SECTION 083323
UPWARD COILING DOORS
MODEL 523

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Upward coiling security shutters.

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 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 SECURITY SHUTTERS

A. Wayne Dalton; Model 523 Security Shutter.

1. Slats: Interlocking, extruded aluminum 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 **<< 8 inches (203 mm)>>** per second.

6. Closing Speed: Door to operate at variable speed up to **<< 12 inches (305 mm)>>** per second.
7. Curtain Material: **<< 0.050-inch (1.27 mm)>>** thick aluminum.
   a. Fenestrated Slats: **<< Not required; Open fenestration; 1-by-1-inch (25.4 by 25.4 mm) uniformly spaced openings over full curtain; Partially open fenestration; 1-by-1-inch (25.4 by 25.4 mm) uniformly spaced openings. Height of fenestrated curtain segment as indicated on drawings; Perforated slats; full curtain; or Perforated slats; partial curtain. Height of perforated curtain segment as indicated on drawings>>**.
   b. Aluminum Finish: **<< White; Almond; Silver powder coat to match look of clear anodized aluminum; Bronze powder coat to match look of bronze anodized; or Powder coat; _____ color>>**.
8. Bottom Bar: 6063-T6 aluminum.
   a. Profile: **<< Compact extruded; or Extruded tube>>**.
   b. Finish: Match curtain.

9. Locking Options to Include: **<< None; Slide lock; Cylinder; or Best cylinder>>**.
   a. Lock Locations: **<< Both jambs; Left only; Right only; or Center>>**.
   b. Lock Access: **<< Coil side; Opposite coil side; or Both sides>>**.
   c. Interlock micro switch on locking doors with tube motor operation.
10. Weatherstripping and Seals:
    a. Bottom Seal Astragal: Required.
11. Side Guides, Channels: Constructed of aluminum extruded channels with continuous PVC wear strips.
    a. Finish: Match curtain.
12. Brackets: Galvanized steel to support counterbalance, curtain, and hood.
    a. Finish: Match curtain.
13. 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.
14. Hood: Aluminum. Box sized to match manufacturer's recommendation based on door height. Provide with intermediate support brackets as required on drawings.
    a. Finish: **<< Match curtain; or Powder coat; _____ color>>**.
15. Manual Operation: **<< Push-up; or Crank>>**.

16. Motor Operation: Provide UL-listed electric tube motor; 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: **<< Not required; or Crank>>**.
    b. Operation Supply Voltage: **<< 110V; or 240V>>**.
    c. Actuation: Double throw, hard-wired wall switch.
    d. Motor Mounting: Within counterbalance tube.

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