

**SECTION 12 24 00**  
**WINDOW SHADES**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Manual roller shades and accessories.

**1.02 RELATED REQUIREMENTS**

**1.03 REFERENCE STANDARDS**

- A. WCMA A100.1 - Safety of Window Covering Products; 2018.

**1.04 SUBMITTALS**

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide manufacturer's standard catalog pages and data sheets for each product to be used including materials, finishes, fabrication details, dimensions, profiles, mounting requirements, and accessories.
- C. Shop Drawings: Include shade schedule indicating size, location and keys to details.

**1.05 DELIVERY, STORAGE, AND HANDLING**

- A. Deliver shades in manufacturer's unopened packaging, labeled to identify each shade for each opening.
- B. Handle and store shades in accordance with manufacturer's recommendations.

**1.06 WARRANTY**

- A. See Section 01 78 00 - Closeout Submittals, for additional warranty requirements.
- B. Provide manufacturer's standard, non-depreciating warranty, for interior shading only, covering the following:
  - 1. Shade Hardware: 10 years unless otherwise indicated.
  - 2. Shade Fabric: 10 years unless otherwise indicated.

**PART 2 PRODUCTS**

**2.01 MANUFACTURERS**

- A. Basis of Design: MechoShade Systems LLC; [www.mechoshade.com/#sle](http://www.mechoshade.com/#sle).
- B. Or approved equal.

**2.02 ROLLER SHADES**

- A. General:
  - 1. Provide shade system components that are capable of being removed or adjusted without removing mounted shade brackets or cassette support channel.
  - 2. Provide shade system that operates smoothly when shades are raised or lowered.
- B. Roller Shades - Basis of Design: MechoShade Systems LLC; Mecho/5 System; [www.mechoshade.com/#sle](http://www.mechoshade.com/#sle).
  - 1. Description: Single roller, manually operated fabric window shades.
    - a. Mounting: Window jamb mounted. Refer to drawings.
    - b. Size: Width to match window width as indicated on drawings. Provide length at least equal to plus 3 inches for each window..
  - 2. Brackets and Mounting Hardware: As recommended by manufacturer for mounting indicated and to accommodate shade fabric roll-up size and weight.
  - 3. Roller Tubes:
    - a. Material: Extruded aluminum.

- b. Size: As recommended by manufacturer; selected for suitability for installation conditions, span, and weight of shades.
- c. Fabric Attachment: Utilize extruded channel in tube to accept vinyl spline welded to fabric edge. Shade band to be removable and replaceable without removing roller tube from brackets or inserting spline from the side of the roller tube.
- d. Roller tubes to be capable of being removed and reinstalled without affecting roller shade limit adjustments.
- 4. Hembars: Designed to maintain bottom of shade straight and flat.
- 5. Clutch Operator: Manufacturer's standard material and design integrated with bracket/brake assembly.
  - a. Provide a permanently lubricated brake assembly mounted on a oil-impregnated hub with wrapped spring clutch.
  - b. Brake must withstand minimum pull force of 50 pounds in the stopped position.
  - c. Mount clutch/brake assembly on the support brackets, fully independent of the roller tube components.
- 6. Drive Chain: Continuous loop stainless steel beaded ball chain, 95 pound minimum breaking strength. Provide upper and lower limit stops.
  - a. Chain Retainer: Chain tensioning device complying with WCMA A100.1.
- 7. Accessories:
  - a. Fascia: Removable extruded aluminum fascia, size as required to conceal shade mounting, attachable to brackets without exposed fasteners; clear anodized finish.
    - 1) Fascia to be capable of installation across two or more shade bands in one piece.
    - 2) Provide single fascia to accommodate regular roll shades.
    - 3) Color: As selected by Director's Representative from manufacturer's standard color range.
    - 4) Profile: Square.

### **2.03 SHADE FABRIC**

- A. Fabric: Non-flammable, color-fast, impervious to heat and moisture, and able to retain its shape under normal operation.
  - 1. Material Composition:
    - a. PVC and polyester.
  - 2. Openness Factor: 1% open, nominal. Translucent Shades: Soften the light and reveal only shadow-like outlines to the outside; substantial privacy
  - 3. Color: As selected by Director's Representative from manufacturer's full range of colors.
  - 4. Products:
    - a. MechoShade Systems LLC Inc; Soho - 1100 Series (1% open):  
[www.mechoshade.com/#sle](http://www.mechoshade.com/#sle).

### **2.04 ROLLER SHADE FABRICATION**

- A. Field measure finished openings prior to ordering or fabrication.
- B. Dimensional Tolerances: As recommended in writing by manufacturer.
- C. At openings requiring continuous multiple shade units with separate rollers, locate roller joints at window mullion centers; butt rollers end-to-end.

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- A. Examine finished openings for deficiencies that may preclude satisfactory installation.
- B. Start of installation shall be considered acceptance of substrates.

### **3.02 PREPARATION**

- A. Prepare surfaces using methods recommended by manufacturer for achieving best result for substrate under the project conditions.
- B. Coordinate with window installation and placement of concealed blocking to support shades.

### **3.03 INSTALLATION**

- A. Install in accordance with manufacturer's instructions and approved shop drawings, using mounting devices as indicated.
- B. Adjust level, projection, and shade centering from mounting bracket. Verify there is no telescoping of shade fabric. Ensure smooth shade operation.

### **3.04 SYSTEM STARTUP**

- A. Motorized Shade System: Provide services of a manufacturer's authorized representative to perform system startup.

### **3.05 CLEANING**

- A. Clean soiled shades and exposed components as recommended by manufacturer.
- B. Replace shades that cannot be cleaned to "like new" condition.

### **3.06 CLOSEOUT ACTIVITIES**

- A. See Section 01 78 00 - Closeout Submittals, for closeout submittals.

### **3.07 PROTECTION**

- A. Protect installed products from subsequent construction operations.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

**END OF SECTION**