

SECTION 11 52 13.52

ROPEWALKER V TAB-TENSIONED CEILING-RECESSED FRONT PROJECTION SCREENS

Display hidden notes to specifier. (Don't know how? [Click Here](http://www.arcat.com/sd/display_hidden_notes.shtml))

\*\* NOTE TO SPECIFIER \*\* Draper Inc; Ceiling recessed front projection screens.  
This section is based on the products of Draper Inc, which is located at:  
411 S. Pearl, P. O. Box 425  
Spiceland, IN 47385-0425  
Toll Free Tel: 800-238-7999  
Tel: 765-987-7999  
Fax: 866-637-5611  
Email:[request info (drapercontract@draperinc.com)](http://admin.arcat.com/users.pl?action=UserEmail&company=Draper+Inc&coid=32063&rep=&fax=866-637-5611&message=RE:%20Spec%20Question%20(11133dra):%20%20&mf=)  
Web:[www.draperinc.com](http://www.draperinc.com)  
[[Click Here](http://www.arcat.com/arcatcos/cos32/arc32063.html)] for additional information.  
Draper manufactures the best and most complete line of projection screens in the world. We want to help you incorporate these screens into the most effective presentation systems. Planning a projection system involves several steps: choosing the screen size, viewing surface, screen model and control system if required. For additional information, see Draper Screen Selection/Resource Center at[www.draperinc.com](http://www.draperinc.com).

1. GENERAL
   1. SECTION INCLUDES

\*\* NOTE TO SPECIFIER \*\* Delete items below not required for project.

* + 1. Electrically-operated ceiling-recessed front projection screens.
  1. RELATED SECTIONS

\*\* NOTE TO SPECIFIER \*\* Delete any sections below not relevant to this project; add others as required.

* + 1. Division 5 - Metal Fabrications: Suspension systems for projection screens.
    2. Section 06 40 00 - Architectural Woodwork.
    3. Section 09 22 26 - Suspension Systems.
    4. Section 09 26 13 - Gypsum Veneer Plastering.
    5. Section 09 21 16.23 - Gypsum Board Shaft Wall Assemblies.
    6. Section 09 51 23 - Acoustical Tile Ceilings.
    7. Division 26 for electrical wiring, connections, and installation of remote control switches for electrically operated projection screens.
  1. REFERENCES

\*\* NOTE TO SPECIFIER \*\* Delete references from the list below that are not actually required by the text of the edited section.

* + 1. NFPA 70 - National Electrical Code.
    2. NFPA 701-99 - Fire Tests for Flame-Resistant Textiles and Films.
    3. UL GREENGUARD Gold.
    4. US Green Building Council.
  1. SUBMITTALS
     1. Submit under provisions of Section 01 30 00 - Administrative Requirements.
     2. Product Data: Manufacturer's data sheets on each product to be used, including:
        1. Preparation instructions and recommendations.
        2. Storage and handling requirements and recommendations.
        3. Installation methods.

\*\* NOTE TO SPECIFIER \*\* Delete below if no electrically operated screens.

* + 1. Wiring diagram for electrically operated units.

\*\* NOTE TO SPECIFIER \*\* Retain below for front projection screens where shop drawings are needed to understand relationships with adjoining work.

* + 1. Shop Drawings: Shop drawings showing layout and types of projection screens. Show the following:

\*\* NOTE TO SPECIFIER \*\* Edit below to suit screens specified and project conditions.

* + - 1. Location of screen centerline.
      2. Location of wiring connections.
      3. Seams in viewing surfaces.
      4. Detailed drawings for concealed mounting.
      5. Connections to suspension systems.
      6. Anchorage details.
      7. Accessories.
      8. Frame details.

\*\* NOTE TO SPECIFIER \*\* Delete selection samples if colors have already been selected.

* + 1. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.
    2. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) square, representing actual product, color, and patterns.
  1. QUALITY ASSURANCE
     1. Single Source Responsibility: Obtain each type of projection screen required from a single manufacturer as a complete unit, including necessary mounting hardware and accessories.
     2. 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, and partitions.
  2. DELIVERY, STORAGE, AND HANDLING
     1. Do not deliver projection screens until building is enclosed and other construction where screens will be installed is substantially complete.
     2. Store products in manufacturer's unopened packaging until ready for installation.
     3. Protect screens from damage during delivery, handling, storage, and installation.
  3. COORDINATION
     1. Coordinate work with installation of ceilings, walls, electric service power characteristics, and location.
  4. WARRANTY
     1. Manufacturer limited warranty: 5 years from date of purchase.

1. PRODUCTS
   1. MANUFACTURERS
      1. Acceptable Manufacturer: Draper Inc, which is located at: 411 S. Pearl, P. O. Box 425; Spiceland, IN 47385-0425; Toll Free Tel: 800-238-7999; Tel: 765-987-7999; Fax: 866-637-5611; Email:[request info (drapercontract@draperinc.com)](http://admin.arcat.com/users.pl?action=UserEmail&company=Draper+Inc&coid=32063&rep=&fax=866-637-5611&message=RE:%20Spec%20Question%20(11133dra):%20%20&mf=); Web:[www.draperinc.com](http://www.draperinc.com)

\*\* NOTE TO SPECIFIER \*\* Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.

* + 1. Substitutions: Not permitted.
    2. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.
  1. MOTORIZED, CEILING RECESSED, FRONT PROJECTION SCREENS
     1. Electrically -operated, ceiling-recessed, tab-tensioned projection screen for use in high ceilings without black drop between the screen and ceiling.
        1. Basis-of-Design Product: Ropewalker E
           1. External recessed case: 18-gauge steel, 14-1/2 inches deep x 16-3/4 inches high (including mounting brackets and bottom perimeter flange to provide support and trim for acoustical ceiling panels and trim for gypsum board ceiling).
           2. Internal screen housing: 18-gauge steel.
           3. Maximum drop from recessed housing: 34 feet (1,067 cm)
           4. Approximate travel speed: 20 feet (6 m) per minute (120V) or 17 feet (5 m) per minute (220V).
           5. Voltage: **[110V AC] [220V AC]**
     2. Operation: Roller with external drive mechanism engages the end of the fabric roller and lowers the viewing surface. Once the fabric is unrolled the mechanism disengages and then the inner case assembly is lowered into the room by a 5-inch (127 mm) OD roller tube via galvanized steel aircraft cables.
     3. Safety Mechanism: Built-in fall arrester prevents screen case from falling in the event of a failure.
  2. MOTOR AND CONTROLS
     1. Motor UL certified, rated [110-120V AC, 60 Hz] [220V AC, 50 Hz], 5-wire, instantly reversible, lifetime lubricated with pre-set accessible limit switches. Motor is left mounted.
        1. Motor is left mounted.

\*\* NOTE TO SPECIFIER \*\* Select controls required for project and delete those not used on the project. Coordinate the compatibility of multiple control selections.

* + - 1. Controls, UL certified.
         1. Single Station Control: 3-position 110-120V maintained rocker switch with [stainless steel cover plate and black rocker] [white switches].
         2. EZ-Power Wireless Remote Receiver/Operator is a commercial type 110-120V AC receiver with a coding switch for individual operation by portable transmitter. Receiver shall be factory-wired and installed in an (6" x 4" x 2½") (152 mm x 102 mm x 64 mm) enclosure with a 6 foot (1.8 m) long power cord with a four-prong NEMA style twist lock grounded plug. Receiver includes a contact closure terminal block mounted on the enclosure. Receiver comes with a matching flange-type receptacle, cover for 4 inch (102 mm) box and plug. All wiring and electrical components are to be in accordance with local codes and as per manufacturer’s installation instructions. All conduits, wiring, and electrical components not specified herein, shall be supplied by the electrical contractor.
         3. EZ-Power Hand Held Remote Control Transmitter is capable of operating up to 99 individual electric receivers. Power supply for hand held shall be a standard 9-volt battery. Operating range for hand held transmitter approximately 100 feet (30.48 m).
  1. PROJECTION VIEWING SURFACE
     + 1. Projection Viewing Surface:

\*\* NOTE TO SPECIFIER \*\* Select the screen type from the following paragraphs and delete those not required. Note that there are size limitations with some viewing surfaces. Contact manufacturer for additional information.

* + - * 1. Matt White XT1000VB - On Axis gain of 1.0. 180 degree viewing cone. GREENGUARD Gold certified. Black backing.
        2. Grey XH600V - On Axis gain of 0.6. Provides excellent contrast and color reproduction. GREENGUARD Gold certified. Maximum size 9 feet by 12 feet (275 cm x 366 cm). Available with or without black backing.
        3. TecVision XH700X Grey - On Axis gain of 0.7. 180 degree viewing cone. Designed for blending applications on curved or flat screens or Ultra-Short Throw (UST) projection where ambient light is present. Provides very good contrast and color reproduction. Imaging Science Foundation certified and 8K ready. Dark backing.
        4. TecVision XH800X ALR - Formulated for use with short throw projection in moderate to high ambient light applications. 0.8 gain. Rejects 57% of off-axis ambient light, supports extremely wide viewing angles. Lens/Throw distance ratio for best brightness uniformity: 0.7:1 or longer. Imaging Science Foundation certified. 4K ready. Dark backing.
        5. TecVision XH900X ALR - On Axis gain of 0.9. Rejects 60% of ambient light. 180 degree viewing cone. Provides very good contrast and color reproduction. Imaging Science Foundation certified. 4K ready. Dark backing.
        6. TecVision MS1000X ALR – Rejects 73% of ambient light. On Axis gain of 1.0. 70 degree viewing cone. Provides excellent contrast and color reproduction. Performs well in ambient light. Imaging Science Foundation certified. 4K ready. Dark backing.
        7. TecVision CS1000X ALR - On Axis gain of 1.0. Rejects 82% of ambient light. 40 degree viewing cone. Provides excellent contrast and color reproduction. Performs well in ambient light. Imaging Science Foundation certified. 4K ready. Dark backing.
        8. TecVision CS1200X ALR - On Axis gain of 1.2. Rejects 82% of ambient light. 40 degree viewing cone. Provides excellent contrast and color reproduction. Performs well in ambient light. Imaging Science Foundation certified. 4K ready. Dark backing.
        9. TecVision XT1000X White - On Axis gain of 1.0. 180 degree viewing cone. Imaging Science Foundation certified. 8K ready reference screen surface for blending applications and Ultra-Short Throw (UST) projection. Precise resolution and color accuracy. Dark backing.
        10. TecVision XT1100X White - On-Axis gain of 1.1. 180 degree viewing cone. Designed for use when the projector brightness and size of screen require a minimal increase in gain. Imaging Science Foundation certified and 4K ready. Dark backing.
        11. TecVision XT1300X White - On Axis gain of 1.3. 180 degree viewing cone. Imaging Science Foundation certified. 4K ready. Dark backing.
        12. TecVision XT1600X White - On Axis gain of 1.6. 180 degree viewing cone. Imaging Science Foundation certified. 4K ready. Dark backing.
        13. TecVision XT1800X White - On Axis gain of 1.8. 180 degree viewing cone. Imaging Science Foundation certified. Suited for active 3D or color combining passive 3D systems. 4K ready. Dark backing.
      1. Tab-Tensioning System:
         1. Viewing surface with integrated tabs and cable on each side of fabric to provide tension and ensure flat viewing surface. Viewing surface and tabs CNC cut as a single piece. Tabs RF welded to the back of viewing surface to prevent tab separation. Tab adhesives are not acceptable. Viewing surface inserted into aluminum bottom dowel. Warranted for 5 years against tab separation.

\*\* NOTE TO SPECIFIER \*\* Select the screen format and size required for the project. Delete the paragraphs not required.

* + - 1. Viewing Area H x W.
         1. NTSC Format (4:3). Black masking borders standard.

6 foot (1.83 m) diagonal, 42-1/2 inches x 56-1/2 inches (1080 mm x 1435 mm).

7 foot (2.13 m) diagonal, 50 inches x 66-1/2 inches (1270 mm x 1689 mm).

100 inch (2540 mm) diagonal, 60 inches x 80 inches (1524 mm x 2032 mm).

10 foot (3.05 m) diagonal, 69 inches x 92 inches (1753 mm x 2337 mm).

11 foot (3.35 m) diagonal, 78 inches x 104 inches (1981 mm x 2642 mm).

150 inch (3810 mm) diagonal, 87 inches x 116 inches (2210 mm x 3658 mm).

15 foot (4.57 m) diagonal, 108 inches x 144 inches (2743 mm x 3658 mm).

200 inch (5.08 m) diagonal, 118 inches x 158 inches (2997 mm x 4013 mm).

210 inch (534 cm) diagonal, 126 inches x 168 inches (300 cm x 427 cm).

220 inch (559 cm) diagonal, 132 inches x 176 inches (335 cm x 447 cm).

230 inch diagonal,

240 inch (610 cm) diagonal, 144 inches x 192 inches (366 cm x 488 cm).

250 inch (635 cm) diagonal, 148 inches x 198 inches (3759 mm x 5029 mm)

270 inch diagonal

* + - * 1. HDTV Format (16:9). Black masking borders standard.

67 inch diagonal

76 inch diagonal

85 inch diagonal

94 inch diagonal

109 inch diagonal

113 inch diagonal

123 inch diagonal

137 inch diagonal

165 inch diagonal

189 inch diagonal

198 inch diagonal

222 inch diagonal

255 inch diagonal

* + - * 1. 16:10 Format. Black masking borders standard.

65 inch diagonal.

73 inch diagonal

82 inch diagonal

92 inch diagonal

100 inch diagonal

106 inch diagonal

110 inch diagonal

119 inch diagonal

133 inch diagonal

161 inch diagonal

184 inch diagonal

193 inch diagonal

220 inch diagonal

248 inch diagonal.

1. EXECUTION
   1. EXAMINATION
      1. Do not begin installation until substrates have been properly prepared.
      2. Verify rough-in openings are properly prepared.
      3. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
   2. PREPARATION
      1. Clean surfaces thoroughly prior to installation.
      2. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
   3. INSTALLATION
      1. Install in accordance with manufacturer's instructions.
      2. 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.

\*\* NOTE TO SPECIFIER \*\* Select manual or electrically operated screens from the following two paragraphs as required by the project requirements.

* + 1. Test electrically operated units to verify that screen, controls, limit switches, closure and other operating components are in optimum functioning condition.
  1. PROTECTION
     1. Protect installed products until completion of project.
     2. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION