

The Genuine. The Original.



SECTION 08330

OVERHEAD COILING DOORS
STORMTITE™ 620 SERIES SERVICE DOORS

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PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Overhead coiling service 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. ANSI/DASMA 108 - American National Standards Institute Standard Method For Testing Sectional Garage Doors And Rolling Doors: Determination Of Structural Performance Under Uniform Static Air Pressure Difference.
- B. NFRC 102 - Test Procedure for Measuring the Steady-State Thermal Transmittance of Fenestration Systems.
- C. ASTM E 90 - Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Element.
- D. ASTM E 330 - Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference.

- E. ASTM A 653 - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
- F. ASTM A 666 - Standard Specification for Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar.
- G. ASTM A 924 - Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process.
- H. ASTM B 221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.
- I. NEMA 250 - Enclosures for Electrical Equipment (1000 Volts Maximum).
- J. NEMA MG 1 - Motors and Generators.

1.4 DESIGN / PERFORMANCE REQUIREMENTS

- A. Overhead coiling service 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 system warranty for 2 years for all parts and components.
- C. PowderGuard Finish

1. PowderGuard Premium Applied to curtain, guides, bottom bar, headplates: Manufacturer's limited Premium Finish warranty for 2 years.
2. PowderGuard Zinc Base Coat applied to guides, bottom bar, headplates plus PowderGuard Premium applied to curtain and top coat for guides, bottom bar, headplates: Manufacturer's limited Zinc Finish warranty for 4 years.
3. PowderGuard Textured: Applied to curtain, guides, bottom bar, headplates: Manufacturer's limited Textured Finish warranty for 3 years.
4. PowderGuard Zinc Base Coat applied to guides, bottom bar, headplates plus PowderGuard Textured applied to curtain and top coat for guides, bottom bar, headplates: Manufacturer's limited Zinc Finish warranty for 4 years.
5. PowderGuard Max: Applied to curtain, guides, bottom bar, headplates: Manufacturer's limited Max Finish warranty for 5 years.

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.overheaddoor.com. E-mail: info@overheaddoor.com.
- B. Substitutions: Not permitted.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01600.

2.2 OVERHEAD COILING SERVICE DOORS

- A. Heavy Duty Industrial Doors: Overhead Door Corporation, Model 620 Stormtite Service Doors.
 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-265 for doors up to 18 feet 4 inches (5.59 m) wide, fabricated of:
 - 1) 22 gauge galvanized steel.
 - 2) 20 gauge galvanized steel.
 - 3) 18 gauge galvanized steel.
 - 4) 16 gauge galvanized steel.
 - 5) 22 gauge stainless steel.
 - 6) 20 gauge stainless steel.
 - 7) .040 inch (1 mm) aluminum.
 - b. Flat profile type F-265 for doors between 18 feet 4 inches (5.59 m) and 25 feet 4 inches (7.72 m) wide, fabricated of:
 - 1) 20 gauge galvanized steel.
 - 2) 18 gauge galvanized steel.
 - 3) 16 gauge galvanized steel.
 - 4) 20 gauge stainless steel.
 - 5) .050 inch (1.29 mm) aluminum.
 - c. Flat profile type F-265 for doors between 25 feet 4 inches (7.72 m) and 40 feet (12.19 m) wide, fabricated of:
 - 1) 18 gauge galvanized steel.
 - 2) 16 gauge galvanized steel.

- 3) .050 inch (1.29 mm) aluminum. (Maximum width of 27 feet (8.23 m)).
2. Slats and Hood 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:
 - (a) PowderGuard Premium powder coat color as selected by the Architect.
 - (b) PowderGuard Textured powder color as selected by the Architect.
 - (c) PowderGuard Max powder coat, color as selected by Architect.
 - 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) Powder Coat:
 - (a) PowderGuard Premium powder coat color as selected by the Architect.
 - (b) PowderGuard Textured powder color as selected by the Architect.
 - (c) PowderGuard Max powder coat, color as selected by Architect.
3. Weatherseals:
 - a. Vinyl bottom seal, exterior guide and internal hood seals.
 - b. Interior guide weatherseal.
 - c. Lintel weatherseal.
4. Bottom Bar:
 - a. Extruded aluminum for doors up to 15 feet 4 inches (4.67 m) wide.
 - b. Two primed steel angles for doors over 15 feet 4 inches (4.67 m) wide.
 - c. Two galvanized steel angles.
5. Guides: Three structural steel angles.
6. Brackets:
 - a. Hot rolled prime painted steel to support counterbalance, curtain and hood.
 - b. Galvanized steel to support counterbalance, curtain and hood.
7. Finish; Bottom Bar, Guides, Headplate and Brackets:
 - a. Finish: Black powdercoat finish.
 - b. Finish: PowderGuard Premium powder coat color as selected by the Architect.
 - c. Finish: PowderGuard Zinc base coat, gray with PowderGuard Premium powder coat color as selected by the Architect.

- d. Finish: PowderGuard Textured powder color as selected by the Architect.
- e. Finish: PowderGuard Zinc base coat, gray with PowderGuard Textured powder color as selected by the Architect.
- f. Finish: PowderGuard Max powder color as selected by the Architect.
- 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. Manual push up for doors up to 96 SF.
 - b. Chain hoist for doors up to 96 SF.
 - c. Chain hoist for doors over 96 SF.
 - d. 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. Two interior bottom bar slide bolts for manually operated doors.
 - b. Interior bottom bar slide bolt with chain hoist operation.
 - c. Chain keeper locks for chain hoist operation.
 - d. Interior slide bolt lock for electric operation with interlock switch.
 - e. Cylinder lock for electric operation with interlock switch.
- 14. Wall Mounting Condition:
 - a. Face-of-wall mounting.

- b. Between jambs mounting.
- 15. 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 open with no cover.
 - d. Provide with Plexiglas covers over openings.

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