

PART 1 - GENERAL

1.1 WORK INCLUDES

- A. Base Bid: Unless noted otherwise, the General Prime Contractor shall provide all labor and materials for the complete installation of work as specified in this section.
  - 1. Manually operated, front-projection screens.
  - 2. Electrically operated, front-projection screens and controls.

1.2 RELATED DOCUMENTS

- A. Division 06 Section “Rough Carpentry” for wood blocking for screen installation.
- B. Division 26 Sections for electrical service and connections including device boxes for switches

1.3 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Shop Drawings: For projection screens. Show layouts and types of projection screens. Include the following:
  - 1. For electrically operated projection screens and controls:
    - a. Location of screen centerline relative to ends of screen case.
    - b. Location of wiring connections.
    - c. Location of seams in viewing surfaces.
    - d. Anchorage details.
    - e. Wiring diagrams.

PART 2 - PRODUCTS

2.1 MANUALLY OPERATED PROJECTION SCREENS FOR CLASSROOMS

- A. General: Manufacturer's standard spring-roller-operated units, consisting of case, screen, mounting accessories, and other components necessary for a complete installation.
- B. Suspended, Metal-Encased, Manually Operated Screens: Units designed and fabricated for mounting below ceiling, fabricated from formed-steel sheet or from aluminum extrusions; with flat back design and vinyl covering or baked-enamel finish.
  - 1. Products: Subject to compliance with requirements, provide one of the following:

- a. Da-Lite Screen Company; Model C with CSR
  - b. Draper Inc.; Luma 2.
  - c. Elite Screens, Manual Series.
2. Provide Manufacturer's standard ceiling trim kit for installation below ACT ceilings.

## 2.2 ELECTRICALLY OPERATED PROJECTION SCREENS FOR FLEX SPACE 1

- A. General: Manufacturer's standard units consisting of case, screen, motor, controls, mounting accessories, and other components necessary for a complete installation.
- 1. Controls: Remote, key-operated, three-position control switch.
    - a. Provide locking cover plates for switches.
    - b. Provide key-operated, power-supply switch.
    - c. Provide infrared remote control.
  - 2. Motor in Roller: Instant-reversing motor with permanently lubricated ball bearings, automatic thermal-overload protection, preset limit switches, and positive-stop action to prevent coasting.
  - 3. Tab Tensioning: Provide units that have a durable low-stretch cord, such as braided polyester, on each side of screen connected to edge of screen by tabs to pull screen flat horizontally.
- B. Surface-Mounted, Metal-Encased, Electrically Operated Screens: Motor-in-roller units designed and fabricated for surface mounting on wall or ceiling, fabricated from formed-steel sheet or from aluminum extrusions; with flat back design and vinyl covering or baked-enamel finish.
- 1. Products: Subject to compliance with requirements, provide one of the following:
    - a. Motor in Roller:
      - 1) Da-Lite Screen Company; Tensioned Cosmopolitan Electrol.
      - 2) Draper Inc.; Premier.
      - 3) Elite Screens; Saker Series

## 2.3 FRONT-PROJECTION SCREEN MATERIAL

- A. Matte-White Viewing Surface: Peak gain not less than 0.9, and gain not less than 0.8 at an angle of 50 degrees from the axis of the screen surface.
- 1. Products: Subject to compliance with requirements, provide one of the following:
    - a. Da-Lite Screen Company; Matte White.
    - b. Draper Inc.; Fiberglass Matte White.
    - c. Elite Screens; Matte White.
- B. Seamless Construction: Provide screens, in sizes indicated, without seams.
- C. Edge Treatment: Black masking borders.

- D. Size of Viewing Surface at classrooms: 54 by 96 inches. (Sizes may vary per manufacturer, review with Architect).
- E. Size of Viewing Surface at multi-purpose rooms: 65 by 116 inches (Sizes may vary per manufacturer, review with Architect).

#### 2.4 FRONT-PROJECTION SCREEN MATERIAL

- A. Material: Fabricated in one piece from 22 gauge steel with heavy gauge steel end caps.
- B. Finish: Powder coated white.

### PART 3 - EXECUTION

#### 3.1 FRONT-PROJECTION SCREEN INSTALLATION

- A. Install front-projection screens at locations indicated to comply with screen manufacturer's written instructions.
- B. Install front-projection screens with screen cases in position and in relation to adjoining construction indicated. Securely anchor to supporting substrate in a manner that produces a smoothly operating screen with vertical edges plumb and viewing surface flat when screen is lowered.
  - 1. Install low-voltage controls according to NFPA 70 and complying with manufacturer's written instructions.
    - a. Wiring Method: Install wiring in raceway except in accessible ceiling spaces and in gypsum board partitions where unenclosed wiring method may be used. Use UL-listed plenum cable in environmental air spaces, including plenum ceilings. Conceal raceway and cables except in unfinished spaces.
  - 2. Test electrically operated units to verify that screen controls, limit switches, closures, and other operating components are in optimum functioning condition.

END OF SECTION 11 52 13

