



SECTION 08330
OVERHEAD COILING SERVICE DOORS
STORMTITE™ 625 SERIES INSULATED SERVICE DOORS

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PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Overhead coiling insulated doors.

1.2 RELATED SECTIONS

- A. Section 05500 - Metal Fabrications: Support framing and framed opening.
- B. Section 06200 - Finish Carpentry: Wood jamb and head trim.
- C. Section 08333 - Security Grilles.
- D. Section 08710 - Door Hardware: Product Requirements for cylinder core and keys.
- E. Section 09900 - Painting: Field applied finish.
- F. Section 16130 - Raceway and Boxes: Conduit from electric circuit to door operator and from door operator to control station.
- G. Section 16150 - Wiring Connections: Power to disconnect.

1.3 REFERENCES

- A. [NFRC 102](#) - Test Procedure for Measuring the Steady-State Thermal Transmittance of Fenestration Systems.
- B. [ASTM E 90](#) - Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Element.
- C. [ASTM E 330](#) - Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference.
- D. [ASTM A 653](#) - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
- E. [ASTM A 666](#) - Standard Specification for Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar.
- F. [ASTM A 924](#) - Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process.

- G. [ASTM B 221](#) - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.
- H. [NEMA 250](#) - Enclosures for Electrical Equipment (1000 Volts Maximum).
- I. [NEMA MG 1](#) - Motors and Generators.

1.4 DESIGN / PERFORMANCE REQUIREMENTS

- A. Overhead coiling insulated doors:
 - 1. Wind Loads: Design door assembly to withstand wind/suction load of 20 psf (958 Pa) without damage to door or assembly components in conformance with ASTM E 330.
 - 2. Operation: Design door assembly, including operator, to operate for not less than 20,000 cycles.
- B. Single-Source Responsibility: Provide doors, tracks, motors, and accessories from one manufacturer for each type of door. Provide secondary components from source acceptable to manufacturer of primary components.
- C. Products Requiring Electrical Connection: Listed and classified by Underwriters Laboratories, Inc. acceptable to authority having jurisdiction as suitable for purpose specified.

1.5 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Details of construction and fabrication.
 - 4. Installation instructions.
- C. Shop Drawings: Include detailed plans, elevations, details of framing members, anchoring methods, required clearances, hardware, and accessories. Include relationship with adjacent construction.
- D. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.
- E. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) long, representing actual product, color, and patterns.
- F. Manufacturer's Certificates: Certify products meet or exceed specified requirements.
- G. Operation and Maintenance Data: Submit lubrication requirements and frequency, and periodic adjustments required.

1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in performing Work of this section with a minimum of five years experience in the fabrication and installation of security closures.

- B. Installer Qualifications: Installer Qualifications: Company specializing in performing Work of this section with minimum three years and approved by manufacturer.
- C. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
 - 1. Finish areas designated by Architect.
 - 2. Do not proceed with remaining work until workmanship, color, and sheen are approved by Architect.
 - 3. Refinish mock-up area as required to produce acceptable work.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Protect materials from exposure to moisture. Do not deliver until after wet work is complete and dry.
- C. Store materials in a dry, warm, ventilated weathertight location.

1.8 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

1.9 COORDINATION

- A. Coordinate Work with other operations and installation of adjacent materials to avoid damage to installed materials.

1.10 WARRANTY

- A. Warranty: Manufacturer's limited door and operator system, except the counterbalance spring and finish, to be free from defects in materials and workmanship for 3 years or 20,000 cycles, whichever occurs first.
- B. Warranty: Manufacturer's limited door warranty for 2 years for all parts and components.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Overhead Door Corp., 2501 S. State Hwy. 121, Suite 200, Lewisville, TX 75067. ASD. Tel. Toll Free: (800) 275-3290. Phone: (469) 549-7100. Fax: (972) 906-1499. Web Site: www.overhaddoor.com. E-mail: info@overhaddoor.com.
- B. Substitutions: Not permitted.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01600.

2.2 INSULATED OVERHEAD COILING SERVICE DOORS

- A. Overhead Coiling Stormtite Insulated Service Doors: Overhead Door Corporation Model 625.
1. Curtain: Interlocking roll-formed slats as specified following. Endlocks shall be attached to each end of alternate slats to prevent lateral movement.
 - a. Flat profile type F-265i for doors up to 40 feet (12.19 m) wide.
 - b. Front slat fabricated of:
 - 1) 24 gauge galvanized steel.
 - 2) 22 gauge galvanized steel.
 - 3) 20 gauge galvanized steel.
 - 4) 18 gauge galvanized steel.
 - 5) 22 gauge stainless steel.
 - 6) 20 gauge stainless steel.
 - 7) Aluminum .040 inch (1 mm).
 - c. Back slat fabricated of:
 - 1) 24 gauge galvanized steel.
 - 2) 22 gauge galvanized steel.
 - 3) 24 gauge stainless steel.
 - 4) Aluminum .024 inch (.06 mm).
 - d. Slat cavity filled with CFC-free foamed-in-place, polyurethane insulation.
 - 1) R-Value: 7.7, U-Value: 0.13.
 - 2) Sound Rating: STC-21.
 2. Performance:
 - a. Through Curtain Sound Rating: Sound Rating: STC-28 (STC-30+ with HZ noise generator) as per ASTM E 90.
 - b. Installed System Sound Rating: STC-21 as per ASTM E 90.
 - c. U-factor: 0.91 NFRC test report, maximum U-factor of no higher than 1.00.
 - d. Air Infiltration: Meets ASHRAE 90.1 & IECC 2012/2015 C402.4.3 Air leakage <1.00 cfm/ft².
 3. Finish:
 - a. Galvanized Steel: Slats and hood galvanized in accordance with ASTM A 653 and receive rust-inhibitive, roll coating process, including 0.2 mils thick baked-on prime paint, and 0.6 mils thick baked-on polyester top coat.
 - 1) Polyester Top Coat.
 - (a) Gray polyester.
 - (b) Tan polyester.
 - (c) White polyester.
 - (d) Brown polyester.
 - 2) Powder coat: PowderGuard
 - (a) PowderGuard Premium: Weather resistant polyester powder coat color as selected by the Architect.
 - (b) PowderGuard Weathered Finish: Industrial textured powder coat provides a thicker, more scratch resistant coat. Applied to entire door system including slats, guides, bottom bar and head plate.
 - 3) Non-galvanized exposed ferrous surfaces shall receive one coat of rust-inhibitive primer.
 - b. Stainless Steel: Slats and hood shall be stainless steel finished as follows.
 - 1) Finish: 2B mill finish.
 - 2) Finish: No. 4 satin finish.
 - c. Aluminum: Slats and hood shall be aluminum finished as follows.

- 1) Finish: Mill finish.
 - 2) Finish: Clear anodized finish.
 - 3) Finish: Bronze anodized finish.
 - 4) Finish: Powder coat, PowderGuard.
 - (a) PowderGuard Premium: Weather resistant polyester powder coat color as selected by the Architect.
 - (b) PowderGuard Weathered Finish: Industrial textured powder coat provides a thicker, more scratch resistant coat. Applied to entire door system including slats, guides, bottom bar and head plate.
4. Weatherseals:
- a. Vinyl bottom seal, exterior guide and internal hood seals.
 - b. Interior guide weatherseal.
 - c. Lintel weatherseal.
 - d. Air Infiltration Package, IECC 2012/2015 listed; product to meet C402.4.3 2012 Air leakage <1.00 cfm/ft².
 - 1) Air infiltration perimeter seal package includes: guide cover, guide cap, dual brush exterior guide seal, 4 inch finned lintel brush seal and vinyl bottom seal.
5. Bottom Bar:
- a. Two prime painted steel angles minimum thickness 1/8 inch (3 mm) bolted back to back to reinforce curtain in the guides.
 - b. Two galvanized steel angles minimum thickness 1/8 inch (3 mm) bolted back to back to reinforce curtain in the guides.
 - c. Two stainless steel angles minimum thickness 1/8 inch (3 mm) bolted back to back to reinforce curtain in the guides.
 - d. Extruded aluminum angle minimum thickness 1/8 inch (3 mm) bolted back to back to reinforce curtain in the guides.
6. Guides: Three Structural steel angles
- a. Finish: PowderGuard Weathered finish with iron/black powder.
 - b. Finish: PowderGuard Zinc Finish for guides, bottom bar and head plate.
7. Brackets:
- a. Hot rolled prime painted steel to support counterbalance, curtain and hood.
 - b. Galvanized steel to support counterbalance, curtain and hood.
 - c. Stainless steel to support counterbalance, curtain and hood.
8. Counterbalance: Helical torsion spring type housed in a steel tube or pipe barrel, supporting the curtain with deflection limited to 0.03 inch per foot of span. Counterbalance is adjustable by means of an adjusting tension wheel.
9. Hood: Provide with internal hood baffle weatherseal.
- a. 24 gauge galvanized steel with intermediate supports as required.
 - b. Stainless steel, 24 gauge hood with intermediate supports as required.
 - c. Aluminum hood with intermediate supports as required.
10. Manual Operation:
- a. Chain hoist.
 - b. Crank operation.
11. Electric Motor Operation: Provide UL listed electric operator, size as recommended by manufacturer to move door in either direction at not less than 2/3 foot nor more than 1 foot per second.
- a. Sensing Edge Protection:
 - 1) Pneumatic sensing edge.
 - 2) Electric sensing edge.
 - b. Operator Controls:
 - 1) Push-button operated control stations with open, close, and stop buttons.

- 2) Key operation with open, close, and stop controls.
- 3) Push-button and key operated control stations with open, close, and stop buttons.
- 4) Controls for interior location.
- 5) Controls for exterior location.
- 6) Controls for both interior and exterior location.
- 7) Controls surface mounted.
- 8) Controls flush mounted.
- c. Special Operation:
 - 1) Vehicle detector operation.
 - 2) Radio control operation.
 - 3) Card reader control.
 - 4) Photocell operation.
 - 5) Door timer operation.
 - 6) Commercial light package.
 - 7) Explosion and dust ignition proof control wiring.
- d. Motor Voltage: 115/230 single phase, 60 Hz.
- 12. Windload Design:
 - a. Standard windload shall be 20 PSF.
 - b. Miami-Dade County NOA ____.
 - c. FBC certification FL# ____.
 - d. TDI Approval # ____.
- 13. Locking:
 - a. Chain keeper locks for chain hoist operation.
 - b. Interior slide bolt lock for electric operation with interlock switch.
 - c. Cylinder lock for electric operation with interlock switch.
- 14. Wall Mounting Condition:
 - a. Face-of-wall mounting.
 - b. Between jambs mounting.
- 15. Insulated Vision Lites: Provide with uniformly spaced openings.
 - a. Size: 3 inch by 5/8 inch (76 mm by 16 mm)
 - b. Size: 10 inch by 1 inch (254 mm by 25.4 mm)
 - c. Provide with dual wall polycarbonate lites.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify opening sizes, tolerances and conditions are acceptable.
- B. Examine conditions of substrates, supports, and other conditions under which this work is to be performed.
- C. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions.

- B. Use anchorage devices to securely fasten assembly to wall construction and building framing without distortion or stress.
- C. Securely and rigidly brace components suspended from structure. Secure guides to structural members only.
- D. Fit and align assembly including hardware; level and plumb, to provide smooth operation.
- E. Coordinate installation of electrical service with Section 16150. Complete wiring from disconnect to unit components.
- F. Coordinate installation of sealants and backing materials at frame perimeter as specified in Section 07900.
- G. Install perimeter trim and closures.
- H. Instruct Owner's personnel in proper operating procedures and maintenance schedule.

3.4 ADJUSTING

- A. Test for proper operation and adjust as necessary to provide proper operation without binding or distortion.
- B. Adjust hardware and operating assemblies for smooth and noiseless operation.

3.5 CLEANING

- A. Clean curtain and components using non-abrasive materials and methods recommended by manufacturer.
- B. Remove labels and visible markings.
- C. Touch-up, repair or replace damaged products before Substantial Completion.

3.6 PROTECTION

- A. Protect installed products until completion of project.

END OF SECTION