

SECTION 12 24 13 - ROLLER WINDOW SHADES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Roller window shades.
 - 1. Manually chain-operated.

1.02 RELATED REQUIREMENTS

- A. Section 01270 - Unit Prices: Descriptions of unit price items, administrative requirements.
- B. Section 01230 - Alternates: Descriptions of items, administrative requirements.
- C. Section 01300 - Administrative Requirements: Submittal procedures, project meetings, progress schedules and documentation, reports, coordination.
- D. Section 01355 - LEED Certification Procedures.
- E. Section 01600 - Product Requirements: Fundamental product requirements, substitutions and product options, delivery, storage, and handling.
- F. Section 01700 - Execution Requirements: Examination, preparation, and general installation procedures; pre-installation meetings; cutting and patching; cleaning and protection; starting of systems; demonstration and instruction.

1.03 ALLOWANCES:

- A. See Section 01210 - Allowances, for cash allowances affecting this section.

1.04 UNIT PRICES:

- A. See Section 01270 - Unit Prices, for additional unit price requirements.
 - 1. Provide the work under the unit price method.

1.05 REFERENCE STANDARDS

- A. ASTM E 84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2007.
- B. ASTM G 21- Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi.
- C. NFPA 70 - National Electrical Code; National Fire Protection Association; 2008.
- D. NFPA 701-99 - Fire Tests for Flame-Resistant Textiles and Films.

1.06 ADMINISTRATIVE REQUIREMENTS

- A. Coordination: Coordinate the installation of Roller Window Shades with size, location and installation of windows, curtain walls and shade pockets.
- B. Pre-installation Meeting: Conduct a pre-installation meeting one week prior to the start of the work of this section; require attendance by all affected installers.
- C. Sequencing: Ensure that utility connections are achieved in an orderly and expeditious manner.

1.08 SUBMITTALS

- A. See Section 01300 - Administrative Requirements, for submittal procedures.
- B. Product Data: Manufacturers data sheets on each product to be used, including:
 - 1. Styles, material descriptions, dimensions of individual components, profiles, features, finishes and operating instructions.
 - 2. Mounting details and installation methods.
 - 3. Typical wiring diagrams including integration of motor controllers with building management system, audiovisual and lighting control systems as applicable.

- C. Shop Drawings: Indicate plans, elevations, sections, product details, installation details, operational clearances, wiring diagrams and relationship to adjacent work.
- D. Selection Samples: For each finish product specified, one set of shade cloth options and aluminum finish color samples representing manufacturers' full range of available colors and patterns.
- E. Verification Samples: For each finish product specified, one complete set of shade components, unassembled, demonstrating compliance with specified requirements. Shade cloth sample and aluminum finish sample as selected. Mark face of material to indicate interior faces.
- F. Manufacturers Qualification Statement.
- G. Certificate: Certify that products of this section meet or exceed specified requirements.
- H. Maintenance Data: Methods for maintaining roller shades, precautions regarding cleaning materials and methods, instructions for operating hardware and controls

1.09 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section, with not less than five years of documented experience.
- B. Verify Field Measurements prior to shop fabrication.
- C. Anti-Microbial Characteristics: No Growth per ASTM G 21 results for fungi ATCC9642, ATCC 9644 and ATCC9645.

1.10 MOCK-UP

- A. Provide a mock-up of one roller shade assembly for evaluation of mounting, appearance, operation and accessories.
 - 1. Locate mock-up in window designated by Architect.
 - 2. Do not proceed with remaining work until, mock-up is accepted by Architect.

1.11 DELIVERY, STORAGE, AND HANDLING

- A. Deliver shades to project site in protective wrapping.
- B. Label each shade with location, rotation number, size and shade cloth style.

1.12 FIELD CONDITIONS

- A. Ambient Conditions: Do not install shades until windows are installed and glazed and wet work is completed.

1.13 WARRANTY

- A. See Section 01780 - Closeout Submittals, for additional warranty requirements.
- B. Correct defective Work within a one-year period after Date of Substantial Completion.
- C. Provide five-year manufacturer warranty on all moving system parts.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. DFB Sales, Inc., 21-07 Borden Avenue, Long Island City, NY 11101, 718.729.8310, 800.433.4546, Product Sol-R-Shade: email: Sales@dfbsales.com, Web Site: www.dfbsales.com.
- B. Substitutions: Not permitted.

2.02 CHAIN OPERATED WINDOW SHADES

- A. Operating System: Adjustment-free, controlled by a nickel-plated steel ball chain, 90 lb test. The clutch system shall be comprised of multi-banded steel springs that

create the pressure necessary to keep the shade in its desired position. The clutch shall develop no more than 1/2 lb drag for easy fit.

- B. Mounting Brackets: Made from 16-gauge galvanized steel capable of being mounted in any position.
- C. Shade Mounting System: The tube shall be 1-1/2 inch in O. D. rolled steel 26 gauge.
- D. Hem/Hem bar: The hem bar shall be extruded aluminum weighing 1/4 lb per linear foot and sit behind two thicknesses of shade cloth. The hem shall be triple thick with an electronically welded seam.

2.03 SHADECLOTH

- A. Performance: The shade cloth shall hang flat without defection or distortion. The edges of the shade band shall be cut square to insure true tracking of the shade cloth and cut clean so that the core yarn is not exposed.
- B. Flame Retardance: The shade cloth shall pass the California Flame Text Title 19, Section 1273.3, medium scale test for interior fabric and shall pass NFPA 701-99 Flame Test.
- C. Sol-R-Control Shade cloth:
 - 1. Series: _____
 - 2. Color: _____
 - 3. Openness: _____

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verification of Conditions: Verify that windows are installed and glazed, and that support blocking and substrates are level and ready to receive roller window shade installation.
- B. Installation shall not commence until all job conditions are suitable.

3.02 INSTALLATION

- A. Install in accordance with manufacturers instructions.
- B. Fastening: Install shade assemblies according to manufacturers' instructions. Each bracket shall receive two screw fasteners. Shades shall be set in place, and leveled by a leveling screw.

3.03 FIELD QUALITY CONTROL

- A. Perform field inspection and testing in accordance with Section 01400.
- B. Inspect for smooth, quiet operation.

3.04 ADJUSTING

- A. Adjust roller operation for smooth operation.

3.05 CLEANING

- A. Clean shade cloth if required for acceptance.

END OF SECTION