

SECTION 11 52 13.50

ACUMEN® M MANUALLY OPERATED FREE-HANGING SURFACE-MOUNTED FRONT PROJECTION SCREEN

\*\* NOTE TO SPECIFIER \*\* Draper, Inc.; Wall and ceiling surface 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)](http://admin.arcat.com/users.pl?action=UserEmail&company=Draper,+Inc.&coid=32063&rep=&fax=866-637-5611&message=RE:%20Spec%20Question%20(11132dra):%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. Manually operated, surface mounted, 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.
	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 701-99 - Fire Tests for Flame-Resistant Textiles and Films.
		2. GREENGUARD Environmental Institute Gold.
		3. 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 \*\* 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. Seams in viewing surfaces.
			3. Detailed drawings for concealed mounting.
			4. Connections to suspension systems.
			5. Anchorage details.
			6. Accessories.
			7. 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: 7 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(11132dra):%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. MANUALLY OPERATED, SURFACE MOUNTED, FRONT PROJECTION SCREENS
		1. Acumen® M: Spring roller operated, extruded aluminum case. Contoured case of 0.156" (3.9624 mm) thick, 9-gauge extruded aluminum. Removable front fascia conceals viewing surface that retracts completely inside the case. Case dimensions are 7-1/8 inches h x 5-7/8 inches d (181 mm x 149 mm).
			1. System Options:

\*\* NOTE TO SPECIFIER \*\* Select the required case finish.

* + - * 1. Contoured aluminum case finished in a white color (standard).
				2. Contoured aluminum case finished in a black color.

\*\* NOTE TO SPECIFIER \*\* Select the mounting bracket required for either ceiling or wall mounting.

* + - * 1. Wall Mount Brackets (standard): “Floating” steel brackets, finished to match screen case.
				2. Ceiling Mount Brackets: “Floating” steel brackets, finished to match screen case.
			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 XT1000E - On Axis gain of 1.0. 180 degree viewing cone. Washable surface. GREENGUARD Gold certified.
				2. Contrast Grey XH800E - 0.8 On Axis gain. Smooth grey surface provides excellent resolution and enhances color contrast. 180 degree viewing cone. GREENGUARD Gold certified.

\*\* NOTE TO SPECIFIER \*\* ClearSound White Weave XT900E is not recommended for viewing less than 10 feet (305 cm) from screen.

* + - * 1. ClearSound White Weave XT900E - On Axis gain of 0.9. 180 degree viewing cone. Acoustically transparent woven blend of fiberglass and PVC. Acoustical properties are comparable to the highest quality speaker grille cloth. Some control of ambient light is recommended. Flame and mildew resistant.
				2. Chroma Key Green - Green flexible PVC surface for video production where you need the background to "disappear." Matte finish. Flame retardant, tear resistant, and wrinkle resistant. Offers excellent uniformity and consistent surface color edge to edge. Works effectively throughout 180 degree viewable range.

\*\* 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. 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 (2225 x 3556 mm).

* + - * 1. HDTV Format (16:9). Black masking borders 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. 2:39:1 CinemaScope Format

117 inch (2972 mm) diagonal, 45 inches x 107-1/2 inches (1143 mm x 2731 mm).

135 inch (3429 mm) diagonal, 52 inches x 124-1/4 inches (1321 x 3156 mm).

150 inch (3810 mm) diagonal, 58 inches x 138-1/4 inches (1473 mm x 3512 mm).

* + - * 1. 1.9:1 2K/4K Full

96 inch (2438 mm) diagonal, 45 inches x 85-1/2 inches (1143 mm x 2172 mm).

118 inch (2998 mm) diagonal, 55 inches x 104-1/2 inches (1397 mm x 2654 mm).

139 inch (3532 mm) diagonal, 65 inches x 123-1/2 inches (1651 x 3137 mm).

\*\* NOTE TO SPECIFIER \*\* If an extra screen drop is required for the project, fill in the drop height and select one of the following paragraphs. Total screen height cannot exceed 12 feet (3.66 m). Extra drop cannot exceed 84 inches (213 cm). Select viewing surface color or black. Black is standard. If 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.
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 manually operated units to verify that screen 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