

DIVISION 9 - FINISHES

SECTION 09260

GYPSUM BOARD SYSTEMS

PART 1 GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specifications Sections, apply to this Section.
- B. Related Sections:
 - 1. Section 01001 - Basic Requirements
 - 2. Section 09900 - Painting

1.02 SECTION INCLUDES

- A. Metal stud wall framing.
- B. Metal channel ceiling and wall framing.
- C. Acoustic insulation.
- D. Gypsum board with taped and sanded joint treatment.
- E. Aluminum Corner Wall Guards

1.03 SYSTEM DESCRIPTION

- A. Acoustic Attenuation for Identified Interior Partitions: STC in accordance with ASTM E90 and classified per ASTM E 413.
- B. Conform to applicable code for fire rated assemblies and in conjunction with Section 05400 and as follows:
 - 1. Fire Rated Partitions: Listed assembly by, UL, FM, and GA File Numbers. Assemblies tested per ASTM E 119.
 - 2. Fire Rated Ceiling and Soffits: Listed assembly by UL, FM, and GA File Numbers. Assemblies tested per ASTM E 119.
 - 3. Fire Rated Structural Column Framing: Listed assembly by UL, FM, GA File Numbers. Assemblies tested per ASTM E 119.
 - 4. Fire Rated Structural Beam Framing: Listed assembly by UL, FM, GA File Numbers. Assemblies tested per ASTM E 119.
 - 5. Fire Rated Shaft Wall Requirements: One and Two hour in accordance with UL listed assembly number for application requirements.

1.04 SUBMITTALS

- A. Product data for each type of product specified.
- B. Product certificates signed by manufacturers of gypsum board assembly components certifying that their products comply with specified requirements.

1.05 QUALITY ASSURANCE

- A. Perform Work in accordance with ASTM C840. GA-201 - Gypsum Board for Walls and Ceilings. GA-216 - Recommended Specifications for the Application and Finishing of Gypsum Board. GA-600 - Fire Resistance Design Manual. Where Fire rated gypsum board assemblies are indicated, provide materials and construction identical to those of assemblies tested for fire resistance per ASTM E 119 by an independent testing and inspecting agency acceptable authorities having jurisdiction.
- B. Single-Source Responsibility for Steel Framing: Obtain steel framing members for gypsum board assemblies from a single manufacturer.
- C. 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.

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.

1.07 PROJECT CONDITIONS

- A. Environmental Conditions, General: Establish and maintain environmental conditions for applying and finishing gypsum board to comply with ASTM C840 and with gypsum board manufacturer's recommendations.
- B. Room Temperature: For non-adhesive attachment of gypsum board to framing, maintain not less than 40 degree F (4 deg C). For adhesive attachment and finishing of gypsum board, maintain not less than 50 degree F (10 deg C) for 48 hours prior to application and continuously after until dry. Do not exceed 95 deg F (35 deg C) when using temporary heat sources.
- C. Ventilation: Ventilate building spaces, as required, for drying joint treatment materials. Avoid drafts during hot dry weather to prevent finishing materials from drying too rapidly.

PART 2 PRODUCTS

2.01 GYPSUM BOARD SYSTEM

- A. Manufacturers:
 - 1. Steel Framing and Furring:
 - a. Dale Industries, Inc.
 - b. Marino Industries Corp.
 - c. Gold Bond Building Products Div., National Gypsum Co.
 - 2. Grid Suspension Assemblies:
 - a. Chicago Metallic Corp.
 - b. National Rolling Mills Co.

- c. USG Interiors, Inc.
- 3. Gypsum Board and Related Products:
 - a. Firestop Type C, Georgia-Pacific Corp.
 - b. Fire-Shield G, Gold Bond Building Products Div., National Gypsum Co.
 - c. United States Gypsum Co.
- 4. Cementitious Backer Units Product and Manufacturer:
 - a. DomCrete Cementitious Tile-Backer Board, Domtar Gypsum.
 - b. Util-A-Crete Concrete Backer Board, FinPan, Inc.
 - c. Wonder-Board, Glascrete, Inc.
 - d. DUROCK Interior Cement Board, United State Gypsum Co.
- B. Studs and Tracks: ASTM C645; GA-216 and GA-600; galvanized sheet steel, C shape, with serrated faces. All studs and/or joists and accessories shall be made of the type, size, thickness and spacing shown on the drawings or as required by calculation. In no case shall wall studs be less than 20 gauge. For stud walls over 10 feet in height the gauge shall be not less than 18 gauge. Conform to stud gauge called for on structural drawings and details for special conditions where stiffer gauge steel studs are called for.
- C. Furring, Framing and Accessories: ASTM C645. GA-216, and GA-600.
- D. Gypsum Board Types: 5/8 inch thick (rated and non rated), maximum permissible length; ends square cut or (tapered as required), edges; unless noted otherwise as follows:
 - 1. Standard Type: ASTM C36.
 - 2. Fire Rated Type: ASTM C36 fire resistive, UL rated.
 - 3. Moisture Resistant Type: ASTM C630.
 - 4. Exterior Gypsum Soffit Board: ASTM C931.
 - 5. Foil Faced Gypsum Board: ASTM C36.
 - 6. Gypsum Sheathing Board: ASTM C79.
 - 7. Gypsum Core Board: ASTM C442, square edges.
 - 8. Cementitious Backing Board: High density, cementitious, glass fiber reinforced, in thickness required and recommended for application.

2.02 ACCESSORIES

- A. Acoustical Insulation: ASTM C665, preformed mineral wool, friction fit type, unfaced, in thickness required for application.
- B. Acoustical Sealant: Non-hardening, non-skinning, for use in conjunction with gypsum board.
- C. Corner Beads: Metal.
- D. Edge Trim: GA 201 and GA 216, Type LC bead U shape exposed reveal bead.
- E. Joint Materials: ASTM C475, GA 201 and GA 216, reinforcing tape, joint compound, adhesive, and water.
- F. Fasteners: ASTM C1002 Type W nails. ASTM C1002 Type S12 hardened screws. GA 216.
- G. Adhesive: ASTM C557, GA 216.
- H. Aluminum Wall Corner Guards: Contractor is to install brushed aluminum corner guards at all outside sheetrock corners. At outside corners where there is a chairrail and no wainscot the corner guard shall stop at the bottom of the chairrail. At outside corners where there is no chairrail, the corner guard shall stop at a height of 42 inches.

PART 3 EXECUTION

3.01 INSTALLATION - METAL STUDS

- A. Install studding in accordance with ASTM C754. GA-201, GA-216, GA-600 and manufacturer's instructions.
- B. Metal Stud Spacing: 16 inches o.c., unless otherwise required or called for in drawings.
- C. Partition Heights: For non-rated or non-acoustical walls, to 6 inches above suspended ceilings. For fire-rated or acoustical walls, full height to floor or roof construction above. Install additional bracing for partitions extending above ceiling as required. Provide additional bracing to adjacent structure at all openings.

3.02 INSTALLATION - WALL FURRING

- A. Erect freestanding metal stud framing tight to Brick walls; attached by adjustable furring brackets in accordance with manufacturer's instructions. Erect horizontally or vertically for desired application.
- B. Space furring maximum 16 inches on center, not more than 4 inches from floor and ceiling lines.
- C. Install insulation between furring attached to Brick walls in accordance with manufacturer's instructions.
- D. Install furring as required for fire resistance ratings indicated.

3.03 INSTALLATION - CEILING FRAMING

- A. Install in accordance with ASTM C754. GA-216 and manufacturer's instructions.
- B. Coordinate location of hangers with other work. Install ceiling framing independent of walls, columns, and above ceiling work.
- C. Reinforce openings in ceiling suspension system that interrupt main carrying channels or furring channels, with lateral channel bracing.
- D. Laterally brace entire suspension system.

3.04 INSTALLATION - ACOUSTICAL ACCESSORIES

- A. Install resilient channels at maximum 24 inches on center. Locate joints over framing members.
- B. Place acoustical insulation in partitions tight within spaces, around cut openings, behind and around electrical and mechanical items within or behind partitions, and tight to items passing through partitions.
- C. Install acoustical sealant within partitions in accordance with manufacturer's instructions.

3.05 INSTALLATION - GYPSUM BOARD

- A. Install gypsum board in accordance with GA-201, GA-216 and GA-600, and manufacturer's instructions.
- B. Fasten gypsum board to furring or framing with screws. Staples may only be used when securing the first layer of double layer applications.
- C. Place control joints consistent with lines of building spaces as indicated or as directed.
- D. Place corner beads at external corners as indicated or as directed. Use longest practical length. Place edge trim where gypsum board abuts dissimilar materials.

- E. Treat cut edges and holes in moisture resistant gypsum board and exterior gypsum soffit board with sealant.

3.06 JOINT TREATMENT

- A. Tape, fill, and sand exposed joints, edges, and corners to produce smooth surface ready to receive finishes.
- B. Feather coats onto adjoining surfaces so that camber is maximum 1/32 inch.
- C. Taping, filling, and sanding are not required at surfaces behind adhesive applied marble tile and granite.
- D. Provide joint treatment materials complying with ASTM C 475 and the recommendations of both the manufacturer of sheet products and of joint treatment materials for each application.

3.07 TOLERANCES

- A. Maximum Variation from True Flatness: 1/8 inch in 10 feet in any direction.

END OF SECTION - 09260

DIVISION 09 – FINISHES

SECTION 09300

TILE

PART 1 GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Divisions 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. 2" x 2" Floor Tile for Men and Women Restrooms and Showers.
 - 2. Stone thresholds.

1.3 SUBMITTALS

- A. General: Submit the following in accordance with conditions of Contract and Division 1 Specification Sections.
- B. Product data for each type of product specified.
- C. Samples for initial selection purposes in form of manufacturer's standard tile chips consisting of actual tiles or sections of tile showing full range of colors, textures and patterns available for each type and composition of tile indicated. Include samples of grout and accessories involving color selection.

1.4 QUALITY ASSURANCE

- A. Single-Source Responsibility for Tile: Obtain each color, grade, finish, type, composition and variety of tile from a single source with resources to provide products of consistent quality in appearance and physical properties without delaying progress of the work.
- B. Single-Source Responsibility for Setting and Grouting Materials: Obtain ingredients of a uniform quality from one manufacturer for each cementitious and admixture component and from one source or producer for each aggregate.
- C. Installer Qualifications: Engage an experienced installer who has successfully completed tile installations similar in material, design and extent to that indicated for project.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Deliver and store packaged materials in original containers with seals unbroken and labels intact until time of use. Comply with requirement of ANSI A137.1 for labeling sealed tile packages.
- B. Prevent damage or contamination to materials by water, freezing, foreign matter and other causes.

1.6 PROJECT CONDITIONS

- A. Maintain environmental conditions and protect work during and after installation to comply with referenced standards and manufacturer's printed recommendations.
- B. Maintain temperatures at 50 deg F (10 deg C) or more in tiled areas during installation and for 7 days after completion, unless higher temperatures are required by referenced installation standard or manufacturer's instructions.

1.7 EXTRA MATERIALS

- A. Deliver extra materials to Owner. Furnish extra materials that match products installed as described below, packaged with protective covering for storage and identified with labels clearly describing contents.

PART 2: PRODUCTS

2.1 PRODUCTS, GENERAL

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated in the work include, but are not limited to, the following:
 - 1. Emser Tile (Pietre Del Nord) double loaded porcelain series.
 - 2. Daltile Fabrique Collection
- B. ANSI Standard for Tile Installation Materials: Comply with ANSI A137.1 "American National Standard Specifications for Ceramic Tile" for types, compositions and grades of tile indicated.
- C. ANSI Standard for Tile Installation Materials: Comply with ANSI standard referenced with products and materials indicated for setting and grouting.
- D. Coefficient of Friction of Wearing Surface for Floor tile. Wet and dry values of at least .60 per CTI 69-5.
- E. Colors, textures and Patterns: Where manufacturer's standard products are indicated for tile, grout and other products requiring selection of colors, surface textures, patterns and other appearance characteristics, provide specific products or materials complying with the following requirements:
 - 1. Provide selections made by Architect from manufacturer's full range of standard colors, textures and patterns for products of type indicated.
 - 2. Provide tile trim and accessories that match color and finish of adjoining flat tile.
- F. Factory Blending: For tile exhibiting color variations within the ranges selected during sample submittals, blend tile in factory and package accordingly so that tile units taken from one package show the same range in colors as those taken from other packages and match approved samples.
- G. Mounting: Where factory-mounted tile is required, provide back-or-edge-mounted tile assemblies as standard with manufacturer unless another mounting method is indicated.
 - 1. Where tile is indicated for installation in wet areas, do not use back-or-edge-mounted tile assemblies unless tile manufacturer specifies that this type of mounting is suitable for these kinds of use and has been successfully used on other projects.

2.2 TILE PRODUCTS

- A. 2" x 2" Unpolished Porcelain FloorTile: Provide flat tile complying with the following requirements:
 - 1. Nominal Facial Dimensions: 2" x 2", unless otherwise indicated.
 - 2. Nominal Thickness: 3/8".
 - 3. Composition: Porcelain.
 - 4. Style: Emser Tile (Pietre Del Nord) double loaded porcelain series
Daltile Crop. Fabrique Collection
 - 5. Color:
 - a. Field Color: To be selected by Architect from full range of colors.
 - b. Accent Band for Wall Band and Floor Border: Pietre Michigan Matt Brown
- B. Trim Units: Provide tile trim units to match characteristics of adjoining flat tile and to comply with following requirements:
 - 1. Size: As indicated, coordinated with sizes and coursing of adjoining flat tile where applicable.
 - 2. Shapes: As follows, selected from manufacturer's standard shapes:
 - a. Base for Portland Cement Mortar Installations: Coved.
 - b. Wainscot Cap for Thinset Mortar Installations: Surface bullnose.
 - c. External Corners for Thinset Installations: Surface bullnose.
 - d. Internal Corners: Field-butt square corners, except use coved base and cap angle pieces designed to member with stretcher shapes.

C. Edge Protection and Transition for Outside Corners

1. Schluter®-RONDEC Description: bullnose-type profile with symmetrically rounded visible surface with 1/4 inch (6 mm) radius, integrated trapezoid-perforated anchoring leg, and integrated grout joint spacer.
2. Material and Finish:[AE - Satin Anodized Aluminum]
3. Height: Floor to Ceiling.
4. Schluter Systems, L.P., 194 Pleasant Ridge Road, Plattsburgh, NY 12901-5841. Tel.: (800) 472-4588. Fax: (800) 477-9783. E-mail: specassist@schluter.com. Internet: www.schluter.com.

2.3 STONE THRESHOLDS

- A. General: Provide stone that is uniform in color and finish, fabricated to sizes and profiles indicated or required to provide transition between tile surfaces and adjoining finished floor surfaces.
- B. Marble Thresholds: Provide marble thresholds complying with ASTM C 503 requirements for exterior use and for abrasion, resistance where exposed to foot traffic, a minimum hardness of 10 per ASTM C 241.
 1. Provide white, honed marble complying with MIA Group "A" requirements for soundness.

2.4 WATERPROOFING FOR THINSET TILE INSTALLATIONS

- A. Polyethylene Sheet Waterproofing: Manufacturer's standard product consisting of composite sheets, 60 inches wide by a nominal thickness of 0.030, composed of an inner layer of chlorinated polyethylene sheet faced on both sides with laminated high-strength nonwoven polyester material, designed for embedding in latex-portland cement mortar, and as substrate for latex-portland cement mortar setting bed.

2.5 SETTING MATERIALS

- A. Portland Cement Mortar Installation Materials: Provide materials complying with ANSI A108.1 and as specified below.
 1. Cleavage Membrane: Asphalt felt, ASTM D 226, Type 1 (No. 15), or polyethylene sheeting ASTM D 4397, 4.0 mils thick.
 2. Latex additive (water emulsion) described below, serving as replacement for part or all of gauging water, of type specifically recommended by latex additive manufacturer for use with job-mixed portland cement and aggregate mortar bed.
 - a. Latex Additive: Manufacturer's standard.
- B. Latex-Portland Cement Mortar: ANSI A118.4, composition as follows:
 1. Prepackaged dry mortar mix composed of portland cement, graded aggregate, and the following dry polymer additive in the form of a reemulsifiable powder to which only water is added at job site.
 - a. Dry Polymer Additive: Manufacturer's standard.
 2. Latex additive (water emulsion) of type described below, serving as replacement for part or all of gauging water, combined at job site with prepackaged dry mortar mix supplied or specified by latex additive manufacturer.
 - a. Latex Type: Manufacturer's standard.
- C. Water-Cleanable Tile-Setting Epoxy Adhesive: ANSI A118.3.
- D. Organic Adhesive: ANSI A136.1, Type I.

2.6 GROUTING MATERIALS

- A. Dry-Set Grout: ANSI A118.6, color as indicated.
- B. Latex-Portland Cement Grout: ANSI A118.6, color as indicated, composition as follows:
 1. Prepackaged dry grout mix composed of portland cement, graded aggregate and the following dry polymer additive in the form of a reemulsifiable powder to which only water is added at job site.
 - a. Dry Polymer Additive: Polyvinyl acetate or ethylene vinyl acetate.
 2. Latex additive (water emulsion) serving as replacement for part or all of gauging water, added at job site with dry grout mixture, with type of latex and dry grout mix as follows:

- a. Latex Type: Manufacturer's standard.
- b. Dry Grout Mixture: Dry-set grout specified or supplied by latex additive manufacturer. Use latex additive without retarder with dry-set grout.
(1) Application: Use dry-set grout combined with latex additive for grouting joints in glazed wall tile.
- c. Dry Grout Mixture: Commercial portland cement specified or supplied by latex additive manufacturer.
(1) Application: Use commercial portland cement grout combined with latex additive for grouting joints in floor tile unless otherwise indicated.

2.7 ELASTOMERIC SEALANTS

- A. General: Provide Manufacturer's standard chemically curing, elastomeric sealants of base polymer indicated that comply with requirements of Division 7 Section "Joint Sealers," including ASTM C 920 as referenced by Type, Grade, Class and Uses.
- B. Colors: Provide colors of exposed sealants to match colors of grout in tile adjoining sealed joints unless otherwise indicated.
- C. One-Part Mildew-Resistant Silicone Sealant: Type S; Grade NS; Class 25; Uses NT, G, A, and as applicable to nonporous joint substrates indicated, O; formulated with fungicide, intended for sealing interior ceramic tile joints and other nonporous substrates that are subject to In-service exposures of high humidity and temperature extremes.

2.8 MIXING MORTARS AND GROUT

- A. Mix mortars and grouts to comply with requirements of referenced standards and manufacturers including those for accurate proportioning of materials, water or additive content; type of mixing equipment, selection of mixer speeds, mixing containers, mixing time, and other procedures needed to produce mortars and grouts of uniform quality with optimum performance characteristics for application indicated.

PART 3: EXECUTION

3.1 EXAMINATION

- A. Examine substrates and areas where tile will be installed, with installer present, for compliance with requirements for installation tolerance and other conditions affecting performance of installed tile.
 - 1. Verify that substrates for setting tile are firm, dry, clean and free from oil or waxy films and curing compounds.
 - 2. Verify that installation of grounds, anchors, recessed frames, electrical and mechanical units of work and similar items located in or behind tile has been completed before installing tile.
- B. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Blending: For tile exhibiting color variations within the ranges selected during sample submittals, verify that tile has been blended in factory and packaged accordingly so that tile units taken from one package show the same range in colors as those taken from other packages and match approved samples. If not factory blended, either return to manufacturer or blend tiles at project site before installing.

3.3 INSTALLATION, GENERAL

- A. ANSI Tile Installation Standard: Comply with parts of ANSI 108 series of tile installation standards included under "American National Standard Specifications for the Installation of Ceramic Tile" that apply to type of setting and grouting materials and methods indicated.
- B. TCA Installation Guidelines: TCA Installation methods indicated.

- C. Extend tile work into recesses and under or behind equipment and fixtures to form a complete covering without interruptions except as otherwise shown. Terminate work neatly at obstructions, edges and corners without disrupting pattern or joint alignments.
- D. Accurately form intersections and returns. Perform cutting and drilling of tile without marring visible surfaces. Carefully grind cut edges of tile abutting trim, finish, or built-in items, for straight aligned joints. Fit tile closely to electrical outlets, piping, fixtures and other penetrations so that plates, collars or covers overlap tile.
- E. Jointing Pattern: Unless otherwise shown, lay tile in grid pattern. Align joints when adjoining tiles on floor, base, walls, and trim are same size. Lay out tile work and center tile fields in both directions in each space or on each wall area. Adjust to minimize tile cutting. Provide uniform joint widths unless otherwise shown.
 - 1. For tile mounted in sheets, make joints between tile sheets same width as joints within tile sheets so that extent of each sheet is not apparent in finished work.
- F. Lay out tile wainscots to next full tile beyond dimensions indicated.
- G. Expansion Joints: Locate expansion joints and other sealant-filled joints, including control, contraction and isolation joints, where indicated during installation of setting materials, mortar beds and tile. Do not saw cut joints after installation of tiles.
 - 1. Locate joints in tile surfaces directly above joints in concrete substrates.
- H. Grout tile to comply with the requirements of the following installation standards:
 - 1. For ceramic tile grouts (sand-portland cement, dry-set, commercial portland cement, and latex-portland cement grouts), comply with ANSI A108.10.

3.4 WATERPROOFING FOR THINSET TILE INSTALLATIONS

- A. Install waterproofing in compliance with waterproofing manufacturer's instructions to produce a waterproof membrane of uniform thickness bonded securely to substrate.
- B. Do not install tile over waterproofing until waterproofing has cured and been treated to determine that it is watertight.

3.5 FLOOR INSTALLATION METHODS

- A. Ceramic (Porcelain) Tile: Install tile to comply with requirements indicated below for setting bed methods, TCA installation methods related to types of subfloor construction and grout types:
 - 1. Portland Cement Mortar: ANSI A 108.1
 - a. Bond Coat: Portland cement paste or dust coat on plastic bed or the following thin-set mortar on cured bed, ANSI A108.5, at contractor's option:
 - 1) Latex-portland cement mortar.
 - b. Concrete sub-floors, Interior: TCA F111 (cleavage membrane).
 - c. Concrete sub-floors, Interior, Waterproofing Membrane: TCA F121.
 - d. Grout: Dry-set.
 - e. Grout: Latex-portland cement.
 - 2. Organic Adhesive: ANSI A108.4.
 - a. Concrete Subfloors, Interior: TCA F116.
 - b. Grout: Latex-portland cement.
 - 3. Latex-Portland Cement Mortar: ANSI A108.5.
 - 4. Dry-Set Portland Cement Mortar: ANSI A108.5.
 - a. Concrete Sub-floors, Interior: TCA F113.
 - b. Cementitious Backer Unit Underlayment, Interior: TCA F144.
 - c. Grout: Latex-portland cement.
- B. Stone Thresholds: Install stone thresholds at locations indicated; set in same type of setting bed as abutting field tile unless otherwise indicated.
 - 1. Set thresholds in latex-portland cement mortar for locations where mortar bed would otherwise be exposed above adjacent nontile floor finish.

3.6 SEALING TILE FLOORS:

- A. See Division 9 – Section 09900 Painting.

3.7 CLEANING AND PROTECTION

- A. Cleaning: Upon completion of placement and grouting, clean all ceramic tile surfaces so they are free of foreign matter.
 - 1. Remove latex-portland cement grout residue from tile as soon as possible.
 - 2. Unglazed tile may be cleaned with acid solutions only when permitted by tile and grout manufacturer's printed instructions, but no sooner than 14 days after installation. Protect metal surfaces, cast iron and vitreous plumbing fixtures from effects of acid cleaning. Flush surface with clean water before and after cleaning.
- B. Finished Tile Work: Leave finished installation clean and free of cracked, chipped, broken, unbonded and otherwise defective tile work.
- C. Provide final protection and maintain conditions in a manner acceptable to manufacturer and installer that ensures that tile is without damage or deterioration at time of substantial completion.
 - 1. When recommended by tile manufacturer, apply a protective coat of neutral protective cleaner to completed tile walls and floors. Protect installed tile work with Kraft paper or other heavy covering during construction period to prevent staining, damage, and wear.
 - 2. Prohibit foot and wheel traffic from tiled floors for at least 7 days after grouting is completed.
- D. Before final inspection, remove protective coverings and rinse neutral cleaner from tile surfaces.

END OF SECTION – 09300

DIVISION 9 – FINISHES

SECTION 09520

SUSPENDED ACOUSTICAL CEILINGS

PART 1: GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Divisions 1 Specification Sections, apply to work of this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Acoustical ceiling panels.
 - 2. Exposed grid suspension system.
 - 3. Wire hangers, fasteners, main runners, cross tees, and wall angle molding.
- B. Related Sections:
 - 1. Section 01001- Basic Requirements.
 - 2. Section 09250-Gypsum Board Systems.
 - 3. Division 15 -Sections Mechanical Work.
 - 4. Division 16 -Sections Electrical Work.
- C. Alternates
 - 1. Prior Approvals: Prior approvals shall be subject to the requirements of Section 01001 and the Instructions to Bidders.

1.3 REFERENCES

- A. American Society for Testing and Materials (ASTM)
 - 1. ASTM A 1008 Standard Specifications for Steel, Sheet, Cold Rolled, Carbon, Structural, High-Strength Low Alloy and High-Strength Low-Alloy with Improved Formability.
 - 2. ASTM A 641 Standard Specifications for Zinc-Coated (Galvanized) Carbon Steel Wire.
 - 3. ASTM A 653 Standard Specifications for Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process.
 - 4. ASTM C 423 Sound Absorption and Sound Absorption Coefficient by the Reverberation Room Method.
 - 5. ASTM 635 Standard Specifications for Metal Suspension System for Acoustical Tile and Lay-in-Panel Ceilings.
 - 6. ASTM C 636 Recommended Practice for Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-in-Panels.
 - 7. ASTM E 84 Standard Test Method for Surface Burning Characteristics of Building Materials.
 - 8. ASTM E 1414 Standard Test Method for Airborne Sound Attenuation Between Rooms Sharing a Common Ceiling Plenum.
 - 9. ASTM E 1111 Standard Test Method for Measuring the Interzone Attenuation of Ceilings Systems.
 - 10. ASTM E 1264 Classification for Acoustical Ceiling Products.
 - 11. ASTM E 1477 Standard Test Method for Luminous Reflectance Factor of Acoustical Materials by Use of Integrating-Sphere Reflectimeters.
 - 12. ASTM D 3273 Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber.
 - 13. ASTM E 119 Standard Test Methods for Fire Tests of Building Construction and Material.
- B. ASHRAE Standard 62.1-2004, "Ventilation for Acceptable Indoor Air Quality"

1.4 SUBMITTALS

- A. Product Data: As per Section 01001.
- B. Samples: As per Section 01001.
- C. Shop Drawings: As per Section 01001.

- D. Certification: Manufacturers certification that products comply with specified requirements, including laboratory reports showing compliance with specified tests and standards. For acoustical performance, each carton of material must carry an approved independent laboratory classification of NRC, CAC, and AC.
- E. If the material supplied by the acoustical subcontractor does not have an Underwriter's Laboratory classification of acoustical performance on every carton, subcontractor shall be required to send material from every production run appearing on the job to an independent or NVLAP approved laboratory for testing, at the architect's or owner's discretion. All products not conforming to manufacturing's current published values must be removed, disposed of and replaced with complying product at the expense of the Contractor performing the work.

1.5 QUALITY ASSURANCE

- A. Single-Source Responsibility: Provide acoustical panel units and grid components by a single manufacturer.
- B. Fire Performance Characteristics: Identify acoustical ceiling components with appropriate markings of applicable testing and inspection organization.
 - 1. Surface Burning Characteristics: As follows, tested per ASTM E 84 and complying with ASTM E 1264 for Class A products.
 - a. Flame Spread: 25 or less.
 - b. Smoke Developed: 50 or less.
- C. Handle acoustical ceiling units carefully to avoid chipping edges or damaged units in any way.

1.6 DELIVERY, STORAGE AND HANDLING

- A. Deliver acoustical ceiling units to project site in original, unopened packages and store them in a fully enclosed space where they will be protected against damage from moisture, direct sunlight, surface contamination, and other causes.
- B. Before installing acoustical ceiling units, permit them to reach room temperature and a stabilized moisture content.
- C. Handle acoustical ceiling units carefully to avoid chipping edges or damaged units in any way.

1.7 PROJECT CONDITIONS

- A. Space Enclosure: All ceiling products and suspension systems must be installed and maintained in accordance with Manufacturer's written installation instructions for that product in effect at the time of installation and best industry practice. Prior to installation, the ceiling product must be kept clean and dry, in an environment that is between 32 degrees F., and 120 degrees F. and not subject to abnormal conditions.
- B. HumiGuard Plus Ceilings: Installation of the products shall be carried out where the temperature is between 32 degrees F and 120 degrees F. It is not necessary for the area to be enclosed or for HVAC systems to be functioning. All wet work (plastering, concrete, etc.) must be complete and dry. The ceilings must be maintained to avoid excessive dirt or dust buildup that would provide a medium for microbial growth on ceiling panels. Microbial protection does not extend beyond the treated surface as received from the factory, and does not protect other materials that contact the treated surface such as supported insulation materials.

1.8 WARRANTY

- A. Acoustical Panel: Submit a written warranty executed by the manufacturer, agreeing to repair or replace acoustical panels that fail within the warranty period. Failures include, but are not limited to:
 - 1. Acoustical Panels: Sagging and warping as a result of defects in materials or factory workmanship.
 - 2. Grid System: Rusting and manufacturer's defects.
 - 3. Acoustical Panels with BioBlock Plus or designated as inherently resistive to the growth of micro-organisms installed with Armstrong suspension systems: Visible sag and will resist the growth of mold/mildew and gram positive and gram negative odor and stain causing bacteria.
- C. Warranty Period Humiguard: Acoustical panels and grid systems with Humiguard Plus performance supplied by one source manufacturer is thirty (30) years from date of substantial completion.
- D. The Warranty shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and will be in addition to and run concurrent with other warranties made by the Contractor under the requirements of the Contract Documents.

1.9 MAINTENANCE

- A. Extra Materials: Deliver extra materials to Owner. Furnish extra materials described below that match products installed. Packaged with protective covering for storage and identified with appropriate labels.
 - 1. Acoustical Ceiling Units: Furnish quality of full-size units equal to 5.0 percent of amount installed.

2. Exposed Suspension System Components: Furnish quantity of each exposed suspension component equal to 2.0 percent of amount installed.

PART 2 – PRODUCTS

2.1 MANUFACTURER

- A. Armstrong World Industries, Inc.
- B. U.S G Interiors, Inc.

2.2 ACCOUSTICAL CEILING UNITS

A. Acoustical Panel Type:

1. Surface Texture: Fine
2. Composition: Fiberglass
3. Color: White
4. Size: 24” x 24” x 1”
5. Edge Profile: Square Tegular for interface with Suprafine XL 9/16” Exposed Tee.
6. Noise Reduction Coefficient (NRC): ASTM C 423; Classified with UL label on product carton, 0.95.
7. Ceiling Attenuation Class (CAC): ASTM C 1414; Classified with UL label on product carton, Not Applicable.
8. Articulation Class (AC): ASTM E 1111; Classified with UL label on product carton 190.
9. Emissions Testing: Section 01350 Protocol, <13.5 ppb of formaldehyde when used under typical conditions required by ASHRAE Standard 62.1-2004, “Ventilation for Acceptable Indoor Air Quality”.
10. Flame Spread: ASTM E 1264; Class A (UL).
11. Light Reflectance (LR): ASTM E 1477; White Panel: Light Reflectance: 0.90.
12. Dimensional Stability: HumiGuard Plus-Temperature is between 32 degrees F and 120 degrees F. It is not necessary for the area to be enclosed or the HVAC systems to be functioning. All wet work (plastering, concrete, etc.) must be complete and dry.
13. Antimicrobial Protection: Inherent – Resists the growth of mold/mildew and bacterial growth.
14. Acceptable Product: Optima Open Plan, 3251 as manufactured by Armstrong World Industries or equal.

2.3 Suspension Systems

- A. Components: All main beams and cross tees shall be commercial quality hot-dipped galvanized steel as per ASTM A 653. Main beams and cross tees are double-web steel construction with type exposed flange design. Exposed surfaces chemically cleansed, capping pre-finished galvanized steel in baked polyester paint. Main beams and cross tees shall have rotary stitching.
 1. Structural Classification: ASTM C 635 Intermediate Duty.
 2. Color: White and match the actual color of the selected ceiling tile, unless noted otherwise.
 3. Acceptable Product: Suprafine XL 9/16” Exposed Tee as manufactured by Armstrong World Industries, Inc. or equal.
- B. Attachment Devices: Size for five times design load indicated in ASTM C 635, Table 1, Direct Hung unless otherwise indicated.
- C. Wire for Hangers and Ties: ASTM A 641, Class 1 zinc coating, soft temper, pre-stretched, with a yield stress load of at least time three design load, but not less than 12 gauge.
- D. Edge Moldings and Trim: Metal or extruded aluminum of types and profiles indicated or if not indicated, manufacturer’s standard moldings for edges and penetrations, including light fixtures, that fit type of edge detail and suspension system indicated. Provide moldings with exposed flange of the same width as exposed runner.
- E. Accessories.

PART 3 – EXECUTION

3.1 EXAMINATION

- A. Do not proceed with installation until all wet work such as concrete, terrazzo, plastering and painting has been completed and thoroughly dried out, unless expressly permitted by manufacturer’s printed recommendations.

3.2 PREPARATION

- A. Measure each ceiling area and establish layout of acoustical units to balance border widths at opposite edge of each ceiling. Avoid use of less than half width units at borders, and comply with reflected ceiling plans. Coordinate panel layout with mechanical and electrical fixtures.
- B. Coordination: Furnish layouts for preset inserts, clips, and other ceiling anchors whose installation is specified in other sections.
 - 1. Furnish concrete inserts and similar devices to other trades for installation well in advance of time needed for coordination of other work.

3.3 INSTALLATION

- A. Install suspension system and panels in accordance with the manufacturer's instructions and in compliance with ASTM C 636 and with the authorities having jurisdiction.
- B. Suspend main beam from overhead construction with hanger wires spaced 4'-0" o.c. along the length of the main runner. Install hanger wires plumb and straight.
- C. Install wall molding at intersection of suspended ceiling and vertical surfaces. Miter corners where wall moldings intersect or install corner caps.
- D. For reveal edge panels: Cut and reveal or rabbet edges of ceiling panels at border areas and vertical surfaces.
- E. Install acoustical panel in coordination with suspended system, with edge resting on flanges of main runner and cross tees. Cut and fit panels neatly against abutting surfaces. Support edges by wall moldings. Notify architect if abutting walls are not plumb or straight prior to installing any grid.

3.4 ADJUSTING AND CLEANING

- A. Replace damaged and broken panels.
- B. Clean exposed surfaces of acoustical ceilings, including trim, edge moldings, and suspension members. Comply with manufacturer's instructions for cleaning and touch up of minor finish damage.
 - 1. Ceiling Touch-Up Paint, (Item #5760, 8oz. Bottles) (Item #5761, quart size cans), "global white" latex paint should be used to hide minor scratches and nicks in the surface and to cover field tegularized edges that are exposed to view.
- C. Remove and replace work that cannot be successfully cleaned and repaired to permanently eliminate evidence of damage.

END OF SECTION - 09520

DIVISION 9 – FINISHES

SECTION 09521

ACOUSTICAL TREATMENT

PART 1: GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Divisions 1 Specification Sections, apply to work of this Section.

1.2 SUMMARY

- A. Extent of each type of acoustical treatment is shown and scheduled on drawings.
- B. Types of acoustical treatment specified in this section include the following:
 - 1. Acoustical application sound absorber panels, ½ inch thick on walls at all **interior restroom walls.**

1.3 SUBMITTALS

- A. Product Data: Submit manufacturer's technical data for each type of acoustical insulation attachment system required.
- B. Samples for verification purposes: Submit the following:
 - 1. 12" square samples of each acoustical sound absorber type.
 - 2. One each of each type of a fastening device.

1.4 QUALITY ASSURANCE

- A. Fire Performance Characteristics: Provide acoustical sound absorber panels that are identical to those tested for the following fire performance characteristics, according to ASTM test method required, by UL or other testing and inspecting agency acceptable to authorities having jurisdiction. Identify acoustical ceiling components with appropriate marking of applicable testing and inspecting agency.
 - 1. Surface Burning Characteristics: As Follows.
 - a. Flame Spread: 25 or less.
 - b. Smoke Developed: 50 or less.
- B. Coordination of Work: Coordinate layout and installation of sound absorber panels with other work supported by, or penetrating through, ceilings, including light fixtures, HVAC equipment, fire-suppression system components (if any), and partition system (if any).

1.5 DELIVERY, STORAGE AND HANDLING

- A. Deliver sound absorber panels to the job site in original, unopened packages and store them in a fully enclosed space where they will be protected against damage from moisture, direct sunlight, surface contamination or other causes.
- B. Before installing units, permit them to reach room temperature and a stabilized moisture content.
- C. Handle units carefully to avoid damaging units in any way.

1.6 PROJECT CONDITIONS

- A. Space Enclosure: Do not install sound absorber panels until space is enclosed and weatherproof, nominally dry, and ambient conditions of temperature and humidity will be continuously maintained at values near those indicated for final occupancy.

PART 2: PRODUCTS

2.1 SOUND ABSORBER PANELS FOR MECHANICAL ROOMS

- A. Sound absorbent materials for mechanical rooms on walls and other areas as indicated on the drawings.
- B. Provide highly efficient tuned sound absorber designed for low and mid-frequency sound absorption to consist of 3 pcf glass fiber core completely protected with 10-mil thick neoprene coated, fiberglass reinforced, aluminized polyester reflective film facing or equal fiberglass reinforced fabric, coated with black elastomer (neoprene) compound and laminated to aluminized polyester film. Two-inch (2") thick material rated at NRC .94 absorption coefficient. Board-like absorber shall have structural integrity and damage resistant and used in temperatures from -40 deg F. to +450 deg F.; shall have highly reflective surface and flame resistant properties. Fire Hazard Classifications: Flame spread 15; fuel contributed 0; smoke developed 10 with coated side exposed. Equal to Peabody S4 sound absorber panels; Pelican RM Acoustical Board.

- C. Sound Absorption coefficient as follows:

1	Frequency, Hz.	2" Thick
	0125	0.26
	0160	0.35
	0200	0.62
	0250	0.80
	0315	1.01
	0400	1.18
	0500	1.23
	0630	1.17
	0800	1.08
	1000	1.00
	1250	0.93
	1600	0.81
	2000	0.71
	2500	0.64
	3150	0.53
	4000	0.43
	NRC	0.94

2.2 SOUND ABSORBER PANELS FOR OTHER WALL CONDITIONS

- A. Provide ½" sound absorber panels in walls indicated on the plans.
1. Provide sound absorber panels on walls that separate offices, conference rooms, and in all halls.

2.3 MISCELLANEOUS MATERIALS

- A. Acoustical Sealant: Resilient, non-staining, non-shrinking, non-hardening, non-skinning, non-drying, non-sag sealant intended for interior sealing of concealed construction joints.
1. Available Products: Subject to compliance with requirements, products which may be incorporated in the work include, but are not limited to, the following:
- a. BA-98; Pecora Corp.
- b. Tremco Acoustical Sealant; Tremco

2.4 STC Ratings:

1. STC ratings for all private offices shall be no less than 37.
2. STC rating for Conference, Meeting and Seminar Rooms shall be no less than 42.
3. STC rating for Restroom/Toilet Rooms shall be no less than 42.
4. STC rating for Multi-Purpose Meeting Room shall be no less than 42.

PART 3: EXECUTION

3.1 PREPARATION

- A. Coordination: Make sure work penetrating sound absorber panels is in place

3.2 INSTALLATION

A. Sound Absorber Panels:

1. Material installed by impaling on welded pins or using edge clips or batten strips. All pins secured flush with surface of absorber. Install in strict accordance with manufacturer's recommendations and as indicated on the drawings. Tape all exposed joints, edges and penetrations with 2" wide matching tape. (self-adhesive).
2. Guarantee: Furnish Architect with regular guarantee that sound absorbent materials meet requirements of specifications and standards stated above.

3.3 CLEANING

- A. Clean exposed surfaces of sound absorber panels; comply with manufacturer's instructions for cleaning and touch-up of minor damage. Remove and replace work, which cannot be successfully cleaned and repaired to permanently eliminate evidence of damage.
- B. Protect until substantial completion or acceptance.

END OF SECTION - 09521

DIVISION 9 - FINISHES

SECTION 09650

RESILIENT FLOORING

PART 1: GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specifications Sections, apply to this Section.

1.02 SECTION INCLUDES

- A. 4" x 36" Luxury Vinyl Tile by Shaw from Uncommon Ground Collection.

1.03 SYSTEM DESCRIPTION

- A. Floor Materials: Conform to applicable code for flame/smoke rating requirements of in accordance with ASTM E84.
 - 1. Critical Radiant Flux: 0.45 watts per sq. cm or more per ASTM E 648.
 - 2. Smoke Density: Less than 450 per ASTM E 662.

1.04 DELIVERY, STORAGE AND HANDLING

- A. Deliver tiles and installation accessories to Project site in original manufacturer's unopened containers. Follow manufacturer shipping and handling instructions.
- B. Store in dry spaces protected from weather and maintain ambient temperature between 50 deg F and 90 deg F.

1.05 PROJECT CONDITIONS

- A. Maintain a minimum temperature of 70 deg F in spaces to receive tile at least 48 hours before and after installation. After installation maintain a temperature of not less than 55 deg. F. Tiles should be same temperature as space at time of installation.
- B. Close spaces to traffic during tile installation.
- C. Schedule installation of tile in sequence with other work after finishing operations including painting have been completed.

1.06 EXTRA MATERIALS

- A. Deliver extra materials to Owner. Furnish extra materials matching product installed.
- B. Furnish not less than one box for each 50 boxes or fraction thereof of each class, wearing surface, color pattern and size of resilient floor tile installed.

1.07 WARRANTY

- A. 10 year limited wear warranty and a 2-year limited warranty against any manufacturing defects/

PART 2: PRODUCTS

A New FFA Conference Center
Coco & Company
Project # 0225
3.31.26

2.01 TILE MATERIALS

- A. Luxury Vinyl Tile: ASTM F1066:
 - 1. Size: 4" x 36" Nominal. Other sizes may be considered if manufacturer offers additional sizes.
 - 2. Thickness: 20 mil LVT
 - 4. Class: Class 2 (Through Pattern Tile).
 - 5. Wearing Layer: Smooth
 - 6. Color: As selected by Architect from manufacturer's full range of colors and patterns produced for tile of class, wearing surface, thickness, size and pattern specified.
 - 7. Acceptable Manufacturers:
 - a. Shaw Hard Surface
 - 8. Floor Pattern: Verify floor pattern from architectural sheet showing floor pattern finish.

2.02 ACCESSORIES

- A. Subfloor Filler: Use type recommended by floor material manufacturer.
- B. Primers and Adhesives: Waterproof, type recommended by floor material manufacturer.
- C. Edge Strips: Flooring Material or as recommended by floor material manufacturer.
- D. Sealer and Wax: Types recommended by floor material manufacturer.
- E. For all accessories used that are recommended by floor material manufacturer, Contractor will be required to submit written information verifying manufacturer recommendations prior to any installation or other work to be done.

PART 3: EXECUTION

3.01 EXAMINATION AND PREPARATION

- A. Verify concrete floors are dry to a maximum moisture content of 7 percent, and exhibit negative alkalinity, carbonization, or dusting.
- B. Fill minor or local low spots and other defects with subfloor filler.
- C. Vacuum clean substrate.
- D. Apply primer to surfaces.

3.02 INSTALLATION - TILE MATERIAL

- A. Install in accordance with manufacturer's instructions.
- B. Spread adhesive and set flooring in place. Press with heavy roller to attain full adhesion.
- C. Install tile flooring and borders with joints and seams parallel to building lines. Allow minimum 1/2 full size tile width at room or area perimeter and border if applicable.
- D. Terminate flooring at centerline of door openings where adjacent floor finish is dissimilar. Install edge strips where flooring terminates.
- E. Scribe flooring to appurtenances to produce tight joints.

- F. At movable partitions install flooring under partitions without interrupting floor pattern.
- G. Install feature strips, edge strips where indicated. Fit joints tightly.

3.03 CLEANING

- A. Remove excess adhesive from surfaces without damage.
- B. It will be the Contractor's responsibility to Strip and clean tile prior to applying manufacturer's recommended sealer and wax finish.
- C. Clean, seal, and wax surfaces in accordance with manufacturer's instructions prior to delivery to Owner.

END OF SECTION - 09650

DIVISION 9 – FINISHES

SECTION 09678

RESILIENT WALL BASE AND ACCESSORIES

PART 1: GENERAL

A. RELATED DOCUMENTS

1. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

B. SUMMARY

1. This section includes the following:
 - a. Resilient wall base and preformed inside and outside corners.
 - b. Resilient flooring accessories.
 - c. Resilient carpet accessories.

C. SUBMITTALS

1. General: Submit the following in accordance with conditions of contract and Division 1 Specification Sections.
2. Product data for each type of product specified.
3. Samples for initial selection purposes of manufacturer's standard sample sets in form of pieces cut from each type of product specified showing full range of colors and patterns available.

D. QUALITY ASSURANCE

1. Single-Source Responsibility for Products: Obtain each type and color of product specified from a single source with resources to provide products of consistent quality in appearance and physical properties without delaying progress of the work.
2. Fire Performance Characteristics: Provide products with the following fire performance characteristics as determined by testing products per ASTM test method indicated below by UL or another testing and inspecting agency acceptable to authorities having jurisdiction.
 - a. Critical Radiant Flux: 0.45 watts per sq. cm or more per ASTM E 648.
 - b. Smoke Density: Less than 450 per ASTM E 662.

E. DELIVERY, STORAGE AND HANDLING

1. Deliver products 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.
2. Store products in dry spaces protected from the weather with ambient temperatures maintained between 50 deg F (10 deg C) and 90 deg F (32 deg C).
3. Move products into spaces where they will be installed at least 48 hours in advance of installations.

F. PROJECT CONDITIONS

1. Maintain a minimum temperature of 70 deg F (21 deg C) in spaces to receive products specified in this section 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 deg F (13 deg C).
2. Do not install products until they are at the same temperature as that of the space where they are to be installed.
3. Close spaces to traffic during installation of products specified in this section.

G. SEQUENCING AND SCHEDULING

1. Sequence installing products specified in this section with other construction to minimize possibility of damage and soiling during remainder of construction period.

H. EXTRA MATERIALS

1. Deliver extra materials to owner. Furnish extra materials matching products installed as described below, packaged with protective covering for storage and identified with labels clearly describing contents.
- a. Furnish not less than 10 linear feet for each 500 linear feet or fraction thereof of each different type and color of resilient wall base installed.

PART 2: PRODUCTS

A. MANUFACTURERS

1. Available Products: Subject to compliance with requirements, products that may be incorporated in the work include, but are not limited to, those specified in each Product Data at end of this section.

B. RESILIENT WALL BASE

1. Rubber Wall Base: Products complying with FS SS-W-40, Type 1, and requirements specified in the Rubber Wall Base Product Data at end of this section.

C. RESILIENT ACCESSORIES

1. Rubber Accessories: Products complying with requirements specified in rubber accessory product data at end of this section.
2. Provide Preformed Outside and Inside Corners.

D. INSTALLATION ACCESSORIES

1. Concrete Slab Primer: Nonstaining type as recommended by flooring manufacturer.
2. Trowelable Underlayments and Patching Compounds; Latex-modified, portland-cement-based formulation provided or approved by flooring manufacturer for applications indicated.
3. Stair Tread Nose Filler: Two-part epoxy compound recommended by resilient tread manufacturer to fill nosing substrates not conforming to tread contours.
4. Adhesives: Water-resistant type recommended by manufacturer to suit resilient flooring product and substrate conditions indicated.

PART 3: EXECUTION

A. EXAMINATION

1. Examine areas where installation of products specified in this section will occur, with installer present, to verify that substrates and conditions are satisfactory for installation and comply with manufacturer's requirements and those specified in this section.

B. PREPARATION

1. General: Comply with manufacturer's installation specifications for preparing substrates indicated to receive products indicated.
2. Use trowelable leveling and patching compounds per manufacturer's directions to fill cracks, holes and depressions in substrates.
3. Use stair tread nose filler per tread manufacturer's direction's to fill nosing substrates not conforming to tread contours.
4. Remove coatings, including curing compounds and other substances that are incompatible with flooring adhesive 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.
5. Broom or vacuum clean substrates to be covered immediately before installing products specified in this Section. Following cleaning, examine substrates for moisture, alkaline salts, carbonation or dust.
6. Apply concrete slab primer, if recommended by flooring manufacturer, prior to applying adhesive. Apply according to manufacturer's directions.

C. INSTALLATION

1. General: Install products specified in this section using methods indicated according to manufacturer's installation directions.
2. Apply resistant wall base to walls, columns, pilasters, casework and other permanent fixtures in rooms and areas where base is required. Install wall base in lengths as long as practicable. Tightly adhere wall base to substrate throughout length of each piece, with base in continuous contact with horizontal and vertical substrates.
 - a. On masonry surfaces or other similar irregular substrates, fill voids along top edge of resilient wall base with manufacturer's recommended adhesive filler material.

- b. Form inside corners use preformed inside corners by same manufacturer.
- c. Form outside corners use preformed outside corners by same manufacturer.
- 4. Place resilient accessories so they are butted to adjacent materials of type indicated and bond to substrates with adhesive. Install reducer strips at edges of flooring that otherwise would be exposed.
- 5. Apply resilient accessories to stairs as indicated and according to manufacturer's installation instructions.

D. **CLEANING AND PROTECTION**

- 1. Perform the following operations immediately after completing installation:
 - a. Remove visible adhesive and other surface blemishes using cleaner recommended by manufacturers of resilient product involved.
 - b. Sweep or vacuum floor thoroughly.
 - c. Do not wash floor until after time period recommended by manufacturer.
 - d. Damp-mop resilient accessories to remove black marks and soil.
- 2. 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.
 - a. Apply protective floor polish to resilient accessories that are free from soil, visible adhesive and surface blemishes.
 - (1) Use commercially available metal, cross-linked, acrylic product acceptable to resilient accessory manufacturer.
 - (2) Coordinate selection of floor polish with owner's maintenance service.
- 3. 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.

RUBBER WALL BASE PRODUCT DATA

Style: Cove with top-set toe.

Minimum Nominal Thickness: 1/8 inch.

Height: 4 inches and 6 inches as called for on the plans.

Lengths: Cut lengths 4 feet long, or coils in lengths standard with manufacturer but not less than 100 feet.

Exterior Corners: Provide Manufacturer's pre made exterior corners to match running base.

Interior Corners: Provide Manufacturer's pre made interior corners to match running base.

Color and Pattern: As selected by Architect from manufacturer's full range of colors and patterns produced for rubber wall base complying with requirements indicated.

Available Products:

- a. Burke Mercer Flooring Products: RubberMyte Rubber-Type TP or Mercer Vinyl-Type TV.
- b. Roppe: 700 Series Vinyl Wall Base

RUBBER ACCESSORY PRODUCT DATA SHEET

Product Description: Carpet bar for tackless installations, Carpet edge for glue down applications. Reducer strip for resilient flooring.

Profile and Dimensions: As required.

Color: As selected by Architect from manufacturer's full range of colors produced for rubber accessories complying with requirements indicated.

END OF SECTION - 09678

DIVISION 9 – FINISHES

SECTION 09770

SPECIAL WALL SURFACING (FIBERGLASS REINFORCED PLASTIC PANELS)

PART 1 - GENERAL

1.1 SUMMARY

- A. Provide fiberglass reinforced plastic (FRP) panels for wall applications.
- B. Related Sections:
 - 1. Section 01001 Basic Requirements
 - 2. Section 09290 Gypsum Board
 - 3. Section 09651 Resilient Base

1.2 SUBMITTALS

- A. General: Submit listed submittals in accordance with Conditions of the Contract and Division 1 Submittal Procedures Section.
- B. Product Data: Submit manufacturer's product data and installation instructions. Submit a full range of color samples to the Architect from which to choose.
- C. Shop Drawings: Provide drawings indicating guide details, head and jamb conditions, clearances, anchorage, accessories, finish colors, patterns and textures, operator mounts and other related information.
- D. Quality Assurance Submittals: Submit the following:
 - 1. Certificates: Submit manufacturer's certificate that products meet or exceed specified requirements.
 - 2. Certificates: Submit installer qualifications.
- E. Closeout Submittals: Submit the following:
 - 1. Provide warranty documents from the manufacturer as called for in Section 01001.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: Utilize an installer having demonstrated experience on projects of similar size and complexity, and trained and authorized by the door dealer to perform the work of this section.
- B. Regulatory Requirements and Approvals: Meet all applicable requirements of regulatory agencies.
- C. Verify project requirements, substrate conditions, manufacturer's installation instructions and manufacturer's warranty requirements. Comply with Division 1 Section 01001 for requirements.

1.6 DELIVERY, STORAGE & HANDLING

- A. General: Comply with Division 1 Section 01001 Product Requirements.
- B. Comply with manufacturer's ordering instructions and lead time requirements to avoid construction delays.
- C. Delivery: Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.
- D. Storage and Protection: Store materials protected from exposure to harmful environmental conditions and at temperature and humidity conditions recommended by the manufacturer.

1.7 WARRANTY

- A. Project Warranty: Refer to Conditions of the Contract for project warranty provisions.
- B. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's standard warranty document executed by authorized company official. Manufacturer's warranty is in addition to, and not a limitation of, other rights Owner may have under contract documents.

1.8 MAINTENANCE

- A. Extra Materials: Provide additional material for use by owner in building maintenance. Package products with protective covering and identify with descriptive labels. Comply with Division 1 Closeout Submittals Section 01001. Service and repair should be performed by an authorized dealer of the manufacturer.
 - 1. Quantity: Minimum required.
- B. Maintenance Service: Submit for Owner's consideration and acceptance maintenance service agreement for products installed.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. Manufacturer: Panolam FRP by Panolam industries International, Inc. 1 Corporate Drive, Suite 725 Shelton, CT 06484. Tel: 877 726 6526, Fax 203 225 0050. Web: www.panolam.com Panels shall comply with the following:
 - 1. Classic Collection: (White) color .
 - 2. Surface Texture (Embossed).
 - 3. Fire Rating ASTM E 84 (Class A)
 - 4. Sustainability: Indoor Air Quality GREENGUARD Gold Certification.
 - 5. Thickness: (0.090 inches).
 - 6. Barcol Hardness ASTM D2583: 35 Typical
 - 7. Water Absorption: ASTM D570: 0.2 percent typical.
 - 8. Accessories: Color matched dividers, outside corners, inside corners, end caps and fastening rivets.
 - 9. Adhesive: As recommended by Manufacturer.

PART 3 - EXECUTION

3.1 MANUFACTURER'S INSTRUCTIONS

- A. Comply with instructions and recommendations of door manufacturer.

3.2 ACCEPTABLE INSTALLERS

- A. Installers must be familiar with manufacturers product and have at least 5 years experience installing particular manufacturers product.

3.3 EXAMINATION and INSTALLATION

- A. Site Verification of Conditions: Verify through direct observation and field measurement that site conditions are acceptable for installation of panels, and accessories. Ensure that surfaces and substrates are clean of dust, waxes, and other bond breaking substances prior to beginning installation.
- B. Install panels with bottom edge located to clear top of resilient base.
- C. Apply adhesive uniformly using adhesives recommended by manufacturer and trowel to the entire back of panels completely to the edge (100% coverage).
- D. Lay FRP panels in place leaving approximately 1/8 inch between panels and 1/4" space top and bottom.
- E. Follow adhesive manufacturer's recommendations for set and application times.
- F. Apply pressure to entire panel face with laminate type roller, removing trapped air and ensure proper adhesion between surfaces.

3.4 ADJUSTING AND CLEANING

- A. Replace installations out of plumb and not aligned with adjacent panels and construction.
- B. Clean panel face to remove soiling, stains, dust, and dirt using clean rag, and cleaning agents as instructed by Manufacturer.
- C. Leave installation clean, free of residue and debris resulting from other work.

END OF SECTION - 09770

DIVISION 9 - FINISHES

SECTION 09900

PAINTING

PART 1: GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specifications Sections, apply to this Section.

1.02 SECTION INCLUDES

- A. Surface preparation and field application of paints and coatings.
- B. Paint exposed surfaces whether or not colors are designated in schedules, except where a surface or material is specifically indicated not to be painted or is to remain natural. Where an item or surface is not specifically mentioned, paint the same as similar adjacent materials or surfaces after consultation and approval by Architect and Interior Designer. If color or finish is not designated, the Architect will select from standard colors or finishes available.
- C. Prefinished items not to be painted include the following factory-finished components:
 - 1. Acoustic material.
 - 2. Prefinished architectural woodwork and casework, laboratory tables and casework, furniture.
 - 3. Finished mechanical and electrical equipment.
 - 4. Light fixtures.
 - 5. Switchgear.
 - 6. Distribution cabinets.
- D. Concealed surfaces not to be painted include wall or ceiling surfaces in the following generally inaccessible areas:
 - 1. Foundation spaces.
 - 2. Furred areas.
 - 3. Utility chases or tunnels.
 - 4. Pipe spaces.
 - 5. Duct shafts.
- E. Finished metal surfaces not to be painted include:
 - 1. Anodized aluminum.
 - 2. Stainless steel.
 - 3. Chromium plate.
 - 4. Copper.
 - 5. Bronze.
 - 6. Brass.
- F. Operating parts not to be painted include moving parts of operating equipment, such as the following:
 - 1. Valve and damper operators.
 - 2. Linkages.
 - 3. Sensing devices.
 - 4. Motor and fan shafts.
- G. Labels: Do not paint over UL, FM or other code-required labels or equipment name, identification, performance rating, or nomenclature plates.

H. Unfinished surfaces not to be painted include:

1. Exposed brick on Exterior.
2. Exposed tile on Interior on all levels.
3. Exposed Terrazzo.
4. Exposed Marble.

1.03 SYSTEM DESCRIPTION

A. Finish Materials: Conform to applicable code for flame/smoke rating requirements.

1.04 SUBMITTALS

A. Product Data: Provide data on all finishing products.

B. Samples: Submit two samples, 4 x 4 inch Standard Color Chips (from available manufacturers) in size illustrating range of colors available for each surface finishing product scheduled. After color selection, the Architect will furnish colors for surfaces to be coated.

1.05 QUALITY ASSURANCE

A. Applicator Qualifications: Engage an experience applicator who has completed painting systems applications similar in material and extent to those indicated for the Project that have resulted in a construction record of successful in- service performance. Applicator must demonstrate having experience in finishing surfaces in Historic Structures and have a proven background in such types of work.

B. Single Source Responsibility: Provide primers and undercoat paint produced by the same manufacturer as the finish coats to insure quality, color mix, and material consistency.

1.06 ENVIRONMENTAL REQUIREMENTS

A. Store and apply materials in environmental conditions required by manufacturer's instructions.

B. Store materials in tightly covered containers in a well-ventilated area at a minimum ambient temperature of 45 deg F. Protect from freezing. Remove oily rags and waste daily.

C. Workers Safety: Take necessary precautions to ensure that workers and work areas are protected from fire and health hazards resulting from handling, mixing and application.

1.07 DELIVERY, STORAGE AND HANDLING

A. Delivery: Deliver materials to the job site in the manufacturer's original, unopened packages and containers bearing manufacturer's name and label, and the following information:

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.

B. Storage: Store materials not in use in tightly covered containers in a well-ventilated area at a minimum ambient temperature of 45 deg F (7 deg C). Maintain containers used in storage in a clean condition, free of foreign materials and residue.

1. Protect from freezing. Keep storage area neat and orderly. Remove oil rags and waste daily. Take necessary measures to ensure that workers and work areas are protected from fire and health hazards resulting from handling, mixing, and application.

1.08 JOB CONDITIONS

- A. Apply water based paints only when temperature of surfaces to be painted and surrounding air temperatures are between 50 deg F and 90 deg F.
- B. Apply solvent-thinned paints only when the temperature of surfaces to be painted and surrounding air temperatures are between 45 deg F and 95 deg F.
- C. Do not apply painting in snow, rain, fog or mist or when the relative humidity exceeds 85 percent; or at temperatures less than 5 deg F above the dew point or to damp or wet surfaces.

PART 2: PRODUCTS

2.01 MATERIALS

- A. Available Manufacturers:
 1. Devoe and Reynolds Co. (Devoe).
 2. Benjamin Moore and Co. (Moore).
 3. The Sherwin-Williams Company (S-W).
 4. Pratt and Lambert (P & L).
 5. The Glidden Company (Glidden).
- B. Coatings: Ready mixed except field catalyzed coatings of good flow and brushing properties, capable of drying or curing free of streaks or sags.
- C. Accessory Materials: Linseed oil, shellac, turpentine, paint thinners and other materials required to achieve the finishes specified.

2.02 FINISHES

- A. Refer to schedule at end of section for surface finish schedule.

PART 3: EXECUTION

3.01 EXAMINATION AND PREPARATION

- A. Verify that substrate conditions are ready to receive work.
- B. Measure moisture content of porous surfaces using an electronic moisture meter. Do not apply finishes unless moisture content is less than 12 percent.
- C. Correct minor defects and clean surfaces which affect work of this Section.
- D. Remove electrical plates and mask electrical outlets, hardware, light fixture trim, escutcheons, and fittings prior to preparing surfaces or finishing.
- E. Gypsum Board Surfaces: Fill minor defects with latex compounds. Spot prime defects after repair.
- F. Galvanized Surfaces: Remove surface contamination and oils and wash with solvent. Apply coat of etching primer.

- G. Concrete Surfaces Scheduled to Receive Paint Finish: Remove foreign matter. Remove oil and grease with a solution of tri-sodium phosphate, rinse well and allow to dry.
- H. Uncoated Ferrous Surfaces: Remove scale by wire brushing, sandblasting, clean by washing with solvent. Apply treatment of phosphoric acid solution. Prime paint after repairs.
- I. Shop Primed Steel Surfaces: Sand and scrape to remove loose primer and rust, hand clean, clean surfaces with solvent. Prime bare steel surfaces.
- J. Interior Wood Items Scheduled to Receive Paint Finish: Wipe off dust and grit prior to priming. Seal knots, pitch streaks, and sappy sections with sealer. Fill nail holes and cracks after primer has dried; sand between coats.
- K. Interior Wood Items Scheduled to Receive Transparent Finish: Wipe off dust and grit prior to sealing, seal knots, pitch streaks, and sappy sections with sealer. Fill nail holes and cracks after sealer has dried; sand lightly between coats.
- L. Exterior Wood Scheduled to Receive Paint Finish: Remove dust, grit, and foreign matter. Seal knots, pitch streaks, and sappy sections. Fill nail holes with tinted exterior caulking compound after prime coat has been applied.
- M. Exterior Wood Scheduled to Receive Transparent Finish: Remove dust, grit, and foreign matter; seal knots, pitch streaks, and sappy sections with sealer. Fill nail holes with tinted exterior caulking compound after sealer has been applied.

3.02 APPLICATION

- A. Apply products in accordance with manufacturer's instructions.
- B. Sand transparent finishes lightly between coats to achieve required finish.
- C. Where clear finishes are required, tint fillers to match wood.
- D. Back prime interior and exterior woodwork scheduled to receive paint finish with primer paint.
- E. Back prime interior woodwork scheduled to receive stain or varnish finish with gloss varnish reduced 25 percent with mineral spirits.

3.03 FINISHING MECHANICAL AND ELECTRICAL EQUIPMENT

- A. Refer to Section 15050 and Section 16050 for schedule of color coding, identification banding of equipment, ductwork piping, and conduit.
- B. Color code items in accordance with requirements indicated.
- C. Paint shop primed equipment.
- D. Remove unfinished louvers, grilles, covers, and access panels and paint separately. Paint dampers exposed behind louvers, grilles, convactor and baseboard cabinets to match face panels.
- E. Prime and paint insulated and exposed pipes, insulated and exposed ducts, hangers, brackets, collars and supports, except where items are prefinished.
- F. Paint interior surfaces of air ducts, and convactor and baseboard heating cabinets that are visible through grilles and louvers with one coat of flat black paint, to limit of sight line.

- G. Paint exposed conduit and electrical equipment occurring in finished areas except prefinished surfaces.
- H. Paint both sides and edges of plywood backboards.
- I. Reinstall electrical cover plates, hardware, light fixture trim, escutcheons, and fittings removed prior to finishing.
- J. Mechanical Items to be painted include, but are not limited to, the following:
 - 1. Piping, pipe hangers and supports.
 - 2. Heat exchangers.
 - 3. Ductwork.
 - 4. Insulation
 - 5. Supports.
 - 6. Motors and mechanical equipment.
 - 7. Accessory items.
- K. Electrical Items to be painted include, but are not limited to, the following:
 - 1. Conduit and fittings.
 - 2. Switchgear.

3.04 CLEANING

- A. As work proceeds, promptly remove finishes where spilled, splashed, or spattered.
- B. Clean all glass adjacent to surfaces to be painted, stained or finished in any way.

3.05 PROTECTION

- A. Protect work of other trades, whether being painted or not, against spillage or damage by painting. Correct damage by cleaning, repairing or replacing, and repainting, as acceptable to Architect.
- B. Provide proper signage indicating newly painted finishes.
- C. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

3.06 SCHEDULE - SHOP PRIMED ITEMS FOR SITE FINISHING

- A. Metal Fabrications Section 05500: Exposed surfaces of lintels, elevator pit ladders, stairs, railings, and all other fabricated items to be finished on site.

3.07 SCHEDULE - EXTERIOR SURFACES

- A. Wood - Painted (Opaque): (If applicable)
 - 1. Gloss Alkyd Finish: Two finish coats over primer with total dry film thickness not less than 3.5 mils.
 - a. Primer: Exterior Primer Coating:
 - 1. Devoe: 1102 All-Weather Alkyd House Paint Primer.
 - 2. Glidden: 1951 Spred Gel-Flo Base Coat.
 - 3. Moore: Moorwhite Primer #100
 - 4. P & L: Permalize Exterior Primer.
 - 5. S & W: A-100 Exterior Alkyd Wood Primer Y24W20.
 - b. First and Second Coats: Gloss silicone alkyd enamel
 - 1. Devoe: Devshield 475
 - 2. P&L: TP 101 Tank Pro
 - 3. S-W: Steel Master 9500 B56 – 300 Series

- B. Wood Trim:
 - 1. Deep-Color, High-Gloss Silicone Alkyd Finish: Two finish coats over primer.
 - a. Primer: Exterior Primer coating.
 - 1. Devoe: 1102 All-Weather Alkyd House Paint Primer.
 - 2. Glidden: 1951 Spread Gel-Flo Base Coat.
 - 3. Moore: Moorwhite Deep Color Base #100-04.
 - 4. P & L: Permalize Exterior Primer.
 - 5. S & W: A-100 Exterior Alkyd Wood Primer Y24W20.
 - b. First and Second Coats: Deep-color, exterior silicone alkyd resin trim paint.
 - 1. Devoe: Devshield 475
 - 2. P & L: TP 101 Tank Pro
 - 3. S-W: Steel Master 9500 B56-300 Series
- C. Ferrous Metal: Primer is not required on shop-painted items.
 - 1. Full-Gloss Alkyd Enamel: Two finish coats over primer.
 - a. Primer: Synthetic rust-inhibiting primer.
 - 1. Devoe: 14920 Bar-Ox Quick Dry Metal Primer, Red.
 - 2. Glidden: 5210 Glid-Guard Universal Fast-Dry Metal Primer.
 - 3. Moore: IronClad Retardo Rust-Inhibitive Paint #163.
 - 4. P & L: Effecto Rust-inhibiting Primer.
 - 5. S-W: Kem Kromik Universal Metal Primer B50NZ6
 - b. First and Second Coats: Gloss alkyd enamel.
 - 1. Devoe: Devshield 475
 - 2. P & L: TP 101 Tank Pro
 - 3. S-W: Steel Master 9500 B56-300 Series
- D. Zinc-Coated Metal:
 - 1. High-Gloss Silicone Alkyd Enamel: Two finish coats over primer.
 - a. Primer: Galvanized metal primer.
 - 1. Devoe: 13201 Mirrolac Galvanized Metal Primer.
 - 2. Glidden: 5229 Glid-Guard All-Purpose Metal Primer.
 - 3. Moore: IronClad Galvanized Metal Latex Primer #155.
 - 4. P & L: Interior Trim Primer.
 - 5. S-W: Galvite HS B50WZ30
 - b. First and Second Coats: Gloss silicone alkyd enamel.
 - 1. Devoe: Devshield 475
 - 2. P & L: TP 101 Tank Pro
 - 3. S-W: Steel Master 9500 B56-300 Series
- E. Exterior Stained Treated Wood Trusses and Glue Laminated Beams for Transparent Finish:
 - 1. Sherwin Williams: Deckscape Waterborne Toner.
 - 2. Minimum one heavy coat application.
 - 3. Insure that exterior wood members are thoroughly dried to receive exterior stain.
 - 4. Do not stack exterior wood trusses or beams in direct sunlight where bleaching may occur.

3.08 SCHEDULE - INTERIOR SURFACES

- A. General: Provide the following paint systems for various substrates, as indicated.
- B. Gypsum Drywall Systems:
 - 1. Odorless Semi-gloss Latex Enamel Finish: Three coats with a total dry film thickness of not less than 2.5 mils.
 - a. Primer: White, interior, latex-based primer.
 - 1. Devoe: 50801 Wonder-Tones Latex Primer and Sealer.

2. Glidden: 5019 PVA Primer.
3. Moore: Moore's Latex Quick-Dry Prime Seal #201.
4. P & L: Latex Wall Primer Z30001.
5. S-W: Pro-Mar 200 Latex Wall Primer B28W200.
- b. First and Second Coats: Interior Latex Eggshell.
 1. Devoe: Manor Hall Latex Eggshell
 2. Glidden: Dulux 1402 Latex Eggshell
 3. Moore: 274 Interior Latex Eggshell
 4. P & L: Pro-Hide Gold Latex Eggshell Z8200
 5. S-W: Pro Mar 200 Interior Latex Eg-Shel B20-2200 Series

C. Woodwork and Hardboard:

1. Semi-gloss Enamel Finish: Three coats.
 - a. Undercoat: Interior enamel undercoat.
 1. Devoe: 8801 Velour Alkyd Enamel Undercoat.
 2. Glidden: 310 Glidden Wood Undercoater.
 3. Moore: Moore's Alkyd Enamel Underbody #217.
 4. P & L: Interior Trim Primer.
 5. S-W: Prep Rite Wall and Wood Primer B49W2
 - b. First and Second Coats: Interior, Semi-gloss, odorless, alkyd enamel.
 1. Devoe: 26XX Velour Alkyd Semi-gloss Enamel.
 2. Glidden: 4200 Spred Ultra Semi-gloss Enamel.
 3. Moore: Moore's Satin Impervo Enamel. #235.
 4. P & L: Celu-Tone Alkyd Satin Enamel.
 5. S-W: Pro Mar 200 Alkyd Semi Gloss Enamel B34-200 Series.

D. Stained Woodwork:

1. Stained-Varnish Rubbed Finish: Three finish coats over stain plus filler on open-grain wood. Wipe filler before applying first varnish coat.
 - a. Stain Coat: Oil-type interior wood stain.
 1. Devoe: 96XX Wonder Woodstain Alkyd Stain.
 2. Glidden: 1600 Woodmaster Oil Stain.
 3. Moore: 241 Moore's Interior Wood Finishes Penetrating Stain.
 4. P & L: S-Series Tonetic Wood Stain.
 5. S-W: Wood Classics Interior Wood Stain A49 Series
 - b. First Coat: Varnish Sanding Sealer
 1. Devoe: 4900 Wonder Woodsealer Quick-Dry Sealer.
 2. Glidden: 5035 Ultra-Hide Sanding Sealer.
 3. Moore: 413 Moore's Interior Wood Finishes Quick-Dry Sanding Sealer.
 4. S-W: Wood Classics Fast Dry Varnish Sanding Sealer B26V43
 - c. Filler Coat: Paste wood filler.
 1. Devoe: 4800 Wonder Woodstain Interior Paste Wood Filler.
 2. Glidden: Glidden Paste Wood Filler.
 3. Moore: Benwood Past Wood Filler #238.
 4. S-W: Sher-Wood Fast-Dry Filler.
 - d. Second and Third Coats: Oil rubbing varnish.
 1. Devoe: 4600 Wonder Wood Satin Alkyd Satin Varnish.
 2. Glidden: 82 Woodmaster Satin Sheen Urethane Varnish.
 3. Moore: Benwood Satin Finish Varnish #404.
 4. P & L: Clear Finish Gloss.
 5. S-W: Wood Classics Fast Dry Oil Varnish A66V391

E. Ferrous Metal:

1. Semi-gloss Enamel Finish: Two coats over primer with total dry film thickness not less than 2.5 mils.

- a. Primer: Synthetic, quick-drying, rust-inhibiting primer.
 - 1. Devoe: 14920 Bar-Ox Quick Dry Metal Primer, Red.
 - 2. Glidden: 5210 Glid-Guard Universal Fast-Dry Metal Primer.
 - 3. Moore: IronClad Retardo Rust-Inhibitive Paint #163.
 - 4. P & L: Effecto Rust-inhibiting Primer.
 - 5. S-W: Kem Kromik Universal Metal Primer B50NZ6
 - b. First and Second Coats: Interior, Semi-gloss, odorless, alkyd enamel.
 - 1. Devoe: 26XX Velour Alkyd Semi-gloss Enamel.
 - 2. Glidden: 4200 Spred Ultra Semi-gloss Enamel.
 - 3. Moore: Moore's Satin Impervo Enamel. #235.
 - 4. P & L: Celu-Tone Alkyd Satin Enamel.
 - 5. S-W: Pro Mar 200 Alkyd Semi Gloss Enamel B34-200 Series.
- F. Zinc-Coated Metal:
 - 1. Semi-gloss Finish: Two coats over primer, with total dry film thickness not less than 2.5 mils.
 - a. Primer: Galvanized metal primer.
 - 1. Devoe: 13201 Mirrolac Galvanized Metal Primer.
 - 2. Glidden: 5229 Glid-Guard All-Purpose Metal Primer.
 - 3. Moore: IronClad Galvanized Metal Latex Primer #155.
 - 4. P & L: Interior Trim Primer.
 - 5. S-W: Galvite HS B50WZ30
 - b. First and Second Coats: Interior, Semi-gloss, odorless, alkyd enamel.
 - 1. Devoe: 26XX Velour Alkyd Semi-gloss Enamel.
 - 2. Glidden: 4200 Spred Ultra Semi-gloss Enamel.
 - 3. Moore: Moore's Satin Impervo Enamel. #235.
 - 4. P & L: Celu-Tone Alkyd Satin Enamel.
 - 5. S-W: Pro Mar 200 Alkyd Semi Gloss Enamel B34-200 Series.
- G. Wall Surfaces Under Vinyl Wall Covering: (If Applicable)
 - 1. S-W: Prep Rite PreWallcovering Primer B28W980
 - 2. P & L: Suprime Pre-Wallcovering Primer ZF1005
- H. Fire Retardant Finish: (If Applicable)
 - Primer: Interior Alkyd Primer
 - 1. S-W: Prep Rite Wall and Wood Primer B49W2
 - First Coat: Intumescent Latex Fire Retardant Finish.
 - 1. Flame Control 20-20
 - Finish Coat: Intumescent Latex Semi Gloss Overcoat
 - 1. Flame Control 40-40
- I. Insulated Coverings - Canvas and Cotton: (If Applicable)
 - First and Second Coats: Acrylic Gloss Coating.
 - 1. S-W: DTM Acrylic Gloss Coating B66 Series.
- J. Concrete Masonry Block Sealer:
 - 1. Product to be equal to PROSOCO Block-Guard & Graffiti Control.
 - 2. Product Description: Clear, solvent-based silicone elastomer formulated to weatherproof concrete block and other porous masonry materials.
 - 3. Application: Apply as per manufacturer's recommendations.
- K. Cast Stone Sealer:
 - 1. Product to be equal to PROSOCO Natural Stone Treatment.
 - 2. Application: Apply as per manufacturer's recommendations.

- L. New Brick Sealer:
 - 1. Prosoco: Siloxane PD Water Based Sealer.
 - 2. S-W : Loxon 7% Siloxane Water Repellant.
 - 2. Application: Apply as per manufacturer's recommendations.

- M. Natural Stone Sealer for Flooring and Walls: (If Applicable)
 - 1. Product to be equal to PROSOCO Natural Stone Treatment.
 - 3. Application: Apply as per manufacturer's recommendations.

- N. Gypsum Wall Board in Wet Conditions:
 - 1. Primer: White, latex-based, drywall primer
 - 2. S-W: Pro Mar 200 Interior Latex Wall Primer B28W200.
 - 3. First and Second Coats: Water Based Epoxy Semi Gloss
 - 4. SW: Waterbased Catalyzed Epoxy Semi Gloss B70-200 Series.

- O. Parking Strips:
 - 1. White

- P. Handicap Parking Striping:
 - 1. Handicap Blue

- Q. Handicap Ramp Scored Concrete Areas:
 - 1. (Color to be selected by Architect and Owner).

3.09 SCHEDULE - COLORS and FINISHES

- A. Color Selection: All Exterior and Interior color selections and paint finishes will be done by the Architect in coordination with the Interior Designer.

- B. Upon Selection of Colors: Architect and Interior Designer will provide Contractor with a schedule indicating colors and finishes to be applied to designated walls and surfaces.

END OF SECTION - 09900