

SECTION 08 33 23.04 - OVERHEAD COILING DOORS

PART 1 GENERAL

1.1 ADMINISTRATIVE REQUIREMENTS

- A. Pre-Installation Conference:
 - 1. Attendance: [Architect,] [Owner,] [Contractor,] [Construction Manager,] [Design/Builder] installer, and related trades.
 - 2. Review: Project conditions, manufacturer requirements, delivery and storage, staging and sequencing, and protection of completed work.

1.2 SUBMITTALS

- A. Action Submittals:
 - 1. Shop Drawings: Illustrate products, installation, and relationship to adjacent construction.
 - 2. Product Data: Manufacturer's descriptive data and product attributes.
 - 3. Samples: [Selection samples.] [Verification samples.]
- B. Closeout Submittals:
 - 1. Operation and Maintenance Data.

1.3 QUALITY ASSURANCE

- A. Installer Qualifications:
 - 1. Minimum [2] [__] years' experience in work of this Section.
 - 2. Approved by door manufacturer.

1.4 SYSTEM DESCRIPTION

- A. Design Requirements: Positive and negative design wind loads in accordance with [ASCE 7.] [Building Code.] [____.]
- B. Operation: Direct drive motor with chain hoist override.
- C. Design Cycle Life: [400,000] [600,000] cycles.
- D. Operating Speed: Up to 24 inches per second opening, up to 12 inches per second closing.
- 1.5 WARRANTY
 - A. Manufacturer's warranty against defects in materials and workmanship for 2 years or 400,000 cycles.

**** OR ****

B. Manufacturer's warranty against defects in materials and workmanship for 3 years or 600,000 cycles.

C. Manufacturer's 40 year warranty for coating film integrity and 35 year warranty against chalking and fading of coating.

PART 2 PRODUCTS

- 2.1 MANUFACTURERS
 - A. Contract Documents are based on Series 400HP by ASTA America, <u>www.astaamerica.com</u>.
 - B. Substitutions: [Refer to Division 01.] [Not permitted.]

2.2 MATERIALS

A. Galvanized Steel: ASTM A653/A653M, Structural Quality, G40 coating class.

**** OR ****

B. Stainless Steel: ASTM A666, Type 304.

2.3 COMPONENTS

- A. Curtain:
 - 1. Material: [Galvanized steel.] [Stainless steel.]
 - 2. Slats: 22 gage, flat profile, 2-5/8 inches wide x 5/8 inch deep.
 - 3. Endlocks: Ends of alternate slats fitted with nylon endlocks.
 - 4. Bottom bar: Steel double angle, with PVC bulb weatherseal.
 - 5. Vision panels: 5 x ³/₄ inch cut outs spaced approximately 3 inches apart, covered with clear Lexan.

B. Hood:

- 1. 24 gage [galvanized] [stainless] steel, with closed ends.
- 2. Reinforcing: ¹/₄ inch thick steel brackets for doors over 13'-4" wide.
- C. Guides:
 - 1. [Steel] [Stainless steel] angles, 3/16 inch minimum thickness, with removable headstops and self-lubricating UHMW anti-wear strips.
 - 2. Weather seal: Brush seal with retainer.
- D. Barrel Assembly:
 - 1. Barrel: Steel pipe, size and wall thickness to limit deflection to 0.03 inch per foot of width,
 - 2. System designed to operate without spring counterbalance assembly.
- E. Support Brackets: Steel plate, 1/4 inch minimum thickness, with self-aligning sealed ball bearings and welded steel provisions for hood mount.
- F. Operator:
 - SecureDrive+ direct drive motor operator and controls designed for continuous duty cycle. Voltage and phase: [115/230 VAC single phase,] [208/230 VAC single phase,] [230/460 VAC three phase,] 50/60 Hz.
 - 2. Motor brake standard; dynamic braking optional by means of timed energized solenoid actuation.
 - 3. Emergency chain hoist operation with integrated electronic interlock.
 - 4. Inherent overload protection.
- G. Controller:
 - 1. Variable Frequency Drive (VFD) with optimal inverter.

- 2. NEMA 4X wall mounted interface control panel. Plug in play programmable logic board connections for:
 - a. Operator assembly.
 - b. Encoder and brake assembly.
 - c. Entrapment protection.
 - d. Ancillary connections.
- 3. LED display standard readout:
 - a. Start up menu.
 - b. Electronic limit quick set up.
 - c. Diagnostics.
 - d. Door positioning.
 - e. Error codes.
 - f. Non-resettable cycle counter continuous display.
- 4. Normally closed/normally open programmable dry contact inputs and outputs.
- 5. Overload and current protection protected by Class II control circuits.
- 6. Compatible with normally closed and normally open dry contacts from:
 - a. [Loop detectors.]
 - b. [RFID readers.]
 - c. [Motion sensors.]
 - d. [Sensing devices.]
 - e. [Annunciators.]
 - f. [Interlocking systems.]
 - g. [Traffic light kit.]
- H. Entrapment Protection: [Photo eye sensors, UL 325 R5 compliant, NEMA rated.] [Light curtain, UL 325 R5 compliant, [3] [6] foot high, NEMA rated.]
- 2.4 FINISHES
 - A. Guides, Bottom Bar, and Headplates: Powder coated, black.
 - B. Galvanized Steel: [Unpainted.] [Manufacturer's standard [white] [gray] [tan] topcoat.] [Powder coated, [____] color [to be selected from manufacturer's full color range].

**** OR ****

C. Stainless Steel: No. 4 satin.

PART 3 EXECUTION

- 3.1 INSTALLATION
 - A. Install in accordance with manufacturer's instructions and approved Shop Drawings.

END OF SECTION