

Motorized Drapery Track

SECTION 1222216 – Motorized Drapery Track

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Motorized Drapery Track System [with single track] [with tandem track] [one way opening] [center opening] [asymmetrical opening].
- B. Related Requirements:
 - 1. Section 061053 "Miscellaneous Rough Carpentry" for wood blocking and grounds for mounting roller shades and accessories.
 - 2. Section 079200 "Joint Sealants" for sealing the perimeters of installation accessories for light-blocking shades with a sealant.
 - 3. Section 092900 "Gypsum Board" for coordination with installation of shade pockets, closure, and related accessories.

1.3 ALLOWANCES

- A. Drapery Tracks are part of [Window-Covering Allowance] <Insert name of allowance>.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Include styles, material descriptions, construction details, dimensions of individual components and profiles, features, finishes, and operating instructions for roller shades.
- B. Shop Drawings: Show fabrication and installation details for drapery track, including drapery materials, motor location and type of opening.
 - 1. Motor-Operated Drapery Track: Include details of installation and diagrams for power, signal, and control wiring.
- C. Samples: For each exposed product, 10 inches (250 mm) long.
- D. Samples for Verification: For each type of drapery track.
 - 1. Drapery Track: Full-size operating unit, not less than 16 inches (400 mm) long.
 - 2. Installation Accessories: Full-size unit, as required for each type selected.
- E. Drapery Track Schedule: Use same designations indicated on Drawings.

1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer.
- B. Product Certificates: For drapery track only, signed by product manufacturer
- C. Product Test Reports: For drapery track only, for tests performed by [manufacturer and witnessed by a qualified testing agency] [a qualified testing agency].

1.6 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For roller shades to include in maintenance manuals.

1.7 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Drapery Track: Full-size units equal to 5 percent of quantity installed for each size, but no fewer than [two] <Insert number> units.

Motorized Drapery Track**1.8 QUALITY ASSURANCE**

- A. Installer Qualifications: Fabricator of products.
 - 1. Installer shall be qualified to install specified products by prior experience and approved by Springs Window Fashions LLC.
 - 2. Installer shall be responsible for acceptable installation in accordance with instructions published by Springs Window Fashions LLC.
- B. Mockups: Build mockups to verify selections made under Sample submittals, to demonstrate aesthetic effects, and to set quality standards for materials and execution.
 - 1. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
 - 2. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.9 DELIVERY, STORAGE, AND HANDLING

- A. Deliver drapery tracks in factory packages, marked with manufacturer, product name, and location of installation using same designations indicated on Drawings.

1.10 FIELD CONDITIONS

- A. Environmental Limitations: Do not install drapery tracks until construction and finish work in spaces, including painting, is complete and dry and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.
- B. Field Measurements: Where Drapery Tracks are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication and indicate measurements on Shop Drawings. Allow clearances for operating hardware of operable glazed units through entire operating range. Notify Architect of installation conditions that vary from Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

PART 2 - PRODUCTS**2.1 MANUFACTURERS**

- A. Basis-of-Design Product: Springs Window Fashions.
- B. Source Limitations: Obtain Drapery tracks from single source from single manufacturer.

2.2 MOTOR-OPERATED, DRAPERY TRACKS

- A. Tracks:
 - 1. Headrail: manufactured from 6063-T5 AL (coated) extruded aluminum of 30.5 mm (1.2") in width, 25.1 mm (1-1/32") in height, curvable to a minimum radius of 300 mm (11.8"). Curves shall be factory made according to template or specification.
 - 2. Drive Belt: synchronous, pre-lubed, toothed belt that circulates internally within the headrail to ensure smooth travel for all track types.
 - 3. Drive and Return Assembly: Manufactured from injection molded plastic, equipped with a bush bearing and allows for multiple curtain hook attachments.
 - 4. Carriers: Wheel mounted type with rotating eyelet and able to accommodate a pinch pleat or ripple-fold heading.
 - 5. Brackets: Steel stamped finished to resist corrosion [one touch type for easy mount] [a swivel type for a maximum of 2 mm light gap] [Wall Mounted] [Ceiling Mounted].
- B. Motorized Operating System: Provide factory-assembled, drapery-operator system of size and capacity and with features, characteristics, and accessories suitable for conditions indicated, complete with electric motor and motor controls, power disconnect plug, enclosures protecting controls and operating parts, and accessories required for reliable operation without malfunction. Coordinate operator wiring requirements and electrical characteristics with building electrical system.
 - 1. All motors to be 100 percent tested in the final product by manufacturer.
 - 2. Electrical Components: Comply with UL 325 tip-to-tip, CSA, and cUL standards.

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3. Geared Motor: A Radio Frequency Controlled, DC motor with precision planetary gear reduction integrating the lyre release system and a patented design that allows the connectors, cables and control modules to be completely concealed. The motor shall be concealed by the fabric
 - a. Motor shall be enclosed in a housing, located on the [Left Side] [right side] and be [top mounted] [bottom mounted]. Rated at 1 Amp at 110 VAC, to provide a nominal torque of 1Nm.
 - b. Operates a curtain up to 132 lbs on a two way 36 foot straight track with an adjustable linear speed from 4.9 inches/second to 7.86 inches/second. For exact weight capacity on different track configurations and lengths refer to manufacturer's width/weight capacity chart.
 4. Manual Override: Achieved through the lyre release system which automatically disconnects the gearbox from the track to allow manual operation of the drapery. The drapery can be operated manually in both directions when the motor unit is not running or when power is interrupted.
 5. Limit Switching: Motor has an electronic encoder that is used to set the end stops and intermediate position during installation. The end stops and the intermediate position do not need to be readjusted during the motor's lifetime or after manual operation.
 6. Motor Control: Logic circuit with programmable microprocessor. Motor has overload current sensing, maximum run timer and speed management. Soft start and stop and speed adjustment from 4.9 inches/second to 7.86 inches/second.
 7. Integration: Motors can integrate with systems such as audio visual, lighting or building automation system. The motor comes standard with one RJ12 connector to allow connection to a two or three dry contact control device. In addition, one of the below control modules can be added to the base of the motor.
 - a. [Radio frequency plug-in module (RF) to allow wireless control with Somfy RTS transmitters.]
 - b. [Wired RS-485 communication plug-in module.]
 8. Operating Mode: Momentary contact directional control for closing, opening, stopping and one programmable intermediate position. Optional "touch motion" feature which allows the user to initiate the drapery to open or close pulling on the fabric in intended direction of travel.
 9. Accuracy: Fully opened and fully closed positions will remain within +/- 10 mm from the set positions over 10,000 cycles (one cycle is a full open and close on a 10 meter track length).
 10. Noise Level: Motor is rated at 44 dB.
 11. Controls and Grouping:
 - a. [Local control] and/or [group control] via [dry contact switches], [smart switches], [Single or multiple channel RTS transmitters], [Chronis RTS Timer] or [Sun Sensor].
 - b. Automated control via [lighting control system], [audio visual system] or [building management system].
 12. Wall Mount Controls
 - a. Decoflex Wirefree Wall Switch
 - 1) [Three button up, down, stop.]
 - 2) [One channel RTS with two programmable buttons and a raise and lower button.]
 - 3) [Two channel RTS with three programmable buttons and a raise and lower button.]
 - 4) [Three channel RTS with three programmable buttons and a raise and lower button.]
 - 5) [Four channel RTS with four programmable buttons and a raise and lower button.]
 - 6) [Five channel RTS with five programmable buttons and a raise and lower button.]
 13. Remote Controls:
 - a. [One channel RTS three button remote with up, stop and down.] [Five channel RTS four button remote with up, stop, down and channel selector for individual or group control.] [Sixteen channel RTS with digital display.]
- C. Drapery Style, [Pinch Pleat] [RippleFold]

Motorized Drapery Track**PART 3 - EXECUTION****3.1 EXAMINATION**

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances, operational clearances, [accurate locations of connections to building electrical system,] and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 DRAPERY TRACK INSTALLATION

- A. Install drapery track level, plumb, and aligned with adjacent units according to manufacturer's written instructions..
- B. Electrical Connections: Connect motor-operated drapery tracks to building electrical system via 3-prong plug into standard 110VAC electrical outlet.

3.3 ADJUSTING

- A. Adjust and balance roller shades to operate smoothly, easily, safely, and free from binding or malfunction throughout entire operational range.

3.4 CLEANING AND PROTECTION

- A. Clean drapery surfaces after installation, according to manufacturer's written instructions.
- B. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and Installer, ensuring that draperies are without damage or deterioration at time of Substantial Completion.
- C. Replace damaged draperies that cannot be repaired, in a manner approved by Architect, before time of Substantial Completion.

3.5 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain motor-operated drapery tracks.

END OF SECTION 122413