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SECTION 08 33 36

OVERHEAD COILING DOORS
790 SERIES OVERHEAD COILING SHEET DOORS

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**** 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:
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Toll Free: (800) 275-3290
Phone: (469) 549-7100
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E-mail: info@overheaddoor.com
[click Here] for additional information.**

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Overhead coiling sheet 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 sheet doors:
**** NOTE TO SPECIFIER ** Select windload for Model 790 doors only from the following paragraph. Delete if not applicable.**
 - 1. Wind Loads: Design door assembly for Model 790 doors to withstand wind/suction load of 25/37.5 psf (1197/1796 Pa) without damage to door or assembly components in conformance with DASMA 108-2012 and as required by local codes.
 - 2. Operation: Design door assembly, including operator, to operate for not less than 10,000 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.

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.

**** 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.
- D.

**** NOTE TO SPECIFIER ** Overhead Door Corporation Model 790CW Commercial Windload Doors are available up to a standard maximum width of 20 feet and a standard maximum height of 16 feet. Overhead Door Corporation Model 780CW Commercial Doors are available up to a standard maximum width of 16 feet and a standard maximum height of 16 feet. Overhead Door Corporation Model 770SS Self-Storage Doors are available up to a standard maximum width of 10 feet and a standard maximum height of 10 feet. Select door type required and edit as required to suit project requirements. Delete doors not required.**

2.2 OVERHEAD COILING SHEET DOORS

- A. Overhead Coiling Commercial Windloaded Sheet Doors: Overhead Door Corporation Model 790.
 - 1. Curtain: Roll formed, 26 gauge galvanized steel, per ASTM A 653, SQ Grade 80, Galvanized G-30. Sections interlocked and permanently seamed together to form a continuous curtain. Provided with a PVC edge strip stapled on the edge of curtain's exterior side to minimize steel-to-steel contact, enhance door operation, and minimize curtain nesting and scratching. Curtain shall have 9 gauge ductile iron windlocks on each edge of the curtain spaced according to door size and the application's windloading requirements.
 - 2. Sheet Finish:
 - a. Curtain sections shall 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.
 - b. Top Coat Color:

**** NOTE TO SPECIFIER ** Select one of the following color paragraphs and delete the ones not required. Reference manufacturers OHD Color Chart: R900-667.**

- 1) White.
 - 2) Glossy White.
 - 3) Garnet Red.
 - 4) Royal Blue.
 - 5) Polar Blue.
 - 6) Forest Green.
 - 7) Desert Tan.
 - 8) Teal.
 - 9) Dark Teal.
 - 10) Walnut Brown.
 - 11) Bronze.
 - 12) As selected by the Architect from the manufacturers standard colors.
- c. Guides, angles, bottom bar stops, headplates and rings galvanized. Aluminum bottom bar clear anodized.
3. Bottom Bar: Extruded aluminum reinforced with 1-1/2 inch by 2 inch (38 mm by 51 mm) roll formed steel angle and provided with a flexible PVC bulb type astragal to ensure a consistent seal along the floor. Extrusion designed to interlock with door curtain.
 4. Bottom Bar Stops: Bottom bar stops of "quick connect" design that allows the curtain to be inserted into the "universal" guide and lock into place with one fastener. Bottom bar stops shall be 12 gauge.
 5. Guides: Guides roll-formed from 14-gauge grade 50 galvanized steel. Guides 3 inches (76 mm) wide with UHMW polypropylene rub strips on each edge of the guide. Through hole, universal design shall allow easy access from the front of the guide for fastener attachment to the door jamb material. Guides of universal design for use in concrete, wood, steel or masonry jambs Guides pre-punched to accept "quick connect" attachment of the bottom bar stops.

**** NOTE TO SPECIFIER ** Select one of the following two headplate paragraphs and delete the one not required. Stamped headplate is standard heavy duty headplate is optional.**

6. Headplates: Stamped 11 gauge steel, mounted directly to the wall to support the door shaft and ensure smooth door roll operation.
7. Heavy Duty Headplates: 0.187 inch (4.76 mm) thick welded steel, mounted directly to the wall to support the door shaft and ensure smooth door roll operation.
8. Counterbalance: Counterbalance assembly with "stepped" steel rings designed to ensure a tight and uniform curtain wrap. Rings include steel roller bearings for enhanced door operation and cycle life. 3-3/8 inch (86 mm) I.D. springs lubricated at factory to enhance long life and door operation. Shaft 1-5/16 inch (35 mm) diameter to minimize door deflection. Counterbalance assembly design to allow quick assembly of "non-handed" chain hoist on either side of door on the job site.

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

9. Manual Operation:

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

- a. Manual push up.
- b. Chain hoist with 6:1 reduced drive.

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

10. 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) N/A.
 - 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.
11. Locking:

**** NOTE TO SPECIFIER ** Select one of the following paragraphs and delete the ones not required. Dual exterior curtain lock is optional.**

- a. Standard Interior bottom bar slide bolt on each end of the door's bottom bar assembly.
- b. Optional Dual Exterior curtain locks, Model 770 slide bolt lock.

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