



**SECTION 083323
UPWARD COILING DOORS
MODEL 900**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Upward coiling service doors.

1.02 RELATED REQUIREMENTS

- A. Section << **079200 - Joint Sealants**>>: Sealing joints between frames and adjacent construction.
- B. Section << **083313 - Coiling Counter Doors**>>: Additional types of overhead coiling doors.
- C. Section << **087100 - Door Hardware**>>: Cylinder cores and keys.
- D. Section << **260583 - Wiring Connections**>>: Power to disconnect.

1.03 REFERENCE STANDARDS

- A. ASHRAE Std 90.1 I-P - Energy Standard for Buildings Except Low-Rise Residential Buildings; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- B. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2023.
- C. ASTM E90 - Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements; 2023.
- D. ASTM E330/E330M - Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference; 2014 (Reapproved 2021).
- E. FBC TAS 201 - Impact Test Procedures; Testing Application Standard; 1994.
- F. FBC TAS 202 - Criteria for Testing Impact and Non-Impact Resistant Building Envelope Components Using Uniform Static Air Pressure; Testing Application Standard; 1994.
- G. ICC (IECC)-2018 - International Energy Conservation Code; 2018.
- H. UL (DIR) - Online Certifications Directory; Current Edition.

1.04 SUBMITTALS

- A. Product Data: Submit manufacturer's standard literature showing materials and details of construction and finish.<< **Include data on electrical operation.**; or **None - N/A**>>
- B. Shop Drawings: Indicate rough and actual opening dimensions, anchorage methods, hardware locations, and installation details.
- C. Manufacturer's Instructions: Indicate installation sequence and installation, adjustment, and alignment procedures.
- D. Manufacturer's qualification statement.

- E. Installer's qualification statement.
- F. Operation and Maintenance Data: Indicate modes of operation, lubrication requirements and frequency, and periodic adjustments required.
- G. Specimen warranty.

1.05 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in performing work of this section with minimum of << **5 years; or _____ years**>> of<< **documented; _____; or None - N/A**>> experience in fabrication and installation of security closures.
- B. Installer Qualifications: Company specializing in performing work of this section with minimum of << **3 years; or _____ years**>> of<< **documented; _____; or None - N/A**>> experience and approved by manufacturer.
- C. Products Requiring Electrical Connection: Listed and classified by << **UL (DIR); TUV; testing firm acceptable to authorities having jurisdiction; or _____**>> as suitable for purpose specified.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Protect materials from exposure to moisture.
- C. Store materials in dry, warm, ventilated, weathertight location.

1.07 WARRANTY

- A. Manufacturer Door-Only Warranty: Provide manufacturer warranty for door assembly for duration indicated under individual doors. Complete forms in <<Owner>>'s name and register with manufacturer.
- B. Manufacturer Door and Operator Warranty: Provide manufacturer's limited warranty for door and operator system free from material and workmanship defects for duration and cycles indicated under individual doors; counterbalance spring and finish not covered by warranty.

PART 2 PRODUCTS

2.01 MANUFACTURER

- A. Wayne Dalton; www.wayne-dalton.com; 1 (800) 827-3667.
- B. Substitutions: Not permitted.

2.02 UPWARD COILING SERVICE DOORS

- A. Wayne Dalton; Model 900 Rolling Service Door.
 - 1. Slats: Interlocking, roll-formed, metal slats.
 - 2. Width: << _____ >>.

3. Height: << _____ >>.
4. Mounting: << **Surface-mounted on side indicated on drawings; or Between jamb**>>.
5. Opening Speed: Door to operate at variable speed up to << **6 to 12 inches (152 to 305 mm)**>> per second.
6. Closing Speed: Door to operate at variable speed up to << **6 to 12 inches (152 to 305 mm)**>> per second.
7. Operation Cycles: Capable of operating for minimum << **20,000; 50,000; 100,000; or 200,000**>> cycles. One operation cycle is complete when door is opened from closed position to fully open position and returned to closed position.
8. Available Warranty:
 - a. Door Only: Two years.
 - b. Door and Operator Warranty: Three years or 20,000 cycles, whichever comes first.

9. Wind Load: Design door assembly to withstand ultimate static pressure load of << **20 psf (0.96 kPa); 31 psf (1.48 kPa); 26 psf (1.25 kPa); 36 psf (1.72 kPa); 41 psf (1.96 kPa); 50 psf (2.39 kPa); 57 to 130 psf (2.73 to 6.22 kPa); 65 psf (3.11 kPa); or 68.9 psf (3.29 kPa)**>>.
10. Curtain Material: Galvanized steel. Staking lock system locks end of each slat from lateral movement.
 - a. Slat Profile: << **No.2, 2-inch (51 mm) curved profile; No.17, 2-inch (51 mm) flat profile; F-265; or FE-265**>>.

 - b. Fenestrated Slats: << **Not required; Secur-Vent perforated slat; 5/8 by 3 inches (16 by 76 mm); 1 by 10 inches (25 by 254 mm); 5/8 by 3 inches (16 by 76 mm) with Plexiglass covers; or 1 by 10 inches (25 by 254 mm) with Plexiglass covers**>>.
 - c. Finish:
 - 1) Standard polyester base coat; << **gray; beige; white; or brown**>> color.
 - 2) G-90 (Z275) galvanized<< **; primed gray; or None - N/A**>>.
11. Bottom Bar: Steel.
 - a. Profile: Double angle.
 - b. Finish: << **Galvanized, primed black; Black anodized; Bronze anodized; Hot-dip galvanized; PowderGuard Premium powder coat; PowderGuard Textured powder coat; PowderGuard Zinc powder coat; Stainless No.4 satin; or Stainless No.2B mill**>>.
12. Locking Options to Include: << **None; Slide lock; Cylinder; or Best cylinder**>>.
 - a. Lock Locations: << **Both jambs; Left only; or Right only**>>.
 - b. Lock Access: << **Coil side; or Opposite coil side**>>.
13. Weatherstripping and Seals:

- a. Bottom Seal Astragal: << **Required**; or Not required>>.
 - b. Guide Surface Weatherstrip: << **Angled brush seal**; Vinyl seal; or Not required>>.
 - c. Lintel Brush Seal: << **Interior**; Exterior; Interior and exterior; or Not required>>.
 - d. Interior Hood Baffle: << **Required**; or Not required>>.
14. Side Guides, Channels: Constructed of << **steel**; 304 stainless steel; or aluminum>> with members fully bolted together.
- a. Finish: << **Mill finish**; Clear anodized; Bronze anodized; Black anodized; Powder coat; Stainless No.4 satin; Hot-dip galvanized; Galvanized, primed black; PowderGuard Textured powder coat; PowderGuard Zinc powder coat; or Stainless No.2B mill>>.
 - 1) Color: << **Match curtain**; **Black**; or ____>>.
15. Brackets: << **Steel**; or 304 stainless steel>> to support counterbalance and curtain.
- a. Finish: << **Hot-dip galvanized**; Galvanized, primed black; Stainless No.4 satin; Powder coat; PowderGuard Premium powder coat; ____ color; PowderGuard Textured powder coat; ____ color; or PowderGuard Zinc powder coat; ____ color>>.
 - 1) Color: << **Match curtain**; or ____>>.
16. Counterbalance: Helical torsion spring type, housed in steel tube or pipe barrel and supporting curtain with deflection limited to << **0.03 inch per foot (1:400 mm/sec)**>> of span. Adjustable spring tension required.
17. Hood: << **Not required**; 24 gauge, 0.028 inch stainless steel (0.63 mm stainless steel); 24 gauge, 0.028 inch galvanized steel (0.63 mm galvanized steel); 22 gauge, 0.025 inch B&S aluminum (0.64 mm B&S aluminum); or ____ gauge, ____ inch (____ mm)>>.
- a. Finish: << Galvanized, primed to match curtain; Hot-dip galvanized; Clear anodized; **Standard polyester base coat; gray color**; Bronze anodized; Standard polyester base coat; tan color; Mill finish; Standard polyester base coat; white color; Powder coat; ____ color; Standard polyester base coat; brown color; Stainless No. 4 satin; Gray-primed galvanized G90 (Z275); Black anodized; or PowderGuard Premium powder coat; ____ color>>.
18. Manual Operation: << **Push-up**; Chain hoist; Bracket-mounted crank; or Wall-mounted crank>>.
19. Motor Operation: << **Not required**; or **Provide UL-listed electric operator; size as recommended by manufacturer to move door in either direction at minimum 8 inches (203 mm), maximum 1 foot (305 mm) per second**>>.
- a. Manual Override: << **Hoist**; Hoist and jackshaft release; or Jackshaft release>>.
 - b. Timer to Close: << **Not required**; or Automatic closing controlled by adjustable hold-open time delay>>.
 - c. Operation Supply Voltage: << **115/208/230V 1-phase 60Hz**; 208/230/460V 3 phase 60Hz; 575V 3-phase 60Hz; 220V 1-phase 50Hz; 220V 3-phase 50Hz; or 400V 3-phase 50Hz>>.
 - d. Signaling Device: << **Horn and strobe combination**; or Traffic warning light>>.
 - e. Actuation Device: Provide << **push button**; **key switch**; **pull cord**; **loop detector**; **motion detector**; **treadle switch**; and **radio control**>>.

- f. Motor Mounting: << **Wall-mounted; or Front of hood**>>, << **right-hand side; or left-hand side**>>.
- g. Motor Enclosure: << **Not required; NEMA 4-12 watertight and oiltight; NEMA 4X corrosion-resistant; Totally enclosed, fan-cooled motor; or Totally enclosed, non-ventilated**>>.
- h. Obstruction Safety Detection: Constant contact button only.
- i. Obstruction Safety Detection:
 - 1) Primary, Monitored:
 - (a) Photo Eyes: << **Reflective photo-eyes; Thru-beam photo-eyes; or NEMA 4X photo-eyes**>>.
 - (b) Light Curtain: << **3 feet (0.91 m); 6 feet (1.83 m); or _____ feet (_____ m)**>>.
 - (c) Safety Edge: << **2-wire reversing safety edge; Wireless reversing safety edge; or _____**>>.
 - 2) Secondary, Non-Monitored:
 - (a) Photo Eyes: << **Reflective photo-eyes; Thru-beam photo-eyes; or _____**>>.
 - (b) Light Curtain: << **3 feet (0.9 m); 6 feet (1.8 m); or _____ feet (_____ m)**>>.
 - (c) Safety Edge: << **2-wire reversing safety edge; or _____**>>.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify << **existing conditions; and _____**>> meet manufacturer's requirements before starting work.
- B. Verify opening sizes, tolerances, and conditions are acceptable.

3.02 INSTALLATION

- A. Install in accordance with manufacturer's written instructions.
- B. Use anchorage devices to securely fasten assembly to wall construction and building structure without distortion or stress.
- C. Securely and rigidly brace components suspended from structure.<< **Secure guides to structural members only; _____.; or None - N/A**>>
- D. Fit and align assembly, including hardware. Level and plumb to provide smooth operation.
- E. Coordinate installation of electrical service; see Section << **260583**>>.
- F. Install enclosure and perimeter trim.

3.03 TOLERANCES

- A. Maintain dimensional tolerances and alignment with adjacent work.
- B. Maximum Variation from Plumb: << **1/16 inch (1.6 mm); or _____ inch (_____ mm)**>>.
- C. Maximum Variation from Level: << **1/16 inch (1.6 mm); or _____ inch (_____ mm)**>>.
- D. Longitudinal or Diagonal Warp: Plus or minus << **1/8 inch per 10 feet (3.2 mm per 3 m); or _____ inch per 10 feet (_____ mm per 3 m)**>> straight edge.

3.04 ADJUSTING

- A. Adjust operating assemblies for smooth and noiseless operation.

3.05 CLEANING

- A. See Section << **017000 - Execution and Closeout Requirements**>> for additional requirements.
- B. Clean installed components.
- C. Remove labels and visible markings.

3.06 PROTECTION

- A. Protect finishes until completion of project.
- B. Touch up damaged finishes after Date of Substantial Completion.

END OF SECTION