

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 116", Nominal Diagonal 150", overall case length 132 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

Joe Webb Memorial Branch Library
Haynesville, Louisiana
Coco & Company
Project # 0524
8.8.25

3.1 INSTALLATION

- 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 suspended ceiling)
87" high x 116 wide viewing area.

END OF SECTION – 11132