



**SECTION 083613
THERMOMARK SECTIONAL STEEL DOORS
MODELS 5150, 5155, 5200, 5255, 530**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Upward acting sectional steel doors.

1.02 RELATED REQUIREMENTS

- A. Section << **079200 - Joint Sealants**>>: Sealing joints between frames and adjacent construction.
- B. Section << **087100 - Door Hardware**>>: Cylinder cores and keys.
- C. Section << **260533.13 - Conduit for Electrical Systems**>>: Conduit from electric circuit to operator and from operator to control station, and empty conduit from control units to door operator.
- D. Section << **260583 - Wiring Connections**>>: Power to disconnect.

1.03 DEFINITIONS

- A. DSB: Double Strength Billet.
- B. SSB: Single Strength Billet.

1.04 REFERENCE STANDARDS

- A. ITS (DIR) - Directory of Listed Products; Current Edition.
- B. UL (DIR) - Online Certifications Directory; Current Edition.
- C. UL 325 - Standard for Door, Drapery, Gate, Louver, and Window Operators and Systems; Current Edition, Including All Revisions.

1.05 SUBMITTALS

- A. Product Data: Submit manufacturer's standard literature showing materials and details of construction and finish.<< **Include data on electrical operation.**; or **None - N/A**>>
- B. Shop Drawings: Indicate rough and actual opening dimensions, anchorage methods, hardware locations, and installation details.
- C. Manufacturer's Installation Instructions: Indicate installation sequence and installation, adjustment, and alignment procedures.
- D. Manufacturer's qualification statement.
- E. Installer's qualification statement.
- F. Operation and Maintenance Data: Indicate modes of operation, lubrication requirements and frequency, and periodic adjustments required.
- G. Specimen warranty.

1.06 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in performing work of this section with minimum of << **5 years; or _____ years**>> of << **documented; _____; or None - N/A**>> experience in fabrication and installation of security closures.
- B. Installer Qualifications: Company specializing in performing work of this section with minimum of << **3 years; or _____ years**>> of << **documented; _____; or None - N/A**>> experience and approved by manufacturer.

1.07 WARRANTY

- A. Manufacturer Door-Only Warranty: Provide manufacturer warranty for door assembly for duration indicated under individual doors. Complete forms in <<Owner>>'s name and register with manufacturer.
- B. Manufacturer Door and Operator Warranty: Provide manufacturer's limited warranty for door and operator system free from material and workmanship defects for duration and cycles indicated under individual doors; counterbalance spring and finish not covered by warranty. Available on Thermomark models and Genie Commercial Operators.

PART 2 PRODUCTS

2.01 MANUFACTURER

- A. Wayne Dalton; www.wayne-dalton.com; 1 (800) 827-3667.
- B. Substitutions: Not permitted.

2.02 UPWARD ACTING SECTIONAL STEEL DOORS

- A. ThermoMark Insulated Steel Sectional Doors: Wayne Dalton; << **Model 5150; Model 5155; Model 5200; Model 5255; or Model 530**>>.
 - 1. Panels: Steel construction with exterior sheet, interior sheet, and core reinforcement.
 - 2. Width: << _____ feet _____ inches (_____ m)>>.
 - 3. Height: << _____ feet _____ inches (_____ mm)>>.
 - 4. Mounting: Surface mounted on interior of building.
 - 5. Opening Speed: Door to operate at variable speed of << **6 to 12 inches (152 to 305 mm)**>> per second.
 - 6. Closing Speed: Door to operate at variable speed of << **6 to 12 inches (152 to 305 mm)**>> per second.
 - 7. Air Infiltration at << **15 mph (24 km/hr)**>>: << **0.23 cfm/sq ft (4.20 cu m/hr/sq m); 0.21 cfm/sq ft (3.84 cu m/hr/sq m); or 0.07 cfm/sq ft (1.28 cu m/hr/sq m)**>>.

8. U-Factor: << **0.07; 0.12; or 0.15**>>.

9. R-value (RSI-value): << **12.12 (2.13); 16.22 (2.85); or 26 (4.58)**>>.

10. STC Rating: << **Not Required; 20; or 22**>>.

11. Operation Cycles: Capable of operating for minimum << **10,000; 25,000; 50,000; 75,000; or 100,000**>> cycles. One operation cycle is complete when door is opened from closed position to fully open position and returned to closed position.
12. Available Warranty:
 - a. Door Only: Ten years against delamination and cracking, splitting, or deterioration due to rust-through.
13. Panel Material:
 - a. Exterior Steel Thickness: << **30-gauge, 0.0157-inch (0.398 mm)**>> galvanized steel.

 - b. Panel Thickness: << **1-3/8 inches (35 mm); 1-7/8 inches (48 mm); or 3 inches (76 mm)**>>.
 - c. Joint Profile: Tongue and groove.
 - d. Section Height: Manufacturer's standard based on door height.

 - e. Exterior Surface Profile: << **Embossed wood grain; Stucco embossed pinstripe; or Stucco embossed**>>.

 - f. Panel Profile: << **Standard; V5 panel; Long panel; Flush panel; or V10 panel**>>.

 - g. Lites: << **Not required; Residential lites; Thermolite; Full view lites; Bubble lites; or _____**>>.

- h. Exterior Finish: << **White; Almond; Taupe; Brown; Terra Bronze; Black; Golden Oak; Walnut; Mission Oak; White textured finish; Almond textured finish; Taupe textured finish; Brown textured finish; or Black textured finish**>>.
- 14. Locking Options to Include: << **None; Slide lock; or Cylinder**>>.
 - a. Lock Locations: << **Both jambs; Left only; or Right only**>>.
- 15. Weatherstripping and Seals: << **Required; or Not required**>>.
- 16. Tracks: Constructed of steel with members fully bolted together.
 - a. Size: << **2 inches (51 mm); or 3 inches (76 mm)**>>.
 - b. Finish: Mill finish.
- 17. End Stiles: << **16-gauge, 0.0635-inch (1.613 mm)**>> galvanized steel.
- 18. Intermediate Stiles: << **16-gauge, 0.0635-inch (1.613 mm)**>> galvanized steel.
- 19. Brackets: Steel to support counterbalance and curtain.
 - a. Finish: Hot-dip galvanized.
- 20. Springs: Rated for << **10,000; 25,000; 50,000; 75,000; or 100,000**>> cycles.

- 21. Manual Operation: << **Push-up; or Chain hoist**>>.
- 22. Motor Operation: Provide UL-listed electric operator; size as recommended by manufacturer to move door in either direction at minimum << **6 inches (152 mm)**>>, maximum << **12 inches (305 mm)**>> per second.
 - a. Timer to Close: << **Not required; or Automatic closing controlled by adjustable hold-open time delay**>>.
 - b. Operation Supply Voltage: << **115/208/230V 1 phase 60Hz; 208/230/460V 3 phase 60Hz; 575V 3 phase 60Hz; 220V 1 phase 50Hz; 220V 3 phase 50Hz; or 400V 3 phase 50Hz**>>.
 - c. Signaling Device: << **Horn and strobe combination; or Traffic warning light**>>.
 - d. Actuation Device: Provide << **push button; key switch; pull cord; loop detector; motion detector; treadle switch; and radio control**>>.
 - e. Motor Mounting: << **Wall mounted; or Trolley**>>, << **right-hand side; left-hand side; or center**>>.
 - f. Motor Enclosure: << **Not required; NEMA 4-12 watertight and oiltight; NEMA 4X corrosion-resistant; Totally enclosed, fan-cooled motor; or Totally enclosed, nonventilated**>>.
 - g. Obstruction Safety Detection: Infrared sensor mounted in-plane to door curtain at << **6 inches (152 mm)**>> from floor.
 - h. Reversing Safety Edge: << **Not required; Door provided with wireless monitored electric safety edge; or Door provided with wired monitored electric safety edge**>>.

PART 3 EXECUTION

3.01 EXAMINATION

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

- B. Verify electric power is available and meets manufacturer's requirements.

3.02 PREPARATION

- A. Prepare opening to permit correct installation of door unit to perimeter air and vapor barrier seal.
- B. Apply primer to wood frame.

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. Coordinate installation of electrical service. Complete power and control wiring from disconnect to unit components.
- F. Install << perimeter trim; closures; and _____>>.

3.04 TOLERANCES

- A. Maximum Variation from Plumb: << 1/16 inch (1.5 mm); or _____ inch (____ mm)>>.
- B. Maximum Variation from Level: << 1/16 inch (1.5 mm); or _____ inch (____ mm)>>.
- C. Longitudinal or Diagonal Warp: Plus or minus << 1/8 inch in 10 feet (3 mm in 3 m); or _____ inch in 10 feet (____ mm in 3 m)>> 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.
- B. Confirm operation is in accordance with manufacturer's instructions with present field representative. Identify adjustments to door assembly.

3.06 CLEANING

- A. See Section << 017000 - Execution and Closeout Requirements>> for additional requirements.
- B. Clean doors and frames<< and glazing; _____; or None - N/A>>.
- C. Remove<< temporary; _____; or None - N/A>> 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