

SECTION 11132 [11 52 13]

ULTIMATE ACCESS V FRONT PROJECTION SCREENS

\*\* NOTE TO SPECIFIER \*\* Draper® Inc; Wall and ceiling surface mounted and recess mounted 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)

 Web: [www.draperinc.com](http://www.draperinc.com)

 [ [Click Here](http://www.arcat.com/arcatcos/cos43/arc43272.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, go to [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.
		2. Front projection screen controls.
	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 06400 [06 40 00] - Interior Architectural Woodwork: Wood trim for recessed screen installation.
		3. Section 09120 [09 22 26} - Ceiling Suspension System: Supports and trim for suspended ceilings.
		4. Section 09210 [09 26 13] - Gypsum Plaster: Ceiling for recessed screen installation.
		5. Section 09260 [09 21 16] - Gypsum Board Assemblies: Ceiling for recessed screen installation.
		6. Section 09510 [09 51 23] - Acoustical Tile Ceilings: Ceiling for recessed screen installation.
		7. Division 16 [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. GREENGUARD Gold®.
		4. US Green Building Council.
	1. SUBMITTALS
		1. Submit under provisions of Section 01300.
		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.
		3. 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.

\*\* 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. ASD. Toll Free Tel: 800-238-7999; Tel: 765-987-7999; Fax: 866-637-5611; 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 01600.
	1. MOTORIZED, CEILING RECESSED, FRONT PROJECTION SCREENS

**\*\* NOTE TO SPECIFIER:\*\* Maximum image width up to 12 feet (366 cm) wide, depending on surface selection.**

* + 1. Ultimate Access V: Electric motor operated, metal case, independently motorized closure, tab tensioned. Ceiling-recessed, metal headbox, 9-7/8 inches high x 8 inches deep (251 mm high x 204 mm deep) including trim flanges. UL approved "Suitable for use in environmental air space." Case finished white. Bottom of case consists of an independently motorized trap door that opens up inside the screen case. Trap door and access door both hinge downward to allow access to inside of screen case. Doors remain attached to screen case via a concealed full-length hinge. Releasing one latch at each end of screen case allows doors to hinge downward and a prop arm at each end may be pivoted to engage with endcaps, keeping door assembly in its fully open position. Housing is symmetrical allowing for left (Standard) and right (optional) hand motor locations and for viewing surface to unroll off front or back of roller. Screen is attached to roller with roller brackets. Ultimate Access case may be ordered in advance and the screen installed later to eliminate field damage. Metal roller mounted on rubber isolation mounts.

\*\* NOTE TO SPECIFIER \*\* Select one of the following motor paragraphs and delete the paragraph not required. Note that there are size limitations with quiet motors. Contact manufacturer for additional information.

* + - 1. Motor mounted inside screen roller on rubber isolation insulators. Motor UL certified, rated 110-120V AC, 60 Hz, five wire, instantly reversible, lifetime lubricated with pre-set accessible limit switches. Motor with overload protection and electric brake.
			2. Quiet Motor mounted inside screen roller on rubber isolation insulators. Motor operates at 44db and is UL certified, rated 110-120V AC, 60 Hz, five wire, instantly reversible, lifetime lubricated with pre-set accessible limit switches. Motor with overload protection and electric brake.

\*\* NOTE TO SPECIFIER \*\* Left hand motor location is standard; right hand is optional. Select required paragraph and delete paragraph not required. Not all screens can have the motor mounted on the right end of the case. Consult Draper literature for details.

* + - 1. Motor shall be left mounted (standard).
			2. Motor shall be right mounted (optional).
			3. 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. 4K ready.
				2. ClearSound NanoPerf XT1000V - On Axis gain of 1.0. 180 degree viewing cone. Acoustically transparent white PVC fabric with microscopic perforations. Not recommended for viewing less than 10 feet (305 cm) from screen. 4K ready.
				3. TecVision XH700X Premium Contrast 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 XH1200X Premium Contrast Grey - On Axis gain of 1.2. 100 degree viewing cone. Designed to enhance contrast under controlled light. Provides excellent color reproduction. Imaging Science Foundation certified and 8K ready. Dark backing.
				5. TecVision XH800X ALR - 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. 8K ready. Dark backing.
				6. 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. 8K ready. Dark backing.
				7. 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. 8K ready. Dark backing.
				8. 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.
				9. 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 8K ready. Dark backing.
				10. TecVision CS1100X ALR - On Axis gain of 1.1. Rejects 82% of off-axis ambient light. 100 degree viewing cone. Provides excellent contrast and color reproduction. Performs well in ambient light. Imaging Science Foundation certified. 8K ready. Dark backing.
				11. TecVision XT1300X White - On Axis gain of 1.3. 180 degree viewing cone. Imaging Science Foundation certified. 8K ready. Dark backing.
				12. TecVision XT1600X White - On Axis gain of 1.6. 180 degree viewing cone. Imaging Science Foundation certified. 8K ready. Dark backing.
				13. CineFlex CH1200V - On Axis gain of 1.2. 60 degree viewing cone. Neutral grey rear projection diffusing surface. Provides high resolution and excellent contrast, even in lighted rooms. Recommended for use with low to medium output projectors. 4K ready.
				14. CineFlex White XT700V - On Axis gain of 0.7. 180 degree viewing cone. White rear projection surface works well for edge matching or edge blending applications, and also for short throw rear projection. Reasonable control of ambient light is recommended. 4K ready.
			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.

\*\*SPECIFIER’: Select format and size required for the project. Delete the paragraphs not required.\*\*

* + - 1. Viewing Area H x W.
				1. Custom Size: \_\_\_\_\_\_\_\_ H x \_\_\_\_\_\_\_\_\_\_\_\_ W.
				2. HDTV Format (16:9). Black masking borders and 12 inches (305 mm) extra black drop are standard.

92 inch (2337 mm) diagonal, 45 inches x 80 inches (1143 mm x 2032 mm).

100 inch (2540 mm) diagonal, 49 inches x 87 inches (1245 mm x 2210 mm)

106 inch (2692 mm) diagonal, 52 inches x 92 inches (1321 mm x 2337 mm).

110 inch (2794 mm) diagonal, 54 inches x 96 inches (1372 mm x 2438 mm)

119 inch (3023 mm) diagonal, 58 inches x 104 inches (1473 mm x 2642 mm).

133 inch (3378 mm) diagonal, 65 inches x 116 inches (1651 mm x 2947 mm).

161 inch (4089 mm) diagonal, 79 inches x 140 inches (2007 mm x 3556 mm).

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

94 inch (2438 mm) diagonal, 50 inches x 80 inches (1270 mm x 2032 mm).

109 inch (2769 mm) diagonal, 57-1/2 inches x 92 inches (1461 mm x 2337 mm).

113 inch (2870 mm) diagonal, 60 inches x 96 inches (1524 mm x 2438 mm).

123 inch (3124 mm) diagonal, 65 inches x 104 inches (1351mm x 2642 mm).

137 inch (3480) diagonal, 72-1/2 inches x 116 inches (1842 mm by 2946 mm).

165 inch (4191 mm) diagonal, 87-1/2 inches x 140 inches (2223 mm by 3556 mm).

* + - * 1. NTSC Format (4:3). Black masking borders and 12 inches (305 mm) extra black drop are standard.

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, 72 inches x 96 inches (1829 mm x 2438 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).

\*\* NOTE TO SPECIFIER \*\* Edit the following if an extra screen drop exceeding the standard of 12 inches (305 mm) is required for the project. Black is standard for all formats, viewing surface color is optional. Note that extra drop will increase the overall length of the case. Select the screen drop type and fill in the drop height from one of the following paragraphs and delete the other. Total screen height cannot exceed 12 feet (3.66 m). If extra screen drop is not required, delete both paragraphs.

* + - 1. Provide an extra screen drop with an overall screen drop of \_\_\_ inches (\_\_\_ mm) with top border matching the viewing surface.
			2. Provide an extra screen drop with an overall screen drop of \_\_\_ inches (\_\_\_ mm) with a black masking top border.

\*\* NOTE TO SPECIFIER \*\* Select controls and wall and/or remote-control switches required for project. Delete the types of controls and switches not used on the project. Coordinate the compatibility of multiple control selections.

* 1. FRONT PROJECTION SCREEN CONTROLS
		1. General: All controls are UL Certified.

\*\* NOTE TO SPECIFIER \*\* Not compatible with options 2, 3, 4, 5, 8, or 9.

* + - 1. Single station control rated 115V AC, 60 Hz with 3-position rocker switch with cover plate to stop or reverse screen at any point.

\*\* NOTE TO SPECIFIER \*\* Not compatible with options 1, 3, 4, 5, 8, or 9.

* + - 1. Multiple station control rated 115V AC, 60 Hz with 3-position rocker switches with cover plates to stop or reverse screen at any point. Automatic override allows only one signal to reach the motor when operated simultaneously.

\*\* NOTE TO SPECIFIER \*\* Not compatible with options 1, 2, 7, or 8.

* + - 1. Low voltage control unit with three button 24V switches and cover plate to stop or reverse screen at any point, built-in RF receiver, built-in Video Interface Control trigger for 3V-28V, RS232, and dry contact relays.

\*\* NOTE TO SPECIFIER \*\* . Not compatible with options 1, 2, 7, or 8.

* + - 1. Low voltage 24V control unit with hand held RF remote three button control switch to stop or reverse screen at any point, built-in RF receiver, built-in Video Interface Control trigger for 3V-28V, RS232, and dry contact relays.

\*\* NOTE TO SPECIFIER \*\* Not compatible with options 1, 2, 7, or 8.

* + - 1. Low voltage 24V control unit with hand held IR remote three button control switch to stop or reverse screen at any point, built-in RF receiver, built-in Video Interface Control trigger for 3V-28V, RS232, and dry contact relays.

\*\* NOTE TO SPECIFIER \*\* Compatible with all options.

* + - 1. Key Operated power supply switch to control power to control system.

\*\* NOTE TO SPECIFIER \*\* Not compatible with options 4, 5, 6, 8, or 9.

* + - 1. Locking switch cover plate for limited access to three position switch.

\*\* NOTE TO SPECIFIER \*\* . Not compatible with options 1, 2, 3, 4, 5, 7, or 9`.

* + - 1. Key operated 3-position control switch rated 115V AC, 60 Hz to stop or reverse screen at any point.

\*\* NOTE TO SPECIFIER \*\* Not compatible with options 1, 2, 6, 7, or 8.

* + - 1. 3-position low voltage control switch with key locking cover plate rated 24V to stop or reverse screen at any point.

\*\* NOTE TO SPECIFIER \*\* LVC-IV Required. Not compatible with options 4, 5, 7, or 8.

* + - 1. LVC-IP Bridge. Acts as an IP to Serial Gateway for controlling Draper lifts & screens when used in conjunction with an LVC-IV. Configuration is done using built-in buttons and display.
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.
		3. Test electrically operated units to verify that screen, controls, limit switches, closure and other operating components are in optimum functioning condition.
	4. PROTECTION
		1. Protect installed products until completion of project.
		2. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION