

THERMOMARK®

5150 / 5200

WAYNE-DALTON COMMERCIAL DOOR SYSTEMS



# THERMOMARK® 5150/5200

## SECTIONAL DOOR SYSTEMS

### INSULATED SECTIONAL STEEL DOORS CUT YOUR TOTAL COST

The ThermoMark 5150 and 5200 doors combine strength, insulation, and aesthetic appeal for those applications that require all three features. Made of hot-dipped galvanized steel, they are designed with a woodgrain finish in either a raised panel or flush profile in a variety of colors. Foamed-in-place polyurethane insulation helps minimize energy costs to heat or cool the building, offering year round comfort while also helping to provide quiet door operation.



COMMERCIAL DOORS & OPERATORS

- EXCELLENT THERMAL QUALITIES  
5150: R-VALUE = 11.00  
U-VALUE = .0909  
5200: R-VALUE = 15.00  
U-VALUE = .0667
- STANDARD SIZES UP TO  
26' WIDE AND 22' HIGH
- RUGGED AND DURABLE

# SECTIONAL DOOR SYSTEMS

# THERMOMARK® 5150/5200

Popular in a wide variety of commercial and industrial applications, the ThermoMark 5150/5200 offers a strong combination of characteristics, including strength, rigidity, longer life and energy efficiency at a competitive price.

The ThermoMark 5150/5200 is manufactured using our patented, continuous foamed-in-place technology, in which the polyurethane core is securely bonded to hot-dipped galvanized inner and outer skins. This process gives the ThermoMark 5150/5200 outstanding thermal, strength, and bonding characteristics while creating a door that is significantly more efficient than conventional insulated steel doors. An integral joint seal also helps save energy by preventing air filtration.

Optional factory glazed windows and aluminum full view panels, combined with two standard finishes (white and brown), can help ensure that the ThermoMark 5150/5200 meets your aesthetic requirements as well.

## Materials & Construction

The ThermoMark 5150/5200 is designed for easy installation, rugged durability and longer life. Features such as the 18-gauge steel end caps give the ThermoMark 5150/5200 increased rigidity, while the factory finished interior and exterior hot-dipped, galvanized skins make installation easier, add life to the door and provide greater durability. The ThermoMark 5150/5200 has hardware plates at all fastener points to add durability and extend the life of the door.

Contact Wayne-Dalton for additional sizes and colors.



## Raised Panel Color Options (5150/5200) with woodgrain finish



White



Taupe



Almond



Brown

## Flush Color Options (5150 Only) with woodgrain finish



White



Taupe



Almond



Brown

## Operation Options

- Chain Hoist Operation
- Motor Operation

## Performance Options

- High Cycle Spring (25K, 50K, 100K)
- 3" Track Option
- Solid Shafts
- Perimeter Weatherseal

## Safety Options

- Broken Cable Devices
- Safety Edges
- Safety Photo Eyes

## Special Application Options

- Special Track Designs
- Mullions

## Window Options



For raised panel or flush doors, Colonial style SSB set in a high impact polymer frame. Also available with StyleLine design upgrade.



For flush doors, Thermolite double insulated SSB set in a 2-piece high impact polymer frame. Optional DSB 1/8" acrylic also available.

[www.wayne-dalton.com/commercial](http://www.wayne-dalton.com/commercial)



**STANDARD SIZES UP TO:**  
26' 2" WIDE & 22' 1" HIGH  
ADDITIONAL SIZES AVAILABLE

**ENERGY EFFICIENCY VALUES:**  
5150: U = .0909 5200: U = .0667  
R = 11.00 R = 15.00

**WINDLOAD:**



MEET OR EXCEED  
ANSI/DASMA 102-2003  
IN ACCORDANCE WITH  
ASTM E-330-70.

**BEST APPLICATIONS:**

Where thermal performance, rugged durability, and aesthetic appeal are key for large openings

### General Operating Clearances

Type	Headroom***		Sideroom**		Depth Into Room 2" & 3" track	Center Line of Springs	
	2" track	3" track	2" track	3" track		2" track	3" track
Standard Lift Manual 12"R	12½-17"	NA	4½"	5½"	Opening Height +18"	Opening Height +12"	NA
Standard Lift Manual 15"R	14½-20"	15½-21"				Opening Height +13"	Opening Height +14"
Standard Lift Motor Oper. 12"R	15-19½"	NA			Opening Height +66"	Opening Height +12"	NA
Standard Lift Motor Oper. 15"R	15-19½"	18-23½"				Opening Height +13"	Opening Height +14"
High Lift Manual	High Lift +12"		24" One Side		Opening Height - Lift +30"	Opening Height +Lift +6½"	Opening Height +Lift +7½"
High Lift Motor Oper.							
Vertical Lift Manual	Door Height +20"		4½"	5½"	18"	Double Door Height +13"	
Vertical Lift Motor Oper			24" One Side				
Low Headroom Manual*	6-14½"	6-14½"	6"	9"	Opening Height +20" - 26"	Does Not Apply	
Low Headroom Motor Oper.*	8½-17"	8½-17"			Opening Height +66"		

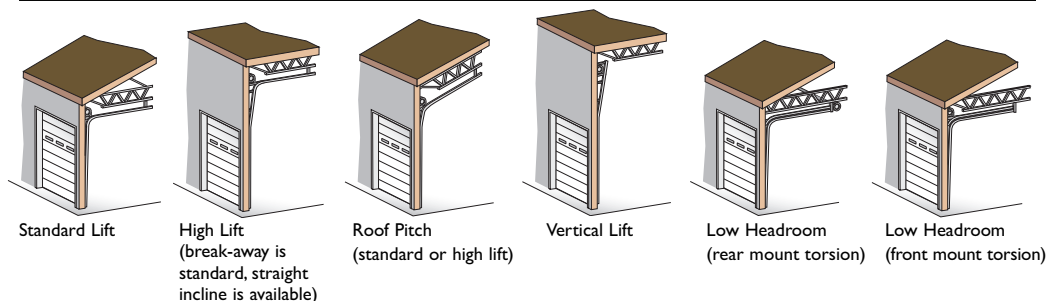
### Panel/Section Selection Guide

Door Section and Lite Selection			Door Height and Section Selection	
Door Width	No. Panels	Max. No. Windows	Door Height	No. Sections
Up to 9'2"	2	2	Up thru 8'1"	4
9'3" to 12'2"	3	3	8'2" thru 10'1"	5
12'3" to 16'2"	4	4	10'2" thru 12'1"	6
16'3" to 19'2"	5	5	12'2" thru 14'1"	7
19'3" to 24'2"	6	7	14'2" thru 16'1"	8
24'3" & up	Call Factory		16'2" & up	Call Factory

\* Standard Lift and Low Headroom clearances are for trolley type operators. High Lift and Vertical Lift clearances are for jackshaft type operators.  
**Note:** 8" side room required, one side, for doors having chain hoists.  
\*\* Headrooms change with drum size on standard lift, for larger size openings (over 20' x 18') consult factory.  
-Trolley operators require 48" minimum depth into room.  
-Rear Mount required for minimum headroom.

Wayne-Dalton strongly recommends only using trolley type operators in the following situations:  
- with standard lift track  
- low headroom track  
- high lift track through 19"  
- 2" track utilizing 32" radius through 29" of high lift

### Track Selection Guide



## THERMOMARK® 5150/5200

**Note to specifiers:** Words in parentheses indicate frequently specified and highly recommended options.

**PART I – GENERAL****1.01 Section Includes**

- A. Sectional overhead doors [manually] [motor] operated with accessories and components.

**1.02 Related Work**

- A. Opening preparation, miscellaneous or structural steel work, access panels finish or field painting are in the scope of work of other trades and divisions of these specifications.

**1.03 Reference Standards**

- A. **ANSI/DASMA 102** – American National Standards Institute [A216.1] Specifications for sectional overhead doors published by Door & Access Systems Manufacturers Association International in bulletin 102-1990.
- B. **ASTM A123** – Zinc [hot-dipped galvanized] coatings on iron and steel products.
- C. **ASTM A216** – Specifications for sectional overhead type doors.
- D. **ASTM A229** – Steel wire, oil-tempered for mechanical springs.
- E. **ASTM A-653-94** – Steel sheet, zinc-coated [galvanized] by the hot-dipped process, commercial quality.
- F. **ASTM D1929** – Ignition temperature test to determine flash and ignition temperature of foamed plastics.
- G. **ASTM E84-91A** – Tunnel test for flame spread and smoke developed index.
- H. **ASTM E330** – Structural performance of exterior windows, curtain walls, and doors by uniform static air pressure difference.
- I. **ASTM E413-87** – Sound transmission class. Acoustical performance value = 20  
**ASTM E1332-90** – Outdoor-indoor transmission class. Acoustical performance value = 20.
- K. **ASTM E283-91** – (Air infiltration = .07 CFM/FT<sup>2</sup>; 15 MPH., 5200)(.23 CFM/FT<sup>2</sup>; 15 MPH., 5150)

**1.04 Quality Assurance**

- A. Sectional overhead doors and all accessories and components required for complete and secure installations shall be manufactured as a system from one manufacturer.
- B. Sectional overhead doors shall be tested and labeled certifying compliance with **ASTM D1929** and **ASTM E84-91A** standards.

**1.05 Systems Description**

- A. Sectional Overhead Door: Type:  
**Thermomark 5150/5200**
- B. Mounting: Continuous angle mounting for [steel] [wood] jambs [bracket mounting for wood jambs]
- C. Operation: [manual push-up] [chain hoist] [motor] [motor with chain hoist]
- D. Material: Galvanized steel with polyester finish paint
- E. Insulation: Polyurethane

**1.06 Submittals**

- A. Shop Drawings: Clearly indicate the following:
- Design and installation details to withstand standard windload.
  - All details required for complete operation and installation.
  - Hardware locations.
  - Type of metal and finish for door sections.
  - Finish for miscellaneous components and accessories.
- B. Product Data: Indicating manufacturer's product data, and installation instructions.

**1.07 Delivery, Handling, Storage**

- A. Deliver products in manufacturer's original containers, dry, undamaged, seals and labels intact.
- B. Store and protect products in accordance with manufacturer's recommendations.

**1.08 Warranty**

- A. Award manufacturer's standard SEVEN YEAR warranty against separation/degradation of the polyurethane foam from the steel skin of the panel. Standard manufacturer's TEN YEAR warranty against cracking, splitting or deterioration due to rust-through. TEN YEARS on insulation value.

**PART II – PRODUCTS****2.01 Manufacturer**

- A. Wayne-Dalton or approved equal  
**Thermospan 5150/5200** insulated sectional overhead doors of steel construction complete as specified in this section and as manufactured by **Wayne-Dalton Corp.**, Mt.Hope, Ohio.

**2.02 Materials**

- A. Door Sections: Shall be of steel/polyurethane/steel sandwich type construction with thermal break and calculated materials "R" value of [11.00 on 5150] [15.00 on 5200], in accordance with industry guidelines.
- Exterior Skin: Structural quality, hot-dipped galvanized steel, .022" minimum embossing, factory finished with baked-on polyester primer and [white] [brown] [almond] [taupe] polyester finish coats with [non-repeating wood grain texture].
  - Interior Skin: Structural quality, hot-dipped, galvanized steel, factory finished with a polyester primer and white finish coat.
  - Ends of section shall be sealed with 18 or 16 gauge hot-dipped galvanized steel full-height end caps.
  - Insulation: Cavity shall be filled with foamed-in-place CFC free polyurethane core. Sections include an integral thermal break.
  - Insulated sections shall be tested by an I.C.B.O. certified laboratory in accordance with ASTM E-84-91A and shall achieve a Flamespread Index of 10 or less, and a Smoke Developed Index of 210 or less.
  - Insulation material shall be tested by an I.C.B.O. certified laboratory in accordance with ASTM D-1929 and shall achieve a minimum Flash Ignition temperature of 734 degrees F, and a minimum Self Ignition temperature of 950 degrees F.
  - Insulated sections shall be tested and meet all requirements of the UBC 17-5 corner burn.
- B. Track: Track design shall be [standard lift] [high lift] [vertical lift] [low headroom]. Vertical mounting angles shall be hot-dipped galvanized. Track size shall be [2"] [3"]. Vertical track shall be graduated to provide wedge type weathertight closing with continuous angle mounting for [steel] [wood] jambs, and shall be fully adjustable to seal door at jambs [bracket mounting for wood jambs]. Horizontal track shall be reinforced with continuous angle of adequate length and gauge to minimize deflection.
- Note:** Horizontal track applies to standard lift, high lift, low headroom and follow-the-roof designs only.
- C. Hardware: Hinge and Roller Assembly:
- Hinges and brackets shall be made from hot-dipped, galvanized steel.
  - Track rollers shall be case-hardened inner steel races with 10-ball [2"] [3"] rollers.

- All factory authorized attachments shall be made at locations indicated and reinforced with backup plates.
- D. Counterbalance:

- Springs shall be torsion type, low-stress, helical wound, oil-tempered spring wire to provide minimum [10,000 standard] [25,000] [50,000] [100,000] cycles of use, on continuous steel [solid].
- Spring fittings and drums made of die cast, high strength aluminum.
- Pre-formed galvanized steel aircraft cable shall provide a minimum of a 5:1 safety factor.

**2.03 Operation**

- A. Operation shall be [manual push-up] [chain hoist] [motor] [motor with chain hoist].

**Note:** Manufacturer does not recommend chain hoists or jack shaft operators on the following track applications.

- 15" radius standard lift with roof pitch less than 2:12
- Hi-lift less than 24"
- Hi-lift between 12" – 23" with roof pitch less than 1:12
- Low headroom track

Special chain hoist assemblies (using a trolley rail) are available for the above track systems.

**2.04 Locks**

- A. Locks shall engage the right-hand vertical track and utilize [an interior side lock] [standard size rim cylinder].

**2.05 Weatherstripping**

- A. Doors shall be equipped with field installed, top seal [5200, optional on 5150] to seal against header; co-polymer joint seals between sections and vinyl "bulb" shaped astragal provided on the bottom section. Optional jamb seals are available.

**2.06 Glazing**

- A. Optional.

**2.07 Windload**

- A. Windload – per DASMA 102-2003 and as required by local codes.

**PART III – EXECUTION****3.01 Installation****A. General:**

- Install doors in accordance with manufacturer's instructions and standards. Installation shall be by an authorized Wayne-Dalton representative.
  - Verify that existing conditions are ready to receive sectional overhead door work.
  - Beginning of sectional overhead door work means acceptance of existing conditions.
- B. Install door complete with necessary hardware, jamb and head mold strips, anchors, inserts, hangers, and equipment supports in accordance with final shop drawings, manufacturer's instructions, and as specified herein.
- C. Fit, align and adjust sectional overhead door assemblies level and plumb for smooth operation.
- D. Upon completion of final installation, lubricate, test and adjust doors to operate easily, free from warp, twist or distortion and fitting for entire perimeter.

**Note:** Architect may consider providing a schedule when more than one sectional overhead door or opening type is required.

**3.02 Materials** (See note above.)

Specifications and technical information also available at [www.arcad.com](http://www.arcad.com), SpecWizard™, and Sweet Source®.

**Distributed By:**

COMMERCIAL DOORS &amp; OPERATORS

For technical information visit:

[www.wayne-dalton.com/commercial](http://www.wayne-dalton.com/commercial)

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