

# Thresholds & Weatherstripping



Hager Companies offers a complete line of thresholds and weatherstripping products for virtually any type of door application. What's more, each meets or exceeds ANSI-grade quality, durability, and performance levels. For enhanced levels of safety and security, we also offer intumescent products for positive pressure solutions, including edge sealing and smoke control systems. All of which make Hager threshold, weatherstripping, and door bottom products an excellent choice for standard or custom applications in schools, hospitals, office buildings, and more.



## THRESHOLDS & WEATHERSTRIPPING

### PRODUCT PRESENTATION

Dimensions on bronze and stainless steel extrusions may differ slightly than those detailed. Questions regarding any dimensions should be directed to Hager Companies.

Drawings or illustrations used in the catalog are subject to change without notice. Questions on any dimensions should be obtained by contacting Hager Companies Customer Service.

### FABRICATION OPTIONS

- Bevel One Edge of Threshold
- Rip One Edge Width of Threshold
- L-Notch Both Ends of Threshold
- U-Notch Both Ends of Threshold
- Miter Single One End of Threshold
- Miter Single Both Ends of Threshold
- Miter Double One End of Threshold
- Miter Double Both Ends of Threshold
- Tack Weld One Line of Threshold
- Pan for Water Return of Threshold
- Sure Step Anti-Skid Abrasive Finish – A rugged, durable coating that can be applied to all Hager Companies' metal thresholds. Ideal for thresholds being used in wet, oily or corrosive environments.

### MATERIALS & FINISHES

#### Metals

All aluminum extrusions are of alloy 6063-T5. All bronze extrusions are of alloy CDA385 brass specified as Architectural Bronze in the industry.

For stock finishes, refer to the code listed below each individual item throughout the catalog. Please inquire for the availability on nonstock finishes.

- MIL** - mill finish aluminum
- MIB** - mill finish bronze
- CAL** - cast aluminum
- GY** - primed steel grey
- DBA** - dark bronze anodized aluminum
- SCA** - Hager Sure Step on aluminum
- 32D** - stainless steel (non-extruded)
- GLD** - gold anodized aluminum
- CLR** - clear anodized aluminum
- LBA** - light bronze anodized aluminum
- SCB** - Hager Sure Step on bronze
- WHP** - white paint on aluminum
- USP** - Prime coat

Notes: Threshold profiles shown refer to aluminum material only, dimensions may vary for mill finish bronze thresholds.

### Gaskets

Gasketing is available in a wide variety of materials. Vinyl is an economical choice and remains flexible down to -40°F (-40°C). EPDM gasketing is supplied both as a solid (dense) and as a closed cell sponge with a tough outer skin. It remains flexible down to -50°F (-49°C). Silicone gasketing provides the best resistance to cold by remaining flexible down to -70°F (-57°C). Gasketing codes are listed below.

- B** - nylon brush
- N** - neoprene, solid EPDM, closed cell sponge EPDM, TPE
- S** - silicone
- V** - vinyl
- W** - pile (Thread may be removed to allow expansion)
- F** - vinyl with fins

### ORDERING INFORMATION

When ordering, please specify by product number, length, quantity, finish and fasteners required. Thresholds and weatherstripping are fabricated in standard sizes with 1/2" (12.7 mm) extra on thresholds 50" (1270 mm) and under. Thresholds over 50" (1270 mm) are supplied with 1" (25 mm) extra length for fitting. Exact lengths are available upon request.

All lengths over 12 feet (3.66 m) must be purchased and are billed at 15 feet (4.57 m). All thresholds must be purchased and are billed at 4" (101.6 mm) increments except abrasive cast aluminum thresholds & auto door bottoms. Weatherstripping must be purchased and is billed at 4" (101.6 mm) increments, 42" (1066 mm) and 86" (2184 mm) sizes excluded.

Example: 891S V 36 x 84 MIL

Item #	Gasketing	Size	Finish
515S	W-pile	36" (914 mm)	MIL - mill finish aluminum
599S	V-vinyl	48" (1219 mm)	DBA - dark bronze anodized aluminum
750S	S-silicone	36" (914 mm)	32D - matte stainless steel
870S	N-neoprene	36" x 84" (914 mm x 2133 mm)	MIB - mill finish bronze
882S	B-nylon Brush	48" x 96" (1219 mm x 2438 mm)	CLR - clear anodized aluminum



## THRESHOLDS & WEATHERSTRIPPING



### FASTENERS

#### Standard

All products are furnished with appropriate fasteners as listed, except where noted. Most thresholds are furnished with mounting holes and #10 x 1-1/2" flat head sheet metal screws. Most weatherstripping products are furnished with slotted holes and #6 x 5/8" pan head sheet metal screws. Brass screws are furnished with bronze products.

#### Optional

##### Thresholds

- #10 wood screws and plastic anchors
- #10 wood screws and lead anchors
- #10 machine screws and lead anchors
- 1/4-20 machine screws and lead anchors
- #10 stainless steel wood screws
- #10 stainless steel wood screws and plastic anchors
- #10 stainless steel wood screws and lead anchors
- 1/4-20 stainless steel machine screws and lead anchors
- 1/4-20 x 2" flat head sleeve anchor
- #10 x 1-1/4" stainless steel flat torx wood screws
- #10-24 x 1-1/2" stainless steel flat torx machine screw with lead anchor
- #10-24 x 1-1/2" stainless steel spanner head wood screw with lead anchor
- Cast-on anchors (cast products only)
- Tap-con type (1/4" x 1-3/4")

##### Weatherstripping

- #6 x 5/8" pan-head stainless steel screws
- #6 x 5/8" self-tapping (TEK) screws
- #6 x 5/8" pan-head security torx sheet metal screws
- #6 x 5/8" stainless steel self-tapping (TEK) screws
- 1/4 - 20 x 1-1/4" sex bolts
- Two-way self-adhesive tape

### GENERAL INSTALLATION INSTRUCTIONS PRESS-ON PRODUCTS:

- Installation should take place after construction has been completed, and final cleaning has taken place
- The frame should be cleaned; isopropyl alcohol is recommended
- Not recommended for unsealed or porous applications
- Do not store these products in extreme heat/cold or for prolonged periods of time

### CERTIFICATIONS

#### Handicap Accessibility



Products denoted by this symbol are designed for applications where handicap accessibility is specified. These products are no greater than 1/2" (12.7 mm) in height and have no more than 1/4" (6.3 mm) vertical rise or with slope proportions no greater than 1:2 slope. Offset floor conditions greater than 1/2" (12.7 mm) require a 1:12 slope.

#### Air Infiltration



Products denoted by this symbol have been tested with air/smoke infiltration, all within the 0.500 cfm/ft. maximum allowable leakage at a pressure of a 25 mph wind (1.56 psf). The tests were conducted in accordance with ASTM test procedures and meet ASTM: E283-91.

#### Sound Tested



Products denoted by this symbol have been sound tested and received the appropriate STC rating. The tests were conducted in accordance with ASTM test procedures and meet ASTM: E90-90 & ASTM: E413-87.

STC Rating Static Door	STC Rating Operable Door	Perimeter Seal	Automatic Door Bottom	Threshold
44	40	726	743S	520S
41	39	726 (2)	743S	520S

#### BHMA Certified



BHMA Certification Program was developed as a means for producers of builders hardware to indicate compliance with American National Standards sponsored by BHMA. Participating manufacturers certify compliance with the standards based on a continuing program of passing the prescribed tests.

#### Underwriter's Laboratories



Products denoted by this symbol are classified and labeled by Underwriter's Laboratories, Inc.® as gasket material for use on listed steel frames and/or classified swinging type fire doors of the hollow metal or steel covered composite type rated up to 3 hours, or wood core fire doors rated up to 1-1/2 hours. Test results show these products do not adversely affect the fire resistance of the door or frame according to its UL rating. All products are regularly checked under a labeling and listing service. The clearance between the door and the frame and between the meeting edges of doors swinging in pairs shall be 1/8" ± 1/16" (3.18 mm ± 1.59 mm) for steel doors and shall not exceed 1/8" (3.2 mm) for wood doors.

Notes: Ratings on some items may vary and are noted on the individual products. Classifications may be viewed at [www.ul.com/database](http://www.ul.com/database).





## THRESHOLDS & WEATHERSTRIPPING

### POSITIVE PRESSURE UBC 7-2 (1997) PART I



UBC 7-2 (1997) tells you the product has been positive pressure tested to the new standard. Part I of this symbol designates the fire test. Since this symbol is used to designate the positive pressure fire test and does not differentiate between categories "G" and "J", additional information is needed. Products intended for use as edge sealing systems need to be labeled as such or list category "G" in their literature. Without this information, the product is category "J"; fire tested to the new standard of positive pressure.

#### Fire Test - Category G

Gaskets that are Edge-Sealing Systems. Category "G" - Edge-Sealing Systems are for use with fire doors requiring an edge seal to meet positive pressure code requirements. These systems are surface-applied to either the perimeter of the door frame or meeting edges of door pairs. Category "G" gaskets are usually intumescent material; this material will swell many times its original size during a fire and help contain the spread of fire by sealing the edges of the door. A category "G" gasket can be used as a smoke control gasket if it passes the UBC 7-2 (1997) Part II test for smoke.

#### Fire Test - Category J

Products that are positive pressure tested to determine that they do not contribute to flaming during a fire; they do not provide an edge-sealing system. Examples are gaskets used for sound, draft control or automatic door bottoms. A category "J" gasket can be used as a smoke control gasket only if it passes the UBC 7-2 (1997) Part II test for smoke control.

### POSITIVE PRESSURE UBC 7-2 (1997) PART II



UBC 7-2 (1997) tells you the product has been positive pressure tested to the new standard. Part II of this symbol designates the test for smoke. Gaskets passing the smoke test receive a category "H" rating. This symbol includes the Part I designation since all smoke control gaskets are positive pressure fire tested. Should the gasket pass the Part I fire test with a category "G" rating it would be a combination edge-sealing system and smoke seal gasket. If the gasket passes Part I with a category "J" rating, it is simply a smoke seal, that has passed the new positive pressure fire test to prove that it does not contribute to flaming during a fire.

#### Smoke and Draft Control Test - Category H



Assigned to gaskets that pass UBC 7-2 (1997) Part II. This is a separate second test that does not involve fire. All gaskets being tested for smoke must initially be fire tested under the requirements of UBC 7-2 (1997) Part I and receive a category "G" or "J" rating before being smoke tested. UBC 7-2 (1997) Part II tests the gasket for its ability to control smoke at an elevated temperature (400°F) (204°C). Smoke seals are used on the frames of doors that have an "S" on their fire-rating label to complete the installation instructions and satisfy the code requirements for a Smoke Control Door.

### SOLUTIONS FOR FIRE SAFETY

Hager Companies is committed to life safety by providing sealing systems to contain fire and prevent the spread of smoke.

Gaps needed between a door and its frame for everyday operation create an area of vulnerability for the passage of flames and smoke during a fire. The rapid expansion of gases generated by a fire in a closed room creates an area of positive pressure that forces flames and smoke through these gaps. Hager Companies' Edge Sealing Systems and Smoke Seals create a barrier and aid in securing these areas during a fire.

Hager seals and gaskets stop the spread of fire and smoke. Benefits of Hager Companies' products include:

- Hager Companies' products have extensive approvals and listings from both ITS/Warnock Hersey and Underwriters Laboratories
- Choice of bulb seals or batwing smoke systems for smoke control doors requiring the addition of a smoke seal to validate their "S" label
- Option of co-extruded combination fire and smoke seals offer a superior alternative to separate application of a bulb seal and intumescent edge seal
- Cost-effective, easy retrofit installation solution for positive pressure code compliance
- Unique coordinated designs provide protection against fire and smoke
- Comprehensive range of sizes including customized requirements to suit all applications

In 1997, the International Council for Building Officials (ICBO) approved a change to the Uniform Building Code (UBC) regarding fire-testing methods.

This code change requires fire doors to be fire tested under positive pressure instead of neutral pressure. The main difference between tests performed under positive pressure and neutral pressure is the location of the neutral plane and the introduction of positive pressure as part of the test. Under the new code, everything above 40" (1016 mm) is subject to testing under positive pressure conditions.

The change in the test method has led to a generation of gaskets that incorporate intumescent material to address the demands of positive pressure. Along with these new products are new terminology and new code requirements.





Below are some key phrases that indicate positive pressure requirements:

- UBC 7-2 (1997) - UBC Fire Test
- IBC 2003 (and later) - International Building Code
- UL 10-C - Positive Pressure Fire Test
- ASTM E-2074-00 - Fire Test of Door Assemblies
- Shall meet positive pressure requirements
- Intumescent seals - imply positive pressure

Over 35 states have adopted the new positive pressure requirements. The [www.iccsafe.org](http://www.iccsafe.org) web site of the International Code Council (ICC) has a map of code adoption by state. This site is frequently updated and by clicking on a state, you can see what states have adopted the new positive pressure requirements. The [www.iccsafe.org](http://www.iccsafe.org) site also provides information on all other building codes and where available, lists enforcement at the local level.

### Basic Requirements for an Opening to be Classified as Fire Rated

The wall, frame, and door all have to be fire rated. This is self-explanatory, as it would not make much sense to put a labeled door in a non-rated wall just as you cannot put a non-labeled door in a rated wall and call the opening fire rated. The purpose of a fire rated opening is to retard fire for a specific length of time. All components of the opening have to be rated. When an opening is also required to be "S" (smoke) labeled then additional gasketing items will be required to comply with the code.

Every swinging fire door must have a listed and labeled self-latching device to engage the strike to be fire rated. Push and pull plates cannot be used on a fire rated door. The door has to latch into the frame when closed so it stays closed. The latch prevents the door from opening during a fire if something falls against it. This means you must use at least a passage lock set on the door. Deadbolts cannot be used in place of a latching device because they are not self-latching.

Steel ball bearings and steel based hinges must be used on fire rated doors. Brass, bronze and other base materials cannot be used, unless tested as an assembly. Continuous hinges are allowed as tested. Plain bearing hinges cannot be used. Bearing hinges minimize wear from everyday operation and help prevent door sag. During a fire, the door needs to operate smoothly so closers and latching devices work properly. Some manufacturers may provide doors with non-bearing type hinges only when they are part of the listed assembly.

The door must be self-closing to be fire rated. A properly sized, listed and labeled closing device is part of basic fire door hardware requirements. If the door is left open during a fire, then that opening cannot retard the fire as it was meant to do; the door needs to close after somebody passes through it. This is usually done by a door closer or, in some cases, spring hinges.

Fire rated and listed louvers can be installed on fire doors but they have to be a fusible link type. This means that once the heat from the fire reaches a certain temperature (usually 105°F) (41° C), the fusible link will melt which causes the louver blades to close. This will help prevent the spread of fire. The maximum size for these louvers is 24" x 24" (610 x 610 mm). There is no glass allowed in a fire rated door if it has a louver and no louvers at all can be installed in a 3-hour rated door.

Basic fire door frames do not have hourly ratings. The exception being frames specially labeled for less than 3 hours. Frames bearing a recognized fire label may support a 3-hour, 1-1/2-hour, 3/4-hour or a 1/3-hour door. Frames used in masonry walls can be used with a maximum 3-hour fire door. While frames in drywall are intended for use with fire doors rated up to 1-1/2-hour, some manufacturers have tested for a 3-hour frame in drywall. Verify with your manufacturer for individual listing.

***Remember, these are basic requirements. Codes differ from area to area and are enforced by the Authority Having Jurisdiction (AHJ)***



## THRESHOLDS & WEATHERSTRIPPING

The purpose of a fire rated opening is to retard fire for a specific period of time.

The hourly designation indicates the duration for the fire test exposure and is known as the fire protection rating.

**A label:** 3-hour rating (for a 4-hour wall): These doors are used for openings in walls separating buildings that are joined together. They are metal doors and glass is allowed as tested. "A" label doors might not require additional seals applied to the frame, check with your individual manufacturer's procedure. Typically, a hollow metal door needs no added seals. Metal and some composite doors expand when heated. The door itself effectively seals the opening and often does not require the addition of an edge sealing system for the fire label. However, this door would still need a smoke gasket if it were functioning as a smoke control door.

**B label:** 1-1/2-hour rating (for a 2-hour wall): These doors are usually used for stairwell doors but are sometimes used at all the rated walls in a building (i.e., mechanical or electrical rooms). One-hundred square inches of exposed glass per door leaf is allowed. These are mostly wood composite and hollow metal doors. A "B" label 1-hour rating (1-hour wall) exists for use in buildings less than four stories tall; this rating currently only applies to wood doors. "B" label fire doors require the addition of an edge-sealing system (category "G" gasket) to the frame to comply with the new positive pressure test method. Some wood doors do not require the additional category "G" gasket; check with your manufacturer for availability.

**C label:** 3/4-hour rating (for a 1-hour wall): These doors are used for openings from a corridor into another room in the same building. 1,296 square inches of exposed glass is allowed per vision light. These are mostly wood composite doors. "C" label fire doors require the addition of an edge-sealing system (category "G" gasket) to the frame to comply with the new positive pressure test method. Some wood doors do not require the additional category "G" gasket, check with your manufacturer for availability.

**D label:** 1-1/2-hour rating (for a 2-hour wall): These are hollow metal doors used in exterior walls subject to severe fire exposure from outside the building. One-hundred square inches of exposed glass per door leaf is allowed. Check with your manufacturer's listing for the addition of a category "G" gasket to meet positive pressure requirements.

**E label:** 3/4-hour rating (for a 1-hour wall): These are hollow metal doors used in exterior walls subject to moderate to light fire exposure from the outside of the building. 1,296 square inches of exposed glass is allowed per vision light. Check with your manufacturers listing for the addition of a category "G" gasket to meet positive pressure requirements.

**1/3-hour door:** 20-minute rating (for a 1-hour wall): These doors do not have a letter designation for their rating and can be a wood or particle core door. 1,296 square inches of exposed glass is allowed per vision light. They are tested with or without hose stream. Doors tested without hose stream are specially labeled: "Twenty Minute-Rating Without Hose Stream". These doors are used on condo/apartment entrances, offices of a 1-hour rated corridor wall and other applications where smoke and draft control is the primary concern.

**S Label:** The letter "S" is the designation on a door's fire label indicating it can be used as a Smoke Control Door. Door manufacturers are allowed to put an "S" on a fire label when the door opening has passed the air infiltration test. The door opening does not become approved for a Smoke and Draft Control unit until an approved category "H" gasket system has been installed on the frame. The federal government, many owners and some states require at least some openings to be labeled for smoke as well as fire. This is not limited to 20-minutes but includes all fire labeled doors that are rated 20-minutes and above. The addition of an approved category "H" smoke control gasket completes the installation instructions necessary to validate the labeled door to become a Smoke Control Door.

All of the labels listed above have the capability of being both fire and smoke barrier openings, however, not all openings require smoke labels under UBC 7-2 (1997). Openings requiring smoke labels are detailed either by the fire authority having jurisdiction, local code, NFPA 101 or NFPA 5000.



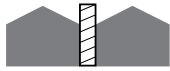




## New and existing fire doors are classified/labeled by one of the following designation systems:

Hourly rating designation    Alphabetical letter designation    A combination of both

## Common Applications for Hager Positive Pressure Edge Sealing & Smoke Seal Systems



Wall Rating	Door and Frame Rating	Door Application and Use	Door Types		Fire Doors Edge Sealing System	Smoke Doors "S" Label Smoke Seal	Fire & Smoke Doors Combination Seal
4 Hr.	3 Hour (A Label) 180 Minute	Openings in fire walls and walls that divide a single building into fire areas	Hollow Metal Hollow Metal	Pairs Singles	— —	721, 726, 736 721, 726, 736	— —



2 Hr.	1 1/2 Hour (B Label) 90 minute	Openings to stairwells and elevator shafts; vertical communication or egress through a building, including 2-hr. rated partitions providing horizontal fire separations	Wood Composite Hollow Metal Wood Composite Hollow Metal	Pairs Pairs Singles Singles	724, 729 — 724, 729 —	721, 726, 736 721, 726, 736 721, 726, 736 721, 726, 736	719, 720, 722, 734 — 719, 720, 722, 734 —
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2 Hr.	1 1/2 Hour (D Label) 90 minute	Opening where there is a chance of severe fire exposure from the exterior of the building	Hollow Metal Hollow Metal	Pairs Singles	— —	721, 726, 736 721, 726, 736	— —
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1 Hr.	*1 Hour (B Label) 60 Minutes	Doors that divide occupancies in a building (building less than 4 stories tall)	Wood Wood	Pairs Singles	724, 729 724, 729	721, 726, 736 721, 726, 736	719, 720, 722, 734 719, 720, 722, 734
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\*Currently rating only applies to wood doors.



1 Hr.	3/4 Hour (E Label) 45 Minute	Opening in an exterior wall with the potential to be exposed to moderate to light fire from the outside of the building	Hollow Metal Hollow Metal	Pairs Singles	— —	721, 726, 736 721, 726, 736	— —
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1 Hr.	3/4 Hour (C Label) 45 Minute	Openings in walls or partitions between rooms and corridors	Wood Composite Wood Composite	Pairs Singles	724, 729 724, 729	721, 726, 736 721, 726, 736	719, 720, 722, 734 719, 720, 722, 734
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1 Hr.	*1/3 Hour 20 Minute	Openings in corridors where smoke and draft control is required *Does not have letter designation	Wood/Particle Core Wood/Particle Core	Pairs Singles	724, 729 724, 729	721, 726, 736 721, 726, 736	719, 720, 722, 734 719, 720, 722, 734
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\*All of the labels listed above have the capability of being both fire and smoke barrier openings. However, not all openings require a smoke label under UBC 7-2 (1997). Openings requiring smoke labels are detailed either by the fire authority having jurisdiction, local code, NFPA 101 or NFPA 5000.





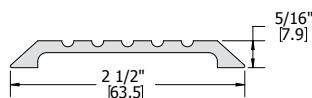
## THRESHOLDS & WEATHERSTRIPPING

### SADDLE THRESHOLDS

To effectively seal out the elements, use in conjunction with a door bottom, sweep, shoe, or bumper strip.

- Fasteners:** #10 x 1-1/2" sheet metal screws, other screw types and anchors available upon request
- Options:** Available with Sure Step Non-Slip Abrasive Coating
- Notes:**
- MIL finish thresholds are supplied with zinc plated screws
  - Brass thresholds are supplied with brass screws
  - Color anodized thresholds are supplied with screws plated to match
  - Stainless steel thresholds are supplied with stainless steel screws

#### 401S



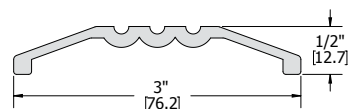
**Finishes:** MIL, DBA, GLD, MIB

**Certifications:**



**Notes:** MIB threshold will have a flat surface

#### 402S

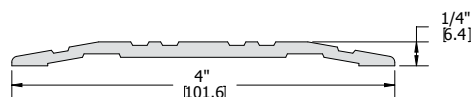


**Finishes:** MIL, DBA, GLD

**Certifications:**

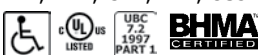


#### 403S

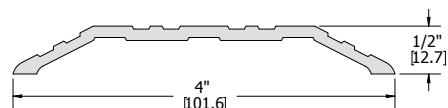


**Finishes:** MIL, DBA, GLD, MIB, US32D

**Certifications:**

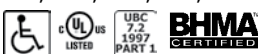


#### 404S

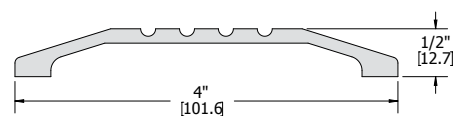


**Finishes:** MIL, DBA, GLD, MIB, US32D

**Certifications:**



#### 410S

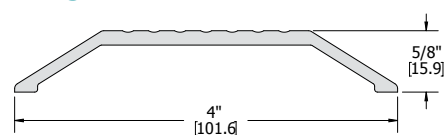


**Finishes:** MIL, DBA, GLD, MIB

**Certifications:**



#### 411S

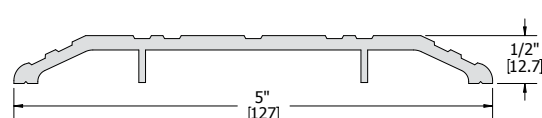


**Finishes:** MIL, DBA, GLD, MIB

**Certifications:**



#### 412S

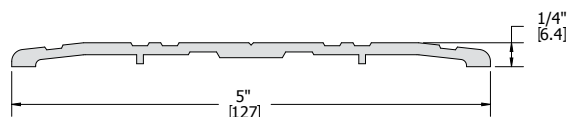


**Finishes:** MIL, DBA, GLD, MIB, US32D

**Certifications:**



#### 413S

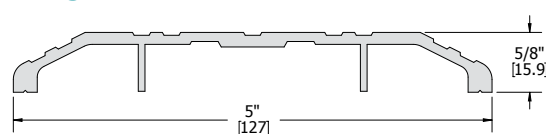


**Finishes:** MIL, DBA, GLD, MIB, US32D

**Certifications:**



#### 414S



**Finishes:** MIL, DBA, GLD

**Certifications:**

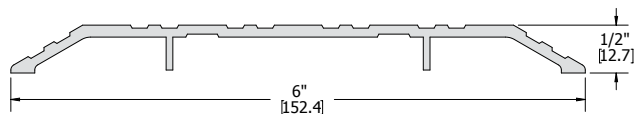






## SADDLE THRESHOLDS (CONTINUED)

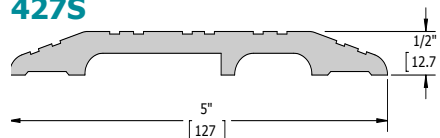
### 415S



Finishes:  
Certifications:



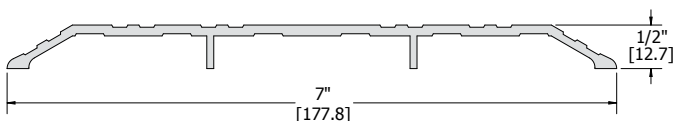
### 427S



Finishes:  
Fasteners:  
Certifications:



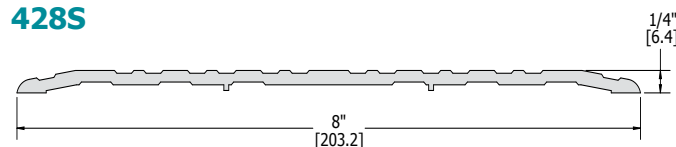
### 416S



Finishes:  
Certifications:



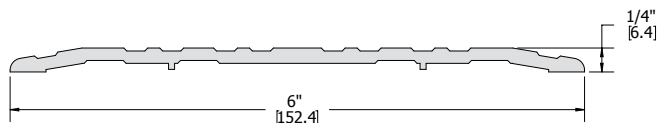
### 428S



Finishes:  
Certifications:



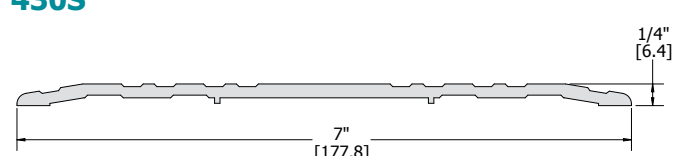
### 417S



Finishes:  
Certifications:



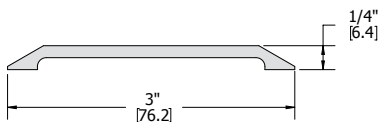
### 430S



Finishes:  
Certifications:



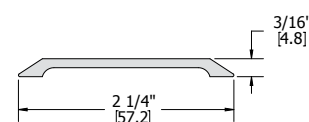
### 418S



Finishes:  
Certifications:



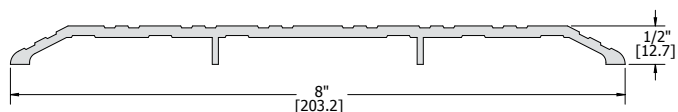
### 436S



Finishes:  
Certifications:



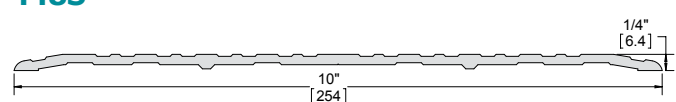
### 426S



Finishes:  
Certifications:



### 448S



Finishes:  
Certifications:

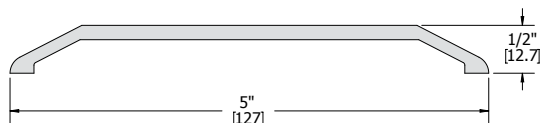




## THRESHOLDS & WEATHERSTRIPPING

### SADDLE THRESHOLDS (CONTINUED)

#### 492S

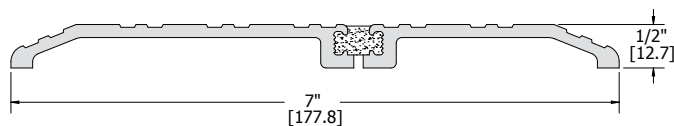


Finishes:  
Certifications:

MIL, DBA, GLD



#### 423S

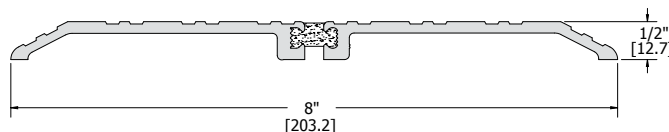


Finishes:  
Certifications:

MIL, DBA, GLD



#### 424S



Finishes:  
Certifications:

MIL, DBA, GLD



### THERMAL BARRIER SADDLE THRESHOLDS

High strength thermal barrier is permanently bonded in place to block the transfer of heat or cold. To provide a seal, use in conjunction with a door bottom, sweep, shoe or bumper strip.

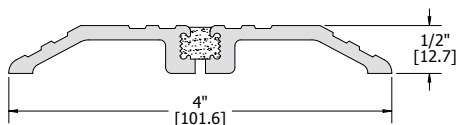
Fasteners: #10 x 1-1/2" sheet metal screws, other screw types and anchors available upon request

Options: Available with Sure Step non-slip abrasive coating

Notes:

- MIL finish thresholds are supplied with zinc plated screws
- Brass thresholds are supplied with brass screws
- Color anodized thresholds are supplied with screws plated to match

#### 420S

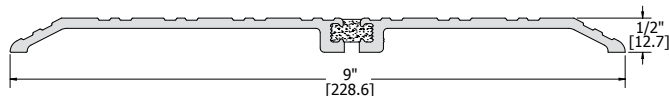


Finishes:  
Certifications:

MIL, DBA, GLD



#### 451S

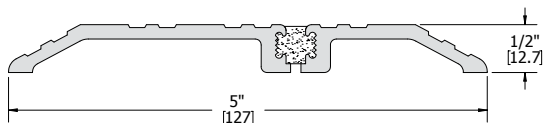


Finishes:  
Certifications:

MIL, DBA, GLD



#### 421S

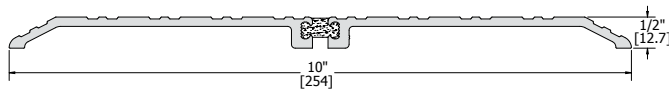


Finishes:  
Certifications:

MIL, DBA, GLD



#### 452S

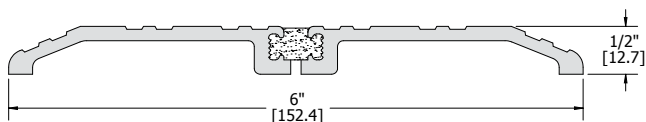


Finishes:  
Certifications:

MIL, DBA, GLD



#### 422S



Finishes:  
Certifications:

MIL, DBA, GLD



## THRESHOLDS & WEATHERSTRIPPING



### HALF SADDLE THRESHOLDS

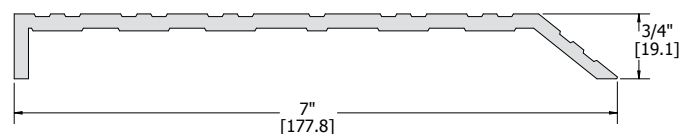
Fasteners: #10 x 1-1/2" sheet metal screws, other screw types and anchors available upon request

Options: Available with Sure Step non-slip abrasive coating

Notes:

- MIL finish thresholds are supplied with zinc plated screws
- Brass thresholds are supplied with brass screws
- Color anodized thresholds are supplied with screws plated to match

#### 406S

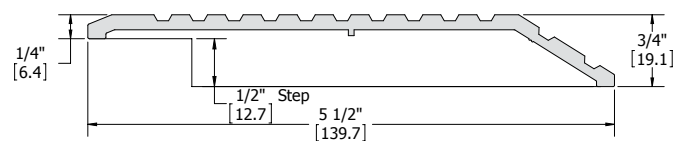


Finishes: MIL, DBA, GLD

Certifications:



#### 407S

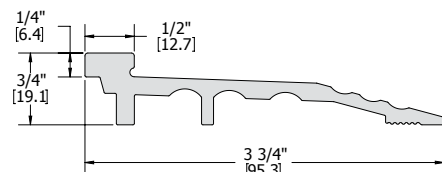


Finishes: MIL, DBA, GLD

Certifications:



#### 429S

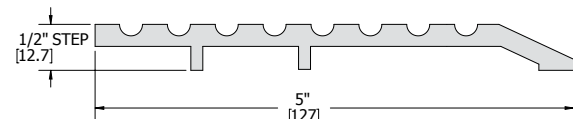


Finishes: MIL, DBA, GLD

Certifications:



#### 431S

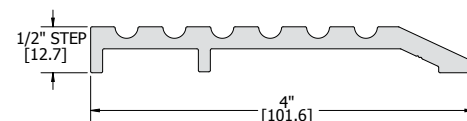


Finishes: MIL, DBA, GLD, MIB

Certifications:



#### 432S

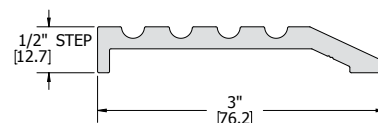


Finishes: MIL, DBA, GLD, MIB

Certifications:



#### 433S

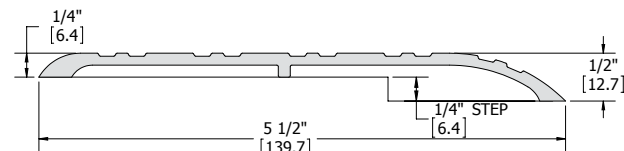


Finishes: MIL, DBA, GLD, MIB

Certifications:



#### 438S

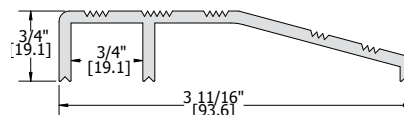


Finishes: MIL, DBA

Certifications:



#### 500S



Finishes: MIL, DBA, GLD

Certifications:

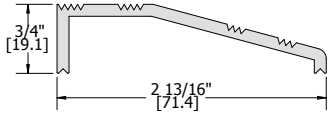




## THRESHOLDS & WEATHERSTRIPPING

### HALF SADDLE THRESHOLDS (CONTINUED)

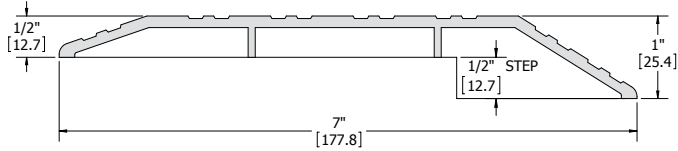
#### 501S



Finishes: MIL, DBA, GLD  
Certifications:



#### 572S



Finishes: MIL, DBA, GLD  
Certifications:

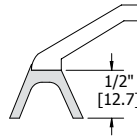


### ELEVATOR AND BUMPER STRIPS

Use in conjunction with a threshold

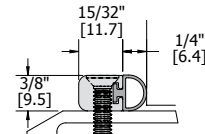
Fasteners: #10 - 24 x 5/8" Flat head self-tapping screws to attach bumper strip directly to an existing threshold

#### 480S



Finishes: MIL, DBA, MIB

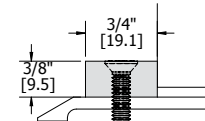
#### 481S



Finishes: MIL, DBA, GLD  
Insert: V, N, S, W  
Certifications:



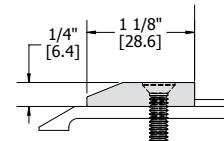
#### 483S



Finishes: MIL, DBA, GLD  
Certifications:



#### 484S



Finishes: MIL, DBA, GLD, MIB  
Certifications:



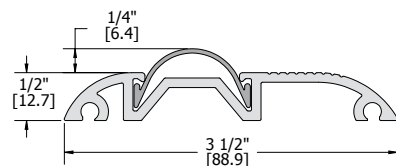
## THRESHOLDS & WEATHERSTRIPPING



### RESIDENTIAL THRESHOLDS

All thresholds appearing in this column are available with Sure Step Non-Slip Abrasive Coating

#### 400S



Finishes: MIL, DBA, GLD

Insert: V

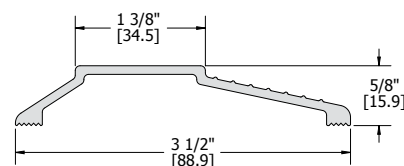
Certifications:



Notes:

Vinyl gasket eliminates the need for door shoe or sweeps

#### 408S

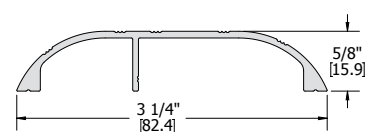


Finishes: MIL, DBA, GLD

Certifications:



#### 409S

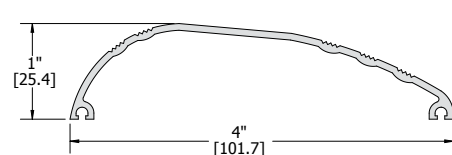


Finishes: MIL, DBA, GLD

Certifications:



#### 419S



Finishes: MIL, DBA, GLD

Certifications:



### CARPET THRESHOLDS

Fasteners:

#10 x 1-1/2" sheet metal screws, other screw types and anchors available upon request

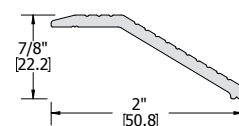
Options:

Available with Sure Step non-slip abrasive coating

Notes:

- MIL finish thresholds are supplied with zinc plated screws
- Brass thresholds are supplied with brass screws
- Color anodized thresholds are supplied with screws plated to match

#### 503S



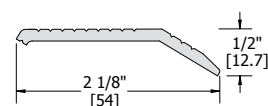
Finishes:

MIL, DBA, GLD

Certifications:



#### 504S



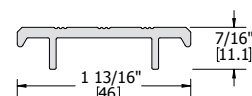
Finishes:

MIL, DBA, GLD

Certifications:



#### 505S



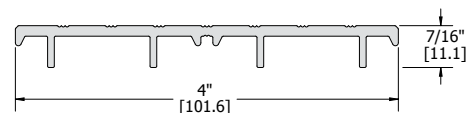
Finishes:

MIL, DBA, GLD

Certifications:



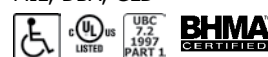
#### 506S



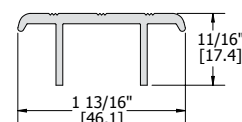
Finishes:

MIL, DBA, GLD

Certifications:



#### 508S



Finishes:

MIL, DBA, GLD

Certifications:





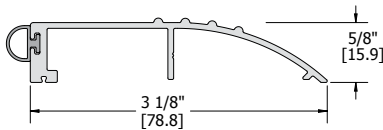
## THRESHOLDS & WEATHERSTRIPPING

### BUMPER THRESHOLDS

For use with outswinging doors to seal out the elements

- Fasteners: #10 x 1-1/2" sheet metal screws, other screw types and anchors available upon request
- Options: Available with Sure Step non-slip abrasive coating
- Notes:
- MIL finish thresholds are supplied with zinc plated screws
  - Brass thresholds are supplied with brass screws
  - Color anodized thresholds are supplied with screws plated to match

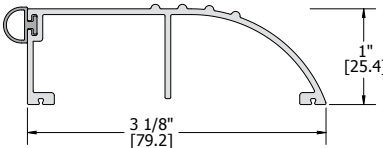
#### 434S



- Finishes: MIL, DBA, GLD
- Insert: V, N, S, W
- Certifications:



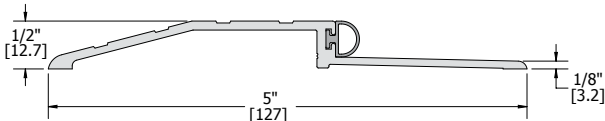
#### 435S



- Finishes: MIL, DBA, GLD
- Insert: V, N, S, W
- Certifications:



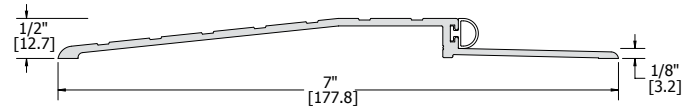
#### 477S



- Finishes: MIL, DBA, GLD
- Insert: V, N, S, W
- Certifications:



#### 478S



- Finishes: MIL, DBA, GLD
- Insert: V, N, S, W
- Certifications:



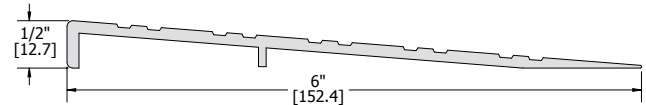
### ADA RAMP THRESHOLDS

Ramp threshold that provides a 1:12 slope to meet the requirements of the Americans With Disabilities Act

Order: To create a ramp that is a combination of the 442S and 443S, order 444S

- Fasteners: #10 x 1-1/2" Flat head sheet metal screws
- Options: Available with Sure Step non-slip abrasive coating
- Notes:
- MIL finish thresholds are supplied with zinc plated screws
  - Brass thresholds are supplied with brass screws
  - Color anodized thresholds are supplied with screws plated to match

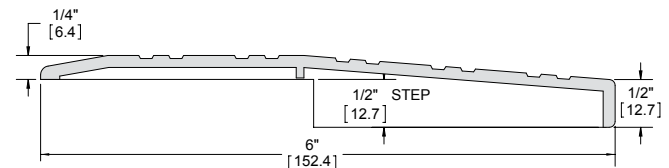
#### 442S



- Finishes: MIL, DBA, GLD
- Certifications:



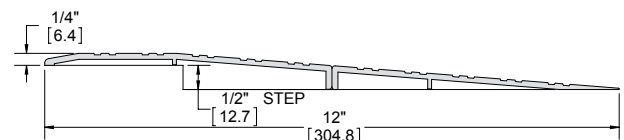
#### 443S



- Finishes: MIL, DBA, GLD
- Certifications:



#### 444S



- Finishes: MIL, DBA, GLD
- Certifications:







## FLOOR PLATE ASSEMBLY THRESHOLDS

Floor Plate components for modular threshold system. Used primarily for extra wide door frames or to cover expansion joints or floor joists

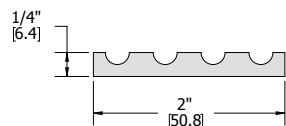
**Fasteners:** Plates and plate supports are furnished without holes and fasteners unless specified

**Options:**

- Available with Sure Step non-slip abrasive coating
- Beveled Edges are available

**Notes:** Plates may be used fluted or smooth side up

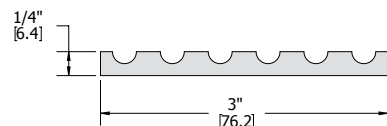
### 440S



**Finishes:** MIL, DBA, GLD, MIB

**Certifications:**

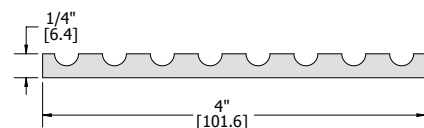
### 445S



**Finishes:** MIL, DBA, GLD, MIB

**Certifications:**

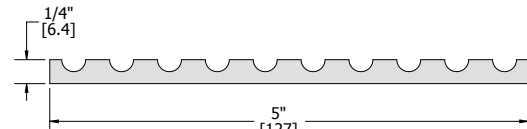
### 450S



**Finishes:** MIL, DBA, GLD, MIB

**Certifications:**

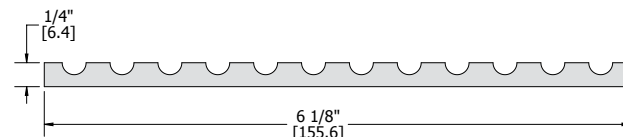
### 455S



**Finishes:** MIL, DBA, GLD, MIB

**Certifications:**

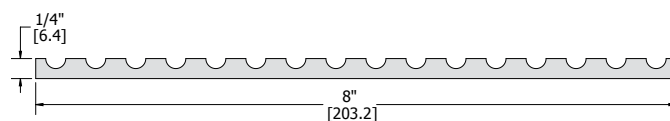
### 460S



**Finishes:** MIL, DBA, GLD, MIB

**Certifications:**

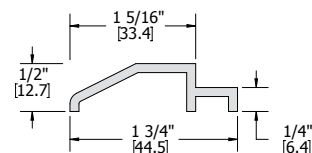
### 465S



**Finishes:** MIL, DBA, GLD

**Certifications:**

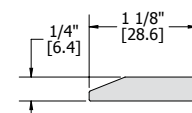
### 470S



**Finishes:** MIL, DBA, GLD, MIB

**Certifications:**

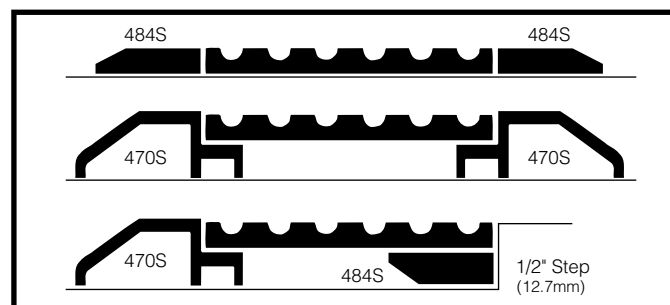
### 484S



**Finishes:** MIL, DBA, GLD, MIB

**Certifications:**

## Typical Applications





## THRESHOLDS & WEATHERSTRIPPING

### PANIC THRESHOLDS

Use in conjunction with surface applied vertical rod exit device

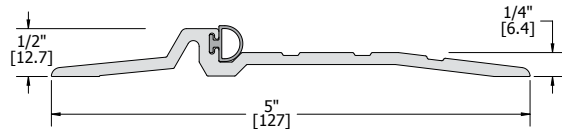
Fasteners: #10 x 1-1/2" flat head sheet metal screws, other screw types and anchors available upon request

Options: Available with Sure Step non-slip abrasive coating

Notes:

- MIL finish thresholds are supplied with zinc plated screws
- Brass thresholds are supplied with brass screws
- Color anodized thresholds are supplied with screws plated to match

#### 520S



Finishes: MIL, DBA, GLD, MIB

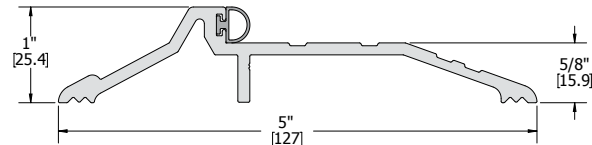
Inserts: V, N, S, W

Door Clearance: Allow 3/8"

Certifications:



#### 532S



Finishes: MIL, DBA, GLD, MIB

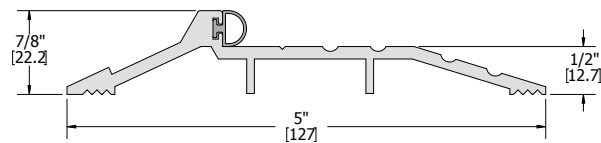
Inserts: V, N, S, W

Door Clearance: Allow 3/4"

Certifications:



#### 541S



Finishes: MIL, DBA, GLD, MIB

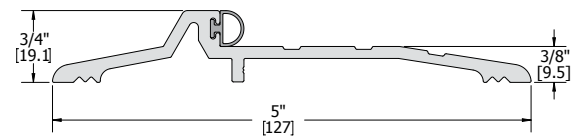
Inserts: V, N, S, W

Door Clearance: Allow 5/8"

Certifications:



#### 552S



Finishes: MIL, DBA, GLD, MIB

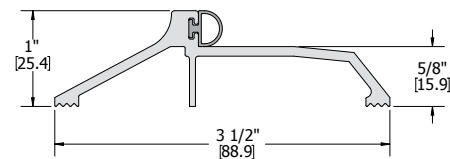
Inserts: V, N, S, W

Door Clearance: Allow 1/2"

Certifications:



#### 560S



Finishes: MIL, DBA, GLD

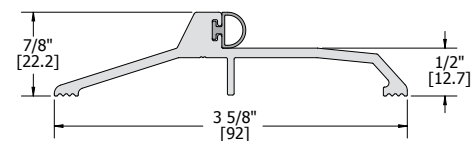
Inserts: V, N, S, W

Door Clearance: Allow 3/4"

Certifications:



#### 565S



Finishes: MIL, DBA, GLD

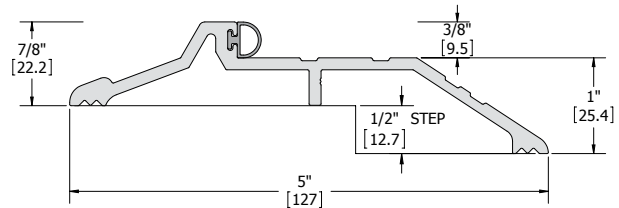
Inserts: V, N, S, W

Door Clearance: Allow 5/8"

Certifications:



#### 570S



Finishes: MIL, DBA, GLD, MIB

Inserts: V, N, S, W

Door Clearance: Allow 5/8"

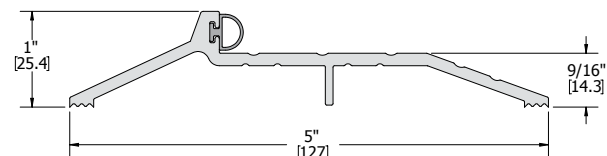
Certifications:





## PANIC THRESHOLDS (CONTINUED)

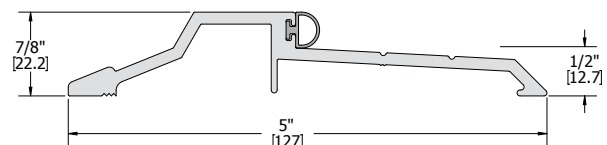
### 575S



Finishes: MIL, DBA, GLD, MIB  
 Inserts: V, N, S, W  
 Door Clearance: Allow 11/16"

Certifications:

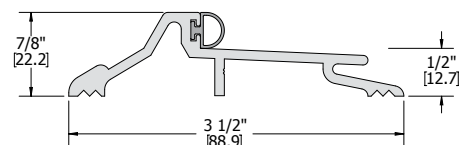
### 580S



Finishes: MIL, DBA, GLD  
 Inserts: V, N, S, W  
 Door Clearance: Allow 5/8"

Certifications:

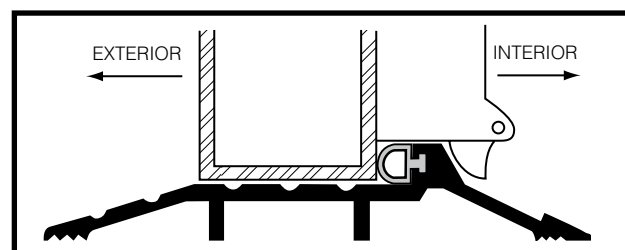
### 599S



Finishes: MIL, DBA, GLD  
 Inserts: V, N, S, W  
 Door Clearance: Allow 5/8"

Certifications:

## Typical Applications



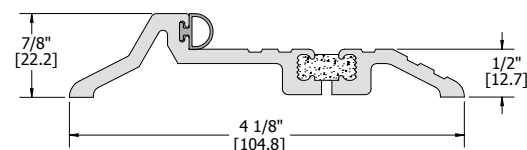
## THERMAL BARRIER PANIC THRESHOLDS

Threshold for latching panic devices that have a thermal barrier permanently bonded in place to effectively block the transfer of heat or cold. Use in conjunction with surface applied vertical rod exit device.

Fasteners: #10 x 1-1/2" Flat head sheet metal screws, other screw types and anchors available upon request  
 Options: Available with Sure Step non-slip abrasive coating  
 Notes: 

- MIL finish thresholds are supplied with zinc plated screws
- Brass thresholds are supplied with brass screws
- Color anodized thresholds are supplied with screws plated to match

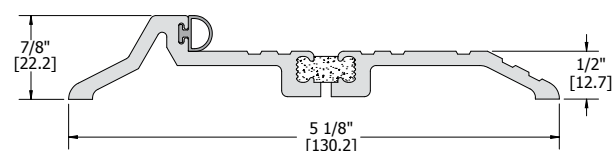
### 515S



Finishes: MIL, DBA, GLD  
 Inserts: V, N, S, W

Certifications:

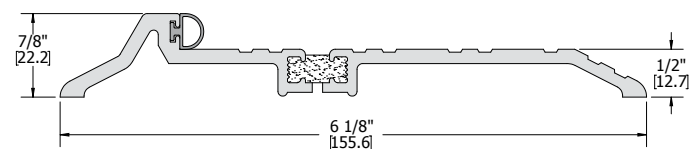
### 516S



Finishes: MIL, DBA, GLD  
 Inserts: V, N, S, W

Certifications:

### 517S



Finishes: MIL, DBA, GLD  
 Inserts: V, N, S, W

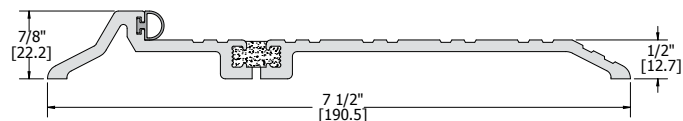
Certifications:



## THRESHOLDS & WEATHERSTRIPPING

### THERMAL BARRIER PANIC THRESHOLDS (CONTINUED)

#### 518S



Finishes: MIL, DBA, GLD  
 Inserts: V, N, S, W  
 Certifications:



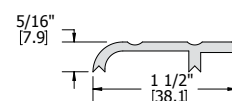
### INTERLOCKING THRESHOLDS

Threshold interlocks with hook on the bottom of the door for a superior seal against wind and rain

Fasteners: #10 x 1-1/2" Flat head sheet metal screws, other screw types and anchors available upon request  
 Options: Available with Sure Step non-slip abrasive coating  
 Notes:
 

- MIL finish thresholds are supplied with zinc plated screws
- Brass thresholds are supplied with brass screws
- Color anodized thresholds are supplied with screws plated to match
- Thresholds are supplied with the 701S J-Hook

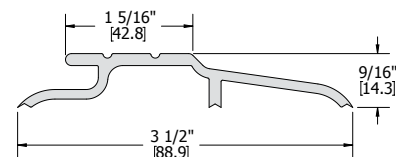
#### 600S



Finishes: MIL, DBA, GLD  
 Certifications:



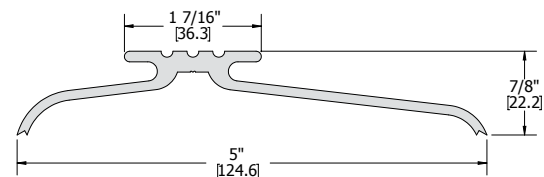
#### 602S



Finishes: MIL, DBA, MIB  
 Certifications:



#### 603S



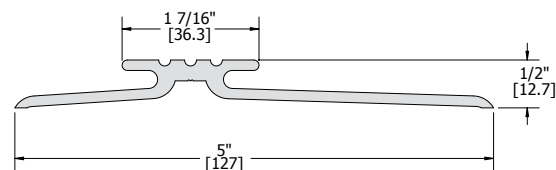
Finishes: MIL, DBA, MIB  
 Certifications:





## INTERLOCKING THRESHOLDS (CONTINUED)

### 604S

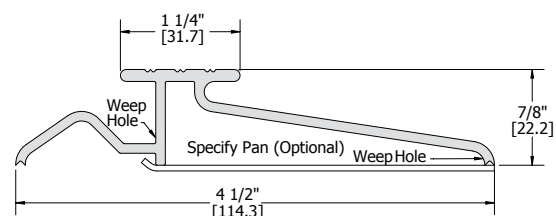


Finishes: MIL, DBA, MIB

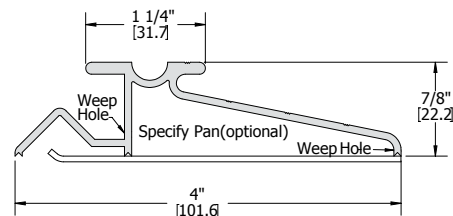
Certifications:



### 608S



### 612S



Finishes: MIL, DBA, GLD (612S only), MIB

Certifications:



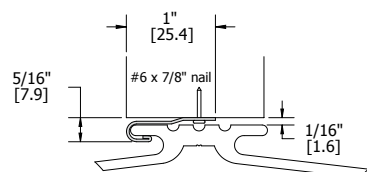
Notes:

- Water return feature designed to catch water and return it to the outside through weep holes
- Optional pan keeps water from coming in contact with the floor

Order:

Specify "with pan" when ordering

### 701S



Finishes:

MIL, MIB

Fasteners:

#6 x 7/8" nail

Certifications:



Notes:

J-Hook interlocks with threshold to seal against wind and rain

## ABRASIVE CAST ALUMINUM THRESHOLDS

A heavy duty aluminum threshold with silicon carbide granules integrally cast into the surface. Ideal for high traffic areas where maximum durability is required. The abrasive, skid resistant surface works well under wet, dry or oily conditions.

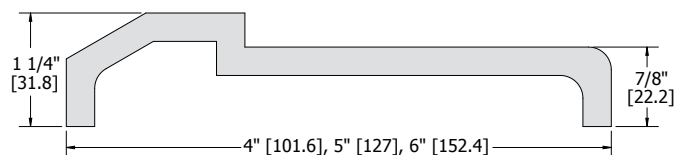
Fasteners: #14 x 1-1/2" Flat head zinc plated sheet metal screws with lead anchor

Options: Cast-on anchors available upon request

Notes:

- Furnished with countersunk holes
- Cut with a reinforced abrasive plain surface disk, 1/8" thick, either aluminum oxide or silicon carbide
- Maximum length available is 8 feet, not available for floor closers
- Available in 4", 5" and 6" widths

### 620S



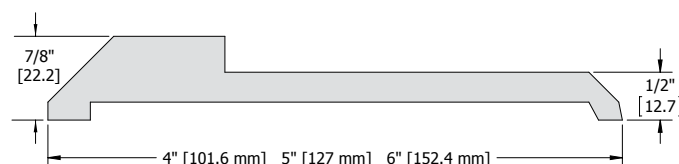
Finishes:

CAL

Certifications:



### 621S



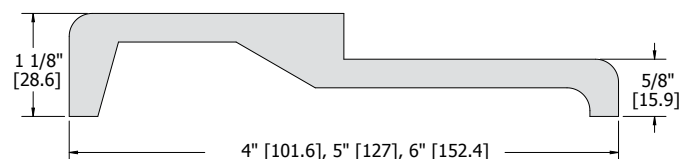
Finishes:

CAL

Certifications:



### 622S



Finishes:

CAL

Certifications:

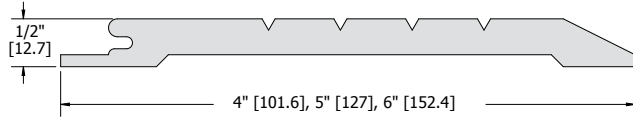




## THRESHOLDS & WEATHERSTRIPPING

### ABRASIVE CAST ALUMINUM THRESHOLDS (CONTINUED)

#### 623S



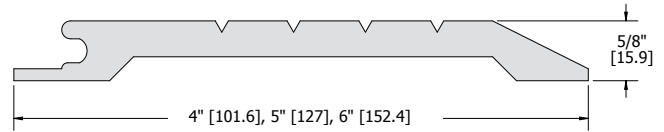
Finishes:

CAL

Certifications:



#### 628S



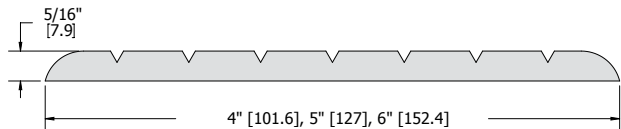
Finishes:

CAL

Certifications:



#### 624S



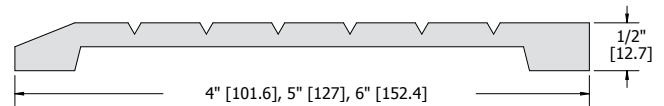
Finishes:

CAL

Certifications:



#### 643S



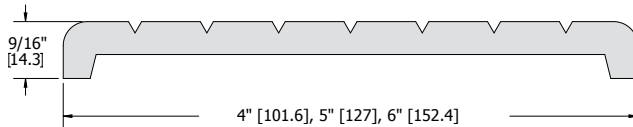
Finishes:

CAL

Certifications:



#### 625S



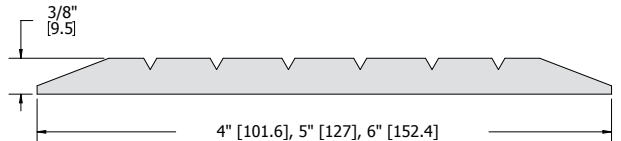
Finishes:

CAL

Certifications:



#### 626S



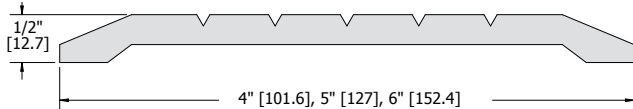
Finishes:

CAL

Certifications:



#### 627S



Finishes:

CAL

Certifications:

