3/16	1376
MQ63UPE	4.5	2.0	63	1585	62 3/16	1580
MQ70UPE	2.0	0.9	70	1778	69 3/16	1757
MQ74UPE	5.5	2.5	74	1690	74 3/16	1884
MQ86UPE	6.5	2.9	86	2195	86 3/16	2189

Epoxy-coated steel post

Stationary Mobile

Item #2

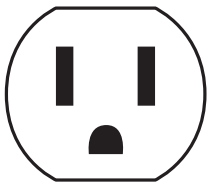
POWER PACK - AIR COOLED

MICRO MATIC

ECONOMY - 1 PUMP - 2,300 BTUs

- Engineered by beer-industry experts for performance and value.
- Digital thermostat for accurate glycol bath temperature.
- Expanded urethane foam insulates cabinet to maintain glycol temperature and minimize condensation.
- Exterior sight glass to verify glycol bath level.
- Rugged stainless steel cabinet.

MMPP4301-EP



5-15P

Job Number:_____ Location: _____

Specifications

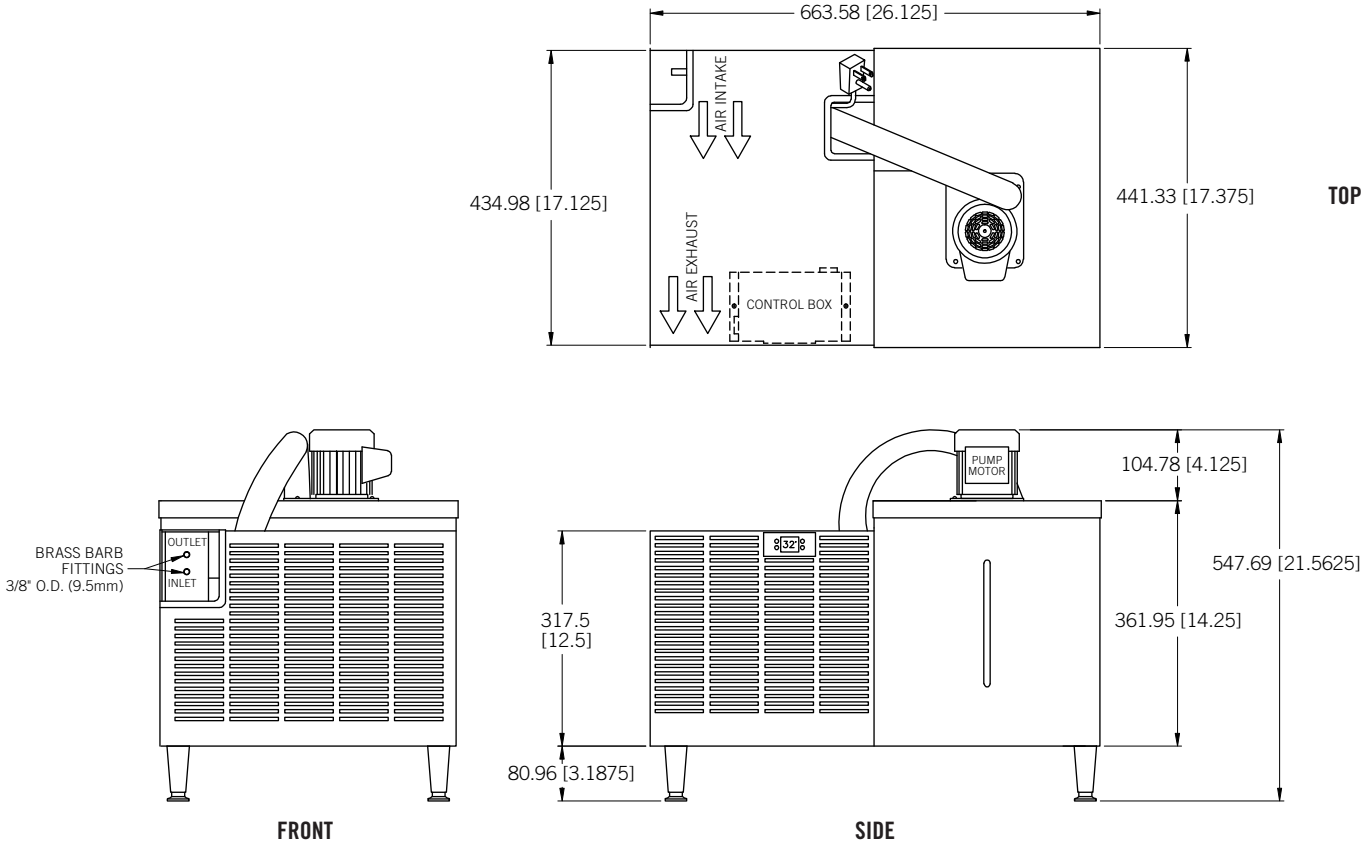
Micro Matic reserves the right to change specifications without notice.

Part No.	Description	Shipping Weight
☐ MMPP4301-EP	Air cooled power pack, 1 vertical pump	41 kg 90 lbs

Operating Performance

Compressor	1/3 HP
BTU per hour	2,300
Plug Type (NEMA #)	5-15P
Voltage	115
Running	7.0A
Refrigerant	R-134a
Charge	0.28 kg (10 oz)
Refrigerant Running Pressure	18 (low) 140 (high)
Bath Capacity	17 litre (4.5 gallons)
Pump Type	Vertical
Inlet Barb	9.52mm (3/8")
Outlet Barb	9.52mm (3/8")
Cabinet Cover	Included

Dimensions



MICRO MATIC

Toll-Free: 1-866-327-4159
www.micromatic.com

West
19791 Bahama St.
Northridge, CA 91324
Tel. (818) 701-9765
Fax. (818) 701-9844

Central
10726 North Second St.
Machesney Park, IL 61115
Tel. (815) 968-7557
Fax. (815) 968-0363

Southeast
15111 Dispense Ln.
Brooksville, FL 34604
Tel. (352) 799-6331
Fax. (352) 796-2429

Northeast
4601 Saucon Creek Rd.
Center Valley, PA 18034
Tel. (610) 625-4464
Fax. (610) 625-4466

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THIS ITEM IS: SPARE NUMBER

- [x] SPARE NUMBER
- [ ] MILLWORK
- [ ] CUSTOM FABRICATED/NSF
- [ ] EXISTING
  - [ ] WHERE SHOWN
  - [ ] RELOCATED
  - [ ] MODIFIED
- [ ] N.I.K.E.C. BY:
  - [ ] OWNER
  - [ ] SUPPLIER / VENDOR
  - [ ] OTHERS

REMARKS:

THIS ITEM IS: SPARE NUMBER

- [x] SPARE NUMBER
- [ ] MILLWORK
- [ ] CUSTOM FABRICATED/NSF
- [ ] EXISTING
  - [ ] WHERE SHOWN
  - [ ] RELOCATED
  - [ ] MODIFIED
- [ ] N.I.K.E.C. BY:
  - [ ] OWNER
  - [ ] SUPPLIER / VENDOR
  - [ ] OTHERS

REMARKS:

THIS ITEM IS: WORK TABLE

- ☐ SPARE NUMBER
- ☐ MILLWORK
- ■ CUSTOM FABRICATED/NSF
- ☐ EXISTING
  - ☐ WHERE SHOWN
  - ☐ RELOCATED
  - ☐ MODIFIED
- ☐ N.I.K.E.C. BY:
  - ☐ OWNER
  - ☐ SUPPLIER / VENDOR
  - ☐ OTHERS

REMARKS:

We put space to work.

Item # _____

Job _____

MetroMax® Top-Track® High-Density Storage

For MetroMax i, MetroMax 4 and MetroMax Q

- **Maximizes Storage Capacity:** Top-Track can increase the storage capacity of a given area up to 40%. The system allows more storage units to fit in a defined space. A movable, open aisle allows full access to each entire shelving unit thus eliminating hard to reach or "dead" spaces.
- **Easy Access:** The overhead track system guides the mobile units and opens an access aisle between any two units, whenever it is needed. The track is above the storage units enabling easy access for employees or for utility carts, simplifying the material handling task.
- **Cost-Saving Performance:** This efficient utilization of space addresses the storage needs of new or growing operations. In a new facility, less square footage would have to be dedicated to storage. In growing operations, MetroMax Top-Track can eliminate the need to expand the facility to handle increasing storage requirements, greatly reducing the costs associated with a growing business's needs.
- **Uniquely Interchangeable:** Corrosion resistant MetroMax Q steel posts can improve the overall rigidity of the Top-Track system in higher weight bearing applications. Polymer posts are offer rust-proof performance.
- **Clean Design:** Guide tracks are installed overhead enabling easy cleaning of floors. MetroMax shelves feature removable polymer mats. *Microban antimicrobial product protection is built into the high contact areas of the shelving systems — shelf mats, frames, and posts — to inhibit the growth of bacteria, mold, mildew, and fungus that cause odors and product degradation. Microban product protection keeps the shelves and posts "cleaner between cleanings".
- **Increased Productivity:** With reduced square footage dedicated to storage, MetroMax Top-Track maximizes the amount of productive "front of the house" space available, increasing daily revenues.

  The system compensates for uneven floor surfaces. Floor should be smooth and free from large cracks or raised obstacles.

All MetroMax shelving styles are available for Top-Track configurations.

MetroMax i: (heavier duty polymer shelving with stainless corners) most commonly used with polymer posts. See spec sheet 9.20 for more information.

MetroMax 4: all-polymer shelving; most commonly used with polymer posts. See spec sheet 9.22 for more information.

MetroMax Q: (hybrid polymer and wire shelving) most commonly used with epoxy coated steel posts. See spec sheet 9.21 for more information.

InterMetro Industries Corporation
North Washington Street, Wilkes-Barre, PA 18705
Product Information. U.S. and Canada: 1.800.992.1776
Outside U.S. and Canada: www.metro.com/contactus

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Information and specifications are subject to change without notice. Please confirm at time of order.

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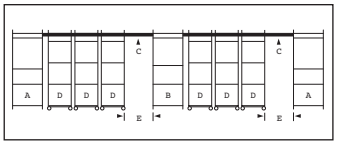
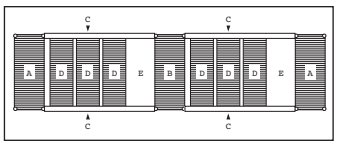
MetroMax® Top-Track® High-Density Storage

SYSTEM COMPONENTS
A = Stationary End Units
B = Stationary Intermediate Unit (Optional)
C = Track Set
D = Mobile Units
E = Open Aisle

FRONT VIEW



OVERHEAD VIEW



System Measurements

- Actual length: Nominal track length + the nominal width of each end unit + 2" (51mm)
- Actual width: Nominal Shelf length + 3-1/2" (89mm)
- Actual height of system is approximately 87" (2210mm)

It is recommended that the tracks are installed at least 5" (127mm) from the wall.

Mobile Unit Measurements

To accommodate bumpers, the actual size of a mobile unit is 2.5" (63.5 mm) wider than the shelf width shown. For example, an 18" (457 mm) wide unit is actually 20.5" (521 mm).

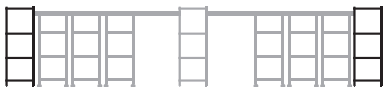
Choosing shelves: All end, intermediate, and mobile units must be 18" (457 mm) or wider. Choose from MetroMax i, MetroMax 4, or MetroMax Q options.

Stationary End Unit Kit (Choose one kit for each system)

Includes 86" high posts (2184mm) high stationary posts, and hardware necessary for connecting stationary end units to tracks. Shelves are sold separately.

Fits Shelf Width (in.)	(mm)	MetroMax Q Steel Posts: Approx. Pkd. Wt. (lbs.)	(kg).	Cat. No.	MetroMax Polymer Posts: Approx. Pkd. Wt. (lbs.)	(kg).	Cat. No.
18	457	55.4	25.1	**MQTTE18**	31.0	15.7	**MXTTE18**
21	530	55.9	25.4	**MQTTE21**	31.5	15.9	**MXTTE21**
24	610	56.4	25.6	**MQTTE24**	32.0	16.1	**MXTTE24**

Note: All kits come with plated foot plates. Stainless Steel Foot plates must be ordered separately



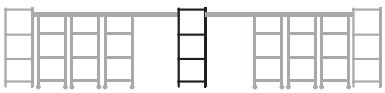
Traditional Configuration with stationary end units. ONE End Unit Kit is required per system. Shelves are ordered separately.

Stationary Intermediate Units

Required when overall desired track length exceeds 21' (6405mm). Optional when track length is under 21' (6405mm). Includes 86" high posts (2184mm) high stationary posts, and hardware necessary for connecting one stationary intermediate unit to tracks. Shelves are sold separately.

Fits Shelf Width (in.)	(mm)	MetroMax Q Steel Posts: Approx. Pkd. Wt. (lbs.)	(kg).	Cat. No.	MetroMax Polymer Posts: Approx. Pkd. Wt. (lbs.)	(kg).	Cat. No.
18	457	32.2	14.6	**MQTTA18**	21.8	9.9	**MXTTE18**
21	530	32.7	14.8	**MQTTA21**	22.3	10.1	**MXTTE21**
24	610	33.2	15.1	**MQTTA24**	22.8	10.3	**MXTTE24**

Note: All kits come with plated foot plates. Stainless Steel Foot plates must be ordered separately



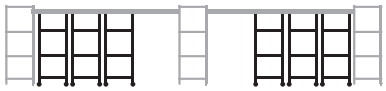
ONE Intermediate Kit (see rules). Shelves are ordered separately.

Mobile Units (One kit required per mobile unit)

Includes four 74" (1880mm) high mobile posts, four casters, donut bumpers, guide rollers, and other hardware to assemble a mobile unit. Shelves are sold separately.

Fits Shelf Width (in.)	(mm)	Approx. Pkd. Wt. (lbs.)	(kg).	MetroMax Q Steel Posts: Cat. No. with Plated Casters	Cat. No. with Stainless Casters	Approx. Pkd. Wt. (lbs.)	(kg).	MetroMax Polymer Posts: Cat. No. with Plated Casters	Cat. No. with Stainless Casters
18	457	32.2	14.4	MQTTM18C	MQTTM18S	21.8	10.2	MXTTM18C	MXTTM18S
21	530	32.7	14.5	MQTTM21C	MQTTM21S	22.3	10.3	MXTTM21C	MXTTM21S

Note: Casters have polyolefin treads.



ONE Mobile kit per mobile unit. Example: (6) needed in the above picture. Shelves are ordered separately.

Under normal conditions, aisle width of 30"-36" (760-914mm) is recommended. The storage of very large objects within the system, however, may require an aisle width larger than 36" (914mm).

MetroMax® Top-Track® High-Density Storage

Track Sets
Includes tracks and hardware needed to assemble track runs up to 21' (6400mm).

Dimensions Length (ft.)	(mm)	Approx. Pkd. Wt. (lbs.)	(kg)	Super Erecta Brite Cat. No.
2.5	762	15.0	6.8	**TTS2.5NA**
6	1828	40.5	18.2	**TTS6NA**
7	2135	47.5	21.3	**TTS7NA**
8	2440	56.0	25.2	**TTS8NA**
9	2743	62.5	28.1	**TTS9NA**
10	3048	69.5	31.2	**TTS10NA**
11	3352	76.5	34.4	**TTS11NA**
12	3657	83.5	37.5	**TTS12NA**
13	3962	92.0	41.4	**TTS13NA**

Dimensions Length (ft.)	(mm)	Approx. Pkd. Wt. (lbs.)	(kg)	Chrome Cat. No.
14	4267	98.0	44.1	**TTS14NA**
15	4572	106.5	47.9	**TTS15NA**
16	4877	113.5	51.0	**TTS16NA**
17	5182	121.0	54.4	**TTS17NA**
18	5486	128.0	58.0	**TTS18NA**
19	5791	135.0	60.7	**TTS19NA**
20	6096	142.0	63.9	**TTS20NA**
21	6400	149.0	67.0	**TTS21NA**

Note: Note: TTS2.5NA includes a joining kit to connect the tracks to other track sets.

For best performance on heavily loaded systems:

1. For configurations using shelves 60" (1524mm) or longer and managing heavier loads choose a more rigid shelving option. Wire shelving – Use all SES wire shelves. Polymer Shelving (MetroMax) – Epoxy coated steel posts offer the most rigid configuration.
2. Mobile Units: If 18" (457mm) wide mobile units are planned, the maximum allowable size shelf is 60" (1524mm) long. If 18" (457mm) wide by 60" (1524mm) long mobile units are planned, a maximum of five 18" (457mm) mobile units are allowable between two stationary units. 18" (457mm), 21" (530mm) and 24" (610mm) wide mobile units can be intermixed in a given system. The standard system requires 74" (1880mm) posts on the mobile units.
3. Weight capacities (evenly distributed) - Mobile Units. Super Erecta, Super Erecta Pro, Super Adjustable, MetroMax Q, MetroMax i: up to 900lbs. (408kg) MetroMax 4: up to 750lbs (340kg)
4. When using long tracks, 13ft or longer, securing the stationary units to the floor will help to keep the system in alignment.

Additional Configuration Notes

1. Standard Top-Track models include 86" (2185mm) stationary posts and 74" (1880mm) stem caster mobile posts. If a taller system or shorter systlem is required, consult Metro Engineering.
2. Existing Metro Super Erecta, Super Adjustable, Super Erecta Pro, MetroMax Q, MetroMax 4, and MetroMax i shelving units can be retrofitted as part of a Top-Track installation.

Installation Guidelines

1. It is recommended that the tracks are installed a minimum of 5" (127mm) from the wall.
2. It is the discretion of the user to install the end units to the floor.
3. Floor should be level, smooth, and free from cracks and raised objects.
4. For new construction, it is recommended that flooring of suitable durability is used in areas where Top-Track will be installed. When such flooring is not an option, floor pad protectors are recommended to protect soft flooring materials from wear and tear.
5. Enclosure panels may be used on mobile units. Panels must be mounted to ensure they do not interfere with the tracks. For standard MetroMax Top-Track Mobile Units with 74" (1890mm) posts, use the enclosures for the 63" (1585mm) posts.

Mobile Unit — Space Calculator . (Use to help determine the quantity of mobile units and the open aisle dimension)

	Nominal Shelf Depth	Actual Depth with Bumpers	Space Occupied by Each Quantity of Mobile Units: qty. 1	qty. 2	qty. 3	qty. 4	qty. 5	qty. 6	qty. 7	qty. 8	qty. 9	qty. 10	qty. 11
(in.)	18	20.5	20.5	41	61.5	82	102.5	123	143.5	64	184.5	205	225.5
(in.)	21	23.5	23.5	47	70.5	94	117.5	141	164.5	188	211.5	—	—
(in.)	24	26.5	26.5	53	79.5	106	132.5	159	185.5	212	—	—	—
(mm)	457	520.5	520.5	1041	1561.5	2082	2602.5	3123	3643.5	4164	4684.5	5205	5725.5
(mm)	530	593.5	593.5	1187	1780.5	2374	2967.5	3561	4154.5	4748	5341.5	—	—
(mm)	610	673.5	673.5	1347	2020.5	2694	3367.5	4041	4714.5	5388	—	—	—

Replacement Parts	**Model No.**
Rollers (bag of 4)*	**MAXROLL**
Bumpers for mobile units*	**M9992DBX**
Caster*	**5MOOR** (plated stem/horn); **5MOORSA** (stainless steel stem/horn)
Track joining kits	**HDWE-TTJOIN**
Hardware for track	**RPHDWE-TTECAP**
Footplates*	**9993Z** (zinc plated), **9993S** (Stainless Steel)

*Note: compatible with all MetroMax systems, past and present.

Job _____

MetroMax® Top-Track® High-Density Storage

We put space to work.

Order Guide

1. Identify the available floor space
Evaluate Top-Track configurations to fill the space. The amount of space needed for the Top-Track unit is calculated by using this formula: Nominal track length + Nominal widths of each end unit + 2" (51mm).

2. Choose the shelving and desired posts.
Choose **(1) end unit kit** based on shelf depth.
Choose **(1) track set** to fill the space.
Select **shelves**.

3. Determine the desired open aisle space.
Reference the Mobile Unit — Space Calculator table on the previous page to select the depth and quantities of mobile units.

Select **mobile unit kits** (including finish for the casters). One needed per mobile unit.
Select **shelves**.

Example: (using MetroMax i)

1. 196" (4979mm) of floor space
12' track + 24" end + 24" end + 2" = 194"
3657mm + 610mm + 610mm +51mm = 4928mm

Top-Track system can be assembled to fill 194" (4928mm) length of floor space.

2.

End unit kit	**MXTTE24** (qty. 1)
Grid shelves	**MX2448G** (qty. 8)
Solid shelves	**MX2448F** (qty. 2)
Track Set	**TTS12NA** (qty. 1)

3. Desired open aisle is 36" (914mm).
Tracks measure 12' or 144" (3657mm).

Available space for mobile units is:
144" – 36" = 108" (3657 – 914 = 2743mm)

Each nominal 24" (610mm) unit measures 26.5" (673.5mm) when you include the bumpers.
(4) 26.5" (673.5mm) deep units = 106" (2440mm)

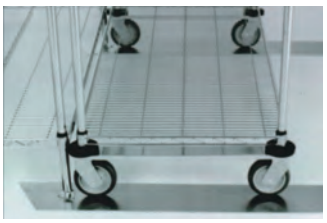
Mobile unit kit	**MXTTM24C** (qty. 4)
Grid shelves	**MX2448G** (qty. 12)
Solid shelves	**MX2448F** (qty. 4)

Top-Track Floor Pad Protectors

- Compensate for soft flooring materials by protecting the floor from normal wear and tear from mobile units.
- To make more applicable for sterile environments a bead of silicone (not included) is recommended to seal the seam between the floor pads and the floor.
- Material: aluminum

For Track Length (ft)	(mm)	Model No.	For Track Length (ft)	(mm)	Model No.
6	1828	**FPS6N**	14	4267	**FPS14N**
7	2135	**FPS7N**	15	4572	**FPS15N**
8	2440	**FPS8N**	16	4877	**FPS16N**
9	2743	**FPS9N**	17	5182	**FPS17N**
10	3048	**FPS10N**	18	5486	**FPS18N**
11	3353	**FPS11N**	19	5791	**FPS19N**
12	3657	**FPS12N**	20	6096	**FPS20N**
13	3962	**FPS13N**	21	6400	**FPS21N**

TTWM



Top-Track® Floor Protectors

Top-Track Wall Mount Bracket

Used to attach one set of tracks to the wall. Eliminates the need for a stationary end unit. Includes one pair of plated wall brackets. Hardware to attach the brackets to the wall is NOT included.
Model No. TTWM

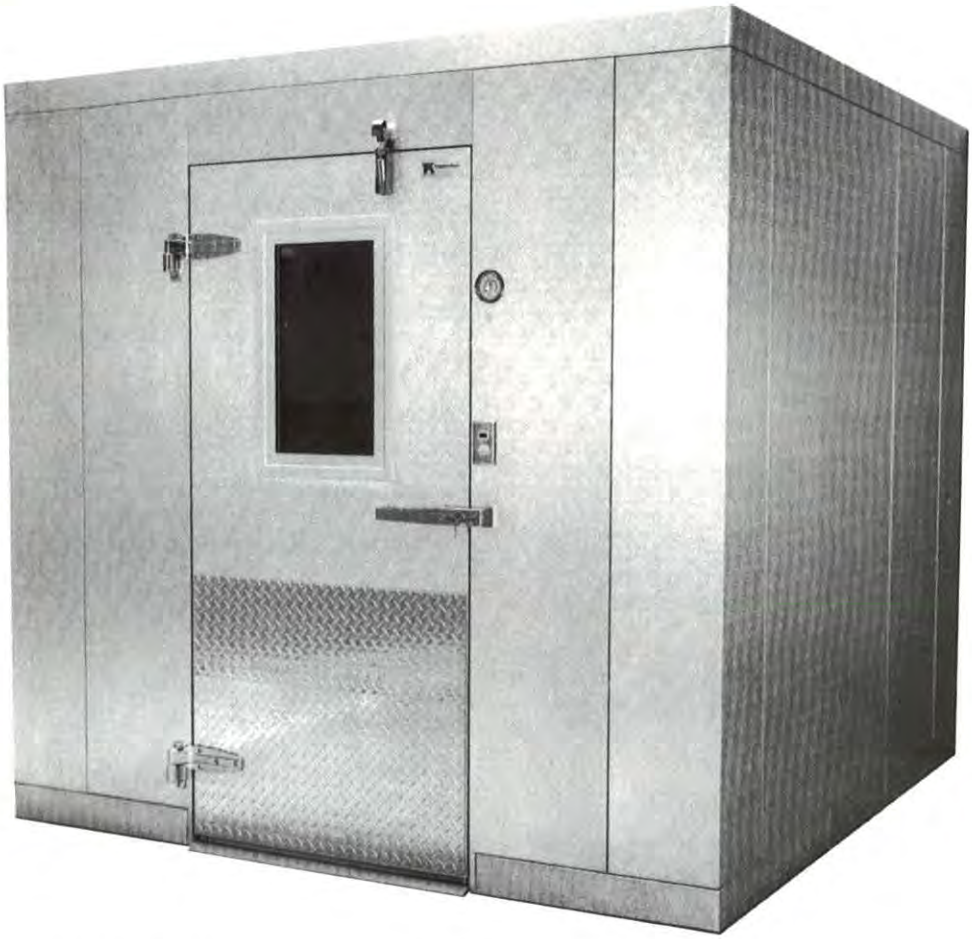
TTSTP

Top-Track Stop Plate Kit

Used in conjunction with the Wall Mount Bracket kit. The aluminum stop plates bolt to the underside of the track next to the wall brackets to prevent mobile units from bumping into the wall.
Model No. TTSTP

Walk-In Refrigeration

Thermo-Kool®

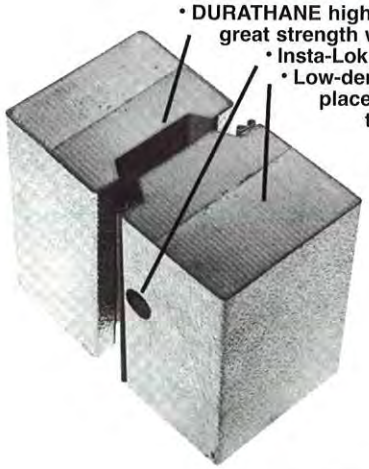


- Exclusive DURATHANE 100% urethane tongue and groove construction – a major advance in walk-in refrigeration.
- Four- and five-inch urethane zero ozone depleting foamed-in-place insulation.
- Durable high-density urethane panel perimeter – no pre-installation damage.
- No exposed low-density urethane surfaces – no deterioration during pre-installation panel storage.
- No need for non-insulating internal metal straps or rods.
- Lightweight panels with added strength.
- Fast, easy assembly – Insta-Lok positive camlock device with exclusive self-centering pin-strike assembly – instant panel alignment.
- Easy to relocate or enlarge.
- Prefabricated panels within 1" increments up to 46" wide and 1' x 1' corners. Door, partition and height within 1" increments to meet space requirements.
- Complete design flexibility – custom sizes and configurations available upon request.
- Standard stucco aluminum finish – optional finishes of smooth aluminum, white pre-painted aluminum, stainless steel, or galvanized steel.
- Standard floor panels of smooth aluminum – made to withstand uniformly distributed loads up to 600 lbs. per sq. ft. – optional 16-gauge stainless steel, treadbrite aluminum or 1/8" aluminum treadplate. For additional floor strength THERMO-KOOL DURA-FLOOR heavy-duty structural support floor has the capability to withstand up to 12,000 lbs. per sq. ft. stationary floor load. Vinyl "U" channel screeds for floorless applications – optional foamed screeds or 2" vinyl screeds.
- Choice of remote, remote pre-assembled, top mount quick connect and remote quick connect refrigeration systems sized to any requirement.
- Choice of top or side mounted packaged refrigeration systems or remote refrigeration units.
- A heavy reinforced steel "U" channel frame is foamed-in-place to give extra support and rigidity to the frame and to prevent racking, distortion, warping and twisting of the door section.
- Meets requirements for Energy Independence and Security Act of 2007 and California Code of Regulations.

DURATHANE CONSTRUCTION

(A New Concept in Walk-In Design)
Thermo-Kool® Walk-Ins feature DURATHANE construction – an all-urethane design with high-density urethane structural members to provide extreme strength and rigidity in prefabricated panels, without loss of insulation value.

While most customers' requirements can be met by a walk-in patterned on standard sizes and configuration, custom-designed sizes and layouts can be figured to meet unusual space demands. Standard sizes are those which can be built up from industry standard 46", 34½", 23", and 11½" width panels with 12" x 12" 90° corners.



• DURATHANE high-density frame combines great strength with high insulation value
• Insta-Lok panel locks speed set-up
• Low-density urethane foamed-in-place bonds to metal pans—is twice as efficient as other insulation materials.

CLASSIFIED UL®

NSF®

Distributed by:

Architectural Specifications

Thermo-Kool®

General:
Walk-in coolers and freezers shall be THERMO-KOOL prefabricated, modular construction. They shall be designed and constructed to allow fast, easy field assembly, disassembly, relocation and enlargement by the addition of like modular panels.

Standard wall, ceiling, and floor panels shall be fabricated in 46", 34½", 23", and 11½" widths. Corner panels shall be 90° angle, 12" x 12". All panels shall be interchangeable with like panels. Partition panel placement shall be within 1" increments to meet shelving space requirements.

Panel Construction:
All panels shall consist of metal pans formed to precise dimensions. Metal finish to be as specified. Insulation shall be "foamed-in-place" urethane foam bonded permanently to the complete inner surfaces of both interior and exterior metal pans to form a strong rigid unit. Panels shall not have internal wood or metal support, framing, straps, or other non-insulating members. Each panel shall be 100% urethane foam insulation exclusive of metal pans. Perimeter structure shall be formed of DURATHANE, high-density urethane insulation forming tongues and grooves to assure vapor proof and airtight joints and to prevent pre-installation damage and deterioration of low-density urethane.

NSF-approved double-bead vinyl gasketing shall be applied to the tongue side of all panels on both interior and exterior. Gaskets shall be impervious to stains, grease, oils, mildew, etc.

Assembly of the walk-in shall be accomplished by "Insta-Loks" consisting of a cam-action hook-arm assembly set in one panel and a self-aligning, self-centering pin assembly set in the matching panel. Rotation of the cam-action hook-arm shall pull and lock panels together to form airtight, vapor proof joints. No metal straps or connection rods shall be used inside the panels. Rotation of the cam-locks shall be operated from inside the walk-in through access ports that are sealed with vinyl snap-in closures. The hexagonal wrench which activates the camlocks shall be furnished with each walk-in.

Floor panels shall be similar in construction to other panels and shall be designed to withstand uniformly distributed stationary loads of 600 lbs. per square foot. The DURA-FLOOR heavy duty structural floor support is available for added strength to the floor when required. The DURA-FLOOR has the capability to withstand up to 12,000 lbs. per sq. ft. uniformly distributed stationary floor load as tested in accordance with the ASTM Standard Designation specifications. Vinyl "U" channel screeds shall be provided for floorless installations. Screeds shall be coved on interior and exterior side and designed to sit flat on the floor for attachment by means of nailing or lag-bolting through the center of the screeds. Wall panels shall lock to screeds on 23" centers. (4¼" x 4" foam screeds and 2" vinyl Thermo-Screeds available when required or specified). Walk-in panels shall be covered by a ten-year warranty.

Insulation:
Insulation shall be 4" or 5" thick rigid, zero ozone depleting HFC 134a blown Class I urethane foam classified according to UL 723 (ASTM-E-84) as tested by Underwriters Laboratories, Inc. The core material has a flame spread of 25 or less and a smoke density of 250.

The urethane foam is foamed-in-place to bond to inner surfaces of metal pans having an average thermal conductivity (K factor) of 0.13 BTU/hr./sq. ft. per degrees/Fahrenheit/inch. As tested in accordance with ASTM C 518-2004, the R factor for coolers at temperatures of 55° F is greater than 29.0 for 4" thick and greater than 36.0 for 5" thick panels; for freezers at temperatures of 20° F the R factor is greater than 32.0 for 4" thick and greater than 40.0 for 5" thick panels.

The prefabricated urethane foamed panels shall be supplied with a Class I fire hazard classification according to UL 723 (ASTM-E-84) as tested by Underwriters Laboratories, Inc. Panels shall have a flame spread rating of 25 or less and bear a certifying Underwriters Laboratories, Inc. label.

This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.

Finishes:
Interior and exterior finishes are available in .040 stucco aluminum (standard), 26 gauge stucco galvanized steel, 22 gauge smooth galvanized steel, 20 gauge smooth or stucco stainless steel, white pre-painted smooth or stucco aluminum or galvanized, or .040 mill finish aluminum. Exterior of floor and ceiling panels shall be .040 stucco aluminum or 26 gauge stucco galvanized unless otherwise specified. Interior of floor panels shall be smooth aluminum (standard), 16 gauge stainless steel, treadbrite aluminum or 1/8" treadplate.

Doors:
Each walk-in shall be equipped with one standard 34" x 76" hinged-type, flush mounted entrance door bearing the UL seal of approval. Each door section consists of a heavy reinforced steel "U" channel frame, foamed-in-place to give extra support and rigidity to the frame and to prevent racking, distortion, warping and twisting. Exterior and interior finish of door will match adjoining wall panels unless otherwise specified. Door placement shall be within 1" increments to meet shelving space requirements. Walk-in entrance doors shall be equipped with a one-piece perimeter NSF approved PVC accordion type removable gasket. A magnetic core at top and sides shall provide positive seal. An adjustable wiper gasket shall be mounted along the bottom edge of door. Door frames shall be provided with an incandescent vapor proof light fixture, pilot light and switch assembly, concealed wiring, 2½" diameter chrome plated dial thermometer, heavy gauge reinforced stainless steel threshold and heater wire around the full perimeter.

Standard hardware shall be break-away type with cylinder lock and inside safety release handle so the door can be opened from the inside even if locked. A positive action hydraulic door closer shall be included to ensure gentle closing action of door and ensure a positive seal. Hinges shall be nine-inch modified strap, cam-lift, self-closing with door lift-off capability. Hinges shall be high-pressure zinc die cast with highly polished chrome finish.

Refrigeration:
Refrigeration system shall be top mount or side mount self-contained, or remote.

Remote – All major components shall be for field installation by refrigeration, plumbing, and electrical contractor. Remote components shall include condensing unit, evaporator coil, control kit (pressure control, thermostat, liquid line drier, sight glass, suction line vibration eliminator, expansion valve), and evaporator coil mounting kit. Low temperature units shall include defrost timer, drain line heater, and liquid line solenoid.

Pre-assembled Remote – Shall be of same components as standard remote systems except with all parts factory-mounted. Tubing, electrical hook-up, drain line and refrigerant charge shall be supplied by refrigeration, plumbing and electrical contractors.

Top Mount, Self-Contained – Shall consist of condensing unit, evaporator coil, control kit mounted and weatherhood. System shall have quick-connect fitting and be precharged for fast, easy and economical job-site installation. System shall require only electrical connection and drain line by job-site contractors. Quick-connect line kits up to 25' supplied with system when remote location of condensing unit is required.

Side Mount, Self-Contained – Shall consist of condensing unit, weatherhood, evaporator coil and control kit mounted, wired, plumbed and precharged all factory-mounted on a steel rack frame for mounting over walk-in wall panel.

Self-contained and quick-connect refrigeration systems shall be covered by a one-year parts and labor warranty.

N.S.F. Construction:
Walk-ins and refrigeration systems shall be constructed in accordance with N.S.F. International, Standard No.7. The NSF approval seal shall be affixed to the serial plate of the walk-in.

Specifications are subject to change without notice due to our program of continuous product development.

For a full set of specifications contact factory.

Mid-South Industries, Inc. • Laurel, Mississippi 39440 • 601-649-4600

0509

HEAT TRANSFER PRODUCTS GROUP, LLC
3885 Crestwood Parkway / Suite 500
Duluth, GA 30096
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SUBMITTAL DATA SHEET
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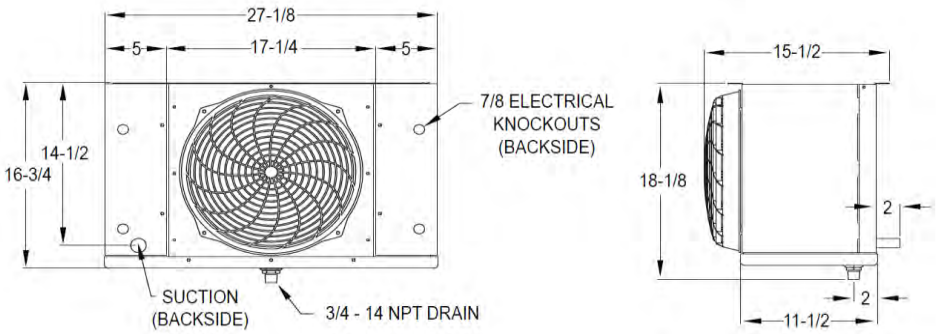
Rev.

Job Name:		**Job Location:**	
Customer Name:		**Order Number:**	
Architect / Engineer:		**Prepared By:**	
Unit Model Number:	RL6A052ADA	**Tagging Info:**	
Unit Quantity:		**Date:**	9/15/2020

Select unit attributes from the drop down menus below to build required model number

Brand	Motor Type	Fins/In	Defrost Type	SST	Refrig.	R-448A AdjustedCapacity (BTUH) @ 10TD	Unit Voltage
Russell	**Dual Speed ECM**	**6**	**Air**	**25**	**448A**	**6000**	**115/1/60**

***clear all fields when starting over ***



Physical Data

Fins/Inch	Refrig. Conn (ODS) Liquid	Refrig. Conn (ODS) Suction	Net Weight	Ship Weight	Number of Fans	Air Throw	CFM	Fan Diameter
6	**3/8**	**5/8**	**-**	**44**	**1**	**25'**	**785**	**12"**

AWEF Cooler
9.00

Electrical Data

Motor Voltage	Total Motor Amp	Motor Circuit MCA	Motor Circuit MOPD	Heater Voltage	Heater Amps	Heater Watts
115/1/60	**0.8**	**15**	**20**	**-**	**-**	**-**

Options (Select catalog options from drop down menu.)

Additional Requirements

Russell	**HEAT TRANSFER PRODUCTS GROUP, LLC** 3885 Crestwood Parkway / Suite 500 Duluth, GA 30096 (P) 800-288-9488 / (F) 256-259-7478 https://www.htpg.com/	**SUBMITTAL DATA SHEET** **Next-Gen Mini-Con** **Air Cooled Condensing Unit** ☐ **For Record Only** ☐ **For Approval**

Job Name:		**Job Location:**	
Customer Name:		**Order Number:**	
Architect / Engineer:		**Prepared By:**	
Unit Model Number:	RFO060M4SDA	**Tagging Info:**	
Unit Quantity:		**Date:**	9/15/20

Select unit attributes from the drop down menus below to build required model number

Brand	Model Style	Compr.	Temp Range	HP	Refr.	Voltage
Russell	Flooded	Scroll	Medium	060 - 1/2HP	448A	208-230/1/60

clear all fields when starting over

Ambient	Capacity Data by Outdoor Ambient and Dew Point Saturated Suction Temperatrue (ºF) for 448A												
Temp ºF	**45**	**40**	**35**	**30**	**25**	**20**	**15**	**10**	**5**	**0**	**-5**	**-10**	**-20**
90	10450	9470	8490	7620	6830	6090	5488	4885	4283	3680	-	-	0
95	10080	9135	8190	7350	6580	5860	5270	4680	4090	3500	-	-	0
100	-	-	7880	7070	6320	5630	5050	4470	3890	3310	-	-	0
110	-	-	7260	6500	5800	5140	4583	4025	3468	2910	-	-	0

Notes:

All capacities are calculated at 65ºF return gas temperature and dew point values.

Electrical Data for RFO060M4SDA (208-230/1/60)

Compressor Data					Condenser Fan Data	
Model	**Qnty**	**HP**	**RLA**	**LRA**	**FLA**	**Qty.**
RFO060M4SDA	1	0.6	5.4	36	0.5	1

Compressor & Cond. Data				Receiver	Approximate Dimensions & Weight				
Model	**Comp.**	**Liquid Connection**	**Suction Connection**	**@ 90%**	**Height**	**Width**	**Length**	**Weight**	**AWEF**
RFO060M4SDA	ZB06KAE	3/8	5/8	6.1	28-1/4	27-7/8	18-3/4	195	7.60

Defrost Type - Input	Electrical Data - No Defrost Provisions				
Defrost Option	**MCA**	**MOPD**	**MAX DEFROST AMPS†**	**MAX EVAP FAN AMPS †**	**STANDARD ED KIT**
No Defrost Provisions	15	15	-	-	-

† Note: Maximum Evap. fan amps and maximum defrost amps are shown to provide ratings when electric defrost is required and is an optional feature. Maximum Amp value used to determine MOPD. Exceeding these values invalidates the listed MOPD and requires a revised calculation. Contact Application Engineering when amp draw requirements deviate from the chart values.

Options (Select catalog options from drop down menu.)

Refrigeration/Mechanical Options	**Refrigeration/Mechanical Options**

Additional Requirements

Russell

SUBMITTAL DATA SHEET

☐ For Record Only

☐ For Approval

Job Name:		**Job Location:**	
Customer Name:		**Order Number:**	
Architect / Engineer:		**Prepared By:**	
Unit Model Number:	RFO060M4SDA	**Tagging Info:**	
Unit Quantity:		**Date:**	9/15/20

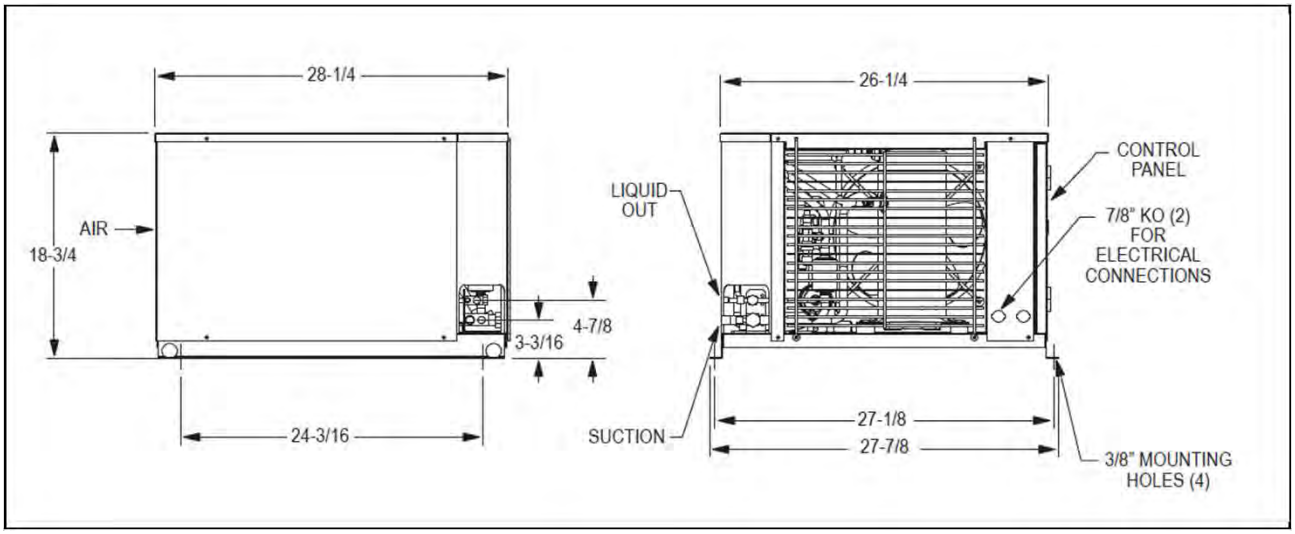
Notes

Standard Features

- Hermetic or Scroll Compressors
- All-weather - Galvanized steel painted housing
- Generously sized high efficiency condenser, enhanced copper tubes/aluminum fins
- Integral Liquid Subcooling Circuit provides subcooled liquid to the expansion device
- Base mounted shut-off valves placed external to cabinet for easy access
- Liquid line kit with filter/drier and sight glass with moisture indicator
- Suction line piping
- Larger electrical panel with hinged/removable door
- Color coded point-to-point wiring
- Crankcase heater
- Refrigerant receiver with isolation valve and pressure relief plug
- "A" Vintage Units feature PSC Motors, "B" Vintage Units feature High Efficiency Motors
- Encapsulated high pressure (auto reset) and low pressure (auto reset) controls (adjustable low pressure control is standard on low temperature models)
- Electronic defrost timer with defrost contactor/ relay on low temperature standard models (2 evaps. maximum)
- Electronic air defrost timer (Medium temperature standard models only)
- UL and cUL listed for outdoor use

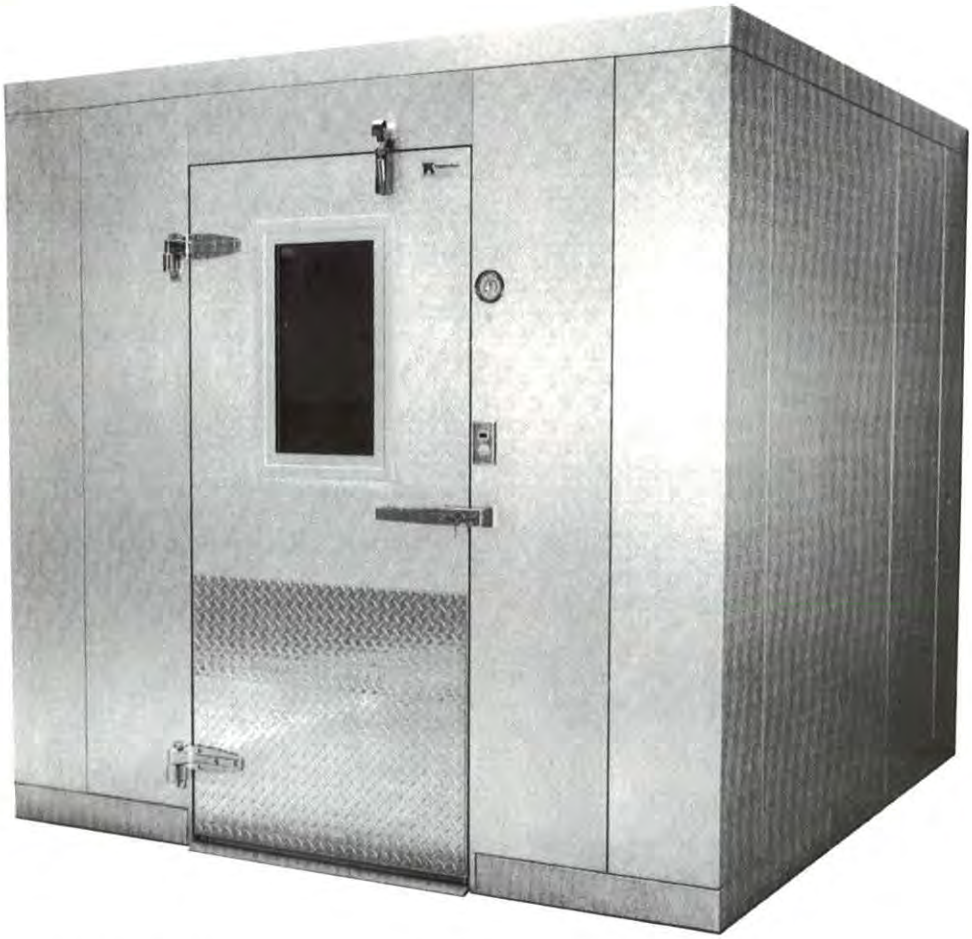
Flooded models include flooded head pressure control as a standard feature.

Non-flooded models include mild ambient fan cycle control as a standard feature.



Walk-In Refrigeration

Thermo-Kool®

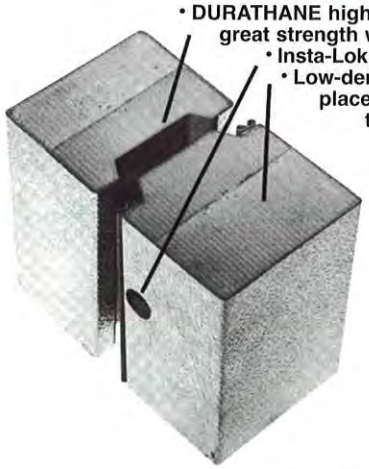


- Exclusive DURATHANE 100% urethane tongue and groove construction – a major advance in walk-in refrigeration.
- Four- and five-inch urethane zero ozone depleting foamed-in-place insulation.
- Durable high-density urethane panel perimeter – no pre-installation damage.
- No exposed low-density urethane surfaces – no deterioration during pre-installation panel storage.
- No need for non-insulating internal metal straps or rods.
- Lightweight panels with added strength.
- Fast, easy assembly – Insta-Lok positive camlock device with exclusive self-centering pin-strike assembly – instant panel alignment.
- Easy to relocate or enlarge.
- Prefabricated panels within 1" increments up to 46" wide and 1' x 1' corners. Door, partition and height within 1" increments to meet space requirements.
- Complete design flexibility – custom sizes and configurations available upon request.
- Standard stucco aluminum finish – optional finishes of smooth aluminum, white pre-painted aluminum, stainless steel, or galvanized steel.
- Standard floor panels of smooth aluminum – made to withstand uniformly distributed loads up to 600 lbs. per sq. ft. – optional 16-gauge stainless steel, treadbrite aluminum or 1/8" aluminum treadplate. For additional floor strength THERMO-KOOL DURA-FLOOR heavy-duty structural support floor has the capability to withstand up to 12,000 lbs. per sq. ft. stationary floor load. Vinyl "U" channel screeds for floorless applications – optional foamed screeds or 2" vinyl screeds.
- Choice of remote, remote pre-assembled, top mount quick connect and remote quick connect refrigeration systems sized to any requirement.
- Choice of top or side mounted packaged refrigeration systems or remote refrigeration units.
- A heavy reinforced steel "U" channel frame is foamed-in-place to give extra support and rigidity to the frame and to prevent racking, distortion, warping and twisting of the door section.
- Meets requirements for Energy Independence and Security Act of 2007 and California Code of Regulations.

DURATHANE CONSTRUCTION

(A New Concept in Walk-In Design)
Thermo-Kool® Walk-Ins feature DURATHANE construction – an all-urethane design with high-density urethane structural members to provide extreme strength and rigidity in prefabricated panels, without loss of insulation value.

While most customers' requirements can be met by a walk-in patterned on standard sizes and configuration, custom-designed sizes and layouts can be figured to meet unusual space demands. Standard sizes are those which can be built up from industry standard 46", 34½", 23", and 11½" width panels with 12" x 12" 90° corners.



• DURATHANE high-density frame combines great strength with high insulation value
• Insta-Lok panel locks speed set-up
• Low-density urethane foamed-in-place bonds to metal pans—is twice as efficient as other insulation materials.

CLASSIFIED UL®

NSF®

Distributed by:

Architectural Specifications

Thermo-Kool®

General:

Walk-in coolers and freezers shall be THERMO-KOOL prefabricated, modular construction. They shall be designed and constructed to allow fast, easy field assembly, disassembly, relocation and enlargement by the addition of like modular panels.

Standard wall, ceiling, and floor panels shall be fabricated in 46", 34½", 23", and 11½" widths. Corner panels shall be 90° angle, 12" x 12". All panels shall be interchangeable with like panels. Partition panel placement shall be within 1" increments to meet shelving space requirements.

Panel Construction:

All panels shall consist of metal pans formed to precise dimensions. Metal finish to be as specified. Insulation shall be "foamed-in-place" urethane foam bonded permanently to the complete inner surfaces of both interior and exterior metal pans to form a strong rigid unit. Panels shall not have internal wood or metal support, framing, straps, or other non-insulating members. Each panel shall be 100% urethane foam insulation exclusive of metal pans. Perimeter structure shall be formed of DURATHANE, high-density urethane insulation forming tongues and grooves to assure vapor proof and airtight joints and to prevent pre-installation damage and deterioration of low-density urethane.

NSF-approved double-bead vinyl gasketing shall be applied to the tongue side of all panels on both interior and exterior. Gaskets shall be impervious to stains, grease, oils, mildew, etc.

Assembly of the walk-in shall be accomplished by "Insta-Loks" consisting of a cam-action hook-arm assembly set in one panel and a self-aligning, self-centering pin assembly set in the matching panel. Rotation of the cam-action hook-arm shall pull and lock panels together to form airtight, vapor proof joints. No metal straps or connection rods shall be used inside the panels. Rotation of the cam-locks shall be operated from inside the walk-in through access ports that are sealed with vinyl snap-in closures. The hexagonal wrench which activates the camlocks shall be furnished with each walk-in.

Floor panels shall be similar in construction to other panels and shall be designed to withstand uniformly distributed stationary loads of 600 lbs. per square foot. The DURA-FLOOR heavy duty structural floor support is available for added strength to the floor when required. The DURA-FLOOR has the capability to withstand up to 12,000 lbs. per sq. ft. uniformly distributed stationary floor load as tested in accordance with the ASTM Standard Designation specifications. Vinyl "U" channel screeds shall be provided for floorless installations. Screeds shall be coved on interior and exterior side and designed to sit flat on the floor for attachment by means of nailing or lag-bolting through the center of the screeds. Wall panels shall lock to screeds on 23" centers. (4¼" x 4" foam screeds and 2" vinyl Thermo-Screeds available when required or specified). Walk-in panels shall be covered by a ten-year warranty.

Insulation:

Insulation shall be 4" or 5" thick rigid, zero ozone depleting HFC 134a blown Class I urethane foam classified according to UL 723 (ASTM-E-84) as tested by Underwriters Laboratories, Inc. The core material has a flame spread of 25 or less and a smoke density of 250.

The urethane foam is foamed-in-place to bond to inner surfaces of metal pans having an average thermal conductivity (K factor) of 0.13 BTU/hr./sq. ft. per degrees/Fahrenheit/inch. As tested in accordance with ASTM C 518-2004, the R factor for coolers at temperatures of 55° F is greater than 29.0 for 4" thick and greater than 36.0 for 5" thick panels; for freezers at temperatures of 20° F the R factor is greater than 32.0 for 4" thick and greater than 40.0 for 5" thick panels.

The prefabricated urethane foamed panels shall be supplied with a Class I fire hazard classification according to UL 723 (ASTM-E-84) as tested by Underwriters Laboratories, Inc. Panels shall have a flame spread rating of 25 or less and bear a certifying Underwriters Laboratories, Inc. label.

This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.

Finishes:

Interior and exterior finishes are available in .040 stucco aluminum (standard), 26 gauge stucco galvanized steel, 22 gauge smooth galvanized steel, 20 gauge smooth or stucco stainless steel, white pre-painted smooth or stucco aluminum or galvanized, or .040 mill finish aluminum. Exterior of floor and ceiling panels shall be .040 stucco aluminum or 26 gauge stucco galvanized unless otherwise specified. Interior of floor panels shall be smooth aluminum (standard), 16 gauge stainless steel, treadbrite aluminum or 1/8" treadplate.

Doors:

Each walk-in shall be equipped with one standard 34" x 76" hinged-type, flush mounted entrance door bearing the UL seal of approval. Each door section consists of a heavy reinforced steel "U" channel frame, foamed-in-place to give extra support and rigidity to the frame and to prevent racking, distortion, warping and twisting. Exterior and interior finish of door will match adjoining wall panels unless otherwise specified. Door placement shall be within 1" increments to meet shelving space requirements. Walk-in entrance doors shall be equipped with a one-piece perimeter NSF approved PVC accordion type removable gasket. A magnetic core at top and sides shall provide positive seal. An adjustable wiper gasket shall be mounted along the bottom edge of door. Door frames shall be provided with an incandescent vapor proof light fixture, pilot light and switch assembly, concealed wiring, 2½" diameter chrome plated dial thermometer, heavy gauge reinforced stainless steel threshold and heater wire around the full perimeter.

Standard hardware shall be break-away type with cylinder lock and inside safety release handle so the door can be opened from the inside even if locked. A positive action hydraulic door closer shall be included to ensure gentle closing action of door and ensure a positive seal. Hinges shall be nine-inch modified strap, cam-lift, self-closing with door lift-off capability. Hinges shall be high-pressure zinc die cast with highly polished chrome finish.

Refrigeration:

Refrigeration system shall be top mount or side mount self-contained, or remote.

Remote – All major components shall be for field installation by refrigeration, plumbing, and electrical contractor. Remote components shall include condensing unit, evaporator coil, control kit (pressure control, thermostat, liquid line drier, sight glass, suction line vibration eliminator, expansion valve), and evaporator coil mounting kit. Low temperature units shall include defrost timer, drain line heater, and liquid line solenoid.

Pre-assembled Remote – Shall be of same components as standard remote systems except with all parts factory-mounted. Tubing, electrical hook-up, drain line and refrigerant charge shall be supplied by refrigeration, plumbing and electrical contractors.

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Side Mount, Self-Contained – Shall consist of condensing unit, weatherhood, evaporator coil and control kit mounted, wired, plumbed and precharged all factory-mounted on a steel rack frame for mounting over walk-in wall panel.

Self-contained and quick-connect refrigeration systems shall be covered by a one-year parts and labor warranty.

N.S.F. Construction:

Walk-ins and refrigeration systems shall be constructed in accordance with N.S.F. International, Standard No.7. The NSF approval seal shall be affixed to the serial plate of the walk-in.

Specifications are subject to change without notice due to our program of continuous product development.

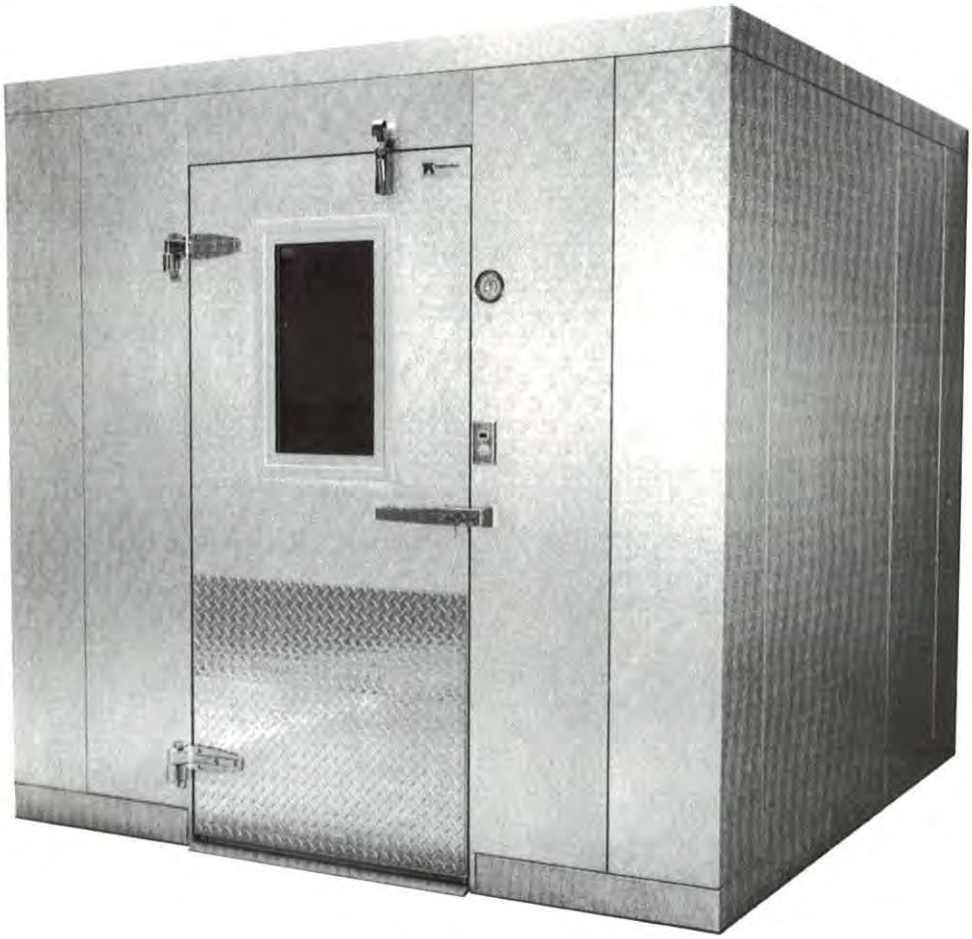
For a full set of specifications contact factory.

Mid-South Industries, Inc. • Laurel, Mississippi 39440 • 601-649-4600

0509

Walk-In Refrigeration

Thermo-Kool®



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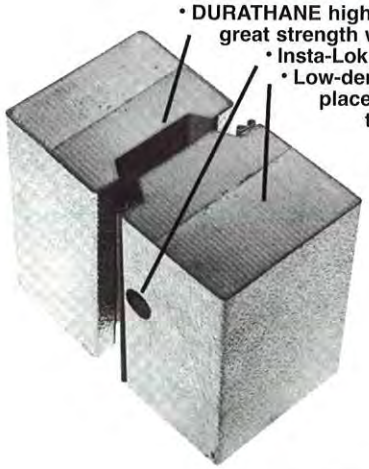

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Top Mount, Self-Contained – Shall consist of condensing unit, evaporator coil, control kit mounted and weatherhood. System shall have quick-connect fitting and be precharged for fast, easy and economical job-site installation. System shall require only electrical connection and drain line by job-site contractors. Quick-connect line kits up to 25' supplied with system when remote location of condensing unit is required.

Side Mount, Self-Contained – Shall consist of condensing unit, weatherhood, evaporator coil and control kit mounted, wired, plumbed and precharged all factory-mounted on a steel rack frame for mounting over walk-in wall panel.

Self-contained and quick-connect refrigeration systems shall be covered by a one-year parts and labor warranty.

N.S.F. Construction:

Walk-ins and refrigeration systems shall be constructed in accordance with N.S.F. International, Standard No.7. The NSF approval seal shall be affixed to the serial plate of the walk-in.

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Mid-South Industries, Inc. • Laurel, Mississippi 39440 • 601-649-4600

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Russell	**HEAT TRANSFER PRODUCTS GROUP, LLC** 3885 Crestwood Parkway / Suite 500 Duluth, GA 30096 (P) 800-288-9488 / (F) 256-259-7478 https://www.htpg.com/	**SUBMITTAL DATA SHEET** **Next-Gen Mini-Con** **Air Cooled Condensing Unit** ☐ **For Record Only** ☐ **For Approval**

Job Name:		**Job Location:**	
Customer Name:		**Order Number:**	
Architect / Engineer:		**Prepared By:**	
Unit Model Number:	RFO080M4SDA	**Tagging Info:**	
Unit Quantity:		**Date:**	9/15/20

Select unit attributes from the drop down menus below to build required model number

Brand	Model Style	Compr.	Temp Range	HP	Refr.	Voltage
Russell	Flooded	Scroll	Medium	080 - 3/4 HP	448A	208-230/1/60

clear all fields when starting over

Ambient	Capacity Data by Outdoor Ambient and Dew Point Saturated Suction Temperatrue (ºF) for 448A												
Temp ºF	**45**	**40**	**35**	**30**	**25**	**20**	**15**	**10**	**5**	**0**	**-5**	**-10**	**-20**
90	12750	11555	10360	9300	8330	7430	6695	5960	5225	4490	-	-	0
95	12300	11145	9990	8960	8020	7150	6430	5710	4990	4270	-	-	0
100	-	-	9620	8630	7710	6870	6163	5455	4748	4040	-	-	0
110	-	-	8860	7930	7070	6270	5590	4910	4230	3550	-	-	0

Notes:

All capacities are calculated at 65ºF return gas temperature and dew point values.

Electrical Data for RFO080M4SDA (208-230/1/60)

Compressor Data					Condenser Fan Data	
Model	**Qnty**	**HP**	**RLA**	**LRA**	**FLA**	**Qty.**
RFO080M4SDA	1	0.8	5.9	48.9	0.5	1

Compressor & Cond. Data				Receiver	Approximate Dimensions & Weight				
Model	**Comp.**	**Liquid Connection**	**Suction Connection**	**@ 90%**	**Height**	**Width**	**Length**	**Weight**	**AWEF**
RFO080M4SDA	ZB07KAE	3/8	5/8	6.1	28-1/4	27-7/8	18-3/4	195	7.60

Defrost Type - Input	Electrical Data - No Defrost Provisions				
Defrost Option	**MCA**	**MOPD**	**MAX DEFROST AMPS†**	**MAX EVAP FAN AMPS †**	**STANDARD ED KIT**
No Defrost Provisions	15	15	-	-	-

† Note: Maximum Evap. fan amps and maximum defrost amps are shown to provide ratings when electric defrost is required and is an optional feature. Maximum Amp value used to determine MOPD. Exceeding these values invalidates the listed MOPD and requires a revised calculation. Contact Application Engineering when amp draw requirements deviate from the chart values.

Options (Select catalog options from drop down menu.)

Refrigeration/Mechanical Options	**Refrigeration/Mechanical Options**

Additional Requirements

Russell

SUBMITTAL DATA SHEET

☐ For Record Only

☐ For Approval

Job Name:		**Job Location:**	
Customer Name:		**Order Number:**	
Architect / Engineer:		**Prepared By:**	
Unit Model Number:	RFO080M4SDA	**Tagging Info:**	
Unit Quantity:		**Date:**	9/15/20

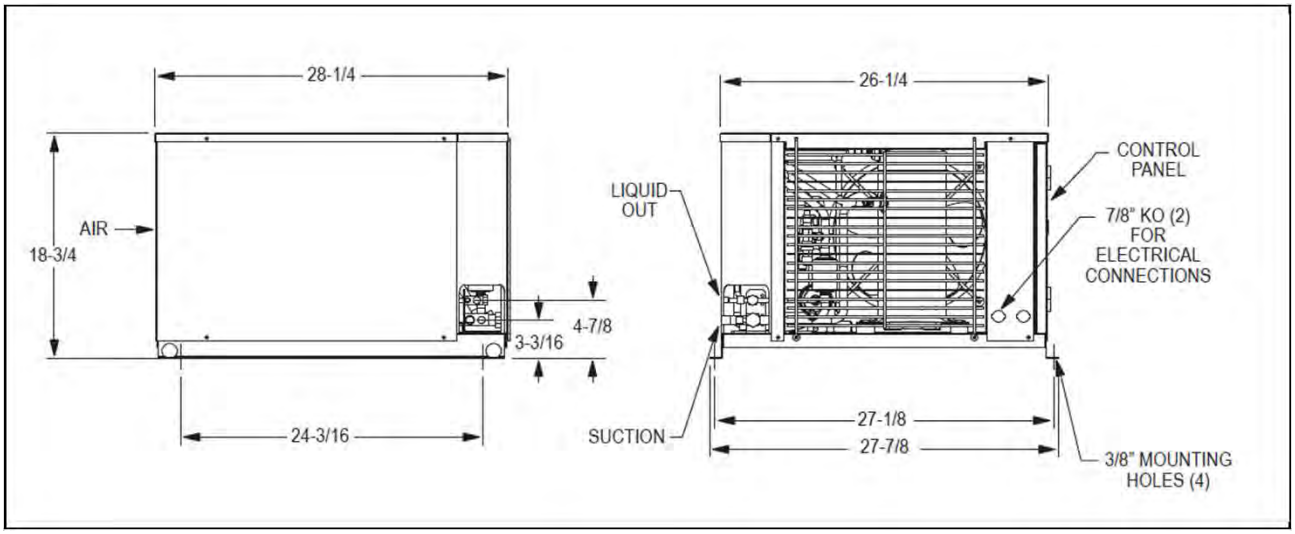
Notes

Standard Features

- Hermetic or Scroll Compressors
- All-weather - Galvanized steel painted housing
- Generously sized high efficiency condenser, enhanced copper tubes/aluminum fins
- Integral Liquid Subcooling Circuit provides subcooled liquid to the expansion device
- Base mounted shut-off valves placed external to cabinet for easy access
- Liquid line kit with filter/drier and sight glass with moisture indicator
- Suction line piping
- Larger electrical panel with hinged/removable door
- Color coded point-to-point wiring
- Crankcase heater
- Refrigerant receiver with isolation valve and pressure relief plug
- "A" Vintage Units feature PSC Motors, "B" Vintage Units feature High Efficiency Motors
- Encapsulated high pressure (auto reset) and low pressure (auto reset) controls (adjustable low pressure control is standard on low temperature models)
- Electronic defrost timer with defrost contactor/ relay on low temperature standard models (2 evaps. maximum)
- Electronic air defrost timer (Medium temperature standard models only)
- UL and cUL listed for outdoor use

Flooded models include flooded head pressure control as a standard feature.

Non-flooded models include mild ambient fan cycle control as a standard feature.



METRO®

We put space to work.®

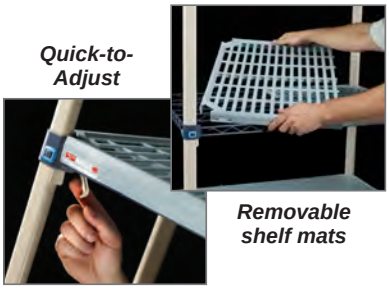
Item # _____

Job _____

MetroMax Q® Polymer / Wire Shelving

Quick-to-adjust, corrosion resistant shelving constructed of removable polymer open grid shelf mats, wire shelf frames, and corner releases. Shelf frames and steel posts have an epoxy coating over an electroplated substrate. Shelves offer a 20 year warranty against rust and corrosion. Polymer posts are rust proof. Microban® antimicrobial product protection is built into the shelf mats and posts. Shelf has a rigid four-sided frame with center truss(es). Robust corner provides complete 360° capture of the wedge and post for added stability. Stationary units have maximum capacity of 2,000 lbs. (907kg) evenly distributed. Mobile units (with stem casters) offer a maximum total unit load of 900 lbs. (408kg). Units assemble easily — shelves mount on four one-piece wedges along grooved, numbered posts and adjust on 1" (25mm) increments.

- **Forever Strong:** Proven corner connection and four-sided shelf frame with center truss(es) assures stability and strength in stationary, mobile, and high-density track shelving configurations.
  800 lbs. (363kg) per shelf for lengths of 24" to 48" (610 to 1219mm)
  600 lbs. (272kg) per shelf for lengths of 54" (1372mm) or longer
  Stationary unit: 2000lbs (907kg) evenly distributed.
  Mobile unit (with stem casters): Up to 900lbs. (408kg).
  Multiply the caster load rating by 3 to determine actual rating.
- **Long life Rust Resistance:** Shelves offer a 20 year limited corrosion warranty and are combined with rust proof polymer posts.
- **Easy to Clean and Maintain:** Polymer mats can be easily removed and cleaned in a sink or commercial washer / dish machine.
- **Microban® Antimicrobial Product Protection** is built into the shelf mats and posts to inhibit the growth of bacteria, mold, mildew, and fungus that cause odors and product degradation. Microban product protection keeps the product "cleaner between cleanings".
- **Quick-to-Adjust:** Patented corner release allows shelves to be adjusted without tools. Simply flip each corner release, relocate the wedge connectors on the posts, and reposition the shelf. Quickly adjust shelves to reclaim wasted vertical space.
- **Efficient Use of Space:** Shelves adjust on 1" (25mm) increments along the post to maximize the use of available vertical space.
- **Fast, Easy Assembly:** Shelves are ready to use right out of the box. One-piece wedges securely attach to the posts — Raised beads on the back of each wedge snap into the grooves on the post. Window on wedge aligns with numbers on the post to locate the desired shelf position. Shelf mounts on four wedges, A unit can be assembled without tools in minutes.
- **Interchangeable:** Part of the MetroMax platform, MetroMax Q shelves are compatible on the same shelving units with MetroMax i and MetroMax 4 shelves.
- **Open Grid and Solid Mat Options:** MetroMax Q is available with open grid mats. Open grid shelves promote air circulation and light penetration. For 21" (530mm) deep MetroMax Q, solid mat overlays are available. For 18" and 24" (457 and 610mm) depths, MetroMax i or MetroMax 4 solid shelves may be added when solid shelves are required.
- **NSF Listed** for all environments.
- **Optional Accessories** are on spec sheet 9.25.



Quick-to-Adjust

Removable shelf mats

*MICROBAN® and the MICROBAN® symbol are registered trademarks of the Microban® Products Company, Huntersville, NC. Microban® product protection does not by itself protect a user from food borne illness. Product must be routinely cleaned.

All Metro Catalog Sheets are available on our website: **www.metro.com**

PROTECTION THAT LIVES ON MICROBAN NSF CLEAN DESIGN Supports good HACCP processes

METRO®

InterMetro Industries Corporation
North Washington Street, Wilkes-Barre, PA 18705

Product Information. U.S. and Canada: 1.800.992.1776
Outside U.S. and Canada: www.metro.com/contactus

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Information and specifications are subject to change without notice. Please confirm at time of order.

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Job _____

MetroMax Q®
POLYMER / WIRE SHELVING

We put space to work.

Standard Interchangeable Shelves

Part number includes shelf with removable mats and one bag of wedges

Shelf with Grid Mat Model No.	Nominal Size Width (in.)	Nominal Size Width (mm)	Nominal Size Length (in.)	Nominal Size Length (mm)	Actual Size Width (in.)	Actual Size Width (mm)	Actual Size Length (in.)	Actual Size Length (mm)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
MQ1824G	18	457	24	610	18 3/8	467	23 13/16	605	6.2	2.8
MQ1830G	18	457	30	762	18 3/8	467	29 13/16	757	8.0	3.6
MQ1836G	18	457	36	914	18 3/8	467	35 13/16	910	9.7	4.4
MQ1842G	18	457	42	1067	18 3/8	467	41 13/16	1062	11.4	5.2
MQ1848G	18	457	48	1219	18 3/8	467	47 13/16	1215	13.2	6.0
MQ1854G	18	457	54	1372	18 3/8	467	53 13/16	1367	15.0	6.8
MQ1860G	18	457	60	1524	18 3/8	467	59 13/16	1519	16.7	7.6
MQ1872G	18	457	72	1829	18 3/8	467	71 13/16	1824	20.0	9.1
MQ2124G	21	530	24	610	21 3/8	543	23 13/16	605	8.0	3.6
MQ2130G	21	530	30	762	21 3/8	543	29 13/16	757	9.7	4.4
MQ2136G	21	530	36	914	21 3/8	543	35 13/16	910	11.4	5.2
MQ2142G	21	530	42	1067	21 3/8	543	41 13/16	1062	12.8	5.8
MQ2148G	21	530	48	1219	21 3/8	543	47 13/16	1215	14.5	6.6
MQ2154G	21	530	54	1372	21 3/8	543	53 13/16	1367	16.7	7.6
MQ2160G	21	530	60	1524	21 3/8	543	59 13/16	1519	18.5	8.4
MQ2172G	21	530	72	1829	21 3/8	543	71 13/16	1824	21.7	9.9
MQ2424G	24	610	24	610	24 3/8	619	23 13/16	605	9.7	4.4
MQ2430G	24	610	30	762	24 3/8	619	29 13/16	757	11.4	5.2
MQ2436G	24	610	36	914	24 3/8	619	35 13/16	910	13.1	6.0
MQ2442G	24	610	42	1067	24 3/8	619	41 13/16	1062	14.1	6.4
MQ2448G	24	610	48	1219	24 3/8	619	47 13/16	1215	15.8	7.1
MQ2454G	24	610	54	1372	24 3/8	619	53 13/16	1367	18.5	8.4
MQ2460G	24	610	60	1524	24 3/8	619	59 13/16	1519	20.3	9.2
MQ2472G	24	610	72	1829	24 3/8	619	71 13/16	1824	23.5	10.7

Heavy-Duty Dunnage Shelves

- Weight capacity per shelf evenly distributed: 1,200 lbs. (544kg) on shelves up to and including 48" (1219mm) long; 900 lbs. (408kg) for shelves 54" (1370mm) and longer.
- Dunnage shelves are recommended for use on units with four posts, not on an add-on unit with two posts.

Grid Mat Model No.	Nominal Width (in.)	Nominal Width (mm)	Nominal Length (in.)	Nominal Length (mm)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
MHP2436G	24	610	36	914	21	9.5
MHP2448G	24	610	48	1220	27	12.2
MHP2454G	24	610	54	1370	29	13.2
MHP2460G	24	610	60	1524	33	15.0

Material Specifications:

- **Shelf Mats:** Injection-molded polypropylene with exclusive built-in Microban® antimicrobial product protection.
- **Shelf frames:** Steel with electroplated substrate and highly durable, abrasion-resistant epoxy finish.
- **Epoxy-coated posts:** Steel with electroplated substrate and highly durable, abrasion-resistant epoxy finish. Epoxy finish has built-in Microban antimicrobial product protection. The adjustable foot is reinforced nylon.
- **Temperature range:** -20°F (-29°C) to 125°F (52°C) continuous use, with intermittent exposure to 200°F (93°C) for cleaning. Visit metro.com/service-support for cleaning guidelines.

Rust Proof Polymer Posts - Lifetime warranty against rust.

Stationary - with leveling foot

Epoxy-Coated Steel Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)	Nominal Height (in.)	Nominal Height (mm)	Actual Height (in.)	Actual Height (mm)
MX13P	0.5	0.2	13	370	14 3/16	360
MX27P	0.9	0.4	27	685	28 3/16	716
MX33P	1.0	0.5	33	875	34 3/16	868
MX54P	1.6	0.7	54	1370	54 3/16	1376
MX63P	1.8	0.8	63	1585	62 3/16	1580
MX74P	2.3	1.0	74	1690	74 3/16	1884
MX86P	2.5	1.4	86	2195	86 3/16	2189

Mobile - for stem casters

Polymer Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)	Nominal Height (in.)	Nominal Height (mm)	Actual Height (in.)	Actual Height (mm)
MX13UP	0.5	0.2	13	370	14 3/16	360
MX27PE	2.0	0.9	27	685	28 3/16	716
MX33UP	1.0	0.5	33	875	34 3/16	868
MX54UP	1.6	0.7	54	1370	54 3/16	1376
MX63UP	1.8	0.8	63	1585	62 3/16	1580
MX70UP	2.0	0.9	70	1778	69 3/16	1757
MX74UP	2.3	1.0	74	1690	74 3/16	1884
MX86UP	3.0	1.4	86	2195	86 3/16	2189

Polymer post

Stationary Mobile

Shelf Wedge Connector: Reinforced nylon. Replacement MetroMax Q Wedges Cat. No. MQ9985 (Bag of 4)

Epoxy Coated Steel Posts - For heavy-duty mobile applications. 15 year limited rust warranty.

Stationary - with leveling foot

Polymer Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)	Nominal Height (in.)	Nominal Height (mm)	Actual Height (in.)	Actual Height (mm)
MQ13PE	1.0	0.5	13	370	14 3/16	360
MQ27PE	2.0	0.9	27	685	28 3/16	716
MQ33PE	2.5	1.1	33	875	34 3/16	868
MQ54PE	4.0	1.8	54	1370	54 3/16	1376
MQ63PE	4.5	2.0	63	1585	62 3/16	1580
MQ74PE	5.5	2.5	74	1690	74 3/16	1884
MQ86PE	6.5	2.9	86	2195	86 3/16	2189

Mobile - for stem casters

Epoxy-Coated Steel Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)	Nominal Height (in.)	Nominal Height (mm)	Actual Height (in.)	Actual Height (mm)
MQ13UPE	1.0	0.5	13	370	14 3/16	360
MQ27UPE	2.0	0.9	27	685	28 3/16	716
MQ33UPE	2.5	1.1	33	875	34 3/16	868
MQ54UPE	4.0	1.8	54	1370	54 3/16	1376
MQ63UPE	4.5	2.0	63	1585	62 3/16	1580
MQ70UPE	2.0	0.9	70	1778	69 3/16	1757
MQ74UPE	5.5	2.5	74	1690	74 3/16	1884
MQ86UPE	6.5	2.9	86	2195	86 3/16	2189

Epoxy-coated steel post

Stationary Mobile

METRO®

We put space to work.®

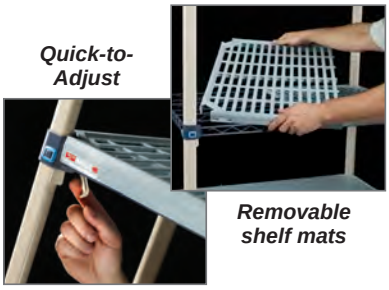
Item # _____

Job _____

MetroMax Q® Polymer / Wire Shelving

Quick-to-adjust, corrosion resistant shelving constructed of removable polymer open grid shelf mats, wire shelf frames, and corner releases. Shelf frames and steel posts have an epoxy coating over an electroplated substrate. Shelves offer a 20 year warranty against rust and corrosion. Polymer posts are rust proof. Microban® antimicrobial product protection is built into the shelf mats and posts. Shelf has a rigid four-sided frame with center truss(es). Robust corner provides complete 360° capture of the wedge and post for added stability. Stationary units have maximum capacity of 2,000 lbs. (907kg) evenly distributed. Mobile units (with stem casters) offer a maximum total unit load of 900 lbs. (408kg). Units assemble easily — shelves mount on four one-piece wedges along grooved, numbered posts and adjust on 1" (25mm) increments.

- **Forever Strong:** Proven corner connection and four-sided shelf frame with center truss(es) assures stability and strength in stationary, mobile, and high-density track shelving configurations.
  800 lbs. (363kg) per shelf for lengths of 24" to 48" (610 to 1219mm)
  600 lbs. (272kg) per shelf for lengths of 54" (1372mm) or longer
  Stationary unit: 2000lbs (907kg) evenly distributed.
  Mobile unit (with stem casters): Up to 900lbs. (408kg).
  Multiply the caster load rating by 3 to determine actual rating.
- **Long life Rust Resistance:** Shelves offer a 20 year limited corrosion warranty and are combined with rust proof polymer posts.
- **Easy to Clean and Maintain:** Polymer mats can be easily removed and cleaned in a sink or commercial washer / dish machine.
- **Microban® Antimicrobial Product Protection** is built into the shelf mats and posts to inhibit the growth of bacteria, mold, mildew, and fungus that cause odors and product degradation. Microban product protection keeps the product "cleaner between cleanings".
- **Quick-to-Adjust:** Patented corner release allows shelves to be adjusted without tools. Simply flip each corner release, relocate the wedge connectors on the posts, and reposition the shelf. Quickly adjust shelves to reclaim wasted vertical space.
- **Efficient Use of Space:** Shelves adjust on 1" (25mm) increments along the post to maximize the use of available vertical space.
- **Fast, Easy Assembly:** Shelves are ready to use right out of the box. One-piece wedges securely attach to the posts — Raised beads on the back of each wedge snap into the grooves on the post. Window on wedge aligns with numbers on the post to locate the desired shelf position. Shelf mounts on four wedges, A unit can be assembled without tools in minutes.
- **Interchangeable:** Part of the MetroMax platform, MetroMax Q shelves are compatible on the same shelving units with MetroMax i and MetroMax 4 shelves.
- **Open Grid and Solid Mat Options:** MetroMax Q is available with open grid mats. Open grid shelves promote air circulation and light penetration. For 21" (530mm) deep MetroMax Q, solid mat overlays are available. For 18" and 24" (457 and 610mm) depths, MetroMax i or MetroMax 4 solid shelves may be added when solid shelves are required.
- **NSF Listed** for all environments.
- **Optional Accessories** are on spec sheet 9.25.



Quick-to-Adjust

Removable shelf mats

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All Metro Catalog Sheets are available on our website: **www.metro.com**

Supports good HACCP processes

METRO®

InterMetro Industries Corporation
North Washington Street, Wilkes-Barre, PA 18705

Product Information. U.S. and Canada: 1.800.992.1776
Outside U.S. and Canada: www.metro.com/contactus

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Job _____

MetroMax Q®
POLYMER / WIRE SHELVING

We put space to work.

Standard Interchangeable Shelves

Part number includes shelf with removable mats and one bag of wedges

Shelf with Grid Mat Model No.	Nominal Size Width (in.)	Nominal Size Width (mm)	Nominal Size Length (in.)	Nominal Size Length (mm)	Actual Size Width (in.)	Actual Size Width (mm)	Actual Size Length (in.)	Actual Size Length (mm)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
MQ1824G	18	457	24	610	18 3/8	467	23 13/16	605	6.2	2.8
MQ1830G	18	457	30	762	18 3/8	467	29 13/16	757	8.0	3.6
MQ1836G	18	457	36	914	18 3/8	467	35 13/16	910	9.7	4.4
MQ1842G	18	457	42	1067	18 3/8	467	41 13/16	1062	11.4	5.2
MQ1848G	18	457	48	1219	18 3/8	467	47 13/16	1215	13.2	6.0
MQ1854G	18	457	54	1372	18 3/8	467	53 13/16	1367	15.0	6.8
MQ1860G	18	457	60	1524	18 3/8	467	59 13/16	1519	16.7	7.6
MQ1872G	18	457	72	1829	18 3/8	467	71 13/16	1824	20.0	9.1
MQ2124G	21	530	24	610	21 3/8	543	23 13/16	605	8.0	3.6
MQ2130G	21	530	30	762	21 3/8	543	29 13/16	757	9.7	4.4
MQ2136G	21	530	36	914	21 3/8	543	35 13/16	910	11.4	5.2
MQ2142G	21	530	42	1067	21 3/8	543	41 13/16	1062	12.8	5.8
MQ2148G	21	530	48	1219	21 3/8	543	47 13/16	1215	14.5	6.6
MQ2154G	21	530	54	1372	21 3/8	543	53 13/16	1367	16.7	7.6
MQ2160G	21	530	60	1524	21 3/8	543	59 13/16	1519	18.5	8.4
MQ2172G	21	530	72	1829	21 3/8	543	71 13/16	1824	21.7	9.9
MQ2424G	24	610	24	610	24 3/8	619	23 13/16	605	9.7	4.4
MQ2430G	24	610	30	762	24 3/8	619	29 13/16	757	11.4	5.2
MQ2436G	24	610	36	914	24 3/8	619	35 13/16	910	13.1	6.0
MQ2442G	24	610	42	1067	24 3/8	619	41 13/16	1062	14.1	6.4
MQ2448G	24	610	48	1219	24 3/8	619	47 13/16	1215	15.8	7.1
MQ2454G	24	610	54	1372	24 3/8	619	53 13/16	1367	18.5	8.4
MQ2460G	24	610	60	1524	24 3/8	619	59 13/16	1519	20.3	9.2
MQ2472G	24	610	72	1829	24 3/8	619	71 13/16	1824	23.5	10.7

Heavy-Duty Dunnage Shelves

- Weight capacity per shelf evenly distributed: 1,200 lbs. (544kg) on shelves up to and including 48" (1219mm) long; 900 lbs. (408kg) for shelves 54" (1370mm) and longer.
- Dunnage shelves are recommended for use on units with four posts, not on an add-on unit with two posts.

Grid Mat Model No.	Nominal Width (in.)	Nominal Width (mm)	Nominal Length (in.)	Nominal Length (mm)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
MHP2436G	24	610	36	914	21	9.5
MHP2448G	24	610	48	1220	27	12.2
MHP2454G	24	610	54	1370	29	13.2
MHP2460G	24	610	60	1524	33	15.0

Material Specifications:

- **Shelf Mats:** Injection-molded polypropylene with exclusive built-in Microban® antimicrobial product protection.
- **Shelf frames:** Steel with electroplated substrate and highly durable, abrasion-resistant epoxy finish.
- **Epoxy-coated posts:** Steel with electroplated substrate and highly durable, abrasion-resistant epoxy finish. Epoxy finish has built-in Microban antimicrobial product protection. The adjustable foot is reinforced nylon.
- **Temperature range:** -20°F (-29°C) to 125°F (52°C) continuous use, with intermittent exposure to 200°F (93°C) for cleaning. Visit metro.com/service-support for cleaning guidelines.

Rust Proof Polymer Posts - Lifetime warranty against rust.

Stationary - with leveling foot

Epoxy-Coated Steel Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)	Nominal Height (in.)	Nominal Height (mm)	Actual Height (in.)	Actual Height (mm)
MX13P	0.5	0.2	13	370	14 3/16	360
MX27P	0.9	0.4	27	685	28 3/16	716
MX33P	1.0	0.5	33	875	34 3/16	868
MX54P	1.6	0.7	54	1370	54 3/16	1376
MX63P	1.8	0.8	63	1585	62 3/16	1580
MX74P	2.3	1.0	74	1690	74 3/16	1884
MX86P	2.5	1.4	86	2195	86 3/16	2189

Mobile - for stem casters

Polymer Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)	Nominal Height (in.)	Nominal Height (mm)	Actual Height (in.)	Actual Height (mm)
MX13UP	0.5	0.2	13	370	14 3/16	360
MX27PE	2.0	0.9	27	685	28 3/16	716
MX33UP	1.0	0.5	33	875	34 3/16	868
MX54UP	1.6	0.7	54	1370	54 3/16	1376
MX63UP	1.8	0.8	63	1585	62 3/16	1580
MX70UP	2.0	0.9	70	1778	69 3/16	1757
MX74UP	2.3	1.0	74	1690	74 3/16	1884
MX86UP	3.0	1.4	86	2195	86 3/16	2189

Polymer post

Stationary Mobile

Shelf Wedge Connector: Reinforced nylon. Replacement MetroMax Q Wedges Cat. No. MQ9985 (Bag of 4)

Epoxy Coated Steel Posts - For heavy-duty mobile applications. 15 year limited rust warranty.

Stationary - with leveling foot

Polymer Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)	Nominal Height (in.)	Nominal Height (mm)	Actual Height (in.)	Actual Height (mm)
MQ13PE	1.0	0.5	13	370	14 3/16	360
MQ27PE	2.0	0.9	27	685	28 3/16	716
MQ33PE	2.5	1.1	33	875	34 3/16	868
MQ54PE	4.0	1.8	54	1370	54 3/16	1376
MQ63PE	4.5	2.0	63	1585	62 3/16	1580
MQ74PE	5.5	2.5	74	1690	74 3/16	1884
MQ86PE	6.5	2.9	86	2195	86 3/16	2189

Mobile - for stem casters

Epoxy-Coated Steel Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)	Nominal Height (in.)	Nominal Height (mm)	Actual Height (in.)	Actual Height (mm)
MQ13UPE	1.0	0.5	13	370	14 3/16	360
MQ27UPE	2.0	0.9	27	685	28 3/16	716
MQ33UPE	2.5	1.1	33	875	34 3/16	868
MQ54UPE	4.0	1.8	54	1370	54 3/16	1376
MQ63UPE	4.5	2.0	63	1585	62 3/16	1580
MQ70UPE	2.0	0.9	70	1778	69 3/16	1757
MQ74UPE	5.5	2.5	74	1690	74 3/16	1884
MQ86UPE	6.5	2.9	86	2195	86 3/16	2189

Epoxy-coated steel post

Stationary Mobile

New Age Industrial Corp., Inc.
PO Box 520 • 16788 US Hwy 36 • Norton, Kansas 67654
Phone: 800-255-0104 • Fax: (877)-877-7687 • **www.NewAgeIndustrial.com**

Job: _____

Item: _____

Quantity: _____

Keg Stackers

Model #NS933

Built To Withstand The Impact Shock Of Dropped Kegs

These heavy duty aluminum units store ⅙, ¼ and ½ barrels (kegs) of beer as well as dry general storage. These keg shelves are extra-reinforced for the added abuse associated with handling kegs.

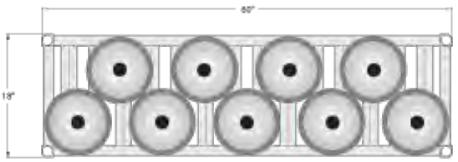
Unlike most wire shelves,these units have easy-to-clean flat surfaces that aid in the easy-on and easy-off of smaller heavy product.

Approved for use in freezers, displays, as well as packaging and storage areas, these heavy duty all welded aluminum racks keep product organized and off of the floor while providing adequate air flow.

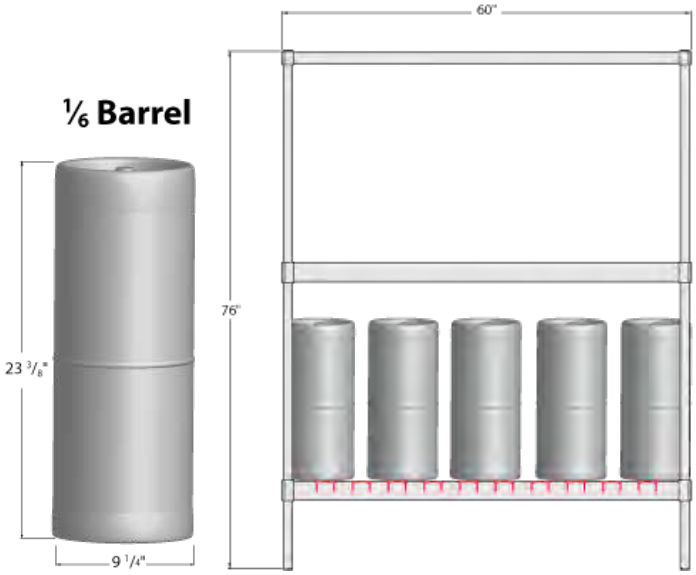
Adjustable
Fully adjustable shelves can be adjusted to fit your specific requirements. Units assemble in minutes with only an allen wrench (provided). Aluminum posts are marked in 2"increments for easy leveling with all ends capped.

Guaranteed To Last
Guaranteed to last, each rack carries a **Lifetime Guarantee** against rust and corrosion as well as a **Five-Year Guarantee** against material defects and workmanship.

MAXIMIZE Your Craft Keg STORAGE



⅙ Barrel



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Made in the USA

Distributed by:

New Age Industrial Corp., Inc.
PO Box 520 • 16788 US Hwy 36 • Norton, Kansas 67654
Phone: 800-255-0104 • Fax: (877)-877-7687 • **www.NewAgeIndustrial.com**

Job: _____

Item: _____

Quantity: _____

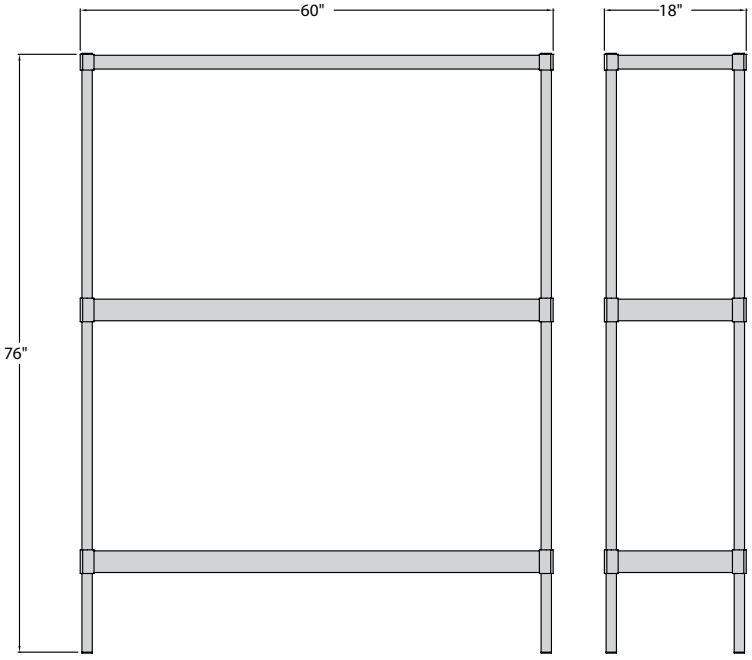
Keg Stackers

MATERIAL:

- Framework for the shelves is constructed out of 1½" x 2¾" x .070" wall tubing.
- Laterals are constructed out of 1¼" x 2¼" x .100" wall T-Bar.
- Complete units come with posts that are constructed out of 1⅝" Diameter pipe.

GUARANTEE:

- Lifetime Guarantee against rust and corrosion.
- Five-Year Guarantee against workmanship and material defects.



#NS933

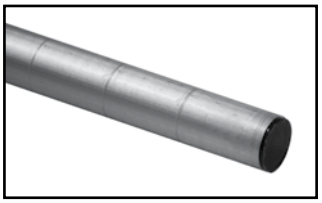
Model No.	Size D-H-L	½-Barrel Capacity	⅙-Barrel Capacity	No. Shelves	Ship Lbs.
Complete Units					
31842TT7	18" x 76" x 42"	4	12	3	49
NS933	18" x 76" x 60"	6	18	3	71
NS475	18" x 76" x 72"	8	22	3	73
1288	18" x 76" x 80"	8	26	3	78
1289 *	18" x 76" x 93"	10	34	3	98
Keg Shelves Only –*Posts (see pg 43)* ***Customize Your Own Units***					
94273	18" x 3" x 60"	3	9	1	14.4
95410	18" x 3" x 72"	4	11	1	16.5
94274	18" x 3" x 80"	4	13	1	21
94275 *	18" x 3" x 93"	5	17	1	23
Wall Protectors - Not NSF Approved.					
94029	18" x 2" x 60"				7.5
1872UB	18" x 2" x 72"				5.4
94030	18" x 2" x 80"				9
94031 *	18" x 2" x 93"				10
* 93" Shelves Require Six Posts.					
Solid Shelf Cover — *Single-Deep Units Only*					
96492	18" x 2" x 42				5
51268	18" x 2" x 54"				6
95435	18" x 2" x 60"				6
95549	18" x 2" x 72"				7
95436	18" x 2" x 80"				7
95437 *	18" x 2" x 93"				10
** Comes in two separate pieces to accommodate center posts.*					

Models 31842TT7, NS475, 95410 & 1872UB Are Not NSF Approved.

Option:

Regulator Bar -- Customized for your shelving layout.

Posts



Model No.	Length	Ship Lbs.
12P	12"	.6
34P	34"	1.7
48P	48"	2.5
54P	54"	3
60P	60"	3
68P	68"	3.6
72P	72"	3.9
76P	76"	4
84P	84"	4.1

Capped aluminum pipe (1-5⁄16" o.d.).
Marked in 2" increments.

This information is for general sales and engineering use only. New Age Industrial reserves the right to modify or make changes at any time without notice to materials and specifications.

Made in the USA

Distributed by:

METRO®

We put space to work.®

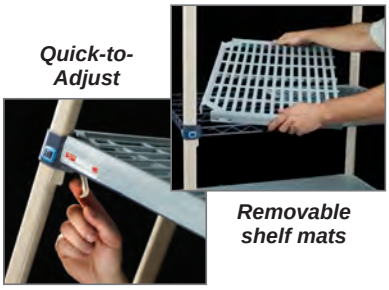
Item # _____

Job _____

MetroMax Q® Polymer / Wire Shelving

Quick-to-adjust, corrosion resistant shelving constructed of removable polymer open grid shelf mats, wire shelf frames, and corner releases. Shelf frames and steel posts have an epoxy coating over an electroplated substrate. Shelves offer a 20 year warranty against rust and corrosion. Polymer posts are rust proof. Microban® antimicrobial product protection is built into the shelf mats and posts. Shelf has a rigid four-sided frame with center truss(es). Robust corner provides complete 360° capture of the wedge and post for added stability. Stationary units have maximum capacity of 2,000 lbs. (907kg) evenly distributed. Mobile units (with stem casters) offer a maximum total unit load of 900 lbs. (408kg). Units assemble easily — shelves mount on four one-piece wedges along grooved, numbered posts and adjust on 1" (25mm) increments.

- **Forever Strong:** Proven corner connection and four-sided shelf frame with center truss(es) assures stability and strength in stationary, mobile, and high-density track shelving configurations.
  800 lbs. (363kg) per shelf for lengths of 24" to 48" (610 to 1219mm)
  600 lbs. (272kg) per shelf for lengths of 54" (1372mm) or longer
  Stationary unit: 2000lbs (907kg) evenly distributed.
  Mobile unit (with stem casters): Up to 900lbs. (408kg).
  Multiply the caster load rating by 3 to determine actual rating.
- **Long life Rust Resistance:** Shelves offer a 20 year limited corrosion warranty and are combined with rust proof polymer posts.
- **Easy to Clean and Maintain:** Polymer mats can be easily removed and cleaned in a sink or commercial washer / dish machine.
- **Microban® Antimicrobial Product Protection** is built into the shelf mats and posts to inhibit the growth of bacteria, mold, mildew, and fungus that cause odors and product degradation. Microban product protection keeps the product "cleaner between cleanings".
- **Quick-to-Adjust:** Patented corner release allows shelves to be adjusted without tools. Simply flip each corner release, relocate the wedge connectors on the posts, and reposition the shelf. Quickly adjust shelves to reclaim wasted vertical space.
- **Efficient Use of Space:** Shelves adjust on 1" (25mm) increments along the post to maximize the use of available vertical space.
- **Fast, Easy Assembly:** Shelves are ready to use right out of the box. One-piece wedges securely attach to the posts — Raised beads on the back of each wedge snap into the grooves on the post. Window on wedge aligns with numbers on the post to locate the desired shelf position. Shelf mounts on four wedges, A unit can be assembled without tools in minutes.
- **Interchangeable:** Part of the MetroMax platform, MetroMax Q shelves are compatible on the same shelving units with MetroMax i and MetroMax 4 shelves.
- **Open Grid and Solid Mat Options:** MetroMax Q is available with open grid mats. Open grid shelves promote air circulation and light penetration. For 21" (530mm) deep MetroMax Q, solid mat overlays are available. For 18" and 24" (457 and 610mm) depths, MetroMax i or MetroMax 4 solid shelves may be added when solid shelves are required.
- **NSF Listed** for all environments.
- **Optional Accessories** are on spec sheet 9.25.



Quick-to-Adjust

Removable shelf mats

*MICROBAN® and the MICROBAN® symbol are registered trademarks of the Microban® Products Company, Huntersville, NC. Microban® product protection does not by itself protect a user from food borne illness. Product must be routinely cleaned.

All Metro Catalog Sheets are available on our website: **www.metro.com**

Supports good HACCP processes

InterMetro Industries Corporation
North Washington Street, Wilkes-Barre, PA 18705
Product Information. U.S. and Canada: 1.800.992.1776
Outside U.S. and Canada: www.metro.com/contactus

L02-178
Printed in U.S.A. 3/20

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Job _____

MetroMax Q®
POLYMER / WIRE SHELVING

We put space to work.

Standard Interchangeable Shelves

Part number includes shelf with removable mats and one bag of wedges

Shelf with Grid Mat Model No.	Nominal Size Width (in.)	Nominal Size Width (mm)	Nominal Size Length (in.)	Nominal Size Length (mm)	Actual Size Width (in.)	Actual Size Width (mm)	Actual Size Length (in.)	Actual Size Length (mm)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
MQ1824G	18	457	24	610	18 3/8	467	23 13/16	605	6.2	2.8
MQ1830G	18	457	30	762	18 3/8	467	29 13/16	757	8.0	3.6
MQ1836G	18	457	36	914	18 3/8	467	35 13/16	910	9.7	4.4
MQ1842G	18	457	42	1067	18 3/8	467	41 13/16	1062	11.4	5.2
MQ1848G	18	457	48	1219	18 3/8	467	47 13/16	1215	13.2	6.0
MQ1854G	18	457	54	1372	18 3/8	467	53 13/16	1367	15.0	6.8
MQ1860G	18	457	60	1524	18 3/8	467	59 13/16	1519	16.7	7.6
MQ1872G	18	457	72	1829	18 3/8	467	71 13/16	1824	20.0	9.1
MQ2124G	21	530	24	610	21 3/8	543	23 13/16	605	8.0	3.6
MQ2130G	21	530	30	762	21 3/8	543	29 13/16	757	9.7	4.4
MQ2136G	21	530	36	914	21 3/8	543	35 13/16	910	11.4	5.2
MQ2142G	21	530	42	1067	21 3/8	543	41 13/16	1062	12.8	5.8
MQ2148G	21	530	48	1219	21 3/8	543	47 13/16	1215	14.5	6.6
MQ2154G	21	530	54	1372	21 3/8	543	53 13/16	1367	16.7	7.6
MQ2160G	21	530	60	1524	21 3/8	543	59 13/16	1519	18.5	8.4
MQ2172G	21	530	72	1829	21 3/8	543	71 13/16	1824	21.7	9.9
MQ2424G	24	610	24	610	24 3/8	619	23 13/16	605	9.7	4.4
MQ2430G	24	610	30	762	24 3/8	619	29 13/16	757	11.4	5.2
MQ2436G	24	610	36	914	24 3/8	619	35 13/16	910	13.1	6.0
MQ2442G	24	610	42	1067	24 3/8	619	41 13/16	1062	14.1	6.4
MQ2448G	24	610	48	1219	24 3/8	619	47 13/16	1215	15.8	7.1
MQ2454G	24	610	54	1372	24 3/8	619	53 13/16	1367	18.5	8.4
MQ2460G	24	610	60	1524	24 3/8	619	59 13/16	1519	20.3	9.2
MQ2472G	24	610	72	1829	24 3/8	619	71 13/16	1824	23.5	10.7

Heavy-Duty Dunnage Shelves

- Weight capacity per shelf evenly distributed: 1,200 lbs. (544kg) on shelves up to and including 48" (1219mm) long; 900 lbs. (408kg) for shelves 54" (1370mm) and longer.
- Dunnage shelves are recommended for use on units with four posts, not on an add-on unit with two posts.

Grid Mat Model No.	Nominal Width (in.)	Nominal Width (mm)	Nominal Length (in.)	Nominal Length (mm)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
MHP2436G	24	610	36	914	21	9.5
MHP2448G	24	610	48	1220	27	12.2
MHP2454G	24	610	54	1370	29	13.2
MHP2460G	24	610	60	1524	33	15.0

Material Specifications:

- **Shelf Mats:** Injection-molded polypropylene with exclusive built-in Microban® antimicrobial product protection.
- **Shelf frames:** Steel with electroplated substrate and highly durable, abrasion-resistant epoxy finish.
- **Epoxy-coated posts:** Steel with electroplated substrate and highly durable, abrasion-resistant epoxy finish. Epoxy finish has built-in Microban antimicrobial product protection. The adjustable foot is reinforced nylon.
- **Temperature range:** -20°F (-29°C) to 125°F (52°C) continuous use, with intermittent exposure to 200°F (93°C) for cleaning. Visit metro.com/service-support for cleaning guidelines.

Rust Proof Polymer Posts - Lifetime warranty against rust.

Stationary - with leveling foot

Epoxy-Coated Steel Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)	Nominal Height (in.)	Nominal Height (mm)	Actual Height (in.)	Actual Height (mm)
MX13P	0.5	0.2	13	370	14 3/16	360
MX27P	0.9	0.4	27	685	28 3/16	716
MX33P	1.0	0.5	33	875	34 3/16	868
MX54P	1.6	0.7	54	1370	54 3/16	1376
MX63P	1.8	0.8	63	1585	62 3/16	1580
MX74P	2.3	1.0	74	1690	74 3/16	1884
MX86P	2.5	1.4	86	2195	86 3/16	2189

Mobile - for stem casters

Polymer Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)	Nominal Height (in.)	Nominal Height (mm)	Actual Height (in.)	Actual Height (mm)
MX13UP	0.5	0.2	13	370	14 3/16	360
MX27PE	2.0	0.9	27	685	28 3/16	716
MX33UP	1.0	0.5	33	875	34 3/16	868
MX54UP	1.6	0.7	54	1370	54 3/16	1376
MX63UP	1.8	0.8	63	1585	62 3/16	1580
MX70UP	2.0	0.9	70	1778	69 3/16	1757
MX74UP	2.3	1.0	74	1690	74 3/16	1884
MX86UP	3.0	1.4	86	2195	86 3/16	2189

Polymer post

Stationary Mobile

Shelf Wedge Connector:
Reinforced nylon.
Replacement MetroMax Q Wedges
Cat. No. MQ9985
(Bag of 4)

Epoxy Coated Steel Posts - For heavy-duty mobile applications. 15 year limited rust warranty.

Stationary - with leveling foot

Polymer Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)	Nominal Height (in.)	Nominal Height (mm)	Actual Height (in.)	Actual Height (mm)
MQ13PE	1.0	0.5	13	370	14 3/16	360
MQ27PE	2.0	0.9	27	685	28 3/16	716
MQ33PE	2.5	1.1	33	875	34 3/16	868
MQ54PE	4.0	1.8	54	1370	54 3/16	1376
MQ63PE	4.5	2.0	63	1585	62 3/16	1580
MQ74PE	5.5	2.5	74	1690	74 3/16	1884
MQ86PE	6.5	2.9	86	2195	86 3/16	2189

Mobile - for stem casters

Epoxy-Coated Steel Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)	Nominal Height (in.)	Nominal Height (mm)	Actual Height (in.)	Actual Height (mm)
MQ13UPE	1.0	0.5	13	370	14 3/16	360
MQ27UPE	2.0	0.9	27	685	28 3/16	716
MQ33UPE	2.5	1.1	33	875	34 3/16	868
MQ54UPE	4.0	1.8	54	1370	54 3/16	1376
MQ63UPE	4.5	2.0	63	1585	62 3/16	1580
MQ70UPE	2.0	0.9	70	1778	69 3/16	1757
MQ74UPE	5.5	2.5	74	1690	74 3/16	1884
MQ86UPE	6.5	2.9	86	2195	86 3/16	2189

Epoxy-coated steel post

Stationary Mobile

METRO®

We put space to work.®

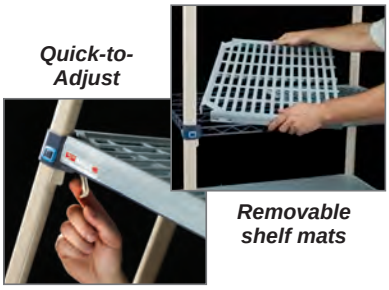
Item # _____

Job _____

MetroMax Q® Polymer / Wire Shelving

Quick-to-adjust, corrosion resistant shelving constructed of removable polymer open grid shelf mats, wire shelf frames, and corner releases. Shelf frames and steel posts have an epoxy coating over an electroplated substrate. Shelves offer a 20 year warranty against rust and corrosion. Polymer posts are rust proof. Microban® antimicrobial product protection is built into the shelf mats and posts. Shelf has a rigid four-sided frame with center truss(es). Robust corner provides complete 360° capture of the wedge and post for added stability. Stationary units have maximum capacity of 2,000 lbs. (907kg) evenly distributed. Mobile units (with stem casters) offer a maximum total unit load of 900 lbs. (408kg). Units assemble easily — shelves mount on four one-piece wedges along grooved, numbered posts and adjust on 1" (25mm) increments.

- **Forever Strong:** Proven corner connection and four-sided shelf frame with center truss(es) assures stability and strength in stationary, mobile, and high-density track shelving configurations.
  800 lbs. (363kg) per shelf for lengths of 24" to 48" (610 to 1219mm)
  600 lbs. (272kg) per shelf for lengths of 54" (1372mm) or longer
  Stationary unit: 2000lbs (907kg) evenly distributed.
  Mobile unit (with stem casters): Up to 900lbs. (408kg).
  Multiply the caster load rating by 3 to determine actual rating.
- **Long life Rust Resistance:** Shelves offer a 20 year limited corrosion warranty and are combined with rust proof polymer posts.
- **Easy to Clean and Maintain:** Polymer mats can be easily removed and cleaned in a sink or commercial washer / dish machine.
- **Microban® Antimicrobial Product Protection** is built into the shelf mats and posts to inhibit the growth of bacteria, mold, mildew, and fungus that cause odors and product degradation. Microban product protection keeps the product "cleaner between cleanings".
- **Quick-to-Adjust:** Patented corner release allows shelves to be adjusted without tools. Simply flip each corner release, relocate the wedge connectors on the posts, and reposition the shelf. Quickly adjust shelves to reclaim wasted vertical space.
- **Efficient Use of Space:** Shelves adjust on 1" (25mm) increments along the post to maximize the use of available vertical space.
- **Fast, Easy Assembly:** Shelves are ready to use right out of the box. One-piece wedges securely attach to the posts — Raised beads on the back of each wedge snap into the grooves on the post. Window on wedge aligns with numbers on the post to locate the desired shelf position. Shelf mounts on four wedges, A unit can be assembled without tools in minutes.
- **Interchangeable:** Part of the MetroMax platform, MetroMax Q shelves are compatible on the same shelving units with MetroMax i and MetroMax 4 shelves.
- **Open Grid and Solid Mat Options:** MetroMax Q is available with open grid mats. Open grid shelves promote air circulation and light penetration. For 21" (530mm) deep MetroMax Q, solid mat overlays are available. For 18" and 24" (457 and 610mm) depths, MetroMax i or MetroMax 4 solid shelves may be added when solid shelves are required.
- **NSF Listed** for all environments.
- **Optional Accessories** are on spec sheet 9.25.



Quick-to-Adjust

Removable shelf mats

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All Metro Catalog Sheets are available on our website: **www.metro.com**

Supports good HACCP processes

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North Washington Street, Wilkes-Barre, PA 18705
Product Information. U.S. and Canada: 1.800.992.1776
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Printed in U.S.A. 3/20

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Job _____

MetroMax Q®
POLYMER / WIRE SHELVING

We put space to work.

Standard Interchangeable Shelves

Part number includes shelf with removable mats and one bag of wedges

Shelf with Grid Mat Model No.	Nominal Size Width (in.)	Nominal Size Width (mm)	Nominal Size Length (in.)	Nominal Size Length (mm)	Actual Size Width (in.)	Actual Size Width (mm)	Actual Size Length (in.)	Actual Size Length (mm)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
MQ1824G	18	457	24	610	18 3/8	467	23 13/16	605	6.2	2.8
MQ1830G	18	457	30	762	18 3/8	467	29 13/16	757	8.0	3.6
MQ1836G	18	457	36	914	18 3/8	467	35 13/16	910	9.7	4.4
MQ1842G	18	457	42	1067	18 3/8	467	41 13/16	1062	11.4	5.2
MQ1848G	18	457	48	1219	18 3/8	467	47 13/16	1215	13.2	6.0
MQ1854G	18	457	54	1372	18 3/8	467	53 13/16	1367	15.0	6.8
MQ1860G	18	457	60	1524	18 3/8	467	59 13/16	1519	16.7	7.6
MQ1872G	18	457	72	1829	18 3/8	467	71 13/16	1824	20.0	9.1
MQ2124G	21	530	24	610	21 3/8	543	23 13/16	605	8.0	3.6
MQ2130G	21	530	30	762	21 3/8	543	29 13/16	757	9.7	4.4
MQ2136G	21	530	36	914	21 3/8	543	35 13/16	910	11.4	5.2
MQ2142G	21	530	42	1067	21 3/8	543	41 13/16	1062	12.8	5.8
MQ2148G	21	530	48	1219	21 3/8	543	47 13/16	1215	14.5	6.6
MQ2154G	21	530	54	1372	21 3/8	543	53 13/16	1367	16.7	7.6
MQ2160G	21	530	60	1524	21 3/8	543	59 13/16	1519	18.5	8.4
MQ2172G	21	530	72	1829	21 3/8	543	71 13/16	1824	21.7	9.9
MQ2424G	24	610	24	610	24 3/8	619	23 13/16	605	9.7	4.4
MQ2430G	24	610	30	762	24 3/8	619	29 13/16	757	11.4	5.2
MQ2436G	24	610	36	914	24 3/8	619	35 13/16	910	13.1	6.0
MQ2442G	24	610	42	1067	24 3/8	619	41 13/16	1062	14.1	6.4
MQ2448G	24	610	48	1219	24 3/8	619	47 13/16	1215	15.8	7.1
MQ2454G	24	610	54	1372	24 3/8	619	53 13/16	1367	18.5	8.4
MQ2460G	24	610	60	1524	24 3/8	619	59 13/16	1519	20.3	9.2
MQ2472G	24	610	72	1829	24 3/8	619	71 13/16	1824	23.5	10.7

Heavy-Duty Dunnage Shelves

- Weight capacity per shelf evenly distributed: 1,200 lbs. (544kg) on shelves up to and including 48" (1219mm) long; 900 lbs. (408kg) for shelves 54" (1370mm) and longer.
- Dunnage shelves are recommended for use on units with four posts, not on an add-on unit with two posts.

Grid Mat Model No.	Nominal Width (in.)	Nominal Width (mm)	Nominal Length (in.)	Nominal Length (mm)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
MHP2436G	24	610	36	914	21	9.5
MHP2448G	24	610	48	1220	27	12.2
MHP2454G	24	610	54	1370	29	13.2
MHP2460G	24	610	60	1524	33	15.0

Material Specifications:

- **Shelf Mats:** Injection-molded polypropylene with exclusive built-in Microban® antimicrobial product protection.
- **Shelf frames:** Steel with electroplated substrate and highly durable, abrasion-resistant epoxy finish.
- **Epoxy-coated posts:** Steel with electroplated substrate and highly durable, abrasion-resistant epoxy finish. Epoxy finish has built-in Microban antimicrobial product protection. The adjustable foot is reinforced nylon.
- **Temperature range:** -20°F (-29°C) to 125°F (52°C) continuous use, with intermittent exposure to 200°F (93°C) for cleaning. Visit metro.com/service-support for cleaning guidelines.

Rust Proof Polymer Posts - Lifetime warranty against rust.

Stationary - with leveling foot

Epoxy-Coated Steel Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)	Nominal Height (in.)	Nominal Height (mm)	Actual Height (in.)	Actual Height (mm)
MX13P	0.5	0.2	13	370	14 3/16	360
MX27P	0.9	0.4	27	685	28 3/16	716
MX33P	1.0	0.5	33	875	34 3/16	868
MX54P	1.6	0.7	54	1370	54 3/16	1376
MX63P	1.8	0.8	63	1585	62 3/16	1580
MX74P	2.3	1.0	74	1690	74 3/16	1884
MX86P	2.5	1.4	86	2195	86 3/16	2189

Mobile - for stem casters

Polymer Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)	Nominal Height (in.)	Nominal Height (mm)	Actual Height (in.)	Actual Height (mm)
MX13UP	0.5	0.2	13	370	14 3/16	360
MX27PE	2.0	0.9	27	685	28 3/16	716
MX33UP	1.0	0.5	33	875	34 3/16	868
MX54UP	1.6	0.7	54	1370	54 3/16	1376
MX63UP	1.8	0.8	63	1585	62 3/16	1580
MX70UP	2.0	0.9	70	1778	69 3/16	1757
MX74UP	2.3	1.0	74	1690	74 3/16	1884
MX86UP	3.0	1.4	86	2195	86 3/16	2189

Polymer post

Stationary Mobile

Shelf Wedge Connector:
Reinforced nylon.
Replacement MetroMax Q Wedges
Cat. No. MQ9985
(Bag of 4)

Epoxy Coated Steel Posts - For heavy-duty mobile applications. 15 year limited rust warranty.

Stationary - with leveling foot

Polymer Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)	Nominal Height (in.)	Nominal Height (mm)	Actual Height (in.)	Actual Height (mm)
MQ13PE	1.0	0.5	13	370	14 3/16	360
MQ27PE	2.0	0.9	27	685	28 3/16	716
MQ33PE	2.5	1.1	33	875	34 3/16	868
MQ54PE	4.0	1.8	54	1370	54 3/16	1376
MQ63PE	4.5	2.0	63	1585	62 3/16	1580
MQ74PE	5.5	2.5	74	1690	74 3/16	1884
MQ86PE	6.5	2.9	86	2195	86 3/16	2189

Mobile - for stem casters

Epoxy-Coated Steel Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)	Nominal Height (in.)	Nominal Height (mm)	Actual Height (in.)	Actual Height (mm)
MQ13UPE	1.0	0.5	13	370	14 3/16	360
MQ27UPE	2.0	0.9	27	685	28 3/16	716
MQ33UPE	2.5	1.1	33	875	34 3/16	868
MQ54UPE	4.0	1.8	54	1370	54 3/16	1376
MQ63UPE	4.5	2.0	63	1585	62 3/16	1580
MQ70UPE	2.0	0.9	70	1778	69 3/16	1757
MQ74UPE	5.5	2.5	74	1690	74 3/16	1884
MQ86UPE	6.5	2.9	86	2195	86 3/16	2189

Epoxy-coated steel post

Stationary Mobile

ADVANCE TABCO
SMART FABRICATION™

STAINLESS STEEL

SINGLE DOOR MOP SINK CABINET

NSF

Item #: _____ Qty #: _____
Model #: _____
Project #: _____

Cabinet Includes
Floor Mop Sink

FEATURES:

16" x 20" x 12" Sink Bowl with Drain
Slotted Side Panels for Ventilation
Single Left-Hinged Door
Fixed Stainless Steel Utility Shelf
2 Mop Holders (1 on each side)

CONSTRUCTION:

All TIG welded.
Welded areas blended to match adjacent surfaces and to a satin finish.

MATERIAL:

16 gauge type "304" Series Sink Bowl
18 gauge type "304" Series Sink Bowl Apron
9-OPC-84 - 18 gauge type "430" Series Stainless Steel Cabinet
9-OPC-84-300 - 18 gauge type "300" Series Stainless Steel Cabinet

OPTIONS:

SU-27 Door Lock
TA-36D Repair Kit For Door Hinge (Per Hinge)
K-94-SHELF Fixed Mid-shelf for 84" High Cabinets
K-94-BACK Add 430 Stainless Steel Back Panel
K-94-BACK-300 Add 300 Stainless Steel Back Panel
K-472 Add 8" O.C. Faucet Holes for Service Faucet (Must provide faucet hole height location)
K-240 Service Faucet
CAB-R Modify Unit to a Right-Hand Door Swing
Standard Left-Hand Door Swing (If required, specify optional right-hand door swing when ordered)

Model #	Cabinet Material
9-OPC-84	18 Ga., 430 S/S
9-OPC-84-300	18 Ga., 300 S/S

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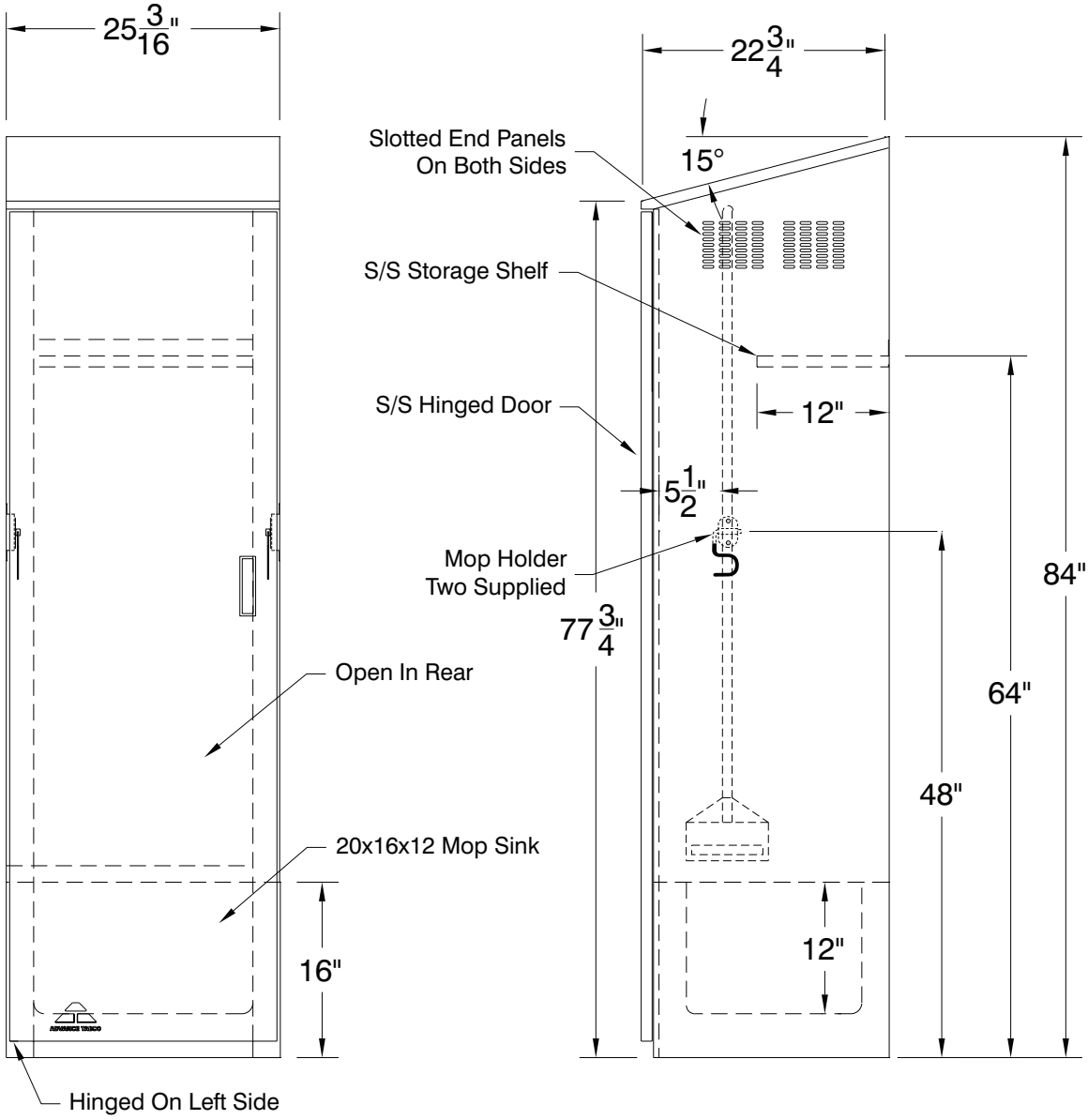
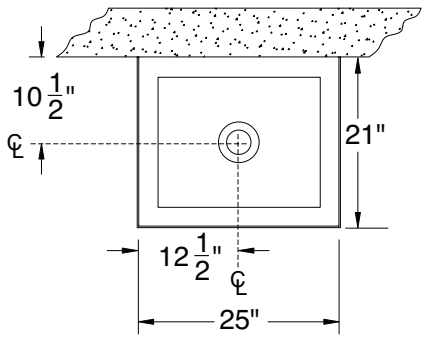
Email: smartfab@advancetabco.com or **Fax:** 631-586-2933

REF-E

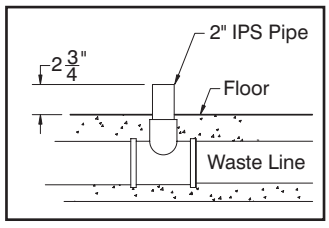
DIMENSIONS and SPECIFICATIONS

ALL DIMENSIONS ARE TYPICAL TOL ± .500”





Mop Sink Detail



Drain Detail

250 lbs.

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SMART FABRICATION™

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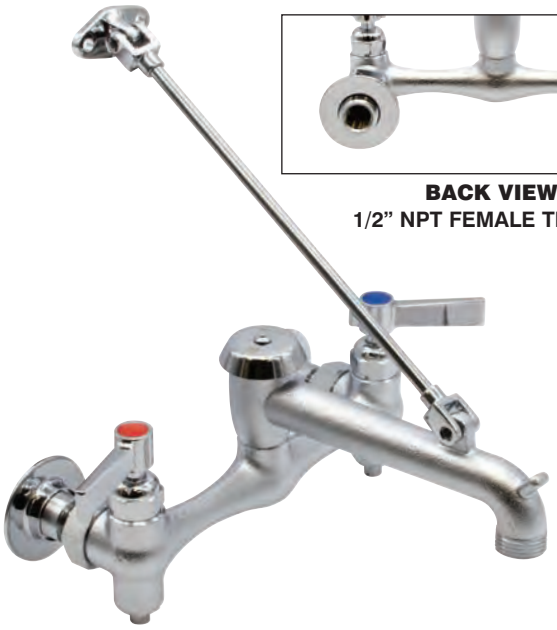
K-240
SERVICE FAUCET FOR MOP SINKS



BACK VIEW
1/2" NPT FEMALE THREAD

Item #: _____ Qty #: _____
Model #: _____
Project #: _____

FEATURES:

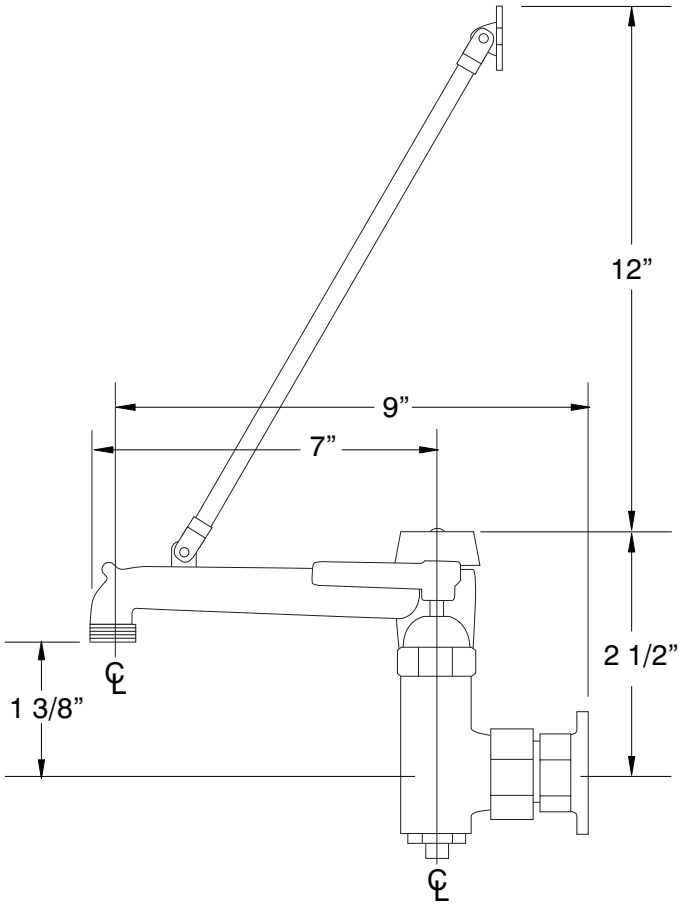
8" O.C. water supply.
Quarter turn wedge style handles with colored hot & cold Indexes.
9.6 GPM/36.3 LPM.
Wall support bracket & pail hook.
Vacuum breaker. Built-in stops.
Garden hose outlet.

MATERIAL:

Brass chrome plated body & spout.
Chrome plated handles.

Click This Link To View Assembly Sheet

DIMENSIONS and SPECIFICATIONS



Options & Accessories

Replacement Vacuum Breaker Repair Kit For K-240

K-03

Faucet Repair Kit*
K-00B (Set of 2)
Includes 2 Cartirdges and 2 Handles With Red & Blue Indexes

*Can Only Be Used On Faucets Purchased After January 2016. For Older Faucets, Consult Customer Service.

⚠ WARNING:

Faucet(s) on this page may expose you to chemicals, including lead, that are known to the State of California to cause cancer or birth defects or other reproductive harm. For more Info.,visit www.p65warnings.ca.gov.

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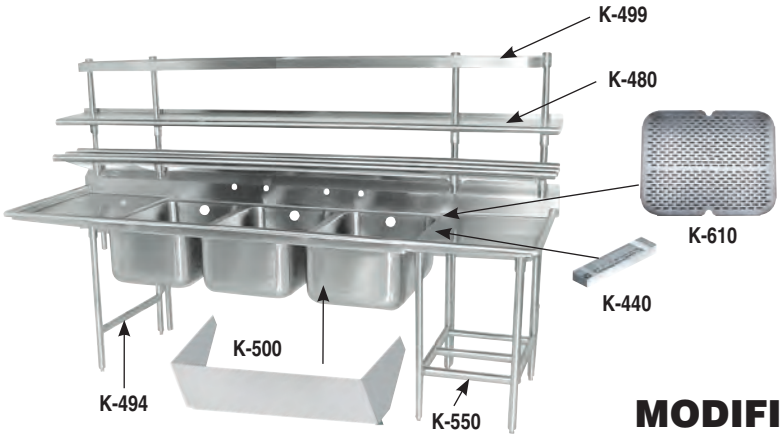
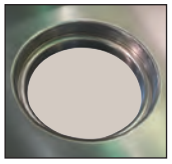
SINK MODIFICATIONS & ACCESSORIES



K-37 Anti-Siphon Vacuum Braker Holes

K-72 Leg-To-Wall Brace

K-460A Disposal Cone w/ Control Bracket & Faucet Holes



K-461A Install Collar w/ Control Bracket

MODIFICATIONS

K-4	Support Bracket for Lever Waste Drain Handle
K-23	Welded Set-Up/Crated
K-24	Shell Crating
K-37	Anti-Siphon Vacuum Breaker Holes
K-57	Welded field Joint *(Welded in field by others)*
K-76	Paint on Sound Deadening
K-77	Splash Cutout (Pipe Chase)
K-106	Mirror Highlite Edge for Sink
K-440	Waste Trough with 2" deep removable basket
K-447	High Backsplash up to 18"
K-448	High Backsplash up to 13"
K-450	Extra Drainboard
K-451	Drainboard Corner Turn
K-452	Control Bracket 8" x 12"
K-452S	Splash Mounted Control Bracket 8" x 12"
K-453	Control Bracket 14" x 16"
K-453S	Splash Mounted Control Bracket 14" x 16"
K-454	Sidesplash
K-456	Scrap Block Installed
K-460	Installation of Disposal Cone with 8" x 12" Control Bracket, Faucet Holes *(Cone supplied by others)*
K-460A	Installation of Disposal Cone with 14" x 16" Control Bracket, Faucet Holes *(Cone supplied by others)*

K-461	Install Collar with 8" x 12" control bracket *(Collar by others)*
K-461A	Install Collar with 14" x 16" control bracket *(Collar by others)*
K-470	Modify Bowl Depth
K-472	Faucet Hole Revision
K-473	Working Height Revision
K-476	Punch for Over Flow Holes *(Holes Only. N/C when ordering K-15)*
K-479	Undershelf Under Drainboard
K-480	Stainless Steel 12" Wide Shelf *(min. of 3 ft.)*
K-480A	Stainless Steel 15" Wide Shelf *(min. of 3 ft.)*
K-490	Provision for Pot Washer *(For "Wells-PW-106" only)*
K-491	Provision for Hatco Heater
K-495	Turn Down Backsplash *(Includes 2 Brackets. See K-397 Addt'l Sets)*
K-498	Tubular Overshelf 12" wide (Min. 3 Ft.)
K-499	Stainless Steel Pot Rack
K-500	Stainless Steel Apron to Cover Sink Bowls
K-500A	17" Stainless Steel Apron to Cover Sink Bowls and Support Lever Drain Handles
K-508	Special Sizing Charge (Larger size cut down to smaller size
K-508A	Special Modification Charge
K-510	Prepare Sink for Undercounter Dishwasher *(24" drainboard or larger)*
K-520	Poly Board/Stainless Steel Cover Holder
K-550	Stainless Steel Tubular Rack Storage

ACCESSORIES

K-30	Faucet Wall Mounting Bracket
K-72	Leg To Wall Brace
K-350	Residential Finish & Packaging
K-397	Wall Brackets for Sink *(Brackets Included with K-495)*
K-457	Replacement Rubber Scrap Block *(See K-456 for install cost)*
K-474	16 ga., '304' Series S/S Leg with S/S Foot
K-475	S/S Legs with S/S Foot
K-478	Stainless Steel Bullet Foot
K-488	Flanged S/S Bullet Foot
K-493	16 ga., '304' Series S/S Welded Leg Assembly with S/S Feet
K-494	S/S Welded Leg Assembly with S/S Feet
K-497	Galv. Welded Leg Assembly with Plastic Feet
K-497A	Galv. Individual Legs with Plastic Feet
K-496	Leg Assembly For Grease Interceptor w/ Adj. Cross-Bracing & S/S Feet *(For Grease Interceptors with 15" Ht. or less. Consult factory for larger Grease Interceptors)*
K-610	Perforated Stainless Steel Sink Grid *(Specify Bowl Size)*

SINK COVERS

	Choose Model # & Add The Proper Letter In Place Of The Underscore (_). Example: K-2A or FC-455H			
	FOR DEEP DRAWN BOWLS		FOR FABRICATED BOWLS	
Bowl Size	Poly Covers Model K-2_	S/S Covers Model K-455_	Poly Covers Model K-2_	S/S Covers Model FC-455_
16" x 20"	C	C	CF	C
20" x 20"	E	E	EF	E
24" x 24"	F	F	FF	F
10" x 14"	A	A	AF	A
20" x 28"	G	G	GF	G
14" x 16"	B	B	BF	B
18" x 24"	D	D	DF	D
18" x 18"	Not Available	Not Available	JF	J
20" x 24"	Not Available	Not Available	PF	P
24" x 36"	Not Available	Not Available	RF	R
20" x 30"	Not Available	Not Available	SF	S
24" x 30"	Not Available	Not Available	TF	T
15" x 15"	Not Available	Not Available	MF	M
14" x 14"	H	H	HF	H
12" x 20"	I	I	IF	I

Custom Covers Available. Consult Factory.

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METRO®

We put space to work.®

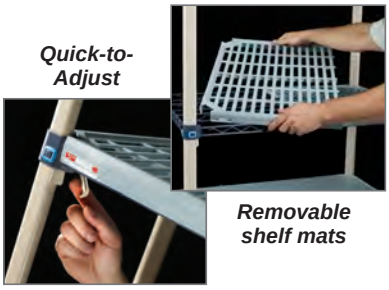
Item # _____

Job _____

MetroMax Q® Polymer / Wire Shelving

Quick-to-adjust, corrosion resistant shelving constructed of removable polymer open grid shelf mats, wire shelf frames, and corner releases. Shelf frames and steel posts have an epoxy coating over an electroplated substrate. Shelves offer a 20 year warranty against rust and corrosion. Polymer posts are rust proof. Microban® antimicrobial product protection is built into the shelf mats and posts. Shelf has a rigid four-sided frame with center truss(es). Robust corner provides complete 360° capture of the wedge and post for added stability. Stationary units have maximum capacity of 2,000 lbs. (907kg) evenly distributed. Mobile units (with stem casters) offer a maximum total unit load of 900 lbs. (408kg). Units assemble easily — shelves mount on four one-piece wedges along grooved, numbered posts and adjust on 1" (25mm) increments.

- **Forever Strong:** Proven corner connection and four-sided shelf frame with center truss(es) assures stability and strength in stationary, mobile, and high-density track shelving configurations.
  800 lbs. (363kg) per shelf for lengths of 24" to 48" (610 to 1219mm)
  600 lbs. (272kg) per shelf for lengths of 54" (1372mm) or longer
  Stationary unit: 2000lbs (907kg) evenly distributed.
  Mobile unit (with stem casters): Up to 900lbs. (408kg).
  Multiply the caster load rating by 3 to determine actual rating.
- **Long life Rust Resistance:** Shelves offer a 20 year limited corrosion warranty and are combined with rust proof polymer posts.
- **Easy to Clean and Maintain:** Polymer mats can be easily removed and cleaned in a sink or commercial washer / dish machine.
- **Microban® Antimicrobial Product Protection** is built into the shelf mats and posts to inhibit the growth of bacteria, mold, mildew, and fungus that cause odors and product degradation. Microban product protection keeps the product "cleaner between cleanings".
- **Quick-to-Adjust:** Patented corner release allows shelves to be adjusted without tools. Simply flip each corner release, relocate the wedge connectors on the posts, and reposition the shelf. Quickly adjust shelves to reclaim wasted vertical space.
- **Efficient Use of Space:** Shelves adjust on 1" (25mm) increments along the post to maximize the use of available vertical space.
- **Fast, Easy Assembly:** Shelves are ready to use right out of the box. One-piece wedges securely attach to the posts — Raised beads on the back of each wedge snap into the grooves on the post. Window on wedge aligns with numbers on the post to locate the desired shelf position. Shelf mounts on four wedges, A unit can be assembled without tools in minutes.
- **Interchangeable:** Part of the MetroMax platform, MetroMax Q shelves are compatible on the same shelving units with MetroMax i and MetroMax 4 shelves.
- **Open Grid and Solid Mat Options:** MetroMax Q is available with open grid mats. Open grid shelves promote air circulation and light penetration. For 21" (530mm) deep MetroMax Q, solid mat overlays are available. For 18" and 24" (457 and 610mm) depths, MetroMax i or MetroMax 4 solid shelves may be added when solid shelves are required.
- **NSF Listed** for all environments.
- **Optional Accessories** are on spec sheet 9.25.



Quick-to-Adjust

Removable shelf mats

*MICROBAN® and the MICROBAN® symbol are registered trademarks of the Microban® Products Company, Huntersville, NC. Microban® product protection does not by itself protect a user from food borne illness. Product must be routinely cleaned.

All Metro Catalog Sheets are available on our website: **www.metro.com**

Supports good HACCP processes

InterMetro Industries Corporation
North Washington Street, Wilkes-Barre, PA 18705
Product Information. U.S. and Canada: 1.800.992.1776
Outside U.S. and Canada: www.metro.com/contactus

L02-178
Printed in U.S.A. 3/20

Information and specifications are subject to change without notice. Please confirm at time of order.

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Job _____

MetroMax Q® POLYMER / WIRE SHELVING

We put space to work.

Standard Interchangeable Shelves

Part number includes shelf with removable mats and one bag of wedges

Shelf with Grid Mat Model No.	Nominal Size Width (in.)	Nominal Size Width (mm)	Nominal Size Length (in.)	Nominal Size Length (mm)	Actual Size Width (in.)	Actual Size Width (mm)	Actual Size Length (in.)	Actual Size Length (mm)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
MQ1824G	18	457	24	610	18 3/8	467	23 13/16	605	6.2	2.8
MQ1830G	18	457	30	762	18 3/8	467	29 13/16	757	8.0	3.6
MQ1836G	18	457	36	914	18 3/8	467	35 13/16	910	9.7	4.4
MQ1842G	18	457	42	1067	18 3/8	467	41 13/16	1062	11.4	5.2
MQ1848G	18	457	48	1219	18 3/8	467	47 13/16	1215	13.2	6.0
MQ1854G	18	457	54	1372	18 3/8	467	53 13/16	1367	15.0	6.8
MQ1860G	18	457	60	1524	18 3/8	467	59 13/16	1519	16.7	7.6
MQ1872G	18	457	72	1829	18 3/8	467	71 13/16	1824	20.0	9.1
MQ2124G	21	530	24	610	21 3/8	543	23 13/16	605	8.0	3.6
MQ2130G	21	530	30	762	21 3/8	543	29 13/16	757	9.7	4.4
MQ2136G	21	530	36	914	21 3/8	543	35 13/16	910	11.4	5.2
MQ2142G	21	530	42	1067	21 3/8	543	41 13/16	1062	12.8	5.8
MQ2148G	21	530	48	1219	21 3/8	543	47 13/16	1215	14.5	6.6
MQ2154G	21	530	54	1372	21 3/8	543	53 13/16	1367	16.7	7.6
MQ2160G	21	530	60	1524	21 3/8	543	59 13/16	1519	18.5	8.4
MQ2172G	21	530	72	1829	21 3/8	543	71 13/16	1824	21.7	9.9
MQ2424G	24	610	24	610	24 3/8	619	23 13/16	605	9.7	4.4
MQ2430G	24	610	30	762	24 3/8	619	29 13/16	757	11.4	5.2
MQ2436G	24	610	36	914	24 3/8	619	35 13/16	910	13.1	6.0
MQ2442G	24	610	42	1067	24 3/8	619	41 13/16	1062	14.1	6.4
MQ2448G	24	610	48	1219	24 3/8	619	47 13/16	1215	15.8	7.1
MQ2454G	24	610	54	1372	24 3/8	619	53 13/16	1367	18.5	8.4
MQ2460G	24	610	60	1524	24 3/8	619	59 13/16	1519	20.3	9.2
MQ2472G	24	610	72	1829	24 3/8	619	71 13/16	1824	23.5	10.7

Heavy-Duty Dunnage Shelves

- Weight capacity per shelf evenly distributed: 1,200 lbs. (544kg) on shelves up to and including 48" (1219mm) long; 900 lbs. (408kg) for shelves 54" (1370mm) and longer.
- Dunnage shelves are recommended for use on units with four posts, not on an add-on unit with two posts.

Grid Mat Model No.	Nominal Width (in.)	Nominal Width (mm)	Nominal Length (in.)	Nominal Length (mm)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
MHP2436G	24	610	36	914	21	9.5
MHP2448G	24	610	48	1220	27	12.2
MHP2454G	24	610	54	1370	29	13.2
MHP2460G	24	610	60	1524	33	15.0

Material Specifications:

- **Shelf Mats:** Injection-molded polypropylene with exclusive built-in Microban® antimicrobial product protection.
- **Shelf frames:** Steel with electroplated substrate and highly durable, abrasion-resistant epoxy finish.
- **Epoxy-coated posts:** Steel with electroplated substrate and highly durable, abrasion-resistant epoxy finish. Epoxy finish has built-in Microban antimicrobial product protection. The adjustable foot is reinforced nylon.
- **Temperature range:** -20°F (-29°C) to 125°F (52°C) continuous use, with intermittent exposure to 200°F (93°C) for cleaning. Visit metro.com/service-support for cleaning guidelines.

Rust Proof Polymer Posts - Lifetime warranty against rust.

Stationary - with leveling foot

Epoxy-Coated Steel Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)	Nominal Height (in.)	Nominal Height (mm)	Actual Height (in.)	Actual Height (mm)
MX13P	0.5	0.2	13	370	14 3/16	360
MX27P	0.9	0.4	27	685	28 3/16	716
MX33P	1.0	0.5	33	875	34 3/16	868
MX54P	1.6	0.7	54	1370	54 3/16	1376
MX63P	1.8	0.8	63	1585	62 3/16	1580
MX74P	2.3	1.0	74	1690	74 3/16	1884
MX86P	2.5	1.4	86	2195	86 3/16	2189

Mobile - for stem casters

Polymer Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)	Nominal Height (in.)	Nominal Height (mm)	Actual Height (in.)	Actual Height (mm)
MX13UP	0.5	0.2	13	370	14 3/16	360
MX27PE	2.0	0.9	27	685	28 3/16	716
MX33UP	1.0	0.5	33	875	34 3/16	868
MX54UP	1.6	0.7	54	1370	54 3/16	1376
MX63UP	1.8	0.8	63	1585	62 3/16	1580
MX70UP	2.0	0.9	70	1778	69 3/16	1757
MX74UP	2.3	1.0	74	1690	74 3/16	1884
MX86UP	3.0	1.4	86	2195	86 3/16	2189

Polymer post

Stationary Mobile

Shelf Wedge Connector: Reinforced nylon. Replacement MetroMax Q Wedges Cat. No. MQ9985 (Bag of 4)

Epoxy Coated Steel Posts - For heavy-duty mobile applications. 15 year limited rust warranty.

Stationary - with leveling foot

Polymer Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)	Nominal Height (in.)	Nominal Height (mm)	Actual Height (in.)	Actual Height (mm)
MQ13PE	1.0	0.5	13	370	14 3/16	360
MQ27PE	2.0	0.9	27	685	28 3/16	716
MQ33PE	2.5	1.1	33	875	34 3/16	868
MQ54PE	4.0	1.8	54	1370	54 3/16	1376
MQ63PE	4.5	2.0	63	1585	62 3/16	1580
MQ74PE	5.5	2.5	74	1690	74 3/16	1884
MQ86PE	6.5	2.9	86	2195	86 3/16	2189

Mobile - for stem casters

Epoxy-Coated Steel Model No.	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)	Nominal Height (in.)	Nominal Height (mm)	Actual Height (in.)	Actual Height (mm)
MQ13UPE	1.0	0.5	13	370	14 3/16	360
MQ27UPE	2.0	0.9	27	685	28 3/16	716
MQ33UPE	2.5	1.1	33	875	34 3/16	868
MQ54UPE	4.0	1.8	54	1370	54 3/16	1376
MQ63UPE	4.5	2.0	63	1585	62 3/16	1580
MQ70UPE	2.0	0.9	70	1778	69 3/16	1757
MQ74UPE	5.5	2.5	74	1690	74 3/16	1884
MQ86UPE	6.5	2.9	86	2195	86 3/16	2189

Epoxy-coated steel post

Stationary Mobile

We put space to work.

Item # _____

Job _____

MetroMax® Accessories

MetroMax Storage System consists of interchangeable corrosion proof MetroMax i, corrosion proof MetroMax 4, and corrosion resistant MetroMax Q shelves and posts. Note the category (i, 4, Q) above the part number column for compatibility. Accessories listed in this specification sheet are NSF listed unless noted otherwise.

2" (51mm) Stackable Shelf Ledges

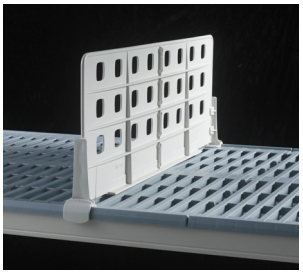
- Prevent items from falling off shelves.
- Snap on and off quickly. Easily stacked to contain larger items
- Corrosion proof: Polymer (High-Density Polypropylene) and Type 304 stainless steel.
- Ships assembled.

i Ledge Model No.	4 Ledge Model No.	Q Ledge Model No.	Type	Nominal Length (in.)	(mm)
MXLS18-2S	MAX4-LS18-2S	MQLS18-2S	Side	18	457
—	MAX4-LS21-2S	MQLS21-2S	Side	21	530
MXLS24-2S	MAX4-LS24-2S	MQLS24-2S	Side	24	610
MXL24-2S	MAX4-L24-2S	MQL24-2S	Back	24	610
MXL30-2S	MAX4-L30-2S	MQL30-2S	Back	30	760
MXL36-2S	MAX4-L36-2S	MQL36-2S	Back	36	914
MXL42-2S	MAX4-L42-2S	MQL42-2S	Back	42	1066
MXL48-2S	MAX4-L48-2S	MQL48-2S	Back	48	1219
MXL54-2S	MAX4-L54-2S	MQL54-2S	Back	54	1370
MXL60-2S	MAX4-L60-2S	MQL60-2S	Back	60	1524
MXL72-2S	—	MQL72-2S	Back	72	1829

8" (203mm) Shelf Dividers — standard duty

- Use to create organized compartments or to simply separate shelf contents.
- Easily repositioned on grid and solid shelves.
- Corrosion proof: Polymer (High-Density Polypropylene).
- Three-piece design — Ships assembled.

i Ledge Model No.	4 Ledge Model No.	Q Ledge Model No.	Nominal Length (in.)	(mm)
MXD18-8	MAX4-D18-8	MQD18-8	18	457
MXD24-8	MAX4-D24-8	MQD24-8	24	610

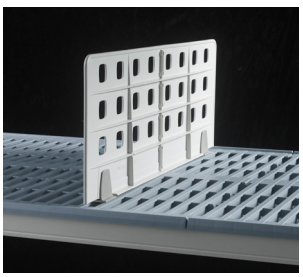


8" (203mm) Universal Shelf Dividers — light duty, for open grid shelves

- Maximum flexibility: Can be repositioned along the entire shelf.
- Easiest divider to install.
- Three-piece design; clips connect to any open grid or wire shelf; divider panel then drops into place. Does not attach to solid shelves.
- Corrosion proof: Polymer (High-Density Polypropylene).

i, 4, and Q Model No.	Fits Shelf Depth	Nominal Length (in.)	(mm)
MUD18-8	18", 21" (457, 530mm)	18	457
MUD24-8	24" (610mm)	24	610

Replacement clips: **Model No. DCLIP** Bag of (2)



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InterMetro Industries Corporation
North Washington Street, Wilkes-Barre, PA 18705
Product Information. U.S. and Canada: 1.800.992.1776
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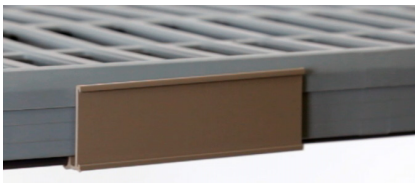
MetroMax® Accessories

MetroMax i Label Holder



MetroMax Q Label Holder

MetroMax 4 Label Holder

MetroMax i with direct mount supports

x4

M9997-4

x4

MAX4-9997-4

MetroMax i Label Holder

- Designed to accept label cards or adhesive labels. Slot measures approximately 1¼" (32mm).

i Model No.	Actual Length (in.)	Actual Length (mm)	Fits Shelf (in.)	Fits Shelf (mm)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
9989PX	1 x 4 1/2	25.4 x 114	All		.03	.01
9989X1	1 x 11 9/32	25.4 x 285	24	610	.14	.06
9989X3	1 x 23 9/32	25.4 x 590	36	914	.30	.13
9989X5	1 x 35 9/32	25.4 x 895	48	1219	.40	.18

MetroMax Q Label Holder

- Designed to accept label cards or adhesive labels. Slot measures approximately 1¼" (32mm).

Q Label Holder Model No.	Actual Length (in.)	Actual Length (mm)	Fits Shelf (in.)	Fits Shelf (mm)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
MQ04LH	4	102	All		.03	.01
MQ24LH	15 7/16	392	24	610	.14	.06
MQ36LH	27 7/16	697	36	914	.30	.13
MQ48LH	39 7/16	1002	48	1219	.40	.18
MQ60LH	51 7/16	1307	60	1524	.50	.22
MQ72LH	63 7/16	1611	72	1825	.60	.27

MetroMax 4 Label Holder

- Designed to accept label cards or adhesive labels. Slot measures approximately 1" (25mm).

4 Model No.	Actual Length (in.)	Actual Length (mm)	Fits Shelf (in.)	Fits Shelf (mm)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
MAX4-9989PX	4	102	All		.03	.01

Color Shelf Markers

- Attach easily to shelf for content identification.
- Available in seven standard colors.
- i and Q versions available.

i Model No.	4 Model No.	Q Model No.	Shelf Marker Color	Length (in.)	Length (mm)
CSM6-BX		CSM6-BQ	Blue	6	152
CSM6-GX		CSM6-GQ	Green	6	152
CSM6-RX		CSM6-RQ	Red	6	152
CSM6-TX		CSM6-TQ	Tan	6	152
CSM6-WX		CSM6-WQ	White	6	152
CSM6-YX		CSM6-YQ	Yellow	6	152
CSM6-GRX		CSM6-GRQ	Gray	6	152

Wall Mount Shelving

- MetroMax i shelf can be mounted to Metro shelf supports using the MetroMax i corner adapter kit.
  Model No. **M9997-4** Bag of four adapters.
- MetroMax 4 shelf can be mounted to Metro shelf supports using the MetroMax 4 corner adapter kit.
  Model No. **MAX4-9997-4** Bag of four adapters.
- MetroMax Q shelf mounts to Metro shelf supports without the need for adapters.

NOTE: All MetroMax platform shelves can be used with direct mount or post type shelf supports (reference spec sheet 10.40) or SmartWall shelf support (reference spec sheet 10.42).

Post Clamp

Adds stability by joining posts of two separate units together. With it,each unit is supported by four posts and buttressed by the adjacent unit. Stainless Steel.
Model No. 9994X

Foot Plate

Used to add stability to the shelving unit or to bolt units to the floor.
Model No. Zinc: 9993Z
Model No. Stainless Steel: 9993S

MetroMax® Accessories

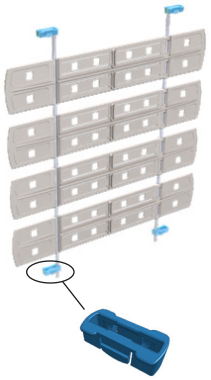
Shelf-to-Shelf Dividers

- Create full height compartments to fully organize the storage cube between two shelves.
- Can be used as a side ledge or interior divider.
- Compatible with any MetroMax i, MetroMax 4 or MetroMax Q open grid shelf or Metro wire shelf.
- Consists of a divider assembly and (4) mounting clips.

  Divider assembly: high-density polypropylene 4" (102mm) panels and stainless steel rods.

  Mounting clips: high-density polyethylene (HDPE)

i, 4 and Q Model No.	Fits Shelf Depth (in.)	(mm)	Nominal Length (in.)	(mm)
MD18-16	18, 21	457, 530	16	406
MD18-20	18, 21	457, 530	20	508
MD18-24	18, 21	457, 530	24	610
MD24-16	24	610	16	406
MD24-20	24	610	20	508
MD24-24	24	610	24	610

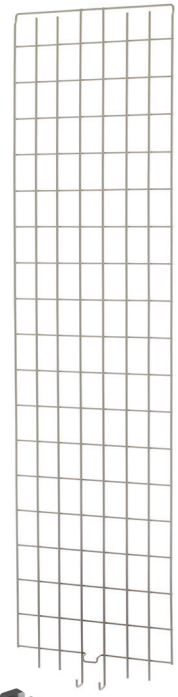


Replacement mounting clips may be ordered.
RPM3-S2SBAG Bag of (4) clips

Enclosure Panels

- An efficient way of enclosing the sides and back of all shelves in a unit to contain stored contents.
- Slot opening: 3" W x 3⅞" H (76 x 98mm).
- Designed to work on MetroMax i, MetroMax 4, and MetroMax Q units. Mounting clips included.
- CRS wire with durable taupe epoxy finish. Mounting clips — Acetyl
- Replacement mounting clips for enclosures.
  MetroMax i: [**Model No. RPMX3-RODTAB**] Bag of (8) clips
  MetroMax 4: [**Model No. RPMX4-RODTAB**] Bag of (8) clips
  MetroMax Q: [**Model No. RPMQ3-RODTAB**] Bag of (8) clips + (1) enclosure adapter

i, 4 and Q Model No.	Width/Height (in.)	(mm)	For Use With Post Height (in.)	(mm)	For Use With Shelf Width (in.)	(mm)	Approx. Pkd. Wt. (lbs.)	(kg)
MEP35E	12⅜x51¼	315x1300	54	1370	18	457	6¼	2.8
MEP36E	12⅜x59¼	315x1505	63	1600	18	457	7	3.2
MEP37E	12⅜x71¼	315x1810	74	1880	18	457	8¾	4.0
MEP55E	18⅜x51¼	467x1300	54	1370	24	610	9	4.1
MEP56E	18⅜x59¼	467x1505	63	1600	24	610	10¼	4.7
MEP57E	18⅜x71¼	467x1810	74	1880	24	610	11¾	5.3



Enclosure Panel

Panels Required to Enclose Both Ends of Shelving Unit or Cart

Post Height	Shelf Width 18" (457mm)	21" (530mm)	24" (610mm)
54" (1370mm)	(2) MEP35E	(2) MEP55E	(2) MEP55E
63" (1600mm)	(2) MEP36E	(2) MEP56E	(2) MEP56E
74" (1800mm)	(2) MEP37E	(2) MEP57E	(2) MEP57E

MetroMax i Mounting Clip

MetroMax 4 Mounting Clip

MetroMax Q Mounting Clip

Post Height	Shelf Length 30" (760mm)	36" (914mm)	42" (1066mm)	48" (1219mm)	54" (1370mm)	60" (1524mm)	72" (1825mm)
54" (1370mm)	(2) MEP35E	(1) MEP35E (1) MEP55E	(2) MEP55E	(2) MEP35E (1) MEP55E	(1) MEP35E (2) MEP55E	(3) MEP55E	(1) MEP35E (3) MEP55E
63" (1600mm)	(2) MEP36E	(1) MEP36E (1) MEP56E	(2) MEP56E	(2) MEP36E (1) MEP56E	(1) MEP36E (2) MEP56E	(3) MEP56E	(1) MEP36E (3) MEP56E
74" (1880mm)	(2) MEP37E	(1) MEP37E (1) MEP57E	(2) MEP57E	(2) MEP37E (1) MEP57E	(1) MEP37E (2) MEP57E	(3) MEP57E	(1) MEP37E (3) MEP57E

MetroMax® Accessories

Drop in baskets are sized to optimally fill out the space on a MetroMax i shelf frame.

Storage Level Frames

- Open four sided frames accommodate drop-in accessories including wire baskets and stainless drying racks.
- Includes corrosion proof MetroMax i frame and a bag of wedges

Model No.	Nominal Exterior Width (in.)	Width (mm)	Length (in.)	Length (mm)	Interior Width/Length (in.)	Interior Width/Length (mm)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
M4F1836	18	457	36	914	18x32	457x810	7	3.2
M4F2424	24	610	24	610	24x20	610x510	7 1/2	3.4
M4F2436	24	610	36	914	24x32	610x810	11 1/4	5.1
M4F2442	24	610	42	1060	24x38	610x965	13 1/4	6.0
M4F2448	24	610	48	1220	24x44	610x1120	15	6.8
M4F2460	24	610	60	1524	24x56	610x1370	18 3/4	8.5

NOTE: Wire baskets can be retrofitted to MetroMax i or MetroMax 4 shelves.

MetroMax i: Remove the mats center beams and drop in the baskets.

MetroMax 4: Remove the mats and drop in the baskets.

Wire baskets can complement a MetroMax 4 shelf. If the requirement is to completely fill out the space with baskets, use a MetroMax i storage level frame.

Wire Baskets

- Conveniently hold small items
- 9" (229mm) deep
- Built in storage handles allow easy removal
- Corrosion resistant taupe epoxy finish (Note: epoxy over a zinc substrate)
- Weight Capacity: 50 lbs. (23kg)

Model No.	Nominal Width (in.)	Nominal Width (mm)	Nominal Length (in.)	Nominal Length (mm)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
MB2416XE	24	610	16	406	10	4.5
MB2422XE	24	610	22	560	12	5.5

NOTE: MB2422XE is not adaptable to 24" (610mm) long MetroMax i storage level frames

Configuration Chart — MetroMax i

Frame	Qty. to Fill Out Shelf Frame MB2416XE	Qty. to Fill Out Shelf Frame MB2422XE
M4F2436	2	
M4F2442	1	1
M4F2448		2
M4F2460	2	1

Configuration Chart — MetroMax 4

Shelf	Qty. to Fill Out Shelf Frame MB2416XE	Qty. to Fill Out Shelf Frame MB2422XE
MAX4-2436G		1
MAX4-2442G	2	
MAX4-2448G	1	1
MAX4-2460G	3	

NOTE: Remove the shelf mats to install the drop in basket.

I.V. Storage Basket

- Corrosion resistant taupe epoxy finish (Note: epoxy over a zinc substrate)
- Can be mounted level or at 10 degree slant
- Fits a 24" (610mm) deep MetroMax i shelf
- Weight Capacity: 50 lbs. (23kg)

Model No. IVB1
See Spec Sheet 30.20 for detail.

Configuration Chart

Frame	Qty. to Fill Out Shelf Frame IVB1
M4F2424	1
M4F2442	2
M4F2460	3

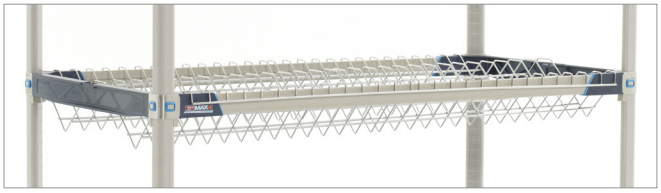
Glassware Handling Basket

Vinyl coated. Fits 18 x 36" 457 x 914mm) MetroMax i frame.
Model No. GWBSKT36
See Spec Sheet 52.01 for detail.

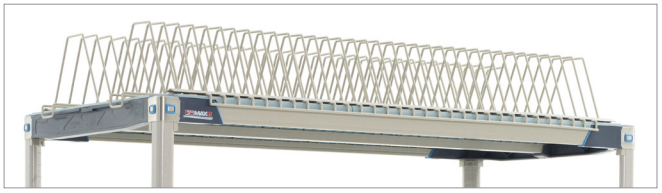
Not NSF listed.

MetroMax® Accessories

View more about our drying racks on spec sheets - MetroMax i (9.31) or MetroMax 4 (9.32)



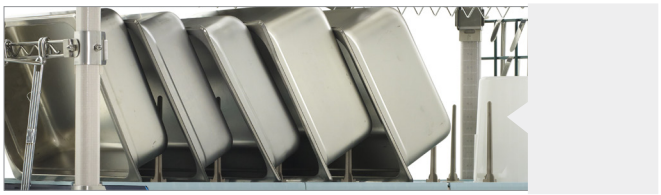
Stainless Steel Drop-in Rack



Cutting Board & Tray Racks

Pan Rack

Hanger Rail & Brackets



Sorting Pegs for Deep Pans

Grid Mounting Kit

Drip Tray (For MetroMax i)

Can Rack System

- Front loading, front dispensing can rack holds eight #10 cans or twelve #5 cans.
- Tough, corrosion resistant taupe epoxy finish.
- Mounts on any MetroMax i or MetroMax Q shelf.

i and Q Model No.	Width/Length/Height (in.)	(mm)	Approx. Pkd. Wt. (lbs.)	(kg)
CR24E	7⅞ x 25⅝ x 15	200 x 643 x 381	10	4.5

3-Sided frames

- 1" (25mm) x 1½" (38mm) structural steel tubing. Includes tri-lobal adapters to attach to posts. (Replacement adapters: **Model No. MTLA** bag of 4)
- Corrosion resistant taupe epoxy finish.
- Use as a 3-sided ledge to contain bulky items or to create "roll under" storage bays.

i, 4 and Q Model No.	Nominal Width (in.)	(mm)	Nominal Length (in.)	(mm)	Approx. Pkd. Wt. (lbs.)	(kg)
M3TF2424E	24	610	24	610	12	5.4
M3TF2430E	24	610	30	760	13	5.7
M3TF2436E	24	610	36	914	14	6.4
M3TF2448E	24	610	48	1220	18	8.2
M3TF2460E	24	610	60	1524	20	9.1

MetroMax® Accessories

Stem Casters

- Promotes easy cleaning. Casters allow shelving units to be moved easily for access to floors and walls.
- Efficient Transport: Create a cart to efficiently move supplies throughout a facility or campus.

5PCX

5PCBX

5MDXA

5MDBXA

5MPX

5MPBX

5MPXGSA

5MPBXGSA

Bumpers included with stem casters.

Truck Dolly Base

Polymer Stem Casters

- Corrosion resistant performance: all-polymer horn, stainless steel axle, 5" (127mm) diameter polyurethane wheel, sleeve-style axle bearing, and an optional toe-operated brake mechanism. **Note:** the stem and swivel raceway are plated steel.
- Models available with antimicrobial product protection built into the tread.
- Load rating of 300 lbs. (135kg) and a temperature range from -20° to 120° F (-29° to 49° C) [continuous].
- Bumpers included.

Model No.	Model No. Antimicrobial.	Wheel Diameter (in.)	Wheel Diameter (mm)	Face (in.)	Face (mm)	Load Rating (lbs.)	Load Rating (kg)	Type	Temperature Range (Continuous Usage) (Fahrenheit)	Temperature Range (Continuous Usage) (Celsius)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
5PCX	5PCXM	5	127	1 1/4	32	300	135	Stem/Swivel	-20°-120°	-29°-49°	2	0.9
5PCBX	5PCBXM	5	127	1 1/4	32	300	135	Stem/Brake	-20°-120°	-29°-49°	2	0.9
5PCRX	—	5	127	1 1/4	32	300	135	Stem/Rigid*	-20°-120°	-29°-49°	2	0.9

***Note 1:** Rigid casters are held in place by a connecting channel. When ordering, shelf width **must** be provided. Rigid connecting channel (aluminum) for 5PCRX caster: Model No. P18RC, P21RC, P24RC.
Note 2: Not suitable for cart wash and autoclave applications.

Standard Stem Casters

- Plated caster horns and hardware. Bumper included with each caster.
- Swivel, Swivel with Brakes, and Rigid Caster options available.

Model No.	Wheel Diameter (in.)	Wheel Diameter (mm)	Face (in.)	Face (mm)	Load Rating (lbs.)	Load Rating (kg)	Type	Wheel Tread	Temperature Range (Continuous Usage) (Fahrenheit)	Temperature Range (Continuous Usage) (Celsius)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
5MX	5	127	1 1/4	32	200	90	Stem/Swivel	Resilient, Flat	-30°-160°	-34°-71°	2 1/2	1.1
5MBX	5	127	1 1/4	32	200	90	Stem/Brake	Resilient, Flat	-30°- 160°	-34°-71°	2 5/8	1.2
5MRX	5	127	1 1/4	32	200	90	Stem/Rigid*	Resilient, Flat	-30°- 160°	-34°-71°	3 1/2	1.5
5MDXA	5	127	1 1/4	32	250	113	Stem/Swivel	High Modulus Donut	-40°-180°	-40°-82°	2 1/2	1.1
5MDBXA	5	127	1 1/4	32	250	113	Stem/Brake	High Modulus Donut	-40°-180°	-40°-82°	2 5/8	1.2
5MDRXA	5	127	1 1/4	32	250	113	Stem/Rigid*	High Modulus Donut	-40°-180°	-40°-82°	2 3/8	1.1
5MPX	5	127	1 1/4	32	300	135	Stem/Swivel	Polyurethane, Flat	-30°-180°	-34°-82°	2 1/8	0.9
5MPBX	5	127	1 1/4	32	300	135	Stem/Brake	Polyurethane, Flat	-30°-180°	-34°-82°	2 1/4	1
5MPRX	5	127	1 1/4	32	300	135	Stem/Rigid*	Polyurethane, Flat	-30°-180°	-34°-82°	2	0.9

***Note:** Rigid casters are held in place by a connecting channel. When ordering, shelf width **must** be provided. Rigid connecting channel (stainless steel): Model No. 18RS, 21RS, or 24RS.

Stainless Steel Cart-Washable Stem Casters

- Stainless horn, axle, and stem with sealed bearings. Bumper included with each caster.

Model No.	Wheel Diameter (in.)	Wheel Diameter (mm)	Face (in.)	Face (mm)	Load Rating (lbs.)	Load Rating (kg)	Type	Wheel Tread	Temperature Range (Continuous Usage) (Fahrenheit)	Temperature Range (Continuous Usage) (Celsius)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
5MPXGSA	5	127	1 1/4	32	300	135	Stem/Swivel	Polyurethane, Flat	-30°-180°	-34°-82°	2 1/8	0.9
5MPBXGSA	5	127	1 1/4	32	300	135	Stem/Brake	Polyurethane, Flat	-30°-180°	-34°-82°	2 1/4	1
5MPRXGSA	5	127	1 1/4	32	300	135	Stem/Rigid*	Polyurethane, Flat	-30°-180°	-34°-82°	2	0.9

***Note:** Rigid casters are held in place by a connecting channel. When ordering, shelf width **must** be provided. Rigid connecting channel (stainless steel): Model No. 18RS, 21RS, or 24RS.

Replacement Bumper for MetroMax i and MetroMax Q

Model No. M9992DBX

Replacement Bumper

Truck Dolly Bases

For heavy duty mobile applications. Truck dollies are available in aluminum or stainless construction with corner bumpers or wrap-around bumpers. For more information, refer to Spec Sheet 11.37.

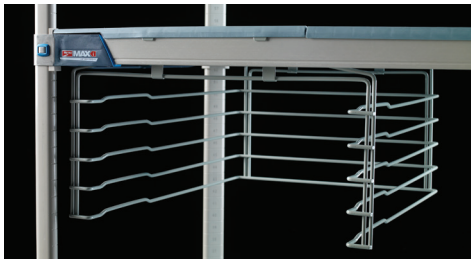
MetroMax shelving mounts to truck dolly bases with the included dolly hardware.

MetroMax® Accessories

Super Slide

- Mounts to 24" (610mm) deep shelves.
- Easily attaches to the shelf frame (under the mats) and is sized to hold 3", 5", 6", and 8" (76, 127, 152, 203mm) tall tote boxes.
- Models available for MetroMax i and MetroMax 4.
- Corrosion-resistant taupe epoxy finish.

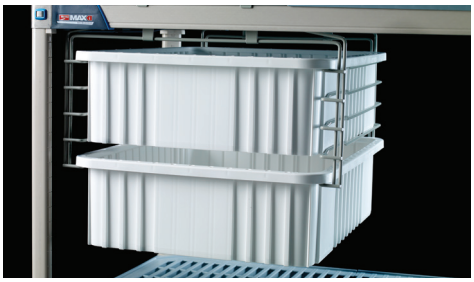
i Model No.	4 Model No.	Width (in.)	Width (mm)	Length (in.)	Length (mm)	Height (in.)	Height (mm)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
MXSS2E	MAX4-SS2E	20 3/8	520	21 5/8	550	10 1/4	260	5 1/4	2



MXSS2E

Metro® Tote Boxes for Super Slide System

Model No. White Totes	Model No. Natural Totes	Width/Length (in.)	Width/Length (mm)	Height (in.)	Height (mm)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
MTB93030W	TB93030NAT	17 1/2 x 22 3/8	457x570	3	75	0.44	0.012
MTB93050W	TB93050NAT	17 1/2 x 22 3/8	457x570	5	127	0.79	0.022
MTB93060W	TB93060NAT	17 1/2 x 22 3/8	457x570	6	150	0.97	0.027
MTB93080W	TB93080NAT	17 1/2 x 22 3/8	457x570	8	203	1.32	0.037



Adjustable Slides

- Slides can be adjusted left to right to accommodate a variety of pan, tray, and container sizes.
- MetroMax i and Q models available.
- Corrosion-resistant taupe epoxy finish.

i Model No.	Q Model No.	Fits Shelf Width (in.)	Fits Shelf Width (mm)	Length	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
MX24SE	MQ24SE	24	610	Adjustable	12 3/4	6

MX24SE

Handles

Use handles on mobile units to improve maneuvering and ergonomics. Handles fit all MetroMax shelving units. Stainless steel material offers long lasting performance.

Extended Handle

- Type 304 stainless steel handle and reinforced nylon tri-lobal adapters.

i, 4 and Q Model No.	Fits Shelf Depth (in.)	Fits Shelf Depth (mm)	Extension Depth (Post to Edge of Handle) (in.)	Extension Depth (Post to Edge of Handle) (mm)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
MEH18S	18	457	4.5	113	2.5	1.1
MEH24S	24	610	4.5	113	2.7	1.3

NOTE: Stainless steel fasteners are provided with each handle to secure the handle to the post for heavier duty applications

Extended Handle

Easy-Grip Handle

- Ergonomic design.
- Type 304 stainless steel handle and reinforced nylon tri-lobal adapters.

i, 4 and Q Model No.	Fits Shelf Depth (in.)	Fits Shelf Depth (mm)	Extension Depth (Post to Edge of Handle) (in.)	Extension Depth (Post to Edge of Handle) (mm)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
MERGH18S	18	457	6	151	2.5	1.1
MERGH24S	24	610	6	151	3.0	1.4

NOTE: Stainless steel fasteners are provided with each handle to secure the handle to the post for heavier duty applications

Easy-Grip Handle

Replacement Tri-Lobal Adapters

Model No. MTLA

4 pair per bag

MTLA

Mounted to polymer post

Job _____

MetroMax® Accessories

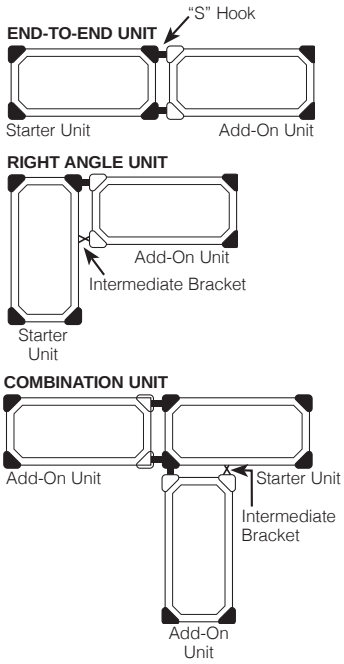
We put space to work.

"S" Hooks

"S" Hooks eliminate the need for adjacent posts saving time and money. Right angle units create open corners in tight spaces for easy access. Use the components below when configuring units from loose shelves and posts.

MetroMax i End-to-End Unit

MetroMax 4 Right Angle Unit



MetroMax i

"S" Hook Kit
Includes (1) "S" Hook and (1) Collar plug.
Model No. **M9995**

x2

Intermediate "S" Hook Kit
Includes (2) "S" hooks and intermediate bracket, (2) Collar plugs.
Model No. **MX9996**

"S" Hooks per storage level	MetroMax i
End-to-End	(2) M9995
Right Angles	(1) MX9996
Combination Unit	(2) M9995 (1) MX9996

MetroMax 4

"S" Hook Kit
Model No. **MAX4-9995**

Intermediate "S" Hook Kit
Model No. **MAX4-9996**

"S" Hooks per storage level	MetroMax 4
End-to-End	(2) MAX4-9995
Right Angles	(1) MAX4-9996
Combination Unit	(2) MAX4-9995 (1) MAX4-9996

MetroMax Q

"S" Hook
Model No. **M9995**

Intermediate "S" Hook Kit
Model No. **Q9995Z**

"S" Hooks per storage level	MetroMax Q
End-to-End	(2) M9995
Right Angles	(1) M9995 (1) Q9995Z
Combination Unit	(3) M9995 (1) Q9995Z

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GROUP
The Spirit of Excellence

We put space to work.

Item # _____

Job _____

MetroMax® Accessories

MetroMax Storage System consists of interchangeable corrosion proof MetroMax i, corrosion proof MetroMax 4, and corrosion resistant MetroMax Q shelves and posts. Note the category (i, 4, Q) above the part number column for compatibility. Accessories listed in this specification sheet are NSF listed unless noted otherwise.

2" (51mm) Stackable Shelf Ledges

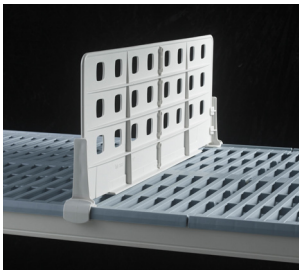
- Prevent items from falling off shelves.
- Snap on and off quickly. Easily stacked to contain larger items
- Corrosion proof: Polymer (High-Density Polypropylene) and Type 304 stainless steel.
- Ships assembled.

i Ledge Model No.	4 Ledge Model No.	Q Ledge Model No.	Type	Nominal Length (in.)	(mm)
MXLS18-2S	MAX4-LS18-2S	MQLS18-2S	Side	18	457
—	MAX4-LS21-2S	MQLS21-2S	Side	21	530
MXLS24-2S	MAX4-LS24-2S	MQLS24-2S	Side	24	610
MXL24-2S	MAX4-L24-2S	MQL24-2S	Back	24	610
MXL30-2S	MAX4-L30-2S	MQL30-2S	Back	30	760
MXL36-2S	MAX4-L36-2S	MQL36-2S	Back	36	914
MXL42-2S	MAX4-L42-2S	MQL42-2S	Back	42	1066
MXL48-2S	MAX4-L48-2S	MQL48-2S	Back	48	1219
MXL54-2S	MAX4-L54-2S	MQL54-2S	Back	54	1370
MXL60-2S	MAX4-L60-2S	MQL60-2S	Back	60	1524
MXL72-2S	—	MQL72-2S	Back	72	1829

8" (203mm) Shelf Dividers — standard duty

- Use to create organized compartments or to simply separate shelf contents.
- Easily repositioned on grid and solid shelves.
- Corrosion proof: Polymer (High-Density Polypropylene).
- Three-piece design — Ships assembled.

i Ledge Model No.	4 Ledge Model No.	Q Ledge Model No.	Nominal Length (in.)	(mm)
MXD18-8	MAX4-D18-8	MQD18-8	18	457
MXD24-8	MAX4-D24-8	MQD24-8	24	610

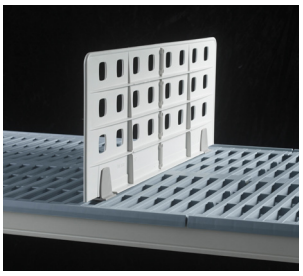


8" (203mm) Universal Shelf Dividers — light duty, for open grid shelves

- Maximum flexibility: Can be repositioned along the entire shelf.
- Easiest divider to install.
- Three-piece design; clips connect to any open grid or wire shelf; divider panel then drops into place. Does not attach to solid shelves.
- Corrosion proof: Polymer (High-Density Polypropylene).

i, 4, and Q Model No.	Fits Shelf Depth	Nominal Length (in.)	(mm)
MUD18-8	18", 21" (457, 530mm)	18	457
MUD24-8	24" (610mm)	24	610

Replacement clips: **Model No. DCLIP** Bag of (2)



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InterMetro Industries Corporation
North Washington Street, Wilkes-Barre, PA 18705
Product Information. U.S. and Canada: 1.800.992.1776
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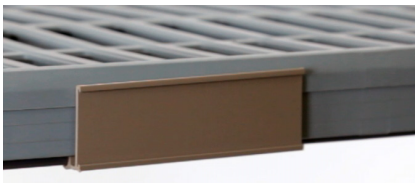
MetroMax® Accessories

MetroMax i Label Holder



MetroMax Q Label Holder

MetroMax 4 Label Holder

MetroMax i with direct mount supports

x4

M9997-4

x4

MAX4-9997-4

MetroMax i Label Holder

- Designed to accept label cards or adhesive labels. Slot measures approximately 1¼" (32mm).

i Model No.	Actual Length (in.)	Actual Length (mm)	Fits Shelf (in.)	Fits Shelf (mm)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
9989PX	1 x 4 1/2	25.4 x 114	All		.03	.01
9989X1	1 x 11 9/32	25.4 x 285	24	610	.14	.06
9989X3	1 x 23 9/32	25.4 x 590	36	914	.30	.13
9989X5	1 x 35 9/32	25.4 x 895	48	1219	.40	.18

MetroMax Q Label Holder

- Designed to accept label cards or adhesive labels. Slot measures approximately 1¼" (32mm).

Q Label Holder Model No.	Actual Length (in.)	Actual Length (mm)	Fits Shelf (in.)	Fits Shelf (mm)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
MQ04LH	4	102	All		.03	.01
MQ24LH	15 7/16	392	24	610	.14	.06
MQ36LH	27 7/16	697	36	914	.30	.13
MQ48LH	39 7/16	1002	48	1219	.40	.18
MQ60LH	51 7/16	1307	60	1524	.50	.22
MQ72LH	63 7/16	1611	72	1825	.60	.27

MetroMax 4 Label Holder

- Designed to accept label cards or adhesive labels. Slot measures approximately 1" (25mm).

4 Model No.	Actual Length (in.)	Actual Length (mm)	Fits Shelf (in.)	Fits Shelf (mm)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
MAX4-9989PX	4	102	All		.03	.01

Color Shelf Markers

- Attach easily to shelf for content identification.
- Available in seven standard colors.
- i and Q versions available.

i Model No.	4 Model No.	Q Model No.	Shelf Marker Color	Length (in.)	Length (mm)
CSM6-BX		CSM6-BQ	Blue	6	152
CSM6-GX		CSM6-GQ	Green	6	152
CSM6-RX		CSM6-RQ	Red	6	152
CSM6-TX		CSM6-TQ	Tan	6	152
CSM6-WX		CSM6-WQ	White	6	152
CSM6-YX		CSM6-YQ	Yellow	6	152
CSM6-GRX		CSM6-GRQ	Gray	6	152

Wall Mount Shelving

- MetroMax i shelf can be mounted to Metro shelf supports using the MetroMax i corner adapter kit.
  Model No. **M9997-4** Bag of four adapters.
- MetroMax 4 shelf can be mounted to Metro shelf supports using the MetroMax 4 corner adapter kit.
  Model No. **MAX4-9997-4** Bag of four adapters.
- MetroMax Q shelf mounts to Metro shelf supports without the need for adapters.

NOTE: All MetroMax platform shelves can be used with direct mount or post type shelf supports (reference spec sheet 10.40) or SmartWall shelf support (reference spec sheet 10.42).

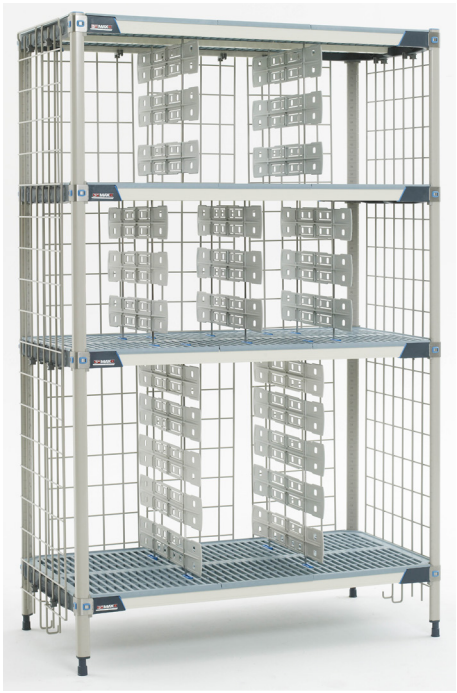
Post Clamp

Adds stability by joining posts of two separate units together. With it,each unit is supported by four posts and buttressed by the adjacent unit. Stainless Steel.
Model No. 9994X

Foot Plate

Used to add stability to the shelving unit or to bolt units to the floor.
Model No. Zinc: 9993Z
Model No. Stainless Steel: 9993S

MetroMax® Accessories



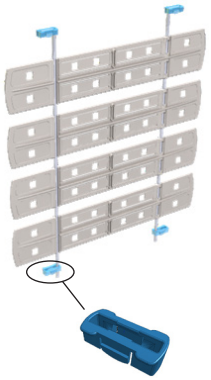
Shelf-to-Shelf Dividers

- Create full height compartments to fully organize the storage cube between two shelves.
- Can be used as a side ledge or interior divider.
- Compatible with any MetroMax i, MetroMax 4 or MetroMax Q open grid shelf or Metro wire shelf.
- Consists of a divider assembly and (4) mounting clips.

  Divider assembly: high-density polypropylene 4" (102mm) panels and stainless steel rods.

  Mounting clips: high-density polyethylene (HDPE)

i, 4 and Q Model No.	Fits Shelf Depth (in.)	(mm)	Nominal Length (in.)	(mm)
MD18-16	18, 21	457, 530	16	406
MD18-20	18, 21	457, 530	20	508
MD18-24	18, 21	457, 530	24	610
MD24-16	24	610	16	406
MD24-20	24	610	20	508
MD24-24	24	610	24	610

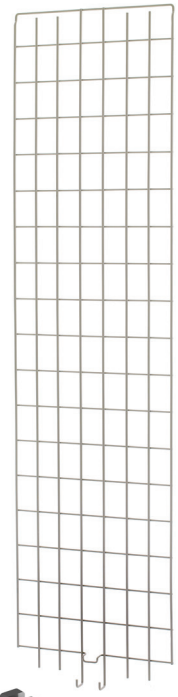


Replacement mounting clips may be ordered.
RPM3-S2SBAG Bag of (4) clips

Enclosure Panels

- An efficient way of enclosing the sides and back of all shelves in a unit to contain stored contents.
- Slot opening: 3" W x 3⅞" H (76 x 98mm).
- Designed to work on MetroMax i, MetroMax 4, and MetroMax Q units. Mounting clips included.
- CRS wire with durable taupe epoxy finish. Mounting clips — Acetyl
- Replacement mounting clips for enclosures.
  MetroMax i: [**Model No. RPMX3-RODTAB**] Bag of (8) clips
  MetroMax 4: [**Model No. RPMX4-RODTAB**] Bag of (8) clips
  MetroMax Q: [**Model No. RPMQ3-RODTAB**] Bag of (8) clips + (1) enclosure adapter

i, 4 and Q Model No.	Width/Height (in.)	(mm)	For Use With Post Height (in.)	(mm)	For Use With Shelf Width (in.)	(mm)	Approx. Pkd. Wt. (lbs.)	(kg)
MEP35E	12⅜x51¼	315x1300	54	1370	18	457	6¼	2.8
MEP36E	12⅜x59¼	315x1505	63	1600	18	457	7	3.2
MEP37E	12⅜x71¼	315x1810	74	1880	18	457	8¾	4.0
MEP55E	18⅜x51¼	467x1300	54	1370	24	610	9	4.1
MEP56E	18⅜x59¼	467x1505	63	1600	24	610	10¼	4.7
MEP57E	18⅜x71¼	467x1810	74	1880	24	610	11¾	5.3



Enclosure Panel

Panels Required to Enclose Both Ends of Shelving Unit or Cart

Post Height	Shelf Width 18" (457mm)	21" (530mm)	24" (610mm)
54" (1370mm)	(2) MEP35E	(2) MEP55E	(2) MEP55E
63" (1600mm)	(2) MEP36E	(2) MEP56E	(2) MEP56E
74" (1800mm)	(2) MEP37E	(2) MEP57E	(2) MEP57E

MetroMax i Mounting Clip

MetroMax 4 Mounting Clip

MetroMax Q Mounting Clip

Post Height	Shelf Length 30" (760mm)	36" (914mm)	42" (1066mm)	48" (1219mm)	54" (1370mm)	60" (1524mm)	72" (1825mm)
54" (1370mm)	(2) MEP35E	(1) MEP35E (1) MEP55E	(2) MEP55E	(2) MEP35E (1) MEP55E	(1) MEP35E (2) MEP55E	(3) MEP55E	(1) MEP35E (3) MEP55E
63" (1600mm)	(2) MEP36E	(1) MEP36E (1) MEP56E	(2) MEP56E	(2) MEP36E (1) MEP56E	(1) MEP36E (2) MEP56E	(3) MEP56E	(1) MEP36E (3) MEP56E
74" (1880mm)	(2) MEP37E	(1) MEP37E (1) MEP57E	(2) MEP57E	(2) MEP37E (1) MEP57E	(1) MEP37E (2) MEP57E	(3) MEP57E	(1) MEP37E (3) MEP57E

MetroMax® Accessories

Drop in baskets are sized to optimally fill out the space on a MetroMax i shelf frame.

Storage Level Frames

- Open four sided frames accommodate drop-in accessories including wire baskets and stainless drying racks.
- Includes corrosion proof MetroMax i frame and a bag of wedges

Model No.	Nominal Exterior Width (in.)	Width (mm)	Length (in.)	Length (mm)	Interior Width/Length (in.)	Interior Width/Length (mm)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
M4F1836	18	457	36	914	18x32	457x810	7	3.2
M4F2424	24	610	24	610	24x20	610x510	7 1/2	3.4
M4F2436	24	610	36	914	24x32	610x810	11 1/4	5.1
M4F2442	24	610	42	1060	24x38	610x965	13 1/4	6.0
M4F2448	24	610	48	1220	24x44	610x1120	15	6.8
M4F2460	24	610	60	1524	24x56	610x1370	18 3/4	8.5

NOTE: Wire baskets can be retrofitted to MetroMax i or MetroMax 4 shelves.

MetroMax i: Remove the mats center beams and drop in the baskets.

MetroMax 4: Remove the mats and drop in the baskets.

Wire baskets can complement a MetroMax 4 shelf. If the requirement is to completely fill out the space with baskets, use a MetroMax i storage level frame.

Wire Baskets

- Conveniently hold small items
- 9" (229mm) deep
- Built in storage handles allow easy removal
- Corrosion resistant taupe epoxy finish (Note: epoxy over a zinc substrate)
- Weight Capacity: 50 lbs. (23kg)

Model No.	Nominal Width (in.)	Nominal Width (mm)	Nominal Length (in.)	Nominal Length (mm)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
MB2416XE	24	610	16	406	10	4.5
MB2422XE	24	610	22	560	12	5.5

NOTE: MB2422XE is not adaptable to 24" (610mm) long MetroMax i storage level frames

Configuration Chart — MetroMax i

Frame	Qty. to Fill Out Shelf Frame MB2416XE	Qty. to Fill Out Shelf Frame MB2422XE
M4F2436	2	
M4F2442	1	1
M4F2448		2
M4F2460	2	1

Configuration Chart — MetroMax 4

Shelf	Qty. to Fill Out Shelf Frame MB2416XE	Qty. to Fill Out Shelf Frame MB2422XE
MAX4-2436G		1
MAX4-2442G	2	
MAX4-2448G	1	1
MAX4-2460G	3	

NOTE: Remove the shelf mats to install the drop in basket.

I.V. Storage Basket

- Corrosion resistant taupe epoxy finish (Note: epoxy over a zinc substrate)
- Can be mounted level or at 10 degree slant
- Fits a 24" (610mm) deep MetroMax i shelf
- Weight Capacity: 50 lbs. (23kg)

Model No. IVB1
See Spec Sheet 30.20 for detail.

Configuration Chart

Frame	Qty. to Fill Out Shelf Frame IVB1
M4F2424	1
M4F2442	2
M4F2460	3

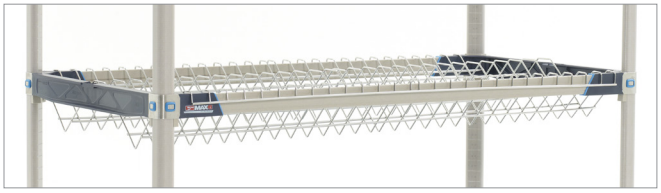
Glassware Handling Basket

Vinyl coated. Fits 18 x 36" 457 x 914mm) MetroMax i frame.
Model No. GWBSKT36
See Spec Sheet 52.01 for detail.

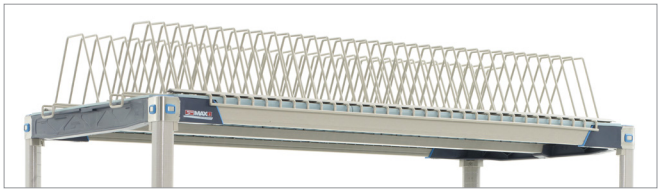
Not NSF listed.

MetroMax® Accessories

View more about our drying racks on spec sheets - MetroMax i (9.31) or MetroMax 4 (9.32)



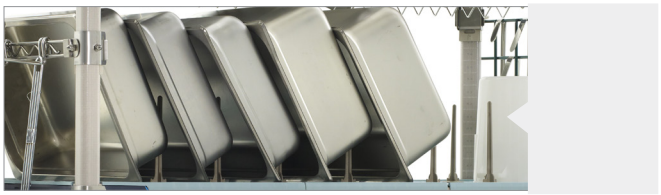
Stainless Steel Drop-in Rack



Cutting Board & Tray Racks

Pan Rack

Hanger Rail & Brackets



Sorting Pegs for Deep Pans

Drip Tray (For MetroMax i)

Grid Mounting Kit

Can Rack System

- Front loading, front dispensing can rack holds eight #10 cans or twelve #5 cans.
- Tough, corrosion resistant taupe epoxy finish.
- Mounts on any MetroMax i or MetroMax Q shelf.

i and Q Model No.	Width/Length/Height (in.)	(mm)	Approx. Pkd. Wt. (lbs.)	(kg)
CR24E	7⅞ x 25⅝ x 15	200 x 643 x 381	10	4.5

3-Sided frames

- 1" (25mm) x 1½" (38mm) structural steel tubing. Includes tri-lobal adapters to attach to posts. (Replacement adapters: **Model No. MTLA** bag of 4)
- Corrosion resistant taupe epoxy finish.
- Use as a 3-sided ledge to contain bulky items or to create "roll under" storage bays.

i, 4 and Q Model No.	Nominal Width (in.)	(mm)	Nominal Length (in.)	(mm)	Approx. Pkd. Wt. (lbs.)	(kg)
M3TF2424E	24	610	24	610	12	5.4
M3TF2430E	24	610	30	760	13	5.7
M3TF2436E	24	610	36	914	14	6.4
M3TF2448E	24	610	48	1220	18	8.2
M3TF2460E	24	610	60	1524	20	9.1

MetroMax® Accessories

Stem Casters

- Promotes easy cleaning. Casters allow shelving units to be moved easily for access to floors and walls.
- Efficient Transport: Create a cart to efficiently move supplies throughout a facility or campus.

5PCX

5PCBX

5MDXA

5MDBXA

5MPX

5MPBX

5MPXGSA

5MPBXGSA

Bumpers included with stem casters.

Polymer Stem Casters

- Corrosion resistant performance: all-polymer horn, stainless steel axle, 5" (127mm) diameter polyurethane wheel, sleeve-style axle bearing, and an optional toe-operated brake mechanism. **Note:** the stem and swivel raceway are plated steel.
- Models available with antimicrobial product protection built into the tread.
- Load rating of 300 lbs. (135kg) and a temperature range from -20° to 120° F (-29° to 49° C) [continuous].
- Bumpers included.

Model No.	Model No. Antimicrobial.	Wheel Diameter (in.)	Wheel Diameter (mm)	Face (in.)	Face (mm)	Load Rating (lbs.)	Load Rating (kg)	Type	Temperature Range (Continuous Usage) (Fahrenheit)	Temperature Range (Continuous Usage) (Celsius)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
5PCX	5PCXM	5	127	1 1/4	32	300	135	Stem/Swivel	-20°-120°	-29°-49°	2	0.9
5PCBX	5PCBXM	5	127	1 1/4	32	300	135	Stem/Brake	-20°-120°	-29°-49°	2	0.9
5PCRX	—	5	127	1 1/4	32	300	135	Stem/Rigid*	-20°-120°	-29°-49°	2	0.9

***Note 1:** Rigid casters are held in place by a connecting channel. When ordering, shelf width **must** be provided. Rigid connecting channel (aluminum) for 5PCRX caster: Model No. P18RC, P21RC, P24RC.
Note 2: Not suitable for cart wash and autoclave applications.

Standard Stem Casters

- Plated caster horns and hardware. Bumper included with each caster.
- Swivel, Swivel with Brakes, and Rigid Caster options available.

Model No.	Wheel Diameter (in.)	Wheel Diameter (mm)	Face (in.)	Face (mm)	Load Rating (lbs.)	Load Rating (kg)	Type	Wheel Tread	Temperature Range (Continuous Usage) (Fahrenheit)	Temperature Range (Continuous Usage) (Celsius)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
5MX	5	127	1 1/4	32	200	90	Stem/Swivel	Resilient, Flat	-30°-160°	-34°-71°	2 1/2	1.1
5MBX	5	127	1 1/4	32	200	90	Stem/Brake	Resilient, Flat	-30°- 160°	-34°-71°	2 5/8	1.2
5MRX	5	127	1 1/4	32	200	90	Stem/Rigid*	Resilient, Flat	-30°- 160°	-34°-71°	3 1/2	1.5
5MDXA	5	127	1 1/4	32	250	113	Stem/Swivel	High Modulus Donut	-40°-180°	-40°-82°	2 1/2	1.1
5MDBXA	5	127	1 1/4	32	250	113	Stem/Brake	High Modulus Donut	-40°-180°	-40°-82°	2 5/8	1.2
5MDRXA	5	127	1 1/4	32	250	113	Stem/Rigid*	High Modulus Donut	-40°-180°	-40°-82°	2 3/8	1.1
5MPX	5	127	1 1/4	32	300	135	Stem/Swivel	Polyurethane, Flat	-30°-180°	-34°-82°	2 1/8	0.9
5MPBX	5	127	1 1/4	32	300	135	Stem/Brake	Polyurethane, Flat	-30°-180°	-34°-82°	2 1/4	1
5MPRX	5	127	1 1/4	32	300	135	Stem/Rigid*	Polyurethane, Flat	-30°-180°	-34°-82°	2	0.9

***Note:** Rigid casters are held in place by a connecting channel. When ordering, shelf width **must** be provided. Rigid connecting channel (stainless steel): Model No. 18RS, 21RS, or 24RS.

Stainless Steel Cart-Washable Stem Casters

- Stainless horn, axle, and stem with sealed bearings. Bumper included with each caster.

Model No.	Wheel Diameter (in.)	Wheel Diameter (mm)	Face (in.)	Face (mm)	Load Rating (lbs.)	Load Rating (kg)	Type	Wheel Tread	Temperature Range (Continuous Usage) (Fahrenheit)	Temperature Range (Continuous Usage) (Celsius)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
5MPXGSA	5	127	1 1/4	32	300	135	Stem/Swivel	Polyurethane, Flat	-30°-180°	-34°-82°	2 1/8	0.9
5MPBXGSA	5	127	1 1/4	32	300	135	Stem/Brake	Polyurethane, Flat	-30°-180°	-34°-82°	2 1/4	1
5MPRXGSA	5	127	1 1/4	32	300	135	Stem/Rigid*	Polyurethane, Flat	-30°-180°	-34°-82°	2	0.9

*__Note:__ Rigid casters are held in place by a connecting channel. When ordering, shelf width **must** be provided. Rigid connecting channel (stainless steel): Model No. 18RS, 21RS, or 24RS.

Replacement Bumper for MetroMax i and MetroMax Q

Model No. M9992DBX

Replacement Bumper

Truck Dolly Bases

For heavy duty mobile applications. Truck dollies are available in aluminum or stainless construction with corner bumpers or wrap-around bumpers. For more information, refer to Spec Sheet 11.37.

Truck Dolly Base

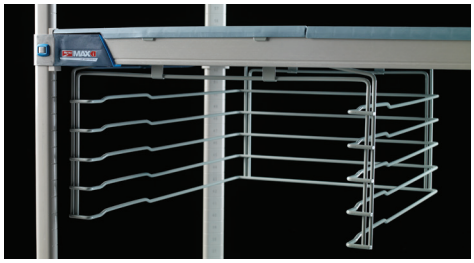
MetroMax shelving mounts to truck dolly bases with the included dolly hardware.

MetroMax® Accessories

Super Slide

- Mounts to 24" (610mm) deep shelves.
- Easily attaches to the shelf frame (under the mats) and is sized to hold 3", 5", 6", and 8" (76, 127, 152, 203mm) tall tote boxes.
- Models available for MetroMax i and MetroMax 4.
- Corrosion-resistant taupe epoxy finish.

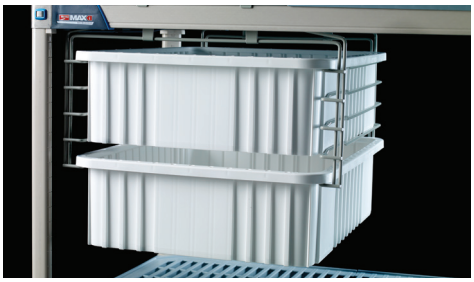
i Model No.	4 Model No.	Width (in.)	Width (mm)	Length (in.)	Length (mm)	Height (in.)	Height (mm)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
MXSS2E	MAX4-SS2E	20 3/8	520	21 5/8	550	10 1/4	260	5 1/4	2



MXSS2E

Metro® Tote Boxes for Super Slide System

Model No. White Totes	Model No. Natural Totes	Width/Length (in.)	Width/Length (mm)	Height (in.)	Height (mm)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
MTB93030W	TB93030NAT	17 1/2x22 3/8	457x570	3	75	0.44	0.012
MTB93050W	TB93050NAT	17 1/2x22 3/8	457x570	5	127	0.79	0.022
MTB93060W	TB93060NAT	17 1/2x22 3/8	457x570	6	150	0.97	0.027
MTB93080W	TB93080NAT	17 1/2x22 3/8	457x570	8	203	1.32	0.037



Adjustable Slides

- Slides can be adjusted left to right to accommodate a variety of pan, tray, and container sizes.
- MetroMax i and Q models available.
- Corrosion-resistant taupe epoxy finish.

i Model No.	Q Model No.	Fits Shelf Width (in.)	Fits Shelf Width (mm)	Length	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
MX24SE	MQ24SE	24	610	Adjustable	12 3/4	6

MX24SE

Handles

Use handles on mobile units to improve maneuvering and ergonomics. Handles fit all MetroMax shelving units. Stainless steel material offers long lasting performance.

Extended Handle

- Type 304 stainless steel handle and reinforced nylon tri-lobal adapters.

i, 4 and Q Model No.	Fits Shelf Depth (in.)	Fits Shelf Depth (mm)	Extension Depth (Post to Edge of Handle) (in.)	Extension Depth (Post to Edge of Handle) (mm)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
MEH18S	18	457	4.5	113	2.5	1.1
MEH24S	24	610	4.5	113	2.7	1.3

NOTE: Stainless steel fasteners are provided with each handle to secure the handle to the post for heavier duty applications

Extended Handle

Easy-Grip Handle

- Ergonomic design.
- Type 304 stainless steel handle and reinforced nylon tri-lobal adapters.

i, 4 and Q Model No.	Fits Shelf Depth (in.)	Fits Shelf Depth (mm)	Extension Depth (Post to Edge of Handle) (in.)	Extension Depth (Post to Edge of Handle) (mm)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
MERGH18S	18	457	6	151	2.5	1.1
MERGH24S	24	610	6	151	3.0	1.4

NOTE: Stainless steel fasteners are provided with each handle to secure the handle to the post for heavier duty applications

Easy-Grip Handle

Replacement Tri-Lobal Adapters

Model No. MTLA

4 pair per bag

MTLA

Mounted to polymer post

Job _____

MetroMax® Accessories

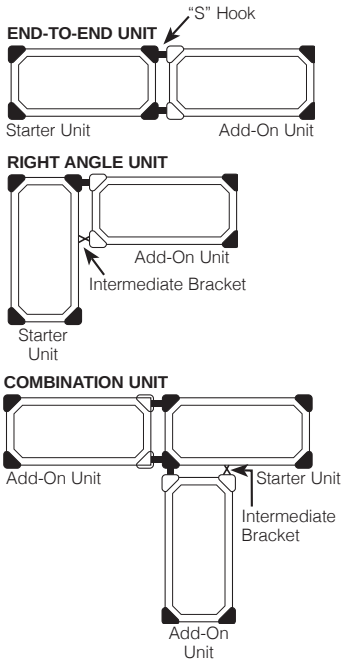
We put space to work.

"S" Hooks

"S" Hooks eliminate the need for adjacent posts saving time and money. Right angle units create open corners in tight spaces for easy access. Use the components below when configuring units from loose shelves and posts.

MetroMax i End-to-End Unit

MetroMax 4 Right Angle Unit



MetroMax i

"S" Hook Kit
Includes (1) "S" Hook and (1) Collar plug.
Model No. **M9995**

x2

Intermediate "S" Hook Kit
Includes (2) "S" hooks and intermediate bracket, (2) Collar plugs.
Model No. **MX9996**

"S" Hooks per storage level	MetroMax i
End-to-End	(2) M9995
Right Angles	(1) MX9996
Combination Unit	(2) M9995 (1) MX9996

MetroMax 4

"S" Hook Kit
Model No. **MAX4-9995**

Intermediate "S" Hook Kit
Model No. **MAX4-9996**

"S" Hooks per storage level	MetroMax 4
End-to-End	(2) MAX4-9995
Right Angles	(1) MAX4-9996
Combination Unit	(2) MAX4-9995 (1) MAX4-9996

MetroMax Q

"S" Hook
Model No. **M9995**

Intermediate "S" Hook Kit
Model No. **Q9995Z**

"S" Hooks per storage level	MetroMax Q
End-to-End	(2) M9995
Right Angles	(1) M9995 (1) Q9995Z
Combination Unit	(3) M9995 (1) Q9995Z

an Ali Group Company

GROUP
The Spirit of Excellence

THIS ITEM IS: TWO COMPARTMENT SINK

- ☐ SPARE NUMBER
- ☐ MILLWORK
- ■ CUSTOM FABRICATED/NSF
- ☐ EXISTING
  - ☐ WHERE SHOWN
  - ☐ RELOCATED
  - ☐ MODIFIED
- ☐ N.I.K.E.C. BY:
  - ☐ OWNER
  - ☐ SUPPLIER / VENDOR
  - ☐ OTHERS

REMARKS:

THIS ITEM IS: WALL SHELF /POT RACK

- ☐ SPARE NUMBER
- ☐ MILLWORK
- ■ CUSTOM FABRICATED/NSF
- ☐ EXISTING
  - ☐ WHERE SHOWN
  - ☐ RELOCATED
  - ☐ MODIFIED
- ☐ N.I.K.E.C. BY:
  - ☐ OWNER
  - ☐ SUPPLIER / VENDOR
  - ☐ OTHERS

REMARKS:

IMC/TEDDY
DECADES OF FINE CRAFTSMANSHIP

FWR
Floor Water Receptacle

General Information

Project Name: _____

Consultant: _____

Item #: _____

Model #: _____

Quantity: _____

Specifications

FWR Floor Water Receptacles are 16GA type 300 series stainless steel one-piece construction. Horizontal corners are coved and the trough is integrally pitched toward a waste outlet with a stainless steel beehive strainer and a 4" OD tailpiece.

Recessed flange and 1" deep ledge for IMC grating are integral with the unit. Unit is 7½" wide and 4" deep.

Joints are TIG welded and leak-proof. Exposed surfaces finished brush satin.

Product Guide

Use for Commercial and Institutional Buildings or large food prep facilities.

Unit is generally used underneath Ice Machines or in front of walk-ins or large water discharge areas, in tight spaces.

Flexible design such as custom depths make this a versatile drain trough.

Recessed flange supports floor tile and provides a grout pocket.

Setting frame for waterproof membrane and/or integral seepage flange with "weep" holes can be added for wet floor areas.

OPTIONS

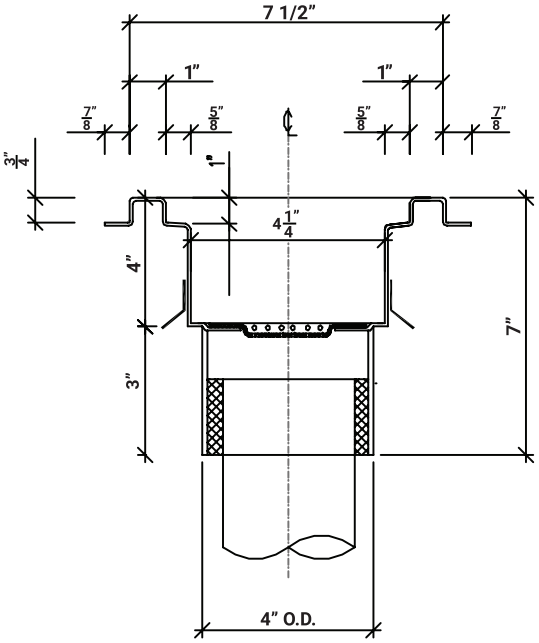
- ☐ 3", 3½", 5", 6", 8" OD Tube (circle one)
- ☐ Waste Tube over 3" Long
- ☐ Additional Wastes
- ☐ Waste Cup Strainers
- ☐ Beehive Strainers
- ☐ Off Center Waste
- ☐ **ST12** - Scrap Tray 12" Long
- ☐ Perforated Waste Pipe
- ☐ Special Size Setting Flange 2" Deep
- ☐ Special Size Setting Flange 2" to 4" Deep
- ☐ Oversize Waste Tube
- ☐ Lint Screen for Laundry Trough
- ☐ **ST20** - Scrap Tray 20" Long
- ☐ Drain on the Side or End
- ☐ Rim on Drain
- ☐ Basket Strainer w/ Handle & Chain
- ☐ **BXD** - Box Type Drain
- ☐ **BSX** - Beehive Strainer for Box Drain
- ☐ **GA-12** - 12GA Upgrade

FWR-60 0619

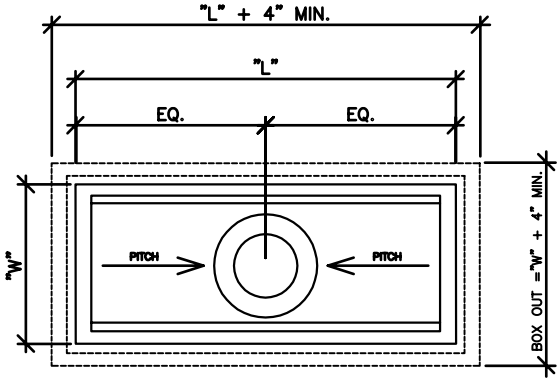
IMC/TEDDY
DECADES OF FINE CRAFTSMANSHIP

FWR
Floor Water Receptacle

DRAWINGS



Box Out Size



Trough Area

- Width (PIT) = Width ("W") + 4" Minimum
- Length (PIT) = Length ("L") + 4" Minimum
- Depth (PIT) = Depth of Trough + 1/2" + Finish Floor
- Size of Rough-In Hole For Drains 7½" Ø Minimum

FLOOR WATER RECEPTACLES

Model	Size (W x L)
☐ FWR-24	7½" x 24"
☐ FWR-30	7½" x 30"
☐ FWR-36	7½" x 36"
☐ FWR-48	7½" x 48"
☐ FWR-60	7½" x 60"
☐ FWR-72	7½" x 72"
☐ FWR-84	7½" x 84"
☐ FWR-96	7½" x 96"
☐ FWR-108	7½" x 108"
☐ FWR-120	7½" x 120"

Note: For longer lengths, contact factory.

Specifications subject to change without notice.

FWR-60 0619

T&S BRASS AND BRONZE WORKS, INC.
2 Saddleback Cove / P.O. Box 1088
Travelers Rest, SC 29690

Travelers Rest, SC: 800-476-4103 • Simi Valley, CA: 800-423-0150 • Fax: 864-834-3518 • www.tsbrass.com

Model No.
B-0133-01

Item No.

This Space for Architect/Engineer Approval

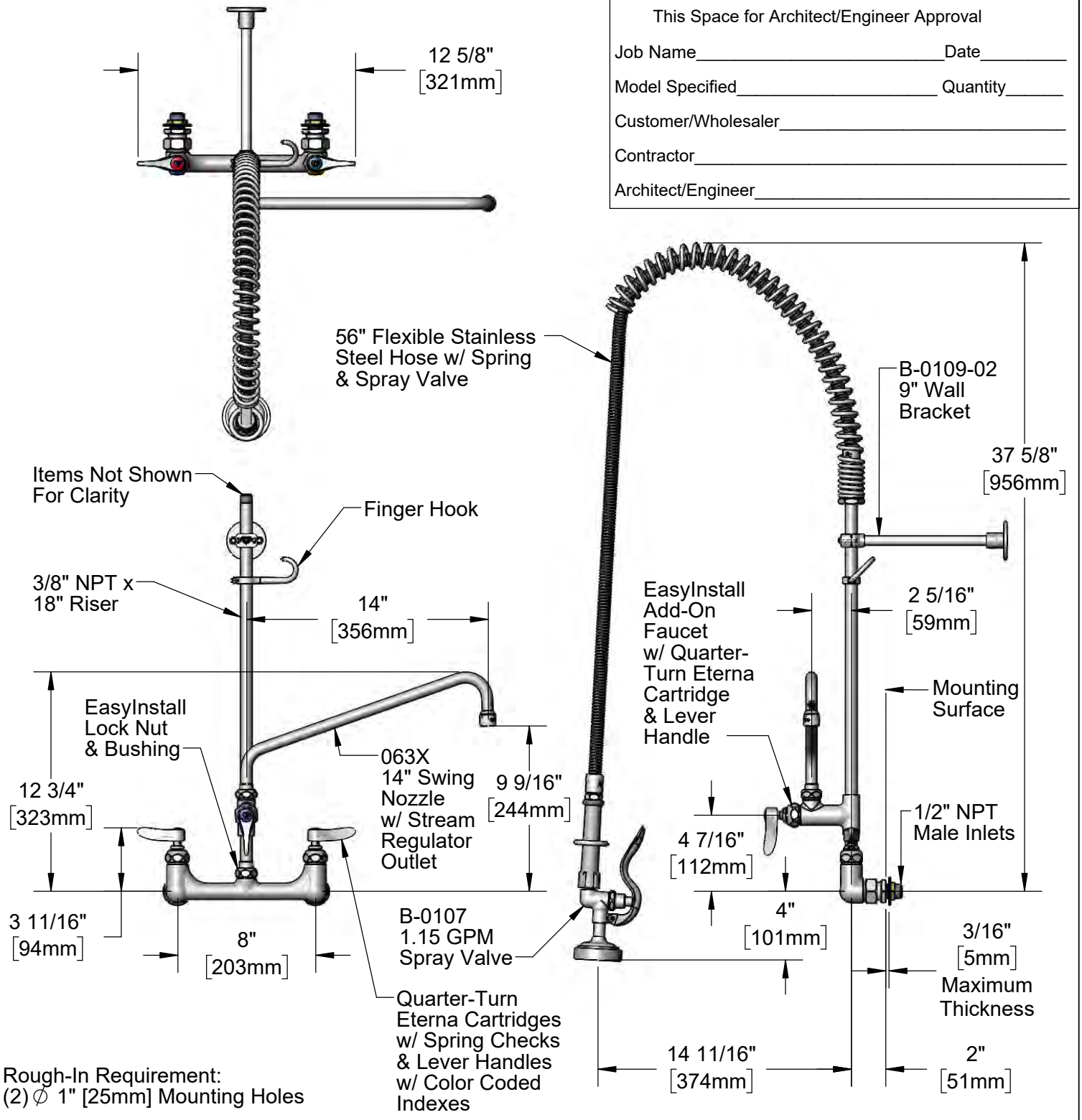
Job Name_____Date_____

Model Specified_____ Quantity_____

Customer/Wholesaler_____

Contractor_____

Architect/Engineer_____



Product Specifications:

Pre-Rinse Unit: EasyInstall 8" Wall Mount Mixing Faucet, Quarter-Turn Eterna Cartridges w/ Spring Checks, Lever Handles, Add-On Faucet, 14" Swing Nozzle, 56" Flexible Stainless Steel Hose, 1.15 GPM Spray Valve, 9" Wall Bracket & 1/2" NPT Male Inlets

Product Compliance:

ASME A112.18.1 / CSA B125.1
NSF 61 - Section 9
NSF 372 (Low Lead Content)
2019 DOE PRSV - Class II

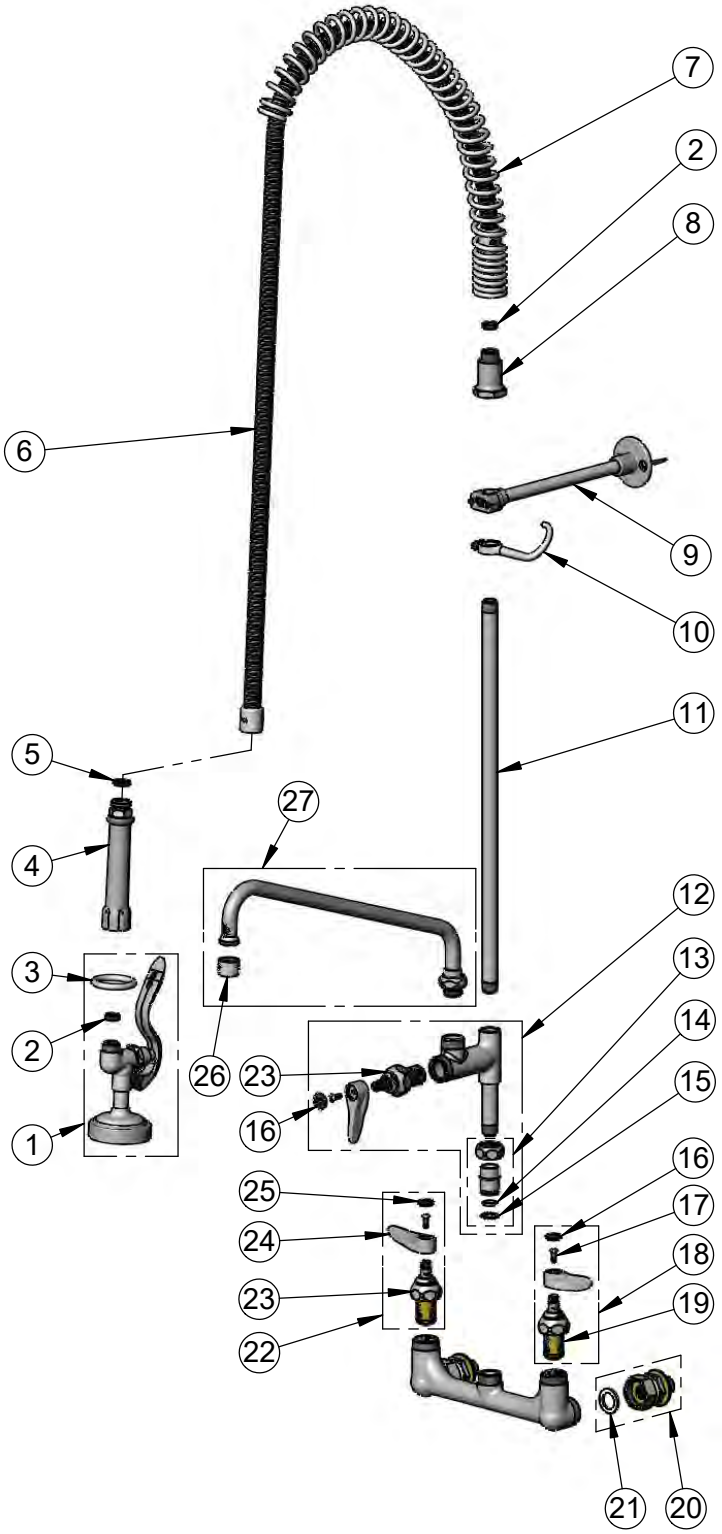
Drawn:	Checked:	Approved:	Date:	Scale:	Sheet:
LSA	KJG	JHB	03/03/20	1:8	1 of 2

T&S BRASS AND BRONZE WORKS, INC.
2 Saddleback Cove / P.O. Box 1088
Travelers Rest, SC 29690

Travelers Rest, SC: 800-476-4103 • Simi Valley, CA: 800-423-0150 • Fax: 864-834-3518 • www.tsbrass.com

Model No.
B-0133-01

Item No.



ITEM NO.	SALES NO.	DESCRIPTION
1	B-0107	1.15 GPM Spray Valve
2	010476-45	#27 Washer
3	000907-45	Spray Valve Hold Down Ring
4	002987-40	Grip Handle
5	001014-45	Washer, B-0100 Hose Barrel
6	B-0056-H2A	56" Flexible Stainless Steel Hose, Less Handle
7	000888-45	EasyInstall Overhead Spring
8	000821-40	Spring Body
9	B-0109-02	9" Wall Bracket
10	004R	Finger Hook
11	000369-40	3/8" NPT x 18" Riser
12	B-0155-LNEZ	EasyInstall Add-On Faucet w/ Quarter-Turn Eterna Cartridge, RTC & Lever Handle, Less Nozzle
13	EZ-K	EasyInstall Kit
14	001065-45	O-Ring
15	014200-45	Star Washer, Anti-Rotation
16	018506-19NS	Blue Button Index, Press-in
17	000925-45	Lab Handle Screw
18	002711-40NS	Quarter-Turn Eterna Cartridge w/ Spring Check, Handle, Blue Index & Screw, LTC
19	012442-40NS	Quarter-Turn Eterna Cartridge w/ Spring Check, LTC
20	00CC	1/2" NPT Male Inlet Flange
21	001019-45	Coupling Nut Washer
22	002712-40NS	Quarter-Turn Eterna Cartridge w/ Spring Check, Handle, Red Index & Screw, RTC
23	012443-40NS	Quarter-Turn Eterna Cartridge w/ Spring Check, RTC
24	001638-45NS	Lever Handle (New Style)
25	001193-19NS	Red Button Index, Press-in
26	B-PT	Full Flow Stream Regulator, 55/64-27
27	063X	14" Swing Nozzle

Product Specifications:

Pre-Rinse Unit: EasyInstall 8" Wall Mount Mixing Faucet, Quarter-Turn Eterna Cartridges w/ Spring Checks, Lever Handles, Add-On Faucet, 14" Swing Nozzle, 56" Flexible Stainless Steel Hose, 1.15 GPM Spray Valve, 9" Wall Bracket & 1/2" NPT Male Inlets

Product Compliance:

ASME A112.18.1 / CSA B125.1
NSF 61 - Section 9
NSF 372 (Low Lead Content)
2019 DOE PRSV - Class II

Drawn:	Checked:	Approved:	Date:	Scale:	Sheet:
LSA	KJG	JHB	03/03/20	NTS	2 of 2

PROJECT: _____ **ITEM NO.:** _____

SS SERIES FOOD WASTE DISPOSERS

Food waste disposers are a hygienic and environmentally sustainable way to manage pre- and post-consumer scraps in a foodservice establishment. The SS Series disposers are ideal for heavy-duty applications such as restaurants, schools and universities, healthcare facilities and hospitals, and government facilities.

1 YEAR ON-SITE PARTS & LABOR WARRANTY

PRODUCT FEATURES & SPECIFICATIONS

SS-SERIES

- Whether you serve 25 or 2,500 people, there is an InSinkErator disposer that's designed for your operation. From the small-capacity SS-100™ model to our large-capacity SS-1000™ workhorse, InSinkErator disposers deliver superior performance, quiet operation, maximum energy efficiency, and reliable service.

SYSTEM OVERVIEW

- Stainless steel and chrome-plated finish
- Corrosion-resistant, stainless steel grind chamber
- Heavy-duty induction motor with built-in thermal overload protection
- Enclosure provides protection against outside moisture with controlled power air flow to cool motor
- Cast-nickel, chrome-alloy stationary and rotating shredding elements
- Double-tapered Timken roller bearings provide a shock-absorbing cushion
- Triple lip seal protects motor from water damage
- Secondary spring-loaded oil seal provides double protection against water and loss of grease

CLEANING

- Disposers are easy to clean and maintain
- Wipe down exterior surfaces with a wet cloth
- Use warm soapy water on the splashguard

Commercial Disposer Sizing Chart

To determine the proper size disposer, use this recommended sizing chart. Sizing recommendations are given in general terms; actual capacities vary depending on the volume and type of food waste.

Volume Processed / Application	Light Majority Fruits & Vegetables	Medium 50/50 Mixture	Heavy Majority Meats & Seafood
High Buffet/Cafeteria Government	SS-300	SS-300/ SS-500	SS-500	SS-500/ SS-1000	SS-500/ SS-1000
Medium Full Service Restaurant	SS-200	SS-300	SS-300/ SS-500	SS-500	SS-500/ SS-1000
Low Limited Service Restaurant/Café/ Fast Casual	SS-100	SS-200	SS-300	SS-300/ SS-500	SS-1000
	SS-100	SS-100	SS-200	SS-300	SS-300/ SS-500

Food Waste Composition

A complete collection of our product drawings is available for download at the **InSinkErator Revit/CAD** Library, which can be found at www.insinkerator.com/foodservice. Product information is also accessible on ***The KCL CADalog***. More information is available from KCL at www.kclcad.com.

4700 21st STREET
RACINE, WI 53406
TEL: 800-845-8345
FAX: 262 554-3620
www.insinkerator.com/foodservice

c UL us LISTED NOM ANCE ISO 9001 QUALITY SYSTEMS CERTIFIED

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EMERSON

WHAT'S INCLUDED

- Base disposer: 1 mounting gasket
- Disposer packages: 1 mounting/bowl assembly, 1 electrical control, 1 syphon breaker, 1 solenoid valve, and 1 flow control valve (the standard flow control valve will be sent with the unit unless the optional valve is specified)

MODEL & HORSEPOWER/ELECTRICAL REQUIREMENTS (CHOOSE ONE)

Small Capacity Disposers

☐ **SS-100**
1 HP

	☐ 115/208-230V, 60 Hz, 1 Ph, 11.6/5.1/5.7 amps, **cULus** ☐ 208-230/460V, 60 Hz, 3 Ph, 2.0/2.4/1.2 amps, **cULus**	☐ 120/208-240V, 60 Hz, 1 Ph, 11.6/5.1/5.7 amps, **NOM** ☐ 100/200-230V, 50/60 Hz, 1 Ph, 10.4/5.2/5.4 amps
Water Usage:	☐ 5 GPM (18.9 LPM) standard water flow	☐ 3 GPM (11.4 LPM) reduced water flow (optional)

Medium Capacity Disposer

☐ **SS-200**
2 HP

	☐ 115/208-230V, 60 Hz, 1 Ph, 17.4/7.7/8.7 amps, **cULus** ☐ 208-230/460V, 60 Hz, 3 Ph, 3.6/4.4/2.2 amps, **cULus** ☐ 115/208-230V, 60 Hz, 1 Ph, 17.4/7.7/8.7 amps, **cULus**, **short body**	☐ 208-230/460V, 60 Hz, 3 Ph, 3.6/4.4/2.2 amps, **cULus**, **short body** ☐ 208-240/460V, 60 Hz, 3 Ph, 3 Ph, 3.6/4.4/2.2 amps, **NOM**
Water Usage:	☐ 7 GPM (26.5 LPM) standard water flow	☐ 5 GPM (18.9 LPM) reduced water flow (optional)

Large Capacity Disposers

☐ **SS-300**
3 HP

	☐ 208-230/460V, 60 Hz, 3 Ph, 6.0/7.4/3.7 amps, **CUL** ☐ 208-230/460V, 60 Hz, 3 Ph, 6.0/7.4/3.7 amps, **CUL**, **short body** ☐ 208-230/460V, 60 Hz, 3 Ph, 7.0/8.6/3.7 amps, **NOM**	☐ 415V, 50 Hz, 3 Ph, 4.9 amps ☐ 220V, 50 Hz, 3 Ph, 7.2 amps ☐ 380V, 50/60 Hz, 3 Ph, 4.1/3.0 amps
Water Usage:	☐ 8 GPM (30.3 LPM) standard water flow	☐ 7 GPM (26.5 LPM) reduced water flow (optional)

☐ **SS-500**
5 HP

	☐ 208-230/460V, 60 Hz, 3 Ph, 8.6/8.8/4.4 amps, **CUL** ☐ 208-230/460V, 60 Hz, 3 Ph, 8.6/8.8/4.4 amps, **CUL**, **short body** ☐ 230/460V, 50 Hz, 3 Ph, 9.0/4.5 amps	☐ 415V, 50 Hz, 3 Ph, 6.0 amps ☐ 380V, 50 Hz, 3 Ph, 8.9 amps
Water Usage:	☐ 8 GPM (30.3 LPM) standard water flow	☐ 7 GPM (26.5 LPM) reduced water flow (optional)

☐ **SS-1000**
10 HP

	☐ 208-230/460V, 60 Hz, 3 Ph, 11.0/13.0/6.5 amps, **CUL** ☐ 208-230/460V, 60 Hz, 3 Ph, 11.0/13.0/6.5 amps, **CUL**, **short body**
Water Usage:	☐ 10 GPM (37.9 LPM) standard water flow

DISPOSER MOUNTING ASSEMBLIES (CHOOSE ONE)

Sink Collar Mounts

☐ **#5 Sink Flange Kit**
for 3-1/2"–4" (88.9 mm–101.6 mm) sink opening (support legs are recommended)

#5 adaptors only available on small and medium capacity disposers.

☐ **#6 Collar Adaptor Kit**
for welding into trough, for 6-5/8" (168.3 mm) opening, includes splash baffle

☐ **#7 Collar Adaptor Kit**
for welding into sink, for 6-5/8" (168.3 mm) opening, includes splash baffle and stopper

Sink Bowl Mounts

Bowl Size

- ☐ 12" (304.8 mm) with one adjustable water nozzle
- ☐ 15" (381.0 mm) with one adjustable water nozzle
- ☐ 18" (457.2 mm) with two adjustable water nozzles

Kit Type

☐ **Type A Sink Bowl Assembly**
- bowl
- water nozzle(s)
- bowl cover
- splash baffle

☐ **Type B Sink Bowl Assembly**
- bowl
- water nozzle(s)
- silver guard
- splash baffle

☐ **Type C Sink Bowl Assembly**
- bowl
- water nozzle(s)
- splash baffle

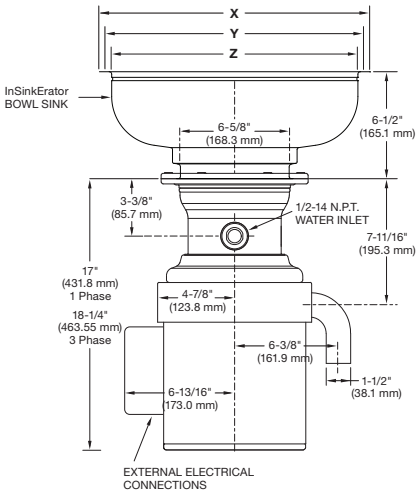
ELECTRICAL CONTROLS (CHOOSE ONE)

☐ **AS-101 Control Center** AquaSaver®	☐ **CC-101 Control Center**	☐ **CC-202 Control Center**	☐ **Manual Reverse Switch**	☐ **Manual Switch**
• Automatically changes direction • Stainless-steel housing • Automatic shut-off with power loss • Line disconnect • Programmable post-flush • Timed run • Automatically regulates water flow to grind load	• Automatically changes direction • Stainless-steel housing • Automatic shut-off with power loss • Line disconnect • Programmable post-flush • Timed run	• Automatically changes direction • Stainless-steel housing • Automatic shut-off with power loss	• Manually changes direction • Stainless-steel housing • Automatic shut-off with power loss	• Single direction • Polycarbonate housing • Automatic shut-off with power loss

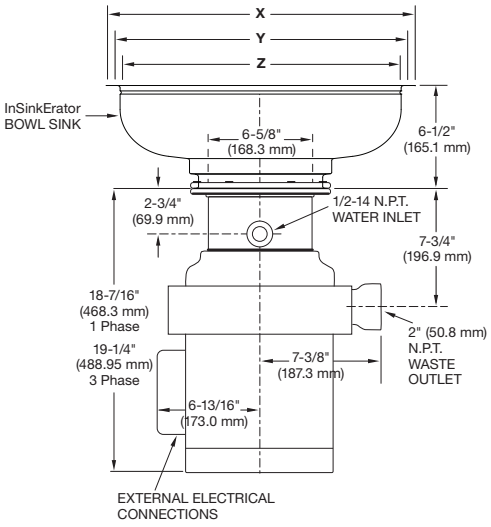
DISPOSER DIMENSIONS

Standard models shown. A short body model is available on medium and large capacity disposers. Short body models reduce overall height by 1" (25.4 mm) on medium capacity disposers and by 3" (76.2 mm) on large capacity disposers.

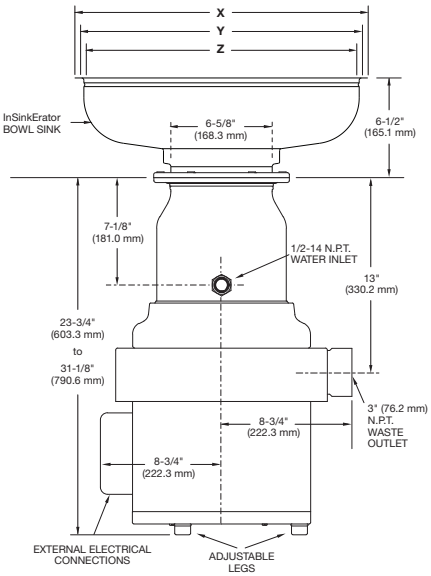
Small Capacity



Medium Capacity



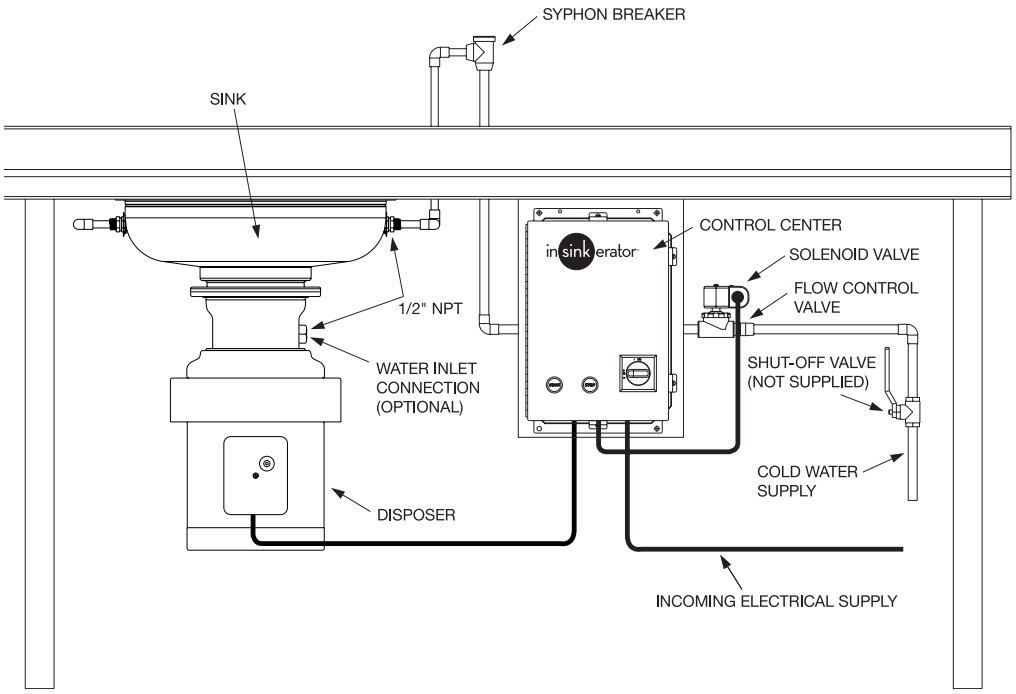
Large Capacity



If mounting directly to a sink, use dimension chart below for adaptor height in place of InSinkErator bowl sink height.
IMPORTANT: #5 adaptors only available on small and medium capacity disposers.

Bowl Mounts	Flange O.D. **X**	Work Table Hole **Y**	Flange I.D. **Z**	**Height**
12" (304.8 mm)	13-1/2" (342.9 mm)	12-1/4" (311.2 mm)	12" (304.8 mm)	6-1/2" (165.1 mm)
15" (381 mm)	16-1/2" (419.1 mm)	15-1/4" (387.4 mm)	15" (381.0 mm)	6-1/2" (165.1 mm)
18" (457.2 mm)	19-1/2" (495.3 mm)	18-1/4" (463.6 mm)	18" (457.2 mm)	6-1/2" (165.1 mm)
Collar Mounts	**X**	**Y**	**Z**	**Height**
#5	Fits Standard Sink Opening: 3-1/2" – 4" (88.9 mm – 101.6 mm)			2-3/4" (69.9 mm)
#6	7-13/16" (198.4 mm)	6-7/8" (174.6 mm)	6-5/8" (168.3 mm)	1-3/16" (30.2 mm)
#7	9-1/8" (231.8 mm)	7-7/8" (200.0 mm)	7-5/8" (193.7 mm)	2-1/16" (52.4 mm)

TYPICAL INSTALLATION - BOWL



REPLACING A COMPETITIVE DISPOSER

- Refer to the Mounting Adaptor Guide or Video for adaptors that fit competitor sink bowls or cones.
- Have sink bowl/cone type with appropriate dimensions available when contacting Customer Service with questions or to place an order.

SAMPLE SPECIFICATION

InSinkErator Food Waste Disposer. Food waste grinding system with _____ HP disposer, _____ control panel. _____ Volts, _____ Hz, _____ Phase operation. _____ disposer mount. Syphon breaker with 1/2" NPT connections; flow control valve; (1) 24V water solenoid.

PROJECT INFORMATION

Item Number: _____

Quantity: _____

Manufacturer: InSinkErator

Model Number: _____

Electrical Requirements:

_____volts _____phase

Project: _____

Address: _____

City/State/Zip: _____

Contact: _____

Phone: _____

Dealer: _____

City/State/Zip: _____

Contact: _____

Phone: _____

Installer: _____

Contact: _____

Phone: _____

Consultant: _____

Contact: _____

Phone: _____

THIS ITEM IS: WALL SHELF

- ☐ SPARE NUMBER
- ☐ MILLWORK
- ■ CUSTOM FABRICATED/NSF
- ☐ EXISTING
  - ☐ WHERE SHOWN
  - ☐ RELOCATED
  - ☐ MODIFIED
- ☐ N.I.K.E.C. BY:
  - ☐ OWNER
  - ☐ SUPPLIER / VENDOR
  - ☐ OTHERS

REMARKS:

Champion®
The Dishwashing Machine Specialists

Project _____
Item No. _____
Quantity _____

UH230B UNDERCOUNTER

UH230B

Undercounter High Temperature
Dishwashing Machine
with Built-in Booster Heater

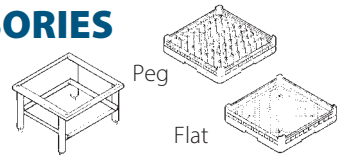
STANDARD FEATURES

- **ENERGY STAR® Qualified**
- **NEW "Shear Energy"** – a reduction in energy requirements while maximizing performance!
- **NEW "Multi-Power"** – includes **"Multi-Volt"** and **"Multi-Phase"**. Allows for infield conversion to 208-240 volt and/or single to three phase with ease.
- **StemSure™** – Soft start to protect glasses and dishes from chipping and breaking
- Rinse Sentry – extends the cycle time to ensure 180°F/82°C final rinse.
- Built-in electric booster for 180°F/82°C final rinse water (standard 70°F/39°C rise)
- Pumped drain
- Low-water tank heat protection
- Detergent and rinse aid pumps
- Quiet double-wall construction
- Door safety switch
- Independent stainless steel interchangeable upper and lower wash and rinse arms
- Top mounted slide-out controls
- Stainless steel top and side panels
- 90-second total cycle time
- Extended wash for difficult ware cleaning & de-liming
- Automatic drain cycle
- 1 Hp motor
- Advanced Digital Temperature Monitoring
- Stainless steel construction
- NSF Certified Pot and Pan Cycle in extended wash cycle

NEW FEATURES

Photo is for general visual representation only. Please refer to specifications for the latest detailed product information.

OPTIONS & ACCESSORIES



- ☐ **Additional Dish Racks**
- ☐ **17" Stand** Stainless Steel
- ☐ **8" Stand** Stainless Steel
- ☐ **3 Phase Connection** (prewired at factory)
- ☐ 9kW High Speed **Rise Booster**
- ☐ **1" Roller Kit** (includes 4 casters)
- ☐ **Power Cord kit**
- ☐ **NEW Champion ION scale prevention system**
- ☐ **Drain water tempering kit** (unmounted)

SPECIFIER STATEMENT

Specified unit will be Champion model UH230B undercounter high temperature dishwashing machine with built-in booster heater.

Features 90 second total cycle, extended wash, LED temp display, Rinse Sentry, rinse aid and detergent pumps, flexible fill and drain hoses, stainless steel top and side panels. Constructed of stainless steel.

1 year parts and labor warranty.

Note: Vent hood is not recommended, as unit does not produce excessive steam.

Note: Always follow local building code guidelines.

Champion Industries, Inc.
3765 Champion Blvd, Winston-Salem, NC 27105
Tel: 336/661-1556 Fax: 336/661-1979
www.championindustries.com

(1M) 10/21 Printed in U.S.A.

UH230B UNDERCOUNTER

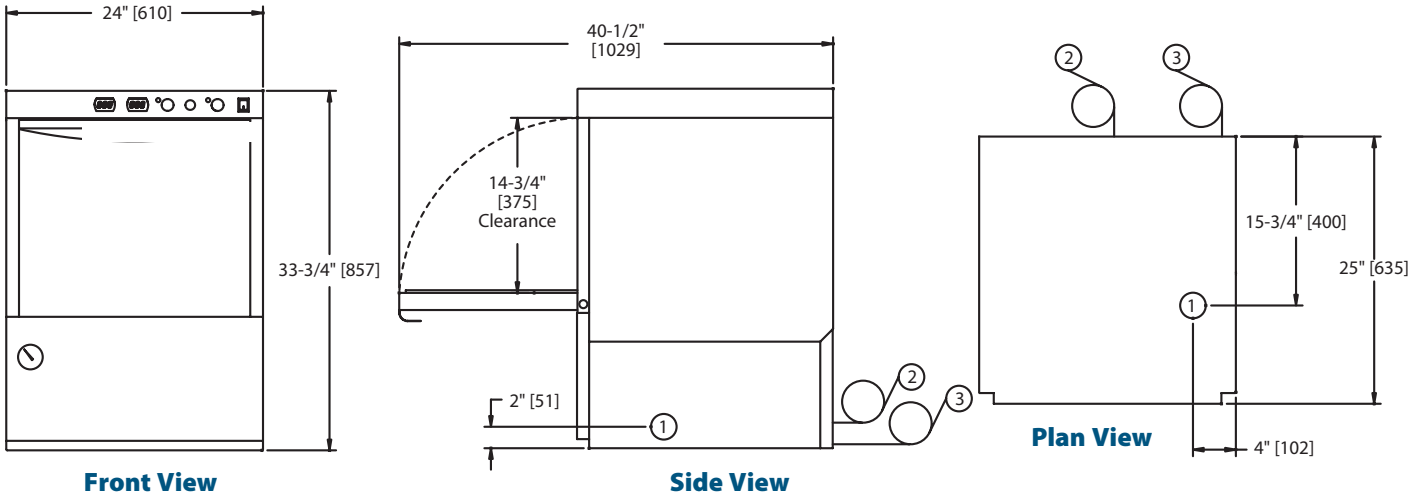
UH230B

Undercounter High Temperature
Dishwashing Machine
with Built-in Booster Heater

Champion®
The Dishwashing Machine Specialists

Volume crated: **15 cu. ft./0.42 cu.m.**
Shipping weight crated: **215 lbs./97.5 kg.**

Dimensions shown in inches and [millimeters]



Front View **Side View** **Plan View**

Utilities

1	**Electrical** 208-240/60/1; 3 wire plus ground, (See Box). 208-240/60/3; 4 wire plus ground, (See Box). Field convertible to accept 3 phase power, see service manual for details
2	**Hot Water** 1/2" supply; 110°F/43°C Min. hot water connection for 70°F/39°C rise booster. Incoming supply pressure must maintain a Flow pressure of 20-22 PSI. If machine is sold without internal booster, a 1/2" PRV is required to be purchased. Machine equipped with 3/4" [19] hose connector.
3	**Pumped Drain** 5/8" [15.9] I.D. flexible reinforced hose, 6 ft. [1829] long. Max. drain flow 15 US gpm. [12.5 imp gal] Max. drain height 3 ft. [914]

6kW UH230B with 70°F/39°C Rise Booster

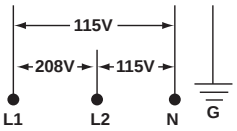
Elec. Specs.	Rated Amps	Minimum Supply Ckt. Conductor Ampacity	Maximum Overcurrent Protective Device
208/60/1	32	40	40
240/60/1	36	40	40
208/60/3	22	30	30
240/60/3	24	30	30

Field convertible to accept 3 phase power

UH230B with 9kW High Speed Booster

Elec. Specs.	Rated Amps	Minimum Supply Ckt. Conductor Ampacity	Maximum Overcurrent Protective Device
208/60/1	45	60	60
240/60/1	50	60	60
208/60/3	29	35	35
240/60/3	33	40	40

Warning Plumbing and electrical connections should be made by qualified personnel who will observe all the applicable plumbing, sanitary and safety codes and the National Electrical Code.



Note: Electrical supply service must be a 3-wire plus ground for connection shown.

Due to an ongoing value analysis program at Champion, specifications contained in this catalog are subject to change without notice.

Champion Industries, Inc.,
3765 Champion Blvd., NC 27105
336/661-1556 • Fax: 336/661-1979
ChampionIndustries.com

SPECIFICATIONS

Capacities*

Cycle time (seconds)	90
Racks per hr.	40

Motor horsepower

Wash	1

Water consumption

U.S. Gal./Imperial Gal. (Max. use) per hr.	23.4/19.2
U.S. Gal./Imperial Gal. per rack	0.78/0.64

Temperatures °F/°C

Wash	150/66
Rinse	180/82

Heating

Tank heat, electric, kW	2.0
Electric booster (kW) (required for 70°F/39°C rise)	6
Electric high speed booster (kW) (required for 100°F rise)	9

Time Cycle in Seconds

Wash	70
Rinse	14
Total cycle	90

Standard 20" x 20" [508 x 508] Rack Complement

Dish	1
Open	1

* at 140°F incoming water

an Ali Group Company

The Spirit of Excellence

THIS ITEM IS: SPARE NUMBER

- [x] SPARE NUMBER
- [ ] MILLWORK
- [ ] CUSTOM FABRICATED/NSF
- [ ] EXISTING
  - [ ] WHERE SHOWN
  - [ ] RELOCATED
  - [ ] MODIFIED
- [ ] N.I.K.E.C. BY:
  - [ ] OWNER
  - [ ] SUPPLIER / VENDOR
  - [ ] OTHERS

REMARKS:

THIS ITEM IS: SPARE NUMBER

- [x] SPARE NUMBER
- [ ] MILLWORK
- [ ] CUSTOM FABRICATED/NSF
- [ ] EXISTING
  - [ ] WHERE SHOWN
  - [ ] RELOCATED
  - [ ] MODIFIED
- [ ] N.I.K.E.C. BY:
  - [ ] OWNER
  - [ ] SUPPLIER / VENDOR
  - [ ] OTHERS

REMARKS:

THIS ITEM IS: SPARE NUMBER

- [x] SPARE NUMBER
- [ ] MILLWORK
- [ ] CUSTOM FABRICATED/NSF
- [ ] EXISTING
  - [ ] WHERE SHOWN
  - [ ] RELOCATED
  - [ ] MODIFIED
- [ ] N.I.K.E.C. BY:
  - [ ] OWNER
  - [ ] SUPPLIER / VENDOR
  - [ ] OTHERS

REMARKS:

THIS ITEM IS: SOAP & TOWEL DISPENSER

- ☐ SPARE NUMBER
- ☐ MILLWORK
- ☐ CUSTOM FABRICATED/NSF
- ☐ EXISTING
  - ☐ WHERE SHOWN
  - ☐ RELOCATED
  - ☐ MODIFIED
- ■ N.I.K.E.C. BY:
  - ■ OWNER
  - ☐ SUPPLIER / VENDOR
  - ☐ OTHERS

REMARKS:

F-450MAJ(-C)

MODULAR ICE MACHINE
SLIM-LINE SERIES

F-450MAJ(-C)
03/31/17
Item # 13133

Item #: _____

Project: _____

Qty: _____

AIA#: _____

W x D x H
22" x 27 3/8" x 22"

F-450MAJ
Air-Cooled Flaker
Shown on optional bin B-300

F-450MAJ-C
Air-Cooled Cubelet

Features

- **Durable stainless steel exterior**
- **Advanced CleanCycle24™ design**
- **Stainless steel auger with greaseless bearing**

- F-450MAJ - Up to 492 lbs. of ice production per 24 hours
- F-450MAJ-C - Up to 412 lbs. of ice production per 24 hours
- Mount two units, side-by-side, in only 44" of floor space for double the amount of ice production
- 2 second flush cycle every hour
- Flush cycle removes sediment for cleaner ice
- Infrared bin control for easy cleaning and reliability
- Not recommended for dispensing applications
- R-404A Refrigerant

Available on Bins:

B-250PF	B-500PF/SF	B-800PF/SF	B-1150SS	B-1500SS*
B-300PF/SF	B-700PF/SF	B-900PF/SF	B-1300SS	B-1650SS*

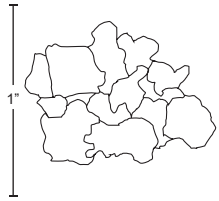
*Top kit may be required. See Bin Spec Sheets. *Two unit application only.*

Warranty:
3 Year Parts & Labor on entire machine. 5 Year Parts on Compressor; air-cooled condenser coil. Valid in United States, Canada, Puerto Rico and U.S. Territories. Contact factory for warranty in other countries.

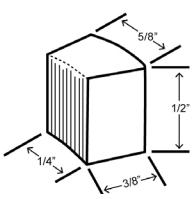
		ICE PRODUCTION			WATER USAGE		ELECTRICAL						
Condenser	Model	Air / Water Temp Lbs. per 24 hours 70°/ 50°F	90°/ 70°F	Type of Ice	Potable Gal. per 100 lbs. 90°/ 70°F	Condenser Gal. per 100 lbs. 90°/ 70°F	kWh Used per 100 lbs. 90°/ 70°F	Max. Fuse Size or HACR Circuit Breaker	Amperage	Voltage	Heat Rejection BTU/hr.	Shipping Weight	ENERGY STAR®
Air-Cooled	F-450MAJ	492	395	Flaked	12.0	N/A	4.94	15A	10.8A	115V/60/1	4,700	170 lbs.	
Air-Cooled	F-450MAJ-C	412	316	Cubelet	12.0	N/A	6.10	15A	10.8A	115V/60/1	4,700	170 lbs.	

Cube Dimensions*

Flaked F-450MAJ



Cubelet F-450MAJ-C



* approximate size in inches, image not to scale

Operating Limits

• Ambient Temp Range	45 - 100°F
• Water Temp Range	45 - 90°F
• Water Pressure	10 - 113 PSIG
• Voltage Range	104-127V

Service

- Panels easily removed and all components accessible for service.
- Removable/cleanable air filter (Air-cooled model only)
- Allow 6" (15 cm) clearance at rear and sides, and 24" (61 cm) clearance at top for proper air circulation and ease of maintenance/service.

Plumbing

- Icemaker Water Supply Line: Minimum 1/4" Nominal ID Copper Water Tubing or Equivalent
- Icemaker Drain Line: Minimum 3/4" Nominal ID Hard Pipe or Equivalent

Printed in the U.S.A.

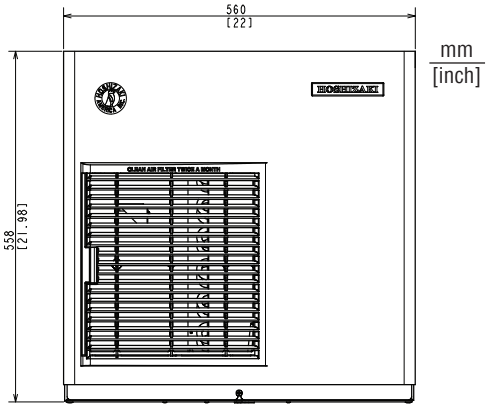
Hoshizaki reserves the right to change specifications without notice.

F-450MAJ(-C)

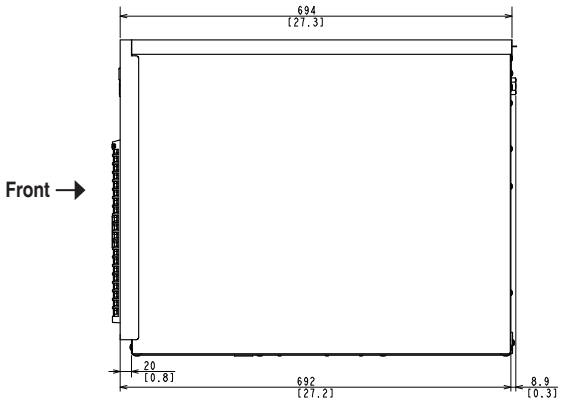
Modular Ice Machine
Slim-Line Series

F-450MAJ(-C)
03/31/17
Item # 13133

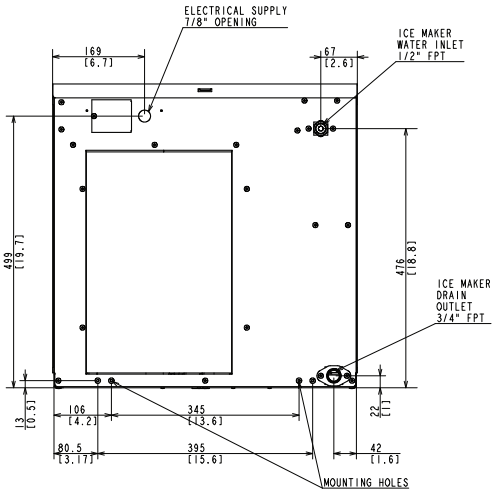
FRONT VIEW
AIR-COOLED



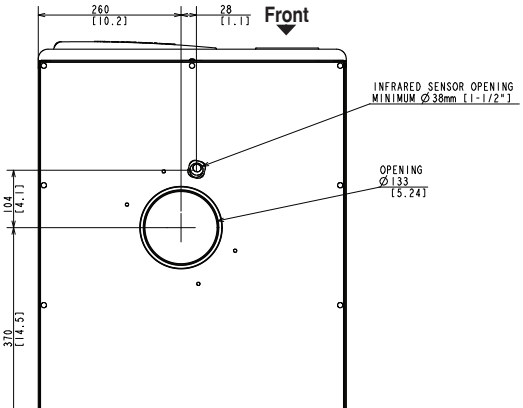
SIDE VIEW
AIR-COOLED



REAR VIEW
AIR-COOLED



BOTTOM VIEW
AIR-COOLED



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WATER FILTERS

FILTRATION SYSTEMS

WATER FILTERS
06/26/20
Item # 13076

Item #: _____

Project: _____

Qty: _____

AIA#: _____

H9320 FILTER
Single, Double, Triple

H9320-51

Single Configuration
18.4" H*

H9320-52

Double Configuration
19.11" H*

H9320-53

Triple Configuration
19.15" H*

*height includes manifold and cartridge

HOSHIZAKI H9320 FILTER

Available in single, double and triple configurations. Rated NSF Class 1, STD 42, for taste, odor and chlorine reduction and for mechanical filtration (95.6% removal of particles one (1) micron and larger in size.)

- Keep ice makers functioning at full capacity
- 93.7% average reduction of chlorine from incoming water supply, eliminating tastes and odors of the ice
- Filters are rated as one (1) micron nominal producing crystal clear ice
- Decrease machine maintenance by reducing lime scale build-up

Model	Filter	Max Flow Rate	Working Pressure	Temperature	Capacity
H9320-51	4HC-H	2 gpm	10-125 psi	35-100°F	21,000 gal
H9320-52	4HC-H	4 gpm	10-125 psi	35-100°F	42,000 gal
H9320-53	4HC-H	6 gpm	10-125 psi	35-100°F	63,000 gal

Plumbing

Inlet/Outlet Connections: Single: (2) 3/8" FNPT
Double & Triple: (1) 3/4" MNPT / (1) 3/4" FNPT

The H9320 Filters and their respective cartridges have been tested and listed by NSF only for the functions listed above. Check for compliance with state and local laws and regulations. Do not use where the water is microbiologically unsafe, or with waters of unknown quality without adequate disinfection before or after the unit. The H9320 filter can be used with water that may contain filterable cysts.

The H9320 System is tested and certified by NSF International against NSF/ANSI Standard 42 for the reduction of:
Std. No. 42 - Aesthetic effects

Aesthetic Effects	*Mechanical Filtration*
Bacteriostatic Effects	Nominal Particulate Class 1
Chemical Reduction	Taste & Odor
Chlorine	

E-10 PREFILTER
(9795-80)

E-20 PREFILTER
(9795-90)

E-10 PREFILTER
(9795-80)
Recommended for single configuraton

E-20 PREFILTER
(9795-90)
Recommended for twin and triple configuraton

E-10 and E-20 Prefilters can be used for ice. Everpure prefilters are designed to increase the life of Hoshizaki 4HC-H water filters in areas with an unusual amount of dirt in the water. With a 10 micron (nominal) rating, the economical Everpure prefilter traps much of the dirt which contributes to scale buildup in ice makers, and clogs the delicate orifices of other water-using equiment.

When you install an Everpure prefilter, the Hoshizaki 4HC-H water filters can concentrate on what they do best: remove particles one (1) micron nominal and larger in size.

Replacement Cartridges:
E-10 Prefilters: 12 pack (9534-12)
40 pack (9534-40)

E-20 Prefilters: 6 pack (9534-26)
20 pack (9534-20)

Warranty:
One Year replaceable elements*
One Year the entire system
* Warranty applies to material defects in materials & workmanship only.

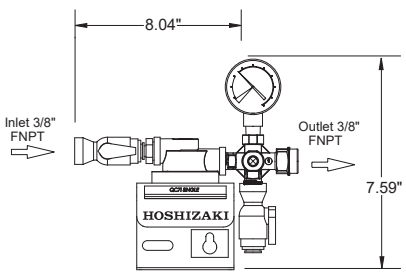
Hoshizaki reserves the right to change specifications without notice.

WATER FILTERS

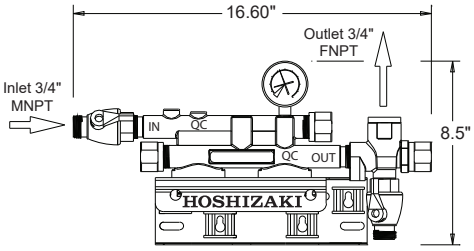
FILTRATION SYSTEMS

Model Number	Description Flow Rate (Gal. per min.)	Undercounter KMs	KM Cubers	IM Cubers	Cubelets & Flakers	DCM/DBs
H9320-51	Single (2 GPM)	AM-50 KM-81 KM-116 KM-161 KM-231 KM-301	KM-350, 520, 660 KML-325, 500, 700 KMD-410, 460, 530 KMS-830 DKM-500	IM-200, 500	All Models	All Models
H9320-52	Twin 2 x (2 GPM)	N/A	KM-901, 1100 KMD-860 KMS-822, 1122, 1402	IM-50BAA-Q	N/A	N/A
H9320-53	Triple 3 x (2 GPM)	N/A	KM-1301, 1340, 1601, 1900, 2200, 2600 KMH-2100 KMS-2000	N/A	N/A	N/A
H9655-11	Replacement Cartridge (1) One each	Recommended water filter configurations based on average ice machine usage and regular filter replacement. If your operation has challenging water conditions or higher usage, then it may be necessary to use an additional filter or prefilter.				

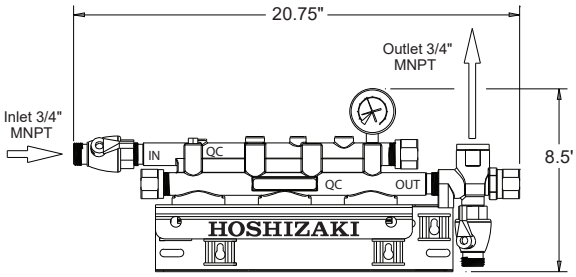
Single



Twin



Triple



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SF Bins

ICE STORAGE BIN SERIES

Item #: _____

Project: _____

Qty: _____

AIA#: _____

SF - Stainless Steel Finish

B-250SF | B-300SF BD-300SF | B-500SF BD-500SF

B-700SF | B-800SF | B-900SF

Features

- **Protected by H-GUARD Plus Antimicrobial Agent**
- **Polyethylene bin liner for sanitary storage**
- **Sturdy construction for side-by-side or stacked ice machine installation**

- Ice storage capacity from 250 lbs. up to 900 lbs.
- Both surfaces are designed for easy cleaning
- Long lasting attractive appearance
- Foamed-in-place polyurethane insulation, in all bin walls and bottom, provides dependable ice storage
- H-GUARD Plus Antimicrobial adds extra protection to the ice scoop (included)

SF - Stainless Steel Finish

BD Bins

- Fit 24" - 24 1/2" deep ice machine without top kit extension

Warranty:

2 Year Parts & Labor (Production prior to January 2012)
3 Year Parts & Labor (Production January 2012 and after)
Valid in United States, Canada, Puerto Rico and U.S. Territories. Contact factory for warranty in other countries.

Model Number	Exterior Dimensions W x D x H*	Interior Dimensions W x D x H	Application Storage Capacity†	Cubic Volume	Shipping Dimensions L x W x H	Shipping Weight (lbs.)
B-250SF	30" x 32.3" x 33.4"	27" x 27.7" x 23.7"	250 lbs.	10.30 ft³	35" x 32" x 32"	—
B-300SF	22" x 32.3" x 46"	19" x 27.7" x 37.6"	300 lbs.	11.51 ft³	35" x 24" x 45"	125
BD-300SF	22" x 32.3" x 46"	19" x 27.7" x 37.6"	300 lbs.	11.51 ft³	35" x 24" x 45"	130
B-500SF	30" x 32.3" x 46"	27" x 27.7" x 37.6"	500 lbs.	16.33 ft³	35" x 32" x 45"	140
BD-500SF	30" x 32.3" x 46"	27" x 27.7" x 37.6"	500 lbs.	16.33 ft³	35" x 32" x 45"	140
B-700SF	44" x 32.3" x 46"	41" x 27.7" x 37.6"	700 lbs.	24.77 ft³	46" x 35" x 45"	175
B-800SF	48" x 32.3" x 46"	45" x 27.7" x 37.6"	800 lbs.	26.90 ft³	50.25" x 35" x 45"	185
B-900SF	52" x 32.3" x 46"	49" x 27.7" x 37.6"	900 lbs.	29.59 ft³	54.5" x 35" x 45"	195

*Height includes 6" legs
† Capacity based on volume x 30 lb/ft³ average density of ice.

Hoshizaki reserves the right to change specifications without notice.

SF Bins

ICE STORAGE BIN SERIES

Ice Machine Model Application

	22" Width KM-350M KM-520M KM-660M F-450M F-801M F-1002M	22" Width KMD-410M† KMS-822M FD-650M-C† FD-1002M-C	30" Width KM-901M KM-1340M KM-1601M KML Series F-1501M F-2001	30" Width KMD-460M‡ KMD-530M‡ KMD-860M‡ KMS-1402M* KMS-2000M*	44" Width 2 KM-350M 2 KM-520M 2 KM-660M IM-500S 2 F-450M 2 F-801M 2 F-1002M	44" Width 2 KMD-410M 2 FD-650M-C 2 FD-1002M-C	48" Width KM-1301S KM-1400S KM-1601S KM-1900S KM-2200S KM-2600S
Bins B-300SF DB-130H	— *(DB-130H - KMD only)*	NEED HS-5424 HS-2153 *(KMD-410 on B-300 only)*	N/A	N/A	N/A	N/A	N/A
Bins B-250SF B-500SF	NEED HS-2033	NEED HS-2033 & HS-2129	—	NEED HS-2129	N/A	N/A	N/A
Bins B-700SF	NEED HS-2035	NEED HS-2035 & HS-2130	NEED HS-2034	NEED HS-2130 & HS-2034	—	NEED HS-2130 *(KMD-410 does not apply)*	N/A
Bins B-800SF	NEED HS-2035 & HS-2032	NEED HS-2035, HS-2032 & HS-2131	NEED HS-2034 & HS-2032	NEED HS-2131, HS-2034 & 2032	NEED HS-2032	NEED HS-2032 & HS-2131	—
Bins B-900SF	NEED HS-2035 & HS-2033	NEED HS-2035, HS-2033 & HS-2132	NEED HS-2035	NEED HS-2132 & HS-2035	NEED HS-2033	NEED HS-2033 & HS-2132	NEED HS-2032
Bins DB-200H DM-200B	NEED HS-2036 *(KM units only)*	N/A	— *(KML only)*	N/A	N/A	N/A	N/A

— No top kit necesary | N/A Combination of ice maker and bin is not possible

BD Bins fit 24" - 24 1/2" deep ice machine without Top Kit extension.

† **BD-300SF:** KMD-410M, KMS-822M, FD-650M-C, FD-1002M-C

‡ **BD-500SF:** KMD-460M, KMD-530, KMD-860

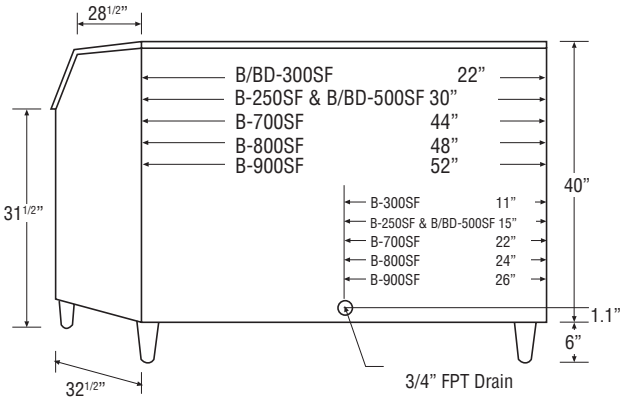
* Any KMS or FD on bin need Top Kit Extension:

- HS-2129 - for use with B-500 bins
- HS-2130 - for use with B-700 bins
- HS-2131 - for use with B-800 bins
- HS-2132 - for use with B-900 bins

Top Kits:

HS-2032 - 4" ABS Top Kit
HS-2033 - 8" ABS Top Kit
HS-2034 - 14" ABS Top Kit
HS-2035 - 22" ABS Top Kit
HS-2036 - (2) 4" ABS Top Kits
HS-2066 - Seismic Kit for SD 500 Stands
HS-2071 - Anchored Leg Kit SD 500 Stands
HS-2111 - 11.3" x 26.2" Stainless Cover/Separator
HS-2148 - 30" x 3.1" Stainless Cover
HS-2153 - KMD-410 on B-300 bin
HS-2160 - 2 KM-901M

B-250SF



Ice Drop Area

B Bins

BD Bins

Bin Flanged Legs:
B/BD-300SF

Bin Legs:
B-250SF, B/BD-500SF
B-700SF, B-800SF
B-900SF

IMC/TEDDY
DECADES OF FINE CRAFTSMANSHIP

FWR
Floor Water Receptacle

General Information

Project Name: _____

Consultant: _____

Item #: _____

Model #: _____

Quantity: _____

Specifications

FWR Floor Water Receptacles are 16GA type 300 series stainless steel one-piece construction. Horizontal corners are coved and the trough is integrally pitched toward a waste outlet with a stainless steel beehive strainer and a 4" OD tailpiece.

Recessed flange and 1" deep ledge for IMC grating are integral with the unit. Unit is 7½" wide and 4" deep.

Joints are TIG welded and leak-proof. Exposed surfaces finished brush satin.

Product Guide

Use for Commercial and Institutional Buildings or large food prep facilities.

Unit is generally used underneath Ice Machines or in front of walk-ins or large water discharge areas, in tight spaces.

Flexible design such as custom depths make this a versatile drain trough.

Recessed flange supports floor tile and provides a grout pocket.

Setting frame for waterproof membrane and/or integral seepage flange with "weep" holes can be added for wet floor areas.

OPTIONS

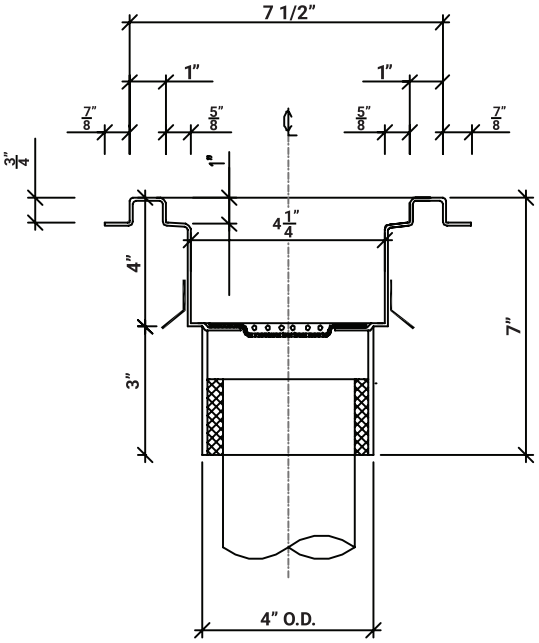
- ☐ 3", 3½", 5", 6", 8" OD Tube (circle one)
- ☐ Waste Tube over 3" Long
- ☐ Additional Wastes
- ☐ Waste Cup Strainers
- ☐ Beehive Strainers
- ☐ Off Center Waste
- ☐ **ST12** - Scrap Tray 12" Long
- ☐ Perforated Waste Pipe
- ☐ Special Size Setting Flange 2" Deep
- ☐ Special Size Setting Flange 2" to 4" Deep
- ☐ Oversize Waste Tube
- ☐ Lint Screen for Laundry Trough
- ☐ **ST20** - Scrap Tray 20" Long
- ☐ Drain on the Side or End
- ☐ Rim on Drain
- ☐ Basket Strainer w/ Handle & Chain
- ☐ **BXD** - Box Type Drain
- ☐ **BSX** - Beehive Strainer for Box Drain
- ☐ **GA-12** - 12GA Upgrade

FWR-60 0619

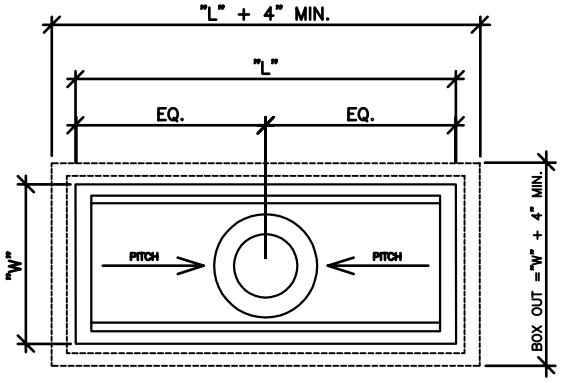
IMC/TEDDY
DECADES OF FINE CRAFTSMANSHIP

FWR
Floor Water Receptacle

DRAWINGS



Box Out Size



Trough Area

- Width (PIT) = Width ("W") + 4" Minimum
- Length (PIT) = Length ("L") + 4" Minimum
- Depth (PIT) = Depth of Trough + 1/2" + Finish Floor
- Size of Rough-In Hole For Drains 7½" Ø Minimum

FLOOR WATER RECEPTACLES

Model	Size (W x L)
☐ FWR-24	7½" x 24"
☐ FWR-30	7½" x 30"
☐ FWR-36	7½" x 36"
☐ FWR-48	7½" x 48"
☐ FWR-60	7½" x 60"
☐ FWR-72	7½" x 72"
☐ FWR-84	7½" x 84"
☐ FWR-96	7½" x 96"
☐ FWR-108	7½" x 108"
☐ FWR-120	7½" x 120"

Note: For longer lengths, contact factory.

Specifications subject to change without notice.

FWR-60 0619

Carbon's Golden Malted Commercial RT Series Waffle Baker Specifications

110 – 120 Volts A/C
1300-Watts • Approximately 11 Amps
Height: 10 ½ inches Closed
Height: 23 ½ inches Open
Width: 12 inches
Overall Length: 25 inches
Weight: 21 pounds

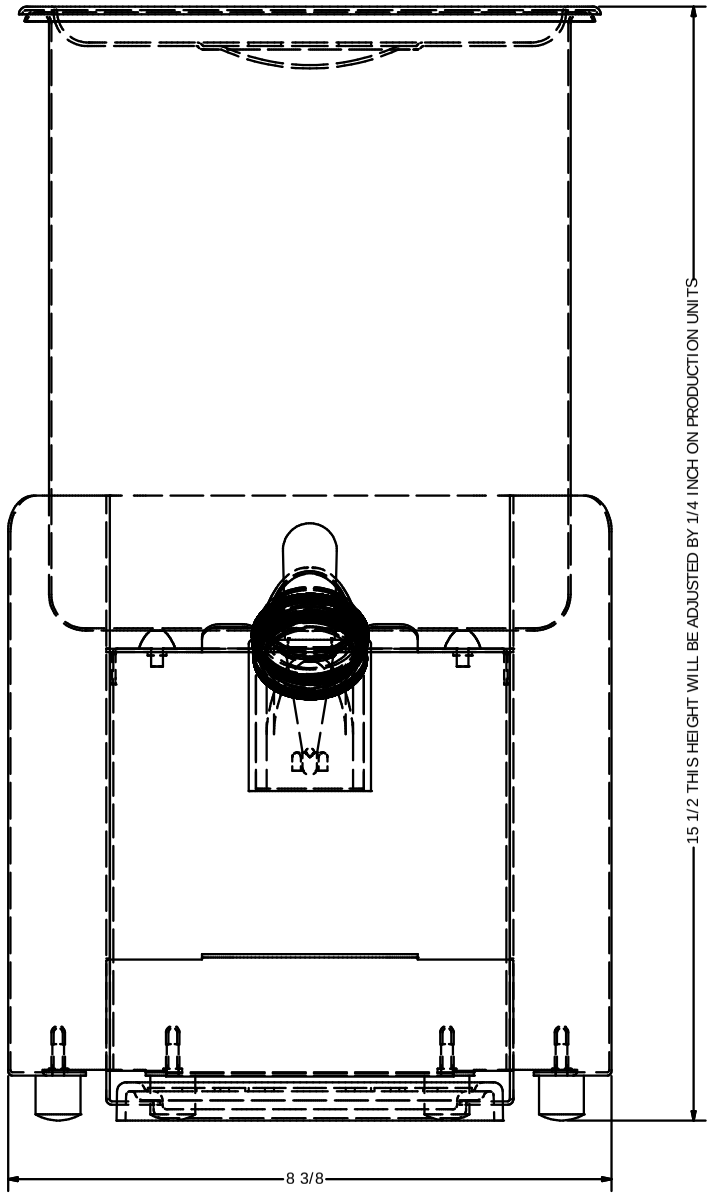
Auto-Start Timer: No buttons to push. Waffle baker timer will automatically engage after rotating grids.

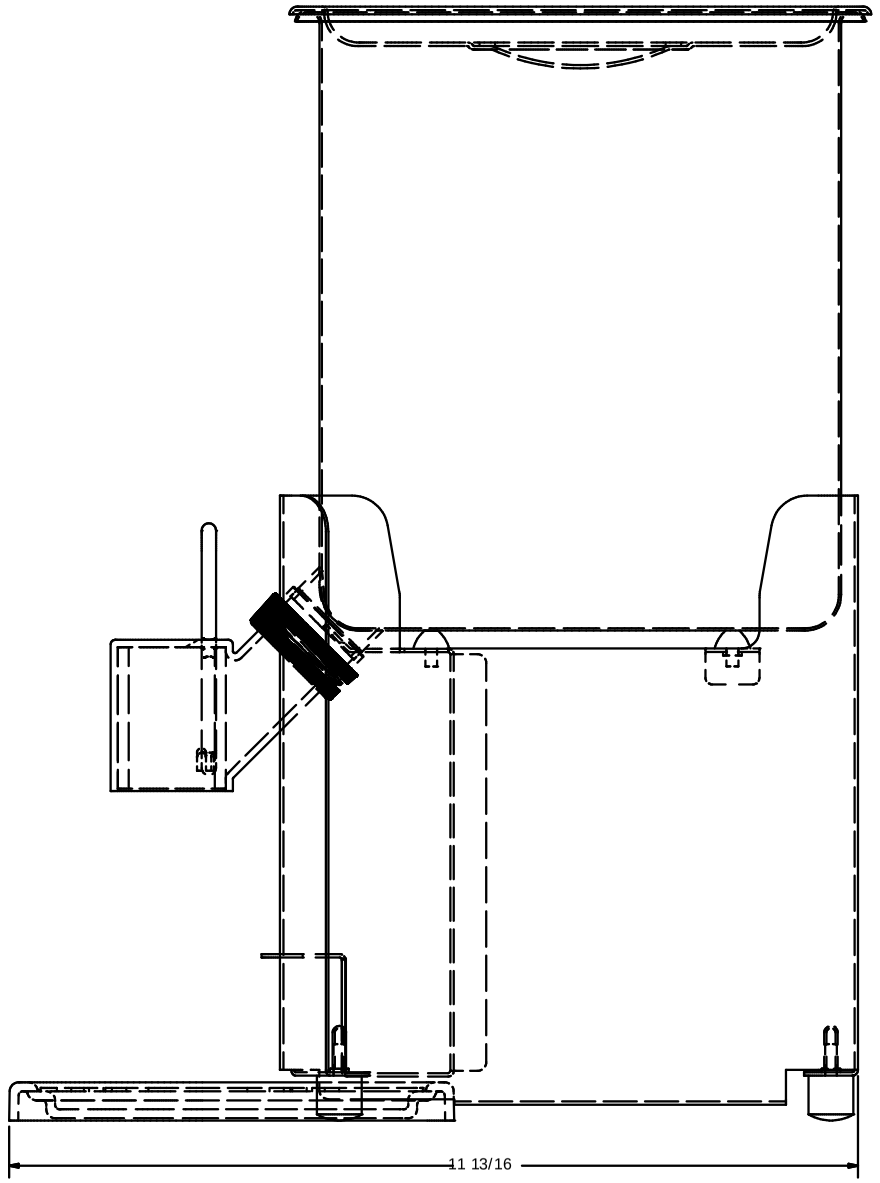
Solid Aluminum Grids with Non-Stick Coating: 6-ounce grids feature non-stick coating with instant recovery time for high volume users.

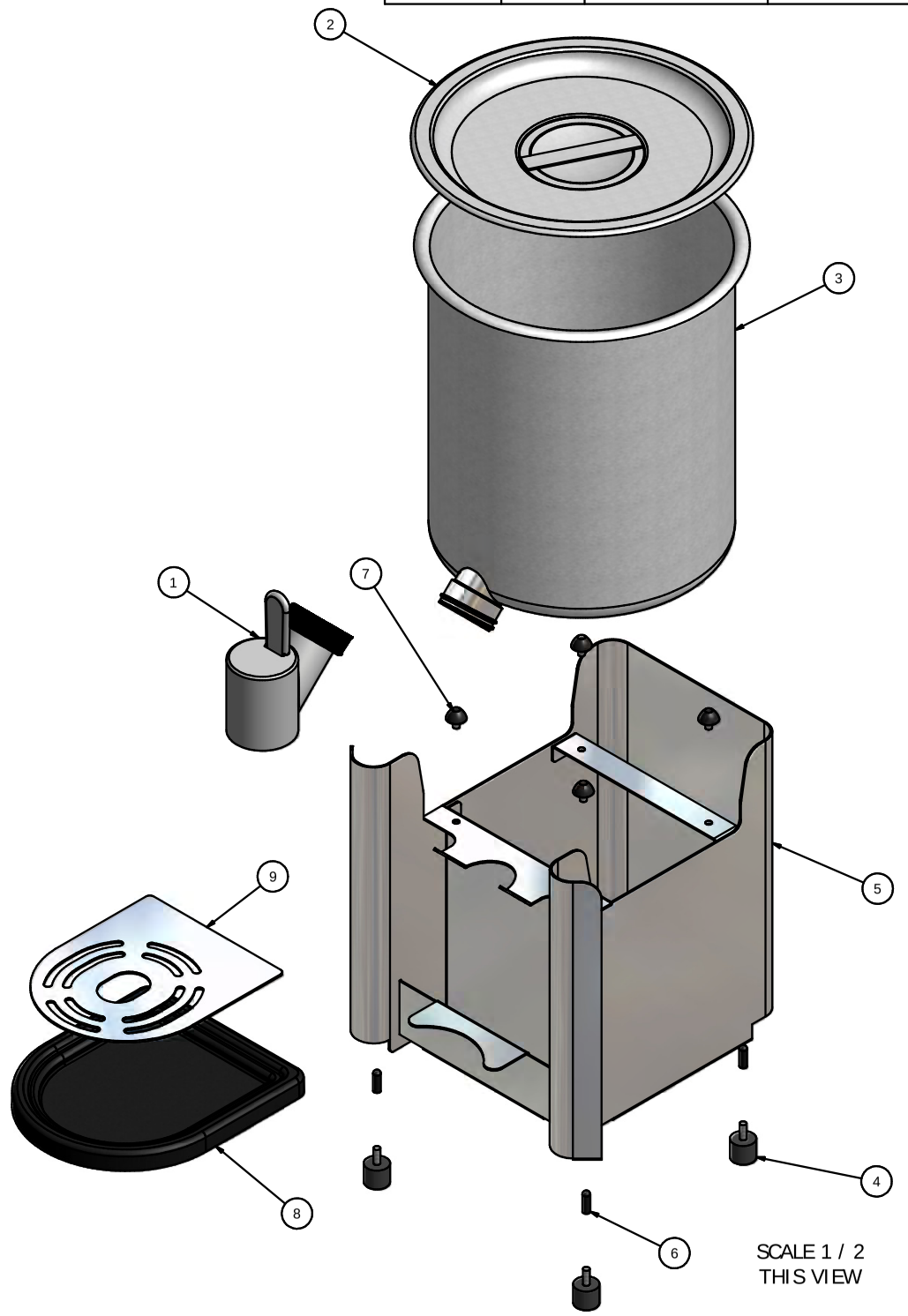
Cool Touch Safety Handles: Safe and easy grasp design.

UL and NSF Listed: UL Certificate #130300-E79062
NSF Certificate #09450 / 09450B

Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	4387003	38MM SPOUT
2	1	4424069	LID, 8 QT
3	1	4424131	VESSEL ASSEMBLY
4	4	81058	FOOT, RUBBER, W/SCREW
5	1	4424150	HOUSING ASSEMBLY
6	4	86337	CAP, PROTECTIVE
7	4	81169	FOOT, RUBBER, SCREW
8	1	4424156	DRIP TRAY
9	1	4424157	DRIP TRAY COVER







SCALE 1 / 2
THIS VIEW

			APP'D BY		SPECIFIED TOLERANCES FOR THIS PART .00=+/-.03 .000=+/-.015
			CK'D BY		MATERIAL
			DRAWN BY	PFELDNER	TOLERANCES UNLESS OTHERWISE SPECIFIED FRAC ± 1/64 DEC .00=±.01 .000=±.005 ANG ± 1°
			DATE	1/12/2009	Server Products, Inc RICHFIELD, WI 53076 USA 800-558-8722
			SCALE	3:4	PART NAME H & H WAFFLE DISPENSER
SYM	DATE	ENG CHG#			SIZE D / DWG NO. 4424010

DWG NO. 4424

Nestlé Vitality Express Dispenser

The *Nestle Vitality* Express Beverage Dispenser gives operators innovative state of-the-art equipment that leads the industry in efficiency, reliability, and food safety. With the patented Flavor Flip feature, operators can serve 8 cold beverage assortments without recalibration from one easy-to-use machine.

CONSISTENT QUALITY
Dispenser blends concentrate and water perfectly every time.

SAFE AND SANITARY
Closed system with no hoses or tubes to trap bacteria.

BUILT FOR SPEED
Deliver up to five 5 oz portions per minute under 45°F.

NO WASTE
ExpressPaks® are designed to evacuate completely and consistently.

GREAT FLAVOR FLEXIBILITY
The 4-drink Express system with its Flavor Flip feature can serve up to 8 cold beverages from 1 convenient dispenser with a simple flip of a switch.

I'm interested. Contact me.

FAQS

How does the Flavor Flip feature work and is it easy to use?
Extend your offerings and change the menu with a flip of a switch. With the patented Flavor Flip feature, operators can serve 8 cold beverage assortments without recalibration from one easy-to-use machine. Simply remove the current ExpressPak, and replace it with your new beverage selection, then flip the switch to serve! Unlike other dispensers, there is no need to wait for product to be empty, place unfinished ExpressPaks into the cooler until the next use.

What kind of beverages can I serve from the Nestlé Vitality Express Dispenser?
Nestlé Vitality offers a wide variety of refreshing lemonades, iced teas, and flavor enhanced waters; as well as iced coffee, juice and juice blends from concentrate. It's an easy and cost-efficient way to add craft-made drinks to your cold beverage menu on demand.

Is the Nestlé Vitality Express Dispenser difficult to set up and clean?
The Nestlé Vitality Express Dispenser leads the food service industry in efficiency, reliability, and food safety. Our dedicated in-house team will set up and program your machine, training your staff along the way. The closed system requires no hoses or tubes that can trap bacteria; therefore, the product never encounters the machine or contaminants. Maintaining the machine is simple, just use a water flush once a month with the touch of a button.

Is it difficult to update the cold beverage offering menu or replace empty ExpressPaks®?
Extend your offerings and change the menu with a flip of a switch. With the Flavor Flip feature, operators can serve 8 cold beverage assortments without recalibration from one easy-to-use machine. Simply remove the current ExpressPak, and replace it with your new beverage selection, then flip the switch to serve! Unlike other dispensers, there is no need to wait for product to be empty, place unfinished ExpressPaks into the cooler until the next use.

Do you need to have an ice machine to serve drinks from the Nestle Vitality Express Dispenser?No, beverages will dispense chilled and ready to drink! The dispenser blends concentrate and water perfectly every time, rapidly dispensing 25 ounces per minute, under 45ºF. Add ice if you wish.

How do I get started?
Contact a Nestle Professional today! Click 'learn more' for a Nestle Professional representative to contact you today!

DISPENSER SPECIFICATIONS

Item #30

Dispenser Dimensions	Height 33.7” (85.7 cm), Width 15.0” (38.1 cm), Depth 24.3” (61.7 cm)
Type	Refrigerated concentrate and water mixed on demand
Pump	Four electronically controlled pump motors
Product Flow Rate	Approximately 1.6 oz/second (47.3 mL). Varies with product
Concentrate Capacity	Four 3 liter *ExpressPaks*
Product Capability	Four selections offered, plus Flavor Flip that allows up to four alternate selections
Electrical System	Solid state control electronics with self-diagnostic system. Available in two voltage configurations: A. 110-120VAC, 60 Hz, 8 FLA (15-16A at compressor start) / B. 220-240VAC, 50 Hz, 5 FLA
Security System	Key lock located on side of door. Night switch located behind graphics panel turns off water solenoid, pump motors, and graphics panel
Refrigeration System	Dual capillary tube refrigeration system with individual controls for water chilling and concentrate cooling. Temperature is monitored by precision thermistors for accurate control
Capacity	Five 5 oz (148 mL) servings per minute under 45°F (7.2°C) at ambient air and incoming water temperature of 75°F (23.9°C)
Water Connection	Inlet hose fitted with 3/8” male flare
Water Supply Pressure	Requires 30-100 PSI
Approvals	UL, C-UL, UL Sanitation, TUV, GS
Shipping Weight	160 lbs (72.8 kg)
Clearance	2” (5.08 cm) at rear, sides and top for ventilation

DISPENSER SERVICES

Item #30

The Nestle Professional Commitment To You

Our machines are reliable and easy to maintain, but when you need assistance, we're there.

Nestlé Professional Beverages' commitment is to offer all customers utilizing our Nestlé Vitality solutions peace of mind, service, and support. With customer satisfaction as our priority, we have created a professionally trained service network. Our dedicated in-house team will set up and program your machine, training your staff along the way.

The Nestle 24/7 assistance team is just a call away for any virtual questions or in-person trouble shooting. The Nestle Vitality Express dispenser has less than .8 calls per year for service! The closed system requires no hoses or tubes that can trap bacteria; therefore, the product never encounters the machine or contaminants. Maintaining the machine is simple, just use a water flush once a month with the touch of a button.

How we serve you:

- Coverage throughout United States and Canada
- Around the clock call center for troubleshooting
- Fully trained service technicians
- Support in machine commissioning and installation
- Preventative and emergency service calls

For more machine assistance, please call 1-800-367-5813 to receive advise from an expert.

TRUE MANUFACTURING CO., INC.
U.S.A. FOODSERVICE DIVISION
2001 East Terra Lane • O'Fallon, Missouri 63366-4434 • (636)240-2400
Fax (636)272-2408 • Toll Free (800)325-6152 • Intl Fax# (001)636-272-7546
Parts Dept. (800)424-TRUE • Parts Dept. Fax# (636)272-9471 • www.truemfg.com

Project Name: _____
Location: _____
Item #: _____ *Qty:* _____
Model #: _____

AIA #
SIS #

Model:
TWT-48-HC

Worktop:
Solid Door Refrigerator with Hydrocarbon Refrigerant

TWT-48-HC

- True's worktop units are designed with enduring quality that protects your long term investment.
- Designed using the highest quality materials and components to provide the user with colder product temperatures, lower utility costs, exceptional food safety and the best value in today's food service marketplace.
- Factory engineered, self-contained, capillary tube system using environmentally friendly R290 hydro carbon refrigerant that has zero (0) ozone depletion potential (ODP), & three (3) global warming potential (GWP).
- Oversized, environmentally friendly forced-air refrigeration system holds 33°F to 38°F (.5°C to 3.3°C).
- All stainless steel front, top and ends. Corrosion resistant GalFan coated steel back. Top and backsplash are one piece formed construction. Bacteria and food particles cannot be trapped underneath as with other two-piece worktop units.
- Interior - attractive, NSF approved, clear coated aluminum liner. Stainless steel floor with coved corners.
- Heavy duty PVC coated wire shelves.
- Foamed-in-place using a high density, polyurethane insulation that has zero ozone depletion potential (ODP) and zero global warming potential (GWP).

ROUGH-IN DATA

Specifications subject to change without notice.
Chart dimensions rounded up to the nearest ⅛" (millimeters rounded up to next whole number).

Model	Doors	Shelves	Cabinet Dimensions (inches) (mm) L	D†	H*	HP	Voltage	Amps	NEMA Config.	Cord Length (total ft.) (total m)	Crated Weight (lbs.) (kg)
TWT-48-HC	2	4	48⅜ 1229	30⅛ 766	33⅜ 848	⅓ ¼	115/60/1 230-240/50/1	3.0 1.63	5-15P ▲	7 2.13	280 127

† Depth does not include 1" (26 mm) for rear bumpers and¼" (7 mm) for front bumper.
* Height does not include 6¼" (159 mm) for castors or 6" (153 mm) for optional legs.

▲Plug type varies by country.

7/18 Printed in U.S.A.

APPROVALS:

AVAILABLE AT:

Model:
TWT-48-HC

Worktop:
Solid Door Refrigerator with Hydrocarbon Refrigerant

STANDARD FEATURES

DESIGN
- True's commitment to using the highest quality materials and oversized refrigeration systems provides the user with colder product temperatures, lower utility costs, exceptional food safety and the best value in today's food service marketplace.

REFRIGERATION SYSTEM
- Factory engineered, self-contained, capillary tube system using environmentally friendly R290 hydro carbon refrigerant that has zero (0) ozone depletion potential (ODP), & three (3) global warming potential (GWP).
- Oversized, factory balanced refrigeration system with guided airflow to provide uniform product temperatures.
- High capacity, factory balanced refrigeration system that maintains cabinet temperatures of 33°F to 38°F (.5°C to 3.3°C) for the best in food preservation.
- State of the art, electronically commutated evaporator and condenser fan motors. ECM motors operate at higher peak efficiencies and move a more consistent volume of air which produces less heat, reduces energy consumption and provides greater motor reliability.
- Condensing unit access in back of cabinet, slides out for easy maintenance.

CABINET CONSTRUCTION
- All stainless steel front, top and ends. Corrosion resistant GalFan coated steel back. Top and backsplash are one piece formed construction. Bacteria and food particles cannot be trapped underneath as with other two-piece worktop units.
- Interior - attractive, NSF approved, clear coated aluminum liner. Stainless steel floor with coved corners.
- Insulation - entire cabinet structure and solid doors are foamed-in-place using a high density, polyurethane insulation that has zero ozone depletion potential (ODP) and zero global warming potential (GWP).
- 5" (127 mm) diameter stem castors - locks provided on front set. 36" (915 mm) work surface height.

DOORS
- Stainless steel exterior with clear aluminum liner to match cabinet interior.
- Each door fitted with 12" (305 mm) long recessed handle that is foamed-in-place with a sheet metal interlock to ensure permanent attachment.
- Positive seal self-closing doors with 90° stay open feature. Doors swing within cabinet dimensions.
- Magnetic door gaskets of one piece construction, removable without tools for ease of cleaning.

SHELVING
- Four (4) adjustable, heavy duty PVC coated wire shelves 21 9/16"L x 16"D (548 mm x 407 mm). Four (4) chrome plated shelf clips included per shelf.
- Shelf support pilasters made of same material as cabinet interior; shelves are adjustable on ½" (13 mm) increments.

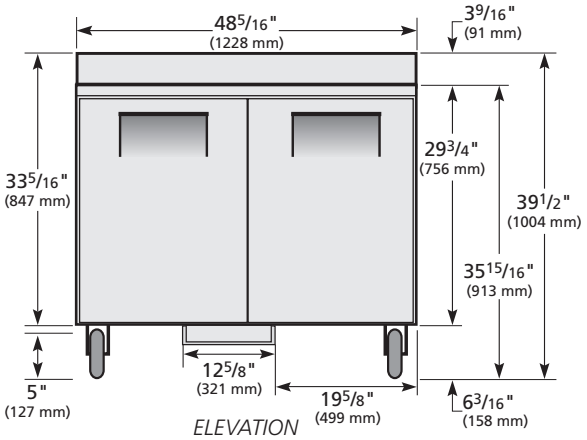
MODEL FEATURES
- Evaporator is epoxy coated to eliminate the potential of corrosion.
- NSF/ANSI Standard 7 compliant for open food product.

ELECTRICAL
- Unit completely pre-wired at factory and ready for final connection to a 115/60/1 phase, 15 amp dedicated outlet. Cord and plug set included.

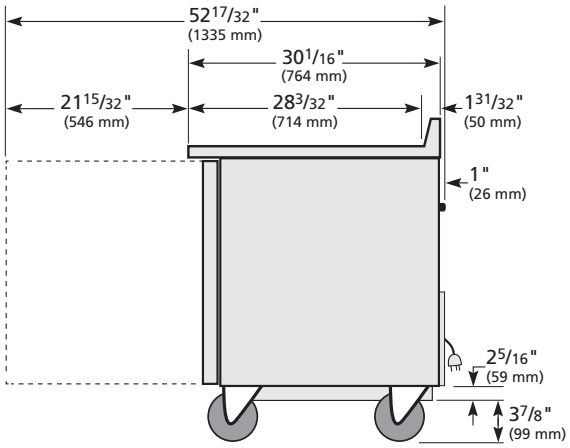
115/60/1
NEMA-5-15R

OPTIONAL FEATURES/ACCESSORIES
Upcharge and lead times may apply.
- ❑ 230 - 240V / 50 Hz.
- ❑ 6" (153 mm) standard legs.
- ❑ 6" (153 mm) seismic/flanged legs.
- ❑ 2½" (64 mm) diameter castors.
- ❑ Barrel locks (factory installed). Requires one per door.
- ❑ Single overshelf.
- ❑ Double overshelf.
- ❑ 28¼" (718 mm) deep, ½" (13 mm) thick, white polyethylene cutting board. Requires "L" brackets.
- ❑ 28¼" (718 mm) deep, ½" (13 mm) thick, composite cutting board. Requires "L" brackets.
- ❑ Heavy duty, 16 gauge tops.
- ❑ Exterior rectangular digital thermometer (factory installed).
- ❑ ADA compliant models with 34" (864 mm) work surface height.

PLAN VIEW



ELEVATION



RIGHT VIEW

WARRANTY
Three year warranty on all parts and labor and an additional 2 year warranty on compressor. (U.S.A. only)

METRIC DIMENSIONS ROUNDED UP TO THE NEAREST WHOLE MILLIMETER

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

Model	Elevation	Right	Plan	3D	Back
TWT-48-HC	TFPY02E	TFPY02S	TFPY02P	TFPY023	

TRUE MANUFACTURING CO., INC.
2001 East Terra Lane • O'Fallon, Missouri 63366-4434 • (636)240-2400 • Fax (636)272-2408 • Toll Free (800)325-6152 • Intl. Fax# (001)636-272-7546 • www.truemfg.com

COFFEE BREWING SYSTEMS

CBS-2250 NG Brewers

1.5 GALLON BREWING SYSTEM

Shown with **D449 6.0L / 1.5G LUXUS® Thermal Dispenser**

CAPACITIVE TOUCHSCREEN DISPLAY

The NG line features a capacitive LED touchscreen display. Set brew times, program recipe buttons and more with just the touch of a finger. It's as easy as a smartphone.

LED STATUS BAR

Quickly identify where your machine is at in the brewing process from anywhere in the room. The LED Status Bar changes color during the brewing process to let you know when it's ready to brew, brewing, almost done and ready to serve.

BREW BASKET LOCKS

Brew baskets lock in place during the brewing process for added safety and quality control.

FETCO®

EXTRACTOR NG™

DISPENSERS

CBS-2250 NG Brewers

DISPENSERS

D449

6.0 Liter / 1.5 Gallon LUXUS® Thermal Dispenser
L4D-15

NSF

D480

6.0 Liter / 1.5 Gallon LUXUS® Sight Gauge Dispenser
LGD-15

NSF

D009

6.0 Liter / 1.5 Gallon LUXUS® Portable Thermal Dispenser
TPD-15

NSF

All dispensers **SOLD SEPARATELY**.

D450

8.0 Liter / 2.0 Gallon LUXUS® Thermal Dispenser
L4D-20

NSF

FOR USE WITH CBS-1253 PLUS BREWER

D481

8.0 Liter / 2.0 Gallon LUXUS® Sight Gauge Dispenser
LGD-20

NSF

FOR USE WITH CBS-1253 PLUS BREWER

BREW BASKET DESIGN

Advanced brew basket design provides a deeper bed depth and superior thermal insulation for better extraction.

CASCADING SPRAY DOME

Patented design provides even saturation of the coffee bed for maximum extraction. Lime resistant design makes for less service calls.

ECO MODE

Reduces tank temperature during periods of non-operation to cut down on electricity usage.

EXTRACTOR NG™

ACCESSORIES

CBS-2250 NG Brewers

NOTE

Coffee brewers are available with **Plastic** or **Metal** brew basket options. Material type is of personal preference and does not affect flavor profile, however if you are looking for color identification the plastic brew baskets are the best option.

BREW BASKETS AND PAPER FILTERS

Item Number	Brew Basket	Coffee Capacity	Filter Size	Filter SKU	Filter/Case
All configurations	Standard **Plastic** / Stainless Steel	Up to 12oz / 340g	15" x 5.5"	F001	500/cs

B001280B1

16" x 6"
Stainless Steel
Brew Basket

B015280BN2BK

16" x 6"
Plastic Brew
Basket

F001

15" x 5.5"
Paper Filters

Contact Customer Service or your Sales Person for more options.

COLORED BREW BASKET HANDLE INSERTS

1023.00180.00
Blue Insert

1023.00190.00
Red Insert

1023.00191.00
Green Insert

1023.00192.00
Orange Insert

WATER FILTRATION SYSTEM

Filtration System	Item Number	Item Description	Rated Capacity	Working Pressure	Weight
Everpure®	A039	In-Line System	113,563 liters	10-125 psi [0.7-8.6 bar], non-shock	6.0 lbs / 2.7 kg
Everpure®	A075	Replacement Cartridge	113,563 liters	10-125 psi [0.7-8.6 bar], non-shock	6.0 lbs / 2.7 kg
BWT Bestmax	A138	In-Line System	3,002 liters	29-116 psi [2-8 bar], non-shock	11.0 lbs / 5.0 kg
BWT Bestmax	A139	Replacement Cartridge	3,002 liters	29-116 psi [2-8 bar], non-shock	11.0 lbs / 5.0 kg
BWT Bestmax	A140	In-Line System	4,562 liters	29-116 psi [2-8 bar], non-shock	11.0 lbs / 5.0 kg
BWT Bestmax	A141	Replacement Cartridge	4,562 liters	29-116 psi [2-8 bar], non-shock	11.0 lbs / 5.0 kg

EVERPURE®

In-Line Water
Filtration System

SET INCLUDES: 1ea. commercial quality corrosion resistant filter head 1ea. taste and odor filter cartridge (FETCO® #A075) / 1ea. 3/8" x 4' connection hose / 1 set — mounting bracket and hardware.

- Recommended for large-sized operations
- Taste and odor filter for extremely turbid (cloudy) water
- Granular-activated carbon reduces sediment and chlorine
- Quick-disconnect style head/cartridge design cartridge for effortless replacement
- Durable, corrosion-resistant head inlcudes built-in shutoff valve

BWT BESTMAX

In-Line Water
Filtration System

SET INCLUDES: 1ea. filter cartridge / 1ea. universal filter head / 1ea. wall mounting bracket Braided hose supplies 3/8" and 3/4" compression, in 24" or 48" lengths

- Recommended for small- to medium-sized operations
- Carbonate hardness removal prevents scale deposits and retains minerals
- Granular-activated carbon reduces sediment and chlorine
- Quick-disconnect style head/cartridge design cartridge for effortless replacement
- Durable, corrosion-resistant head inlcudes built-in shutoff valve
- Four bypass settings allows for different water qualities and product preferences

EXTRACTOR NG™

TECHNICAL SPECIFICATIONS

NORTH AMERICA

CBS-2251 NG Brewer

ELECTRICAL

Item Number	Brew Basket	Voltage	Heater Config.	Phase	Wires	kW	Connection	Max Amp Draw	[Gal] / [L] Hour	Certification
E2251US-1B230-MA110	16x6" Metal	208-240	2 x 3.0 kW	1	2+G	4.5-6.0	No Cord	22.2-25.5	15.0 / 56.9	NSF, c UL us
E2251US-1B230-PA110	16x6" **Plastic**	208-240	2 x 3.0 kW	1	2+G	4.5-6.0	No Cord	22.2-25.5	15.0 / 56.9	NSF, c UL us

WATER

Water Inlet	Water Pressure [psig] / [Bar]	Minimum Flow Rate [gpm] / [L/min]	Tank Capacity [Gal] / [L]
3/8" Male Flare	20-75 / 1.37-5.17	1.50 / 5.68	5.89 / 22.30

CBS-2252 NG Brewer

ELECTRICAL

Item Number	Brew Basket	Voltage	Heater Config.	Phase	Wires	kW	Connection	Max Amp Draw	[Gal] / [L] Hour	Certification
E2252US-UB230-MA110 DUAL PHASE	16x6" Metal	208-240 208-240	2 x 3.0 kW 3 x 3.0 kW	1 3	3+G 3+G	4.5-6.0 6.8-9.0	No Cord No Cord	22.2-25.5 19.3-22.2	15.9 / 60.4 23.9 / 90.6	NSF, c UL us
E2252US-UB230-PA110 DUAL PHASE	16x6" **Plastic**	208-240 208-240	2 x 3.0 kW 3 x 3.0 kW	1 3	3+G 3+G	4.5-6.0 6.8-9.0	No Cord No Cord	22.2-25.5 19.3-22.2	15.9 / 60.4 23.9 / 90.6	NSF, c UL us
E2252US-UB250-MA110 DUAL PHASE	16x6" Metal	208-240 208-240	2 x 5.0 kW 3 x 5.0 kW	1 3	3+G 3+G	7.5-10.0 11.3-15.0	No Cord No Cord	36.6-42.2 31.8-36.6	26.6 / 100.7 30.0 / 113.7	NSF, c UL us
E2252US-UB250-PA110 DUAL PHASE	16x6" **Plastic**	208-240 208-240	2 x 5.0 kW 3 x 5.0 kW	1 3	3+G 3+G	7.5-10.0 11.3-15.0	No Cord No Cord	36.6-42.2 31.8-36.6	26.6 / 100.7 30.0 / 113.7	NSF, c UL us

WATER

Water Inlet	Water Pressure [psig] / [Bar]	Minimum Flow Rate [gpm] / [L/min]	Tank Capacity [Gal] / [L]
3/8" Male Flare	20-75 / 1.37-5.17	1.50 / 5.68	10.48 / 39.67

CBS-2253 NG 2.0 Gallon Brewer

ELECTRICAL

Item Number	Brew Basket	Voltage	Heater Config.	Phase	Wires	kW	Connection	Max Amp Draw	[Gal] / [L] Hour	Certification
E2253US-UB230-MA110 DUAL PHASE	16x6" Metal	208-240 208-240	2 x 3.0 kW 3 x 3.0 kW	1 3	3+G 3+G	4.5-6.0 6.8-9.0	No Cord No Cord	22.2-25.5 19.3-22.2	15.9 / 60.4 23.9 / 90.6	NSF, c UL us
E2253US-UB230-PA110 DUAL PHASE	16x6" **Plastic**	208-240 208-240	2 x 3.0 kW 3 x 3.0 kW	1 3	3+G 3+G	4.5-6.0 6.8-9.0	No Cord No Cord	22.2-25.5 19.3-22.2	15.9 / 60.4 23.9 / 90.6	NSF, c UL us
E2253US-UB250-MA110 DUAL PHASE	16x6" Metal	208-240 208-240	2 x 5.0 kW 3 x 5.0 kW	1 3	3+G 3+G	7.5-10.0 11.3-15.0	No Cord No Cord	36.6-42.2 31.8-36.6	26.6 / 100.7 30.0 / 113.7	NSF, c UL us
E2253US-UB250-PA110 DUAL PHASE	16x6" **Plastic**	208-240 208-240	2 x 5.0 kW 3 x 5.0 kW	1 3	3+G 3+G	7.5-10.0 11.3-15.0	No Cord No Cord	36.6-42.2 31.8-36.6	26.6 / 100.7 30.0 / 113.7	NSF, c UL us

WATER

Water Inlet	Water Pressure [psig] / [Bar]	Minimum Flow Rate [gpm] / [L/min]	Tank Capacity [Gal] / [L]
3/8" Male Flare	20-75 / 1.37-5.17	1.50 / 5.68	10.48 / 39.67

1 This version is made to order and it might require longer production lead time. Please ask your local sales representative for more information.

EXTRACTOR NG™

TECHNICAL SPECIFICATIONS

INTERNATIONAL

CBS-2251 NG Brewer

ELECTRICAL

Item Number	Brew Basket	Voltage	Heater Config.	Phase	Wires	kW	Connection	Max Amp Draw	[Gal] / [L] Hour	Certification
E2251IN-1B140-PA110	16x6" **Plastic**	200-240	1 x 4.0 kW	1	2+G	2.8-4.0	No Cord	14.4-17.2	10.6 / 40.3	NSF cULus
E2251IN-1B150-PA110	16x6" **Plastic**	200-240	1 x 5.0 kW	1	2+G	3.5-5.0	No Cord	17.9-21.3	13.3 / 50.4	NSF cULus
E2251IN-1B230-PA110[1]	16x6" **Plastic**	200-240	2 x 3.0 kW	1	2+G	4.2-6.0	No Cord	21.3-25.5	15.0 / 56.9	NSF cULus
E2251NM-1B230-PA110	16x6" **Plastic**	200-240	2 x 3.0 kW	1	2+G	4.2-6.0	No Cord	21.3-25.5	15.0 / 56.9	NSF NOM
E2251CE-1B230-PA110	16x6" **Plastic**	230/400	2 x 3.0 kW	1	2L/N/PE	5.6	No Cord	12.5	14.9 / 56.4	NSF CE

WATER

Water Inlet	Water Pressure [psig] / [Bar]	Minimum Flow Rate [gpm] / [L/min]	Tank Capacity [Gal] / [L]
3/8" Male Flare	20-75 / 1.37-5.17	1.50 / 5.68	5.89 / 22.30

CBS-2252 NG Brewer

ELECTRICAL

Item Number	Brew Basket	Voltage	Heater Config.	Phase	Wires	kW	Connection	Max Amp Draw	[Gal] / [L] Hour	Certification
E2252IN-3B330-PA110[1]	16x6" **Plastic**	220/380-240/415	3 x 3.0 kW	3	4+G	7.6-9.0	No Cord	12.0-12.9	23.9 / 90.6	NSF cULus
E2252IN-3B350-PA110[1]	16x6" **Plastic**	220/380-240/415	3 x 5.0 kW	3	4+G	12.6-15.0	No Cord	19.6-21.3	30.0 / 133.7	NSF cULus
E2252IN-1B230-PA110[1]	16x6" **Plastic**	200-240	2 x 3.0 kW	1	2+G	4.2-6.0	No Cord	21.3-25.5	15.9 / 60.4	NSF cULus
E2252IN-1B250-PA110	16x6" **Plastic**	220/380-240/415	2 x 5.0 kW	1	2+G	7.0-10.0	No Cord	35.2-42.2	26.6 / 100.7	NSF cULus
E2252IN-3B340-PA110	16x6" **Plastic**	240/415	3 x 4.0 kW	3	4+G	10.1-12.0	No Cord	15.8-17.2	30.0 / 113.7	NSF cULus
E2252NM-1B250-PA110	16x6" **Plastic**	208-240	2 x 5.0 kW	1	2+G	7.5-10.0	No Cord	36.6-42.2	26.6 / 100.7	NSF NOM
E2252NM-UB250-PA110[1] DUAL PHASE	16x6" **Plastic**	208-240 208-240	2 x 5.0 kW 3 x 5.0 kW	1 3	2+G 3+G	7.5-10.0 11.3-15.0	No Cord	36.6-42.2 31.8-36.6	26.6 / 100.7 30.0 / 113.7	NSF NOM
E2252CE-3B330-PA110	16x6" **Plastic**	230/400	3 x 3.0 kW	3	3L/N/PE	8.3	No Cord	12.5	22.1 / 83.6	NSF CE
E2252CE-3B350-PA110	16x6" **Plastic**	230/400	3 x 5.0 kW	3	3L/N/PE	13.8	No Cord	20.5	30.0 / 113.7	NSF CE

WATER

Water Inlet	Water Pressure [psig] / [Bar]	Minimum Flow Rate [gpm] / [L/min]	Tank Capacity [Gal] / [L]
3/8" Male Flare	20-75 / 1.37-5.17	1.50 / 5.68	10.48 / 39.67

1 This version is made to order and it might require longer production lead time. Please ask your local sales representative for more information.

EXTRACTOR NG™

TECHNICAL SPECIFICATIONS

INTERNATIONAL

CBS-2253 NG Brewer

ELECTRICAL

Brewer SKU	Brew Basket	Voltage	Heater Config.	Phase	Wires	kW	Connection	Max Amp Draw	[Gal] / [L] Hour	Certification
E2253IN-3B330-PA110[1]	16x6" Plastic	220/380-240/415	3 x 3.0 kW	3	4+G	7.6-9.0	No Cord	12.0-12.9	23.9 / 90.6	NSF, cULus
E2253IN-3B350-PA110[1]	16x6" Plastic	220/380-240/415	3 x 5.0 kW	3	4+G	12.6-15.0	No Cord	19.6-21.3	30.0 / 133.7	NSF, cULus
E2253IN-1B230-PA110[1]	16x6" Plastic	200-240	2 x 3.0 kW	1	2+G	4.2-6.0	No Cord	21.3-25.5	15.9 / 60.4	NSF, cULus
E2253IN-1B250-PA110	16x6" Plastic	220/380-240/415	2 x 5.0 kW	1	2+G	7.0-10.0	No Cord	35.2-42.2	26.6 / 100.7	NSF, cULus
E2253IN-3B340-PA110	16x6" Plastic	240/415	3 x 4.0 kW	3	4+G	10.1-12.0	No Cord	15.8-17.2	30.0 / 113.7	NSF, cULus
E2253NM-1B250-PA110	16x6" Plastic	208-240	2 x 5.0 kW	1	2+G	7.5-10.0	No Cord	36.6-42.2	26.6 / 100.7	NSF, NOM
E2253NM-UB250-PA110[1]	16x6" Plastic	208-240 208-240	2 x 5.0 kW 3 x 5.0 kW	1 3	2+G 3+G	7.5-10.0 11.3-15.0	No Cord	36.6-42.2 31.8-36.6	26.6 / 100.7 30.0 / 113.7	NSF, NOM
E2253CE-3B330-PA110	16x6" Plastic	230/400	3 x 3.0 kW	3	3L/N/PE	8.3	No Cord	12.5	22.1 / 83.6	NSF, CE
E2253CE-3B350-PA110	16x6" Plastic	230/400	3 x 5.0 kW	3	3L/N/PE	13.8	No Cord	20.5	30.0 / 113.7	NSF, CE
E2253CE-3B350-PM110	16x6" Plastic	230/400	3 x 5.0 kW	3	3L/N/PE	13.8	No Cord	20.5	30.0 / 113.7	NSF, CE

WATER

Water Inlet	Water Pressure [psig] / [Bar]	Minimum Flow Rate [gpm] / [L/min]	Tank Capacity [Gal] / [L]
3/8" Male Flare	20-75 / 1.37-5.17	1.50 / 5.68	10.48 / 39.67

1 This version is made to order and it might require longer production lead time. Please ask your local sales representative for more information.

DIMENSIONS

CBS-2251 NG Brewer

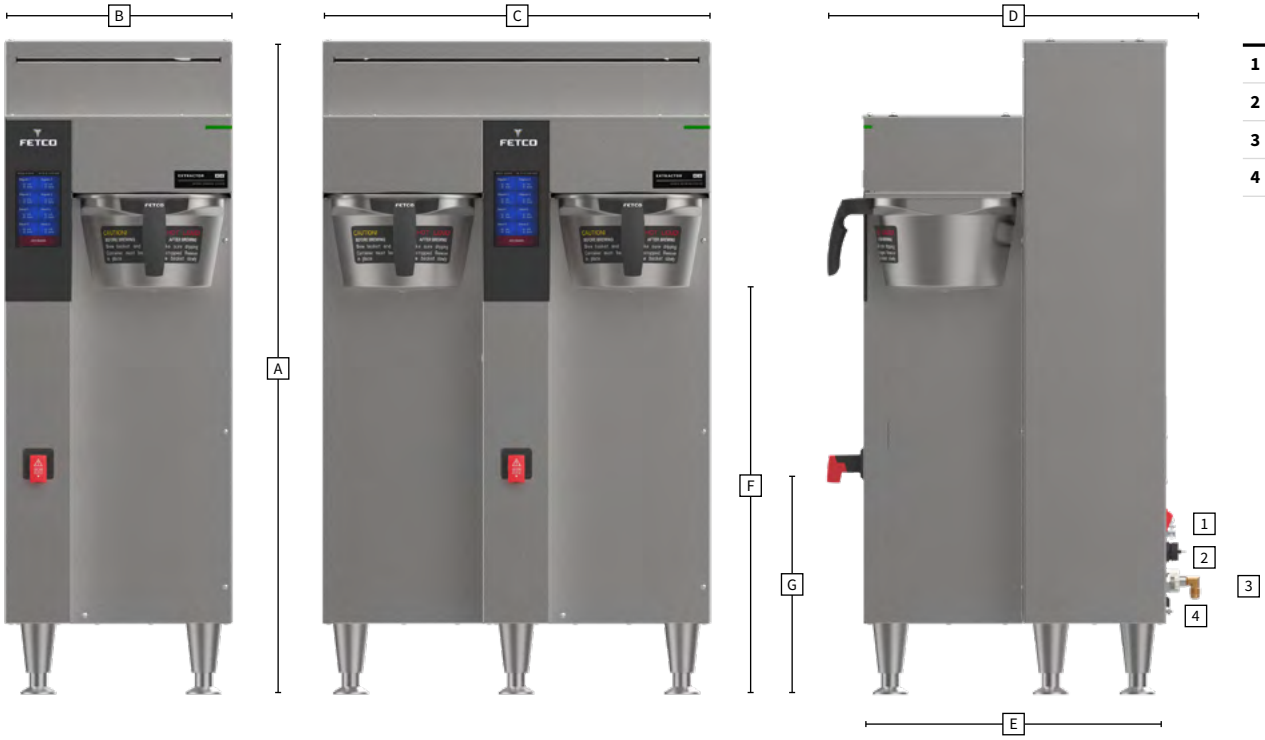
DIMENSIONS	Height (A)	Width (B)	Depth (D)	Depth (E)	Brew Basket Clearance (F)	Faucet Clearance (G)
Product Dimensions	36.88" 93.67 cm	12.75" 32.38 cm	22.5" 57.15 cm	17.13" 43.51 cm	22.5" 57.15 cm	12.13” 30.80 cm
Shipping Dimensions	37.0" 93.98 cm	18.0" 45.72 cm	24.0" 60.96 cm	N/A	N/A	N/A

WEIGHT	Empty [lbs] / [kg]	Filled [lbs] / [kg]
Product Weight	53 lbs 24.0 kg	106 lbs 48.1 kg
Shipping Weight	63 lbs 28.5 kg	N/A

CBS-2252 NG Brewer

DIMENSIONS	Height (A)	Width (C)	Depth (D)	Depth (E)	Brew Basket Clearance (F)	Faucet Clearance (G)
Product Dimensions	36.88" 93.67 cm	21.88" 55.57 cm	22.5" 57.15 cm	17.13" 43.51 cm	22.5" 57.15 cm	12.13” 30.80 cm
Shipping Dimensions	37.0" 93.98 cm	24.0" 60.96 cm	27.0" 68.58 cm	N/A	N/A	N/A

WEIGHT	Empty [lbs] / [kg]	Filled [lbs] / [kg]
Product Weight	77 lbs 34.9 kg	174 lbs 78.8 kg
Shipping Weight	97 lbs 44.0 kg	N/A



FETCO®
WEBSITE fetco.com
EMAIL inquiries@fetco.com
PHONE +1.847.719.3000 1.800.338.2699
FAX +1.847.719.3001
ADDRESS FETCO® 600 Rose Road Lake Zurich, IL 60047, USA

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Dispensers, airpots, paper filters, water filters, stands, accessories and options sold separately
Rev. 1.0 2023.06.15 Digital Letter

PENTAIR
EVERPURE

QC7I SINGLE HEAD

FILTER HEAD EXCLUSIVELY FOR EVERPURE REPLACEMENT CARTRIDGES

QC7I Single Head: EV9272-41

APPLICATIONS

- Foodservice

FEATURES • BENEFITS

- Commercial quality filter head is designed exclusively to fit Pentair§ Everpure§ filter cartridges
- Quick sanitary cartridge change interface
- Includes flushing valve quick change
- Can be used with any Pentair Everpure QC Cartridge
- Includes mounting bracket and screws
- Includes built-in water shut-off valve
- Built-in water pressure gauge helps monitor proper flow
- Will not corrode
- Engineered for durability, strength and longevity
- All wetted parts have passed NSF® extraction tests

INSTALLATION TIPS

- Mounts directly onto flat surface.
- Install vertically so cartridge hangs down.
- Allow 2½" (6.35 cm) clearance below the cartridge for easy cartridge replacement.
- Flush filter by running water through filter according to cartridge instructions.

OPERATION TIPS

- Change cartridges on a regular six (6) month preventative maintenance program.
- Change cartridges when capacity is reached or when flow becomes too slow.
- Always flush the filter cartridge at time of installation and cartridge change.

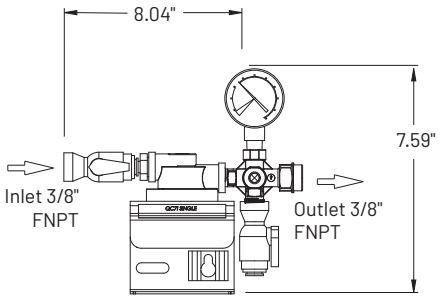
SIZING

- Service Flow Rate: Maximum 1.67 gpm (6.3 Lpm)

QC7I SINGLE HEAD

EV9272-41

QC7I Single Head: EV9272-41



SPECIFICATIONS

- **Service Flow Rate**
  Maximum 1.67 gpm (6.3 Lpm)
- **Pressure Requirements**
  10 – 125 psi (0.7 – 8.6 bar), non-shock
- **Temperature**
  35 – 100°F (2 – 38°C)
- **Overall Dimensions**
  7.59" H x 8.04" W x 5.25" D
  (19.3 cm x 20.4 cm x 13.3 cm)
- **Inlet Connection**
  3/8"
- **Outlet Connection**
  3/8"
- **Electrical Connection**
  None required
- **Shipping Weight**
  (0.453 kgs)

WARRANTY

Everpure water treatment systems by Pentair (excluding replaceable elements) are covered by a limited warranty against defects in material and workmanship for a period of five years after date of purchase. Everpure replaceable elements (filter cartridges and water treatment cartridges) are covered by a limited warranty against defects in material and workmanship for a period of one year after date of purchase. See printed warranty for details. Pentair will provide a copy of the warranty upon request.

The contaminants or other substances removed or reduced by this drinking water system are not necessarily in your water. Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

Since the conditions under which our products may be used are beyond our control, we cannot accept any liability with respect to the improper installation, application and/or use of our products.

World Headquarters
1040 Muirfield Drive
Hanover Park, IL 60133
United States
800.942.1153 (US Only)
630.307.3000 Main
cseverpure@pentair.com

Australia
1-21 Monash Drive
Dandenong South, Vic 3175
Australia
011.1300 576 190 Tel
au.everpure@pentair.com

China
21F Cloud 9 Plaza, N0 1118
Shanghai, 200052
China
86.21.3211.4588 Tel
china.water@pentair.com

India
Boulevard, B-9/A,
7th Floor - Tower B Sector 62
Noida - 201301
91.120.419.9444 Tel
indiacustomer@pentair.com

Europe
Pentair Water Belgium BVBA
Industriepark Wolfstee,
Toekomstlaan 30,
B-2200 Herentals
Belgium
+32.(0).14.283.504 Tel
sales@everpure-europe.com

Japan Inc.
Hashimoto MN Bldg. 7F,
3-25-1 Hashimoto, Midori-ku,
Sagamihara-shi
Kanagawa 252-0143
Japan
81.(0)42.775.3011 Tel
info@everpure.co.jp

Southeast Asia
390 Havelock Road,
#04-01 King's Centre
Singapore 169662
65.6768.5800 Tel
cseverpure@pentair.com

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EVERPURE® 7FC-S FILTER CARTRIDGE

DELIVER PREMIUM QUALITY DRINKING WATER FOR ICE AND STEAM APPLICATIONS

7FC-S Replacement Cartridge (1 PK): EV9692-71

APPLICATIONS

Ice

Steam and Combi Ovens

Coffee

FEATURES • BENEFITS

Integrated beaded phosphate with levels specifically selected for greater life and scale inhibition

Sanitary cartridge replacement is simple, quick and clean; internal filter parts are never exposed to handling or contamination

Protects drink system seals, pump, tubing and small orifices from clogging, corrosion and abrasive wear

Reduces chlorine taste & odor and other offensive contaminants that can adversely affect the taste of beverages

Balanced cartridge for optimum performance in varying water qualities.

Proprietary Fibredyne™ II media with AgION® antimicrobial protection media effectively inhibits the growth of bacteria on the filter media that can decrease product life

Exclusive submicron technology provides superior chlorine taste & odor reduction and micro-filters dirt and particles as small as 0.5 micron in size by mechanical means

Compatible with Insurice®, Insurice PF, QC7I, QL2, QL3B and QL3 Heads

NSF/ANSI Standard 53 certified to reduce cysts such as *Cryptosporidium* and *Giardia* by mechanical means

INSTALLATION TIPS

Install vertically so cartridge hangs down.

Allow 2-1/2" (6.35 cm) clearance below the cartridge for easy cartridge replacement.

Flush cartridge by running water through system for five (5) minutes at full flow.

OPERATION TIPS

Replace cartridge when flow rate becomes inconveniently slow or before rated capacity is reached. It is recommended to replace cartridge at least once per year.

Change cartridges when capacity is reached or when pressure falls below 10 psi (0.7 bar).

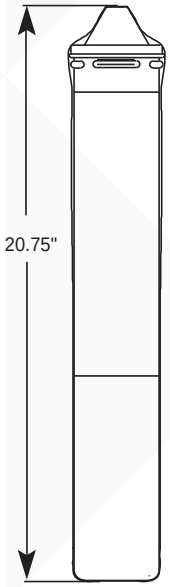
Always flush the filter cartridge at time of installation and cartridge change.

SIZING

Service Flow Rate: 2.5 gpm (9.5 Lpm)

Rated Capacity: 25,000 gallons (94,635 L)

EVERPURE® 7FC-S FILTER CARTRIDGE
EV9692-71



SPECIFICATIONS

Service Flow Rate
Maximum 2.5 gpm (9.5 Lpm)

Rated Capacity
25,000 gallons (94,635 L)

Pressure Requirements
10 - 125 psi (0.7 - 8.6 bar), non-shock

Temperature Requirements
35 - 100ºF (2 - 38ºC)

Overall Dimensions
20.75" L x 3.25" D (52.7 cm x 8.3 cm)

System Tested and Certified by NSF International against NSF/ANSI Standards 42 and 53 for the reduction of:

STANDARD NO. 42 — AESTHETIC EFFECTS
- Chemical Reduction
  - Taste & Odor
  - Chlorine
- Mechanical Filtration
  - Nominal Particulate, Class I

STANDARD NO. 53— HEALTH EFFECTS
- Mechanical Filtration
  - Cyst Reduction
  - Turbidity Reduction

EPA No. 002623-IL-002

The contaminants or other substances removed or reduced by this drinking water system are not necessarily in your water. Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system. Systems certified for cyst reduction may be used with disinfected water that may contain filterable cysts.

WARRANTY

Everpure water treatment systems by Pentair® (excluding replaceable elements) are covered by a limited warranty against defects in material and workmanship for a period of five years after date of purchase. Everpure replaceable elements (filter cartridges and water treatment cartridges) are covered by a limited warranty against defects in material and workmanship for a period of one year after date of purchase. See printed warranty for details. Pentair will provide a copy of the warranty upon request.

PENTAIR

WATER QUALITY SYSTEMS

EVERPURE-SHURFLO WORLD HEADQUARTERS, 1040 MUIRFIELD DRIVE, HANOVER PARK, IL 60133 USA • FOODSERVICE.PENTAIR.COM
800.942.1153 MAIN (US ONLY) • 630.307.3000 MAIN • 630.307.3030 FAX • CSEVERPURE@PENTAIR.COM EMAIL

EVERPURE-SHURFLO AUSTRALIA, 1-21 MONASH DRIVE, DANDENONG SOUTH, VIC 3175, AUSTRALIA
011.1300.576.190 TEL • 011.61.39.562.7237 FAX • AU.EVERPURE@PENTAIR.COM EMAIL

EVERPURE-SHURFLO CHINA, 21F CLOUD 9 PLAZA, NO 1118, SHANGHAI, 200052, CHINA
86.21.3211.4588 TEL • 86.21.3211.4580 FAX • CHINA.WATER@PENTAIR.COM EMAIL

EVERPURE-SHURFLO INDIA, GREEN BOULEVARD, B-9/A, 7TH FLOOR - TOWER B SECTOR 62, NOIDA - 201301
91.120.419.9444 TEL • 91.120.419.9400 FAX • INDIACUSTOMER@PENTAIR.COM EMAIL

EVERPURE-SHURFLO EUROPE, PENTAIR WATER BELGIUM BVBA, INDUSTRIEPARK WOLFSTEE, TOEKOMSTLAAN, 30 B-2200 HERENTALS, BELGIUM
+32.(0).14.283.500 TEL • +32.(0).14.283.505 FAX • SALES@EVERPURE-EUROPE.COM EMAIL

EVERPURE-SHURFLO JAPAN INC., HASHIMOTO MN BLDG. 7F, 3-25-1 HASHIMOTO, MIDORI-KU, SAGAMIHARA-SHI KANAGAWA 252-0143, JAPAN
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EVERPURE-SHURFLO SOUTHEAST ASIA, SOUTHEAST ASIA, 390 HAVELOCK ROAD, #04-01, KING'S CENTRE, SINGAPORE 169662
65.6768.5800 TEL • 65.6737.5149 FAX • CSEVERPURE@PENTAIR.COM EMAIL

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THIS ITEM IS: SPARE NUMBER

- [x] SPARE NUMBER
- [ ] MILLWORK
- [ ] CUSTOM FABRICATED/NSF
- [ ] EXISTING
  - [ ] WHERE SHOWN
  - [ ] RELOCATED
  - [ ] MODIFIED
- [ ] N.I.K.E.C. BY:
  - [ ] OWNER
  - [ ] SUPPLIER / VENDOR
  - [ ] OTHERS

REMARKS:

THIS ITEM IS: SPARE NUMBER

- [x] SPARE NUMBER
- [ ] MILLWORK
- [ ] CUSTOM FABRICATED/NSF
- [ ] EXISTING
  - [ ] WHERE SHOWN
  - [ ] RELOCATED
  - [ ] MODIFIED
- [ ] N.I.K.E.C. BY:
  - [ ] OWNER
  - [ ] SUPPLIER / VENDOR
  - [ ] OTHERS

REMARKS:

THIS ITEM IS: BEVERAGE COUNTER

- ☐ SPARE NUMBER
- ☐ MILLWORK
- ■ CUSTOM FABRICATED/NSF
- ☐ EXISTING
  - ☐ WHERE SHOWN
  - ☐ RELOCATED
  - ☐ MODIFIED
- ☐ N.I.K.E.C. BY:
  - ☐ OWNER
  - ☐ SUPPLIER / VENDOR
  - ☐ OTHERS

REMARKS:

THIS ITEM IS: WALL SHELF

- ☐ SPARE NUMBER
- ☐ MILLWORK
- ■ CUSTOM FABRICATED/NSF
- ☐ EXISTING
  - ☐ WHERE SHOWN
  - ☐ RELOCATED
  - ☐ MODIFIED
- ☐ N.I.K.E.C. BY:
  - ☐ OWNER
  - ☐ SUPPLIER / VENDOR
  - ☐ OTHERS

REMARKS:

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- [x] SPARE NUMBER
- [ ] MILLWORK
- [ ] CUSTOM FABRICATED/NSF
- [ ] EXISTING
  - [ ] WHERE SHOWN
  - [ ] RELOCATED
  - [ ] MODIFIED
- [ ] N.I.K.E.C. BY:
  - [ ] OWNER
  - [ ] SUPPLIER / VENDOR
  - [ ] OTHERS

REMARKS:

IMC/TEDDY
DECADES OF FINE CRAFTSMANSHIP

CSW
Wall Hand Sink

General Information

Project Name: _____

Consultant: _____

Item #: _____

Model #: _____

Quantity: _____

CSW-2S

CSW-1SX

Specifications

CSW Wall Hand Sink is constructed of 20GA type 300 series stainless steel, with integral backsplash and apron. Sink bowl is deep drawn with non-drip edges and built-in pitch to 1½" waste outlet. Stainless steel front apron conceals bowl. Mount to wall with wall screws through top and lower brackets. Sink bowl is 14" x 10" x 5".

Sink is mounted to wall with screws through rear flanges and offset wall strip.

Product Guide

CS Hand Sinks are dual designed for Institutional and Commercial applications. For use in kitchens and public areas, with abuse resistant features, such as integral apron, multi-point mounting surfaces and high quality faucets.

These sinks are an economical version of Models WS and HS Sinks.

Options are designed to make the sink suitable for a variety of locations throughout the facility, such as prep areas, administrative, receiving and shipping and public areas.

Options

- ☐ **SS** - Side Splashes (Pair)
- ☐ **TLG** - Adjustable Tubular Legs
- ☐ **TWB** - Tubular Wall Brackets
- ☐ **RSOD** - Rear Sink Overflow Drain
- ☐ **CBW** - Custom Bowl Size

WALL HAND SINK - CSW

Sink Only Models	Faucet Mounting	Sink w/ Faucet Models	Overall Size
☐ CSW-1SX	1 Hole Splash	☐ CSW-1S	15½" x 17" x 13½"
☐ CSW-2SX	4" OC Splash	☐ CSW-2S	15½" x 17" x 13½"
☐ CSW-1DX	1 Hole Deck	☐ CSW-1D	15½" x 17" x 13½"
☐ CSW-2DX	4" OC Deck	☐ CSW-2D	15½" x 17" x 13½"
☐ CSW-1S-SSX	1 Hole Splash (w/ Side Splashes)	☐ CSW-1S-SS	15½" x 17" x 13½"
☐ CSW-2S-SSX	4" OC Splash (w/ Side Splashes)	☐ CSW-2S-SS	15½" x 17" x 13½"

PROUDLY MADE IN THE USA

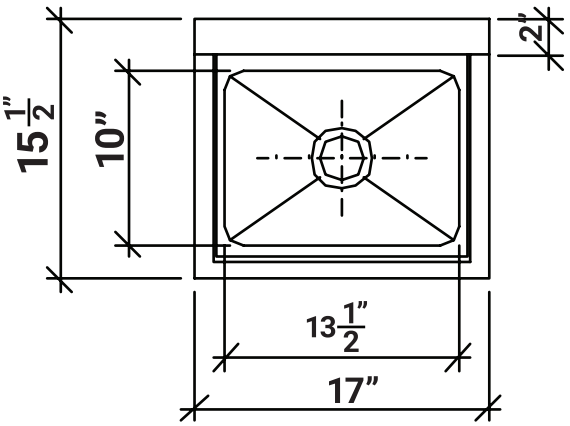
NSF

CSW-80 1220

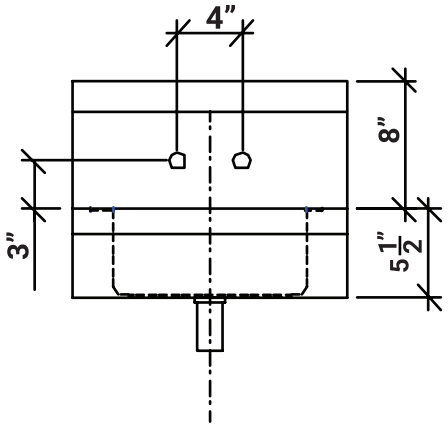
IMC/TEDDY
DECADES OF FINE CRAFTSMANSHIP

CSW
Wall Hand Sink

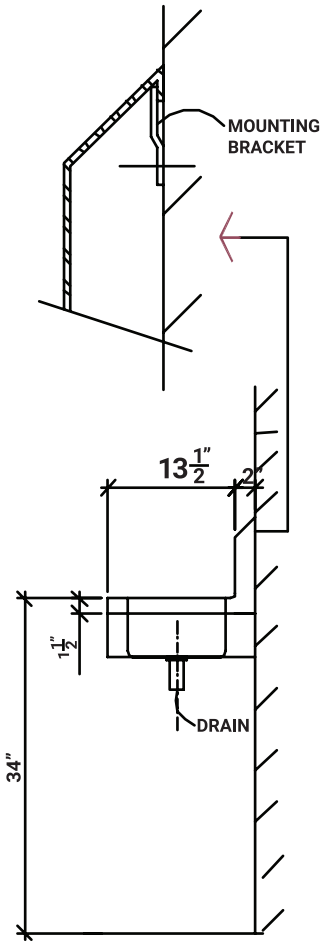
DRAWINGS



PLAN



ELEVATION



END VIEW

ACCESSORIES

(See Price Book Pg. 60-62)

RGLH
Gooseneck Faucet

EFD
Electronic Faucet

EW-S
Eye Wash Faucet

TD
Towel Dispenser

CTSD
Combo Towel & Soap Dispenser

ITSD
Integral Towel & Soap Dispenser

Specifications subject to change without notice.

CSW-80 1220

Project_____Consultant_____Model Number_____Item Number_____

Accessories

LFRG
Lavatory Faucet, 5 1/2" spread rigid gooseneck, 8" centers, rosespray outlet, 4 5/16" clearance deck to face of spray, 4" wrist action handles

Service Sinks & Prep Tables

KPSF
Kettle & Pot Sink Faucet, Big-Flo, wall mounted 8" centers, 3/4" IPS model LL street EL inlets with locknuts, 12" swing nozzle, 175F four arm handles, 1 1/4" diameter holes required in backsplash

Service Sinks & Prep Tables

SSF
Service Sink Faucet, 8" centers-adjustable from 7 3/4" to 8 1/4", 5 1/8" clearance wall to center line of faucet, 11 5/8" from wall to center of outlet, polished chrome plated finish, with built in screwdriver stops

Service Sinks & Mop Sinks

SCMV-SEC
Slow Self Closing Mixing Faucet, 1/2" IPS threaded shank w/1/4" IPS tailpieces on 4" centers, 5 1/2" high, 1/2" OD slip inlet aerator outlet, vandal resistant option

Correctional Type

PRF
Pre-Rinse Unit, mounted behind splash faucet 4" centers, 1/2" IPS female inlets, 33"high, 15"overhang, 4" from bottom of spray valve to center of faucet, 18" riser model, spray valve & flexible stainless steel hose

PRF-FPV
Pre-Rinse with Foot Pedal Valve Control, 1 1/4" long shank on base faucet, 1/2" end w/1/4" IPS tailpiece, 38" high, 15" overhang, 7 1/2" clearance, 24" riser model, spray valve, & flexible stainless steel hose

IMC/TEDDY FOOD SERVICE EQUIPMENT

P.O. Box 206
Copiague, NY 11726-0206

800-221-5644/631-789-8881
Fax: 631-789-3633

www.imcteddy.com

Project_____Consultant_____Model Number_____Item Number_____

Accessories

WF-GS
Workboard Faucet, backsplash mounted, 6 1/2" long x 2" wide chrome plated escutcheon, 4" centers, 1 1/2" long shanks, 1/2" IPS thread, w/ 133x swivel gooseneck

WS Hand Sink Faucet

WFH-SN
Workboard Faucet & Flexible Stainless Steel Hose w/Hose Spray 48" long, deck mounted, removable seats, 10 1/2" long x 2" wide chrome plated escutcheon, 8" inlet centers, 1" long shanks, 1/2" IPS threads, 8" swing nozzle, spray valve

DL Can Washer Faucet/Spray

WRA
Wrist Action Handle, chrome plated zinc handle, 4" long

WRA-4C
Wrist Action Handle 4" long, chrome plated brass handle, includes color coded snap-in index

FPV
Double Pedal Valve, Floor Mounted paired with Sink Mounted Spout

KNV-S
Knee Action Valve w/Wall Support Bracket, heavy duty cam acting stirrup, valve will remain in set position for hot, cold or mixed water, 1/2" IPS female inlets, 2 1/2" centers, 1/2" IPS female outlet combined with Sink Mounted Spout

LH-BR
Lever Handle, chrome plated zinc handle, blue index button & screw for cold, red index button & screw for hot

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Fax: 631-789-3633
www.imcteddy.com

Project_____Consultant_____Model Number_____Item Number_____

Accessories

KNV
Double Knee Pedal Valve, inlets on 2 1/2" centers, approximately 24" floor to base of valve, pedals 6 1/4" long combined with Sink Mounted Spout

LDB
Twist Waste Valve, 3 1/2" sink opening, 2" drain outlet, cast bronze, s/s strainer, nickel-plated wearing parts

LDO
Twist Waste Valve, 3 1/2" sink opening, 2" drain outlet with overflow assembly, cast bronze, s/s strainer, nickel plated wearing parts

EFD
ADA Compliant deck or splash mounted Electronic Faucet with motion detection operation. Supplied with plug-in transformer (AC) or AA batteries good for two years operation

MH3
Stainless Steel Mop Hanger, 3 spring loaded rubber grips, 24" long x 3 3/4"wide

WSDI-1012
Water Station, Drop-In, 10 1/2" x 12 1/2" drip pan in one piece 18GA stainless steel, push back glass filler with 8" clearance from tip to pan, 2 1/4" diameter sweat tailpiece for copper tube connection, 2 1/4" diameter grid drain, drain 1 1/4" x 4" long w/17GA tailpiece

SD
Soap Dispenser, s/s, 20 fl. oz. (0.6L) Capacity, 4" (100mm) Spout Length, 1" (25mm) Maximum Mounting Thickness

IMC/TEDDY FOOD SERVICE EQUIPMENT
P.O. Box 206
Copiague, NY 11726-0206
800-221-5644/631-789-8881
Fax: 631-789-3633
www.imcteddy.com

THIS ITEM IS: SOAP & TOWEL DISPENSER

- ☐ SPARE NUMBER
- ☐ MILLWORK
- ☐ CUSTOM FABRICATED/NSF
- ☐ EXISTING
  - ☐ WHERE SHOWN
  - ☐ RELOCATED
  - ☐ MODIFIED
- ■ N.I.K.E.C. BY:
  - ■ OWNER
  - ☐ SUPPLIER / VENDOR
  - ☐ OTHERS

REMARKS:

THIS ITEM IS: PREP TABLE W/ SINKS

- ☐ SPARE NUMBER
- ☐ MILLWORK
- ■ CUSTOM FABRICATED/NSF
- ☐ EXISTING
  - ☐ WHERE SHOWN
  - ☐ RELOCATED
  - ☐ MODIFIED
- ☐ N.I.K.E.C. BY:
  - ☐ OWNER
  - ☐ SUPPLIER / VENDOR
  - ☐ OTHERS

REMARKS:

THIS ITEM IS: WALL SHELF

- ☐ SPARE NUMBER
- ☐ MILLWORK
- ■ CUSTOM FABRICATED/NSF
- ☐ EXISTING
  - ☐ WHERE SHOWN
  - ☐ RELOCATED
  - ☐ MODIFIED
- ☐ N.I.K.E.C. BY:
  - ☐ OWNER
  - ☐ SUPPLIER / VENDOR
  - ☐ OTHERS

REMARKS:

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U.S.A. FOODSERVICE DIVISION
2001 East Terra Lane • O'Fallon, Missouri 63366-4434 • (636)240-2400
Fax (636)272-2408 • Toll Free (800)325-6152 • Intl Fax# (001)636-272-7546
Parts Dept. (800)424-TRUE • Parts Dept. Fax# (636)272-9471 • www.truemfg.com

Project Name: _____
Location: _____
Item #: _____ *Qty:* _____
Model #: _____

AIA #
SIS #

Model:
T-23F-HC

T-Series:
Reach-In Solid Swing Door Freezer with Hydrocarbon Refrigerant

T-23F-HC

- True's solid door reach-in's are designed with enduring quality that protects your long term investment.
- Designed using the highest quality materials and components to provide the user with colder product temperatures, lower utility costs, exceptional food safety and the best value in today's food service marketplace.
- Extra large evaporator coil balanced with higher horsepower compressor and large condenser maintains -10°F (-23.3°C) cabinet temperatures. Ideally suited for both frozen foods and ice cream.
- Stainless steel solid door and front. The very finest stainless with higher tensile strength for fewer dents and scratches.
- Adjustable, heavy duty PVC coated shelves.
- Positive seal self-closing door. Lifetime guaranteed door hinges and torsion type closure system.
- Automatic defrost system time-initiated, temperature-terminated. Saves energy consumption and provides shortest possible defrost cycle.

Bottom mounted units feature:

- "No stoop" lower shelf.
- Storage on top of cabinet.
- Compressor performs in coolest, most grease free area of kitchen.
- Easily accessible condenser coil for cleaning.

ROUGH-IN DATA

Specifications subject to change without notice.
Chart dimensions rounded up to the nearest ⅛" (millimeters rounded up to next whole number).

Model	Doors	Shelves	Cabinet Dimensions (inches) (mm) W	D	H*	HP	Voltage	Amps	NEMA Config.	Cord Length (total ft.) (total m)	Crated Weight (lbs.) (kg)
T-23F-HC	1	3	27 686	29½ 750	78⅜ 1991	½ ½	115/60/1 220-240V/50Hz	3.7 2.2	5-15P ▲	9 2.74	295 134

* Height does not include 5" (127 mm) for castors or 6" (153 mm) for optional legs.

▲ Plug type varies by country.

MADE WITH INNOVATION IN THE USA · 5 YEAR COMPRESSOR WARRANTY USA · ENERGY STAR · c UL us · CLASSIFIED UL EPH · CE · natural refrigerant

5/20 Printed in U.S.A.

APPROVALS:

AVAILABLE AT:

Model:
T-23F-HC

T-Series:
Reach-In Solid Swing Door Freezer with Hydrocarbon Refrigerant

STANDARD FEATURES

DESIGN
- True's commitment to using the highest quality materials and oversized refrigeration systems provides the user with colder product temperatures, lower utility costs, exceptional food safety and the best value in today's food service marketplace.

REFRIGERATION SYSTEM
- Factory engineered, self-contained, capillary tube system using environmentally friendly R290 hydro carbon refrigerant that has zero (0) ozone depletion potential (ODP), & three (3) global warming potential (GWP).
- Extra large evaporator coil balanced with higher horsepower compressor and large condenser; maintains -10°F (-23.3°C). Ideally suited for both frozen foods and ice cream.
- State of the art, electronically commutated evaporator and condenser fan motors. ECM motors operate at higher peak efficiencies and move a more consistent volume of air which produces less heat, reduces energy consumption and provides greater motor reliability.
- Bottom mounted condensing unit positioned for easy cleaning. Compressor runs in coolest and most grease free area of the kitchen. Allows for storage area on top of unit.
- Automatic defrost system time-initiated, temperature-terminated. Saves energy consumption and provides shortest possible defrost cycle.

CABINET CONSTRUCTION
- Exterior - Stainless steel front. Anodized quality aluminum ends. Corrosion resistant GalFan coated steel back.
- Interior - attractive, NSF approved, clear coated aluminum liner. Stainless steel floor with coved corners.
- Insulation - entire cabinet structure and solid door are foamed-in-place using a high density, polyurethane insulation that has zero ozone depletion potential (ODP) and zero global warming potential (GWP).
- Welded, heavy duty steel frame rail, black powder coated for corrosion protection.
- Frame rail fitted with 4" (102 mm) diameter stem castors - locks provided on front set.

DOOR
- Stainless steel exterior with clear aluminum liner to match cabinet interior. Door extend full width of cabinet shell. Door lock standard.
- Lifetime guaranteed recessed door handle. Door fitted with 12" (305 mm) long recessed handle that is foamed-in-place with a sheet metal interlock to ensure permanent attachment.
- Positive seal self-closing door. Lifetime guaranteed door hinges and torsion type closure system.
- Magnetic door gasket of one piece construction, removable without tools for ease of cleaning.

SHELVING
- Three (3) adjustable, heavy duty PVC coated wire shelves 22 7/8"L x 23 1/4"D (582 mm x 591 mm). Four (4) chrome plated shelf clips included per shelf.
- Shelf support pilasters made of same material as cabinet interior; shelves are adjustable on 1/2" (13 mm) increments.

LIGHTING
- Interior lighting - safety shielded. Lights activated by rocker switch mounted above door.

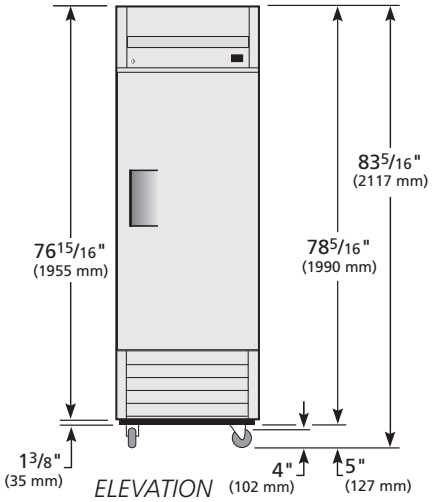
MODEL FEATURES
- Exterior temperature display.
- Evaporator is epoxy coated to eliminate the potential of corrosion.
- Rear airflow guards prevent product from blocking optimal airflow.
- NSF/ANSI Standard 7 compliant for open food product.

ELECTRICAL
- Unit completely pre-wired at factory and ready for final connection to a 115/60/1 phase, 15 amp dedicated outlet. Cord and plug set included.

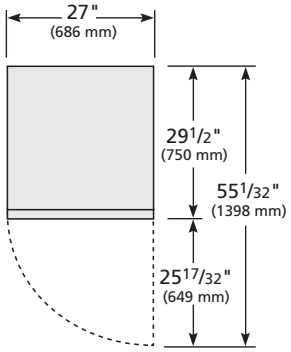
115/60/1
NEMA-5-15R

OPTIONAL FEATURES/ACCESSORIES
Upcharge and lead times may apply.
- ❑ 220-240V/50Hz
- ❑ 6" (153 mm) standard legs.
- ❑ 6" (153 mm) seismic/flanged legs.
- ❑ Alternate door hinging (factory installed).
- ❑ Novelty baskets.
- ❑ Additional shelves.

PLAN VIEW



ELEVATION



PLAN VIEW

3 YEAR PARTS + LABOR
7 YEAR COMPRESSOR
WARRANTY
(U.S.A. only)

METRIC DIMENSIONS ROUNDED UP TO THE NEAREST WHOLE MILLIMETER

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

Model	Elevation	Right	Plan	3D	Back
T-23F-HC	TFEY53E	TFEY03S	TFEY03P	TFEY633	

TRUE MANUFACTURING CO., INC.
2001 East Terra Lane • O'Fallon, Missouri 63366-4434 • (636)240-2400 • Fax (636)272-2408 • Toll Free (800)325-6152 • Intl. Fax# (001)636-272-7546 • www.truemfg.com

turbofan®

30DSERIES

E32D5 / P8M

Technical data sheet for

E32D5 ON THE P8M Proofer/Holding Cabinet Full Size Digital / Electric Convection Oven 8 Tray Manual / Electric Proofer/Holding Cabinet

ENERGY STAR

E32D5 OVEN

dm

E32D5

Unit shall be a Moffat electrically heated Turbofan convection oven E.T.L. listed and NSF-4 listed. The oven shall have a one piece porcelain enameled oven chamber, stainless top and sides and safe touch vented easy clean side hinged door that offers field reversible hinging. Oven shall have capacity for five full size sheet pans. The oven shall be controlled by an electronic control having separate digital displays and adjusting knobs for time and temperature functions. The oven control shall allow both manual and programmed operating modes with programmable moisture injection, 2 speed oven fan, and 3 stage cooking. A core temperature probe M236060 is optional. The unit shall include dual halogen oven lamps. Unit shall be supplied in 100% recyclable shipping packaging. This unit shall be Energy Star certified.

P8M

Unit shall be a Moffat electrically heated Turbofan Proofer and Holding Cabinet ETL Listed and NSF-4 listed. The proofer and holding cabinet shall have double skin construction with stainless steel interior and exterior sides, front and top. Door shall be side hinged and field reversible. Unit shall have capacity for up to 16 half size sheet pans or 8 full size sheet pans. A single speed fan shall gently and evenly circulate air around the cabinet. Cabinet shall be controlled by a mechanical thermostat and humidity via a control of the water tank. A thermometer shall indicate the cabinet temperature. Proofer and holding cabinet shall be mounted on castors, with two rigid castors at rear and two swivel castors dual swivel and wheel lock and front. Proofer and Holding Cabinets shall be fitted with NEMA 5-15P cordsets. Unit shall be supplied in 100% recyclable shipping packaging.

STANDARD FEATURES

- Full size sheet pan capacity
- 5 tray Oven / 8 tray Proofer
- Compact 28⅞" / 735mm width
- Low unit height 61⅜" / 1560mm
- Side hinged doors (standard LH hinge) Optional RH hinge (field convertible)
- Dual halogen lamps in Oven and Proofer
- Proofer with dual function Proof and Holding modes

OVEN

- 3⅓"/ 85mm tray spacing
- Digital display Time and Temperature Controls
- Large easy view ¾" / 20mm high displays
- Electronic thermostat control
- Electronic timer with countdown or time count modes
- Manual mode and Program mode
- 20 programs with 3 stage cooking and stage end alarms
- Core Probe program cooking (optional Core Probe Kit)
- Moisture injection mode (5 levels) and manual injection
- 2 speed bi-directional reversing fan system
- Safe-Touch vented door
- Porcelain enameled oven chamber
- Plug-in continuous oven door seal
- 5 oven wire racks supplied
- 100% recyclable packaging

PROOFER

- 3"/ 76mm tray spacing
- Auto water fill system with optional integrated water filter kit
- Continuous door seal
- Low velocity circulation fan system
- Mechanical thermostat and Humidity level control
- Cabinet temperature display thermometer
- 4 dia. 3" / 76mm castors with 2 front castors dual wheel and swivel lock, 2 rigid rear castors
- 100% recyclable packaging

ACCESSORIES

- Optional M236060 Core Temperature Probe Kit
- Optional 3M Cuno water filter kit complete with cartridge and connection fittings
- Installs in pre-fitted rear housing of cabinet for flush rear installation

MOFFAT®

turbofan®

30DSERIES

E32D5 / P8M

E32D5 Full Size Digital / Electric Convection Oven
P8M Full Size Manual / Electric Proofer/Holding Cabinet

CONSTRUCTION - Oven (E32D5)
Porcelain enameled fully welded oven chamber
Stainless steel front, sides and top exterior
Stainless steel frame side hinged door
0.2" / 5mm thick door inner and outer glass
Stainless steel control panel
Aluminized coated steel base and rear panels

CONSTRUCTION - Proofer (P8M)
304 stainless steel interior cabinet
Stainless steel front, sides and top exterior
Stainless steel interior side racks
Stainless steel frame side hinged door
0.2" / 5mm thick door glass
Stainless steel control panel
Aluminized coated steel base and rear panels

CONTROLS - Oven (E32D5)
Electronic controls with Digital Time and Temperature display, Manual or Program modes
Large ¾" / 20mm high LED displays
Two individual time and temperature setting control knobs
ON/OFF and Oven Lights key
Fan LO speed key
Timer Start/Stop key
Moisture Injection key (5 levels)
Programs select key
Actual temperature display key
Adjustable buzzer/alarm volume
Thermostat range 150-500°F / 50-260°C
Timer range from 180 minute in countdown mode / 999 minute in count-up mode
Optional Core Probe temperature range 122-194°F / 50-90°C
Over-temperature safety cut-out

CONTROLS - Proofer (P8M)
Off / Proof / Holding mode selector switch
Mechanical thermostat 32-185°F / 20-85°C
Humidity level control
Cabinet temperature thermometer
Auto-fill water system standard

CLEANING
Stainless steel top and side exterior panels
Porcelain enameled oven chamber
Fully removable stainless steel oven and proofer side racks
Removable stainless steel oven fan baffle
Easy clean door system with hinge out door inner glass (no tools required)
Removable plug-in oven door seal (no tools required)

SPECIFICATIONS

Electrical Requirements
Oven (E32D5)
208V, 60Hz, 1-phase, 5.8kW, 28A
220-240V, 50/60Hz, 1-phase, 6.5W, 27A
No cordset supplied

Proofer (P8M)
110-120V, 50/60Hz, 1-phase, 1.45kW, 11.6A
NEMA 5-15P cordset fitted

Water Requirements
Cold water connection ¾" GHT male
80psi maximum inlet pressure / 20psi minimum inlet pressure
Connection to oven optional

External Dimensions
Width 287/8" / 735mm
Height 61¾" / 1560mm
Depth 317/8" / 810mm

Nett Weight
Oven (E32D5)
196lbs / 89kg

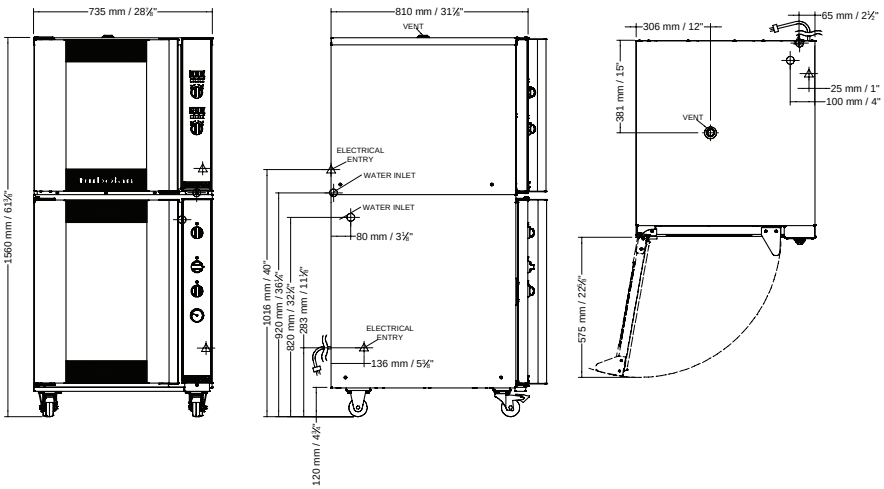
Proofer (P8M)
171lbs / 77.5kg

Packing Data
Oven (E32D5)
231lbs / 105kg
20.1ft³ / 0.57m3
Width 297/8" / 760mm
Height 32" / 815mm
Depth 363/8" / 925mm

Proofer (P8M)
210lbs / 95.3kg
26.8 ft³ / 0.76m3
Width 30" / 760mm
Height 42½" / 1080mm
Depth 363/8" / 925mm

INSTALLATION CLEARANCES
Rear 2" / 50mm
LH Side 2" / 50mm
RH Side* 3" / 75mm
* For fixed installations a minimum of 20" / 500mm is required for service

CLEARANCE FROM SOURCES OF HEAT
A minimum distance of 12" / 300mm from the appliance sides is required



E32D5 OVEN

MOFFAT
www.moffatusa.com
www.turbofanoven.com

U.S.A.
Moffat Inc
3765 Champion Boulevard
Winston-Salem
North Carolina 27105
Ph Toll Free 1-800-551 8795
Ph 336-661 0257
Fax 336-661 9546
Email sales@moffat.com
www.moffatusa.com

Manufactured by:
Moffat Limited
45 Illinois Drive, Izone Business Hub
Rolleston 7675, New Zealand

ISO9001 Quality Management Standard

Designed and manufactured by MOFFAT

ISO9001
All Turbofan products are designed and manufactured by Moffat using the internationally recognised ISO9001 quality management system, covering design, manufacture and final inspection, ensuring consistent high quality at all times.

In line with policy to continually develop and improve its products, Moffat Limited reserves the right to change specifications and design without notice.

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PENTAIR
EVERPURE

QC7I SINGLE HEAD

FILTER HEAD EXCLUSIVELY FOR EVERPURE REPLACEMENT CARTRIDGES

QC7I Single Head: EV9272-41

APPLICATIONS

- Foodservice

FEATURES • BENEFITS

- Commercial quality filter head is designed exclusively to fit Pentair§ Everpure§ filter cartridges
- Quick sanitary cartridge change interface
- Includes flushing valve quick change
- Can be used with any Pentair Everpure QC Cartridge
- Includes mounting bracket and screws
- Includes built-in water shut-off valve
- Built-in water pressure gauge helps monitor proper flow
- Will not corrode
- Engineered for durability, strength and longevity
- All wetted parts have passed NSF® extraction tests

INSTALLATION TIPS

- Mounts directly onto flat surface.
- Install vertically so cartridge hangs down.
- Allow 2½" (6.35 cm) clearance below the cartridge for easy cartridge replacement.
- Flush filter by running water through filter according to cartridge instructions.

OPERATION TIPS

- Change cartridges on a regular six (6) month preventative maintenance program.
- Change cartridges when capacity is reached or when flow becomes too slow.
- Always flush the filter cartridge at time of installation and cartridge change.

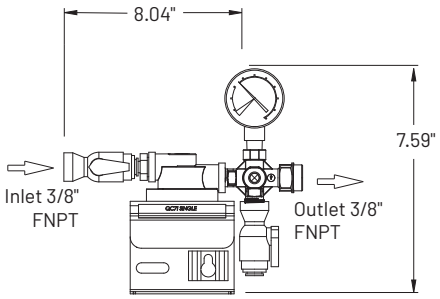
SIZING

- Service Flow Rate: Maximum 1.67 gpm (6.3 Lpm)

QC7I SINGLE HEAD

EV9272-41

QC7I Single Head: EV9272-41



SPECIFICATIONS

- **Service Flow Rate**
  Maximum 1.67 gpm (6.3 Lpm)
- **Pressure Requirements**
  10 – 125 psi (0.7 – 8.6 bar), non-shock
- **Temperature**
  35 – 100°F (2 – 38°C)
- **Overall Dimensions**
  7.59" H x 8.04" W x 5.25" D
  (19.3 cm x 20.4 cm x 13.3 cm)
- **Inlet Connection**
  3/8"
- **Outlet Connection**
  3/8"
- **Electrical Connection**
  None required
- **Shipping Weight**
  (0.453 kgs)

WARRANTY

Everpure water treatment systems by Pentair (excluding replaceable elements) are covered by a limited warranty against defects in material and workmanship for a period of five years after date of purchase. Everpure replaceable elements (filter cartridges and water treatment cartridges) are covered by a limited warranty against defects in material and workmanship for a period of one year after date of purchase. See printed warranty for details. Pentair will provide a copy of the warranty upon request.

The contaminants or other substances removed or reduced by this drinking water system are not necessarily in your water. Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

Since the conditions under which our products may be used are beyond our control, we cannot accept any liability with respect to the improper installation, application and/or use of our products.

World Headquarters
1040 Muirfield Drive
Hanover Park, IL 60133
United States
800.942.1153 (US Only)
630.307.3000 Main
cseverpure@pentair.com

Australia
1-21 Monash Drive
Dandenong South, Vic 3175
Australia
011.1300 576 190 Tel
au.everpure@pentair.com

China
21F Cloud 9 Plaza, N0 1118
Shanghai, 200052
China
86.21.3211.4588 Tel
china.water@pentair.com

India
Boulevard, B-9/A,
7th Floor - Tower B Sector 62
Noida - 201301
91.120.419.9444 Tel
indiacustomer@pentair.com

Europe
Pentair Water Belgium BVBA
Industriepark Wolfstee,
Toekomstlaan 30,
B-2200 Herentals
Belgium
+32.(0).14.283.504 Tel
sales@everpure-europe.com

Japan Inc.
Hashimoto MN Bldg. 7F,
3-25-1 Hashimoto, Midori-ku,
Sagamihara-shi
Kanagawa 252-0143
Japan
81.(0)42.775.3011 Tel
info@everpure.co.jp

Southeast Asia
390 Havelock Road,
#04-01 King's Centre
Singapore 169662
65.6768.5800 Tel
cseverpure@pentair.com

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PENTAIR
EVERPURE

4FC FILTER CARTRIDGE

DELIVERS PREMIUM QUALITY WATER FOR FOUNTAIN AND COMBINATION APPLICATIONS

4FC Replacement Cartridge (1 PK): EV9692-21
4FC Replacement Cartridge (6 PK): EV9692-27

APPLICATIONS

- Fountain
- Combination Systems

FEATURES • BENEFITS

- Reduces chlorine taste & odor and other offensive contaminants that can adversely affect the taste of beverages
- Sanitary cartridge replacement is simple, quick and clean; internal filter parts are never exposed to handling or contamination
- Protects drink system seals, pump, tubing and small orifices from clogging, corrosion and abrasive wear
- Improves the taste of fountain beverages and helps retain the drink's carbonation
- Increased capacity for extended reduction of chemical and mechanical contaminants
- Balanced cartridge for optimum performance in varying water qualities
- Compatible with Pentair§ Everpure§ Coldrink§, QC7I, QL2, QL3B, QL3 Heads, and Pentair Everpure High Flow CSR manifolds
- Proprietary Fibredyne™ II filtration media effectively inhibits the growth of bacteria on the filter media that can decrease product life
- Exclusive Fibredyne II media provides superior chlorine taste & odor reduction and micro-filters dirt and particles as small as 0.2* micron in size by mechanical means
- NSF/ANSI Standard 53 certified to reduce cysts such as *Cryptosporidium* and *Giardia* by mechanical means

*Validated by ISO 17025 accredited lab for 99.999% reduction of Pseudomonas diminuta following the ASTM F838-05 protocol for the validation of 0.2 µm sterilizing grade filters.

INSTALLATION TIPS

- Install vertically so cartridge hangs down.
- Allow 2½" (6.35 cm) clearance below the cartridge for easy cartridge replacement.
- Flush filter by running water through filter according to cartridge instructions.

OPERATION TIPS

- Replace cartridge when flow rate becomes inconveniently slow or before rated capacity is reached. It is recommended to replace cartridge at least once per year.
- Change cartridges when capacity is reached or when pressure falls below 10 psi (0.7 bar).
- Always flush the filter cartridge at time of installation and cartridge change.

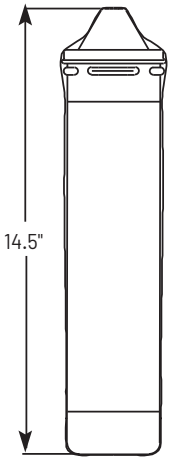
SIZING

- Service Flow Rate: 2.5 gpm (9.5 Lpm)
- Rated Capacity: 15,000 gallons (56,781 L)

4FC FILTER CARTRIDGE

EV9692-21, EV9692-27

4FC Replacement Cartridge (1 PK): EV9692-21
4FC Replacement Cartridge (6 PK): EV9692-27



4-SIZE

SPECIFICATIONS

- **Service Flow Rate**
  Maximum 2.5 gpm (9.5 Lpm)
- **Rated Capacity**
  15,000 gallons (56,781 L)
- **Pressure Requirements**
  10 - 125 psi (0.7 - 8.6 bar), non-shock
- **Temperature Requirements**
  35 - 100°F (2 - 38°C)
- **Overall Dimensions**
  14.5" H x 3.25" D
  (36.8 cm x 8.3 cm)

System Tested and Certified by NSF International against NSF/ ANSI Standards 42 and 53 for the reduction of:

STANDARD NO. 42 – AESTHETIC EFFECTS	STANDARD NO. 53 – HEALTH EFFECTS
Bacteriostatic Effects	Mechanical Filtration
Chemical Reduction	Cyst
Taste & Odor	Turbidity
Chlorine	
Mechanical Filtration	
Nominal Particulate Class I	

EPA Est. No. 002623-IL-002

WARRANTY

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The contaminants or other substances removed or reduced by this drinking water system are not necessarily in your water. Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system. Systems certified for cyst reduction may be used with disinfected water that may contain filterable cysts.

Since the conditions under which our products may be used are beyond our control, we cannot accept any liability with respect to the improper installation, application and/or use of our products.

PENTAIR

World Headquarters
1040 Muirfield Drive
Hanover Park, IL 60133
United States
800.942.1153 (US Only)
630.307.3000 Main
cseverpure@pentair.com

Australia
1-21 Monash Drive
Dandenong South, Vic 3175
Australia
011.1300.576.190 Tel
au.everpure@pentair.com

China
21F Cloud 9 Plaza, N0 1118
Shanghai, 200052
China
86.21.3211.4588 Tel
china.water@pentair.com

India
Boulevard, B-9/A,
7th Floor - Tower B Sector 62
Noida - 201301
91.120.419.9444 Tel
indiacustomer@pentair.com

Europe
Pentair Water Belgium BVBA
Industriepark Wolfstee,
Toekomstlaan 30,
B-2200 Herentals
Belgium
+32.(0).14.283.504 Tel
sales@everpure-europe.com

Japan Inc.
Hashimoto MN Bldg. 7F,
3-25-1 Hashimoto, Midori-ku,
Sagamihara-shi
Kanagawa 252-0143
Japan
81.(0)42.775.3011 Tel
info@everpure.co.jp

Southeast Asia
390 Havelock Road,
#04-01 King's Centre
Singapore 169662
65.6768.5800 Tel
cseverpure@pentair.com

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THIS ITEM IS: SPARE NUMBER

- [x] SPARE NUMBER
- [ ] MILLWORK
- [ ] CUSTOM FABRICATED/NSF
- [ ] EXISTING
  - [ ] WHERE SHOWN
  - [ ] RELOCATED
  - [ ] MODIFIED
- [ ] N.I.K.E.C. BY:
  - [ ] OWNER
  - [ ] SUPPLIER / VENDOR
  - [ ] OTHERS

REMARKS:

THIS ITEM IS: SPARE NUMBER

- [x] SPARE NUMBER
- [ ] MILLWORK
- [ ] CUSTOM FABRICATED/NSF
- [ ] EXISTING
  - [ ] WHERE SHOWN
  - [ ] RELOCATED
  - [ ] MODIFIED
- [ ] N.I.K.E.C. BY:
  - [ ] OWNER
  - [ ] SUPPLIER / VENDOR
  - [ ] OTHERS

REMARKS:

THIS ITEM IS: WORK TABLE W/ SINK

- ☐ SPARE NUMBER
- ☐ MILLWORK
- ■ CUSTOM FABRICATED/NSF
- ☐ EXISTING
  - ☐ WHERE SHOWN
  - ☐ RELOCATED
  - ☐ MODIFIED
- ☐ N.I.K.E.C. BY:
  - ☐ OWNER
  - ☐ SUPPLIER / VENDOR
  - ☐ OTHERS

REMARKS:

THIS ITEM IS: DOUBLE WALL SHELF

- ☐ SPARE NUMBER
- ☐ MILLWORK
- ■ CUSTOM FABRICATED/NSF
- ☐ EXISTING
  - ☐ WHERE SHOWN
  - ☐ RELOCATED
  - ☐ MODIFIED
- ☐ N.I.K.E.C. BY:
  - ☐ OWNER
  - ☐ SUPPLIER / VENDOR
  - ☐ OTHERS

REMARKS:

WPC100

Pasta Cooker/Rethermalizer

COOK

MAIN FEATURES

- Durable stainless steel construction
- 12.4L (13.1 qt.) maximum water capacity
- Stainless steel heating elements for easy cleaning
- Four small, round, ½ lb. baskets and two rectangular, 2 lb. baskets are included
- Reaches a rolling boil in under 20 minutes
- Cook up to 4 pounds of fresh or frozen pasta in minutes
- Drain and refill valves located in front for easy access
- Can be used as stand-alone or connected to plumbing
- Limited One Year Warranty

ELECTRICAL

Voltage: 208/240V

Frequency: 60Hz

Watts: 2700/3600

Plug Type: NEMA 6-20

Cord Length: 3 feet

SALES FEATURES

Cooking perfect pasta is easy with the Waring® Pasta Cooker/Rethermalizer. Make individual orders from al dente to soft using the 4 small, round baskets, or prepare batches by the pound with the large rectangular baskets. The refill and drain valves are easily accessible inside a panel on the front of the cooker, and there is an overflow water outlet on the back, so the unit can be used as stand-alone or plumbed in.

@waringcommercial

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314 Ella T. Grasso Avenue, Torrington, CT 06790
Tel. 800-492-7464 • Fax 860-496-9008
waringcommercialproducts.com

Pasta Cooker/Rethermalizer
WPC100

PARTS & ACCESSORIES

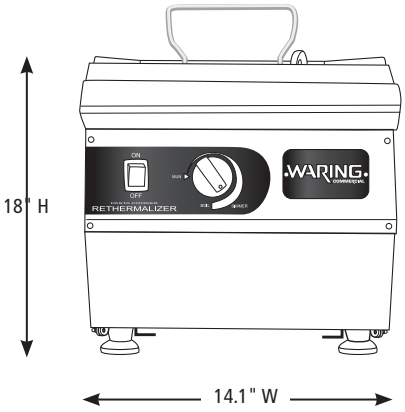
WPC100RB Round Basket

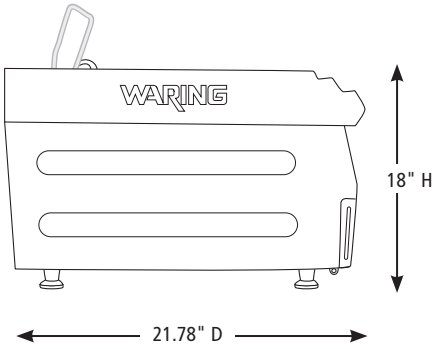
WPC100LB Large Basket

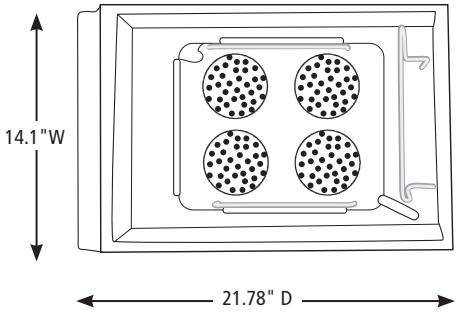
OPTIONAL

CAC157 Hose & Hose Clamp

DIMENSIONS







Out of Box Weight: 33.1 lb.

ORDERING INFORMATION	#STD. PKG.	GIFTBOX WEIGHT	CUBIC FEET	BOX DIMENSIONS D X W X H	UPC	CASE PKG.	MC WEIGHT	MC DIMENSIONS D X W X H	MBC
WPC100 – Pasta Cooker Rethermalizer	1	51.1	6.9	18.5" x 26.5" x 24.5"	040072068607	1	53.3	19" x 27" x 25.5"	10040072068604

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314 Ella T. Grasso Avenue, Torrington, CT 06790
Tel. 800-492-7464 • Fax 860-496-9008

@waringcommercial

waringcommercialproducts.com

WARING COMMERCIAL COOK

DEDICATED TO DESIGN

When it comes to pasta, look to the Italians for inspiration!

Cook or Par-boil 4 pounds of fresh or frozen pasta in minutes. Prepare in bulk with the 2 large baskets or perfectly portion with the 4 round baskets for super quick service.

Full Stainless Steel construction inside and out – Manual or Auto Fill (Plumbed in)

Stainless Steel Heating elements heat to a rolling boil in 25 minutes or less and pivot up for easy cleaning and maintenance of elements/inner tank

12.4L (3.5 Gallon) MAX Capacity

Drain and Refill Valves located in the front for easy access

@waringcommercial

waringcommercialproducts.com

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314 Ella T. Grasso Avenue
Torrington, CT 06790
Tel. 800-492-7464
Fax 860-496-9008

21WC000000 – 8/21

TRUE MANUFACTURING CO., INC.
U.S.A. FOODSERVICE DIVISION
2001 East Terra Lane • O'Fallon, Missouri 63366-4434 • (636)240-2400
Fax (636)272-2408 • Toll Free (800)325-6152 • Intl Fax# (001)636-272-7546
Parts Dept. (800)424-TRUE • Parts Dept. Fax# (636)272-9471 • www.truemfg.com

Project Name: _____
Location: _____
Item #: _____ *Qty:* _____
Model #: _____

AIA #
SIS #

Model:
TWT-48D-4-HC

Worktop:
Drawered Refrigerator with Hydrocarbon Refrigerant

TWT-48D-4-HC

- True's worktop units are designed with enduring quality that protects your long term investment.
- Designed using the highest quality materials and components to provide the user with colder product temperatures, lower utility costs, exceptional food safety and the best value in today's food service marketplace.
- Factory engineered, self-contained, capillary tube system using environmentally friendly R290 hydrocarbon refrigerant that has zero (0) ozone depletion potential (ODP), & three (3) global warming potential (GWP).
- Oversized, environmentally friendly forced-air refrigeration system holds 33°F to 38°F (.5°C to 3.3°C).
- All stainless steel front, top and ends. Corrosion resistant GalFan coated steel back. Top and backsplash are one piece formed construction. Bacteria and food particles cannot be trapped underneath as with other two-piece worktop units.
- Interior - attractive, NSF approved, clear coated aluminum liner. Stainless steel floor with coved corners.
- Each drawer accommodates one (1) full size 12"L x 18"W x 6"D (305 mm x 458 mm x 153 mm) food pan (sold separately).
- Foamed-in-place using a high density, polyurethane insulation that has zero ozone depletion potential (ODP) and zero global warming potential (GWP).

ROUGH-IN DATA

Specifications subject to change without notice.
Chart dimensions rounded up to the nearest ⅛" (millimeters rounded up to next whole number).

Model	Drawers	Cabinet Dimensions (inches) (mm) L	D†	H*	HP	Voltage	Amps	NEMA Config.	Cord Length (total ft.) (total m)	Crated Weight (lbs.) (kg)
TWT-48D-4-HC	4	48⅜ 1229	30⅛ 766	33⅜ 848	⅓ ¼	115/60/1 230-240/50/1	3.0 1.63	5-15P ▲	7 2.13	330 150

† Depth does not include 1" (26 mm) for rear bumpers.
* Height does not include 6¼" (159 mm) for castors or 6" (153 mm) for optional legs.

▲Plug type varies by country.

MADE WITH INNOVATION IN THE USA · 5 YEAR COMPRESSOR WARRANTY USA · c UL us · CE · natural refrigerant

6/18-A Printed in U.S.A.

APPROVALS:

AVAILABLE AT:

Model:
TWT-48D-4-HC

Worktop:
Drawered Refrigerator with Hydrocarbon Refrigerant

STANDARD FEATURES

DESIGN
- True's commitment to using the highest quality materials and oversized refrigeration systems provides the user with colder product temperatures, lower utility costs, exceptional food safety and the best value in today's food service marketplace.

REFRIGERATION SYSTEM
- Factory engineered, self-contained, capillary tube system using environmentally friendly R290 hydrocarbon refrigerant that has zero (0) ozone depletion potential (ODP), & three (3) global warming potential (GWP).
- Oversized, factory balanced refrigeration system with guided airflow to provide uniform product temperatures.
- High capacity, factory balanced refrigeration system that maintains cabinet temperatures of 33°F to 38°F (.5°C to 3.3°C) for the best in food preservation.
- State of the art, electronically commutated evaporator and condenser fan motors. ECM motors operate at higher peak efficiencies and move a more consistent volume of air which produces less heat, reduces energy consumption and provides greater motor reliability.
- Condensing unit access in back of cabinet, slides out for easy maintenance.

CABINET CONSTRUCTION
- All stainless steel front, top and ends. Corrosion resistant GalFan coated steel back. Top and backsplash are one piece formed construction. Bacteria and food particles cannot be trapped underneath as with other two-piece worktop units.
- Interior - attractive, NSF approved, clear coated aluminum liner. Stainless steel floor with coved corners.
- Insulation - entire cabinet structure and drawer facings are foamed-in-place using a high density, polyurethane insulation that has zero ozone depletion potential (ODP) and zero global warming potential (GWP).
- 5" (127 mm) diameter stem castors - locks provided on front set. 36" (915 mm) work surface height.

DRAWERS
- Stainless steel exterior drawer facings and liners. Stainless steel drawer frames.
- Each drawer fitted with 12" (305 mm) long recessed handle that is foamed-in-place with a sheet metal interlock to ensure permanent attachment.
- Magnetic drawer gaskets of one piece construction, removable without tools for ease of cleaning.
- Heavy-duty stainless steel drawer slides and rollers, removable without tools for easy cleaning.
- Each drawer accommodates one (1) full size 12"L x 18"W x 6"D (305 mm x 458 mm x 153 mm) food storage box (sold separately) or one ⅓ size and one ½ size pan.

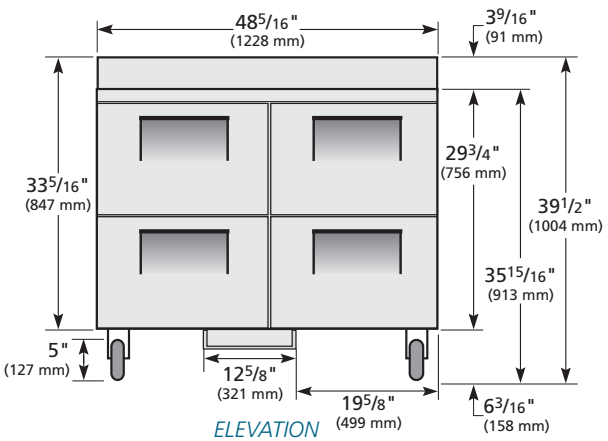
MODEL FEATURES
- Evaporator is epoxy coated to eliminate the potential of corrosion.
- NSF/ANSI Standard 7 compliant for open food product.

ELECTRICAL
- Unit completely pre-wired at factory and ready for final connection to a 115/60/1 phase, 15 amp dedicated outlet. Cord and plug set included.

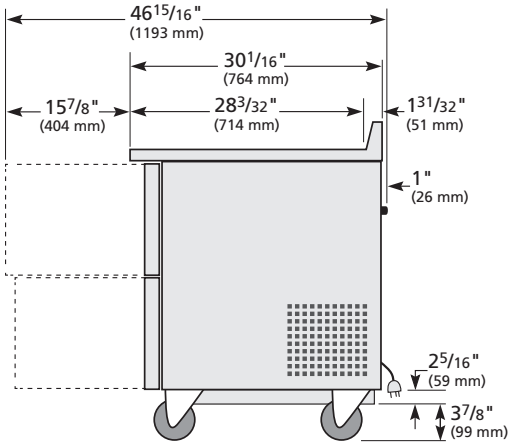
115/60/1
NEMA-5-15R

OPTIONAL FEATURES/ACCESSORIES
Upcharge and lead times may apply.
- ❑ 230 - 240V / 50 Hz.
- ❑ 6" (153 mm) standard legs.
- ❑ 6" (153 mm) seismic/flanged legs.
- ❑ 2½" (64 mm) diameter castors.
- ❑ Single overshelf.
- ❑ Double overshelf.
- ❑ 28¼" (718 mm) deep, ½" (13 mm) thick, white polyethylene cutting board. Requires "L" brackets.
- ❑ 28¼" (718 mm) deep, ½" (13 mm) thick, composite cutting board. Requires "L" brackets.
- ❑ Heavy duty, 16 gauge tops.
- ❑ Exterior rectangular digital temperature display (factory installed).
- ❑ ADA compliant models with 34" (864 mm) work surface height.

PLAN VIEW



ELEVATION



RIGHT VIEW

WARRANTY
Three year warranty on all parts and labor and an additional 2 year warranty on compressor. (U.S.A. only)

METRIC DIMENSIONS ROUNDED UP TO THE NEAREST WHOLE MILLIMETER

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

Model	Elevation	Right	Plan	3D	Back
TWT-48D-4-HC	TFPY07E	TFPY06S	TFPY07P	TFPY073	

TRUE MANUFACTURING CO., INC.
2001 East Terra Lane • O'Fallon, Missouri 63366-4434 • (636)240-2400 • Fax (636)272-2408 • Toll Free (800)325-6152 • Intl. Fax# (001)636-272-7546 • www.truemfg.com

Project_____
Item #_____ Quantity_____
Model #_____

MAX INDUCTION®

Countertop, Portable Induction Range

(Model Shown: SM-181C)

Model #	Voltage	Peak Power	Plug Type
SM-181C (US)	110-120	1800 W	NEMA 5-15P
SM-261C (US)	208-240	2600 W	NEMA 6-20P
SM-263C (Int'l)	220-240	2600 W	CEE-7/7 16A Schuko
SM-263CU (UK)	220-240	2600 W	BS 1363 (13A) U.K.

Description:

Spring USA's Countertop, Portable Induction Range is a heating unit for product cooking or holding. The range features a low-profile design, satin stainless steel case, and integrated oversized pan support. Each range includes our exclusive SmartScan® technology with over/under voltage protection, pan size and pan type recognition, and large LED power/temp display.

Standard Warranty:

Spring USA Induction Ranges offer a one (1) year, overnight exchange warranty, from the date of invoice, against manufacturers defects. See SpringUSA.com for more details.

Agency Listings:

- ETL
- UL STD 197
- FCC
- CETL
- ETL-Sanitation to NSF-4

Intertek UL197 Intertek NSF-4

Mar 2018

Project_____
Item #_____ Quantity_____
Model #_____

Countertop, Portable Induction Range

Construction & Performance Features:

- Tempered, black, smoked glass faceplate
- Rugged, 5 mm thick, easy to clean, tempered glass top
- 100% silicone rubber protective top seal
- Non-skid, non-scratch footing/base
- 7’ power cord with plug
- Removable mesh air filter
- Simple, solid state controls
- Power ON/OFF heavy duty knob
- Power ON/Pan-Present indicator lights
- ‘Cook’ or ‘Temp’ mode
- ‘Cook’/’Temp’ mode touch pad control
- ‘Cook’/’Temp’ mode indicator lights
- Simple, knob-set thermostat control
- Lighted temperature indicator
- Power level 1-20 in ‘Cook’ mode
- Temperature range 110°F-400°F (43°C-204°C) in ‘Temp’ mode

Available Accessories/Alternate Configurations:

- Storage & Transport Box [Spring USA Catalog]
- Induction-ready Cookware and Serving Vessels [Spring USA Catalog]
- AF-350 Under-Counter Air Filter System
- Built-In, High Power Induction Ranges
- Custom Tabletop Induction featuring SmartStone®
- Mobile & Custom Configurations [Contact Spring USA]

Electric Requirements:

Model #	Voltage	Phase	Hertz	Watts	Amps	Plug
SM-181C (US)	110-120	1	60	1800	15.0	NEMA 5-15P
SM-261C (US)	208-240	1	60	2600	10.8	NEMA 6-20P
SM-263C (Int’l)	220-240	1	50-60	2600	10.8	CEE-7/7 16A Schuko
SM-263CU (UK)	220-240	1	50-60	2600	10.8	BS 1363 (13A) U.K.

127 Ambassador Drive, Suite 147 Naperville, Il 60540 P: 630-527-8600 F: 630-527-8677 springusa@springusa.com

Project_____
Item #_____ Quantity_____
Model #_____

Countertop, Portable Induction Range

Key Dimensions:

Model #	Width	Depth	Height	Weight
SM-181C (US)	12.5”	16.0”	3.1”	11.8 lb.
SM-261C (US)	12.9”	16.5”	4.0”	11.8 lb.
SM-263C (Int’l)	328 mm	419 mm	102 mm	5.4 kg
SM-263CU (UK)	328 mm	419 mm	102 mm	5.4 kg

Shipping Dimensions:

Single Unit Shipping Carton				
Model #	Length	Width	Height	Weight
SM-181C (US)	18.0”	15.5”	4.5”	13 lb.
SM-261C (US)	19.5”	16.0”	5.5”	15 lb.
SM-263C (Int’l)	495 mm	406 mm	140 mm	6.8 kg
SM-263CU (UK)	495 mm	406 mm	140 mm	6.8 kg

Mar 2018

Project_____
Item #_____ Quantity_____
Model #_____

Countertop, Portable Induction Range

Notes & Conditions:

1. For optimum performance, allow 4” clearance from front and sides for good air circulation. **Proper ventilation must be provided at all times.**

2. Actual range temperature may vary due to a number of variables, such as ambient temperature in the immediate surrounding area, content and volume of food being heated or cooked, and whether or not you are using a cover on the serving vessel.

3. This induction range requires use of ferrous metal, induction-ready cookware.

4. Spring USA Induction Servers and Induction Warmers/Ranges are designed to work together as a system. Optimal performance is achieved by using Spring USA components in conjunction with each other. As the first to offer such induction systems, Spring USA cannot warranty the performance of facsimile products offered by other companies.

127 Ambassador Drive, Suite 147 Naperville, Il 60540 P: 630-527-8600 F: 630-527-8677 springusa@springusa.com

Cook & Hold 2600 Watt Range SM-261C

Countertop
2600 W | 208-240 V | 10.8 amps | 60 Hz
20 Settings | 110-400°F/43-204°C
NEMA 6-20P
11.8 lbs
12.9"W x 16.5"D x 4.0"H
FCC, ETL, ETL-Sanitation to NSF-4,
CETL, UL 197
7 ft. cord

SM-263C
2600 W | 220-240 V | 10.8 amp | 50-60 Hz
CEE 7/7 Schuko Plug

SM-263CU **UK**
2600 W | 220-240 V | 10.8 amps | 50-60 Hz
BS 1363 (13A) U.K. Plug

Cook & Hold 3500 Watt Range SM-351C

Countertop
3500 W | 208-240 V | 14.6 amps | 60 Hz
20 Settings | 110-400°F/43-204°C
NEMA 6-20P
18.0 lbs
15.0"W x 20.2"D x 5.8"H
FCC, ETL, ETL-Sanitation to NSF-4,
CETL, UL 197
7 ft. cord

SM-353C
3500 W | 220-240 V | 14.6 amps | 50-60 Hz
CEE 7/7 Schuko Plug

SM-353CU **UK**
3000 W | 220-240 V | 12.5 amp | 50-60 Hz
BS 1363 (13A) U.K. Plug

Amana® Commercial

Project #: _____

Item #: _____

Left to right: HDC window door style and HDC solid door style (HDC18SD2)

Market Region: **North America**

Chef Line | Heavy Volume
This category of microwave oven is ideal for…

Applications

- Fast casual dining
- Prep stations
- Bars & grills
- Quick service restaurants
- Casual dining
- Convenience stores
- Bakery cafés
- Kiosks
- Food courts

Through put potential by oven wattage (items per hour)

Food item	1000W	1200W	1800W	2100W
Steamed Shrimp *(8oz (227g))*	22	23	33	38
Scrambled Eggs *(4oz (120g))*	48	51	65	72
Steamed Rice *(8cups (1.2kg))*	2	3	5	7
1 Baked potato *(9oz (255g))*	17	18	21	29
Salmon fillet *(8oz (227g))*	19	20	26	29
Chocolate Cake in a Cup	57	60	80	97
Fresh Steamed Veggies *(6oz (170g))*	45	48	65	80
Asparagus *(8oz (227g))*	29	30	45	51
Dumplings *(6ea)*	19	19	24	28

All ACP, Inc. commercial ovens are supported by our Culinary Center. Do not hesitate to contact us for any questions regarding food preparation, menu development and cooking times: testkitchen@acpsolutions.com

For other market regions, please see product literature online

Heavy Volume

Amana® Commercial **HDC** Series

Power Output

- 1000-2100 Watts of power
- Unique method of microwave energy distribution provides superior even heating throughout the entire cavity

Multi-language universal operation, with programming flexibility

- Oven interface and programming software supports 24 languages
- Smart USB connectivity standard
- Compatible with ACP Programming Application

Easy to Use

- Up to 100 programmable menu items simplifies cooking
- 11 power levels and 4 cooking stages for cooking flexibility
- Multiple quantity function automatically calculates cooking times for multiple portions
- Automatic Voltage Sensor adjusts to the power supply *(North America only >1200W)*
- See-through door and lighted interior for monitoring without opening the door *(HDC18SD2 excluded)*
- Ample 0.6 cubic ft. (17 liter) capacity accommodates a standard half-sized pan
- Stackable to save valuable counter space

Easy to Maintain

- Stainless steel exterior and interior for easy cleaning and increased durability
- Removable, cleanable air filter protects oven components
- Constructed to withstand the foodservice environment, multiple users and variable ambient temperatures
- Gasket sealed Borosilicate Glass tray for easy cleaning
- Interlock switch assembly is engineered for maximum durability and long life.

AIA File #:

Specification #:

Optional Accessories

- Cavity shelf (SE10)
- Stainless cart/equipment stands: (CA24, CA30)
- Non-stick baskets (TB10/S, SB10/S, MB10/S)
- Oven Cleaner and Shield Protectant (CL10*, SH10*)

Service

All products are backed by the ACP, Inc.
24/7 ComServ Support Center

ComServ Commercial Service
866-811-8559

Warranty

Warranty Certificate for this product can be found on the ACP, Inc. website at www.acpsolutions.com/warranty

Safety and Sanitation

This ACP, Inc. product meets and exceeds safety and sanitation standards set for commercial microwave ovens by UL, ETL, NSF, CSA, and FDA.

Intertek Intertek

**Only shipped in U.S.A.*

© 2020 ACP, Inc.
Cedar Rapids, Iowa 52404

225 49th Ave. Dr. SW Cedar Rapids, IA 52404 U.S.A. | 800-233-2366 | 319-368-8120 | Fax: 319-368-8198 | www.acpsolutions.com

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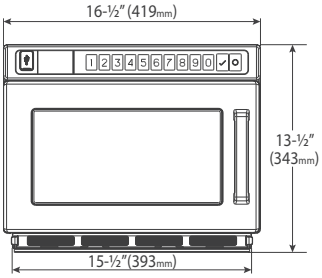
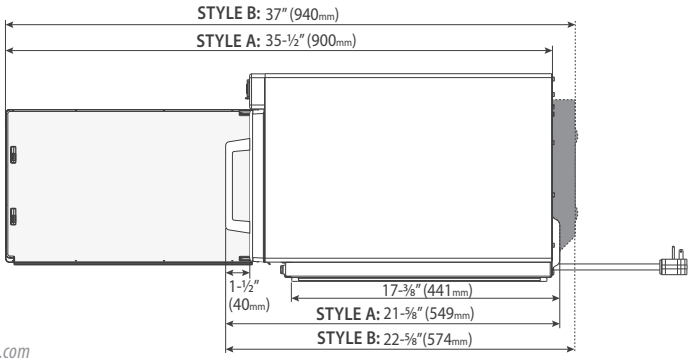
Amana® Commercial Microwave **HDC** Series | Heavy Volume

North America

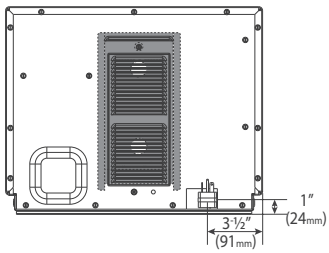
front view



side view



back view



Drawings available from KCL CADlog - techs@kclcad.com

Dimensions

		STYLE A	STYLE B
Exterior	Height	13 ½" (343)	13 ½" (343)
	Width	16 ½" (419)	16 ½" (419)
	Depth†	21 ⅝" (549)†	22 ⅝" (578)†
Cavity	Height	6 ¾" (171)	6 ¾" (171)
	Width	13" (330)	13" (330)
	Depth	12" (305)	12" (305)
Usable Cavity Space		0.6 cubic ft. (17 liter)	0.6 cubic ft. (17 liter)
Door Depth		35½" (900), 90°+ door open	37" (940), 90°+ door open
Installation Clearance	Top	2" (51)	2" (51)
	Sides	1" (25)	1" (25)
	Back	None	None
Shipping Carton	Height	18 ⅝" (473)	18 ⅝" (473)
	Width	21 ⅞" (556)	21 ⅞" (556)
	Depth	24 ⅝" (625)	24 ⅝" (625)

Weight

Product Weight	Ship weight (approx.)	UPS Shippable
68 lbs (31kg)	74 lbs (34kg)	Yes, ISTA 1A

Measurements are US Standard. Measurements in ( ) are in millimeters
** IEC 60705 Tested*
† Includes handle

Features

Configuration	Countertop
Stackable	Yes
Display	LCD
Control System	Touchpad
Programmable Control	Yes, 10 pads
Braille	Overlay available
Settings Programmable	100
Max. Cooking Time	60:00
Microwave Distribution	Double rotating antennas, top and bottom
Power Levels	11
Defrost	Yes, power level 2
Time Entry Option	Yes
Multiple Portion Setting	Yes, X2 by default, optional up to X9
Stage Cooking	4 stages
Interior Light	Yes, LED
Automatic Voltage Sensor	Yes *(North America only >1200W)*
Air Filter	Yes, 1 removable
Signal	End of cycle, adjustable
Door Handle	Grab & Go
Exterior Finish	Stainless steel
Interior Finish	Stainless steel with gasket sealed borosilicate tray

Electrical Configuration

Region	Model#/ UPC	Automatic Voltage Sensor	Exterior Depth Style	Door Style	Power Consumption	Power Output (microwave)	Power Source	Plug Configuration		Cord Length	Frequency	Magnetron
North America *single phase*	**HDC1015** 728028470949	No	A	Window	1610W, 14.4 A	1000W*	120V, 60Hz, 15A, single phase	NEMA 5-15P		5 ft. (1.5m)	2450MHz	2
North America *single phase*	**HDC12A2** 719881159355	No	A	Window	2000W, 16.8 A	1200W*	120V, 60Hz, 20A, single phase	NEMA 5-20		5.5 ft. (1.7m)	2450MHz	2
North America *single phase*	**HDC182** 719881159362	Yes	A	Window	3000W, 14.4 A	1800W*	208/240V, 60Hz, 20A, single phase	NEMA 6-20		5.5 ft. (1.7m)	2450MHz	2
North America *single phase*	**HDC1815** 728028315929	Yes	A	Window	3000W, 14.4 A	1800W*	208/240V, 60Hz, 15A, single phase	NEMA L6-15P		5.5 ft. (1.7m)	2450MHz	2
North America *single phase*	**HDC18SD2** 719881159379	Yes	A	Solid	3000W, 14.4 A	1800W*	208/240V, 60Hz, 20A, single phase	NEMA 6-20		5.5 ft. (1.7m)	2450MHz	2
North America *single phase*	**HDC212** 719881159386	Yes	B	Window	3200W, 15.4 A	2100W*	208/240V, 60Hz, 20A, single phase	NEMA 6-20		5.5 ft. (1.7m)	2450MHz	2

Specification #:

AIA File #:

225 49th Ave. Dr. SW, Cedar Rapids, IA 52404 U.S.A.
800-233-2366 • 319-368-8120 • Fax: 319-368-8198
www.acpsolutions.com

Part No. 20271301
Updated 10/26/2020
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an Ali Group Company

The Spirit of Excellence

HDC Series

CHEF LINE

NEW DESIGN!

HDC212 - 2100 Watts, 20A plug
HDC182 - 1800 Watts, 20A plug
HDC1815 - 1800 Watts, 15A plug
HDC12A2 - 1200 Watts, 20A plug

FEATURES AND BENEFITS

- 1200 - 2100 watts of cooking power
  - Faster cooking, steaming and re-therming of single portions
- 0.6 cu ft. (17 L) oven capacity
  - Accommodates a 6" (152 mm) deep ½ size food pan
- Top and bottom antenna system
  - Dispersed energy pattern for even cooking
  - Consistent results and excellent food quality
- *New!* HD advanced controller
  - 2.8" (7cm) full color LCD HD display
  - New user interface. Multi-lingual— supports 24 languages
- *New!* Accepts standard USB flash drives
  - Easily transfer settings. Compatible with the ACP Programming App
- 100 programmable menu items, 4 cooking stages, 11 power levels
  - One-touch cooking
  - Versatile program options
  - Minimizes staff training and reduces prep time

USB Standard Connectivity

Accommodates a 6" (152mm) deep ½ size food pan

Cleanable air filter removes easily

Fabricated and Assembled in the USA

STEAM OR BOOST HEATS IN SECONDS

FOOD ITEM	HDC212	HDC182/1815	HDC12A2
Fresh Asparagus - 8oz. (227g)	1:00	1:10	1:50*
Steamed Shrimp - 8oz. (227g)	1:40	1:55	2:45*
Baked potato - 10oz. (283g)	1:55	2:40	3:10
Steamed Rice - 8cups (1.2kg)	8:00	12:00	20:00*
Salmon filet - 8oz. (227g)	1:55	2:10	2:50
Chocolate Cake in a Cup	0:27	0:35	0:50

**For best steaming results, use HDC212 , HDC1815, or HDC182*

IDEAL APPLICATIONS

- Casual dining
- Fast casual dining
- Bars and grills
- Quick service restaurants

Amana Commercial

For future reference, please write the Model Number and Serial Number here.

Model Number_____

Serial Number_____

Commercial Microwave Oven Warranty

ACP warrants this product only when the original purchaser uses the oven for commercial food service preparation.

Warranty

ACP, Inc. reserves the right, at its sole discretion, to repair or replace failed product covered by this warranty with new or factory recertified product of the same or similar model.

First through Third Year

ACP will repair or replace any part (f.o.b. Cedar Rapids, IA U.S.A.) that has failed due to workmanship or materials, including related labor and travel, except as provided in this warranty.

OWNER RESPONSIBILITIES:

- To obtain warranty service in the USA, you must contact ACP, Inc. ComServ Customer Service to request service at: Phone 866.426.2621 or email: commercialservice@acpsolutions.com. Outside the USA contact your local authorized distributor.
- Provide proof of purchase.
- Provide normal care and maintenance, including cleaning as instructed in owner's manual or product safety guide.
- Replace owner replaceable items where directions appear in the owner's manual.
- Make product accessible for service.
- Pay for premium service costs for service outside servicer's normal business hours and service area.
- Pay for service calls related to product installation and customer education.
- Pay for service calls and or freight charges for items not covered as listed below.

ITEMS NOT COVERED:

- Failures caused by:
  - Abuse or misuse.
  - Accident, fire, flood or acts of nature.
  - Any modification, alteration, adjustment or repair service not authorized by ACP.
  - Grease or other material buildup due to improper cleaning or maintenance.
  - Connection to an improper power supply.
  - Operating an empty oven.
  - Use of improper pans, containers, or accessories that cause damage to the product.
- Normal product maintenance and cleaning, including light bulbs.
- Lost or broken air filters or antenna shields.
- Replacement of oven liners.
- Damages which occur in shipment.
- Broken ceramic tray, stirrer covers.
- General rebuilding or refurbishing.

WARRANTY LIMITATIONS:

- Begins at date of original purchase.
- Applies to product used for NORMAL commercial food preparation.
- Service must be performed by an authorized ACP servicer.
- Replaced equipment warranty coverage will be for the remainder of the original equipment warranty.

WARRANTY IS VOID IF:

- Serial plate is defaced.
- Product is altered by user.
- Product is not installed or used according to manufacturer's instructions.
- Product is installed in a prison or correctional facility.

For answers to questions regarding the above, contact equipment supplier or:

ACP, Inc.
225 49th Avenue Drive SW
Cedar Rapids, Iowa 52404 U.S.A.
1-866-426-2621 (inside U.S.A. & Canada)
1-319-368-8120 (outside U.S.A. & Canada)

ANY IMPLIED WARRANTY OF MERCHANTABILITY AND/OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS HEREBY EXCLUDED. IN NO EVENT SHALL ACP BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Part No. 20098401
Printed 9/13

ACP Inc. **• www.acpsolutions.com**

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Cedar Rapids, IA 52404

Como fuente de consulta para el futuro, anote aquí el Número de modelo y el Número de serie.

Número de modelo _____

Número de serie _____

Garantía de Horno Microondas Comercial

ACP garantiza este producto sólo si el comprador original usa el horno para preparación de alimentos con fines comerciales.

Garantía

A su discreción única, ACP, Inc. se reserva el derecho de reparar o reemplazar un producto cubierto bajo esta garantía que haya fallado por un producto nuevo o reconstruido de un modelo igual o similar.

Del primer al tercer año

ACP se compromete a reparar o reemplazar cualquier pieza, porte por cobrar, que haya fallado como consecuencia de la fabricación o los materiales, incluida la correspondiente mano de obra y transporte, con excepción de lo dispuesto en esta garantía.

DEBERES DEL PROPIETARIO:

- Para obtener el servicio de garantía en EE.UU., deberá comunicarse con Apoyo al Servicio ComServ de ACP, Inc. para solicitar servicio al: teléfono 866.426.2621 o por correo electrónico: commercialservice@acpsolutions.com. Fuera de EE.UU, comuníquese con su distribuidor local autorizado.
- Proporcionar prueba de compra.
- Prestar el cuidado y mantenimiento normal, incluida la limpieza de acuerdo con las instrucciones del manual del propietario o la guía de seguridad del producto.
- Reemplazar los elementos reemplazables por el propietario para lo cual se incluyan las instrucciones en el manual del propietario.
- Permitir el acceso al producto para fines de reparación.
- Pagar un precio de reparación más elevado por concepto de servicios fuera del horario y zona de trabajo normales de la empresa de servicio técnico.
- Pagar llamadas de servicio técnico relacionadas con la instalación del producto y la formación del cliente.
- Pagar llamadas de servicio técnico y/o cargos de transporte por los elementos no amparados según se indica a continuación.

ELEMENTOS NO AMPARADOS:

- Fallos ocasionados por:
  - Abuso o mal uso.
  - Accidentes, incendio, inundación o casos fortuitos.
  - Toda modificación, alteración, ajuste o servicio de reparación no autorizados por ACP.
  - Acumulación de grasa u otras substancias debida a limpieza o mantenimiento incorrectos.
  - Conexión a una fuente de alimentación inadecuada.
  - Usar el horno estando vacío.
  - Uso de cacerolas, recipientes o accesorios inadecuados que dañen el producto.
- Mantenimiento y limpieza normal del producto, incluidas las bombillas eléctricas.
- Perdidos o rotos los filtros de aire o escudos de antena.
- Sustitución de revestimientos de horno.
- Daños ocurridos durante el envío.
- Ruptura de repisas de porcelana.
- Reconstrucción o modernización generales.

LIMITACIONES DE LA GARANTÍA:

- Empieza a partir de la fecha original de compra.
- Se aplica a productos utilizados para la preparación NORMAL de alimentos con fines comerciales.
- El servicio debe ser prestado por un servicio técnico ACP autorizado.
- La cubierta en garantía del equipo reemplazado estará avalada por el resto del periodo de garantía del equipo original.

LA GARANTÍA SE ANULA SI:

- Se borra el número de serie de la chapa correspondiente.
- El usuario modifica el producto.
- No se instala o utiliza el producto de acuerdo con las instrucciones del fabricante.
- El producto se instala en una prisión o institución correccional.

Si tiene preguntas acerca de la información suministrada, puede ponerse en contacto con el proveedor del equipo o con:

ACP, Inc.
225 49th Avenue Drive SW
Cedar Rapids, Iowa 52404 U.S.A.
1-866-426-2621 (en EE.UU. y Canadá)
1-319-368-8120 (fuera de EE.UU. y Canadá)

CUALQUIER GARANTÍA IMPLÍCITA DE COMERCIALIZACIÓN Y/O GARANTÍA IMPLÍCITA DE ADECUACIÓN PARA UN PROPÓSITO EN PARTICULAR QUEDA POR LA PRESENTE EXCLUIDA. BAJO NINGUNA CIRCUNSTANCIA SERÁ ACP RESPONSABLE DE DAÑOS INCIDENTALES O EMERGENTES.

Nro. de pieza 20098401
Impreso 9/13

***ACP Inc.*• www.acpsolutions.com**

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Cedar Rapids, IA 52404

Pour référence ultérieure, inscrire le numéro de modèle et de série ici.

Numéro de modèle _____

Numéro de série _____

Garantie pour four à micro-ondes commercial

ACP garantit ce produit seulement lorsque l'acheteur d'origine utilise le four dans la préparation commerciale d'aliments de restauration.

Garantie

ACP, Inc. se réserve le droit, à sa seule discrétion, de réparer ou de remplacer le produit défaillant couvert par la présente garantie par un nouveau produit ou un produit remis à neuf du même modèle ou d'un modèle similaire.

De la première à la troisième année

ACP réparera ou remplacera toute pièce, fret payable à destination, en cas de défaillance résultant de la qualité d'exécution ou des matériaux, y compris une défaillance associée à la main-d'œuvre et au transport, sauf stipulation de la présente garantie.

RESPONSABILITÉS DU PROPRIÉTAIRE :

- Pour bénéficier du service de garantie aux États-Unis, contacter le service clientèle d'ACP, Inc. ComServ pour demander ledit service, par téléphone au : 866.426.2621 ou par courriel à l'adresse : commercialservice@acpsolutions.com. À l'extérieur des États-Unis, contacter le distributeur local agréé.
- Fournir une preuve d'achat.
- Assurer une maintenance et un entretien réguliers, y compris un nettoyage conformément aux instructions du manuel de l'utilisateur ou du guide sur la sécurité des produits.
- Remplacer les articles remplaçables par le propriétaire, conformément aux directives du manuel de l'utilisateur.
- Rendre le produit accessible pour l'entretien.
- Payer des primes de service pour tout service fourni en dehors des heures ouvrées normales et à l'extérieur de la zone de service.
- Payer pour les appels de service associées à l'installation du produit et à la formation du client.
- Payer pour les appels de service et/ou les frais de transport pour les éléments non couverts listés ci-dessous :

ÉLÉMENTS NON COUVERTS :

- Défaillances causées par :
  - Abus ou mésusage.
  - Accident, incendie, inondation ou calamités naturelles.
  - Toute modification, toute altération, tout réglage ou toute réparation non autorisé(e) par ACP.
  - Accumulation de graisse ou d'autre matière résultant d'un nettoyage ou d'un entretien inadéquat.
  - Connexion à une source d'alimentation électrique inadéquate.
  - Fonctionnement du four à vide.
  - Utilisation de récipients, de conteneurs ou d'accessoires inadéquats qui endommagent le produit.
- Entretien et nettoyage normal du produit, y compris les ampoules.
- Filtres à air perdus ou brisés, bouclier antenne.
- Remplacement des revêtements de fours.
- Dommages survenus pendant l'expédition.
- Étagères en céramique brisées.
- Réfection ou remise à neuf générale.

LIMITATIONS DE GARANTIE :

- Commence à partir de la date d'achat d'origine.
- S'applique au produit pour la préparation commerciale NORMALE d'aliments.
- L'entretien doit être effectué par un préposé à l'entretien agréé par ACP.
- La couverture de la garantie pour l'équipement de remplacement s'étend pendant le reste de la durée de la garantie de l'équipement d'origine.

LA GARANTIE EST NULLE SI :

- La plaque du numéro de série est défigurée.
- Le produit est modifié par l'utilisateur.
- Le produit n'est pas installé ou utilisé conformément aux instructions du fabricant.
- Le produit est installé dans un établissement pénitentiaire ou correctionnel..

Pour obtenir toute information complémentaire portant sur les éléments ci-dessus, contacter le fournisseur de l'équipement ou :

ACP, Inc.
225 49th Avenue Drive SW
Cedar Rapids, Iowa 52404 U.S.A.
1-866-426-2621 (pour les États-Unis et le Canada)
1-319-368-8120 (en dehors des États-Unis et du Canada)

TOUTE GARANTIE IMPLICITE DE QUALITÉ MARCHANDE ET/OU TOUTE GARANTIE IMPLICITE D'ADÉQUATION À USAGE PARTICULIER EST EXCLUE PAR LA PRÉSENTE. EN AUCUN CAS ACP NE POURRA ÊTRE TENUE RESPONSABLE POUR DES DOMMAGES INDIRECTS OU CONSÉCUTIFS.

N° de pièce 20098401
Imprimé 9/13

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Cedar Rapids, IA 52404

Notieren Sie die Modell- und Seriennummer für spätere Bezugnahme bitte hier.

Modellnummer _____

Seriennummer _____

Garantie für das gewerbliche Mikrowellengerät

ACP bietet nur dann Garantieleistungen für dieses Produkt, wenn der ursprüngliche Käufer das Gerät für die gewerbliche Essenszubereitung verwendet.

Garantie

ACP, Inc. behält sich das Recht vor, ein fehlerhaftes, unter dieser Garantie stehendes Produkt zu reparieren oder mit einem neuen bzw. generalüberholten Produkt desselben bzw. eines ähnlichen Modells zu ersetzen.

Erstes bis drittes Jahr

ACP repariert oder ersetzt mit Ausnahme der in dieser Garantie aufgeführten Bedingungen jedes Teil, Unfrei Haus, einschließlich damit verbundener Arbeits- und Reisekosten, welches aufgrund von Verarbeitungs- oder Materialmängeln versagt.

PFLICHTEN DES EIGENTÜMERS:

- Für Leistung im Gewährleistungsfall in den USA setzen Sie sich mit dem ComServ-Kundendienst von ACP, Inc. folgendermaßen in Verbindung: Telefonisch: 866.426.2621 oder E-Mail: commercialservice@acpsolutions.com. Außerhalb der USA setzen Sie sich mit Ihrem autorisierten Vertriebshändler vor Ort in Verbindung.
- Vorlage des Kaufnachweises.
- Vornahme normaler Pflege und Wartung. Dazu zählt die Reinigung nach den Instruktionen im Benutzer- oder Produktsicherheitshandbuch.
- Austausch von durch den Eigentümer austauschbaren Teilen gemäß den im Benutzerhandbuch angegebenen Anweisungen.
- Bereitstellung des Produkts für Wartungsarbeiten.
- Zahlung eines Aufschlags für Wartungsarbeiten, die außerhalb der normalen Öffnungszeiten und des normalen Wartungsbereichs vorgenommen werden.
- Zahlung für Wartungsarbeiten, die mit der Installation des Produkts und der Schulung des Kunden zusammenhängen.
- Zahlung für Wartungsarbeiten und/oder Frachtkosten für nachstehende, nicht von der Garantie abgedeckte Punkte.

NICHT VON DER GARANTIE ABGEDECKTE PUNKTE:

- Versagen aus folgenden Ursachen:
  - Missbrauch bzw. Fehlgebrauch.
  - Unfall, Brand, Überschwemmung und höhere Gewalt.
  - Alle Modifikationen, Änderungen, Anpassungen oder Reparaturen, die nicht von ACP genehmigt wurden.
  - Ansammlung von Fett oder anderen Stoffen aufgrund unsachgemäßer Reinigung bzw. Wartung.
  - Anschluss an eine ungeeignete Stromversorgung.
  - Betrieb eines leeren Geräts.
  - Gebrauch ungeeigneter Pfannen, Behälter oder Zubehörteile, die das Produkt beschädigen.
- Normale Wartung und Reinigung des Produktes, darunter Glühbirnen.
- Verlorene oder defekte Luftfilter oder Antenne abschirmt.
- Ersatz Backofenauskleidungen.
- Versandschäden.
- Zerbrochene Keramikabstellflächen.
- Allgemeine Überholungs- bzw. Instandsetzungsarbeiten.

GARANTIEEINSCHRÄNKUNGEN:

- Beginnen ab Datum des Originalkaufs.
- Gelten für Produkte, die für die NORMALE gewerbliche Essenszubereitung verwendet werden.
- Die Wartung muss von einem von ACP befugten Wartungstechniker vorgenommen werden.
- Die Garantie für ein ersetztes Gerät gilt für die restliche Zeit der ursprünglichen Gerätegarantie.

DIE GARANTIE ERLISCHT IN DEN FOLGENDEN FÄLLEN:

- Serienschild wurde unkenntlich gemacht.
- Vom Benutzer wurden Änderungen am Produkt vorgenommen.
- Das Produkt wurde nicht gemäß den Anweisungen des Herstellers installiert oder verwendet.
- Das Produkt wird in einer Justizvollzugsanstalt installiert.

Setzen Sie sich in Bezug auf Fragen zu den oben angeführten Punkten mit dem Lieferanten des Geräts in Verbindung oder wenden Sie sich an:

ACP INC.
Accelerated Cooking Products

ACP, Inc.
225 49th Avenue Drive SW
Cedar Rapids, Iowa 52404 U.S.A.
1-866-426-2621 (von innerhalb der USA und Kanada)
1-319-368-8120 (von außerhalb der USA und Kanada)

JEGLICHE KONKLUDENTE GEWÄHRLEISTUNG DER TAUGLICHKEIT UND/ODER EIGNUNG FÜR EINEN BESTIMMTEN ZWECK IST HIERMIT AUSGESCHLOSSEN. IN KEINEM FALL HAFTET ACP FÜR BEGLEIT- ODER FOLGESCHÄDEN.

Teile-Nr. 20098401
Gedruckt 9/13

***ACP Inc.*• www.acpsolutions.com**

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Cedar Rapids, IA 52404

THIS ITEM IS: SPARE NUMBER

- [x] SPARE NUMBER
- [ ] MILLWORK
- [ ] CUSTOM FABRICATED/NSF
- [ ] EXISTING
  - [ ] WHERE SHOWN
  - [ ] RELOCATED
  - [ ] MODIFIED
- [ ] N.I.K.E.C. BY:
  - [ ] OWNER
  - [ ] SUPPLIER / VENDOR
  - [ ] OTHERS

REMARKS:

THIS ITEM IS: SPARE NUMBER

- [x] SPARE NUMBER
- [ ] MILLWORK
- [ ] CUSTOM FABRICATED/NSF
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  - [ ] WHERE SHOWN
  - [ ] RELOCATED
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  - [ ] OTHERS

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- [ ] N.I.K.E.C. BY:
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  - [ ] SUPPLIER / VENDOR
  - [ ] OTHERS

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- [x] SPARE NUMBER
- [ ] MILLWORK
- [ ] CUSTOM FABRICATED/NSF
- [ ] EXISTING
  - [ ] WHERE SHOWN
  - [ ] RELOCATED
  - [ ] MODIFIED
- [ ] N.I.K.E.C. BY:
  - [ ] OWNER
  - [ ] SUPPLIER / VENDOR
  - [ ] OTHERS

REMARKS:

THIS ITEM IS: BEER/WINE DISPENSING SYSTEM

- ☐ SPARE NUMBER
- ☐ MILLWORK
- ■ CUSTOM FABRICATED/NSF
- ☐ EXISTING
  - ☐ WHERE SHOWN
  - ☐ RELOCATED
  - ☐ MODIFIED
- ☐ N.I.K.E.C. BY:
  - ☐ OWNER
  - ☐ SUPPLIER / VENDOR
  - ☐ OTHERS

REMARKS:

Project_____

Item #_____

Quantity_____

Hidden Frost Top

Item #	Frost Zone Dimensions	Voltage
SS-FT-2422	21.6” x 19.6”	110-120
SS-FT-3622	33.6” x 19.6”	110-120
SS-FT-4822	45.6” x 19.6”	110-120
SS-FT-6022	57.6” x 19.6”	110-120
SS-FT-7222	69.6” x 19.6”	208-240

Note: Custom options available

Description:
Spring USA’s Hidden Frost Tops help keep items chilled without the use of ice packs. No need to replenish ice in the middle of service or worry about messy puddles to clean from melted ice. Frost Tops are a clean, reliable source for keeping cold food or drink cold. Hidden Frost Tops make the desired surface area multifunctional. When in use, the surface area is cold but when turned off, the surface area is at ambient temperature and clean of any Frost Top equipment, ready to use for the next task. Made with stainless steel and fully sealed for efficiency.

Standard Warranty:
- One year, parts (standard factory warranty from condenser manufacturer)

Agency Listings:
- NSF and UL certified custom fabricating manufacturer

Sep 2020

Project_____

Item #_____

Quantity_____

Hidden Frost Top

Construction & Performance Features:

- 18-gauge, 304 stainless steel housing
- Fully insulated housing with 2” polystyrene for efficiency and energy savings
- One-piece construction
- Fully welded and sealed with high strength silicone sealant
- 1” flanged perimeter for easy mounting
- Digital thermostat
- 16-gauge, stainless steel condenser base
- 1-1/4” angle iron frame condenser housing
- Hermetically sealed compressor with 404-a refrigerant
- Thermostatic expansion valve with drier and sight glass for easy service
- 6’ power cord with plug
- Power ON/OFF switch
- Compatible with 1/4” to 1” countertop material

Available Accessories/Alternative Configurations:

- Five-year extended warranty from manufacturer
- Remote ON/OFF switch
- Remote condenser operation with TXV valve and (2) 3/8” diameter refrigerator lines; 110-120 V, 60 Hz condenser

Frost Zone	Remote Condenser L x W x H	Amps
21.6” x 19.6”	16” x 11.5” x 8.9”	5.7
33.6” x 19.6”	16” x 11.5” x 8.9”	8.5
45.6” x 19.6”	18.4” x 14” x 11.1”	10.1
57.6” x 19.6”	17.4” x 13.5” x 11.8”	14.0
69.6” x 19.6”	17.4” x 13.5” x 11.8”	14.0

Electrical Requirements:

Item #	Voltage	Phase	Hz	W	Amps	Plug	BTU/HR @ -15F
SS-FT-2422	110-120	1	60	670	6.1	NEMA 5-15P	720
SS-FT-3622	110-120	1	60	920	8.4	NEMA 5-15P	1000
SS-FT-4822	110-120	1	60	1350	12.3	NEMA 5-15P	1500
SS-FT-6022	110-120	1	60	1380	12.6	NEMA 5-15P	1900
SS-FT-7222	208-240	1	60	1850	8.9	NEMA 6-20P	2700

127 Ambassador Drive, Suite 147, Naperville, IL 60540 P: 630-527-8600 springusa@springusa.com www.springusa.com

Project_____

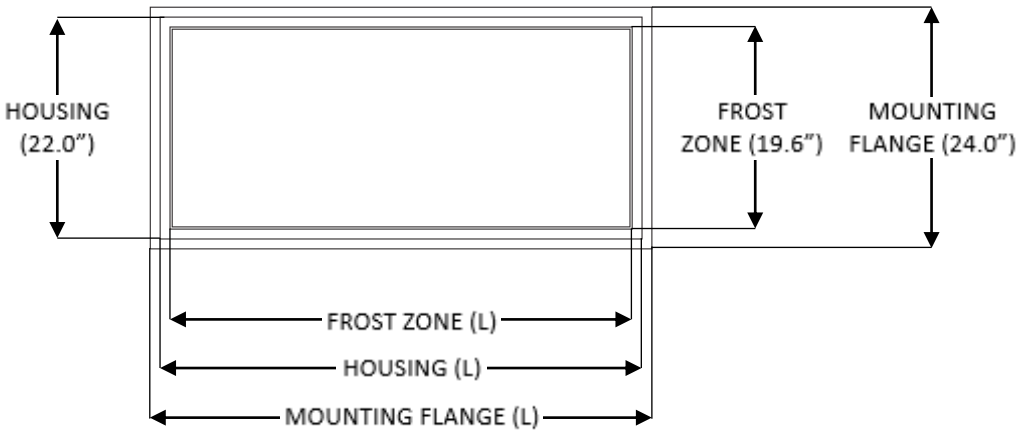
Item #_____

Quantity_____

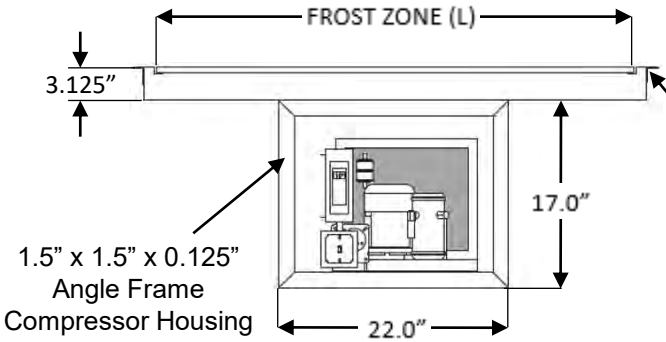
Hidden Frost Top

Key Dimensions:

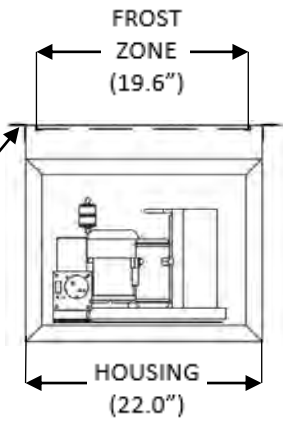
TOP VIEW



FRONT VIEW



SIDE VIEW



Item #	Frost Zone (L)	Housing (L)	Mounting Flange (L)
SS-FT-2422	21.6"	24.0"	26.0"
SS-FT-3622	33.6"	36.0"	38.0"
SS-FT-4822	45.6"	48.0"	50.0"
SS-FT-6022	57.6"	60.0"	62.0"
SS-FT-7222	69.6"	72.0"	74.0"

Project_____

Item #_____

Quantity_____

Hidden Frost Top

Notes & Conditions:

1. Hidden Frost Top units must be installed in a base cabinet or display pedestal by a qualified contractor.
2. Direction of airflow must be verified when order placed.
3. Ensure that you have dedicated power wherever you are planning to use your Hidden Frost Top. Refer to the manual for detailed instructions regarding operation.
4. Ensure the unit has proper ventilation at all times so it does not overheat.
5. Not recommended for use with marble.

127 Ambassador Drive, Suite 147, Naperville, IL 60540 P: 630-527-8600 springusa@springusa.com www.springusa.com

THIS ITEM IS: SPARE NUMBER

- [x] SPARE NUMBER
- [ ] MILLWORK
- [ ] CUSTOM FABRICATED/NSF
- [ ] EXISTING
  - [ ] WHERE SHOWN
  - [ ] RELOCATED
  - [ ] MODIFIED
- [ ] N.I.K.E.C. BY:
  - [ ] OWNER
  - [ ] SUPPLIER / VENDOR
  - [ ] OTHERS

REMARKS:

case displays

24" -S " 3" x18" Self Serve
263-S 10"x " 4" Self Serve

a

b 254

c 255

d

24" 13" x18"
260 10"x " 4"

e 255-S Self Serve

f " 24 Self Serve

g 261

h 2" 8

i 267

a. Classic Display Case BPA FREE
Slant Front. Rear Door. Self Serve Front Door. 263-S 3 – 10" x " 4" Trays. 241-S 3 – 13" x " 8" Clear Trays.

ITEM	DESCRIPTION	LIST PRICE
241-S	" 3½Wx22Dx21H	$506.60 ea
263-S	" " ½Wx17Dx17H	380.00 ea

b. Classic Display Case BPA FREE
Slant Front. Rear Door. Includes 2 – 10" x " 4" Clear Trays.

ITEM	DESCRIPTION	LIST PRICE
254	15Wx13Dx" " H	$239.00 ea

c. Classic Display Case BPA FREE
Slant Front. Rear Door. Includes 2 – 13" x " 8" Clear Trays.

ITEM	DESCRIPTION	LIST PRICE
255	19Wx15Dx" " H	$307.40 ea

d. Classic Display Case BPA FREE
Slant Front. Rear Door. 241" 3 – 13" x " 8" Trays. 260 3- " 0" x " 4" Clear Trays.

ITEM	DESCRIPTION	LIST PRICE
241	" 3½Wx22Dx21H	$497.30 ea
260	" " ½Wx17Dx17H	361.60 ea

e. Classic Display Case BPA FREE
Slant Front. Front Door. Includes 2 – " 3" x 18" Clear Trays.

ITEM	DESCRIPTION	LIST PRICE
255-S	19Wx15Dx" " H	$307.40 ea

f. Classic Display Case BPA FREE
3 Front Self Serve Doors. Rear Door. Includes 3 – " 3" x 18" Clear Trays.

ITEM	DESCRIPTION	LIST PRICE
124	" 3½Wx20Dx18H	$506.60 ea

g. Classic Display Case BPA FREE
Slant Front. Rear Door. Includes 3 – 10" x " 4" Clear Trays.

ITEM	DESCRIPTION	LIST PRICE
261	" 5½Wx15Dx16H	$380.00 ea

h. Cleaning Kit

ITEM	DESCRIPTION	LIST PRICE
218	Cleaning Kit	$50.60 ea

i. Tongs Kit
Includes Tongs, Chain, Hook & Tape.

ITEM	DESCRIPTION	LIST PRICE
267	Tongs Kit	$23.80 ea

j. Classic Display Case BPA FREE
Large Slant Front. Attendant Serve. Includes 3 – " 8" x 26" Clear Trays.

ITEM	DESCRIPTION	LIST PRICE
1202	27Wx20Dx20H	$897.70 ea

k. Classic Display Case BPA FREE
Large Slant Front. Self Serve. Includes 3 – " 8" x 26" Clear Trays.

ITEM	DESCRIPTION	LIST PRICE
1202-S	27Wx20Dx20H	$897.70 ea

l. Classic Display Case BPA FREE
Slant Front. Double Rear Doors. Includes 3 – " 8" x 26" Clear Trays.

ITEM	DESCRIPTION	LIST PRICE
P254	26½Wx22½Dx23½H	$1,105.90 ea

m. Classic Display Case BPA FREE
Large Slant Front. Self Serve. Includes 3 – " 8" x 26" Clear Trays.

ITEM	DESCRIPTION	LIST PRICE
P254SS*	26½Wx22½Dx23½H	$1,105.90 ea

*Ships Truck Only

n. Classic Large Bakery Case BPA FREE
Double Front Doors. Includes 6 – 13" x 18" Clear Trays.

ITEM	DESCRIPTION	LIST PRICE
288*	27Wx23Dx28H	$1,897.70 ea

*Ships Truck Only

visit us online at: www.calmil.com CAL-MIL call toll-free 800-321-9069

case displays

A

B

C

D

A. CLASSIC DISPLAY CASE

Ships Truck Only! Large Slanted Front.
Self-Serve. Includes 3 – 18" x 26" Clear Trays.

ITEM P254SS | 26½Wx22½Dx23½H

ITEM P235-12 | Replacement Tray

C. CLASSIC ATTENDANT-SERVE CASE

Includes 3 – 18" x 26" Clear Trays.

ITEM 1202 | 27Wx20Dx20H

ITEM P235-12 | Replacement Tray

B. GRAND BAKERY CASE

Small Case Includes 3 Small Trays, 3 Large Trays.
Large Case Includes 6 Small Trays and 3 Large Trays.
Assembly Required.

ITEM 3493-13L | 29Wx17Dx29H

ITEM 3493-13S | 20Wx15½Dx21H

ITEM 3047 | Chalkboard Tents

REPLACEMENT TRAYS

ITEM 3414-15 | 6½Wx14Dx1H

ITEM 3415-15 | 14Wx13Dx1H

D. CLASSIC SELF-SERVE DISPLAY CASE

Includes 3 – 18" x 26" Clear Trays.

ITEM 1202-S | 27Wx20Dx20H

ITEM P235-12 | Replacement Tray

Please visit www.calmil.com/legal for a complete list of California Proposition 65 related items.

Project _____

Item # _____

Quantity _____

Pop-Up Toasters

Models: TPT-120, -208, -240, -230-4

The Hatco Pop-Up Toasters are economical, fast, dependable and versatile. These toasters are perfect for self-serve buffet areas and lighter volume restaurants, diners and cafes.

TPT-208, TPT-230-4 and TPT-240

TPT-120

Standard features

- Evenly toasts a variety of bread products including bagels, Texas toast, waffles and English muffins
- All models have four self-centering 1.25" (32 mm) extra wide slots.
- Durable stainless steel construction
- Individual progressive color controls
- Removable crumb trays for easy cleaning
- A selector switch for single (or double) sided toasting (excluding TPT-120)
- Unit comes with 6' (1829 mm) cord with plug

Gloss Finishes – Non-standard colors are non-returnable
– Stainless Steel standard – (TPT-120 only)
☐ Radiant Red ☐ Bold Black

IFS anti-microbial coatings use naturally-occurring, environmentally sustainable, silver ions to help inhibit the growth of microbes on the powder coated surface. See www.hatcocorp.com/antimicrobial-paint for more information.

For operation, location and safety information, please refer to the Installation and Operating Manual.

TPT-120, -208, -240

ANSI/NSF 4

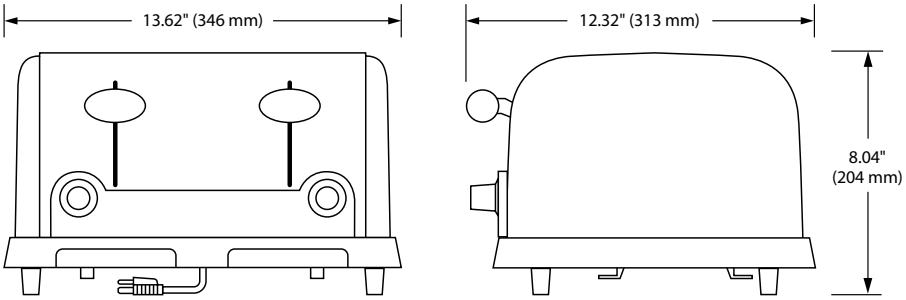
TPT-230-4 only

HATCO CORPORATION | P.O. Box 340500 Milwaukee, WI 53234-0500 U.S.A. | (414) 671-6350

www.hatcocorp.com | support@hatcocorp.com | Find a Hatco Rep | Image Library | Document Library | Patents | Chat

Pop-Up Toasters

Models: TPT-120, -208, -240, -230-4



SPECIFICATIONS
Pop-Up Toasters

The shaded areas contain electrical information for International models

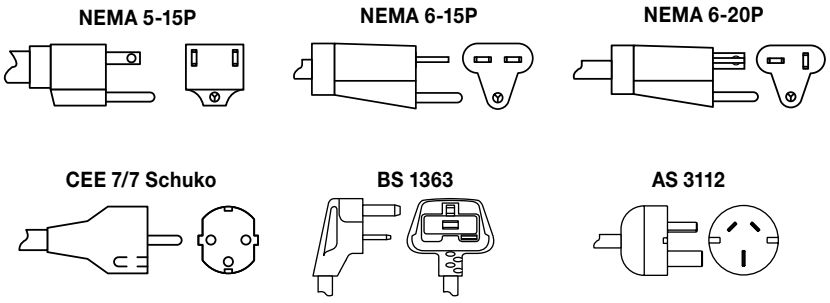
Model	Dimensions (Width x Depth x Height)	Volts	Phase	Watts	Amps	Plug	Approx. Ship Weight
TPT-120 (US)	13.62" x 12.32" x 8.04" (346 x 313 x 204 mm) Slot Opening: 1.25" x 5.5" x 4.5" (32 x 140 x 114 mm)	120	Single	1800	15.0	NEMA 5-15P	14 lbs. (7 kg)
TPT-120 (CAN)				1440	12.0		
TPT-208		208		2600	12.5	NEMA 6-15P♣	16 lbs. (8 kg)
TPT-240		240			10.9	NEMA 6-15P	
TPT-230-4		230 (CE)		2388	10.4	CEE 7/7 Schuko AS 3112	

♣ Canadian models use NEMA 6-20P.

CORD LOCATION

Bottom, back center.

PLUG CONFIGURATIONS



PRODUCT SPECS
Pop-Up Toasters

The Pop-Up Toaster shall be Model ... rated at ... volts, and ... watts, single phase, by the Hatco Corporation, Milwaukee, WI 53234 U.S.A.

The Toaster shall consist of a rugged stainless steel body with 4 slot openings, removable crumb trays, resistance wire elements, and a 6' (1829 mm) cord with plug attached.

Warranty consists of 24/7 parts and service assistance (US and Canada only).

Project_____
Item #_____ Quantity_____
Model #_____

MAX INDUCTION®

Built-In, Hold-Only Induction Warmer

(Model Shown: SM-651R)

Model #	Voltage	Peak Power	Plug Type
SM-651R (US)	110-120	650 W	NEMA 5-15P
SM-653R (Int'l)	220-240	650 W	CEE-7/7 16A Schuko
SM-653RU (UK)	220-240	650 W	BS 1363 (13A) U.K.

Description:

Spring USA's Built-In, Hold-Only Induction Warmer is a heating unit for product holding. The range is flush mountable and features a installation-ready modular flanged base and separate control panel. Each range includes our exclusive SmartScan® technology with over/under voltage protection, pan size and pan type recognition, and large LED power/temp display.

Construction & Performance Features:

- Sealed induction base with flanged cooking surface for easy drop-in mounting
- Separate control panel with 43" (1.1 m) cable for easy mounting
- Mounting frame bracket
- Rugged, 5 mm thick, easy to clean, tempered glass top
- 100% silicone rubber protective top seal
- 7' power cord with plug
- Simple, solid state controls
- Power ON/OFF touch pad
- Power ON/Pan-Present indicator lights
- Four-Position Set-Hold Temperature Control
- Lighted temperature indicator
- Temperature range

Low	Low-Med	Med-High	High
145-155°F	156-165°F	166-175°F	176-185°F
62-68°C	69-73°C	74-79°C	80-85°C

Standard Warranty:

Spring USA Induction Ranges offer a one (1) year, overnight exchange warranty, from the date of invoice, against manufacturers defects. See SpringUSA.com for more details.

Agency Listings:

- ETL
- UL STD 197
- FCC
- CETL
- ETL-Sanitation to NSF-4

Intertek UL197 Intertek NSF-4

Mar 2018

Project_____
Item #_____ Quantity_____
Model #_____

Built-In, Hold-Only Induction Warmer

Available Accessories/Alternate Configurations:

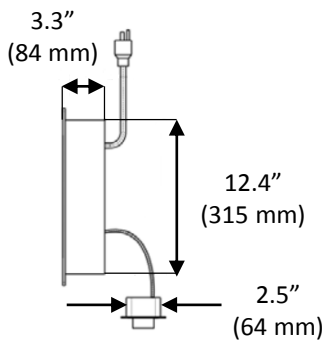
- Universal flush mounting flange/adapter plate
- Induction-ready Cookware and Serving Vessels
- AF-350 Under-Counter Air Filter System
- Built-In, High Power Induction Ranges
- Countertop, Portable Induction Ranges
- Custom Tabletop Induction featuring SmartStone®
- Mobile & Custom Configurations [Contact Spring USA]

Electric Requirements:

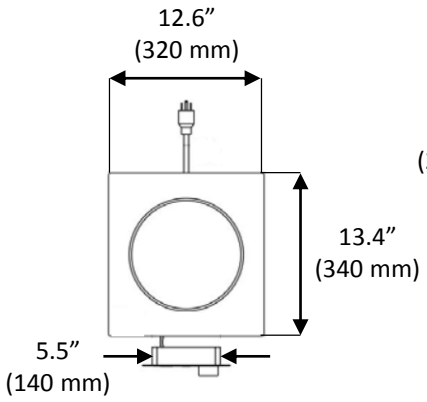
Model #	Voltage	Phase	Hertz	Watts	Amps	Plug
SM-651R (US)	110-120	1	60	650	5.4	NEMA 5-15P
SM-653R (Int'l)	220-240	1	50-60	650	2.7	CEE-7/7 16A Schuko
SM-653RU (UK)	220-240	1	50-60	650	2.7	BS 1363 (13A) U.K.

Key Dimensions:

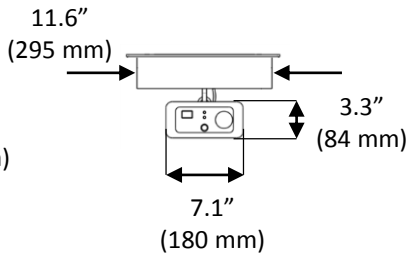
SIDE VIEW



TOP VIEW



FRONT VIEW



Range cutout: 13.5" L x 12.7" W
(342 mm L x 323 mm W)

Control box cutout: 5.6" L x 2.6" W
(142 mm L x 66 mm W)

Net Weight: 10.6 lb. (4.8 kg)

Mar 2018

Project_____
Item #_____ Quantity_____
Model #_____

Built-In, Hold-Only Induction Warmer

Shipping Dimensions:

Single Unit Shipping Carton				
Model #	Length	Width	Height	Weight
SM-651R (US)	18.0”	17.0”	7.0”	13.0 lb.
SM-653R (Int’l)	457 mm	432 mm	178 mm	5.9 kg
SM-653RU (UK)	457 mm	432 mm	178 mm	5.9 kg

Notes & Conditions:

1. This induction range must be surface mounted (by others) in a heat resistant countertop (2” thick maximum) or base cabinet with the control module mounted on the front of that enclosure [see cutout dimensions above].

2. For optimum performance, allow 4” clearance from front and sides; 7” below unit for good air circulation. **Cabinet ventilation must be provided.** The inside temperature of the cabinet must not exceed 90°F/32°C.

3. Actual range temperature may vary due to a number of variables, such as ambient temperature in the immediate surrounding area, content and volume of food being heated or cooked, and whether or not you are using a cover on the serving vessel.

4. This induction range requires use of ferrous metal, induction-ready cookware.

5. Spring USA Induction Servers and Induction Warmers/Ranges are designed to work together as a system. Optimal performance is achieved by using Spring USA components in conjunction with each other. As the first to offer such induction systems, Spring USA cannot warranty the performance of facsimile products offered by other companies.

127 Ambassador Drive, Suite 147 Naperville, Il 60540 P: 630-527-8600 F: 630-527-8677 springusa@springusa.com

Built-In MAX INDUCTION®

Ranges flush mount with countertop for a seamless display. Hold-only range can be hidden under SmartStone®- more information on page 18.

Hold Only 650 Watt Range SM-651R

Built-in
650 W | 110-120 V | 5.4 amps | 60 Hz
4 Settings | 145-185°F/62-85°C
NEMA 5-15P | 10.6 lbs
12.6"W x 13.4"D x 3.3"H
FCC, ETL, ETL-Sanitation to NSF-4, CETL, UL 197

Hidden Hold Only 650 Watt Range SM-651SS

SM-653R
650 W | 220-240 V | 2.7 amps | 50-60 Hz
CEE 7/7 16 A Schuko Plug

SM-653RU **UK**
650 W | 220-240 V | 2.7 amps | 50-60 Hz
BS 1363 (13A) U.K. Plug

Cook & Hold 1800 Watt Range SM-181R

Built-in
1800 W | 110-120 V | 15 amps | 60 Hz
20 Settings | 110-400°F/43-204°C
NEMA 5-15P | 10.8 lbs
12.6"W x 13.4"D x 3.3"H
FCC, ETL, ETL-Sanitation to NSF-4, CETL, UL 197

Cook & Hold 2600 Watt Range SM-261R

Built-in
2600 W | 208-240 V | 10.8 amps | 60 Hz
20 Settings | 110-400°F/43-204°C
NEMA 6-20P | 11.7 lbs
12.6"W x 13.4"D x 3.3"H
FCC, ETL, ETL-Sanitation to NSF-4, CETL, UL 197

SM-263R
2600 W | 220-240 V | 10.8 amps | 50-60 Hz
CEE 7/7 16 A Schuko Plug

SM- 263RU **UK**
2600 W | 220-240 V | 10.8 amps | 50-60 Hz
BS 1363 (13A) U.K. Plug

THIS ITEM IS: SPARE NUMBER

- [x] SPARE NUMBER
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  - [ ] WHERE SHOWN
  - [ ] RELOCATED
  - [ ] MODIFIED
- [ ] N.I.K.E.C. BY:
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  - [ ] SUPPLIER / VENDOR
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REMARKS:

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REMARKS:

Somerville™ Buffet Service - 4635210

NEW!

4635210

Description	4 qt (3.8 L) each, Double cereal dispenser
Dimensions IN (CM)	12 x 8 3/4 x 23 5/8 (31 x 22 x 60)
Case Lot	1
Tote Box	
Food Pan	
Water Pan	
Fuel Holder	
Dome Cover	

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Somerville® Accessories

4635710

4635410

4635310

4635510

4635110

4635810

4635510

ITEM #	DESCRIPTION	FOOD PAN	WATER PAN	FUEL HOLDER	DOME COVER	TOTE BOX
4634010	Chafer	30022	4625910	46864	4634020-1	52647
4635610	Chafer	46862	46269	46864	—	—
4634110	Chafer	46862	46269	46864	—	—
4635710	Soup urn	4635730-1*	—	46864	4635720-1	52645
4635410	Gravy/sauce urn	4635430-1*	—	46864	4635420-1	52645
4635310	Coffee urn	—	—	46864	—	52647
4635510	Coffee urn	—	—	46864	—	52647
4635110	Milk dispenser	—	—	—	—	—
4635810	Juice/cold beverage dispenser	—	—	—	—	52645
4635210	Double cereal dispenser	—	—	—	—	52645

**Accessory inset item number is listed.*

2511-6/7 Beverage Dispenser

7 Liter Beverage Dispenser

18/10 Stainless Steel with Ice Tube
Height: 25 inches
Width with Spout: 12.50 inches
Width of Vessel: 8 inches
Weight: 11 lbs.
Carton Weight: 14 lbs.
Carton Quantity: 2
Carton Weight: 30 lbs.

127 Ambassador Drive, Suite 147 Naperville, IL 60540-4079
Phone: 800-535-8974 • Fax: 630-527-8677 • www.springusa.com

BEVERAGE & TABLE DISPLAY

Beverage Dispensers

Juice

- ✓ Mirror polished 18/10 stainless steel
- ✓ Acrylic canisters are stain resistant
- ✓ Solid cast, stainless steel faucet with removable, easy clean-out valve
- ✓ Separate ice core does not dilute beverage
- ✓ BPA free; NSF certified
- ✓ Skid and scratch proof footing

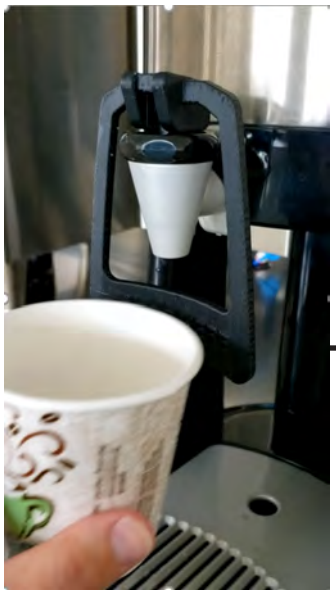
4.2 qt Beverage Dispenser
2511-6/4
4.2 qt./ 4.0 L
6.5"W x 10.5"D x 22.0"H

7.4 qt Beverage Dispenser
2511-6/7
7.4 qt./ 7.0 L
8.0"W x 11.5"D x 25.0"H

7.4 qt Beverage Dispenser w/ Drip Tray
2525-6/7
7.4 qt./ 7.0 L
8.9"W x 13.8"D x 25.0"H

FETCO® LUXUS Touchless Dispensers

LUXUS L4D-TLA 1.5 and 1.0 Gallon Touchless Antimicrobial Handle Dispensers



Simply push a cup against the handle for a hands-free dispense

D449TLA L4D-15TLA
LUXUS 1.5 Gallon Dispenser with Touchless Antimicrobial Handle Shown*

Antimicrobial Facuet Handle*: Permanent antimicrobial additive has been added to the plastic handle. Handle manufactured at the FETCO facility in Lake Zurich, IL

Digital Freshness Timer: Four pie-shaped visual indicators represent how much time (in 15 minute increments) has elapsed since filling.

Digital Volume Indicator: Digital visual indicator shows how much liquid remains with series of "V" shape bars representing 20% increments.

Precision Fit Funnel Assembly keeps moisture and heat from escaping to lock in freshness and aroma

Wrap Stabilizer: Pronounced ledge in molded plastic cover helps prevent graphic "wraps" from sliding up the dispenser body during handling.

Brew Cap mounted on lid exterior for easy access mounted on lid exterior for easy access

*Faucet handle only made with antimicrobial Omni Pro Armor. The antimicrobial properties do not protect users against bacteria, viruses, germs, or other disease organisms. Always clean and wash this product thoroughly before and after each use.

FETCO® LUXUS Touchless Dispensers

LUXUS L4D-TLA 1.5 and 1.0 Gallon Touchless Antimicrobial Handle Dispensers

L4D Series LUXUS® Thermal Dispensers

The LUXUS® L4D Thermal Dispensers and Servers are designed to retain all the heat generated during the brewing process with very little dissipation.

In fact, FETCO thermal dispensers maintain the suggested 180-185°F holding temperature for at least 4 hours andmeet or exceed industry standards.

This patented technology eliminates the need for an additional heat source, thus saving energy and equipment costs.

LUXUS 1.5 Gallon Touchless Dispenser

D449TLA	L4D-15TLA 1.5 Gallon LUXUS Thermal Dispenser				
	Height	Width	Depth	Empty Weight	Filled Weight
Product	23.00”	9.00”	13.25”	10.5 lbs	22.4 lbs
	Height	Width	Depth	Empty Weight	Filled Weight
Shipping	25.00”	17.00”	13.00”	14 lbs	NA

LUXUS 1.0 Gallon Touchless Dispenser

D448TLA	L4D-10TLA 1.0 Gallon LUXUS Thermal Dispenser				
	Height	Width	Depth	Empty Weight	Filled Weight
Product	21.75”	8.00”	12.50”	8.0 lbs	15.9 lbs
	Height	Width	Depth	Empty Weight	Filled Weight
Shipping	23.00”	16.00”	13.00”	12 lbs	NA

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- [x] SPARE NUMBER
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- [ ] CUSTOM FABRICATED/NSF
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  - [ ] MODIFIED
- [ ] N.I.K.E.C. BY:
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REMARKS:

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- [ ] N.I.K.E.C. BY:
  - [ ] OWNER
  - [ ] SUPPLIER / VENDOR
  - [ ] OTHERS

REMARKS:

THIS ITEM IS: CONDIMENT BIN

- ☐ SPARE NUMBER
- ☐ MILLWORK
- ■ CUSTOM FABRICATED/NSF
- ☐ EXISTING
  - ☐ WHERE SHOWN
  - ☐ RELOCATED
  - ☐ MODIFIED
- ☐ N.I.K.E.C. BY:
  - ☐ OWNER
  - ☐ SUPPLIER / VENDOR
  - ☐ OTHERS

REMARKS:

THIS ITEM IS: NAPKIN DISPENSER

- ☐ SPARE NUMBER
- ☐ MILLWORK
- ☐ CUSTOM FABRICATED/NSF
- ☐ EXISTING
  - ☐ WHERE SHOWN
  - ☐ RELOCATED
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- ■ N.I.K.E.C. BY:
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REMARKS:

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- [x] SPARE NUMBER
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REMARKS:

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REMARKS:

THIS ITEM IS: POS-CASH REGISTER

- ☐ SPARE NUMBER
- ☐ MILLWORK
- ☐ CUSTOM FABRICATED / NSF
- ☐ EXISTING
  - ☐ WHERE SHOWN
  - ☐ RELOCATED
  - ☐ MODIFIED
- ■ N.I.K.E.C. BY:
  - ■ OWNER
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  - ☐ OTHERS

REMARKS:

THIS ITEM IS: SPARE NUMBER

- [x] SPARE NUMBER
- [ ] MILLWORK
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REMARKS:

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REMARKS:

Oasis®

Product Specifications

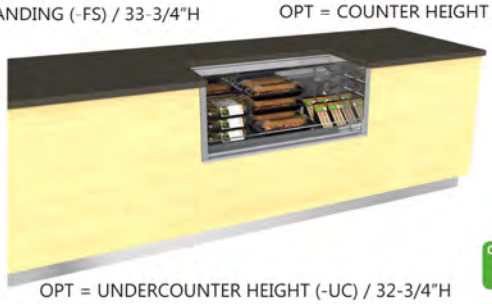
ITEM NO.
PROJECT:
DATE:

Refrigerated Self-Service Counter Case

	Lengths include end panels
□ CO3324R	36-1/4"L x 24-1/8"D x 33-3/4"H
□ CO4324R	47-1/4"L x 24-1/8"D x 33-3/4"H
□ CO5324R	59-1/4"L x 24-1/8"D x 33-3/4"H
□ CO6324R	71-1/4"L x 24-1/8"D x 33-3/4"H

STD = FREESTANDING (-FS) / 33-3/4"H

OPT = COUNTER HEIGHT (-CH) / 33-3/4"H



OPT = UNDERCOUNTER HEIGHT (-UC) / 32-3/4"H

Conforms to NSF STD 7 TYPE II

STANDARD FEATURES

- NOTE: ADD SUFFIX TO MODEL # LISTED ABOVE BASED ON MODEL CONFIGURATION CHOSEN BELOW
- Breeze~E (Type-II) w/ EnergyWise s/c refrigeration (rear access)
- Blue Fin coated coil
- Casters (non-locking) w/ levelers
- Compressor air rear intake, front discharge at toe kick. Front and rear panels cannot be blocked. Must remain 4" from wall
- Condensate pan (self-contained refrig. only)
- Flat front panel
- Integrated average product temperature of 40°F or less
- LED 3500K top light(s)
- One piece formed ABS plastic tub
- One year parts & labor; 5 year compressor warranty
- Removable deck pans provide complete access to evaporator coil & refrigeration connections
- Toe kick, black

Features	Standard	Options
MODEL CONFIGURATION	□ Freestanding (-FS) Counter ht. 33-3/4"H; freestanding unit w/2 end panels. Top & front panels positioned between end panels	□ Counter height (-CH) Counter ht. 33-3/4"H; Top & front panels extended over end panels to blend w/adj. counters (supplied by others) □ Undercounter height (-UC) Undercounter ht. 32-3/4"H; front panel extends over end panels to blend w/adj. counters (supplied by others). Counter surface (supplied by others) extends over top of unit
EXTERIOR COLOR	□ Laminated (non-premium) Confirm pattern/grain direction	□ Laminated (premium) Confirm pattern/grain direction □ Stainless steel exterior
INTERIOR COLOR	□ Black interior	□ Stainless steel interior
END PANEL LEFT	□ Square full end panel w/mirror	□ Curved end panel w/mirror (-FS model only) □ No end panel w/ synchronized defrost
END PANEL RIGHT	□ Square full end panel w/mirror	□ Curved end panel w/mirror (-FS model only) □ No end panel w/ synchronized defrost
EXTERIOR BACK PANEL	□ Solid back panel, black	□ Solid back panel, stainless steel
ELECTRICAL CONNECT	□ 6' Straight blade power cord (self-cont.)	□ 6' Locking power cord (self-cont.) □ Electrical leads (remote)
REFRIGERATION	□ Breeze~E (Type-II) w/ EnergyWise s/c refrigeration (rear access)	□ Breeze~E (Type-II) w/ EnergyWise s/c refrigeration (front access)(w/ 2"D open rear wall spacer) □ Note: Remote doesn't incl Conds unit. Floor drain reqd. □[1] Remote w/thermostat, solenoid & TXV (front access) □[2] Remote w/thermostat, solenoid & TXV (rear access)
MISCELLANEOUS		□ Second year parts & labor warranty (excludes compressor)
ACCESSORIES		□ 2"D Full chimney rear wall spacer (front access only) □ 2"H, 6.5"D Display riser(s) for lower display □ Night curtain, retractable, non-locking □ Solid security cover, removable, locking

Option Notes: 1 - See tech spec for remote load reqmts
2 - See tech spec for remote load reqmts

Structural Concepts
888 E. Porter Rd.
Muskegon, MI 49441
Ph. 231-798-8888
Fx. 231-798-4960
www.structuralconcepts.com

Note: Information is subject to change at any time.
Visit www.structuralconcepts.com for the most current specs.

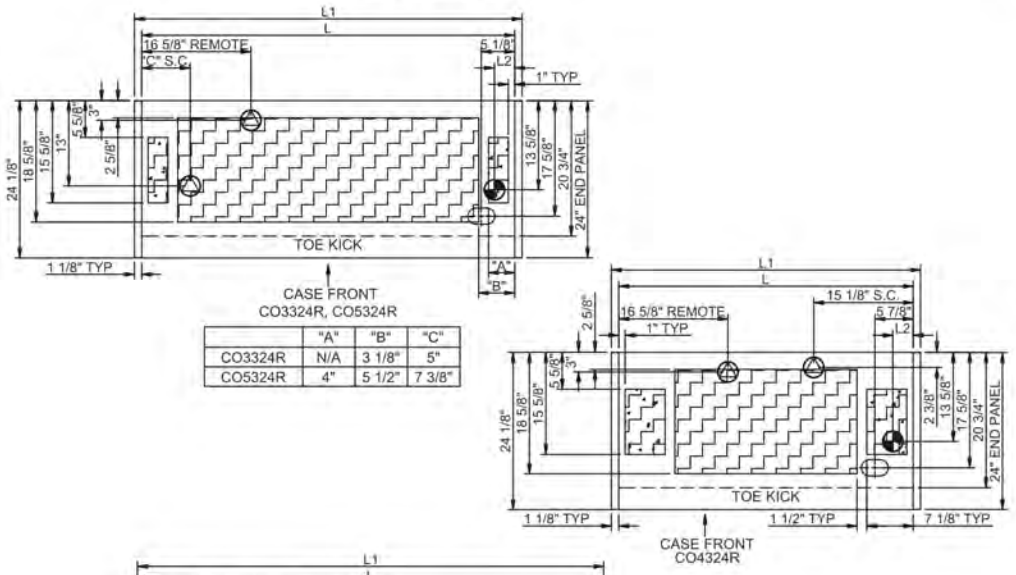
Revised 11/23/2020 20489532

Oasis®

Product Specifications

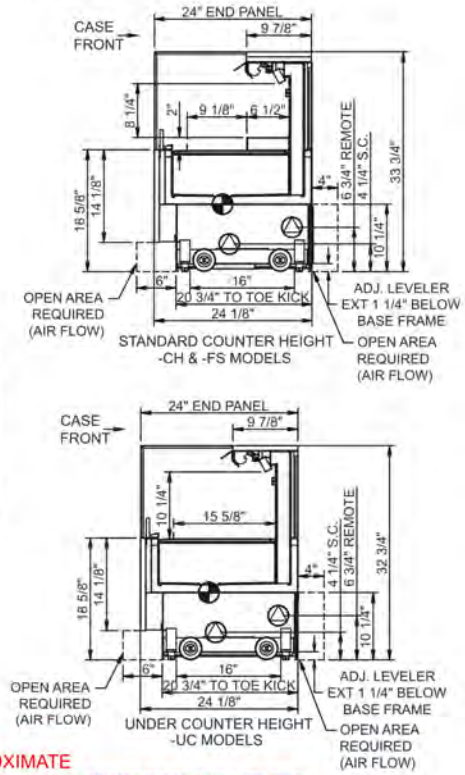
Intended Environment:	Type II - Designed to operate in ambient conditions of 80°F and 60% relative humidity unless noted otherwise in system information below.	
Zone	**Intended Product To Be Displayed**	**Warmest Avg Prod Temp ° F**
1	Packaged refrigerated products	40

PLAN VIEW



	"A"	"B"	"C"
CO3324R	N/A	3 1/8"	5"
CO5324R	4"	5 1/2"	7 3/8"

SIDE VIEW



NOTE: ALL DIMENSIONS APPROXIMATE

- ELECTRICAL JUNCTION BOX (SUPPLIED WITH 6" LEADS OR POWER CORD).
- LOCATION OF DRAIN TUBE FOR REMOTE REF. ONLY (SUPPLIED WITH $\frac{3}{4}$" OR 1$\frac{1}{2}$" PVC TUBE).
- REFRIGERATION LINE CONNECTION.
- REMOTE FLOOR SINK & UTILITIES ACCESS AREA.
- SELF-CONTAINED CASE SERVICE ACCESS AREA.
- DRY CASE SERVICE ACCESS AREA.

Model Technical Specifications

Model	L"	L1"	L2"	System Circuit Volts			Phs	Freq	Amps ***	Watts	Wires	NEMA Plug	SST	Conv. Rack BTUH	Para. Rack BTUH	Est Wt
CO3324R	N/A	36.25	2.38	Remote(Type II)	Circuit #1	110-120	1	60	1.20	46	2+G	Leads Multiple	20.00	1469	1360	500
				Self-Contained	Circuit #1	110-120	1	60	12.00	1,050	2+G	5-15P or L5-15P	N/A	N/A	N/A	
CO4324R	N/A	47.25	3.13	Remote(Type II)	Circuit #1	110-120	1	60	1.32	66	2+G	Leads Multiple	20.00	1944	1800	600
				Self-Contained	Circuit #1	110-120	1	60	12.00	1,053	2+G	5-15P or L5-15P	N/A	N/A	N/A	
CO5324R	N/A	59.25	3.13	Remote(Type II)	Circuit #1	110-120	1	60	1.60	76	2+G	Leads Multiple	20.00	2592	2400	700
				Self-Contained	Circuit #1	110-120	1	60	16.00	1,204	2+G	5-20P or L5-20P	N/A	N/A	N/A	
CO6324R	N/A	71.25	3.13	Remote(Type II)	Circuit #1	110-120	1	60	1.64	85	2+G	Leads Multiple	20.00	2938	2720	1,000
				Self-Contained	Circuit #1	110-120	1	60	16.00	1,211	2+G	5-20P or L5-20P	N/A	N/A	N/A	

*** Does not include electric defrost on freezer models.

Regulatory Approvals:	
All Models	Accordance with AHRI Std 1200 ETL Listed to UL 471 ETL Listed to CAN/CSA 22.2 No. 120 ETL Sanitation to NSF 7

In Accordance with AHRI Std 1200

DOE 2017 Energy Efficiency Compliant

Important Notes:

1) ELECTRICAL NOTE: If GFCI is required, a GFCI breaker MUST be used in lieu of a GFCI receptacle
2) 33" Minumum entry door clearence required (w/out shipping skid)
3) Performance issues (product temperatures, water on floor, etc.) caused by adverse conditions are not covered by warranty.
4) Keep unit at least 15' from exterior doors, overhead HVAC vents, or any air curtain disruption.
5) Do not expose unit to direct sunlight or any heat source (ovens, fryers, etc.).

⚠ **WARNING:** This product can expose you to chemicals, including Urethane (Ethyl Carbamate), which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

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Muskegon, MI 49441
Ph. 231-798-8888
Fx. 231-798-4960
www.structuralconcepts.com

Note: Information is subject to change at any time.
Visit www.structuralconcepts.com for the most current specs.

Revised 11/23/2020 20489532

THIS ITEM IS: POS-CASH REGISTER

- ☐ SPARE NUMBER
- ☐ MILLWORK
- ☐ CUSTOM FABRICATED / NSF
- ☐ EXISTING
  - ☐ WHERE SHOWN
  - ☐ RELOCATED
  - ☐ MODIFIED
- ■ N.I.K.E.C. BY:
  - ■ OWNER
  - ☐ SUPPLIER / VENDOR
  - ☐ OTHERS

REMARKS:

THIS ITEM IS: POS-PRINTER

- ☐ SPARE NUMBER
- ☐ MILLWORK
- ☐ CUSTOM FABRICATED / NSF
- ☐ EXISTING
  - ☐ WHERE SHOWN
  - ☐ RELOCATED
  - ☐ MODIFIED
- ■ N.I.K.E.C. BY:
  - ■ OWNER
  - ☐ SUPPLIER / VENDOR
  - ☐ OTHERS

REMARKS:

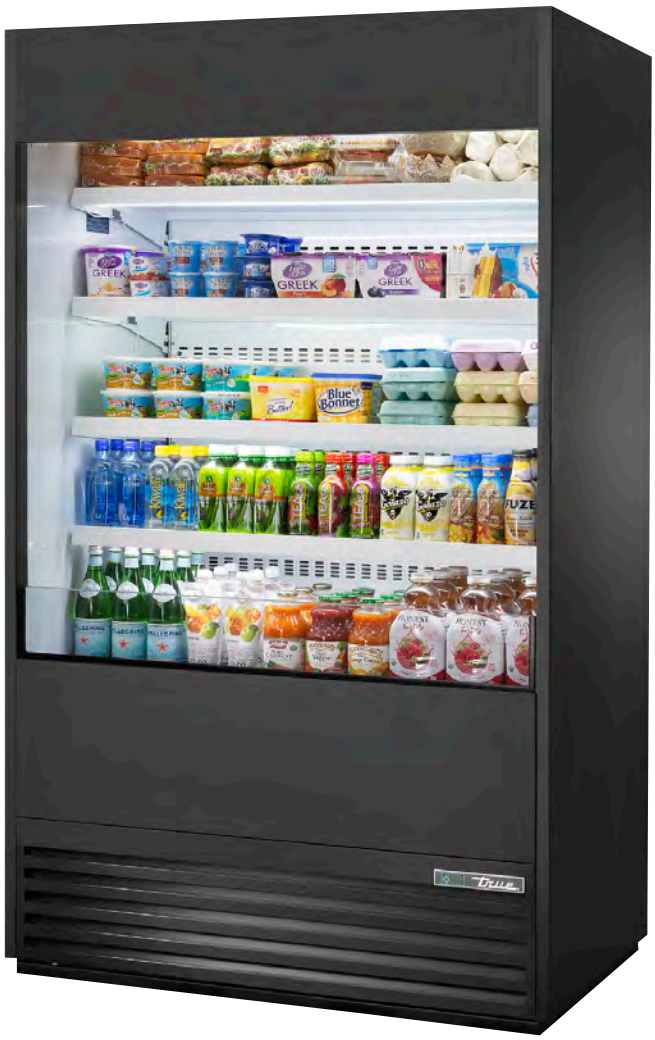
TRUE MANUFACTURING CO., INC.
U.S.A. FOODSERVICE DIVISION
2001 East Terra Lane • O'Fallon, Missouri 63366-4434 • (636)240-2400
Fax (636)272-2408 • Toll Free (800)325-6152 • Intl Fax# (001)636-272-7546
Parts Dept. (800)424-TRUE • Parts Dept. Fax# (636)272-9471 • www.truemfg.com

Project Name: _____
Location: _____
Item #: _____ *Qty:* _____
Model #: _____

AIA #
SIS #

Model:
TOAM-48-HC~NSL01

Open Air Merchandiser:
Refrigerator with Hydrocarbon Refrigerant~Non Standard Look Version 01



TOAM-48-HC~NSL01

- True's open air merchandisers are designed with enduring quality that protects your long term investment.
- Large, open front allows easy access to display levels and places maximum attention on merchandising.
- Factory engineered, self-contained refrigeration system using environmentally friendly R290 hydrocarbon refrigerant that has zero (0) ozone depletion potential (ODP), & three (3) global warming potential (GWP).
- High capacity, factory balanced refrigeration system that maintains cabinet temperatures of 33°F to 40°F (0.5°C to 4.4°C) for the best in food preservation.
- Patented reversing condenser fan motors. Fan motors reverse to help keep condenser coil free from dirt, dust and debris. Keeping coils clean optimizes the units performance providing colder holding temperatures and increased energy efficiency. Regularly scheduled thorough cleaning of coils still recommended.
- Exterior - non-peel or chip black powder coated cold rolled steel; durable and permanent. Interior - attractive, white aluminum liner. Stainless steel interior floor and deck pans.
- Four (4) Adjustable, solid white powder coated cantilever shelves. 3-piece, adjustable for up to 15° tilt in 5° increments.
- LED interior cabinet lighting and under shelf high output LED interior lighting provides more even lighting throughout the cabinet and illuminates product on each shelf.
- Glass lower front panel. Durable and break resistant maximizes product visibility.
- Entire cabinet structure is foamed-in-place using a high density, polyurethane insulation that has zero ozone depletion potential (ODP) and zero global warming potential (GWP).
- NSF/ANSI Standard 7 Type II compliant for the storage and/or display of packaged or bottled product; maximum ambient temperature 80°F (27°C).

ROUGH-IN DATA

Specifications subject to change without notice.
Chart dimensions rounded up to the nearest ⅛" (millimeters rounded up to next whole number).

Model	Shelves	Cabinet Dimensions (inches) (mm) W	D	H	HP	Voltage	Amps	NEMA Config.	Cord Length (total ft.) (total m)	Crated Weight (lbs.) (kg)
TOAM-48-HC~NSL01	4	48 1220	29⅛ 738	78½ 1994	(2) ¾ N/A	208-230V/60Hz	7.6 N/A	6-15P	10 3.04	530 241

Requires 208-230/60 Hz, single phase, NEMA 6-15R.
Unit utilizes dual ¾ Horsepower compressors

MADE WITH INNOVATION IN THE USA · 7 YEAR COMPRESSION WARRANTY USA and Canada · c UL us · CLASSIFIED UL EPH · natural refrigerant

9/20 Printed in U.S.A.

APPROVALS:

AVAILABLE AT:

Model:
TOAM-48-HC~NSL01

Open Air Merchandiser:
Refrigerator with Hydrocarbon Refrigerant~Non Standard Look Version 01

STANDARD FEATURES

DESIGN
- Designed using the highest quality materials and components to provide the user with colder product temperatures and lower utility costs in an attractive merchandiser that brilliantly displays packaged food and beverages.

REFRIGERATION SYSTEM
- Factory engineered, self-contained refrigeration system using environmentally friendly R290 hydrocarbon refrigerant that has zero (0) ozone depletion potential (ODP), & three (3) global warming potential (GWP).
- Time and temperature-initiated, time and temperature-terminated off cycle defrost system.
- High capacity, factory balanced refrigeration system that maintains cabinet temperatures of 33°F to 40°F (0.5°C to 4.4°C) for the best in food preservation.
- State of the art, electronically commutated evaporator and condenser fan motors. ECM motors operate at higher peak efficiencies and move a more consistent volume of air which produces less heat, reduces energy consumption and provides greater motor reliability.
- Bottom mounted condensing unit positioned for easy maintenance.
- Patented reversing condenser fan motors. Fan motors reverse to help keep condenser coil free from dirt, dust and debris. Keeping coils clean optimizes the units performance providing colder holding temperatures and increased energy efficiency. Regularly scheduled thorough cleaning of coils still recommended.

CABINET CONSTRUCTION
- Exterior - non-peel or chip black powder coated cold rolled steel; durable and permanent.
- Interior - attractive, white aluminum liner. Stainless steel interior floor and deck pans.
- Insulation - entire cabinet structure is foamed-in-place using a high density, polyurethane insulation that has zero ozone depletion potential (ODP) and zero global warming potential (GWP).
- Welded, heavy duty steel frame rail, black powder coated for corrosion protection.
- Frame rail fitted with leg levelers.

SHELVING
- Four (4) adjustable, solid white powder coated cantilever shelves. 3-piece, adjustable for up to 15° tilt in 5° increments.
- Cantilever shelving adjustable up to a 15° tilt.

LIGHTING
- LED interior cabinet lighting and under shelf high output LED interior lighting provides more even lighting throughout the cabinet and illuminates product on each shelf.

MODEL FEATURES
- Glass lower front panel. Durable and break resistant maximizes product visibility.
- Night cover.
- NSF/ANSI Standard 7 Type II compliant for the storage and/or display of packaged or bottled product; maximum ambient temperature 80°F (27°C).

ELECTRICAL
- Unit completely pre-wired at factory and ready for final connection to a 208-230V / 60 Hz single phase, 15 amp dedicated outlet. Cord and plug set included.

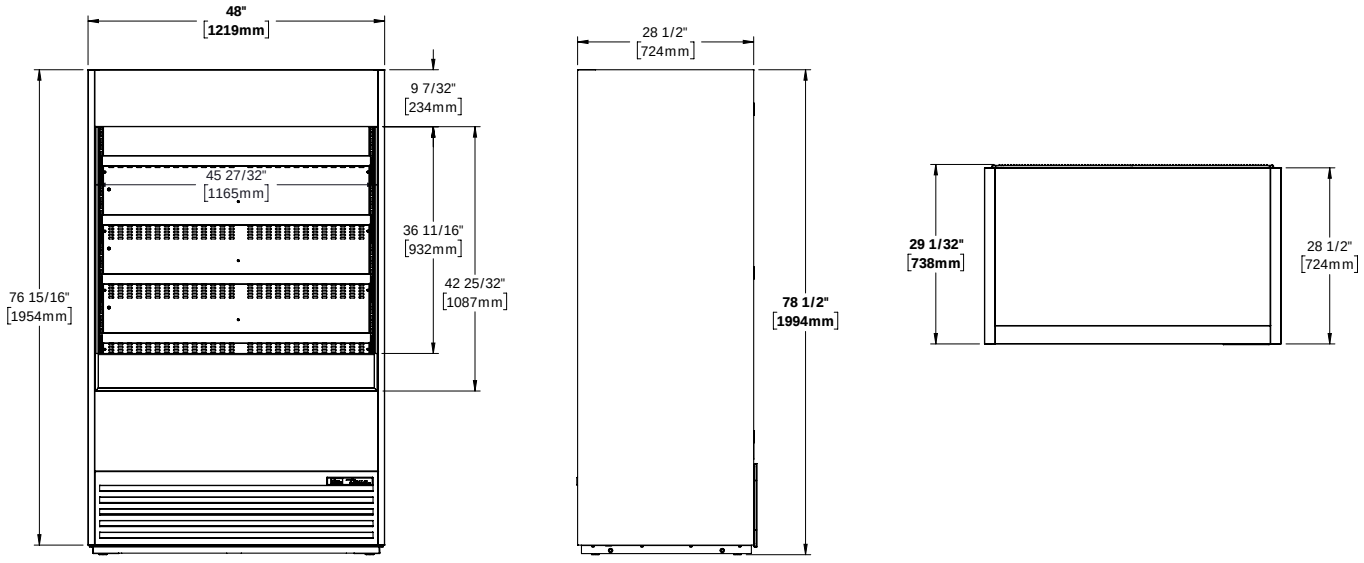
208-230/60/1
NEMA-6-15R

- Unit utilizes a dual compressor system rated at ¾HP each.

RECOMMENDED OPERATING CONDITIONS
- Designed to operate in an environment where temperature and humidity do not exceed 80°F (27°C) and 55% relative humidity.
- Unit should not be installed near HVAC vents, fans or doorways that will disrupt the air curtain and compromise the function of the cabinet. Unit should not be installed in direct sunlight.
- Model will run most efficiently when completely loaded with product.
- Drain plumbing hookup recommended. Factory installed condensate pan heater kit available if there is no access to drain plumbing.
- Please be advised Open Air Merchandisers are substantially louder than standard refrigeration models.

OPTIONAL FEATURES/ACCESSORIES
Upcharge and lead times may apply.
- ❑ White exterior.
- ❑ Stainless steel exterior.
- ❑ Black interior liner with black cantilever shelves.
- ❑ Stainless steel interior liner with stainless steel cantilever shelves.
- ❑ 2½" (64 mm) diameter castors (set of 4).
- ❑ 4" (102mm) castors
- ❑ 5" (127mm) castors
- ❑ 6" (153mm) standard legs.
- ❑ 6" (153mm) seismic/flanged legs.
- ❑ Electric heated condensate pan.
- ❑ pricing strips.
- ❑ White locking security cover. Standard with flat sign panel. Adds 6¾" (171mm) to cabinet height. (Factory Installed with some Field assembly required.)
- ❑ Silver locking security cover. Standard with flat sign panel. Adds 6¾" (171mm) to cabinet height. (Factory Installed with some Field assembly required.)
- ❑ Black locking security cover. Standard with flat sign panel. Adds 6¾" (171mm) to cabinet height. (Factory Installed with some Field assembly required.)

PLAN VIEW



3 YEAR PARTS + LABOR
7 YEAR COMPRESSOR
WARRANTY
(U.S.A. and Canada only)

METRIC DIMENSIONS ROUNDED UP TO THE NEAREST WHOLE MILLIMETER

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

Model	Elevation	Right	Plan	3D	Back
TOAM-48-HC~NSL01					

TRUE MANUFACTURING CO., INC.
2001 East Terra Lane • O'Fallon, Missouri 63366-4434 • (636)240-2400 • Fax (636)272-2408 • Toll Free (800)325-6152 • Intl. Fax# (001)636-272-7546 • www.truemfg.com

TRUE MANUFACTURING CO., INC.
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2001 East Terra Lane • O'Fallon, Missouri 63366-4434 • (636)240-2400
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Parts Dept. (800)424-TRUE • Parts Dept. Fax# (636)272-9471 • www.truemfg.com

Project Name: _____
Location: _____
Item #: _____ *Qty:* _____
Model #: _____

AIA #
SIS #

Model:
GDM-23F-HC~TSL01

Glass Door Merchandiser:
Swing Door Freezer with Hydrocarbon Refrigerant~True Standard Look Version 01

GDM-23F-HC~TSL01

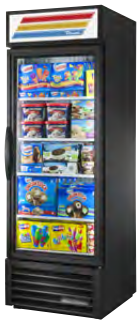
- The world's #1 manufacturer of glass door merchandisers.
- Designed using the highest quality materials and components to provide the user with an attractive, point of purchase merchandiser that brilliantly displays frozen food and ice cream, resulting in high impulse sales.
- Factory engineered, self-contained, capillary tube system using environmentally friendly R290 hydro carbon refrigerant that has zero (0) ozone depletion potential (ODP), & three (3) global warming potential (GWP).
- Oversized, factory balanced, refrigeration system holds -10°F (-23.3°C). Ideal for ice cream and frozen food products.
- Exterior - non-peel or chip white powder coated cold rolled steel; durable and permanent.
- Interior - attractive, NSF approved, white aluminum interior liner with stainless steel floor.
- Self closing door. Positive seal, torsion type closure system.
- Triple pane thermal glass door assembly with extruded aluminum frame.
- LED interior lighting provides more even lighting throughout the cabinet. Safety shielded.
- Entire cabinet structure is foamed-in-place using a high density, polyurethane insulation that has zero ozone depletion potential (ODP) and zero global warming potential (GWP).

Bottom mounted units feature

- "No stoop" lower shelf to maximize product visibility.
- Easily accessible condenser coil for cleaning.

Exterior Color Options

Standard White Exterior



Optional Black Exterior

Optional Stainless Exterior

ROUGH-IN DATA

Specifications subject to change without notice.
Chart dimensions rounded up to the nearest ⅛" (millimeters rounded up to next whole number).

Model	Doors	Shelves	Cabinet Dimensions (inches) (mm) W	D†	H	HP	Voltage	Amps	NEMA Config.	Cord Length (total ft.) (total m)	Crated Weight (lbs.) (kg)
GDM-23F-HC~TSL01	1	4	27 686	29⅞ 759	78⅝ 1998	1 N/A	115/60/1	9.5 N/A	5-15P ▲	9 2.74	350 159

† Depth does not include 1⅝" (42 mm) for door handle.

▲Plug type varies by country.

MADE WITH INNOVATION IN THE USA · 5 YEAR COMPRESSOR WARRANTY USA · c UL us · natural refrigerant.

9/18 Printed in U.S.A.

APPROVALS:

AVAILABLE AT:

Model:
GDM-23F-HC~TSL01

Glass Door Merchandiser:
Swing Door Freezer with Hydrocarbon Refrigerant~True Standard Look Version 01

STANDARD FEATURES

DESIGN
- True's glass door freezers are designed with enduring quality that protects your long term investment.
- True's commitment to using the highest quality materials and oversized refrigeration systems provides the user with colder product temperatures, and lower utility costs in an attractive merchandiser that brilliantly displays frozen food and ice cream.

REFRIGERATION SYSTEM
- Factory engineered, self-contained, capillary tube system using environmentally friendly R290 hydrocarbon refrigerant that has zero (0) ozone depletion potential (ODP), & three (3) global warming potential (GWP).
- High capacity, factory balanced refrigeration system that maintains -10°F (-23.3°C) temperatures. Ideal for both frozen foods and ice cream.
- State of the art, electronically commutated evaporator and condenser fan motors. ECM motors operate at higher peak efficiencies and move a more consistent volume of air which produces less heat, reduces energy consumption and provides greater motor reliability.
- Bottom mounted condensing unit positioned for easy maintenance. "No stoop" lower shelf maximizes visibility by raising merchandised product to higher level.
- Automatic defrost system time-initiated, temperature-terminated. Saves energy consumption and provides shortest possible defrost cycle.

CABINET CONSTRUCTION
- Exterior - non-peel or chip white powder coated cold rolled steel; durable and permanent.
- Interior - attractive, NSF approved, white aluminum liner with stainless steel floor.
- Insulation - entire cabinet structure is foamed-in-place using a high density, polyurethane insulation that has zero ozone depletion potential (ODP) and zero global warming potential (GWP).
- Welded, heavy duty steel frame rail, black powder coated for corrosion protection.
- Frame rail fitted with leg levelers.
- Illuminated exterior sign panel. Variety of sign options available.

DOOR
- Triple pane thermal insulated glass door assembly with extruded aluminum frame.
- Door fitted with 12" (305 mm) long extruded handle.
- Self closing door. Positive seal, torsion type closure system.
- Magnetic door gaskets of one piece construction, removable without tools for ease of cleaning.

SHELVING
- Four (4) adjustable, heavy duty PVC coated wire shelves 22⅞"L x 21¼"D (582 mm x 540 mm). Four (4) chrome plated shelf clips included per shelf.
- Shelf support pilasters made of same material as cabinet interior; shelves are adjustable on ½" (13 mm) increments.

LIGHTING
- LED interior lighting provides more even lighting throughout the cabinet. Safety shielded.

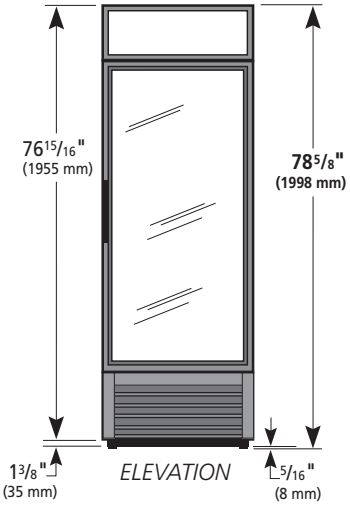
MODEL FEATURES
- Evaporator is epoxy coated to eliminate the potential of corrosion.
- See our website www.truemfg.com for latest color and sign offerings.
- Backguard and floor rack ensure optimum airflow.
- Listed under NSF/ANSI Standard 7 for the storage and/or display of packaged or bottled product.

ELECTRICAL
- Unit completely pre-wired at factory and ready for final connection to a 115/60/1 phase, 15 amp dedicated outlet. Cord and plug set included.

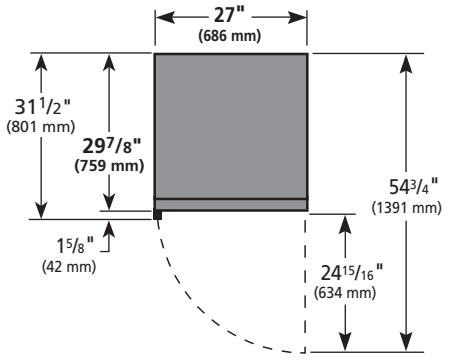
115/60/1
NEMA-5-15R

OPTIONAL FEATURES/ACCESSORIES
Upcharge and lead times may apply.
- ❑ Black exterior.
- ❑ Stainless exterior.
- ❑ Black aluminum interior liner with black shelving.
- ❑ Stainless interior liner.
- ❑ 6" (153 mm) standard legs.
- ❑ 6" (153 mm) seismic/flanged legs.
- ❑ 2½" (64 mm) diameter castors.
- ❑ 4" (102 mm) diameter castors.
- ❑ Novelty baskets.
- ❑ Pricing strips.
- ❑ Barrel Locks – located in grill assembly (requires one per door)

PLAN VIEW



ELEVATION



PLAN VIEW

WARRANTY
Three year warranty on all parts and labor and an additional 2 year warranty on compressor. (U.S.A. only)

METRIC DIMENSIONS ROUNDED UP TO THE NEAREST WHOLE MILLIMETER

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

Model	Elevation	Right	Plan	3D	Back
GDM-23F-HC~TSL01					

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THIS ITEM IS: SPARE NUMBER

- [x] SPARE NUMBER
- [ ] MILLWORK
- [ ] CUSTOM FABRICATED/NSF
- [ ] EXISTING
  - [ ] WHERE SHOWN
  - [ ] RELOCATED
  - [ ] MODIFIED
- [ ] N.I.K.E.C. BY:
  - [ ] OWNER
  - [ ] SUPPLIER / VENDOR
  - [ ] OTHERS

REMARKS:

THIS ITEM IS: SPARE NUMBER

- [x] SPARE NUMBER
- [ ] MILLWORK
- [ ] CUSTOM FABRICATED/NSF
- [ ] EXISTING
  - [ ] WHERE SHOWN
  - [ ] RELOCATED
  - [ ] MODIFIED
- [ ] N.I.K.E.C. BY:
  - [ ] OWNER
  - [ ] SUPPLIER / VENDOR
  - [ ] OTHERS

REMARKS:

THIS ITEM IS: SPARE NUMBER

- [x] SPARE NUMBER
- [ ] MILLWORK
- [ ] CUSTOM FABRICATED/NSF
- [ ] EXISTING
  - [ ] WHERE SHOWN
  - [ ] RELOCATED
  - [ ] MODIFIED
- [ ] N.I.K.E.C. BY:
  - [ ] OWNER
  - [ ] SUPPLIER / VENDOR
  - [ ] OTHERS

REMARKS:

THIS ITEM IS: SPARE NUMBER

- [x] SPARE NUMBER
- [ ] MILLWORK
- [ ] CUSTOM FABRICATED/NSF
- [ ] EXISTING
  - [ ] WHERE SHOWN
  - [ ] RELOCATED
  - [ ] MODIFIED
- [ ] N.I.K.E.C. BY:
  - [ ] OWNER
  - [ ] SUPPLIER / VENDOR
  - [ ] OTHERS

REMARKS:

THIS ITEM IS: SPARE NUMBER

- [x] SPARE NUMBER
- [ ] MILLWORK
- [ ] CUSTOM FABRICATED/NSF
- [ ] EXISTING
  - [ ] WHERE SHOWN
  - [ ] RELOCATED
  - [ ] MODIFIED
- [ ] N.I.K.E.C. BY:
  - [ ] OWNER
  - [ ] SUPPLIER / VENDOR
  - [ ] OTHERS

REMARKS:

THIS ITEM IS: DROP-IN HAND SINK

- ☐ SPARE NUMBER
- ☐ MILLWORK
- ■ CUSTOM FABRICATED/NSF
- ☐ EXISTING
  - ☐ WHERE SHOWN
  - ☐ RELOCATED
  - ☐ MODIFIED
- ☐ N.I.K.E.C. BY:
  - ☐ OWNER
  - ☐ SUPPLIER / VENDOR
  - ☐ OTHERS

REMARKS:

July 2019

CROWN VERITY

BUILT-IN GRILLS

BI-30, 36, 48

Project: _____

Item #: _____

Quantity: _____

BI-48
Shown with optional Roll Dome

Our passion at Crown Verity is to bring the precision and performance of commercial kitchens to the outdoor environment. To that end we design and manufacture our grills to be reliable and go beyond traditional industry specifications.

Our grill bodies, cooking grates, burners, radiants, water pans, fasteners, pilot tubes are all constructed of 304 series stainless steel for durability and ease of cleaning. Compared to units made of metal or 430 stainless steel, our units are built to last.

15,000 BTUH stainless steel burners are placed every 5.75" to ensure the most even heat pattern possible. These units heat up to cooking temperature within 5 minutes. Our stainless steel burners and cooking grills carry a 10 year and lifetime warranty, respectively.

The BI model is available as either liquid propane (LP) or natural gas (NG). All LP & NG models include a regulator.

Certifications

Intertek Intertek

SPECIFICATIONS

- Gas grill constructed of 304 stainless steel including grids, burners and all fasteners
- 15,000 BTUH stainless steel burners
- Ready to use: ships completely assembled and comes with an insert shell ready to drop into an island
- Includes water pan with drain port to ease cleaning and help eliminate grease fires from occurring
- 16 ga stainless steel radiants that remain in place during transportation and cleaning
- c ETL us, ETL Sanitation listed, Conforms to ANSI Z83.11/CSA 1.8 and NSF Standard 4

More Standard Features

- Unibody design for lighter weight and added strength
- Stainless steel pilot burner tube system
- Regulator for NG & LP models
- Factory technician tested prior to shipping
- 1 year parts and labor limited warranty
- Lifetime warranty on body and cooking grids and 10 years on burners

Options/Accessories

Roll Dome	Adjustable Bun Rack
Griddle Plate	Steam Pan Adapter
Front Shelf	Side Burner
Rotisserie	Wind Guard
Smoker Box	BBQ Cover
Charcoal Tray	Propane Tanks

Built-In Island Accessories

3 Drawer Compartment	2 Drawer Compartment
Propane Compartment	Trash Compartment
Ice Chest	Horizontal Drawer
Vertical and Horizontal Door	Outdoor Fridge

37 Adams Boulevard
Brantford Ontario N3S 7V8

T 519 751 1800
F 519 751 1802

crownverity.com
info@crownverity.com

BRILLIANT FOR LIFE

July 2019

CROWN VERITY

SPECIFICATIONS

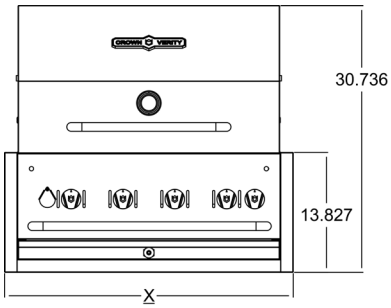
All above shown with options

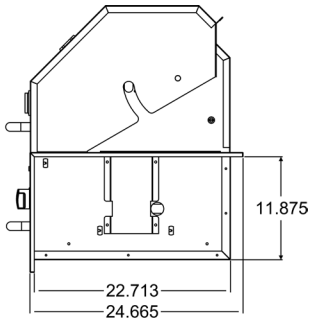
Model	BI-30	BI-36	BI-48	BI-48-2
Number of Burners	4	5	7	6
BTUH	64,500	79,500	114,000	99,000
Actual Weight (lbs)	131	163	194	194
Shipping Weight (lbs)	209	243	284	284
Cooking Surface	28" x 21"	34" x 21"	46" x 21"	46" x 21"
Overall Dimensions	33.5" L x 27" D x 13.82" H	39.5" L x 27" D x 13.82" H	51.5" L x 27" D x 13.82" H	51.5" L x 27" D x 13.82" H

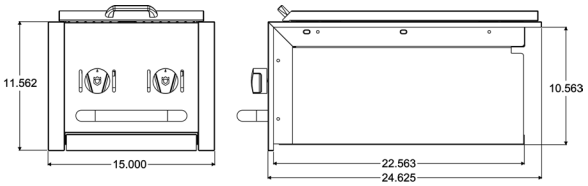
* All units are available in natural gas models (BI-NG). Please specify gas type when ordering. Above units do not include the optional roll dome in the dimensions, height of each unit becomes 30.736" with the roll dome on the unit.

Optional side burner (SB-BI) - A side burner increases flexibility, providing a convenient surface for sauteing and keeping sauces hot.

Model	SB-BI	SB-BI
Burners	1	2
BTUH	15,000	30,000
Weight (lbs)	25	30
Overall Dimensions	15" W x 27" D x 11.75" H	15" W x 27" D x 12.125" H







	BI-30	BI-36	BI-48
X	33.5"	39.5"	51.5"

Cut out dimensions available upon request at info@crownverity.com or go to www.crownverity.com

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BRILLIANT FOR LIFE

THIS ITEM IS: TRASH COUNTER

- ☐ SPARE NUMBER
- ☐ MILLWORK
- ■ CUSTOM FABRICATED/NSF
- ☐ EXISTING
  - ☐ WHERE SHOWN
  - ☐ RELOCATED
  - ☐ MODIFIED
- ☐ N.I.K.E.C. BY:
  - ☐ OWNER
  - ☐ SUPPLIER / VENDOR
  - ☐ OTHERS

REMARKS:

Updated 2020

CROWN VERITY

PORTABLE SINKS

CV-PHS-4C - COLD WATER

Project: _____

Item #: _____

Quantity: _____

For indoor and outdoor events and locations, when hand-washing is a must! Shipped fully assembled, complete with removable fresh and waste water tanks, 12 foot cord, standard wall plug and city water and drain hookups.

Also includes hands free elctrical pump-saver foot switch to eliminate pump burn out, allowing the operator to use the foot pedal to turn the faucet on/off.

SPECIFICATIONS

- Stainless steel construction
- Lockable access door
- Compact cabinet version of PHS
- 120 Volt water pump
- 1 x 20 litre (5 gallon) removable fresh water tanks
- 1 X 30 litre (7.5 gallon) removable waste water tanks
- Backsplash w/ soap & towel dispensers
- Ability to connect directly to city water and drain hookups
- Ready to use: ships completely assembled and crated
- All units are NSF, CSA, UL or equal approved
- 1 year parts and labor warranty

Certifications

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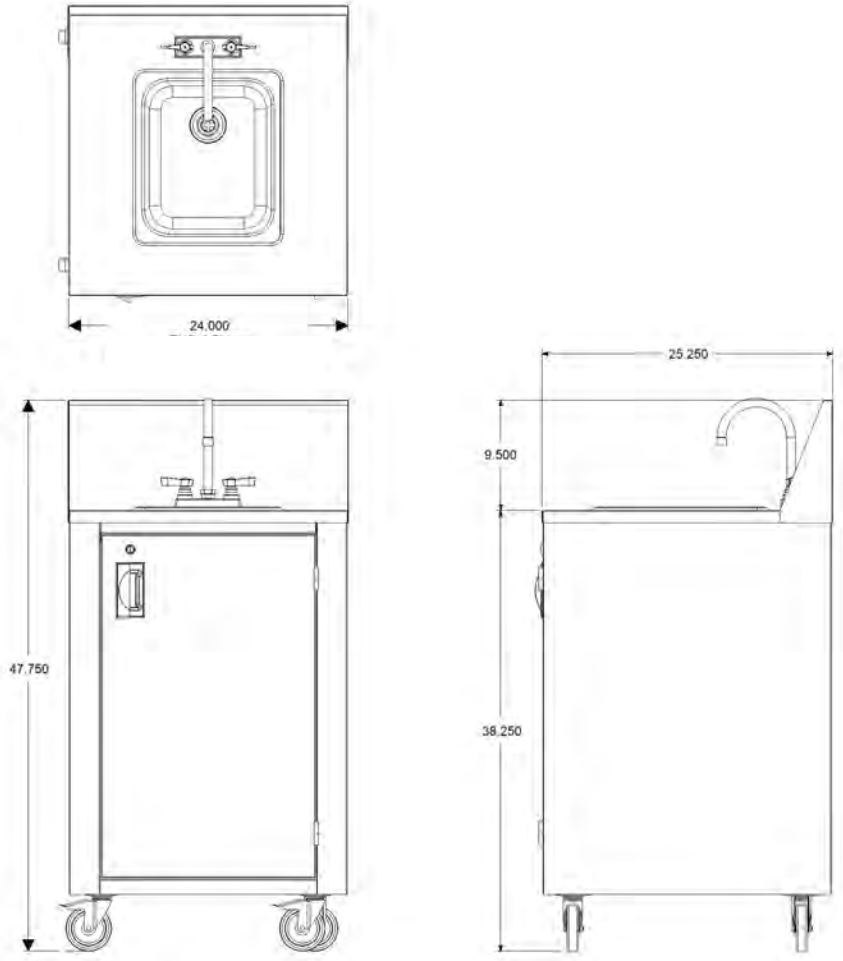
BRILLIANT FOR LIFE

Updated 2020

CROWN VERITY

SPECIFICATIONS

Model	CV-PHS-4C
Sink Bowl Size	14"L x 12"W x 6" H
Sinks	1
Actual Weight (lbs)	140
Shipping Weight (lbs)	190
Fresh water capacity	1 x 5 Gallon
Waste water capacity	1 x 7.5 Gallon
Cabinet Size	24" W x 25.25" D x 38.25" H



37 Adams Boulevard
Brantford Ontario N3S 7V8
T 519 751 1800
F 519 751 1802
crownverity.com
info@crownverity.com

BRILLIANT FOR LIFE

SECTION 12 32 16 - MANUFACTURED PLASTIC LAMINATE CLAD CASEWORK

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Custom Cabinet Units

a. Plastic Laminate Clad Custom Cabinet Units

2. Cabinet Hardware

B. Related Sections:

1. Section 06 61 00 - Rough Carpentry
2. Section 06 20 00 - Finish Carpentry
3. Section 12 35 30.13 – Kitchen Casework
4. Section 12 36 23 - Plastic Countertops
5. Section 12 36 40 - Stone Countertops
6. Division 22 (15) for Plumbing Fixtures

1.02 REFERENCES

A. Architectural Woodwork Institute (AWI) / Architectural Woodwork Manufacturers Association of Canada (AWMAC) /Woodwork Institute (WI) Publications:

1. "Architectural Woodwork Standards (AWS)"

B. ASTM International (ASTM) Publications:

1. C1048 “Standard Specification for Heat-Treated Flat Glass—Kind HS, Kind FT Coated and Uncoated Glass”
2. D523 “Standard Test Method for Specular Gloss”
3. E84 "Standard Test Method for Surface Burning Characteristics of Building Materials"

C. American National Standards Institute (ANSI) Publications:

1. A135.4 Basic Hardboard
2. ANSI/KCMA A161.1 “Performance and Construction Standard for Kitchen and Vanity Cabinets
3. A161.2 “Standards for Fabricated High Pressure Decorative Laminate Countertops”
4. A208.1 "Standards for the Performance of Particleboard"

D. Federal Specifications (FS) Publications:

1. FS MM-L-736 - Lumber, Hardwood
2. FS MMM-A-130 - Adhesive, Contact

E. Forest Stewardship Council (FSC) Publications:

1. FSC 1.2, "Principles and Criteria."

F. National Electrical Manufacturer’s Association (NEMA) Standards Publications:

1. NEMA LD3 “High Pressure Decorative Laminates”

a. Grade HGS (GP 50): Horizontal grade

b. Grade VGS (GP-28): Vertical Grade

c. Grade CLS (CL 20): Cabinet liner

d. Grade BKL (BK 20): Backing sheet

e. Grade HGF (FR 50): Horizontal application, fire retardant material

f. Grade VGF (FR 32): Vertical application, fire retardant material

G. U.S. Department of Commerce (DOC), National Institute of Standards and Technology (NIST) Publications

1. PS 1 - Construction and Industrial Plywood

2. PS 20 - American Softwood Lumber Standard

3. PS 51 - Hardwood and Decorative Plywood

4. PS 58 - Basic Hardboard

1.03 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

B. Submit "Letter of Conformance" in accordance with Section 01 33 00 indicating specified items selected for use in project with the following supporting data.

1. Submit Shop Drawings and product data. Include materials, component profiles, fastening methods, assembly methods, joint details, accessory listings, and schedule of finishes.

a. Show locations and sizes of furring, blocking, and hanging strips, including concealed blocking and reinforcement specified in other Sections.

b. Show locations and sizes of cutouts and holes for plumbing fixtures, faucets, soap dispensers, and other items installed in architectural woodwork.

C. Qualification Data: For Fabricator

1.04 DELIVERY, STORAGE, AND HANDLING

A. Do not deliver casework until painting and similar operations that could damage synthetic marble have been completed in installation areas. If casework components must be stored in other than installation areas, store only in areas where environmental conditions comply with requirements specified in "Project Conditions" Article.

B. Handle materials to prevent damage to finished surfaces. Provide protective coverings to prevent physical damage or staining following installation for duration of project.

1.05 PROJECT CONDITIONS

A. Environmental Limitations: Do not deliver or install casework until building is enclosed, wet work is complete, and HVAC system is operating and maintaining temperature and relative humidity at occupancy levels during the remainder of the construction period.

B. Field Measurements: Where casework is indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication and indicate measurements on Shop Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

1. Locate concealed framing, blocking, and reinforcements that support casework by field measurements before being enclosed and indicate measurements on Shop Drawings.

PART 2 PRODUCTS

2.01 APPROVED MANUFACTURERS

A. Preferred Manufacturers:

1. D'Style case goods as shown noted in FF&E specifications.
2. Casework not noted in specifications shall be by approved manufacturer's and/or approval of Architect and Owner.

B. Approved Manufacturers:

1. MillRock RiverRun Casework (540-438-5973)
2. R.B. Woodcraft, Inc. (315-474-2429)
3. J. Suss Industries Inc. (866-769-5666)

2.02 PLASTIC LAMINATE CUSTOM BOX CABINET UNITS

A. Quality Standard:

1. Perform work to meet the requirements of Custom Grade in accordance with the "Architectural Woodwork Standards (AWS)", unless noted otherwise manufactured from solid stock meeting the following requirements:.
   a. Minor warp which can be held flat and straight with normal nailing.
   b. Natural and manufacturing defects in excess of those permitted in the grade specified are permitted if such defects are to be covered by adjoining members or otherwise concealed.
   c. Trim members for application on flat surfaces shall have the reverse side "backed out", except members with exposed ends.

B. Design:

1. Style of face construction for base, wall, and full-height units, if any, with drawer fronts, doors, and fixed panels as follows:
   a. Face Frame or Frameless.
      1) All cabinets shall be the same construction type for the entire Project.
   b. Cabinet and Door Interface: Flush (Full) Overlay.
   c. Flush Panel Doors.
   d. Flush Panel Drawer Fronts.
2. Grain Direction:
   a. Vertical or horizontal on doors, horizontal on drawer fronts.
   b. Lengthwise on face frame members.
   c. Vertical on end panels.
   d. Side to side on bottoms and tops of units.
   e. Vertical on knee-space panels.
   f. Horizontal on aprons.

2.03 MATERIALS

A. Lumber shall be in accordance with the AWS Grade specified for the product being fabricated. Moisture content shall be 6% to 12% for boards up to 2-inches nominal thickness, and shall not exceed 19% for thicker pieces.

B. Plastic Laminate: Shall be high-pressure decorative laminate material complying with current NEMA Standard LD-3. Comply with ANSI A161.2. Pattern and color shown on Interior Finish Index.

1. Laminate Manufacturers:

a. Approved Manufacturers:

1) WilsonArt International, Inc. (800-433-3222)

b. Alternate Manufacturers with prior approval by Hilton:

1) Formica Corporation (800-367-6422)
2) Nevamar Company, LLC (800-638-4380)

C. Particle Board: ANSI A208.1, Mat-Formed Particle Board, Grade 1-M-2, with minimum density of 45 pcf. Internal bond of 60 psi, and minimum screw holding capacity of 225 lb. on faces and 200 lb. on edges.

D. Hardboard: ANSI A135.4, Class 1, tempered.

E. MDF: ANSI A208.2, Grade 130.

F. Thermoset Decorative Overlay (Melamine): Not less than 100 gram thermally fused, melamine-impregnated decorative paper, complying with requirements of NEMA LD 3, Grade VGL, for Test Methods 3.3, 3.4, 3.6, 3.8, and 3.10. Finish shall be resistant to water and mild cleaners.

G. Edgebanding for use Thermoset Decorative Overlay (Melamine) finished Panels: PVC or polyester edgebanding matching thermoset decorative overlay.

2.04 FABRICATION - GENERAL

A. General:

1. Shop assemble casework for delivery to site in units easily handled and to permit passage through building openings.

2. When necessary to cut and fit on site, provide materials with ample allowance for cutting. Provide trip for scribing and site cutting.

3. Provide cutouts for plumbing fixtures, inserts, appliances, outlet boxes, and other fixtures and fittings.

2.05 FABRICATION - FACE-FRAME CABINETS

A. General:

1. Face Frame Rails and Stiles: Not less than 3/4-inch by 1-1/2 inch Particle Board faced with Grade VGS plastic laminate with glued mortise and tendon joints.

2. Exposed Ends: Grade VGS plastic laminate or minimum 0.030-inch thick PVC edgebanding. Color to match exposed faces.

3. Semi-exposed Ends; Grade VGS plastic laminate or minimum 0.030-inch thick PVC edgebanding. Color to match exposed faces.

4. Top and Bottom Rails; and Sub-toe Boards:

a. Not less than 3/4-inch particle board faced with Grade VGS plastic laminate to match door and drawer fronts. Machine ends for wood-dowel or mechanical dowel fasteners to receive top, bottom, and back. Base ends to extend to floor. Finish exposed ends to match doors and doors and drawer fronts.

5. Unexposed Ends: Not less than 3/4-inch particle board or MDF; finished with Thermoset Decorative Overlay (Melamine). Attach to front frame in same manner as exposed ends.

6. Back Panels:

    a. Not less than 1/4-inch tempered hardboard; finished with Thermoset Decorative Overlay (Melamine).

7. Doors 48 Inches or Less in Height: 3/4 inch thick, Particle Board cores. Front faces to be Grade VGS plastic laminate overlay, and back faces to be Thermoset Decorative Overlay (melamine). Provide stop silencers at the top and bottom of all hinged doors.

8. Shelving: Not less than 5/8" particle board with Thermoset Decorative Overlay (Melamine) to match cabinet interior, PVC edge banding; adjustable at least every 1-1/2 inch; clear plastic shelf clip pressed into 5mm holes bored in cabinet side. Fabricate base shelf to half depth.

9. Filler Strips:

    a. Provide as needed to close spaces between cabinets and walls, ceilings, and indicated equipment. Fabricate from same material and with same finish as cabinets.

    b. Oversize for field cutting to suit field conditions and assure continuous enclosure of open spaces.

    c. Provide raw (unfinished) cleats at blind corners and appliance openings as required to support countertops, minimum 3/4-inch x 1-1/2 inch x 8 foot length, to be field cut and fit by the installer

10. Interior Cabinet Finish:

    a. Public Space Casework: Interior face of cabinet units that have surfaces that are exposed shall be Thermoset Decorative Overlay (melamine) in color to match door fronts as approved by Marriott Representative.

    b. Public Space Casework Wet Areas: Interior unexposed face of units that are likely to become wet (such as cabinets housing refrigerated cold pans) should be constructed of polyester overlaid plywood cabinet liner materials:

        1) Approved Manufacturer: "Cabinet Liner Industrial Panel"; Olympic Panel Products, LLC (800-782-7265), or approved substitution.

    c. Back-of-House Casework: Interior face of cabinet units that have surfaces that are exposed shall be Thermoset Decorative Overlay (melamine) in color to match door fronts as approved by Marriott Representative.

B. Base Cabinet Units:

1. Base Cabinet Top Frames: 3/4-inch solid wood with mortise and tenon or doweled connections, glued and pinned or screwed.

2. Base Cabinet Stretchers: 3/4-by-4-1/2-inch plywood, Particle Board, or MDF strips or solid-wood boards at front and back of cabinet, glued and pinned or screwed.

    a. Base Cabinet Stretchers may be provided as an option to base cabinet top frames.

3. Front Frame Drawer Rails: Not less than 3/4-inch lumber mortised and fastened into face frame.

4. Bottoms: Not less than 1/2-inch hardwood plywood faced with Thermoset Decorative Overlay (Melamine) to match door and drawer fronts, fully supported by and secured in rabbets in end panels, front frame, and back bottom rail.

5. Corner Blocks: Glued and fastened in each of four top corners to maintain cabinet squareness and rigidity.

6. Drawers:

    a. Provide box-type construction with sub-front and back joined with glued dovetail or rabbeted into sides and secured with glue and mechanical fasteners. Clear coat all exposed surfaces. Match color of sides and bottoms with drawer fronts.

    b. Drawer Fronts: 3/4 inch thick, Particle Board cores. Front faces to be Grade VGS plastic laminate overlay, and back faces to be Thermoset Decorative Overlay (melamine).

    c. Drawer Sides Sub-fronts, and Backs: Not less than 1/2-inch hardwood dovetail construction, or 3/4-inch thick Particle Board faced with Thermoset Decorative Panel overlay (melamine). Provide PVC edge banding to match finish of fronts.

    d. Exposed fronts fastened to Sub-fronts with mounting screws from interior of body.

    e. Drawer bottom of not less than 1/4-inch thick MDF, tempered hardboard, or plywood faced with Thermoset Decorative Overlay (melamine), set into rabbets in back, sides, and sub-fronts.

C. Wall Cabinet Units:

1. Tops and Bottoms: Not less than 1/2-inch hardwood plywood faced with Thermoset Decorative Overlay (Melamine) to match door and drawer fronts, fully supported by and secured in rabbets in end panels, front frame, and back rail.

2.06 FABRICATION – FRAMELESS CABINETS

A. General:

1. Exposed Ends: Grade VGS plastic laminate or minimum 0.030-inch thick PVC edge banding. Color to match exposed faces.

2. Semi-exposed Ends; Grade VGS plastic laminate or minimum 0.030-inch thick PVC edge banding. Color to match exposed faces.

3. Top and Bottom Rails; and Sub-toe Boards:

    a. Not less than 3/4-inch particle board faced with Grade VGS plastic laminate to match door and drawer fronts. Machine ends for wood-dowel or mechanical dowel fasteners to receive top, bottom, and back. Base ends to extend to floor. Finish exposed ends to match doors and doors and drawer fronts.

4. Unexposed Ends: Not less than 3/4-inch tempered hardboard; finished with Thermoset Decorative Overlay (Melamine). Attach to front frame in same manner as exposed ends.

5. Back Panels:

    a. Not less than 1/4-inch tempered hardboard or MDF; finished with Thermoset Decorative Overlay (Melamine).

6. Doors 48 Inches or Less in Height: 3/4 inch thick, Particle Board cores. Front faces to be Grade VGS plastic laminate overlay, and back faces to be Thermoset Decorative Overlay (melamine). Provide stop silencers at the top and bottom of all hinged doors.

7. Shelving: Not less than 5/8” particle board with Thermoset Decorative Overlay (melamine) to match cabinet interior, PVC edge banding; adjustable at least every 1-1/2” clear plastic shelf clip pressed into 5mm holes bored in cabinet side. Fabricate base shelf to half depth.

8. Filler Strips:

    a. Provide as needed to close spaces between cabinets and walls, ceilings, and indicated equipment. Fabricate from same material and with same finish as cabinets.

    b. Oversize for field cutting to suit field conditions and assure continuous enclosure of open spaces.

    c. Provide raw (unfinished) cleats at blind corners and appliance openings as required to support countertops, minimum 3/4-inch x 1-1/2 inch x 8 foot length, to be field cut and fit by the installer

9. Interior Cabinet Finish:

    a. Public Space Casework: Interior face of exposed units shall be Thermoset Decorative Overlay (melamine) in color to match door fronts as approved by Marriott Representative.

    b. Public Space Casework Wet Areas: Interior unexposed face of units that are likely to become wet (such as cabinets housing refrigerated cold pans) should be constructed of polyester overlaid plywood cabinet liner materials:

        1) Approved Manufacturer: "Cabinet Liner Industrial Panel"; Olympic Panel Products, LLC (800-782-7265), or approved substitution.

    c. Back-of-House Casework: Interior face of exposed units shall be Thermoset Decorative Overlay (melamine) in color to match door fronts as approved by Marriott Representative.

B. Base Cabinet Units:

1. Base Cabinet Top Frames: 3/4-inch solid wood with mortise and tenon or doweled connections, glued and pinned or screwed.

2. Base Cabinet Stretchers: 3/4-by-4-1/2-inch plywood, Particle Board, or MDF strips or solid-wood boards at front and back of cabinet, glued and pinned or screwed.

    a. Base Cabinet Stretchers may be provided as an option to base cabinet top frames.

3. Bottoms: Not less than 1/2-inch hardwood plywood faced with Thermoset Decorative Overlay (Melamine) to match door and drawer fronts, fully supported by and secured in rabbets in end panels, front frame, and back bottom rail.

4. Corner Blocks: Glued and fastened in each of four top corners to maintain cabinet squareness and rigidity.

5. Drawers:

    a. Provide box-type construction with sub-front and back joined with glued dovetail or rabbeted into sides and secured with glue and mechanical fasteners. Clear coat all exposed surfaces. Match color of sides and bottoms with drawer fronts.

    b. Drawer Fronts: 3/4 inch thick, Particle Board cores. Front faces to be Grade VGS plastic laminate overlay, and back faces to be Thermoset Decorative Overlay (melamine).

    c. Drawer Sides Sub-fronts, and Backs: Not less than 1/2-inch hardwood dovetail construction or 3/4-inch thick Particle Board faced with Thermoset Decorative Overlay (melamine). Provide PVC edge banding to match finish of fronts.

    d. Exposed fronts fastened to Sub-fronts with mounting screws from interior of body.

e. Drawer bottom of not less than 1/4-inch thick plywood faced with Thermoset Decorative Panel overlay (melamine), set into rabbets in back, sides, and sub-fronts.

C. Wall Cabinet Units:

1. Tops and Bottoms: Not less than 1/2-inch hardwood plywood faced with Thermoset Decorative Overlay (Melamine) to match door and drawer fronts, fully supported by and secured in rabbets in end panels, front frame, and back rail.

2.07 CABINET HARDWARE

A. See Cabinet Hardware Schedule for list of which Manufacturer's are approved for use on a specific item.

B. Approved Manufacturers

1. Accuride International (562-903-0200)
2. Blum, Inc. (800-438-6788)
3. CompX Timberline (847-752-2600)
4. Corbin Russwin Architectural Hardware, an ASSA ABLOY Group (800-543-3658)
5. Epco, The Engineered Products Co. (810-767-2050)
6. Franklin Fixtures (508-291-1475)
7. Grass America, Inc. (800-334-3512)
8. Hafele America Co. (800-423-3531)
9. H.B. Ives, an Ingersoll-Rand Company (800-820-5542)
10. Hercules Casters and Wheels (800-942-8717)
11. Hettich America, LP (800-777-1772)
12. J. G. Edelen Company, Inc. (410-918-1200)
13. Knape & Vogt Manufacturing Co. (800-253-1561) (KV)
14. Doug Mockett & Company, Inc. (800-523-1269)
15. Outwater Plastics Industries, Inc. (800-631-8375)
16. Polar Ware Company (800-237-3655)
17. Rockler Companies, Inc. (800-279-4441)
18. Selby Furniture Hardware Co., Inc. (718-993-3700)
19. Shepherd Caster Corporation (800-253-0868)
20. Stanley Hardware, Div. of the Stanley Works (800-493-5263)
21. Stylmark, Inc. (Garcy Corp.) (800-328-2495)
22. Victory Display & Store Fixture Mfg. (800-262-1126)

C. General: Provide cabinet hardware and accessory materials associated with architectural cabinets. Coordinate finishes of exposed cabinet hardware with adjacent finish hardware as specified in Section 08 71 00.

1. All exposed hardware to be US15 unless noted otherwise.

2.08 INSTALLATION MATERIALS

A. Furring, Blocking, Shims, and Hanging Strips: Fire-retardant-treated Softwood or hardwood lumber, kiln-dried to less than 15 percent moisture content.

B. Anchors: Select material, type, size, and finish required for each substrate for secure anchorage. Provide nonferrous-metal or hot-dip galvanized anchors and inserts on inside face of exterior walls and elsewhere as required for corrosion resistance. Provide toothed-steel or lead expansion sleeves for drilled-in-place anchors.

1. Adhesives: Installation adhesives as recommended by manufacturer for use intended.

PART 3 EXECUTION

3.01 INSPECTION

A. Verify adequacy of backing and support framing.

3.02 INSTALLATION

A. All cabinets and shelving shall be installed as shown on Drawings and as specified by manufacturer.

B. Set and secure casework in place rigid, plumb, and level.

C. Cabinets: Install without distortion so doors and drawers fit openings properly and are accurately aligned. Adjust hardware to center doors and drawers in openings and to provide unencumbered operation. Complete installation of hardware and accessory items as indicated.

1. Secure cabinet and counter bases to floor using appropriate angles and anchorages.
2. Install cabinets with no more than 1/8 inch in 96-inch sag, bow, or other variation from a straight line.
3. Maintain veneer sequence matching of cabinets with transparent finish.
4. Carefully scribe casework which is against other building materials, leaving gaps of 1/32 inch maximum. Do not use additional overly trim for this purpose.
5. Carefully fit equipment to be installed into millwork. Provide filler pieces when required.

D. Fasteners:

1. Use purpose designed fixture attachments at concealed locations for wall-mounted components.
2. Use threaded steel concealed joint fasteners to align and secure adjoining cabinet units and counter tops.
3. Countersink anchorage devices at exposed locations used to wall-mount components, and conceal with solid plugs of species to match surrounding wood. Finish flush with surrounding surfaces.
4. Install countertops with no more than 1/8 inch in 96-inch sag, bow, or other variation from a straight line.

3.03 ADJUSTING AND CLEANING

A. Adjust doors, drawers, hardware, fixtures and other moving or operating parts to function smoothly and correctly.

B. Clean casework, shelves, hardware, fittings and fixtures.

END OF SECTION

SECTION 12 35 30.13 - KITCHEN CASEWORK

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Cabinet Units

a. Wood Premanufactured Cabinets

1) Location: Guestroom Kitchen

2) Location: Guestroom Bathroom Vanity

2. Cabinet Hardware

B. Related Sections:

1. Section 06 61 00 - Rough Carpentry
2. Section 06 20 00 - Finish Carpentry
3. Section 12 32 16 – Manufactured Plastic Laminate Clad Casework
4. Section 12 36 23 - Plastic Countertops
5. Section 12 36 40 - Stone Countertops
6. Division 22 for Plumbing Fixtures

1.02 REFERENCES

A. Architectural Woodwork Institute (AWI) / Architectural Woodwork Manufacturers Association of Canada (AWMAC) /Woodwork Institute (WI) Publications:

1. "Architectural Woodwork Standards

(AWS)" B. ASTM International (ASTM)

Publications:

1. D523 “Standard Test Method for Specular Gloss”
2. E84 "Standard Test Method for Surface Burning Characteristics of Building

Materials" C. American National Standards Institute (ANSI) Publications:

1. A135.4 Basic Hardboard
2. A161.2 “Standards for Fabricated High Pressure Decorative Laminate Countertops”
3. A208.1 "Standards for the Performance of Particleboard"

D. Hardwood Plywood & Veneer Association (HPVA)

Publications:

1. ANSI/HPVA HP-1: "American National Standard for Hardwood and Decorative Plywood"

E. Kitchen Cabinet Manufacturers Association (KCMA)

1. ANSI/KCMA A161.1 “Performance & Construction Standard for Kitchen and Vanity Cabinets”

F. National Electrical Manufacturer’s Association (NEMA) Standards Publications:

1. NEMA LD3 “High Pressure Decorative Laminates”

G. U.S. Department of Commerce (DOC), National Institute of Standards and Technology (NIST) Publications

1. PS 1 - Construction and Industrial Plywood
2. PS 20 - American Softwood Lumber Standard
3. PS 51 - Hardwood and Decorative Plywood
4. PS 58 - Basic Hardboard

1.03 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01
Specification Sections.

B. Submit "Letter of Conformance" in accordance with Section 01 33 00 indicating specified items selected for use in project with the following supporting data.

1. Submit Shop Drawings and product data. Include materials, component profiles, fastening methods, assembly methods, joint details, accessory listings, and schedule of finishes.

a. Show locations and sizes of furring, blocking, and hanging strips, including concealed blocking and reinforcement specified in other Sections.

b. Show locations and sizes of cutouts and holes for plumbing fixtures, faucets, soap dispensers, and other items installed in architectural woodwork.

C. Qualification Data: For Fabricator

1.04 DELIVERY, STORAGE, AND HANDLING

A. Do not deliver casework until painting and similar operations that could damage synthetic marble have been completed in installation areas. If casework components must be stored in other than installation areas, store only in areas where environmental conditions comply with requirements specified in "Project Conditions" Article.

B. Handle materials to prevent damage to finished surfaces. Provide protective coverings to prevent physical damage or staining following installation for duration of project.

1.05 PROJECT CONDITIONS

A. Environmental Limitations: Do not deliver or install casework until building is enclosed, wet work is complete, and HVAC system is operating and maintaining temperature and relative humidity at occupancy levels during the remainder of the construction period.

B. Field Measurements: Where casework is indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication and indicate measurements on Shop Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

1. Locate concealed framing, blocking, and reinforcements that support casework by field measurements before being enclosed and indicate measurements on Shop Drawings.

PART 2 PRODUCTS

2.01 APPROVED MANUFACTURERS

A. Approved Manufacturers:

1. Casegoods as noted in the Guestroom FF&E Specifications

B. Quality Standard:

1. Provide cabinets that comply with KCMA A161.1, unless noted otherwise manufactured meeting the following requirements:

a. Minor warp which can be held flat and straight with normal nailing.

b. Natural and manufacturing defects in excess of those permitted in the grade specified are permitted if such defects are to be covered by adjoining members or otherwise concealed.

c. Trim members for application on flat surfaces shall have the reverse side "backed out", except members with exposed ends.

C. Design:

1. Style of face construction for base, wall, and full-height units, if any, with drawer fronts, doors, and fixed panels as follows:

a. Face Frame or Frameless.

1) All cabinets shall be the same construction type for the entire Project.

b. Cabinet and Door Interface: Flush (Full) Overlay.

c. Flush Panel Doors.

d. Flush Panel Drawer Fronts.

e. Thermoformed-Vinyl-Faced Panels (Thermofoil) pattern to be approved by Marriott. No substitutions permitted unless approved by Marriott in advance of Project.

2. Grain Direction:

a. Horizontal on Thermoformed-Vinyl-Faced Panels (Thermofoil) doors, horizontal on drawer fronts.

b. Lengthwise on face frame members.

c. Vertical on end panels.

d. Side to side on bottoms and tops of units.

e. Vertical on knee-space panels.

f. Horizontal on aprons.

2.02 MATERIALS

A. Solid Lumber: Dry, sound, selected to eliminate appearance defects, of the following species: Moisture content shall be 6% to 12% for boards up to 2-inches nominal thickness, and shall not exceed 19% for thicker pieces. Do not use two adjacent exposed surfaces that are noticeably dissimilar in color, grain, figure, or natural character markings.

1. Hard Maple - "Select White" (Sapwood), plain (flat) sliced, custom grade.

B. Plywood Face Veneer: HPVA HP-1. Same species as exposed lumber, unless otherwise indicated, selected for grain and color compatible with exposed solid lumber, with Grade A faces and Grade C backs of same species as faces, no defects. Edgeband exposed edges with solid wood of same species as face veneer.

1. Hard Maple - "Select White" (Sapwood), plain (flat) sliced, custom grade.

C. Particle Board: ANSI A208.1, Mat-Formed Particle Board, Grade 1-M-2, with minimum density of 45 pcf. Internal bond of 60 psi, and minimum screw holding capacity of 225 lb. on faces and 200 lb. on edges.

D. Hardboard: ANSI A135.4, Class 1, tempered.

E. MDF: ANSI A208.2, Grade 130.

F. Thermoformed-Vinyl-Faced Panels (Thermofoil): MDF, milled to required shapes, with a thermoformed vinyl overlay applied in a vacuum or membrane press.

G. Thermoset Decorative Overlay (Melamine): Not less than 100 gram thermally fused, melamine-impregnated decorative paper, complying with requirements of NEMA LD 3, Grade VGL, for Test Methods 3.3, 3.4, 3.6, 3.8, and 3.10. Finish shall be resistant to water and mild cleaners.

H. Edgebanding for use Thermoset Decorative Overlay (Melamine) finished Panels: PVC or polyester edgebanding matching thermoset decorative overlay.

I. Decorative Glass for Cabinet Doors:

J. Sandblasted Glass: Heat Treated Float Glass, ASTM C1048, Type I, Class 1, Quality Q3, Condition A, Kind FT (Fully Tempered), 3/16-inch thick, unless otherwise indicated.

1. Provide evenly abraded sandblasted or Acid-Etched Finish. Translucent Pattern as approved by Owner's Representative.

2. Refer to Drawings for locations and size.

2.03 FABRICATION - GENERAL

A. General:

1. Shop assemble casework for delivery to site in units easily handled and to permit passage through building openings.

2. When necessary to cut and fit on site, provide materials with ample allowance for cutting.
Provide trip for scribing and site cutting.

3. Provide cutouts for plumbing fixtures, inserts, appliances, outlet boxes, and other fixtures and fittings.

2.04 FABRICATION - FACE-FRAME CABINETS

A. General:

1. Face Frame Rails and Stiles: Not less than 3/4-inch by 1-1/2 inch solid lumber with glued mortise and tendon joints.

2. Exposed and Semi-exposed Ends; Top and Bottom Rails; and Sub-toe Boards:

a. Not less than 1/2-inch hardwood plywood with exterior veneer, with clear finish to match doors and drawer faces and with clear finish on interior; or not less than 1/2-inch Particle Board with Thermoset Decorative Overlay (Melamine), to match door and drawer fronts. Machine ends for wood-dowel or mechanical dowel fasteners to receive top, bottom, and back. Rabbet base ends to receive bottom and back. Base ends to extend to floor. Finish exposed ends to match doors and doors and drawer fronts.

b. Connect to stiles with pressure-glued tongue and plow joint and supplement by concealed mechanical fasteners. Finish exposed ends to match doors and drawers. If wood veneered materials are used, clear coat interior to achieve water resistant cleanable surface.

3. Unexposed Ends: Not less than 1/2-inch hardwood plywood with clear finish, or not less than 3/4-inch hardboard; finished with Thermoset Decorative Overlay (Melamine). Attach to front frame in same manner as exposed ends.

4. Back Panels:

a. Not less than 1/4-inch hardwood plywood, or not less than 1/8-inch MDF faced with Thermoset Decorative Overlay (Melamine). If wood veneered materials, clear coat interior to achieve water resistant cleanable surface.

5. Doors 48 Inches or Less in Height:
   a. 3/4 inch MDF cores with eased edges, faced with full overlay of Thermoformed-Vinyl-Facing (Thermofoil) on front side, and Thermoset Decorative Overlay (Melamine) on rear side. Provide stop silencers at the top and bottom of all hinged doors.
6. Shelving:
   a. Not less than 5/8" Particle Board with Thermoset Decorative Overlay (melamine) to match cabinet interior, PVC edge banding; adjustable at least every 1-1/2 inch; clear plastic shelf clip pressed into 5mm holes bored in cabinet side. Fabricate base shelf to half depth.
7. Filler Strips:
   a. Provide as needed to close spaces between cabinets and walls, ceilings, and indicated equipment. Fabricate from same material and with same finish as cabinets.
   b. Oversize for field cutting to suit field conditions and assure continuous enclosure of open spaces.
   c. Provide raw (unfinished) cleats at blind corners and appliance openings as required to support countertops, minimum 3/4-inch x 1-1/2 inch x 8 foot length, to be field cut and fit by the installer

8. Interior Cabinet Finish:
   a. Interior face of cabinet units that have surfaces that are exposed shall be Thermoset Decorative Overlay (melamine) in color to match door fronts as approved by Marriott Representative.

B. Base Cabinet Units:

1. Base Cabinet Top Frames: 3/4-inch thickness of same material as side panels with mortise and tenon or doweled connections, glued and pinned or screwed.
2. Base Cabinet Stretchers: 3/4-by-4-1/2-inch plywood, Particle Board, or MDF strips or solid-wood boards at front and back of cabinet, glued and pinned or screwed.
   a. Base Cabinet Stretchers may be provided as an option to base cabinet top frames.
3. Front Frame Drawer Rails: Not less than 3/4-inch solid wood mortised and fastened into face frame.
4. Bottoms: Not less than 1/2-inch hardwood plywood with exterior veneer, or not less than 1/2-inch particle board with Thermoset Decorative Overlay (Melamine), to match door and drawer fronts, fully supported by and secured in rabbets in end panels, front frame, and back bottom rail.
5. Corner Blocks: Glued and fastened in each of four top corners to maintain cabinet squareness and rigidity, or provide plastic or composite glue blocks. Full cabinet rails are an acceptable alternate to corner blocks.
6. Drawers:
   a. Provide box-type construction with sub-front and back joined with glued dovetail or rabbeted into sides and secured with glue and mechanical fasteners. Clear coat all exposed surfaces.
   b. Drawer Fronts: 3/4 inch MDF cores with eased edges, faced with full overlay of Thermoformed-Vinyl-Facing (Thermofoil) on front side, and Thermoset Decorative Overlay (Melamine) on rear side.
   c. Drawer Sides Sub-fronts, and Backs: Not less than 1/2-inch solid hardwood, or veneered plywood, or not less than 1/2 thick particle board with Thermoset Decorative Overlay (Melamine).

d. Exposed fronts fastened to Sub-fronts with mounting screws from interior of body.

e. Drawer bottom of not less than 1/4-inch veneer hardboard, or not less than 1/8-inch MDF faced with Thermoset Decorative Overlay (Melamine), set into rabbets in back, sides, and sub-fronts.

C. Wall Cabinet Units:

1. Tops and Bottoms: Not less than 1/2-inch hardwood veneered plywood with exterior veneer, or not less than 1/2 thick particle board with Thermoset Decorative Overlay (Melamine), to match door fronts, fully supported by and secured in rabbets in end panels, front frame, and back rail.

2.05 FABRICATION – FRAMELESS

CABINETS A. General:

1. Exposed and Semi-exposed Ends; Top and Bottom Rails; and Sub-toe Boards:
   a. Not less than 1/2-inch Particle Board with Thermoset Decorative Overlay (Melamine) to match door and drawer fronts. Machine ends for wood-dowel or mechanical dowel fasteners to receive top, bottom, and back. Base ends to extend to floor. Finish exposed ends to match doors and doors and drawer fronts.

2. Unexposed Ends:
   a. Not less than 3/4-inch hardboard; finished with Thermoset Decorative Overlay (Melamine). Attach to front frame in same manner as exposed ends.

3. Back Panels:
   a. Not less than 1/4-inch tempered hardboard; finished with Thermoset Decorative Overlay (Melamine), or not less than 1/8-inch MDF faced with Thermoset Decorative Overlay (Melamine).

4. Doors 48 Inches or Less in Height: 3/4 inch MDF cores with eased edges, faced with full overlay of Thermoformed-Vinyl-Facing (Thermofoil) on front side, and Thermoset Decorative Overlay (Melamine) on rear side. Provide stop silencers at the top and bottom of all hinged doors.

5. Shelving: not less than 5/8" Particle Board with Thermoset Decorative Overlay (Melamine) to match cabinet interior, PVC edge banding; adjustable at least every 1-1/2 inch; clear plastic shelf clip pressed into 5mm holes bored in cabinet side. Fabricate base shelf to half depth.

6. Filler Strips:

   a. Provide as needed to close spaces between cabinets and walls, ceilings, and indicated equipment. Fabricate from same material and with same finish as cabinets.

   b. Oversize for field cutting to suit field conditions and assure continuous enclosure of open spaces.

   c. Provide raw (unfinished) cleats at blind corners and appliance openings as required to support countertops, minimum 3/4-inch x 1-1/2 inch x 8 foot length, to be field cut and fit by the installer.

7. Interior Cabinet Finish:

   a. Interior face of cabinet units that have surfaces that are exposed shall be Thermoset Decorative Overlay (melamine) in color to match door fronts as approved by Marriott Representative.

B. Base Cabinet Units:

1. Base Cabinet Top Frames: 3/4-inch solid wood, or material to match cabinet sides, with mortise and tenon or doweled connections, glued and pinned or screwed.

2. Base Cabinet Stretchers: 3/4-by-4-1/2-inch plywood, Particle Board, or MDF strips or solid-wood boards at front and back of cabinet, glued and pinned or screwed.

   a. Base Cabinet Stretchers may be provided as an option to base cabinet top frames.

3. Bottoms: Not less than 1/2-inch hardwood plywood with exterior veneer, or not less than 1/2-inch particle board with Thermoset Decorative Overlay (Melamine), to match door and drawer fronts, fully supported by and secured in rabbets in end panels, front frame, and back bottom rail.

4. Corner Blocks: Glued and fastened in each of four top corners to maintain cabinet squareness and rigidity or provide plastic or composite glue blocks. Full cabinet rails are an acceptable alternative to corner blocks.

5. Drawers:

   a. Provide box-type construction with sub-front and back joined with glued dovetail or rabbeted into sides and secured with glue and mechanical fasteners. Clear coat all exposed surfaces.

   b. Drawer Fronts: 3/4 inch MDF cores with eased edges, faced with full overlay of Thermoformed-Vinyl-Facing (Thermofoil) on front side, and Thermoset Decorative Overlay (Melamine) on rear side.

   c. Drawer Sides Sub-fronts, and Backs: Not less than 1/2-inch solid hardwood or veneered plywood, or not less than 1/2 thick particle board with Thermoset Decorative Overlay (Melamine).

   d. Exposed fronts fastened to Sub-fronts with mounting screws from interior of body.

   e. Drawer bottom of not less than 1/4-inch veneer hardboard, or not less than 1/8-inch MDF faced with Thermoset Decorative Overlay (Melamine), set into rabbets in back, sides, and sub-fronts.

C. Wall Cabinet Units:

1. Tops and Bottoms: Not less than 1/2-inch hardwood veneered plywood with exterior veneer, or not less than 1/2 thick particle board with Thermoset Decorative Overlay (Melamine), to match door fronts, fully supported by and secured in rabbets in end panels, front frame, and back rail.

2.06 CABINET HARDWARE

A. General: Provide cabinet hardware and accessory materials associated with architectural cabinets. Coordinate finishes of exposed cabinet hardware with adjacent finish hardware as specified in Section 08 71 00 (08710).

B. All exposed hardware to be US15 unless noted otherwise.

1. Drawer Slides: Side Mount, 75 lb. load capacity, epoxy coated, self-closing.

2. ADA Accessible Guest Room:

   a. Door hardware at kitchen sink: Provide Flipper type "Pocket Door" retractable doors, hardware system, by Julius Blum, or approved substitution.

   b. Cabinet to be minimum 36-inches wide with opening complying with 2010 ADA, as approved by Architect.

      1)Eliminate base of sink cabinet with flipper doors. Attach toe kicks to flipper doors at sink cabinet.

   c. Finish all interior surfaces to match doors and drawers.

2.07 INSTALLATION MATERIALS

A. Furring, Blocking, Shims, and Hanging Strips: Fire-retardant-treated Softwood or hardwood lumber, kiln-dried to less than 15 percent moisture content.

B. Anchors: Select material, type, size, and finish required for each substrate for secure anchorage. Provide nonferrous-metal or hot-dip galvanized anchors and inserts on inside face of exterior walls and elsewhere as required for corrosion resistance. Provide toothed-steel or lead expansion sleeves for drilled-in-place anchors.

1. Adhesives: Installation adhesives as recommended by manufacturer for use intended.

2.08 SHOP FINISHING

A. General: Finish casework at fabrication shop as specified in this Section. Defer only final touchup, cleaning, and polishing until after installation.

PART 3 EXECUTION

3.01 INSPECTION

A. Verify adequacy of backing and support framing.

3.02 INSTALLATION

A. All cabinets and shelving shall be installed as shown on Drawings and as specified by manufacturer.

B. Set and secure casework in place rigid, plumb, and level.

C. Cabinets: Install without distortion so doors and drawers fit openings properly and are accurately aligned. Adjust hardware to center doors and drawers in openings and to provide unencumbered operation. Complete installation of hardware and accessory items as indicated.

1. Secure cabinet and counter bases to floor using appropriate angles and anchorages.
2. Install cabinets with no more than 1/8 inch in 96-inch sag, bow, or other variation from a straight line.
3. Maintain veneer sequence matching of cabinets with transparent finish.
4. Carefully scribe casework which is against other building materials, leaving gaps of 1/32 inch maximum. Do not use additional overly trim for this purpose.
5. Carefully fit equipment to be installed into millwork. Provide filler pieces when required.

D. Fasteners:

1. Use purpose designed fixture attachments at concealed locations for wall-mounted components.
2. Use threaded steel concealed joint fasteners to align and secure adjoining cabinet units and countertops.
3. Countersink anchorage devices at exposed locations used to wall-mount components, and conceal with solid plugs of species to match surrounding wood. Finish flush with surrounding surfaces.
4. Install countertops with no more than 1/8 inch in 96-inch sag, bow, or other variation from a straight line.

3.03 FLOAT GLASS

A. Refer to Section 08 80 00 (08800) - Glazing, for installation methods.

3.04 ADJUSTING AND CLEANING

A. Adjust doors, drawers, hardware, fixtures and other moving or operating parts to function smoothly and correctly.

B. Clean casework, shelves, hardware, fittings and fixtures.

END OF SECTION

SECTION 12 36 23 - PLASTIC COUNTERTOPS

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Plastic Laminate

a. Countertops and Backsplashes

b. Aprons

B. Related Sections:

1. Section 06 10 00 - Rough Carpentry
2. Section 06 20 00 - Finish Carpentry
3. Section 12 32 16 – Manufactured Plastic Laminate Clad Casework
4. Section 12 36 40 - Stone Countertops

1.02 REFERENCES

A. American National Standards Institute (ANSI) Publications:

1. A161.2 “Performance Standards for Fabricated High Pressure Decorative Laminate Countertops”
2. A208.1 “Particleboard”

B. ASTM International (ASTM) Publications:

1. E84 "Standard Test Method for Surface Burning Characteristics of Building Materials"

C. Federal Specifications (FS) Publications:

1. MM-L-736 “Lumber, Hardwood”
2. MMM-A-130 “Adhesive, Contact”

D. National Electrical Manufacturer’s Association (NEMA) Standards Publications:

1. LD3 “High Pressure Decorative Laminates”

E. National Institute of Standards and Technology (NIST)

1. PS 1 “Construction and Industrial Plywood”
2. PS 20 “American Softwood Lumber Standard”
3. PS 51 “Hardwood and Decorative Plywood”
4. PS 58 “Basic Hardboard”

1.03 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

B. Submit “Letter of Conformance” in accordance with Section 01 33 00 indicating specified items selected for use in project with the following supporting data.

1. Submit Shop Drawings and product data. Include materials, component profiles, fastening methods, assembly methods, joint details, accessory listings, and schedule of finishes.

1.04 QUALITY ASSURANCE

A. Perform work to (custom) quality in accordance with "Architectural Woodwork Quality Standards" of the Architectural Woodwork Institute AWI

B. Plastic Laminate Materials shall comply with NEMA LD-3 as follows:

1. GP 50: Horizontal grade
2. CL 20: Cabinet liner
3. BK 20: Backing sheet
4. PF-40: Post Forming Grade
5. FR 50: Horizontal application, fire retardant material
6. FR 32: Vertical application, fire retardant material

1.05 DELIVERY, STORAGE, AND HANDLING

A. Do not deliver countertops until painting and similar operations that could damage synthetic marble have been completed in installation areas. If countertops must be stored in other than installation areas, store only in areas where environmental conditions comply with requirements specified in "Project Conditions" Article.

B. Handle materials to prevent damage to finished surfaces. Provide protective coverings to prevent physical damage or staining following installation for duration of project.

1.06 PROJECT CONDITIONS

A. Environmental Limitations: Do not deliver or install countertops until building is enclosed, wet work is complete, and HVAC system is operating and maintaining temperature and relative humidity at occupancy levels during the remainder of the construction period.

B. Field Measurements: Where countertop work is indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication and indicate measurements on Shop Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

1. Locate concealed framing, blocking, and reinforcements that support countertops by field measurements before being enclosed and indicate measurements on Shop Drawings.

PART 2 PRODUCTS

2.01 MATERIALS:

A. Plastic Laminate: Shall be standard grade, 1/16" thick, general purpose material complying with current NEMA LD-3 Grade HGS for flat countertops [and HGP for postformed]. Comply with ANSI A161.2. Pattern and color shown in [Interior Finish Index].

1. Approved Manufacturers:

a. WilsonArt International, Inc. (800-433-3222)

2. Alternate Manufacturers with prior approval by Hilton:

a. Nevamar Company, LLC (800-638-4380)
b. Formica Corporation (800-367-6422)

B. Particleboard Core:

1. ANSI A208.1, Grade M-2.

C. Adhesives:

1. Wood Glue: Waterproof types as recommended by AWI standards for the particular application.

2. Plastic Laminate: Non-Flammable Type:
   a. Approved Manufacturers:
      1) "DAP Weld-Wood, Non-Flammable Type" - DAP, Inc. (888-327-8477)
      2) Approved substitution.

3. Installation adhesives as recommended by manufacturer for use intended.

2.02 COUNTERTOPS

A. Countertops and Edging: 3/4" B-C particleboard (except at sinks, use exterior grade plywood only) with plastic laminate bonded to tops.

1. In locations as required by local codes or ordinances, provide fire retardant countertop assemblies, as tested in accordance with ASTM E 84.

B. Plastic Laminate Work:

1. Where shown as self edged, countertops shall have 3/4" x 4" high square-edged separate matching backsplash and matching aprons with same grade of laminate as top surface unless indicated otherwise.

   a. Apply trim and edging prior to surface sheet.

   b. Apply veneers or plastic laminate finish in full uninterrupted sheets consistent with manufactured sizes. Make corners and joints hairline. Locate counter butt joints minimum 2 feet from sink cut-outs.

2. Counters and work tops with sinks: Substrate for back splashes and at edges shall be trimmed lumber. Use only exterior grade or marine grade Plywood near wet areas. All adhesives used near water shall be formulated to be specially water-resistant.

C. ADA Accessible Guest Room:

1. Meet all local and national requirements for access. Minimum work surface shall be as follows:

   a. Sink Area: Minimum 28" to 34" maximum above finished floor x 30" in length.

   b. Countertop: Minimum 28" to 34" maximum above finished floor x 30" in length.

2. For units which have exposed sides and ends due to placement of accessible units, provide durable, nonabsorbent materials for finish.

3. Provide wall brackets and standards of the type capable of loads of 250 pounds per linear foot of horizontal work surface.

4. Provide brackets capable of supporting work surfaces and loads without leading edge deflection greater than 1/2".

2.03 INSTALLATION MATERIALS

A. Furring, Blocking, Shims, and Hanging Strips: Fire-retardant-treated Softwood or hardwood lumber, kiln-dried to less than 15 percent moisture content.

B. Anchors: Select material, type, size, and finish required for each substrate for secure anchorage. Provide nonferrous-metal or hot-dip galvanized anchors and inserts on inside face of exterior walls and elsewhere as required for corrosion resistance. Provide toothed-steel or lead expansion sleeves for drilled-in-place anchors.

2.04 FABRICATION

A. General:

1. Shop assemble countertops for delivery to site in units easily handled and to permit passage through building openings.

2. When necessary to cut and fit on site, provide materials with ample allowance for cutting.
Provide trip for scribing and site cutting.

3. Provide cutouts for plumbing fixtures, inserts, appliances, outlet boxes, and other fixtures and fittings.

PART 3 EXECUTION

3.01 INSPECTION

A. Verify adequacy of backing and support framing.

3.02 INSTALLATION

A. All countertops and shelving shall be installed as shown on Drawings and as specified by manufacturer.

B. Set and secure countertops in place rigid, plumb, and level.

C. Anchor securely by screwing through corner blocks of base cabinets or other supports into underside of countertop.

D. Fasteners:

1. Use purpose designed fixture attachments at concealed locations for wall-mounted components.

2. Use threaded steel concealed joint fasteners to align and secure adjoining counter tops.

3. Install countertops with no more than 1/8 inch in 96-inch sag, bow, or other variation from a straight line.

3.03 PLASTIC

LAMINATE A.

Installation:

1. The plastic laminate shall be bonded to a suitable substrate. Rigid setting type adhesive is recommended. The temperature of the materials, surfacing, substrate, and adhesive, and the area in which the actual fabrication is to be done shall not be less than 65 degrees F. with a relative humidity of not less than 35% and not more than 85%. All inside corners of cutouts in plastic laminate shall be radiused as large as possible with 1/8"R minimum. File edges of the radius smooth and free of cracks and

crazes. B. Method:

1. Assembly of components should be accomplished using approved procedures, materials, and equipment, and the workmanship should conform to established industry practices, conditions, procedures, and recommendations.

C. Use single sheet at corners. Seams will not be permitted at corners, unless otherwise approved by Owner's Representative.

D. Arrange joints in vertical edges away from common view.

3.04 ADJUSTING AND CLEANING

A. Clean surfaces of plastic laminate with a damp cloth or ordinary bar soap and water. Harsh abrasive cleansers shall not be used. Stubborn dirt may be removed with lacquer thinner, meth ethyl Ketone, contact adhesive solvents or cleaner waxes.

END OF SECTION

SECTION 12 36 40 - STONE COUNTERTOPS

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Interior Granite

a. Vanity Tops

b. Countertops

c. Backsplashes

d. Aprons

B. Related Sections:

1. Section 07 92 00 - Joint Sealants
2. Section 09 30 00 - Tiling
3. Section 12 35 30.13 - Kitchen Casework
4. Section 12 36 23 – Plastic Countertops
5. Division 22 for Plumbing Fixtures

1.02 REFERENCES

A. ASTM International (ASTM) Publications:

1. C568 “Standard Specification for Limestone Dimension Stone”

B. American National Standards Institute (ANSI) Publications.

1. A118.3 “water-cleanable, tile-setting epoxy adhesive”

C. National Building Granite Quarries Association's (NBGQA) Publications:

1. "Specifications for Architectural Granite"

D. Green Seal, Inc. (GS) Publications:

1. GS-11 “Green Seal Environmental Standard for Paints”
2. GS-36 “Green Seal Standard for Commercial Adhesives”

E. South Coast Air Quality Management District (SCAQMD):

1. “South Coast Rule #1168 Architectural Coatings”

1.03 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

B. Submit “Letter of Conformance” in accordance with Section 01 33 00 indicating specified items selected for use in project with the following supporting data.

1. Product data for each type of stone, stonework accessory, and other manufactured products required.
2. Shop Drawings detailing fabrication and installation of stone. Include cutting and setting Drawings indicating sizes, dimensions, sections, and profiles of stones, arrangement and provisions for jointing, supporting, anchoring, and bonding stonework, and details showing relationship with, attachment to, and reception of related work.

a. Include large-scale details of decorative surfaces and inscriptions.

3. Samples for verification purposes of stone in form of sets for each color, grade, finish, type, and variety of stone required and consisting of stones not less than 12 inches square. Include two or more stones in each set of samples showing the full range of variations in appearance characteristics to be expected in completed work.

   a. Colored pointing mortar and grout samples for each color required showing full range of exposed color and texture to be expected in completed work.

4. Maintenance Data: For stone tile to include in maintenance manuals.

1.04 QUALITY ASSURANCE

A. Single-Source Responsibility for Stone: Obtain each color, grade, finish, type, and variety of stone from a single quarry with resources to provide materials of consistent quality in appearance and physical properties, including the capacity to cut and finish material without delaying the progress of the work.

B. Single-Source Responsibility for Mortar and Grout Materials: Obtain mortar ingredients of uniform quality and from one manufacturer for each cementitious and admixture component and from one source or producer for each aggregate.

C. Single-Source Responsibility for Other Materials: Obtain each type of stone accessory, sealant, and other materials from one manufacturer for each product.

D. Installer Qualifications; Engage an experienced installer who has completed stone cladding similar in material, design, and extent to that indicated for project that has resulted in construction with a record of successful in-service performance.

E. Granite materials shall not contain unsafe levels of radioactive materials.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials to project site in undamaged condition.

B. Store and handle stone and related materials to prevent their deterioration or damage due to moisture, temperature changes, contaminants, corrosion, breakage, chipping, or other causes.

1. Do not use pinch or wrecking bars.

2. Lift with wide-belt-type slings where possible. Do not use wire rope or ropes containing tar or other substances that might cause staining. If required to move stone, use wood rollers with cushions at end of wood slides.

3. Store stone on wood skids or pallets covered with nonstaining, waterproof membrane. Place and stack skids and stones to distribute weight evenly and to prevent breakage or cracking of stones.

4. Protect stored stone from weather with waterproof, nonstaining covers or enclosures, but allow air to circulate around stones.

5. Store cementitious materials off the ground, under cover, and in dry location.

1.06 PROJECT CONDITIONS

A. Do not set stone when air temperature or material temperature is below 50 degrees F. (10 degrees C.).

B. Maintain minimum ambient temperatures of 50 degrees F. (10 degrees C.) during installation and for seven days after completion, unless higher temperatures are required by fabricator's or supplier's instructions.

C. Field Measurements: Verify dimensions of construction to receive stone countertops by field measurements before fabrication and indicate measurements on Shop Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the work.

1. Established Dimensions: Where field measurements cannot be made without delaying the work, establish dimensions and proceed with fabricating countertops without field measurements. Provide allowance for trimming at site and coordinate construction to ensure actual dimensions correspond to established dimensions.

PART 2 PRODUCTS

2.01 MATERIALS, GENERAL

A. Comply with referenced standards and other requirements indicated applicable to each type of material required.

B. Provide matched blocks from a single quarry for each type, variety, color, and quality of stone required. Extract blocks from a single bed of quarry stratum especially reserved for project, unless stones from randomly selected blocks are acceptable to Owner's Representative for aesthetic effect.

C. Quarry stone in manner to ensure that as-quarried block orientations yield finished stone with required characteristics.

D. Make quarried blocks available for inspection by Owner's Representative.

2.02 GRANITE

A. Granite Building Stone Standard: ASTM C568

B. Reference Homewood Prototype finish specifications for Stone Countertop materials requirements.

C. Manufacturers:

1. Approved Manufacturers:

a. Dal Tile (214) 309-4531

b. Belstone (818) 373-4900

c. Wilsonart (917) 651-6524

2 Materials, Finish and Color: Refer to Interior Finish Index.

2.03 ADHESIVES, SEALANTS AND SEALERS

A. Manufacturers:

1. Approved Manufacturers:

a. Inno Chem LLC, Member of Akemi Group (877-462-5364).

1) Epoxy Adhesive: "Akepox"

2) Polyester Adhesive: "Platinum Clear Polyester Adhesive"

b. Approved Substitution by Laticrete International Inc. (800-243-4788)

c. Approved Substitution by Custom Building Products (800-272-8786)

B. General: Use only adhesives formulated for stone and Tiling and recommended by their manufacturer for the application indicated.

C. Water-cleanable Epoxy Adhesive: ANSI A118.3, water-cleanable, tile-setting epoxy adhesive.

D. Stone Seam Adhesive: 2-part, epoxy or polyester stone adhesive with an initial set time of not more than 2 hours at 70 deg F.

1. Color: Clear.

E. Sealant for Countertops: Clear silicone sealant complying with requirements of Division 07 Section - "Joint Sealants".

F. Penetrating Sealer: Penetrating sealer that protects the exposed faces of stone and grout from staining. Sealer shall be UV transparent; non-yellowing; VOC compliant; mold and mildew resistant; and USDA approved as safe on food handling surfaces. Material shall exceed ADA standards for slip resistance at traffic areas.

2.04 STONE COUNTERTOP FABRICATION

A. General: Fabricate stone countertops in sizes and shapes required to comply with requirements indicated, including details on Drawings and Shop Drawings. Comply with recommendations in NBGQA's "Specifications for Architectural Granite".

B. Thickness: Provide thickness indicated, but not less than the following:

1. Nominal Thickness: Refer to Drawings and Interior Finish Index

C. Edge Detail: Provide edge detail indicated on Drawings.

D. Seams: Fabricate countertops without seams, if seams are required, fabricate sections indicated for joining in field, with seams as follows:

1. Bonded Seams: 1/32 inch or less in width.

E. Cutouts and Holes for Lavatories, Sinks, and Fittings:

1. Undercounter Lavatories: Make cutouts for undercounter lavatories in shop using template or pattern furnished by lavatory manufacturer. Form cutouts to smooth, even curves with edges at right angles to top. Ease juncture of cutout edges with tops, and finish edges to match tops.

2. Fittings: Drill countertops in shop for plumbing fittings, undercounter soap dispensers, and similar items.

PART 3 EXECUTION

3.01 EXAMINATION

A. Examine surfaces to receive stone countertops, and conditions under which stonework will be installed, with installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of stonework. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.02 PREPARATION

A. Advise installers of other work about specific requirements relating to placement of inserts, flashing reglets, and similar items to be used by stonework installer for anchoring, supporting, and flashing of dimension stonework. Furnish installers of other work with Drawings or templates showing locations of these items.

B. Protect stone countertops during installation as follows:

1. Prevent staining of stone from mortar, grout, sealants, and other sources. Immediately remove such materials from stone without damage to latter.

C. Clean stone surfaces that have become dirty or stained prior to setting to remove soil, stains, and foreign materials. Clean stones by thoroughly scrubbing stones with fiber brushes followed by a thorough drenching with clear water. Use only mild cleaning compounds that contain no caustic or harsh filler or abrasives.

3.03 INSTALLATION - COUNTERTOPS

A. General: Install countertops over plywood subtops with a full spread of water-cleanable epoxy adhesive.

B. Bond seams with stone seam adhesive and draw tight as countertops are set. Mask areas of countertops adjacent to seams to prevent adhesive smears. Use clamps to ensure countertop units are properly aligned and seams are minimum width.

C. Complete cutouts not finished in shop. Mask areas of countertops adjacent to cutouts while cutting to prevent damage.

D. Install backsplash and end splash by adhering to wall with water-cleanable epoxy adhesive. Leave 1/16-inch gap between countertop and splash for filling with sealant. Use temporary shims to ensure uniform spacing.

E. Apply sealant to seams and to gap between countertops and splashes; comply with Section 07 92 00 (07920) "Joint Sealants."

3.04 ADJUSTING AND CLEANING

A. Remove and replace or repair stonework of the following description:

1. Broken, chipped, stained, or otherwise damaged stones. Broken, chipped, stained, or otherwise damaged stone may be repaired, providing the methods and results are acceptable to Owner's Representative.

2. Defective joints.

3. Stones and joints not matching approved samples.

4. Stonework not complying with other requirements indicated.

B. Replace in manner that results in stonework matching approved samples and field-constructed mock-ups, complying with other requirements, and showing no evidence of replacement.

C. Clean stonework not less than six days after completion of work, using clean water and stiff bristle fiber brushes. Do not use wire brushes, acid-type cleaning agents, cleaning compounds with caustic or harsh fillers, or other materials or methods that could damage stone.

3.05 SEALER APPLICATION

A. All surfaces must be clean and free from all loose grit and debris, satins, dirt, and wax coatings. Surfaces shall remain dry for a minimum of 24 hours before the application of sealer and remain dry for 24 hours after the application of sealer.

B. Floor surface temperature must be above 50° F. and below 90° F.

C. Test on a small area before using to determine if the product is acceptable with type of stone.

D. A uniform coating of sealer shall be applied AFTER installation of stone materials. Install in strict accordance with Sealer manufacturer's recommendations.

3.06 PROTECTION

A. Provide final protection and maintain conditions in a manner acceptable to fabricator and installer ensuring dimension stonework being without damage or deterioration at time of Substantial Completion.

END OF SECTION

SECTION 12 54 13.13 - HOSPITALITY FURNITURE INSTALLATION

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. The complete installation of all furniture and fixtures which are furnished by Owner.

B. Related Sections:

1. Section 06 10 00 - Rough Carpentry: Blocking for wall mounted furniture and fixtures.

1.02 QUALITY ASSURANCE

A. Qualified installer shall have experience in installation methods similar to work of this section.

1.03 DELIVERY, STORAGE AND HANDLING

A. The Contractor shall receive and store all items furnished by Owner.

B. The storage area shall be secure and dry with temperatures maintained above 40 degrees F. at all times.

C. For each delivery, the Contractor shall fill out receiving reports. Each delivery shall be inspected for damage. All damage shall be noted on the carriers delivery slip as well as the receiving report. Receiving reports and carriers delivery slips shall be forwarded to the Owner immediately upon receipt of delivery. If damaged material is not reported when discovered, the Contractor assumes full responsibility.

PART 2 PRODUCTS

2.01 MATERIALS

A. Headboard Mounting Items:

1. 2 ea 3" x 3/16" toggle bolts.
2. Silicone adhesive.
3. 2 ea 2" #10 pan head screws for each cleat.

B. Box Spring and Bed Frame Mounting Items:

1. 4 ea #10 x 3/4" pan headed screws.

C. Artwork and Framed Mirror Mounting Items:

1. 2 ea 1/8" x 3" toggle bolts for each item.
2. 2 each 2" #10 pan head screws (concrete walls only).

PART 3 EXECUTION

3.01 INSTALLATION

A. Contractor shall exercise care when installing items so as not to damage or soil adjacent areas and surface.

B. Headboard Installation:

1. Mount cleat to wall using toggle bolts as required.
2. Apply three (3) 1" spots of silicone adhesive to bottom rail of headboard.
3. Set headboard on wall cleat and press firmly into place.
4. Clean excess adhesive from wall with approved cleaner.

C. Box Spring and Bed Frame Installation:

1. Be sure box spring is properly set in bed frame.
2. Drill 4 ea. - (2 to each side of box springs). Three holes provided in bed frame.
3. Install screw to each hole and tighten in a workmanship manner until box spring is secured to frame.

D. Artwork: Install using picture wire, or security cleats and silicone adhesive.

E. Lamps and shades: Install complete with bulbs, if directed by Owner's representative, staple excess lamp cord to the back of furniture.

END OF SECTION

SECTION 14 21 23 - ELECTRIC TRACTION PASSENGER ELEVATORS

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Furnish and install a complete new Electric Traction Machine-Room-Less (MRL) Elevator System including, but not limited to, the elevator cab, elevator entrances, motors and controls. The new elevator system shall be furnished and installed in complete accordance with the Specifications and Drawings.

B. Work Included in Other Sections:

1. General Contractor to provide the following:

a. Confirm length, width, and clear overhead dimensions for hoistway, and provide size as required, as approved by Architect and elevator manufacturer.

b. Provide all structural supports for guide rails and other mechanisms, as located by elevator manufacturer.

c. Sill supports and grouting inside of hoistway for doors.

2. Telephone Cable by Division 27.

3. Electrical

a. Include auxiliary contact in mainline electrical disconnect switch to signal elevator controller loss of power is shutoff of disconnect switch.

C. Related Sections:

1. Section 05 12 00 - Structural Steel: Hoisting Beam

2. Section 05 50 00 - Metal Fabrications: Pit Ladders, Sump Pit Cover

3. Section 09 90 00 - Painting

4. Division 23 - Heating, Ventilation, and Air Conditioning

a. Ventilation and temperature control of elevator equipment room.

5. Division 26 - Electrical

a. Electrical service to main disconnect in elevator control room, electrical power for elevator installation and testing, electrical disconnecting device to elevator equipment prior to activation of sprinkler system, electrical service for control room, and pit receptacles with ground fault current protection, lighting in control room and pit, wiring for telephone service to control room.

b. Telephone Systems; ADAAG-required emergency communications equipment.

6. Division 28 - Fire Protection

a. Fire and smoke detectors; fire alarm signal lines to contacts in the control room.

1.02 REFERENCES

A. Americans with Disabilities Act (ADA) II Public Accommodations

1. "Americans with Disabilities Act Accessibility Guidelines "(ADAAG)

B. American National Standards Institute (ANSI) Publications:

1. ANSI/ASME 17.1 "Safety Code for Elevators and Escalators"

C. American Society for Testing and Materials (ASTM):

1. A36 “Standard Specification for Carbon Structural Steel”
2. A167 “Standard Specification for Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip”
3. A1008 "Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability"
4. A1011 "Standard Specification for Steel Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability"
5. B221 “Aluminum-Alloy Extruded Bars, Rods, Shapes, Tubes”
6. B209 “Aluminum-Alloy Sheet and Plate”
7. A167 “Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet and Strip”
8. A526 “Steel Sheet, Zinc-Coated, (Galvanized) by the Hot Dip Process, Commercial Quality”.
9. E84 "Standard Test Method for Surface Burning Characteristics of Building Materials"

D. American Welding Society (AWS)

1. D1.1 “Structural Welding Code”

E. Federal Specifications (FS) Publications:

1. FS L-P-508 “Plastic Sheet, Laminated, Decorative, and Nondecorative”

F. National Electrical Manufacturer’s Association (NEMA) Standards Publications:

1. LD3 “High Pressure Decorative Laminates”

G. National Fire Protection Association (NFPA) Publications:

1. 80 “Standard for Fire Doors, Fire Windows”

H. National Institute of Standards and Technology (NIST)

1. PS-1 “Construction and Industrial Plywood”

I. Underwriter's Laboratories, Inc. (UL) Standards:

1. 10B "Standard for Fire Tests of Door Assemblies"

1.03 DEFINITIONS

A. Gearless Traction Elevator: Space-saving machine-room-less gearless traction elevators are designed for medium to high rise buildings having over 50 feet of travel, where quality performance, energy efficiency and high speeds are desired within a compact footprint.

B. Definitions in ASME A17.1 apply to work of this Section.

C. Defective Elevator Work: Operation or control system failures; performances below specified ratings; excessive wear; unusual deterioration or aging of materials or finishes; unsafe conditions; the need for excessive maintenance; abnormal noise or vibration; and similar unusual, unexpected, and unsatisfactory conditions.

1.04 SYSTEM DESCRIPTION

A. The work of this Section includes new gearless, machine-room-less (MRL) traction passenger elevators to comply with the Americans with Disabilities Act (ADA).

B. Elevator characteristics are as follow:

1. Quantity and Type: One (1) Gearless Traction Passenger Elevator

2.	Capacity	2500 Pounds
3.	Speed	150 Feet per Minute
4.	Travel	1st Floor to 4th Floor - A distance of 35'- 0"
5.	Landings	Four (4)
6.	Openings	Number of Openings: Four (4) Front: Four (4)
7.	Operation	Duplex Selective Collective
8.	Clear Car Inside Size:	
	2500 Pounds:	Nominal, Minimum 6'-8" Wide x 4'-3" Deep x 8'-0" High, and also in accordance with American with Disabilities Act (ADA)
9.	Hoistway Entrances (Size)	3'-6" Wide x 7'-0" High
	(Type)	Side Opening
	(Fire Rating) HR	2
10.	Power Supply	208 Volts, 3 Phase, 60 Hertz
11.	Signals	Illuminated car and hall buttons, car position indicator with audible signal, car direction sign with dual stroke gong, and as specified herein.
12.	Additional Features	Complete provisions for the handicapped, infrared screen type detector, emergency light, telephone, Voice announcing, and as specified herein.

C. Elevator characteristics are as follow:

1.	Quantity and Type:	One (1) Gearless Traction Passenger Elevator
2.	Capacity	3500 Pounds
3.	Speed	150 Feet per Minute
4.	Travel	1st Floor to 4th Floor - A distance of 35'- 0"
5.	Landings	Four (4)
6.	Openings	Number of Openings: Four (4) Front: Four (4) Rear: One (1) (first floor only)
7.	Operation	Duplex Selective Collective
8.	Clear Car Inside Size:	
	3500 Pounds:	Nominal, Minimum 6'-8" Wide x 4'-3" Deep x 8'-0" High, and also in accordance with American with Disabilities Act (ADA)
9.	Hoistway Entrances (Size)	3'-6" Wide x 7'-0" High
	(Type)	Side Opening
	(Fire Rating) HR	2

10.	Power Supply	208 Volts, 3 Phase, 60 Hertz
11.	Signals	Illuminated car and hall buttons, car position indicator with audible signal, car direction sign with dual stroke gong, and as specified herein.
12.	Additional Features	Complete provisions for the handicapped, infrared screen type detector, emergency light, telephone, Voice announcing, and as specified herein.

1.05 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

B. Submit "Letter of Conformance" in accordance with Section 01 33 00 indicating specified items selected for use in project with the following supporting data.

1. Submit Shop Drawings and product data that clearly indicate space requirements, general arrangement of elevator equipment, and material being supplied. Show connections, attachments, reinforcing, anchorage and location of exposed fastenings, and location and amount of loads and reactions to be carried on the building structure.

2. Submit descriptive brochures or detail Drawings of landing buttons, hall fixtures, car position indicators, and car operating panels, car interior, and hoistway doors and frames for review.

3. Samples of exposed finishes for car, hoistway doors and entrances, and operating and signal equipment; 3-inch square samples of sheet materials; and 4-inch lengths of running trim members.

4. Certification that a service office of the manufacturer is located within 100 miles of the Project and that a parts warehouse is located within 100 miles of the Project.

5. Submit repair parts catalogs, instruction manuals, and wiring diagrams specific to this project.

6. Record Documents: Refer to Section 01 78 39 (01785) - Project Record Documents for required closeout documents to be provided at completion of Project.

a. Maintenance manuals for each different traction elevator, including operation and maintenance instructions, parts listing with sources indicated, recommended parts inventory listing, emergency instructions, and similar information. Include all diagnostic and repair information available to manufacturer's and Installer's maintenance personnel. Submit for Owner's information at project closeout as specified in Division 01.

C. Inspection and acceptance certificates and operating permits as required by governing authorities for normal, unrestricted elevator use.

1.06 QUALITY ASSURANCE

A. Installer Qualifications: Engage the elevator manufacturer or an experienced Installer approved by the elevator manufacturer who has completed a minimum of 5 years of experience with elevator installations similar in material, design, and extent to that

indicated for this Project and a record of successful in-service performance.

B. Regulatory Requirements:

1. Conform to:

a. Local and State Codes

b. The American Society of Mechanical Engineers (ASME) Publications:

1) A-17.1 “Safety Code for Elevators, and Escalators”

2) A-17.2 “Guide for Inspection of Elevators, Escalators, and Moving Walks”

c. American National Standards Institute (ANSI) Publications:

1) C1 “National Electric Code”

d. Americans with Disabilities Act (ADA) II Public Accommodations

1) “Americans with Disabilities Act Accessibility Guidelines“ (ADAAG)

e. The Elevator Contractor shall obtain and pay for all required inspections and permits and perform tests as called for by regulations of governing authorities.

C. Fire-Rated Hoistway Entrance Assemblies: Door and frame assemblies complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire-protection ratings indicated, based on testing at as close to neutral pressure as possible according to NFPA 252 or UL 10B.

D. Proprietary Components

1. Processors or other equipment which can only be serviced by the manufacturer are **prohibited**, unless a non-expiring service/adjustment tool and instructions are provided to Owner at no additional cost. Provide onboard diagnostics on elevator controller.

1.07 DELIVERY, STORAGE, AND HANDLING

A. Deliver items or materials to site after area in which they are to be installed is ready to receive them in their place of final installation.

B. Store materials in allotted storage area, and in such a manner as to prevent deterioration, damage, or loss of their essential properties.

1. Fully protect movable and operating equipment from weather.

2. Wrap and create factory finished materials in manner to protect their finishes.

1.08 PROJECT CONDITIONS

A. Temporary Use of Elevators:

1. The elevator shall **not** be used for building construction purposes except as directed after acceptance of the complete installation or after signing of Contractor's "Temporary Acceptance" form.

2. If Owner decides to use the elevators prior to completion of project, approval shall begin when elevators are accepted by Owner's Representative. Temporary use will not be considered final acceptance by the Owner or commencement of warranties.

B. Changes to Drawings and Specification:

1. Review shaft size, machine room size, pit and over-travel dimensions shown on the Drawings and state in a letter with the bid if changes are required to accommodate manufacturer's standard equipment.

2. Failure to furnish such statements will be interpreted to mean that this Contractor

agrees to meet all requirements under this Section, and conflicts with the work of other trades will not result in added expense to Owner.

1.09 MAINTENANCE

A. Maintenance Service:

1. Provide a separate proposal to Owner to maintain entire elevator installation for 12 months after date of Substantial Completion of Work. Use only competent and trained employees of the manufacturer. Provide 24-hour Emergency Call-Back Service during maintenance period.

2. Include systematic examination, adjustment, and lubrication of elevator equipment, repair, or replace worn electrical and mechanical parts of the elevator equipment using only genuine standard parts produced by manufacturer of equipment concerned.

3. Replace seals, packing, and valves to maintain required factor of safety.

4. Perform work without removing cars during peak traffic periods.

5. Ensure that competent personnel handle maintenance service. Maintain locally an adequate stock of parts for replacement or emergency purposes and have qualified personnel available at such places to ensure the fulfillment of this service without unreasonable loss of time.

B. Indicate amount included in the proposal for this maintenance

service. C. Maintenance Proposal:

1. Provide separate amount for maintenance of installed elevator work for a period of one year after termination of regular maintenance as required in the preceding Paragraph.

2. Proposal shall include stipulated sum for above stated time period with premiums due quarterly.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Approved Manufacturers:

1. "MonoSpace"; Kone, Inc. (800-956-5663)

2. “Gen2”; Otis Elevator Co. (800-441-6847)

3. “3300”; Schindler Elevator Corp. (973-397-6500)

4. “H Series”; ThyssenKrupp Elevator (877-230-0303)

2.02

MATERI

ALS A.

Ste

el:

1. Sheet Steel for Exposed Work: Stretcher-leveled, cold-rolled, commercial-quality carbon steel, complying with ASTM A1008, matte finish.

2. Sheet Steel for Unexposed Work: Hot-rolled, commercial-quality carbon steel, pickled and oiled, complying with ASTM A1011.

3. Structural Steel Shapes and Plates: ASTM

A36. B. Stainless Steel:

1. Type 300 Series complying with ASTM A167

C. Aluminum:

1. Extrusions per ASTM B221; sheet and plate per ASTM

B209. D. Plastic Laminate

1. Materials shall comply with NEMA LD-3:

a. Approved Manufacturers:

1) Lamin-Art (800-323-7624)

2) Nevamar Company, LLC (800-638-4380)

3) Pionite Decorative Surfaces, a Panolam Industries International Incorporated
Company (800-746-6483)

4) Formica Corporation (800-367-6422)

5) WilsonArt International, Inc. (800-433-3222)

2. Installation adhesives as recommended by manufacturer for use

intended. E. Fire-Retardant Treated Particleboard Panels:

1. Minimum ½-inch thick backup for plastic laminate veneered panels, provided with suitable anti-warp backing; to meet ASTM E84 Class "A" rating with flame-spread rating of 25 or less.

2.03 CAR ENCLOSURE

A. The elevator cab(s) shall meet the requirements of the ASME A-17.1 Elevator Code, and all Elevator Code Supplements issued to date, including Code restrictions pertaining to flame spread and smoke generation.

B. The car shall be manufacturer's standard car, with finishes as shown below:

1. Refer to Interior Finish Index for the following:

a. Ceiling

b. Front Return Walls

c. Rear and Side

Walls d. Base

e. Entrance Columns

f.

Trans

om g. Car

Doors h.

Car

Sills

2. Handrails - on rear wall only, Stainless Steel No. 4 Finish, ADA acceptable profile as selected by Owner's Representative, spaced 1-1/2" from the car wall at 32" above car floor.

3. Protective pads and hooks - for side and rear walls.

4. Lighting - The minimum illumination in the car shall be in accordance with the latest edition of ANSI/ASME A-17.1 Elevator Code.

5. Floor - Carpet to be installed at site, furnished by [Owner].

6. Signage: Provide engraved sign "Do Not use Elevator in case of Fire - Use Stairs" within cab and beside elevator entrance on each floor. Provide engraved sign "Elevator not to be used by construction personnel" and "Elevator permit on file with manager" in cab.

7. Provide stainless steel license holder in each elevator car to suit certificate issued.

Design holder with non-visible tamper-proof fastenings.

8. Provide reinforced structure at ceiling in conformance with ASME A-17.1.

2.04 CAR FRAME AND PLATFORM

A. The car frame which supports the elevator platform and enclosure shall be made of structural steel members. Platform shall be manufacturer's standard with a suitable sub-floor and a finished floor of carpet by others. Underside of platform shall be properly fireproofed.

2.05 HOISTWAY ENTRANCES AND DOORS

A. Hoistway entrances of the hollow metal, horizontal sliding, side] opening type shall be provided at each of the hoistway openings. Size shall be as indicated in Specification.

B. Fire Rating: Comply with NFPA 80 and Underwriter's Laboratories, Inc. (UL) label or other as accepted by governing authorities, for rating as indicated on Drawings.

C. Finish: Refer to Interior Finish Index for the following, unless shown otherwise:

1. Entrance Frame Profile: Square Jamb

2. Entrance Frame Material and Finish: Baked Enamel

3. Door Panels and Sight Guards: Baked Enamel

4. Entrance Sills: Extruded Aluminum

D. Door Operator and Control

1. Door Operator: A closed loop permanent magnet VVVF high-performance door operator shall be provided to open and close the car and hoistway doors simultaneously. Door movement shall be cushioned at both limits of travel. Electro-mechanical interlock shall be provided at each hoistway entrance to prevent operation of the elevator unless all doors are closed and locked. An electric contact shall be provided on the car at each car entrance to prevent the operation of the elevator unless the car door is closed.

2. The door operator shall be arranged so that, in case of interruption or failure of electric power from any cause, the doors can not be readily opened by hand from within the car, unless the car is within 18 inches of a landing. Emergency devices and keys for opening the doors from the landing shall be provided if allowed by the local codes.

3. The doors shall open automatically when the car is leveling at the respective landings, and shall close after a predetermined time interval or immediately on pressing a car button. A "Door Open" button shall be provided in the car, the momentary pressing of which shall reopen the doors and reset the time interval.

4. Electronic Door Safety Device. The elevator car shall be equipped with an electronic protective device extending the full height of the car. When activated, this sensor shall prevent the doors from closing or cause them to stop and reopen if they are in the

process of closing. The doors shall remain open as long as the flow of traffic continues and shall close shortly after the last person passes through the door opening.

5. Infrared Door Reopening Device: Black, fully enclosed device. Full screen infrared matrix or multiple beams extending vertically along edge of each leading door panel to a minimum height of 7'-0" above finished floor. Device shall prevent doors from closing and reverse doors at normal opening speed if beams are obstructed while doors are closing, except during nudging operation. If device fails, provide for automatic shutdown of car at floor level with doors open.

E. Door Hangers and Tracks:

1. Door hangers and tracks shall be provided for each car and hoistway door. Tracks shall be contoured to match the hanger sheaves. The hangers shall be designed for power operation with provisions for vertical and lateral adjustment. Hanger sheaves shall have polyurethane tires and pre-lubricated sealed-for-life bearings.

F. Hoistway Door Jamb Markings:

1. Floor designation shall be provided on both sides of each hoistway entrance door jamb, visible from within the car and the elevator lobby. Designations shall be Braille and Arabic, 2" high, raised .030" and located 60" above the floor. Include star indication at main egress floor.

2. At the elevator car that accommodates ambulance stretcher, provide international symbol for emergency medical services (Star of Life) placed inside on both sides of the hoistway door frame. The symbol shall not be less than 3-inches high.

2.06 OPERATION & CONTROLS

A. Microprocessor Elevator Logic Control: The operation shall be accomplished utilizing microprocessor computer logic control contained in a cabinet. The elevator control program shall be contained in nonvolatile, programmable, read only memory. Control shall be constructed such that future alterations in elevator operation may readily be made by altering the read only memory. Safety circuits shall be monitored and controlled by the programmable logic control with redundant protection.

B. Selective Collective Operation:

1. Pressure upon one or more Car Buttons shall send the car to the designated landings in the order in which the landings are reached by the car, irrespective of the sequence in which the buttons are pressed, provided the hoistway door interlock and car door switch circuits are completed. During this operation, the car shall also answer calls from the landings which are in the prevailing direction of travel. Each landing call shall be cancelled when answered.

2. Pressure upon a Hall Button at a floor above the car location shall cause the car to start Up and answer any Up calls as they are reached by the car irrespective of the sequence in which the buttons had been pressed. The car shall not stop at floors where Down buttons only had been pressed. If no further Car or Up Hall calls are registered, the car shall reverse its direction preference for response to Car Calls or Down Hall calls.

3. The car shall start Down to answer calls below the car and shall not stop where Up calls only are registered. When traveling Up, the car shall reverse at the highest call and proceed to answer calls below it. When traveling Down, the car shall reverse at the lowest call and answer calls above it.

4. Should both an Up and a Down call be registered at an intermediate landing, only the call corresponding to the direction in which the car is traveling shall be cancelled upon the stopping of the car at the landing. Terminal limit switches shall be provided in the hoistway designed to automatically stop the car at or near the closest

terminal landing.

C. Emergency Stop Switch: An emergency stop switch shall be provided in the car, in the pit, and on top of the car as required by ANSI A-17.1, designed to cut off current supply to motor and down direction valves and bring the car to rest independent of the regular operating devices.

D. Car Operating Panel: A flush-mounted operating panel shall be furnished in the car containing registration push buttons for each floor, alarm button, door open and close push buttons, light switch, independent service switch.

1. Each car registration button shall illuminate when pressed, signaling that the car has been registered. Each button will remain illuminated until the call has been answered.

2. Tactile car control symbols shall be placed adjacent to the emergency stop switch, door open, door close, alarm bell, and all call registration buttons.

3. The car operating panel shall be mounted at Code required handicap levels.

E. Emergency Communication System: Provide hands-free audio Telephone ("Push to Talk") system conforming to ADA recommendations and shall automatically dial Front Desk.

1. Include automatic dialing (minimum rollover for 2 numbers), tracking and recall features with shielded wiring between the car and controller in the machine room (Cable by Div. 27).

2. Use alarm button or separate button for the "Push to Talk" control.

3. Button or adjacent light jewel shall illuminate and flash when call is acknowledged. Button shall match floor pushbutton design. Provide uppercase "Push to Call", "Help on the Way" engraved signage Sans Serif or simple Serif type.

4. Provide Braille, "Telephone" and tactile symbol engraved signage adjacent to button.

5. System shall be included as part of the car station faceplate and shall include instructions for use, and battery back-up power supply.

F. Emergency Light: A battery powered emergency light shall be provided in the elevator car.

G. Car Position Indicator: A digital electric position indicator shall be provided in the elevator car. The position of the car and the hoistway shall be indicated by the illumination of the numeral corresponding to the floor at which the elevator is stopped or passing. An audible signal shall sound to indicate the car is stopping at or passing a floor.

1. Provide similar position indicator at the primary egress floor as directed by the Owner's Representative.

H. Car Direction Signs: A car direction sign with visual and audible signal shall be provided in the car jamb, located 6'-0" above the car floor. The car direction sign shall be visible from the proximity of the hall push button fixture to indicate to the waiting passenger the direction the car will gravel. Two car direction signs shall be provided for each elevator car entrance. Finish to be #4 Stainless Steel.

1. The visual signal lens size shall be at least 2-1/2" in the smallest dimension. The audible signal shall sound once for the up direction and twice for the down direction.

I. Hall Push Buttons: A hall push button station shall be provided for each elevator landing, containing a single push button at the terminal landings and two push buttons at the intermediate landings. Each push button shall illuminate when a call is registered, and shall extinguish when the call is answered. The hall push button fixture shall be mounted at the handicapped required height. Finish to be #4 Stainless Steel.

J. Fire Emergency Service: Provide in conformance with ASME A-17.1

K. Battery Standby Power Transfer (Emergency Return Unit): Upon loss of normal power, provide controls to automatically lower the car(s) nonstop to the lowest landing. Upon arrival at the lowest landing, the elevator doors shall open automatically and remain open until regular door time has expired. The elevator shall then become deactivated. The standby power source shall be provided via 12-volt D.C. battery units installed in machine room, including solid-state charger and testing means mounted in a common metal container. Battery to be rechargeable lead acid or nickel cadmium with a 10-year life expectancy.

1. Upon restoration of normal power, the elevator shall automatically resume normal operation.

PART 3 EXECUTION

3.01 INSPECTION

A. Examine work of other Sections on which the work of this Section depends. Report defects to Owner's representative in writing which may affect work of this Section or equipment operation.

1. Review shaft size, control room size, pit and over-travel dimensions shown on the Drawings and report in writing if changes are required to accommodate manufacturer's standard equipment.

2. Failure to furnish such statements will be interpreted to mean that this Contractor agrees to meet all requirements under this Section, and conflicts with the work of other trades will not result in added expense to Owner.

B. Ensure that shafts and openings for moving equipment are plumb, level, and in-line and that pit is to proper depth with ladder.

C. Ensure that Control Room is properly illuminated, heated, and ventilated and equipment foundations correctly located, complete with floor and access door.

3.02 PREPARATION

A. Before fabrication of controls, take necessary job site measurements and verify where work is governed by other Sections. Check measurement of space for equipment and means of access for installation and operation. Obtain dimensions from site for preparation of Shop Drawings.

B. Ensure the following preparatory work, provided under other Sections has been properly completed to receive the elevator work:

1. Supply of electric feeder wires to the terminals of the elevator control panel, including fused main line switch or circuit breaker. Provision of hoistway outlets for car light, and for light in pit and outlets in machine room for light. Furnishing of electric power for testing and adjusting elevator equipment.

2. Provision of hoistway outlet for telephone.

3. Supply of power for emergency cab lighting and ventilation from power panel specified in Division 26 and fed by the building emergency circuits.

4. Machine room enclosed and protected from moisture, with lockable door.

C. Supply in ample time for installation, inserts, anchors, pipe sleeves, bearing plates, brackets, supports and bracing including setting templates and diagrams for placement.

3.03 INSTALLATION

A. Perform work with competent mechanics skilled in this work and under the direct control and supervision of the elevator manufacturer's experienced foreman.

B. Set hoistway entrances in alignment with car openings and true with plumb sill lines.

C. Install machinery, guides, controls, car, and equipment and accessories in accordance with manufacturer's instructions, applicable codes, and standards to provide a quiet, smoothly operating installation, free from sideway, oscillation, or vibration.

D. Mount machine immediately adjacent to hoistway on concrete foundation. Isolate and dampen machine vibration with properly sized sound-reducing anti-vibration pads.

E. Install and hook-up piping between machine and cylinder.

3.04 FIELD QUALITY CONTROL

A. Obtain and pay for inspections and permits and make such tests as are required by regulations of authorities. Make tests in presence of Owner's Representative.

B. Final inspection shall be after elevator installation, hoisting enclosure, and machine room are complete.

C. Inspect installation in accordance with ASME A-

17.2. D. Deliver test certificates and permits to Owner.

3.05 ADJUSTING AND CLEANING

A. Make necessary adjustments of equipment to ensure elevator operates smoothly and accurately.

B. Prior to final acceptance, remove protection from exposed surfaces and clean and polish surfaces with due regard to type of material.

C. At completion of work of this Section, except for special tools and diagnostic equipment, remove tools, equipment and surplus materials from site.

3.06 TRAINING

A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain units.

1. Train Owner's maintenance personnel on procedures and schedules for troubleshooting, servicing, and maintaining system.

END OF SECTION

SECTION 14 91 33 - LAUNDRY AND LINEN CHUTES

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Linen (laundry) Chutes

B. Related Documents:

1. Fire Protection and Life Safety Design Standards.

C. Related Sections:

1. Section 07 62 00 - Flashing and Sheet Metal
2. Section 21 10 00 - Fire Suppression
3. Division 22 and 26: Hook-ups for water and electrical services.

1.02 REFERENCE STANDARDS

A. American National Standards Institute (ANSI) Publications

B. National Fire Protection Association (NFPA) Publications:

1. 13 “Installation of Sprinkler Systems”
2. 82. “Standard on Incinerators and Waste and Linen Handling Systems and Equipment”

C. Underwriter's Laboratories, Inc. (UL)

1.03 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

B. Submit “Letter of Conformance” in accordance with Section 01 33 00 indicating specified items selected for use in project with the following supporting data.

1. Mark each copy to identify applicable products, characteristics, models, options and other supplemental data to clearly communicate information specific to this project.
2. Product Data: Submit manufacturer's product specifications, standard details, installation instructions and general recommendations for total pre-engineered chute system. Mark- up data sheets to indicate actual selections for sizes and other details of installation.
3. Shop Drawings: Submit 1/4" scale section/elevation drawing, 1/2" scale typical landing plans, and 1-1/2" scale details of chute fabrication. Distinguish between factory fabrication and field assembly work. Show required piping, wiring connections and conduit runs for wiring.
4. Quality Control Submittals:
    a. Test Reports: Fire rating, in duplicate.
5. Certifications:
    a. Contractor’s Certification that:
        1) Manufacturer’s certification that installer of manufacturer’s product is approved.
    b. Applicable standards: NFPA 82, standards as referenced herein.

1.04 QUALITY ASSURANCE

A. Reference Standards: Applicable requirements of standards and specifications referenced herein apply to the Work of this Section.

B. Chute and Accessories: Conform to NFPA, UL and Local Code

requirements. C. Sprinklers: Comply with requirements of NFPA 13 and NFPA

82.

1.05 DELIVERY, STORAGE AND HANDLING

A. Deliver materials to job site in unopened containers bearing manufacturer's name and content identification.

B. Store materials as recommended by the manufacturer.

1.06 PROJECT CONDITIONS

A. Coordination: Coordinate this Work with the Work of other Sections to avoid any delay or interference with other Work.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Preferred Manufacturers:

1. None

B. Approved Manufacturers:

1. Wilkinson-Hi-Rise, LLC. (800-231-3888)
2. Midland Chutes (847-678-4007)
3. US Chutes Corp. (800-872-4883)
4. Chutes International (800-882-4883)

2.02 LINEN CHUTE

A. Chute Sections: 16 gage aluminized steel per NFPA 82, 24" diameter.

1. Factory assemble sections to greatest extent possible. Disassemble only as necessary for shipping and handling limitations. Clearly mark for reassembly and coordinated installation.
2. Design sections to flash inside sections below, with no bolts, clips or other projections inside chute to snag flow of materials.
3. Except for joints required for shipment and installation, provide factory welded or lock-seamed tight joints.
4. Provide expansion joint in chute between supporting grid floor frames.

B. Vent: Extend full diameter chute section through roof; terminate top 4'-0" above roof. Equip 16 gage aluminized steel vent cap with ventilation air space around full diameter of vent riser, insect screen, condensation gutter, roof flashing. Provide roof curb at low slope roofs, installed by roofing contractor.

C. Door Units:

1. UL Labeled Door Units: Provide UL 1-1/2 hour labeled door units with 30-minute temperature rise of 250 deg. F., (139 deg. C.), complete with closers.

2. Chute Intake Door/Frame Units: Provide self-closing units at each landing and at heights above floor as indicated. Use manufacturer's recommended heights if not otherwise shown. Provide 21 inch x 18 inch door size. Equip doors with positive latch, latch handle, and manufacturer's standard keyed cylinder locks. Key outside locks and unlocks door. Provide manufacturer's standard stainless steel door units, ANSI Type 302/304 with standard satin finish or No. 3 directional polish.

   a. Factory Bolt Doors to Intake Throat.

3. Discharge Hopper: Horizontal rolling, UL 1-1/2 hour labeled, spring counterbalanced with fusible link. Provided with required offsets and reinforcing, structural angle door around discharged opening, 2" IPS drain at low point of hopper, pipe pedestal support, 28" wide x 36" high x 14 gage stainless steel hopper door, manufacturer's standard self-latching devices.

4. Accessories:

   a. Flushing Spray Head: 3/4" IPS; installed above top intake door.

   b. Sprinkler Heads: 1/2 IPS; located at or above top service opening of chute, at alternate floor levels in buildings over two stories in height, and at lowest service area, unless otherwise required by local code.

      1) Recess heads out of chute area through which linen travels, with recessed area designed to avoid collection of foreign matter.

5. Electrical Interlocks: Equip the intake door units with electrical interlocks. All doors are normally unlocked. When system is energized by opening one door, the remaining doors shall be automatically locked until system is de-energized. Provide manual control switch stations where indicated.

PART 3 EXECUTION

3.01 EXAMINATION

A. Examine areas in which Work is to be performed. Report in writing, to Owner's Representative, all prevailing conditions that will adversely affect satisfactory execution of Work. Do not proceed with work until unsatisfactory conditions have been corrected.

B. Starting Work constitutes acceptance of the existing conditions and this Contractor shall then, at their expense, be responsible for correcting all unsatisfactory and defective Work encountered.

3.02 INSTALLATION

A. General: Comply with chute manufacturer's instructions and recommendations. Assemble components with tight, non-leaking joints and anchor securely to supporting structure with sufficient anchorages to withstand impact and wind loading stresses on vent units. Provide for thermal expansion movement of chute sections. Except as otherwise indicated, install chutes plumb, without offsets of obstructions, for free fall of materials within chutes. Install chute systems complete with doors, and with safety and fire-resistive components and accessories.

B. Intake and Discharge Doors: Install doors at heights and locations indicated. Provide anchorages, wall/chute interfaces, self-closing operation, self-latching and similar features of installation to comply with labeling and fire-resistive requirements for fire-resistive door construction. Interface door units with throat sections of chutes in a manner which will ensure safe, snag-proof, sanitary depositing of materials in chutes by users.

   1. Coordinate foot-pedal door operator installation with door and enclosure wall installation.

3.03 TESTING, ADJUSTING, CLEANING

A. Test operate components of chute system upon completion of installation; demonstrate use and safety features to Owner's personnel. Operate doors, locks and interlock system to demonstrate that hardware is adjusted and electrical wiring is connected correctly. Where possible, complete test operations prior to installation of shaft enclosures.

B. Cleaning: Following completion of enclosure walls and ceilings, clean exposed surfaces of finished metal components of chute system. Remove foreign substances and repair imperfections in finishes, but do not remove UL labels.

3.04 DEMONSTRATION

A. Arrange demonstration of system operation, conducted by manufacturer's representative, to Owner's maintenance personnel

END OF SECTION

END OF VOLUME 1