

# 3" Commercial Insulated Sectional Doors

(Models CHT-816 and CHT-832)

## Specifications

### Part 1 - General

#### 1.01-Section Includes

A. *Type:* Sectional doors are to be Models CHT-816 and CHT-832 as manufactured by Haas Door.

B. *Operation:* To be manual push-up, chain hoist, or electric operation.

C. *Mounting:* To be interior face-mounted on a prepared surface.

#### 1.02-Related Work

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

### Part 2 - Product

#### 2.01-Materials and Construction

A. *Sections:* Shall be 3" (76.2mm) thick roll-formed commercial quality hot-dipped galvanized steel, both inside and out, and insulated with high-density polyurethane foam. Sections shall be finished as follows: Model 816 shall have a 26-gauge, wood-grain texture with small horizontal V-grooves every 3" (76.2mm) on both exterior and interior sides. Model 832 shall have a 20-gauge flush-smooth surface on the exterior side and a 26-gauge, wood-grain embossed texture with V-grooves every 3" (76.2mm) on the interior side.

B. *Insulation:* Sections shall be fully insulated with high-density polyurethane foam, pressure-injected into each section at approximately 2.4 to 2.5 pounds per cubic foot in a temperature-controlled environment to provide for adequate curing and maximum strength.

C. *End Stiles:* Shall be 16-gauge steel with vinyl end caps to provide a thermal break.

D. *Intermediate Reinforcing:* Shall be 16-gauge steel back-up plates, inserted prior to foaming, to provide reinforcing for attachment of various hardware, and pre-drilled for proper positioning.

E. *Bottom Section:* Shall have a full-length vinyl astragal retainer. Weatherstrip to be U-shaped flexible extruded vinyl.

F. *Thermal Break:* Shall be an integral rigid top and bottom cap installed at each section to provide a tight 1-3/4" thermal break.

G. *Header Seal:* Shall be a vinyl top header seal, factory installed on the top section.

H. *Finish Coat:* Interior and exterior steel is rust-proofed with hot-dipped galvanizing and pre-painted inside and out with an epoxy primer and an enamel top coat of white, brown, almond, or sandstone on the exterior and white only on the interior.

#### 2.02-Spring Counterbalance

A. *Counterbalance:* Shall be factory-calibrated to match site specifications.

B. *Springs:* Shall be helical torsion-type made from oil-tempered wire.

C. *Spring Options:* Up to 100,000 cycles.

D. *Assembly:* Shall be contained on a continuous steel shaft, retained in ball bearing brackets, with high-strength galvanized aircraft cable with a minimum 7 to 1 safety factor.

#### 2.03-Tracks

A. *Vertical Tracks:* Shall be a minimum of 16-gauge galvanized steel tapered and mounted for wedge-type mounting (2" or 3" depending on door size).

B. *Horizontal Tracks:* Shall be a minimum of 16-gauge galvanized steel reinforced with a minimum of 13-gauge galvanized angles, as required (2" or 3" depending on door size).

#### 2.04-Hardware

A. *Hinges:* Shall be manufactured of hot-dipped galvanized steel, 14-gauge minimum.

B. *Rollers:* Shall be full-floating ball bearing in case-hardened steel races, mounted to fit the slope of the track (2" or 3" to suit the track).

#### 2.05-Locking

A. *Slide Bar Lock:* Shall be an inside spring-loaded lock on the end stile and shall engage a slot in the track.

### Part 3 - Execution

#### 3.01-Installation

A. *Installation:* Shall be by a Haas Door authorized representative and shall comply with all relevant Haas Door standards and instructions.

### Part 4 - Warranty

#### 4.01-Five-Year Limited Warranty

A. Haas Door warrants each ThermaPro™ door and all component parts to be free from material and workmanship defects for a period of one (1) year from the date of delivery to the original purchaser.

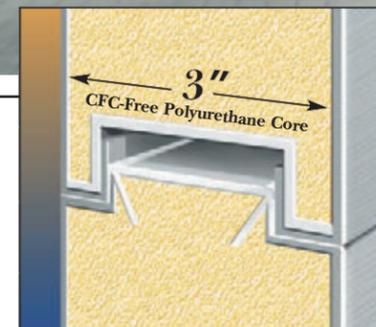
B. Haas Door warrants each ThermaPro™ door to be free from delamination of the polyurethane core and its exterior steel skins for five (5) years from the date of installation.



# THERMAPRO™

## Models CHT-816 and CHT-832

Insulated Sectional Steel Doors



With a solid 3" core of high-density polyurethane foam insulation, Haas Door's ThermaPro™ sectional steel door meets the most demanding specifications, while providing a calculated R-Value of 25.8.

# THERMAPRO™

## For the Most Demanding Specifications

Haas Door's ThermaPro™ insulated sectional steel door features a full 3" pressure-injected core of high-density CFC-free polyurethane foam insulation, with a calculated R-Value of 25.8. ThermaPro™ is exceptionally strong. In short, Haas Door's ThermaPro™ is the ideal door for applications that require both maximum energy efficiency and strength.

## The Architect's Choice

The outstanding features and benefits of Haas Door's ThermaPro™ commercial door have made it the door of choice among commercial and industrial architects. These features and benefits include:

### 1 Maximum Energy Efficiency

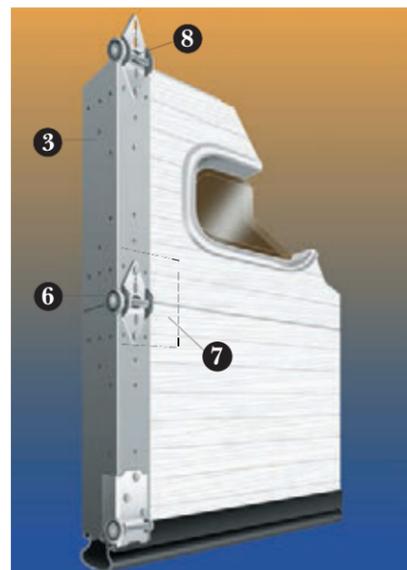
A 3" pressure-injected core of high-density CFC-free polyurethane foam insulation is bonded to the inner surfaces of the exterior and interior face sheets or panels. To ensure maximum energy efficiency and strength, the foam is pressure-injected into each section of the door and is carefully cured in a temperature-controlled environment.

### 2 All-Steel Construction

Face sheets are heavy-duty, roll-formed, galvanized steel. Model CHT-816 features a 26-gauge, wood-grain texture with horizontal V-grooves every 3" on both the exterior and interior face sheets. Model CHT-832 has a 20-gauge flush-smooth surface on the exterior face sheet and a 26-gauge wood-grain texture with V-grooves on the interior.



Exterior View



Interior View

**ThermaPro™. 3" of high-density polyurethane foam insulation and a calculated R-Value of 25.8.**

### 3 Steel End Stiles

End stiles are formed from 16-gauge galvanized steel and feature vinyl end caps to create a thermal break.

### 4 Tongue-and-Groove Section Joints

Tight sealing tongue-and-groove section joints add wind resistance and strength, prevent air and water infiltration, and provide a full 1-3/4" thermal break to prevent temperature transmission.

### 5 Bottom Weatherseal

Full-length vinyl astragal retainer and flexible U-shaped bottom weatherseal provide a tight seal at the floor to resist rain and snow and absorb the shock of repeated closing.

### 6 Smooth Operation

Full-floating ten ball bearing rollers in case-hardened steel races, mounted to fit the slope of the track, assure smooth, easy, and reliable operation.

### 7 Intermediate Reinforcing

Full-length 16-gauge steel back-up plates, inserted prior to foaming, ensure solid attachment of all hardware; also, pre-drilling assures proper positioning.

### 8 Heavy-Duty Hinges

14-gauge, hot-dipped galvanized steel hinges provide added strength, durability, and reliable performance.



# THERMAPRO™

## Quality Features...Quality Materials... Quality Workmanship

### 1 Joint Detail

Tongue-and-groove construction with full-length vinyl top and bottom caps eliminate metal-to-metal contact and provide energy-efficient thermal breaks that limit transfer of heat and cold — a major advantage where conditioned air or controlled temperatures are important.

### 2 Bottom Seal

A full-length, one-piece vinyl astragal retainer and flexible vinyl U-shaped weatherstrip seals to irregular or unlevel floors, prevents infiltration of air, rain, and snow, and reduces impact shock when the door is closed against concrete flooring.

### 3 Header Seal

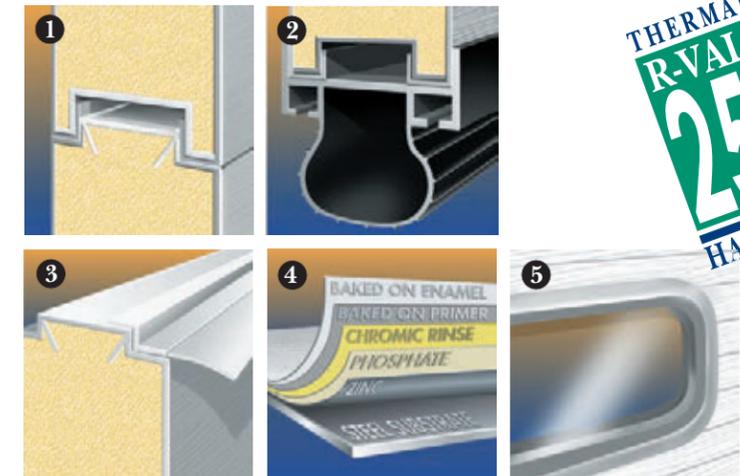
Flexible flap seals the top of the door against the header to seal out air infiltration. Seal extends a full 2" past the front of the door for maximum efficiency.

### 4 Protective Finish

Interior and exterior steel is rust-proofed with hot-dipped galvanizing and prepainted inside and out with an epoxy primer and an enamel top coat of white, brown, almond, or sandstone. (The interior side is available in white only.)

### 5 Window Options

Attractive and practical, the 25" x 12" insulated 1/2" tempered glass window inserts provide superior double-glazed insulation. Seal-tight frames and a new anti-condensation system ensure effective sealing and a bright, clear view. Windows are attached from the inside for easy installation and maximum security.



## ThermaPro™ Sizes and Section Arrangements

Sizes	Standard Door Heights	No. of Sections
Door Widths: Up to 36'2" wide*	Up to 8'1"	4
	8'3" to 10'1"	5
Door Heights: Up to 30' high*	10'3" to 12'1"	6
	12'3" to 14'1"	7
Section Heights: 21" and 24"	14'3" to 16'1"	8
	16'3" to 18'1"	9
	18'3" to 20'1"	10

\*For section configurations up to 36'2" wide and 30' high, call, write, or fax Haas Door. See bottom of page 4.

## ThermaPro™ Window Options

Door Widths	Max. No. of Lites
Up to 9'2"	2
From 9'3" to 13'1"	3
From 13'2" to 18'2"	4
From 18'3" to 24'2"	6
From 26'2" to 30'2"	8