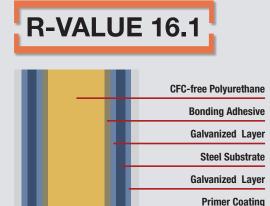


# EXCELLENT INSULATION - UNMATCHED -

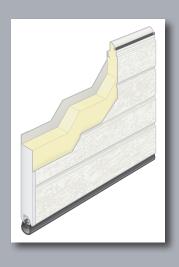
Hörmann H-425U offers 1¾" thick two sided steel sections and 100% CFC-free polyurethane foam core insulation for maximum protection against the elements. (R-value 16.1) Manufactured to the highest quality standards in the industry, all H-425U doors come with Hörmann exclusive FingerGuard™ pinch resistant section joints.

Hörmann commercial steel doors are available in a wide range of sizes and design options. Sophisticated engineering and state-of-the-art manufacturing provide the basis for durable, reliable and long-lasting quality products.



# **Quality in Every Layer**

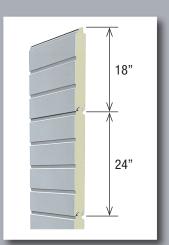
The structural integrity of each H-425U section is enhanced inside and out to offer maximum protection against the elements to provide you with a long lasting surface finish and reduced maintenance cost. The bonding adhesive is applied to the galvanized coated steel substrate, followed by a durable primer coating. The thick insulating core of high-grade CFC-free polyurethane rigid foam is injected evenly in a continuous computer-controlled process.



# **Energy Efficiency and Safety**

Environmentally friendly polyurethane foam core is injected between 25 gauge galvanized steel sheets front and back. This provides maximum insulation for substantial energy savings and ultimate panel stability for extremely quiet door operation.

The uniquely designed FingerGuard<sup>™</sup> pinch-resistant section joint creates a deep tongue and groove fit for a tight seal between door sections.



#### **Superior Design**

H-425U's standard section heights, 18" and 24" allow evenly placed ribs throughout the entire door height. The section joints appear seamless and offer a clean and balanced look to any building's exterior.

With high thermal insulation properties and Stucco-textured exterior/interior surfaces, H-425U doors allow maximum protection against harsh environment and minimizes the formation of water condensation on the inside door surface.

# Panel Design

#### Ribbed design

For the best seal against the opening and maximum energy efficiency, it is recommended to specify 2" over the door opening width. Verify side room dimensions.

# **Surface Finish**



#### **Stucco**

The stucco embossment provides a uniform surface texture for a long lasting appearance.



# **Galaxy Paint System**

Hörmann's exclusive Galaxy Paint System is available to further customize your new H-425U door with 28 semi-custom colors or unlimited color matching capabilities.

With Hörmann Galaxy Paint System, you will not only be confident that you have purchased the highest quality and safest commercial door for your building but one that will match the color of its exterior with a factory finish that will last.

# **Window Options**

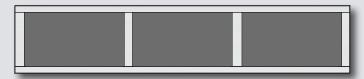


Window 24" X 8"



Window 24" X 12"

Insulated glass is standard on all H-425U doors.



#### **Aluminum Full View Windows**

Clear anodized aluminum frame with clear single pane tempered glass is standard. The number of windows available depends on door width. Each section is equipped with pre-punched painted end caps, aluminum glass retainers, and the same between section seal as the steel sections.

### **Window Arrangements**

The number of windows installed per section or windows per full view section depends on the door width.

Door Width	Maximum No. of Windows
Up to 9' 2"	2
9' 3" to 12' 2"	3
12' 3" to 16' 2"	4
16' 3" to 19' 2"	5
19' 3" to 24' 2"	6
24' 3" to 26' 2"	7



• •	11 40=11
Series	H-425U
Steel Thickness	25 ga.
Section Thickness	1¾ in.
R - Value	16.1
Polyurethane Core Insulation	Standard
Panel Design	
Ribbed	Standard
External Texture	
Ribbed	Stucco
Available Color	
White	Standard
Galaxy Paint System	Optional
Window Options	
24" X 8"	Optional
24" X 12"	Optional
Aluminum Full View	Optional
Warranty	
Sections	10 years
Hardware	1 year

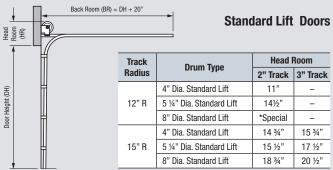
# **Section Arrangements**

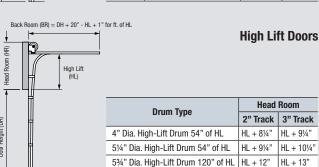
Door Height	No. of Sections
Up to 8'0"	4
8'3" to 10'0"	5
10'3" to 12'0"	6
12'3" to 14'0"	7
14'3" to 16'0"	8
16'3" to 18'0"	9

# **Additional Options**

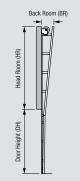
- · Various track options
- Full perimeter weatherseal
- Top header seal
- Lock options
- Extended cycle springs 25k, 50k & 100k
- Chain hoist operation
- Full range of electric openers and safety devices

# **Head Room and Side Room Dimensions (typical)**



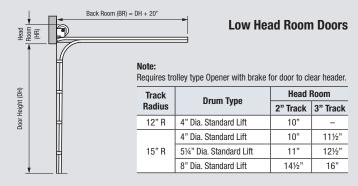


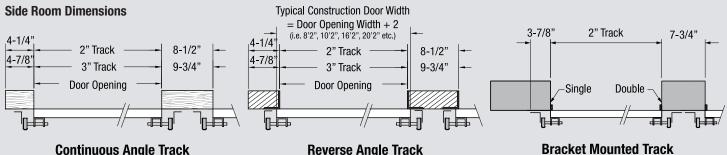
63/8" Dia. High-Lift Drum 164" of HL | HL + 123/4" | HL + 133/4"



#### **Head Room Back Room** 2" Track 3" Track 2" Track 3" Track DH + 9" DH + 916" 16"

**Vertical Lift Doors** 





**Continuous Angle Track Wood Jambs** 

**Reverse Angle Track** Steel / Masonry Jambs

# CSI Product Specifications

SECTION 08360 - SECTIONAL DOORS

H-425U Series Insulated Steel Sectional Doors

PART 1 - GENERAL

#### 1.01 RELATED DOCUMENTS

A. All of the Contract Documents, including General and Supplementary Conditions, and Division 1 General Requirements, apply to the work of this Section.

#### 1.02 SUMMARY

- A. The work of this Section includes upward-acting sectional doors.
- B. Related Sections: Other specification sections which directly relate to the work of this section include, but are not limited to, the following:
  - 1. Section 05500 Miscellaneous Metal; metal framing and supports.
  - 2. Section 08710 Finish Hardware; key cylinders for locks.
  - 3. Section 09900 Painting; field painting.
  - 4. Section 16100 Electrical; wiring

#### 1.03 SUBMITTALS

- A. Product Data: Submit manufacturer's product data and installation instructions for each type of sectional door. Include both published data and any specific data prepared for this project.
- B. Shop Drawings: Submit shop drawings for approval prior to fabrication. Include detailed plans, elevations, details of framing members, required clearances, anchors, and accessories. Include

#### 1.04 QUALITY ASSURANCE

- A. Manufacturer: Sectional doors shall be manufactured by a firm with a minimum of five years experience in the fabrication and installation of sectional doors. Manufacturers proposed for use, which are not named in these specifications, shall submit evidence of ability to meet performance and fabrication requirements specified, and include a list of five projects of similar design and complexity completed within the past five years
- B. Installer: Installation of sectional doors shall be performed by the authorized representative of the manufacturer.
- C. Single-Source Responsibility: Provide doors, tracks and accessories from one manufacturer for each type of door. Provide secondary components from source acceptable to manufacturer of primary
- D. Pre-installation Conference: Schedule and convene a pre-installation conference just prior to commencement of field operations, to establish procedures to maintain optimum working conditions and to coordinate this work with related and adjacent work.

#### 1.05 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials and products in labeled protective packages. Store and handle in strict compliance with manufacturer's instructions and recommendations. Protect from damage from weather, excessive temperatures and construction operations.

#### PART 2 - PRODUCTS

#### ACCEPTABLE MANUFACTURER

A. Provide sectional doors by Hörmann LLC, Montgomery, Illinois; Telephone 877-654-6762 or 630-859-3000; Fax 630-859-8122.

#### INSULATED STEEL SECTIONAL DOORS

- A. Trade Reference: H-425U Series Insulated Steel Doors by Hörmann LLC.
- B. Sectional Door Assembly: Insulated steel door assembly with pinch resistant rabbeted meeting rails to form weather tight joints and provide full-width interlocking structural rigidity. Units shall have the following characteristics
  - 1. Panel Thickness: 1 34"
  - 2. Exterior Surface: Ribbed. (Also available in flush or raised panel)
  - 3. Section Joint: Sections to form a weather tight tongue and groove pinch resistant fit.
  - 4. Material: G-40 galvanized steel, complying with ASTM A-929, A-653, exterior and interior skins bonded with polyurethane foam.
  - 5. Exterior Skin: Minimum 25 gauge exterior steel face sheet.
  - 6. Interior Skin: 27 gauge interior steel face sheet with stucco texture. Color: white.
  - 7. End Caps: 20 gauge galvanized steel primed with white baked-on polyester top coat.
  - 8. Standard Springs: 10,000 cycles. (Higher cycles available)
  - 9. Insulation: Polyurethane, R-value 16.1
  - 10. Partial Glazing of Steel Panels: (Insulated or non-insulated double strength glass available.) (Not Required.)
  - 11. Full Glazing Requiring Aluminum Sash Panels: (1/8" double strength or tempered glass.) (Insulated double strength or tempered glass.) (Not Required.)
- C. Finish and Color: Factory-applied baked-on White or Sandstone polyester
- D. Wind load Design: ANSI/DASMA 108 and 115 standards and as required by code.

Hardware: 13 Gauge or greater galvanized steel two pieced hinge assembly and fixtures. Ball bearing rollers with hardened steel races.

Lock: Interior mounted slide lock. (Keyed lock.)

Weatherstripping: Flexible PVC on bottom section. (Header seal and jamb weatherstripping.)

Track: Provide track as recommended by manufacturer to suit loading required and clearances available. Note: Select type of operation

- E. Manual Operation: Manual pull rope. (Chain hoist.)
- F. Electric Motor Operation: Provide UL listed electric operator, size and type as recommended by manufacturer to move door in either direction at not less than 2/3 foot nor more than 1 foot per second.
  - 1. Entrapment Protection: (Pneumatic sensing edge up to 18' wide) (Electric sensing edge.) (Photoelectric sensors.)
  - 2. Operator Controls: (Push-button)(Key) (Push-button and key) operated control stations with open, close, and stop buttons for (flush) (surface) mounting, for (interior) (exterior) (both interior and exterior) location. Note: Select from below as applicable
  - Special Operation: (Pull-rope release automatic opening device, vehicle detector operation, radio control operation, card reader control, photocell operation, door timer operation, commercial light package, explosion and dust ignition proof control wiring.)

#### PART 3 - EXECUTION

#### 3.01 PREPARATION

A. Take field dimensions and examine conditions of substrates, supports, and other conditions under which this work is to be performed. Do not proceed with work until unsatisfactory conditions are corrected.

#### 3.02 INSTALLATION

- A. Strictly comply with manufacturer's installation instructions and recommendations. Coordinate installation with adjacent work to ensure proper clearances and allow for maintenance.
- B. Instruct Owner's personnel in proper operating procedures and maintenance schedule.

- A. Test sectional doors for proper operation and adjust as necessary to provide proper operation without binding or distortion.
- B. Touch-up damaged coatings and finishes and repair minor damage. Clean exposed surfaces using non-abrasive materials and methods recommended by manufacturer of material or product being cleaned



# Call us ▶ 1 877 OK HORMANN (1-877-654-6762)

Hörmann LLC, 5050 Baseline Road, Montgomery, Illinois 60538 Phone: 630-859-3000 Fax: 630-859-8122 Email: info@hormann.us www.hormann.us







