

SECTION 12 24 13 – MANUAL WINDOW SHADES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Manually operated, roll-up fabric interior window shades including mounting and operating hardware.

1.02 REFERENCES

- A. NFPA 70 - National Electrical Code.
- B. NFPA 701-99 - Fire Tests for Flame-Resistant Textiles and Films.

1.03 SUBMITTALS

- A. Submit under provisions of Section 01 33 00 - Submittal Procedures.
- B. Product Data: Manufacturer's data sheets on each product specified, including:
 - 1. Preparation instructions and recommendations.
 - 2. Installation and maintenance instructions.
 - 3. Styles, material descriptions, dimensions of individual components, profiles, features, finishes and operating instructions.
 - 4. Storage and handling requirements and recommendations.
 - 5. Mounting details and installation methods.
- C. Shop Drawings: Plans, elevations, sections, product details, installation details, operational clearances, wiring diagrams and relationship to adjacent work.
- D. Window Treatment Schedule: For all roller shades. Use same room designations as indicated on the Drawings, field verified window dimensions, quantities, type of shade, controls, fabric and color, and include opening sizes and key to typical mounting details.
- E. Selection Samples: For each finish product specified, two complete sets of shade cloth options and aluminum finish color samples representing manufacturer's full range of available colors and patterns.
- F. Verification Samples: For each finish product specified, two complete sets of shade components, unassembled, demonstrating compliance with specified requirements. Shade fabric sample and aluminum finish sample as selected, representing actual product, color, and patterns. Mark face of material to indicate interior faces.
- G. Maintenance Data: Methods for maintaining roller shades, precautions regarding cleaning materials and methods, instructions for operating hardware and controls.
- H. Manufacturer's Certificates: Certify products meet or exceed specified requirements.

1.04 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Obtain roller shades through one source from a single manufacturer with a minimum of twenty years of experience in manufacturing products comparable to those specified in this section.
- B. NFPA Flame-Test: Passes NFPA 701. Materials tested shall be identical to products proposed for use.
- C. Mock-Up: Provide a mock-up of one of each type roller shade assembly specified for evaluation of mounting, appearance and accessories.
 - 1. Locate mock-up in window(s) designated by Architect.
 - 2. Do not proceed with remaining work until mock-up is accepted by Architect.
 - 3. Mock-up may remain in place upon acceptance by Architect.

1.05 DELIVERY, STORAGE AND HANDLING

- A. Do not deliver window shades until building is enclosed and construction within spaces where shades will be installed is substantially complete.
- B. Deliver products in manufacturer's original, unopened, undamaged containers with labels intact.
- C. Label containers and shades according to Window Shade Schedule.
- D. Store products in manufacturer's unopened packaging until ready for installation.

1.6 SEQUENCING

- A. Ensure that locating templates and other information required for installation of products of this section are furnished to affected trades in time to prevent interruption of construction progress.
- B. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.

1.07 PROJECT CONDITIONS

- A. Install roller shades after finish work and ambient temperature, humidity and ventilation conditions are maintained at levels recommended for project upon completion.

1.08 WARRANTY

- A. Hardware and Shade Fabric: Manufacturer's standard twenty-five year limited warranty.

1.10 FIELD MEASUREMENTS

- A. Verify field measurements prior to fabrication.

PART 2 PRODUCTS

2.01 MANUFACTURERS AND PRODUCTS

- A. Basis of Design: Contract Documents are based on manufacturer and product named below to establish a Standard of Quality. Other acceptable manufacturers with products having equivalent characteristics may be considered, provided deviations are minor and do not change concept as expressed in Contract Documents as judged by Architect.
 - 1. Basis of Design Selections:
 - a. Manufacturer: Draper, Inc.
 - b. Product: Manual FlexShade XD
- B. Acceptable Manufacturers: Subject to compliance with requirements of Contract Documents, provide product by one of the manufacturers named below. If not named, submit as substitution according to Conditions of the Contract and appropriate Division 1 sections.
 - 1. Manufacturer: MechoShade Systems.

2.02 MANUALLY OPERATED WINDOW SHADES

- A. Manually Operated Window Shades with Independent Control: Manually operated, vertical roll-up, fabric window shade with components necessary for complete installation.
 - 1. Centered bead chain exit allows for right or left hand operation without field modification.
 - 2. Fabric spline attachment and new heavy-duty clutch design. Metal tube, with stainless steel bead chain clutch operator on right side, standard, as seen from facing the window inside the room. Left side operator available. Chain tension device included.
 - 3. Operating Mechanism: Stainless steel bead chain clutch standard (ivory, grey, black, white or brown polyester available at no extra charge).
 - 4. 1/8" steel brackets with reinforcement ribs. Brackets and clutch integrated rotational bearing for ease of operation and noise reduction. Minimum of 5 recessed rivets securing clutch to bracket, 7 on idler. One-piece machined steel primary post 9 mm/.354 diameter. Decorative endcap covers with mechanical attachment included.
 - 5. Mounting: Wall or ceiling mounting available for brackets only.
 - 6. Headbox Ceiling/Wall style: Aluminum fabrication with removable closure, endcaps and back and top cover piece:
 - a. Finish: Clear anodized.

2.03 FABRIC

- A. Light-Filtering Fabrics:

1. SheerWeave Series PW3500 by Phifer: Vinyl-coated polyester yarn with manufacturer's standard anti-microbial protection woven into 2x2 basket-weave pattern.
 - a. PW3500 shall be GREENGUARD® Children & Schools.
2. Fire Rating: NFPA 701 TM#1(small scale)/NFPA 101 (Class A Rating)/NFPA 701-TM#2 large scale.
3. Bacteria and Fungal Resistance: ASTM G21 and ASTM G22.
4. Openness Factor: 5%.
5. Fabric Thickness: 0.036".
6. Fabric Weight: 19.20 ounces per square yard.

Color and pattern: As selected by Architect from manufacturer's standard range.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.02 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Install roller shades level, plumb, square and true. Allow proper clearances for window operation hardware.

3.03 TESTING AND DEMONSTRATION

- A. Demonstrate operation of shades to Owner's designated representatives.

3.04 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch up, repair or replace damaged products before Substantial Completion.

3.05 SCHEDULES

- A. Provide window shades at all exterior window in work station 106 and exam room 107 and 104.

END OF SECTION