

SECTION 11132 - PROJECTION SCREENS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. DRAWINGS AND GENERAL PROVISIONS OF THE CONTRACT, INCLUDING GENERAL AND SUPPLEMENTARY CONDITIONS AND DIVISION 1 SPECIFICATION SECTIONS, APPLY TO THIS SECTION.

1.2 SUMMARY

- A. SECTION INCLUDES:
 - 1. MANUALLY OPERATED PROJECTION SCREENS WITH PULL CORD.
 - 2. EACH CLASSROOM SHALL RECEIVE A PROJECTION SCREEN WHETHER INDICATED OR NOT

1.3 DEFINITIONS

- A. GAIN OF FRONT-PROJECTION SCREENS: RATIO OF LIGHT REFLECTED FROM SCREEN MATERIAL TO THAT REFLECTED PERPENDICULARLY FROM A MAGNESIUM CARBONATE SURFACE AS DETERMINED PER SMPTE RP 94.

1.4 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 MANUALLY OPERATED PROJECTION SCREENS:
 - A. ANCHORAGE DETAILS.
 - B. ACCESSORIES.
- C. MAINTENANCE DATA: FOR PROJECTION SCREENS TO INCLUDE IN MAINTENANCE MANUALS.

1.5 QUALITY ASSURANCE

- A. SOURCE LIMITATIONS FOR PROJECTION SCREENS: OBTAIN PROJECTION SCREENS FROM SINGLE MANUFACTURER. OBTAIN ACCESSORIES, INCLUDING NECESSARY MOUNTING HARDWARE, FROM SCREEN MANUFACTURER.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. ENVIRONMENTAL LIMITATIONS: DO NOT DELIVER OR INSTALL PROJECTION SCREENS UNTIL SPACES ARE ENCLOSED AND WEATHERTIGHT, WET WORK IN SPACES IS COMPLETE AND DRY, AND TEMPORARY HVAC SYSTEM IS OPERATING AND MAINTAINING AMBIENT TEMPERATURE AND HUMIDITY CONDITIONS AT OCCUPANCY LEVELS DURING THE REMAINDER OF THE CONSTRUCTION PERIOD.

1.7 COORDINATION

- A. COORDINATE LAYOUT AND INSTALLATION OF PROJECTION SCREENS WITH ADJACENT CONSTRUCTION, INCLUDING CEILING SUSPENSION SYSTEMS, LIGHT FIXTURES, HVAC EQUIPMENT, FIRE-SUPPRESSION SYSTEM, AND PARTITIONS.

PART 2 - PRODUCTS

2.1 MANUALLY OPERATED PROJECTION SCREENS

- A. GENERAL: MANUFACTURER'S STANDARD SPRING-ROLLER-OPERATED UNITS, CONSISTING OF CASE, SCREEN, MOUNTING ACCESSORIES, AND OTHER COMPONENTS NECESSARY FOR A COMPLETE INSTALLATION.
 - 1. SCREEN MOUNTING: TOP EDGE SECURELY ANCHORED TO A 3-INCH DIAMETER, RIGID STEEL ROLLER; BOTTOM EDGE FORMED INTO A POCKET HOLDING A TUBULAR METAL SLAT, WITH ENDS OF SLAT PROTECTED BY PLASTIC CAPS, AND WITH A SADDLE AND PULL ATTACHED TO SLAT BY SCREWS.
- B. **BRACKET-MOUNTED OR CEILING-SUSPENDED**, METAL-ENCASED, MANUALLY OPERATED SCREENS: UNITS DESIGNED AND FABRICATED FOR SUSPENDING FROM WALL BRACKETS OR CEILING, FABRICATED FROM FORMED-STEEL SHEET NOT LESS THAN 0.027 INCH THICK OR FROM ALUMINUM EXTRUSIONS; WITH VINYL COVERING OR BAKED-ENAMEL FINISH AND MATCHING END CAPS. PROVIDE MOUNTING BRACKETS UNLESS OTHERWISE INDICATED.
 - 1. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, AVAILABLE PRODUCTS THAT MAY BE INCORPORATED INTO THE WORK INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:
 - A. DA-LITE SCREEN COMPANY; MODEL C.
 - B. DRAPER INC.; LUMA 2.

2.2 FRONT-PROJECTION SCREEN MATERIAL

- A. HIGH POWER VIEWING SURFACE: PEAK GAIN NOT LESS THAN 2.8, AND HALF-GAIN ANGLE OF AT LEAST 15 DEGREES FROM THE AXIS OF THE SCREEN SURFACE.
 - 1. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, AVAILABLE PRODUCTS THAT MAY BE INCORPORATED INTO THE WORK INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:

- A. DA-LITE SCREEN COMPANY; HIGH POWER.
 - B. DRAPER INC.
- B. WIDE-ANGLE REFLECTIVE VIEWING SURFACE: PEAK GAIN NOT LESS THAN 1.5, AND HALF-GAIN ANGLE OF AT LEAST 35 DEGREES FROM THE AXIS OF THE SCREEN SURFACE.
- C. MATERIAL: VINYL-COATED, BLACK BACKED GLASS-FIBER FABRIC.
- D. FLAME-SPREAD INDEX: NOT GREATER THAN 75 WHEN TESTED ACCORDING TO ASTM E 84.
- E. SEAMLESS CONSTRUCTION: PROVIDE SCREENS, IN SIZES INDICATED, WITHOUT SEAMS.
- F. EDGE TREATMENT: BLACK MASKING BORDERS.
- G. SIZE OF VIEWING SURFACE: 70 BY 70 INCHES.
- H. ACCESSORIES:
- 1. WALL BRACKETS:
 - a. FIXED LENGTH: EXTENDS 6"
 - b. COLOR: BLACK
 - c. CAPACITY: 75 POUNDS PER PAIR MAXIMUM
 - 2. FLOATING MOUNTING BRACKET: BLACK (USE AT GYPSUM WALL APPLICATIONS)

PART 3 - EXECUTION

3.1 FRONT-PROJECTION SCREEN INSTALLATION

- A. 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. TEST MANUALLY OPERATED UNITS TO VERIFY THAT SCREEN-OPERATING COMPONENTS ARE IN OPTIMUM FUNCTIONING CONDITION.

END OF SECTION