

## **SECTION 083613 SECTIONAL DOORS**

### **PART 1 GENERAL**

#### **1.01 SECTION INCLUDES**

- A Overhead sectional doors, manually operated.
- B Operating hardware and supports.

#### **1.02 REFERENCE STANDARDS**

- A ANSI A135.4 - Basic Hardboard 2012 (Reaffirmed 2020).
- B ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process 2022.
- C ASTM E283 - Standard Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen 2004 (Reapproved 2012).
- D ASTM E330/E330M - Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference 2014 (Reapproved 2021).
- E DASMA 102 - American National Standard Specifications for Sectional Doors 2018.

#### **1.03 SUBMITTALS**

- A Shop Drawings: Indicate opening dimensions and required tolerances, connection details, anchorage spacing, hardware locations, and installation details.
- B Product Data: Show component construction, anchorage method, and hardware.
- C Manufacturer's Installation Instructions: Include any special procedures required by project conditions.
- D Operation Data: Include normal operation, troubleshooting, and adjusting.
- E Maintenance Data: Include data for motor and transmission, shaft and gearing, lubrication frequency, spare part sources.
- F Warranty: Submit manufacturer warranty and ensure forms have been completed in Owner's name and registered with manufacturer.

#### **1.04 QUALITY ASSURANCE**

- A Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years of documented experience.

#### **1.05 WARRANTY**

- A Correct defective Work within a five year period after Date of Substantial Completion.

### **PART 2 PRODUCTS**

#### **2.01 MANUFACTURERS**

- A Sectional Doors:
  - 1. Basis of Design: Overhead Door, Model 420 non-insulated and Model 422 insulated.
  - 2. Clopay Building Products: [www.clopaydoor.com/#sle](http://www.clopaydoor.com/#sle).
  - 3. Raynor Garage Doors: [www.raynor.com/#sle](http://www.raynor.com/#sle).
  - 4. Wayne-Dalton, a Division of Overhead Door Corporation: [www.wayne-dalton.com/#sle](http://www.wayne-dalton.com/#sle).

## **2.02 STEEL DOORS**

- A Steel Doors: Flush steel; non-insulated and insulated as indicated on drawings; standard lift operating style with track and hardware; complying with DASMA 102, Commercial application.
  - 1. Performance: Withstand positive and negative wind loads equal to 1.5 times design wind loads specified by local code without damage or permanent set, when tested in accordance with ASTM E330/E330M, using 10 second duration of maximum load.
  - 2. Door Nominal Thickness: 2 inches thick.
  - 3. Thermal Transmittance: U-factor of 0.31 Btu/hr sq ft degrees F, maximum, in accordance with DASMA 102.
  - 4. Air Leakage Rate: Less than 0.40 cfm/sf when tested in accordance with ASTM E283 at test pressure difference of 1.57 psf.
  - 5. Exterior Finish: Factory finished with acrylic baked enamel; color as selected by Architect.
  - 6. Interior Finish: Factory finished with acrylic baked enamel; color as selected from manufacturers standard line.
  - 7. Glazed Lights: Full panel width, one row; set in place with resilient glazing channel.
  - 8. Manual Operation: Chain hoist.
- B Door Panels: Steel construction; outer steel sheet of 20 gauge, 0.0359 inch minimum thickness, flush profile; inner steel sheet of 20 gauge, 0.0359 inch minimum thickness, flat profile; core reinforcement sheet steel roll formed to channel shape, rabbeted weather joints at meeting rails; polyurethane insulation.
- C Window Frame: Manufacturers standard, finish to match.
- D Glazing: Acrylic; single pane; clear; 1/8 inch overall thickness.

## **2.03 COMPONENTS**

- A Track: Rolled galvanized steel, 0.090 inch minimum thickness; 2 inch wide, continuous one piece per side; galvanized steel mounting brackets 1/4 inch thick.
- B Hinge and Roller Assemblies: Heavy duty hinges and adjustable roller holders of galvanized steel; floating hardened steel bearing rollers, located at top and bottom of each panel, each side.
- C Lift Mechanism: Torsion spring on cross head shaft, with braided galvanized steel lifting cables.
  - 1. For Manual Operation: Requiring maximum exertion of 25 lbs force to open.
- D Sill Weatherstripping: Resilient hollow rubber strip, one piece; fitted to bottom of door panel, full length contact.
- E Jamb Weatherstripping: Roll formed steel section full height of jamb, fitted with resilient weatherstripping, placed in moderate contact with door panels.
- F Head Weatherstripping: EPDM rubber seal, one piece full length.
- G Panel Joint Weatherstripping: Neoprene foam seal, one piece full length.

- H Lock: Inside center mounted, adjustable keeper, spring activated latch bar with feature to retain in locked or retracted position; interior and exterior handle.

## **2.04 MATERIALS**

- A Hardboard: ANSI A135.4, Class 1 - Tempered, S2S (smooth two sides) hardboard, 1/4 inch thick.
- B Sheet Steel: Hot-dipped galvanized steel sheet, ASTM A653/A653M, with G60/Z180 coating, plain surface.
- C Insulation: Foamed-in-place polyurethane, bonded to facing.
  - 1. R-value of 7.35 minimum.

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- A Verify that wall openings are ready to receive work and opening dimensions and tolerances are within specified limits.

### **3.02 PREPARATION**

- A Prepare opening to permit correct installation of door unit to perimeter air and vapor barrier seal.

### **3.03 INSTALLATION**

- A Install door unit assembly in accordance with manufacturer's instructions.
- B Anchor assembly to wall construction and building framing without distortion or stress.
- C Securely brace door tracks suspended from structure. Secure tracks to structural members only.
- D Fit and align door assembly including hardware.
- E Install perimeter trim.

### **3.04 TOLERANCES**

- A Maximum Variation from Plumb: 1/16 inch.
- B Maximum Variation from Level: 1/16 inch.
- C Longitudinal or Diagonal Warp: Plus or minus 1/8 inch from 10 ft straight edge.
- D Maintain dimensional tolerances and alignment with adjacent work.

### **3.05 ADJUSTING**

- A Adjust door assembly for smooth operation and full contact with weatherstripping.

### **3.06 CLEANING**

- A Clean doors and frames.
- B Remove temporary labels and visible markings.

### **3.07 PROTECTION**

- A Protect installed products from damage until Date of Substantial Completion.
- B Do not permit construction traffic through overhead door openings after adjustment and cleaning.

**END OF SECTION**