upwardor

SECTION 08 36 13
SECTIONAL OVERHEAD DOORS

This section includes residential insulated steel sectional overhead doors, manual or electric operation of stock configuration and hardware. This specification may be edited for KANATA Series residential garage doors.

This section includes performance, proprietary, and descriptive type specifications; edit text to avoid conflicting requirements. For more product information, contact: www.upwardor.com

PART 1 General

1.1 SECTION INCLUDES

*** Note to specifier: Select the component or assemblies that are intended to be installed. Delete those not selected. ***

1.1.1 Overhead sectional door.
1.1.2 Operating hardware and tracks.
1.1.3 Electric operator.

1.2 RELATED SECTIONS

*** Note to specifier: Indicate those sections that inter-rely on this section. The listing below is only partial and should be edited to include those sections specific to the project that describe subjects or products that affect this section directly. ***

1.2.1 Section 06 10 13 - Wood Blocking and Curbing: Rough wood opening of:
  1.2.1.1 Framing
  1.2.1.2 Block
1.2.2 Section 07 92 00 - Joint Sealants: Perimeter sealant and backup materials.
1.2.3 Section 08 71 00 - Door Hardware - General: Cylinder locks.
1.2.4 Section 08 80 50 – Glass and Glazing: Glass for door lights.
1.2.5 Division 26 - Electrical: Electrical service connection to door controller.

1.3 REFERENCES

*** Note to specifier: Edit this article after editing the rest of this section. Only list reference standards below that are included within the text of this section, when edited for a project specification – delete other references that do not apply. ***

1.3.1 ASTM A123/A123M-11 - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
1.3.2 ASTM A653/A653M-11 - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
1.3.3 CSA-C22.1-12 - Canadian Electrical Code, Part I (22th Edition), Safety Standard for Electrical Installations.
1.3.4 CAN/CSA-C22.2 No. 100-04 (R2009) - Motors and Generators.
1.3.5 NEMA MG1-2011 - Motors and Generators.

1.4 SYSTEM DESCRIPTION

*** Note to specifier: Select the appropriate lift type under article 1.4.2, delete the other references. ***

1.4.1 Panels: Insulated steel, embossed front panels with insulated windows

1.4.2 Lift type:

1.4.2.1 Low headroom with track and hardware

1.4.2.2 Standard lift with track and hardware

1.4.2.3 High lift with track and hardware

1.4.2.4 Vertical lift track and hardware

*** Note to specifier: Select the appropriate operation/operator under article 1.4.3, delete the other references. ***

1.4.3 Operation:

1.4.3.1 Manual operation

1.4.3.2 Residential overhead trolley electric operator (Chain drive)

1.4.3.3 Residential overhead trolley electric operator (Belt drive)

1.4.3.4 Residential jackshaft operator

1.5 DELIVERY AND STORAGE

1.5.1 Schedule for delivery of materials to arrive upon completion of required structural, surfacing and electrical work.

1.5.2 If storage is required, keep materials in their original packaging. Place indoors in a dry, secure space. Materials not to be removed until at time of installation.

1.6 SUBMITTALS

1.6.1 Submit under provisions of section 01 33 00, Submission Procedures.

1.6.2 Shop drawings to show opening dimensions and required tolerances, connection details, anchorage spacing, hardware locations and installation details.

1.6.3 Provide product data for component construction, anchorage method, hardware and operator.

1.6.4 Manufacturer's warranty including required preventative maintenance required within warranty period.

1.6.5 Product manuals and data sheets according to the specified operator.

1.7 WARRANTY

*** Note to specifier: Article 1.7.2.1 applies to original owner of single family dwelling. 1.7.2.2 applies to condominiums and commonly owned family housing. Delete the article that does not apply

1.7.1 Section 01 78 10, Warranties

1.7.2 Provide manufacturers' limited warranty for a period of:

1.7.2.1 15 Years for steel skin delamination from foam core.

1.7.2.2 7 Years for steel skin delamination from foam core.

1.7.3 Provide manufacturers' warranty for material or workmanship on door parts and hardware for a period of 3 years.

1.7.4 Provide manufacturers' warranty for material or workmanship on torsion springs for a period of 1 year.

PART 2 Product

2.1 MANUFACTURERS

2.1.1 Acceptable manufacturer: Upwardor Inc., 8025 Lawson Road, Milton, ON, L9T 5C4; Tel. Toll free: 1-800-667-3367; Tel.: 905-876-3667; email: info@upwardor.com; Web: www.upwardor.com

2.1.2 Substitutions: Not permitted.

2.1.3 Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 – Product Requirements.

2.2 MATERIALS

2.2.1 Sheet steel: ASTM A653/A653M galvanized to Z180 (G60), pebble embossed surface pre-coated with silicone polyester finish.

2.2.2 Glass: Float, (CAN/CGSB-12.3)(ASTM C1036), 3mm (1/8") minimum thickness

2.2.3 Insulation: Foam-type polyurethane core, RSI-2.87/R-16.3/U-0.06 thermal value.

2.3 PANEL CONSTRUCTION

*** Note to specifier: Select the appropriate stamped profile under article 2.3.1, delete the other references. ***

2.3.1 Outer steel sheet of 0.47mm (26 gauge) thickness with stamped:

2.3.1.1 "Sheridan raised panel" style profile
2.3.1.2 "Sheridan XL raised panel" style profile
2.3.1.3 "Bronte Creek carriage house" style profile
2.3.1.4 "Bronte Creek XL carriage house" style profile
2.3.1.5 "Trafalgar ribbed panel" style profile
2.3.1.6 "Flush" style profile

*** Note to specifier: Select the appropriate exterior color under article 2.3.2, delete the other references. Note: Article 2.3.2.3 Walnut available for opening heights of 2133mm (84 inches) ONLY.***

2.3.2 Silicone polyester finish in:

2.3.2.1 White
2.3.2.2 Almond
2.3.2.3 Sandtone
2.3.2.4 Brown
2.3.2.5 Black
2.3.2.6 Bronze
2.3.2.7 Walnut (Wood Grain)
2.3.2.8 Medium Oak (Wood Grain)
2.3.2.9 Steel Grey
2.3.2.10 Hazelwood

2.3.3 Inner steel sheet of 0.47mm (26 gauge) thickness; continuous sheet steel horizontal, reinforcement strips 77mm wide by 0.51mm (24 gauge) thick at top and bottom for hinge mounting.

2.3.4 Tongue and groove weather joint seals at meeting rails.

2.3.5 Insulated with profile thickness of 44.5mm (1.75").

*** Note to specifier: Select the appropriate window glazing under article 2.3.6, delete the other reference. ***

2.3.6 Top section glass inserts;
- 2.3.6.1 Single pane Clear
- 2.3.6.2 Single pane Frosted
- 2.3.6.3 Double pane Clear
- 2.3.6.4 Double pane Frosted

*** Note to specifier: Select the appropriate window framing under article 2.3.7, delete the other references. ***

2.3.7 Decorative window frame inserts in;
- 2.3.7.1 Stockton -
  - 2.3.7.1.1 Standard
  - 2.3.7.1.2 Ten square XL
  - 2.3.7.1.3 Arched XL
- 2.3.7.2 Stockbridge -
  - 2.3.7.2.1 Straight
  - 2.3.7.2.2 Straight XL
  - 2.3.7.2.3 Arched XL
- 2.3.7.3 Cascade -
  - 2.3.7.3.1 Standard
  - 2.3.7.3.2 XL
- 2.3.7.4 Waterton -
  - 2.3.7.4.1 Standard
  - 2.3.7.4.2 XL
- 2.3.7.5 Prairie Standard
- 2.3.7.6 Cathedral Standard
- 2.3.7.7 Sunburst -
  - 2.3.7.7.1 Four Piece
  - 2.3.7.7.2 Four Piece XL
  - 2.3.7.7.3 Eight Piece
- 2.3.7.8 Wagon Wheel -
  - 2.3.7.8.1 Two Piece
  - 2.3.7.8.2 Two Piece XL

2.4 HARDWARE COMPONENTS

2.4.1 Rolled galvanized steel with Z180 (G60) zinc coating, 1.9mm (14 gauge) base metal thickness mounted to riveted galvanized steel jamb brackets, minimum 3mm (11 gauge) thick.

2.4.2 Track size of 50mm (2 inches) with a maximum 381mm (15 inch) radius.

2.4.3 Graduated hinges and adjustable top brackets, 1.99mm (14 gauge) galvanized steel.

2.4.4 Nylon rollers, 50mm (2 inch). Floating hardened steel bearings.

2.4.5 Bottom bracket, 1.9mm (14 gauge) galvanized steel with removable roller carrier.

2.4.6 Torsion spring fitted on 25mm (1 inch) continuous hollow tube shaft, 1.9mm (14 gauge) wall.

2.4.7 Torsion springs, oil tempered with standard cycle rating.

2.4.8 Spring assembly supported with nylon center bearing and hardened steel bearings on 1.9mm (14 gauge) end bearing plates on either side.

2.4.9 Cable drums suitable for lift type specified with galvanized steel aircraft cable designed to suit door weight at a safety factor of 5:1.

2.5 ACCESSORIES

2.5.1 Low temperature resilient vinyl astragal. One piece fitted by retainer to full length of the bottom section.

2.5.2 Exterior vinyl weather-strip for mounting to full height of opening jambs, either side of the door. Installed with moderate contact against door panels.

2.5.3 Exterior vinyl weather-strip for mounting to full length of opening header. Installed with moderate contact against top section.

2.5.4 Bulb type, panel joint weather-strip. One piece weather seal full width of door.

2.5.5 Lock: spring loaded sliding latch. Mounting to door section endcap for extended engagement of stamped cutout on vertical track.

2.6 DOOR OPERATOR

2.6.1 Manufacturer: _____.

2.6.2 Model: _____.

2.6.3 Substitutions not permitted.

PART 3 Execution

3.1 EXAMINATION

3.2.1 Section 01 70 00, verify existing conditions before starting work.

3.2.2 Remove all components from packaging and inspect for any damage in shipment, verify all components and quantities.

3.2.3 Verify all mounting surfaces are prepared and of good construction and appropriate material for fastening.

3.2.4 Verify electric power is available within close proximity of the location of the operator installation and is of the correct type.

3.2 PREPARATION

3.2.1 Insure immediate area of installation is clean and unobstructed.

3.2.2 Insure mounting surfaces are primed and painting.

3.2.3 Insure interior jamb work is flush with overhead wall surface.

3.2.4 Installer to insure they have all of the necessary tolls and medium of fasteners prior to installation.

3.3 INSTALLATION

3.3.1 Refer to manual and manufacturer’s instructions.

3.3.2 Anchor assembly to wall construction and building framing without distortion or stress.

3.3.3 Securely brace door tracks suspended from structure. Secure tracks to structural members only.

3.3.4 Align and secure door assembly including hardware.

3.3.5 Install operator including required safety devices, wall control stations and other related accessories required for operation.

3.3.6 If “hardwired”, coordinate connection of electric service. Complete all low-voltage wire connections as per manufacturers’ instructions.

3.4 ERECTION TOLERANCES

3.4.1 Tolerances, section 01 73 00.

3.4.2 Maximum variation from plumb: 1.5mm (1/16 inch)

3.4.3 Maximum variation from level: 1.5mm (1/16 inch)

3.4.4 Longitudinal or Diagonal warp: +/- 3mm (1/8 inch) with 3m (10 foot) straight edge.

3.4.5 Maintain dimensional tolerances and alignment with adjacent work.

3.5 CLEANING

3.5.1 Clean doors, frames and glass inserts.

3.5.2 Remove temporary labels and visible markings.

3.6 ADJUSTMENT

3.6.1 Lubricate spring coils, bearings and hinge joints.

3.6.2 Adjust door to smooth, fluid operation.

3.6.3 Adjust door for sealed contact between the door face and weather-strip.

3.6.4 Adjust door for sealed contact between astragal and floor surface.

3.7 PROTECTION OF FINISHED WORK

3.7.1 Protecting installed work, section 01 78 40.

3.7.2 Insure obstructions are removed from operational vicinity of the door operator.

END OF SECTION