



SECTION 08330  
OVERHEAD COILING SERVICE DOORS  
RAPIDSLAT® MODEL 621 ADVANCED PERFORMANCE ROLLING SERVICE DOORS

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**PART 1 GENERAL**

1.1 SECTION INCLUDES

- A. Advanced Performance Rolling 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 08710 - Door Hardware: Product Requirements for cylinder core and keys.
- D. Section 09900 - Painting: Field applied finish.
- E. Section 16130 - Raceway and Boxes: Conduit from electric circuit to door operator and from door operator to control station.
- F. 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. Advanced Rolling Service doors:
  - 1. Windload: Design door assembly to withstand wind/suction load of 20 psf (958 Pa) without damage to door or assembly components. Does not apply to doors with optional wearstrip guides.
  - 2. Operation: Design door assembly, including operator, to operate for not less than 200,000 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.

## **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](http://www.overheaddoor.com). E-mail: [info@overheaddoor.com](mailto:info@overheaddoor.com).
- B. Substitutions: Not permitted.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01600.

### 2.2 ADVANCED PERFORMANCE ROLLING SERVICE DOORS

- A. RapidSlat Model 621 Stormtite Doors by Overhead Door Corporation.
  - 1. Curtain: Interlocking roll-formed metal slats as specified with endlocks attached to each end of alternate slats to prevent lateral movement.
    - a. Flat Profile type F-265 for doors up to 20 feet wide fabricated of:
      - 1) 22 gauge powder coated steel.
      - 2) 20 gauge powder coated steel.
      - 3) 18 gauge powder coated steel.

- 4) 22 gauge stainless steel.
  - 5) 20 gauge stainless steel.
  - 6) 16 gauge (.050 inch) aluminum.
  - b. Finish:
    - 1) PowderGuard Max powder coat.
      - (a) Gray.
      - (b) Tan.
      - (c) White.
      - (d) Color as selected by Architect.
2. Bottom Bar: Two metal angles, minimum thickness 3/16 inch, bolted back to back to reinforce curtain in the guides and incorporating a wireless, monitored safety edge.
- a. Material:
    - 1) Steel.
    - 2) Extruded aluminum.
    - 3) Stainless steel with brushed finish.
  - b. Steel/Aluminum Finish:
    - 1) PowderGuard Premium powder coat in black color.
    - 2) PowderGuard Premium powder coat, color as selected by Architect.
    - 3) PowderGuard Textured powder coat, color as selected by Architect.
    - 4) PowderGuard Zinc powder coat, color as selected by Architect.
    - 5) PowderGuard Max powder coat, color as selected by Architect.
3. Guides: Three Structural steel angles.
- a. Material:
    - 1) Steel.
    - 2) Stainless steel with brushed finish.
  - b. Steel/Aluminum Finish:
    - 1) PowderGuard Premium powder coat in black color.
    - 2) PowderGuard Premium powder coat, color as selected by Architect.
    - 3) PowderGuard Textured powder coat, color as selected by Architect.
    - 4) PowderGuard Zinc powder coat, color as selected by Architect.
    - 5) PowderGuard Max powder coat, color as selected by Architect.

Provide with high usage guide wear strip to minimize wear and reduce sound.

- 4. Motor: Direct drive, integrated gear motor/brake assembly sized for openings. Provide with a manual hand chain for operation during power outages. Operator and drive assembly is factory pre-assembled and provided with all wiring harnesses needed direct from the factory.
  - a. Opening Speed: Up to 24 inches per second.
  - b. Closing Speed: 12 inches per second.
  - c. Electrical Characteristics: 220V AC, single phase per motor/drive.
  - d. Electrical Characteristics: 208/230V AC, 3 phase per motor/drive.
  - e. Electrical Characteristics: 460V AC, 3 phase per motor/drive.
  - f. Electrical Characteristics: 575V AC, 3 phase per motor/drive.
  - g. Left hand mount.
  - h. Right hand mount.
- 5. Control Panel: Provide electronic Variable Frequency drive controller with microprocessor self-diagnostics. LCD readout indicates door action, alarm conditions, and fault conditions. Timer to close programming options and non-resettable cycle counter are included. Enclosure is NEMA 4X rated. Control system is UL508A certified. Junction box is IP67 rated.

6. Door Roll: Directly driven, springless roll shall be steel tube with integral shafts, keyed on the Drive End and supported by self-aligning greaseable sealed bearings. Door shall not require any counterbalance device.
7. Hood: Protecting drive motor, barrel, chain, and sprocket from dirt and debris and extending between the support brackets. Fabricated of:
  - a. Material:
    - 1) Steel.
    - 2) Aluminum.
    - 3) Stainless steel with brushed finish.
  - b. Steel/Aluminum Finish:
    - 1) Polyester paint in black color (steel only)
    - 2) PowderGuard Premium powder coat, color as selected by Architect.
    - 3) PowderGuard Textured powder coat, color as selected by Architect.
    - 4) PowderGuard Max powder coat, color as selected by Architect.
  - c. Provide with sloped top for exterior mounting.
8. Brackets: Provide steel brackets to support motor, curtain, and hood and fabricated of:
  - a. PowderGuard Premium powder coat in black color.
  - b. PowderGuard Premium powder coat, color as selected by Architect.
  - c. PowderGuard Textured powder coat, color as selected by Architect.
  - d. PowderGuard Max powder coat, color as selected by Architect.
9. Safety Devices: Provide door with following safety devices:
  - a. Photoelectric sensors that cast an invisible beam across the door opening and reverses the downward motion of the door when an object enters the path of the beam.
  - b. Wireless, monitored safety edge reverses downward motion upon impact.
  - c. Built-in (to motor assembly) brake mechanism eliminates uncontrolled curtain travel independent of other safeties.
10. Actuators:
  - a. One Open/Close/Stop push button station incorporated into Control Panel.
  - b. Loop detectors.
  - c. Radio control.
  - d. Interior Push buttons.
  - e. Exterior Push buttons.
  - f. Interior Key switch.
  - g. Exterior Key switch.
  - h. Motion detectors.
  - i. Warning light.
  - j. Horns and/or strobes.
  - k. Second set of photoelectric sensors.
11. Windload Design:
  - a. Standard windload shall be 20 PSF.
  - b. Miami-Dade County NOA \_\_\_\_.
  - c. FBC certification FL# \_\_\_\_.
  - d. TDI approval # \_\_\_\_.

### **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