

DIVISION 11 - EQUIPMENT

SECTION 11132

PROJECTION SCREENS

PART 1: GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This section includes the following:
 - 1. One (1) New Concealed Motorized operated front projection screens for suspended acoustical ceiling grid in Meeting Room .

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 screen specified.
- C. Shop Drawings: Show layout and type of projection screens. Show the following:
 - 1. Location of screen centerline.
 - 2. Anchorage and mounting details.
 - 3. Accessories.

1.4 QUALITY ASSURANCE

- A. Single Source Requirement: Obtain each type of projection screen required from a single manufacturer as a complete unit, including necessary mounting hardware and accessories.
- B. Coordination of Work: Coordinate layout and installation of projection screens with other construction supported by, or penetrating through, ceilings, including light fixtures, HVAC equipment, fire-suppression system, chalkboards, millwork, cabinetry, other equipment and partitions.

1.5 DELIVERY, HANDLING & STORAGE

- A. Do not deliver projection screens until building is enclosed, other construction within spaces where screens will be installed is substantially complete, and installation of screens is ready to take place.
- B. Protect screens from damage during delivery, handling, storage and installation.

PART 2: PRODUCTS

2.1 PROJECTION SCREEN SURFACES, GENERAL

- A. Measurement of Gain of Screen Viewing Surface: Measure gain of screen viewing surface against that of a magnesium carbonate surface by means of a photogoniometer using test methods and test apparatus per FS GG-S-00172D (1) for determining effect of reflected light at various viewing angles on screen surface. Ratings of 1.0 refer to those viewing surfaces having a reflectivity equal to the magnesium carbonate surface.

- B. Material and Viewing Surface of Front Projection Screens: Obtain screens manufactured from mildew-and-flame-resistant fabric of type indicated for each type of screen specified and complying with the following requirements:
1. Provide Matte White Surfaces.
 2. Seamless Construction: Provide screens in sizes indicated without seams.
 3. Seam Construction: Provide seams as required by manufacturer for Matte White type screens.
 4. Mildew Resistance: Provide mildew-resistant screen fabrics as determined by Federal Standard 191A/5760.
 5. Fire Performance Characteristics: Provide projection screen fabrics identical to those materials that have undergone testing and passed requirements for flame resistance as indicated below:
 - a. NFPA 701 per small-scale test.

2.3 ELECTRICALLY OPERATED FRONT PROJECTION SCREENS

- A. General: Provide manufacturer's standard UL listed and UL marked units consisting of case, screen, motor, controls, mounting accessories, and other components required for a complete installation and to comply with requirements indicated for screen surface and controls and for case, motor, and screen under description of operation and type.
- B. Motorized Screen for Concealed Mounting in Suspended Acoustical Ceilings Grid or in Gypsum Board Furredown: (One (1) required).
1. The Screen shall have two motors, one to operate the door and one to operate screen Door motor electrically operated 120 volt (60hz) 1.2 amp, mounted inside the roller, to be three wire with ground, integral gears, capacitor and an electric brake to prevent coasting. To have pre-set but adjustable limit switches to automatically stop fabric door in the "up" and "down" positions. The roller to be of rigid aluminum, 1 1/2" in diameter. Screen motor is electrically operated 120 volt (60hz) 1.4 amp, mounted inside the roller with a noise silencer to be three wire quick reversal type, oiled for life, with automatic thermal overload cutout, integral gears, capacitor and an electric brake to prevent coasting. The have pre set but adjustable limit switches to automatically stop picture surface in the "up" and "down" position. The roller to be of rigid metal, 3" in diameter. Screen fabric to be flame retardant and mildew resistant fiberglass with Video Spectra 1.5 with black masking borders standard. Bottom of fabric shall be formed into a pocket holding a 3/8" metal rod with plastic caps. Case shall be an aluminum extrusion. Bottom of case to be self-trimming with a built-in flange around the bottom of the case. Case to be white. Steel brackets bolted to the top of case for ceiling mounting. A section of the bottom of the case shall be an aluminum door equipped with concealed hinges so that it opens and closes automatically with the lowering and raising of the picture surface. The balance of the bottom of the case shall be a second hinged aluminum door with manual opening to provide access. Junction box shall be integrated into the housing making it possible to install the housing and wire to the building's electrical system during construction. The junction box shall contain a five-prong connector that is mounted in the housing for easy plug-in connection to the motorized fabric and roller assembly. The motorized fabric and roller assembly to be installed in the case at the factory or at a later time at the job site. To be complete with three position control switch with cover plate. Suitable for use in environmental air space in accordance with section 300-22 © of the National Electric Code, and sections 2-128, 12-010 (3) and 12-100 of the Canadian Electrical Code, part 1 CSA C22.1. Screen to be listed by Underwriters' Laboratories.
 2. Available Products:
 - a. Da-Lite Advantage Deluxe Electrol concealed with closure doors electric projections screen, Video Spectra 1.5 screen for concealed mounting in suspended acoustical ceiling grid.
 - b. Draper Ceiling-Recessed Motorized Project Screens.
 - c. Size: Viewing area to be 87" x 72", Nominal Diagonal 150", overall case length 82 1/4", approximately 144 pounds.
 - d. Wireless Remote Control for LVC, infrared remote.
 - e. Video Projector Interface Control.
 - f. SCB-100 RS-232 Serial Control Board (built-in).

PART 3: EXECUTION

3.1 INSTALLATION

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

- A. General: Install projection screens at locations indicated in compliance with screen manufacturer's instructions.
- B. Install front projection screens with screen cases in position and relationship to adjoining construction as indicated, securely anchored to supporting substrate, and in manner that produces a smoothly operating screen with plumb and straight vertical edges and plumb and flat viewing surfaces when screen is lowered.
 - 1. Test operated units to verify that screen, controls, closure and other operating components are in optimum functioning condition.
- C. Mounting: Contractor will be required to provide specific mounting details during the submittal process based on mounting requirements provided by the manufacturer for project screens to be mounted in suspended ceiling conditions. Contractor will be required to provide all anchorage, and structural support above the suspended ceiling required to accomplish the work in a way that the motorized project screens will be securely and safely mounted to function properly.

3.2 PROTECTION AND CLEANING

- A. Protect projection screens after installation from damage during construction. If despite such protection damage occurs, remove and replace damaged components or entire unit as required to provide units in their original, undamaged condition.

3.3 SCHEDULE:

- 1. Multi-Purpose Room (Concealed In ceiling furr down)
87" high x 72" wide viewing area.

END OF SECTION – 11132

DIVISION 11 - EQUIPMENT

SECTION 11400

FOOD SERVICE EQUIPMENT

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. This Section includes the following food service equipment:
 - 1. Electric Range/Oven
 - 2. Convection Oven
 - 3. Ice Maker
 - 4. Refrigerater

1.03 PROJECT CONDITIONS

- A. Coordination: Coordinate miscellaneous specialties and equipment locations, installation and sequencing with other work to avoid interference and to assure proper installation, operation, adjustment, cleaning and servicing of items.

1.04 SUBMITTALS

- A. Product Data: Submit manufacturer's product data and installation instructions for each type of specialty equipment, including printed installation instructions.
- B. Maintenance Data: Submit manufacturer's maintenance and service date, including, address and telephone number of nearest authorized service representative.
- C. Product Data and Installation Instructions: Submit rough-in dimensions service connection requirements, performance, materials, manufacturer's model numbers, furnished accessories, power requirements, water/drainage requirements, and other similar information.
- D. Shop Drawings: Dimensions of rough-ins showing mechanical and electrical requirements. Submit dimensioned fabrication drawings for custom-fabricated equipment including plans, elevations, and sections, showing materials and gauges.

1.05 DELIVERY, HANDLING & STORAGE

- A. Deliver new food service equipment in original unopened container or packaging submitted by manufacturer. Store in controlled conditioned space free from extreme temperature differences. Do not allow heavy objects to be placed on material which may cause it to become smashed or damaged prior to installation. Keep material clean and free of dust and dirt. Keep under lock and key until time of installation.

1.06 PROJECT CONDITIONS

- A. Field Measurements: Take field measurements prior to preparation of shop drawings and fabrication to ensure proper fitting. Show record measurements on final shop drawings. Coordinate fabrication schedule with construction progress to avoid delay.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Available Manufactures: For the purposes of these specifications the following (but not limited to) manufacturers have been selected as equals for the supply of the scheduled food service equipment:
1. Hobart Food Equipment
 2. Vulcan-Hart Company
 3. Hoshizake, America, Inc.
 4. Manitowoc Ice, Inc.

2.01 FOOD SERVICE EQUIPMENT

- A. Range: (One Required) For the purposes of these specifications the Range called out shall meet the performance requirements of the following: Vulcan EV36S-3HT208
1. Standard Oven and three 12" x 24 " hot tops.
 2. Conventional Oven.
 3. Modular design.
 4. Stainless Steel Front.
 5. Spring Counter balanced Oven Door.
 6. Cool-to-touch Door Handle.
 7. Oven Base.
 8. High Density Insulation: 2 ½" in sides, top, back and bottom. 2" in door.
 9. Porcelain on Steel oven cavity and door liner.
 10. Electrical requirements: Nominal Amps Per Line Wire , Single Phase 96.2, (X-Y 5kw, Y-Z 10kw, XZ 5kw per phase) Total connecting KW 20.0, 208 Voltage
 11. Stainless Steel Back
 12. Approx. 36 inches wide x 34" deep, 46 ½" inches deep (with oven door open)
- B. Convection Oven: (One Required) For the purposes of these specifications the Double Deck Electric Convection Oven called out shall meet the performance requirements of the following: Vulcan VC44ED with stacking leg and stack set.
1. Stainless Steel Front.
 2. Painted sides, Top and Legs.
 3. Stainless Steel Doors with windows.
 4. Electrical: 25 KW input, ½ H.P. tow speed oven blower motors. 220/380 volt, 50 Hz, 1 phase, 3 wire..
 5. Solid State temperature controls adjust from 150 degrees to 500 degrees F.
 6. 60 minute timer per section with audible alarm.
 7. Oven cool switch for rapid cool down.
 8. Porcelain Enamel on steel oven interior.
 9. Five nickel plated oven racks with eleven rack positions per section.
 10. Time & Temperature readout. Includes cook & hold cycle, shelf ID, and 24 hr. timer with audible alarm.
 11. 40 ¼" W x 41 ¼" (motor & door handles), 70" H on 8" legs
- C. Ice Maker: (One Required) For the purposes of these specifications the Ice Maker called out shall meet the performance requirements of the following: Manitowoc Ice, Inc. Indigo NXt , IPo620 Manitowoc Ice Cube Machine
1. Size: Maximum size shall be 22" wide, 34" deep and 71.5" on 6" legs.
 2. Capacity: Up to 537 lbs of ice production per 24 hours.
 3. Bin Capacity: 365 lbs. ARI-rated capacity Bin.
 4. Ice Shapes: Regular: 1 1/8" x 1 1/8" x 7/8"

4. Finish: Stainless Steel
5. Warranty: Three (3) years on Parts & Labor on entire machine, five year on parts & labor on evaporator, five (5) year on parts for compressor and air cooled condenser.
Note: In no case shall the width of the Ice Maker be more than 22 inches.

- D. Refrigerator: (One Required) For the purposes of these specifications the refrigerator shall be equal to Frigidare, Inc.
1. Capacity: 26 Cu Ft.
 2. 36" Wide Side by Side
 5. Standard Dept.
 6. Ice Maker and Water Dispenser.
 7. Stainless Steel.
 8. Energy Star
 9. Model # FRSN2623AS

PART 3 EXECUTION

3.01 INSTALLATION

- A. General:
1. Install food service equipment in accordance with manufacturer's instructions.
 2. Install equipment plumb, square, and straight with no distortion and securely anchored as required.
 3. Secure work surfaces to case work and equipment components with material and procedures recommended by the manufacturer.
- B. Accessory installation: Install accessories and fittings in accordance with manufacturer's recommendations.

3.02 ADJUSTING

- A. Repair or remove and replace defective work, as directed by Owner upon completion of installation.
- B. Adjust equipment, accessories and other moving or operating parts to function smoothly.

3.03 CLEANING AND PROTECTION

- A. At completion of the installation, clean surfaces in accordance with the manufacturer's instructions.
- B. Provide all necessary protective measures to prevent exposure of equipment from exposure to other construction activity.
- C. Advise contractor of procedures and precautions for protection of material and installed fume hoods from damage by work of other trades.

END OF SECTION - 11400