Legrand AV Division April 2019

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Guide Specification

Specifier Notes: This guide specification is written in Construction Specifications Institute (CSI) 3-Part Format in accordance with *The CSI Construction Specifications Practice Guide,* *MasterFormat, SectionFormat,* and *PageFormat.*

This Section must be carefully reviewed and edited by the Architect to meet the requirements of the Project and local building code. Coordinate this Section with Conditions of the Contract, Division 01, other specification sections, and the Drawings. Delete all Specifier Notes after editing this Section.

Section numbers and titles are based on *CSI MasterFormat 2018 Edition.*

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PROJECTION SCREENS

Specifier Notes: This Section covers Legrand AV Division Da-Lite “DescenderPro” ceiling recessed projection screens. Tab-tensioned and non-tensioned versions are available.

Consult Legrand AV Division for assistance in editing this Section as required for the Project.

* 1. GENERAL
		1. SECTION INCLUDES
			1. Ceiling recessed projection screens.
		2. RELATED REQUIREMENTS

Specifier Notes: Edit the following list of related sections as required for the Project. Limit the list to sections with specific information that the reader might expect to find in this Section, but is specified elsewhere.

* + - 1. Division 26 – Electrical: Electrical power for projection screens.
		1. REFERENCE STANDARDS

Specifier Notes: List reference standards used elsewhere in this Section, complete with designations and titles. Delete reference standards from the following list not used in the edited Section.

* + - 1. Canadian Standards Association (CSA) (www.csagroup.org):
				1. CSA C22.1 – Canadian Electrical Code (CE Code), Part 1.
			2. International Organization for Standardization (ISO) ([www.iso.org](http://www.iso.org)):
				1. ISO 9001 – Quality management systems – Requirements.
			3. National Fire Protection Association (NFPA) (www.nfpa.org):
				1. NFPA 70 – National Electrical Code (NEC).
		1. PREINSTALLATION MEETINGS

Specifier Notes: Edit the Preinstallation Meetings article as required for the Project. Delete this article if not required.

* + - 1. Convene preinstallation meeting [1 week] [2 weeks] before start of installation of projection screens.
			2. Require attendance of parties directly affecting Work of this Section, including Contractor, Architect, installer, and manufacturer’s representative.
			3. Review the Following:
				1. Materials.
				2. Accessories.
				3. Installation.
				4. Adjusting.
				5. Cleaning.
				6. Protection.
				7. Coordination with other Work.
		1. SUBMITTALS

Specifier Notes: Edit the Submittals article as required for the Project. Delete submittals not required.

* + - 1. Submittals: Comply with Division 01.
			2. Product Data: Submit manufacturer’s product data, including installation instructions.
			3. Shop Drawings: Submit manufacturer’s shop drawings, indicating dimensions, tolerances, materials, components, mounting brackets, hardware, finish, electrical wiring diagrams, options, and accessories.
			4. Manufacturer’s Certification: Submit manufacturer’s certification that materials comply with specified requirements and are suitable for intended application.
			5. Manufacturer’s Project References: Submit manufacturer’s list of 10 successfully completed projection screen projects of similar size and scope to this Project, including project name and location, name of architect, and type and quantity of projection screens furnished.
			6. Operation and Maintenance Data:
				1. Submit manufacturer’s operation and maintenance manual, including the following:

Operation, maintenance, adjustment, and cleaning instructions.

Safety information.

Troubleshooting guide.

Parts list.

Electrical wiring diagrams.

* + - * 1. Provide detailed information required for Owner to properly operate and maintain equipment.
			1. Warranty Documentation: Submit manufacturer’s standard warranty.
		1. QUALITY ASSURANCE
			1. Manufacturer’s Qualifications:
				1. Manufacturer regularly engaged in the manufacturing of projection screens of similar type to that specified for a minimum of 10 years.
				2. Da-Lite: ISO 9001 certified company.
		2. DELIVERY, STORAGE, AND HANDLING
			1. Delivery Requirements: Deliver materials to site in manufacturer’s original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
			2. Storage and Handling Requirements:
				1. Store and handle materials in accordance with manufacturer’s instructions.
				2. Keep materials in manufacturer’s original, unopened containers and packaging until installation.
				3. Store materials in clean, dry area indoors.
				4. Do not store materials directly on floor.
				5. Store projection screens horizontally and provide uniform support.
				6. Store materials between 40 degrees F and 100 degrees F (5 degrees C and 40 degrees C) and between 30 percent and 70 percent relative humidity.
				7. Store materials out of direct sunlight.
				8. Protect materials during storage, handling, and installation to prevent damage.
		3. WARRANTY
			1. Warranty Period:
				1. Projection Screen and Motor: 5 years.
	1. PRODUCTS
		1. MANUFACTURERS
			1. Manufacturer: Legrand AV Division, 6436 City West Parkway, Eden Prairie, Minnesota 55344. Phone 866-977-3901. Fax 877-894-6918. [www.legrandav.com](http://www.legrandav.com). av.support@legrand.com.

Specifier Notes: Specify if substitutions will be permitted.

* + - 1. Substitutions: [Not permitted] [Comply with Division 01].
			2. Single Source: Provide materials from single manufacturer.
		1. PROJECTION SCREENS

Specifier Notes: Specify Da-Lite “Tensioned DescenderPro” **or** Da-Lite “DescenderPro” projection screens. Delete type of projection screens not required.

* + - 1. Projection Screens: Da-Lite “Tensioned DescenderPro” automatic, electric, ceiling recessed projection screens.

Specifier Notes: Specify screen surface nominal diagonal. Consult Legrand AV Division for screen sizes available for the HDTV 16:9 and wide 16:10 formats.

* + - * 1. Screen Surface Nominal Diagonal: \_\_\_\_\_\_\_ inches (\_\_\_\_\_\_\_ cm).

Specifier Notes: Specify format.

* + - * 1. Format: [HDTV 16:9] [Wide 16:10].

Specifier Notes: Specify **one** of the following **three** surface resolutions. Delete surface resolutions not required.

* + - * 1. High Surface Resolution: HD Progressive 0.9.

Viewing Angle: 170 degrees.

Gain: 0.9.

16 K ready.

* + - * 1. High Surface Resolution: HD Progressive 1.1.

Viewing Angle: 170 degrees.

Gain: 1.1.

16 K ready.

* + - * 1. Standard Surface Resolution: Da-Mat.

Viewing Angle: 120 degrees.

Gain: 1.0.

* + - * 1. Screen Surface Tension:

Each Side of Screen Surface: Tab guide cable system to maintain even lateral tension and hold surface flat.

Custom slat bar with added weight maintains vertical tension on screen surface.

* + - * 1. Screen Surface:

Seamless in image area.

Fire retardant.

Mildew resistant.

Black masking borders.

Black backing.

GREENGUARD Gold certified.

* + - * 1. Black Drop at Top of Screen: 12 inches.

Screen can be incrementally adjusted to show less drop to 6 inches black drop at top.

* + - * 1. Electrical: Electrically operated, 120 V, 60 Hz, not more than 1.2 amp, with quick-connect male plug-in connector on motor.
				2. Motor: Mounted inside roller, 3-wire with ground, quick-reversal type, oiled for life, with automatic thermal-overload cutout, integral gears, capacitor, and electric brake to prevent coasting.
				3. Limit Switches: Preset adjustable limit switches to automatically stop screen surface in "up" and "down" positions.
				4. Junction Box: Internally integrated into case, making it possible to install case and wire to building electrical system during construction.
				5. Quick-Connect Connector: Mounted in case for easy plug-in connection to motorized fabric and roller assembly.
				6. Motorized Fabric and Roller Assembly: Installed in case at factory.
				7. Fabric Roller: Rigid steel.
				8. Screen designed for left-hand motor installation.
				9. Ends of Slat: Protected by heavy-duty plastic caps, enclosing preset adjustable mechanism for screen tensioning.
				10. Case:

Top, Front, and Back: Heavy-gauge steel, powder-coated white.

End Caps: Heavy-gauge galvanized steel.

Removable Access Door: Bottom of case, heavy-gauge steel, powder-coated white.

Bottom: Self-trimming, with built-in flange on bottom of case and detachable flanges on left and right ends.

No visible screws.

* + - * 1. Integrated low-voltage control (LVC) unit, 3-position wall control switch, and cover plate.
				2. Suitable for use in environmental air space in accordance with section 300-22 (c) of NFPA 70, and sections 2-128, 12-010 (3), and 12-100 of CSA C22.1.
				3. UL listed.
			1. Projection Screens: Da-Lite “DescenderPro” automatic, electric, ceiling recessed projection screens.

Specifier Notes: Specify screen surface nominal diagonal. Consult Legrand AV Division for screen sizes available for the HDTV 16:9 and wide 16:10 formats.

* + - * 1. Screen Surface Nominal Diagonal: \_\_\_\_\_\_\_ inches (\_\_\_\_\_\_\_ cm).

Specifier Notes: Specify format.

* + - * 1. Format: [HDTV 16:9] [Wide 16:10].
				2. Standard Surface Resolution: Matte White.

Viewing Angle: 120 degrees.

Gain: 1.0.

* + - * 1. Bottom of Screen Surface:

Steel rolled slat bar.

Plastic end caps to protect ends of slat bar.

* + - * 1. Screen Surface:

Seamless in image area.

Fire retardant.

Mildew resistant.

Black masking borders.

Black backing.

GREENGUARD Gold certified.

* + - * 1. Black Drop at Top of Screen: 2 inches.

Screen can be incrementally adjusted to show more drop to 12 inches black drop at top.

* + - * 1. Electrical: Electrically operated, 120 V, 60 Hz, not more than 1.2 amp, with quick-connect male plug-in connector on motor.
				2. Motor: Mounted inside roller, 3-wire with ground, quick-reversal type, oiled for life, with automatic thermal-overload cutout, integral gears, capacitor, and electric brake to prevent coasting.
				3. Limit Switches: Preset adjustable limit switches to automatically stop screen surface in "up" and "down" positions.
				4. Junction Box: Internally integrated into case, making it possible to install case and wire to building electrical system during construction.
				5. Quick-Connect Connector: Mounted in case for easy plug-in connection to motorized fabric and roller assembly.
				6. Motorized Fabric and Roller Assembly: Installed in case at factory.
				7. Fabric Roller: Rigid steel.
				8. Screen designed for left-hand motor installation.
				9. Ends of Slat: Protected by heavy-duty plastic caps.
				10. Case:

Top, Front, and Back: Heavy-gauge steel, powder-coated white.

End Caps: Heavy-gauge galvanized steel.

Removable Access Door: Bottom of case, heavy-gauge steel, powder-coated white.

Bottom: Self-trimming, with built-in flange on bottom of case and detachable flanges on left and right ends.

No visible screws.

* + - * 1. Integrated low-voltage control (LVC) unit, 3-position wall control switch, and cover plate.
				2. Suitable for use in environmental air space in accordance with section 300-22 (c) of NFPA 70, and sections 2-128, 12-010 (3), and 12-100 of CSA C22.1.
				3. UL listed.
		1. ACCESSORIES

Specifier Notes: Delete optional accessories not required.

* + - 1. Radio Frequency Wireless Remote:
				1. Radio frequency remote and receiver for operation up to 75 feet away.
				2. Includes batteries.
			2. Infrared Wireless Remote:
				1. Infrared remote and receiver for operation up to 50 feet away.
				2. Includes batteries.
			3. Smart Low-Voltage Wall Switch:
				1. Additional or replacement low-voltage wall switch.

Specifier Notes: Specify color. White is standard.

* + - * 1. Color: [White] [Ivory].
			1. Locking Switch Cover Plate:
				1. Hinged cover plate installs over top of standard wall switch.
				2. Opens with key.
				3. Finish: Brushed stainless steel.
			2. Red Laser Pointer:
				1. Power Output: Less than 5 mW.
				2. Wavelength: 650 nm.
				3. Operating Lifetime: 3,000 hours.
				4. FDA Safety Class: IIIa.
				5. Includes batteries.
			3. Green Laser Pointer:
				1. Range: 300 feet.
				2. Power Output: Less than 5 mW.
				3. Wavelength: 532 nm.
				4. Operating Lifetime: 3,000 hours.
				5. FDA Safety Class: IIIa.
				6. Includes batteries.
			4. RF PowerPoint Remote with Green Laser Pointer:
				1. Page-up/page-down functions with Microsoft PowerPoint on Windows, Linux, and Macintosh operating systems.
				2. Range:

RF: 30 feet.

Green Laser Pointer: 1,000 feet in dark room.

* + - * 1. RF Frequency: 2.4 MHz.
				2. Power Output: Less than 5 mW.
				3. Wavelength: 532 nm.
				4. FDA Safety Class: IIIa.
				5. Includes batteries.
	1. EXECUTION
		1. EXAMINATION
			1. Examine areas to receive projection screens.
			2. Verify structure to support projection screens is clean, dry, flat, plumb, level, square, stable, rigid, and capable of supporting the weight.
			3. Notify Architect of conditions that would adversely affect installation or subsequent use.
			4. Do not begin installation until unacceptable conditions are corrected.
		2. INSTALLATION
			1. Install projection screens in accordance with manufacturer’s instructions at locations indicated on the Drawings.
			2. Install projection screens plumb, level, and square.
			3. Install projection screens securely in place to supporting structure.
			4. Electrical: Install electrical power to projection screens as specified in Division 26.
		3. ADJUSTING
			1. Adjust projection screens for proper operation in accordance with manufacturer’s instructions.
			2. Repair minor damages in accordance with manufacturer’s instructions and as approved by Architect.
			3. Remove and replace with new material, damaged components that cannot be successfully repaired, as determined by Architect.
		4. CLEANING
			1. Clean materials promptly after installation in accordance with manufacturer’s instructions.
			2. Do not use harsh cleaning materials or methods that could damage projection screens.
		5. PROTECTION
			1. Protect installed projection screens from damage until Substantial Completion.

END OF SECTION