



**SECTION 083613
THERMOSPAN SECTIONAL STEEL DOORS
MODELS TS-125, TS-150, MODEL 200, MODEL 200-20**

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 Thermospan 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. Thermospan Steel Sectional Doors: Wayne Dalton; << **Model 125; Model 150; Model 200; Model 200-20** >>.
 - 1. Panels: Steel construction with exterior sheet, interior sheet, and core reinforcement.

 - 2. Width: << _____ feet _____ inches (_____ m)>>.

 - 3. Height: << _____ feet _____ inches (_____ m)>>.
 - 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. Model 150: Air Infiltration at << **25 mph (40 km/hr)**>>: << **0.08 cfm/sq ft (1.46 cu m/hr/sq m); 0.13 cfm/sq ft (2.37 cu m/hr/sq m); 0.15 cfm/sq ft (2.74 cu m/hr/sq m)**>>.

- m); **0.21 cfm/sq ft (3.83 cu m/hr/sq m); 0.46 cfm/sq ft (8.40 cu m/hr/sq m); or 4.21 cu m/hr/sq m (____ mm)>>**.
8. Models 200 and 200-30: Air Infiltration at << **15 mph (24 km/hr)**>>: << **0.17 cfm/sq ft (3.11 cu m/hr/sq m)**>>.

 9. U-Factor: << **0.12; 0.07; 0.14; 0.10; or 0.20**>>.

 10. R-value (RSI-value): << **17.5 (3.08); 14.16 (2.49); 17.40 (3.09); 10.79 (1.90); or 9.31 (1.64)**>>.

 11. STC Rating: << **Class 21; or Class 22**>>.

 12. 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.
 13. Available Warranty:
 - a. Door Only: One year.
 14. Panel Material:
 - a. Exterior Steel Thickness: << **31-gauge, 0.012-inch (0.30 mm); 30-gauge, 0.0157-inch (0.40 mm); 22-gauge, 0.0336-inch (0.85 mm); or 21-gauge, 0.0366-inch (0.93 mm)**>> galvanized steel.

 - b. Panel Thickness: << **2 inches (51 mm); 3 inches (76 mm); 1-1/2 inches (38 mm); 7/8 inch (22 mm); or 1-3/8 inches (35 mm)**>>.
 - c. Joint Profile: Tongue and groove.
 - d. Section Height: Manufacturer's standard based on door height.

 - e. Exterior Surface Profile: << **Flush; Ribbed; Microgroove; Stucco texture; or Raised panel**>>.

- f. Lites: << **Not required**; **Double thermal acrylic**; **Aluminum sash section with double strength billet (DSB) glazing**; **Insulated double strength billet (DSB)**; **Clear long lites**; or **Large lites**>>.

 - g. Exterior Finish: << **White**; **Tan**; **Brown**; **Gray**; **Almond**; **Industrial Brown**; **Black**; **Sandstone**; **Forest Green**; **Chestnut Brown**; **Terra Bronze**; **Desert Tan**; **Trinar White**; or **Trinar Brown**>>.
15. Locking Options to Include: << **None**; **Slide lock**; or **Cylinder**>>.
 - a. Lock Locations: << **Both jambs**; **Left only**; or **Right only**>>.
 16. Weatherstripping and Seals: << **Required**; or **Not required**>>.
 17. Tracks: Constructed of steel with members fully bolted together.
 - a. Size: << **2 inches (51 mm)**; or **3 inches (76 mm)**>>.
 - b. Finish: Mill finish.

 18. End Stiles: << **17-gauge, 0.0575-inch (1.46 mm)**; **14-gauge, 0.0785-inch (1.99 mm)**; **21-gauge, 0.0366-inch (0.93 mm)**; **single 16-gauge, 0.0635-inch (1.613 mm)**; or **double 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)**>> per second, 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