SECTION 083323
UPWARD COILING DOORS
MODEL 790CW

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Upward coiling sheet 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.

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 SHEET DOORS

A. Wayne Dalton; Model 790CW Sheet Door.

1. Width: **<< _____>>**.

2. Height: **<< _____>>**.
3. Mounting: Surface mounted on side indicated on drawings.
4. Opening Speed: Door to operate at variable speed up to **<< 8 inches (203 mm)>>** per second.

5. Closing Speed: Door to operate at variable speed up to **<< 12 inches (305 mm)>>** per second.
6. Operation Cycles: Capable of operating for minimum 10,000 cycles. One operation cycle is complete when door is opened from closed position to fully open position and returned to closed position.

7. Wind Load: Design door assembly to withstand ultimate static pressure load of **<< 22 psf (1.05 kPa); 26 psf (1.25 kPa); 31 psf (1.48 kPa); 36 psf (1.72 kPa); or 41 psf (1.96 kPa)>>** in accordance with **<<ASTM E330/E330M>>**.
8. Curtain: Roll-formed, **<< 26-gauge, 0.217-inch (0.55 mm)>>**, **<< G30 (Z90)>>** galvanized steel sheet in accordance with **<<ASTM A653/A653M>>**, SS Grade 80. Sections interlocked and permanently seamed together to form continuous curtain. Provide with PVC edge strip stapled on edge of exterior side to minimize steel-to-steel contact, enhance door operation, and minimize curtain nesting and scratching.
    a. Wind Locks: 9-gauge ductile iron wind locks on each edge of curtain, spaced in accordance with door size and wind load requirements.
    b. Finish: Rust-inhibitive roll coating process including **<< 0.2 mil (0.0051 mm)>>** baked-on prime paint and **<< 0.6 mil (0.015 mm)>>** baked-on polyester top coat.
    c. Color: **<< White; Glossy White; Silhouette Gray; Buckskin; Desert Tan; Garnet Red; Walnut Brown; Polar Blue; Royal Blue; Teal; Dark Teal; Forest Green; Bronze; or Matte black>>**.
9. Bottom Bar: Extruded aluminum reinforced with **<< 1-1/2-by-2-inch (38 by 51 mm)>>** roll-formed steel angle; provide with flexible, PVC bulb-type astragal, ensuring consistent seal along floor. Extrusion designed to interlock with door curtain.
    a. Bottom Bar Stops: **<< 12-gauge, 0.108-inch (2.75 mm)>>** galvanized steel with quick-connect design, allowing curtain insertion into universal guide and lock into place with one fastener.
    b. Finish: Mill finish.
10. Locking Options to Include: **<< None; Slide lock; or Slide lock that accepts cylinder or padlock>>**.
    a. Lock Locations: **<< Both jambs; Left only; or Right only>>** in bottom bar.
    b. Lock Access: **<< Coil side; or Opposite coil side>>**.
    c. Optional Dual Exterior Slide Bolt Curtain Locks: **<< Required; or Not required>>**.
11. Weatherstripping and Seals:
    a. Bottom Seal Astragal: Included.
12. Guides: **<< 3 inches (76 mm)>>** wide, roll-formed, **<< 14 gauge, 0.0747 inch (1.90 mm)>>**, Grade 50 steel guides with UHMW polypropylene rub strips on each edge. Through-hole design allows easy access from front for fastener attachment to concrete, wood, steel, or masonry jambs. Prepunched to accept quick-connect attachment of bottom bar stops.
    a. Finish: Galvanized.
13. Headplates: **<< Stamped, 11-gauge steel ; or Heavy-duty, 0.187-inch (4.76 mm) thick welded steel>>**mounted directly to wall to support door shaft and ensure smooth door roll operation.
    a. Finish: Galvanized.
14. Counterbalance: Assembly includes stepped design steel rings with steel roller bearings to ensure tight, uniform curtain wrap, enhanced door operation, and cycle life; factory-lubricated, **<< 3-3/8-inch (86 mm)>>** inside diameter springs; and **<< 1-5/16-inch (35 mm)>>** diameter shaft with **<< 0.065-inch (1.65 mm)>>** wall thickness to minimize door deflection. Design allows quick assembly of non-handed chain hoist on either side of door.

15. Manual Operation: **<< Push-up; or Chain hoist>>**.
16. Motor Operation: 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. Obstruction Safety Detection: Infrared sensor mounted in-plane to door curtain.
    h. Reversing Safety Edge: **<< Not required; Door provided with wireless monitored electric safety edge; or Door provided with wired monitored electric safety edge>>**.

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