

The Genuine. The Original.



SECTION 08330

OVERHEAD COILING DOORS
STORMTITE™ AP 627 SERIES ADVNACED PERFORMANCE ROLLING SERVICE DOORS

Display hidden notes to specifier by using "Tools"/"Options"/"View"/"Hidden Text".

**** NOTE TO SPECIFIER ** Overhead Door Corp.; overhead coiling door products.**

**This section is based on the products of Overhead Door Corp., which is located at:
2501 S. State Hwy. 121
Suite 200
Lewisville, TX 75067
Toll Free: (800) 275-3290
Phone: (469) 549-7100
Fax: (972) -906-1499
Web Site: www.overheaddoor.com
E-mail: info@overheaddoor.com
[click Here] for additional information.**

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Overhead coiling insulated doors.

1.2 RELATED SECTIONS

**** NOTE TO SPECIFIER ** Delete any sections below not relevant to this project; add others as required.**

- 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

**** NOTE TO SPECIFIER ** Delete references from the list below that are not actually required by the text of the edited section.**

- 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

**** NOTE TO SPECIFIER ** Pressures specified are standard. Designs are available for pressures to 75 psf and for operation up to 100,000 cycles. Contact the manufacturer for additional information.**

- 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.

**** NOTE TO SPECIFIER ** Delete selection samples if colors have already been selected.**

- 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.

**** NOTE TO SPECIFIER ** Include a mock-up if the project size and/or quality warrant taking such a precaution. The following is one example of how a mock-up on a large project might be specified. When deciding on the extent of the mock-up, consider all the major different types of work on the project.**

- 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

**** NOTE TO SPECIFIER ** Include the following warranty paragraph for Model 627 overhead coiling doors and Models RSX®, RMX®, or RHX® commercial door operators provided together as a System. Delete if not applicable.**

- 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.

**** NOTE TO SPECIFIER ** Include the following warranty paragraph for Model 627 overhead coiling doors. Delete if not applicable.**

- B. Warranty: Manufacturer's limited door system warranty for 2 years for all parts and components.

**** NOTE TO SPECIFIER ** Include the following Optional PowderGuard Finish warranty paragraph if included for the Door(s) specified. Delete if not applicable.**

- C. PowderGuard Finish

**** NOTE TO SPECIFIER ** Include the one of the following PowderGuard Finish warranty paragraphs for the finish specified. Delete if not applicable.**

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.

**** NOTE TO SPECIFIER ** Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.**

- 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 Advanced Performance Insulated Service Doors: Overhead Door Corporation Stormtite AP Model 627.
 - 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 FIT-265 for doors up to 40 feet (12.19 m) wide.
 - b. Front slat fabricated of:

**** NOTE TO SPECIFIER ** Select one of the following paragraphs and delete the ones not required. 24 gauge galvanized steel is standard.**

- 1) 22 gauge galvanized steel.
- 2) 24 gauge galvanized steel.
- 3) 22 gauge stainless steel.
- 4) Aluminum .040 inch (1 mm).

- c. Back slat fabricated of:

**** NOTE TO SPECIFIER ** Select one of the following paragraphs and delete the ones not required. 24 gauge galvanized steel is standard.**

- 1) 24 gauge galvanized steel.
- 2) 24 gauge stainless steel.
- 3) Aluminum .024 inch (.06 mm).

- d. Slat cavity filled with CFC-free foamed-in-place, polyurethane insulation.

- 1) R-Value: 10.9, U-Value: 0.09.

- 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: 0.84 NFRC test report, maximum U-factor of no higher than 1.00.
- d. Air Infiltration: Meets ASHRAE 90.1 and IECC 2012/2015 C402.4.3 Air leakage <1.00 cfm/ft².

- 3. Slats and Hood Finish:

**** NOTE TO SPECIFIER ** Select one of the following three paragraphs for the slat and hood material required and delete the ones not required.**

- 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.

**** NOTE TO SPECIFIER ** Select one of the following two paragraphs for Polyester top coat or Powder top coat and delete the one not required. Polyester top coat is standard.**

- 1) Polyester Top Coat.
 - (a) Gray polyester.
 - (b) Tan polyester.
 - (c) White polyester.
 - (d) Brown polyester.

- 2) Powder Coat:

**** NOTE TO SPECIFIER ** PowderGuard Premium polyester powder coat available in 197 colors; custom color match options available. PowderGuard Textured Finish available in**

11 color options. PowderGuard Max Finish with 4 times the hardness of standard powder coat is also available in 197 colors. See PowderGuard Finish brochure for color selection

- (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: No. 4 satin finish.
- c. Aluminum: Slats and hood shall be aluminum finished as follows.

**** NOTE TO SPECIFIER ** Select one of the following two paragraphs and delete the one not required.**

- 1) Finish: Mill finish.
- 2) Finish: Powder Coat:

**** NOTE TO SPECIFIER ** PowderGuard Premium polyester powder coat available in 197 colors; custom color match options available. PowderGuard Textured Finish available in 11 color options. PowderGuard Max Finish with 4 times the hardness of standard powder coat is also available in 197 colors. See PowderGuard Finish brochure for color selection**

- (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.
4. Weatherseals:
- a. Vinyl bottom seal and internal hood seals.
 - b. Interior and exterior EPDM triple-seal finned guide weatherseal.
 - c. Lintel weatherseal.

**** NOTE TO SPECIFIER ** Air infiltration package is optional delete if not required.**

- 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, PVC weatherseal on exterior of guide, EPDM triple finned weatherseal on interior of guide, lintel weatherseal and vinyl bottom seal.

5. Bottom Bar:

**** NOTE TO SPECIFIER ** Select one of the following paragraphs and delete the ones not required.**

- a. Two powder coated black 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. Two aluminum angles minimum thickness 1/8 inch (3 mm) bolted back to back to reinforce curtain in the guides.

6. Guides: Three structural steel angles.

7. Brackets:

**** NOTE TO SPECIFIER ** Select one of the following paragraphs and delete the ones not required.**

- a. Hot rolled powder coated black 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. Finish; Guides, Headplate and Brackets:

**** NOTE TO SPECIFIER ** Select one of the following finish paragraphs and delete those not required. Black powder coat is standard. PowderGuard Premium and PowderGuard Max powder coat available in 197 colors; custom color match options available. PowderGuard Textured Finish available in 11 color options. See PowderGuard Finish brochure for color selections.**

- 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.
- 9. 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.
- 10. Hood: Provide with internal hood baffle weatherseal.

**** NOTE TO SPECIFIER ** Select one of the following paragraphs and delete those not required.**

- 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.

**** NOTE TO SPECIFIER ** Select one of the following paragraphs for manual operation or electric motor operation and delete the one not required.**

- 11. Manual Operation:

**** NOTE TO SPECIFIER ** Select one of the following manual operation paragraphs and delete the ones not required.**

- a. Chain hoist.
- b. Crank operation.

*** NOTE TO SPECIFIER ** Include the following paragraph is electric motor operation is required and delete if not required.**

- 12. 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:

**** NOTE TO SPECIFIER ** Select one of the following two paragraphs and delete the one not required.**

- 1) Pneumatic sensing edge.
- 2) Electric sensing edge.
- b. Operator Controls:

**** NOTE TO SPECIFIER ** Select one of the following operation paragraphs and delete the one not required.**

- 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.

**** NOTE TO SPECIFIER ** Select one of the following location paragraphs and delete the one not required.**

- 4) Controls for interior location.
- 5) Controls for exterior location.

6) Controls for both interior and exterior location.

**** NOTE TO SPECIFIER ** Select one of the following two paragraphs and delete the one not required.**

7) Controls surface mounted.

8) Controls flush mounted.

c. Special Operation:

**** NOTE TO SPECIFIER ** Select one of the following operation paragraphs and delete the one not required.**

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.

13. Windload Design:

**** NOTE TO SPECIFIER ** Select one of the following paragraphs and delete the one not required. Standard windload is 20 PSF. Note that if wear strip guides are used the windload warranty does not apply. Contact the manufacturer for current data on FBC Certification or TDI approval and insert below.**

a. Standard windload shall be 20 PSF.

b. FBC certification FL# ____.

c. TDI approval # _____.

14. Locking:

**** NOTE TO SPECIFIER ** Select one of the following paragraphs and delete the ones not required.**

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.

15. Wall Mounting Condition:

**** NOTE TO SPECIFIER ** Select one of the following two paragraphs and delete the one not required.**

a. Face-of-wall mounting.

b. Between jambs mounting.

**** NOTE TO SPECIFIER ** Vision lites are optional. Select open or covered openings. Delete if not required.**

16. Insulated Vision Lites: 10 inch by 1 inch (254 mm by 25.4 mm) uniformly spaced openings.

a. Provide with dual-wall polycarbonate.

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.

**** NOTE TO SPECIFIER ** Select the following paragraph for electric operation of coiling doors and delete if not required.**

- 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