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Model Speed-Tite® Flat Slats Rolling Service Door

NOTE: For specifications, architects must choose from a variety of options. The standard choice will be shown first in plain text followed by the one or more highlighted options shown in [brackets]

(Example: "Finish: Galvanized, Unpainted [Powder coated] [Baked enamel]"). The specifier must make the appropriate choices and delete the others. (Example: "Finish: ExoShield™ Powder Coated").

#### PART 1 - GENERAL

### 1.01 SUMMARY

- A. This section includes: Electric operated Speed-Tite High Speed Rolling Door.
  - 1. High Cycle Operation
  - 2. High Speed Operation
  - 3. (Optional) Ability to withstand a given wind load requirement
- B. Related sections: Related to this section, but not limited to, the following (based on Master Format 2004):
  - 1. Section 01660 Product Storage and Handling Requirements.
  - 2. Section 04220 Concrete Unit Masonry.
  - 3. Section 05120 Structural Steel
  - 4. Section 05500 -- Metal Fabrications.
  - 5. Section 06100 Rough Carpentry.
  - 6. Section 08310 Access Doors and Panels.
  - 7. Section 08710 Door Hardware.
  - 8. Section 09290 Gypsum Board.
  - 9. Section 09900 Paints and Coatings.
- 10. Section 26000 Electrical.

## 1.02 REFERENCES

- A. ASTM A-653/A-653M Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
- B. ASTM A-36 Standard Specification for Carbon Structural Steel, Hot Rolled Steel.
- C. ASTM A-123 Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
- D. ASTM A-312 Standard Specification for Seamless, Welded, and Heavily Cold Worked Austenitic Stainless-Steel Pipes.
- E. ASTM A-240 Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications.
- F. ASTM A 276 Standard Specification for Stainless Steel Bars and Shapes.
- G. ASTM B 209 Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.
- H. ASTM B 221 Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.
- I. ASTM D 4549 Standard Specification for Polystyrene and Rubber-Modified Polystyrene Molding and Extruding Materials (PS).

### 1.03 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Provide manufacturer's standard details and catalog data. Provide installation instructions.







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- C. Shop Drawings: Furnish shop drawings for architect's approval. Include elevation, sections, and details indicating dimensions, materials, finishes, conditions for anchorage, and support of each door.
- D. Submit manufacturer's recommended operation, troubleshooting, and maintenance instructions.

## 1.04 QUALITY ASSURANCE

- A. Manufacturer: Rolling doors shall be manufactured by a firm with a minimum of five years of experience in manufacturing.
- B. ISO 9001:2015 Qualified.
- C. Single-Source Responsibility: Manufacturer shall provide doors, tracks, motors, and accessories for each type of door. Secondary components shall come from a source acceptable to the manufacturer of the primary components.

## 1.05 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials in original packaging supplied by manufacturer with intact labels. Store materials away from harmful environmental conditions and construction.

### 1.06 WARRANTY

A. Door Warranty: Provide a two-year written warranty from the date of shipment against defects in materials or workmanship. Installer agrees to repair or replace any defects in materials or workmanship.

### PART 2 - PARTS

## 2.01 MANUFACTURER

- A. Manufacturer: Alpine Overhead Doors, Inc.; 8 Hulse Road Suite 1S, East Setauket, NY 11733. Telephone 800-257-4634 or 631-473-9300. Fax 631-642-0800.
- B. Model: Speed-Tite High Speed Rolling Door. Substitutions: No substitutions permitted.

### 2.02 MATERIALS

## A. Curtain:

- 1. Slats: Constructed of interlocking, roll-formed 2 ¾" flat slats. (For insulated slats, see secs for Speed-Tite IMB) a) Slat Material:
  - i) Galvanized steel, conforming with ASTM A-653/ A-653 M.

Finish: Galvanized, Unpainted [ExoShield™ High Cycle Powder Coating] [Baked Enamel] (Minimum coating conforming with Coating Designation G-01 is required).

## – OR –

ii) ASTM 240 Stainless Steel 300 Series

Finish: [Mill Finish #2B] [#4 Satin Finish].

- b) Gauge (Per manufacturer's standard):
  - i) Galvanized: Minimum 20 gauge [18] [16].
- OR
  - ii) Stainless Steel: Minimum 20 gauge [18] [16].
  - c) [Extra Slats]: Extra slats to be included in curtain wrap. In the event the curtain gets damaged, the extra slats located at the top of the curtain can be used for immediate curtain repair. Commonly used in conjunction with breakaway bottom bar below.

#### 2. End Locks and Wind Locks

a) Ductile cast iron, hot-dipped galvanized end locks or wind locks riveted to each end of every (or every other) slat to prevent lateral movement and to limit slat deflection and bending stress. Self-lubricating ductile iron end and wind









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locks are a wearable component that prevent steel to steel contact and are designed for smooth door operation. (Wind locks are dependent on wind load requirements and increase resistance to curtain jamming)

3. Bottom Bar: Two structural formed galvanized steel [stainless steel] angles which extend into guides, designed to

reinforce curtain bottom. (Size dependent on dimensions per manufacturer's standard).

a) Bottom Bar Material:

i) Galvanized Steel as per ASTM A-653/ A-653 M.

Finish: Galvanized [ExoShield™ High Cycle Powder Coated].

- OR -

ii) ASTM 240 Stainless Steel 300 Series

Finish: [Mill Finish #2B] [#4 Satin Finish].

- b) [Breakaway Bottom Bar]: Double angle bottom bar designed to split at the middle in the event of a foreign object striking the door. Allows for the swift replacement/maintenance of the bottom bar to ensure operation is unimpeded. Commonly used in conjunction with extra slats in curtain wrap above.
- c) [Sloped Bottom Bar]: Constructed to match the pitch of opening floor to accommodate irregular floor conditions. Maximum pitch of 1/8" per foot.
- 4. [Fenestrations] [Vision Lite Panels]: Provide 6" by 1 1/4" oval acrylic panes set into curtain. (Choose number and placement) (Minimum 12" off guides, and spaced 12" apart minimum)
- B. Guides: Guides shall be designed using structural angles with a minimum thickness of 3/16", minimum 1 1/4" slotted connections, with removable bell mouth curtain stops to allow for curtain maintenance without removal of guides. Bellmouth stops shall be flush with guide groove.
  - a) Material:
    - i) ASTM A-36 Carbon Structural Steel.

Finish: Gray ExoShield™ High Cycle Powder Coated [ASTM A-123 Galvanized].

– OR –

ii) ASTM 276 Stainless Steel 300 Series

Finish: [Mill Finish #2B] [#4 Satin Finish].

- b) Guide Wear Strips:
  - i) UHMW wear strips to be provided on guides. Plastic with an ultra-low coefficient of friction and inherent lubricity minimizes heat-generating friction in order to prevent wear and tear and extend the life of both guide and curtain material from the effects of high-speed, high-cycle use. UHMW wear strips also ensure a smooth and noiseless operation.
- C. Door Support Brackets and Mounting Plates:
  - 1. Steel plate not less than 1/4" thick. Provide ball bearings at rotating support points. Bolt plates to wall mounting angles with minimum 1/2" fasteners. Plate supports counterbalance assembly and forms end enclosures.
    - a) Material:
      - i) ASTM A-36 Carbon Steel:

Finish: Grey ExoShield™ High Cycle Powder Coated [ASTM A-123 Galvanized].

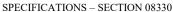
– OR –

ii) ASTM 240 Stainless Steel 300 Series

Finish: [Mill Finish #2B].

- D. Counterbalance Assembly: Springless
  - 1. Counterbalance Assembly: Steel pipe barrel of a size (minimum 6") capable of carrying a curtain load with a maximum deflection of 0.03" per foot of door width. Springless design allows for both high speed operation and continuous, high









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cycle usage. Sealed and pre-lubricated high-speed ball bearing at rotating support points for smooth operation and durability.

- a) Material:
  - i) ASTM A-36 Carbon Structural Steel

Finish: Clear coat of rust inhibitor [Zinc Enriched Powder Coated].

- -OR
  - ii) A-312 Stainless Steel 300 Series

Finish: [Mill Finish].

2. Life Cycle: Springless design allows up to 500,000 cycles. (Cycle defined as one time opening and closing of door).

### E. Hood:

- 1. 24-gauge galvanized steel formed to fit the contour of the end brackets with reinforced top and bottom edges. Provide support bracing for doors wider than 20 feet at every 10 feet to prevent excessive sag. Fastened to end brackets.
- 2. Shape: Hexagon [Square] [Round]
- 3. Material:
  - a) Galvanized Steel as per ASTM A-653/ A-653 M

Finish: Galvanized, Unpainted [Baked enamel paint] [ExoShield™ High Cycle Powder Coated].

-OR-

b) ASTM 240 Stainless Steel 300 Series:

Finish: Mill Finish #2B [#4 Satin Finish].

4. [Fascia]: Galvanized Steel [Stainless Steel] provided where areas behind hood are open. Materials and finish to be same as hood.

### F. Locking:

- 1. Slide Locks: Provide pad-lockable slide locks for latching and locking door on [Coil Side] [Opposite Coil Side] bottom bar at each jamb extending into slots in guides. [Cylinder/Slide Lock Combination] (Electric Interlocks required with motorized doors that utilize slide locks).
- G. Weatherstripping:
  - 1. Bottom Bar: Vinyl astragal.
  - 2. Guides: Brush Seals [Snap-on vinyl].
  - 3. Hood: Neoprene baffle.

### 2.03 OPERATION:

- A. Opening/Closing:
  - 1. Motor Operators:
    - a) High Speed Direct Drive Operator:
      - i) Direct drive motor operator and control system designed for high cycle usage. Sprocket and roller chain prohibited. Includes electrically interlocked auxiliary chain hoist for manual operation, overload protection, and a high-performance motor brake. Horsepower as recommended by manufacturer, with [115v single] [230v single] [208/230v three] [460v three] phase service. Operator utilizes a PLC controller with an adjustable variable frequency drive, allowing for a soft-start and soft-stop at both ends of limits. Logic provided for [1] [2] [3] fully monitored safety entrapment protection devices such that the failure of any single monitored device will cause a closing door to revert to an open position.







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### 2. Safety Entrapment Protection

a) Photo Eyes: Consisting of both a transmitter and receiver, photo eyes project an infrared beam across the entire width of the door. Beam interruption during operation results in the cessation of downward travel and reverses the operator

direction until door is fully open. Must be mounted at a maximum of 6" above the floor.

- b) Light Curtain: 6' high light curtain provides a barrier that, upon breaking, reverses the door's direction of motion. Must be installed a minimum of 12" above photo eyes.
- c) [Wireless Sensing Edge]: For motorized doors, sensing edges will allow the door to go up in case of obstruction directly underneath curtain.
  - i) Colors: Grey [Yellow] [Black] [White] [Yellow with Black Stripes]
- 3. Emergency Annunciator (Motor Operation Only)
  - a) [ADA compliant horn/strobe] [Voice warning module] automatic closing notification system for motor operated doors to provide a warning in advance of automatic door closure upon alarm or motor activation.

### 2.04 Mounting (Select One):

- 1. Interior face mounted on prepared opening.
- 2. Interior mounted between jambs and under lintel in a prepared opening.
- 3. Exterior face mounted on prepared opening.

### PART 3 - EXECUTION

### 3.01 EXAMINATION

A. Verify that dimensions are correct and project conditions are in accordance with manufacturer's installation instructions; do not proceed with installation until unacceptable conditions have been corrected.

#### 3.02 INSTALLATION

- A. Install units in accordance with manufacturer's instructions.
- B. Ensure that units are installed plumb and true, free of warp or twist, and within tolerances specified by the manufacturer for smooth operation.

## 3.03 FIELD TESTING

A. Test doors for regular operation.

## 3.04 DEMONSTRATION

A. Instruct the Owner's personnel in correct operation and maintenance of units.

#### 3.05 ADJUST AND CLEAN

- A. Clean units in accordance with manufacturer's instructions.
- B. Restore slight blemishes in finishes in accordance with manufacturer's instructions to match original finish. Remove and provide new units where repairs are not acceptable to the Architect.

END OF SECTION

