

SECTION 12520

SHADES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. Work Included:
 - 1. Washable manual mesh shades.
- B. Related Work Specified Elsewhere:
 - 1. Section 06100: Rough Carpentry.
 - 2. Section 09250: Gypsum Board.

1.03 SUBMITTALS

- A. Submit the following in accordance with Conditions of Contract and Division 1 Specification Sections
- B. Product data for each type of shade specified. Include printed data on physical characteristics.
- C. Shop drawings showing location and extent of shades. Show installation details at and relationship to adjoining work. Include elevations indicating shade units. Indicate locations of shade controls.
 - 1. Provide shade assembly and mounting details.
- D. Samples for initial selection purposes in manufacturer's standard sizes showing full range of colors, textures, and patterns available for each type of shade indicated.
- E. Samples for Verification Purposes: One 18-inch-square sample of shade material for each color, texture, and pattern of shade required.
- F. Maintenance data for shades to include in Operating and Maintenance Manual specified in Division 1.

1.04 QUALITY ASSURANCE

- A. Installer Qualifications: Engage an experienced Installer who has specialized in installing shades similar to those required for this Project.
- B. Surface Burning Characteristics: Provide shades identical to those tested for the following fire performance characteristics as determined by testing identical products, by UL or another testing and inspecting agency acceptable to authorities having jurisdiction.
 - 1. Test Method: NFPA 701, Small Scale Vertical Burn Test.
- C. Single-Source Responsibility: Obtain shades of each type from one source of a single manufacturer.
- D. Field-Constructed Mockup: Prior to installing shades, prepare mockups for each form of construction and finish required to verify selections made under sample submittals, to demonstrate aesthetic effects and to establish application quality standards. Comply with the following requirements:
 - 1. Place mockups on site in location and size indicated or, if not indicated, as directed by Architect.
 - 2. Retain and maintain mockups during construction in undisturbed condition as a standard for judging completed Work.
 - a. Accepted mockups in undisturbed condition at time of Substantial Completion may become part of completed Work.

1.05 PROJECT CONDITIONS

- A. Field Measurements: Check openings by field measurements before fabrication. Show recorded measurements on shop drawings. Coordinate fabrication schedule with construction progress to avoid delay in the Work.
 - 1. Where field measurements cannot be made without delaying the Work, guarantee opening dimensions and proceed with fabricating shades without field measurements. Coordinate wall and ceiling construction to ensure that actual opening dimensions correspond to guaranteed dimensions.

1.06 WARRANTY

- A. Warranty: Provide Manufacturer's written ten year warranty on manually operated components, hardware and shade cloth.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Shade Manufacturer: Subject to compliance with requirements, provide products by the following:
 - 1. Mecho Shade Systems, Inc., Long Island City, NY, www.mechoshade.com.

2.02 ROLLING SHADE TYPE 1:

- A. Product: MechoShade Mecho/5 Standard manual roll down shade with Mirrofilm 0600 Series shade cloth.
 - 1. Sunscreen Fabric: Mirrofilm 0600 Series shade cloth consisting of layers of tinted and clear polyester film with a deposit of pure reflective aluminum in the core.
 - a. Content: Layers of tinted and clear polyester film, aluminum core.
 - b. Fabric Width: 100 inches.
 - c. Openness Factor: 0 percent.
 - d. Washable, flame retardant and fade resistant.
 - e. Weight per Square Yard: 15.1 ounces.
 - f. Thickness: 19.6 mil.
 - g. UV Fade: 5 percent.
 - h. UV Tensile: 96 percent.
 - i. Color: 0606 Smoke.
 - 2. Maximum Roll Diameter with Fascia: 2-3/4 inches.
 - 3. Bracket Dimensions Without Optional Fascia, Roll Up Diameter Or Wall Mount Bracket: 3 inches wide by 3-3/4 inches high.
 - 4. Accessories: Provide exposed extruded aluminum 3 inch closure with closure mount.
 - a. Color: White.
 - 5. Provide spring loaded chain retainer.

2.03 CONSTRUCTION

- A. Construction:
 - 1. Provide pre-engineered unit with one piece molded sprockets and a linear disk brake opposed to a flat steel backing plate and concealed variable adjustment mechanism.
 - 2. Operator: Side mounted gear and sprocket mechanism located within the drive end bracket.
 - 3. Provide removable shade cloth using a snap-on/off mounting spline without having to remove the shade tube.
 - 4. Shade Roller: Manufacturer's standard construction of diameter, width, and material required to support shade without sag, equipped with cover plate to prevent accidental dislocation of tube.
 - a. Material: Aluminum.
 - b. Provide shade roller assemblies. One each for sunscreen fabric.

5. Mounting Brackets: Manufacturer's standard to support the weight of the shade plus force required to operate shade.
 - a. End Brackets: 3mm thick (1/8 inch thick) steel.
 - b. Center Support Brackets: designed to support shades of size and weight as indicated.
6. Headrail: Manufacturer's standard channel section equipped with cord lock and end caps.
7. Drive Chain: #10 qualified stainless steel chain rated to 90 pound minimum breaking strength.

2.04 ACCESSORIES

- A. Accessories: Roll Fascia.
 1. Continuous removable extruded aluminum fascia that attaches to shade mounting brackets without the use of adhesives, magnetic strips, or exposed fasteners.
 2. Extruded aluminum with baked-on enamel finish. Provide custom colors to be selected by the Architect.
 3. Fascia shall be able to be installed across two or more shadebands in one piece.
 4. Fascia will be mounted outside of frame.
 5. Fully conceal brackets, shade roller and fabric on the tube.
 6. Chain drive shall fall behind bottom return edge of the fascia without requiring notching of the fascia.

2.05 FABRICATION

- A. Fabricate shade assemblies from noncorrosive materials that do not require lubrication during the normal expected life.
- B. Fabricate shade units to completely fill openings.
- C. For continuous installations, fabricate blind units so breaks between units occur only at mullions or other defined vertical separations.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Examine openings where shades will be installed prior to beginning installation. Verify that critical dimensions are correct and surface conditions acceptable.
 1. Complete all finishing operations, including painting, before beginning installation.
- B. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.02 INSTALLATION

- A. Install shades level and plumb, mounted not less than 1 inch from face of exterior glass.
- B. Install metal parts isolated from concrete or mortar to prevent corrosion.
- C. Install mounting brackets with at least two fasteners per bracket.

3.03 CLEANING

- A. After completing the installation, clean shade surfaces according to the manufacturer's instructions.
- B. Remove surplus materials, packaging, rubbish and debris resulting from the installation. Leave areas where installation occurred neat, clean, and ready for use.

END OF SECTION