

## SECTION 08334

### OVERHEAD COILING DOORS

\*Select tools/options and on the view tab, click "Hidden Text" for editing details.

#### PART 1 - GENERAL

##### 1.1 SUMMARY

- A. Section Includes:
  - 1. [Manually] [Electrically] operated steel overhead coiling doors.
  - 2. Operating hardware, controls, and supports.
- B. Related Sections:
  - 1. Division 1: Administrative, procedural, and temporary work requirements.
  - 2. Section [09910 - Paints:] [\_\_\_\_ - \_\_\_\_]: Field painting of doors.
  - 3. Section [\_\_\_\_] - [\_\_\_\_]: Connection to power supply and control devices.

##### 1.2 REFERENCES

- A. ASTM International (ASTM) A653/A653M-03 - Standard Specification for Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.

##### 1.3 SYSTEM DESCRIPTION

- A. Design doors to withstand:
  - 1. Positive and negative design wind loads [in accordance with Building Code.] [of [\_\_] PSF.]
  - 2. Cycle life of [20,000] [50,000] [100,000] [\_\_] cycles.
- B. Operation: [Manual push up.] [Chain hoist.] [Electric.]

##### 1.4 SUBMITTALS

- A. Submittals for Review:
  - 1. Shop Drawings: Indicate opening dimensions and required tolerances, jamb connection details, anchorage spacing, hardware locations, installation details, and special conditions.
  - 2. Product Data: Provide information on components, application, hardware, and accessories.
- B. Closeout Submittals:
  - 1. Operation and Maintenance Data.
- C. Sustainable Design Submittals:
  - 1. Recycled products: Indicate percentage of recycled material used in manufacture of products, and percentage classified as post consumer.
  - 2. Regional products: Indicate location of product manufacturer and distance from manufacturer to project site.

##### 1.5 WARRANTIES

- A. Provide manufacturer's [one] [five] year warranty against defects in materials and workmanship.

#### PART 2 - PRODUCTS

##### 2.1 MANUFACTURERS

- A. Contract Documents are based on Model [\_\_\_\_] by C.H.I. Overhead Doors.
- B. Substitutions: Under provisions of [Section [\_\_\_\_].] [Division 1.]

\*\*\*\* OR \*\*\*\*

C. Substitutions: Not permitted.

## 2.2 MATERIALS

A. Galvanized Steel Sheet:

1. ASTM A653/A653M, Structural Quality, G90 coating class.
2. Recycled content: Minimum [75] [ ] percent, with minimum [40] [ ] percent classified as post consumer.

## 2.3 COMPONENTS

A. Curtain:

1. Material: Galvanized steel.
2. Gage: [Per design requirements.] [18.] [20.] [22.] [24.]
3. Profile: [Flat, non-insulated, 2-1/2 inches high x 3/4 inch deep.] [Curved, non-insulated, 2-5/8 inches high x 7/8 inch deep.] [Flat, insulated, 2-1/2 inches high x 13/16 inch deep, with expanded polystyrene insulation and 24 gage steel backer.]
4. End locks: Galvanized malleable iron, attached to every other slat to act as wearing surface and prevent lateral movement.
5. Bottom bar: Two galvanized steel angles bolted back-to-back, with adjustable tubular compression weatherseal.
6. Vision lites:
  - a. Rectangular, 5 inches wide x 1-1/8 inches high, clear acrylic panels set with silicone sealant and rivets.
  - b. Pattern: [Three wide x three high,] [Five wide x five high,] [ [ ] wide x [ ] high,] [centered.] [left side looking out.] [right side looking out.]
7. Ventilated slats:
  - a. Rectangular punched openings in slats on 7 inch centers, 5 inches wide x 1-1/8 inches high.
  - b. Pattern: [Three wide x three high,] [Five wide x five high,] [ [ ] wide x [ ] high,] [centered.] [left side looking out.] [right side looking out.]

B. Hood: Minimum 24 gage steel.

C. Guides: [Three minimum 3/16 inch thick steel angles bolted together to form guide channel and mounting surface.] [Rolled steel type shaped to form guide channel and mounting surface.]

D. Weatherstripping: Rubber hood baffle [and lintel seal brush], with exterior vinyl guide seal.

E. Head Plate: Rectangular steel plate, with precision sealed ball bearings supporting drive side axle.

F. Barrel Assembly: Steel pipe sized for maximum deflection under loading of 0.03 inch per foot of span, with threaded rings or lugs welded to barrel assembly for curtain attachment.

G. Springs: Curtain weight counterbalanced by oil-tempered, helically wound torsion springs, grease packed and mounted on steel torsion shaft, designed for minimum 20,000 cycles.

H. Locking: [[Interior] [Exterior] mounted plated steel slide bolt locks with padlock provisions.] [Chain keeper with padlock provisions.] [Master keyable cylinder operable from [coil] [fascia] [each] side of bottom bar.] [Interlock switches.]

I. Electric Operator:

1. Power supply: [115 VAC, single phase.] [220 VAC, [single] [three] phase.] [440-480 VAC, three phase.]
2. Sufficient power to operate door at average speed of 12 inches per second.
3. Disconnect for [manual lift up] [chain hoist] operation in case of power failure.
4. Control station: [24 VDC;] [115 VAC;] [push button] [keyed switch] station marked [OPEN and CLOSE.] [OPEN, CLOSE, and STOP.] [Furnish [four] [ ] keys per station.]

5. Exterior operator cover: Cover exposed operator parts to provide weather and pest resistance for operator; finish to match hood.
  
- J. Safety Device: [Photoelectric sensor; detect obstruction and reverse door without requiring door to contact obstruction.] [Electric edge, two wire; detect obstruction and reverse door upon contact with electric strips in vinyl housing.] [Air wave edge; detect obstruction and reverse door upon disruption of bottom edge.] [Electric edge, four wire; fail-safe, self monitoring; detect obstruction and reverse door upon contact with electric strips in vinyl housing.]
  
- K. Finish:
  1. Curtain: [Epoxy primer and polyester finish coat,] [Powder coat,] [\_\_\_\_] color [to be selected from manufacturer's standards].
  2. Guides and head plates: [Rust inhibiting primer.] [Powder coat, [\_\_\_\_] color [to be selected from manufacturer's standards.]]
  3. Hood: [Epoxy primer and polyester finish coat.] [Powder coat, [\_\_\_\_] color [to be selected from manufacturer's standards.]]
  4. Bottom bar: [Galvanized.] [Painted to match guides.] [Powder coat, [\_\_\_\_] color [to be selected from manufacturer's standards.]]

### **PART 3 - EXECUTION**

#### **3.1 INSTALLATION**

- A. Install door assembly in accordance with manufacturer's instructions.
- B. Anchor to adjacent construction without distortion or stress.
- C. Fit and align door assembly including hardware, level and plumb, to provide smooth operation.
- D. Make wiring connections between power supply and operator and between operator and controls.

#### **3.2 ADJUSTING**

- A. Adjust doors to operate smoothly throughout full operating range.

#### **3.3 DEMONSTRATION**

- A. Demonstrate proper operation to Owner.

END OF SECTION