



## ABOUT THE PRODUCT:

Steelcraft B18, B16 and B14 Series Flush Doors are designed to meet the architectural requirements for full flush, steel stiffened doors.

The door face sheets are supported by the internal steel stiffeners, which are welded to the face sheets.

The B Series Door offers a wide range of specifiable options including sizes, glass light designs, optional edge constructions and hardware (mechanical, pneumatic, electrical) preparations.

B-Series Doors are 1-3/4" (45mm) thick.

**THE USE OF HIGH GLOSS PAINT IS NOT RECOMMENDED.** All internal steel stiffeners are welded to both face sheets. High gloss paint accentuates the visibility of all welds.

## INSTALLATION:

1. Installation shall conform to the published Steelcraft installation instructions, ANSI A250.11-2001 (formerly SDI 105) *Recommended Erection Instructions for Steel Frames and HMMMA 840.*
2. Fire Rated Assemblies must be in accordance with NFPA Pamphlet 80. *The Authority Having Jurisdiction* is the final authority on issues related to the installation and use of installed Fire Rated Doors.

## FEATURES AND BENEFITS:

Steelcraft's B Series Doors offer the following standard unique features, which enhance long term performance and durability:

1. **Steel Stiffened core construction** with welded 22 gage hat section stiffeners.
2. **Full Height, Epoxy Filled Mechanical Interlock Edges** provide structural support and stability the full height of the door edges. Available edge options:
  - **Visible Edge Seam** (standard) – full height, epoxy filled mechanical Interlocked edges
  - **Filled Seam** – optional edge seam epoxy filled and finished smooth. Includes tack welds above and below edge cutouts for hinges, locks, etc
  - **Welded Edge Seam** – optional edge seam welded with 1" (25mm) long weld, 6" (152mm) on center, epoxy filled between welds and finished smooth; available on B18, B16 and B14 doors.
3. **Universal Hinge Preparations** (patented) allow for easy field conversion from standard weight .134" (3.3mm) hinges to heavy weight .180" (4.7mm) hinges.
 

**14 Gage [0.067" (1.7mm)] Inverted Top and Bottom Channels** provide stability and protection for the top and bottom edges from abuse.
4. **Beveled Hinge and Lock Edges** allow for tighter installation tolerances, ensure easier operation and eliminate binding and sticking.
5. **Recessed Designer™ Glass Trim** provides a clean, neat and flush finish with the door surface.
6. **Factory Applied Baked-On Rust Inhibiting Primer** paint in accordance with ANSI A250.10-1998 (R2004).

## SPECIFICATION COMPLIANCE:

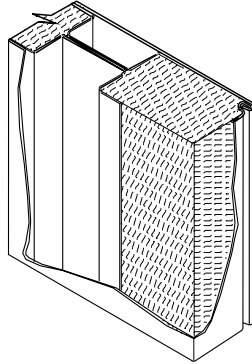
1. Door construction for Steelcraft B Series Full Flush Doors meets the requirements of ANSI A250.8-2003 (SDI 100).
2. Hardware preparations and reinforcements are in accordance with ANSI A250.6-2003. Locations are in accordance with ANSI/DHI A115 unless otherwise stated.

## FIRE RATINGS:

B Series Doors meet the broadest fire rating requirements. They are listed for installations requiring compliance to both neutral pressure testing (ASTM E152 and UL-10B) and positive pressure standards (UBC 7-2 and UL-10C).

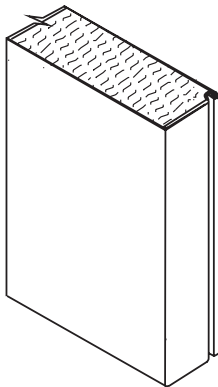
### B SERIES CORE CONSTRUCTION

#### Steel Stiffeners with Fiberglass Insulation

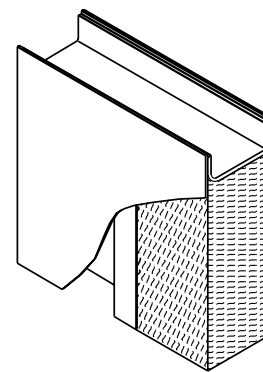


#### Standard B Series Core

- 22 gage [0.026" (0.6mm)] stiffeners
- Stiffeners welded to inside of face sheets
  - Vertical interior webs located 6" (152mm) apart
  - welded to face sheet 5" (127.6mm) on center
- Stiffeners welded to each other at the top and bottom
- Areas between stiffeners filled with nominal 1 pound (453.6g) per ft<sup>3</sup> density fiberglass batt insulation



#### Inverted Top & Bottom Channels 14 Gage



#### Standard Premium Edge Construction

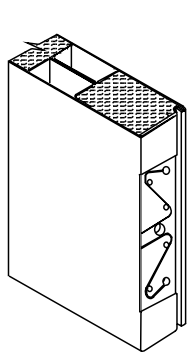
- Beveled hinge & lock edges
- Full height mechanical interlock with epoxy adhesive
- Visible edge seam standard
- Seamless edge optional

#### DOOR APPLICATION AND USAGE

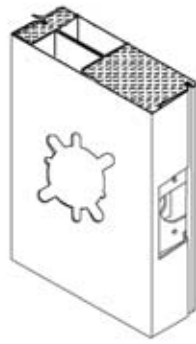
Series	Steel Thickness	Opening	Usage Frequency	
<b>B18</b>	18 Ga (1.0mm)	Interior - Cold Rolled Steel	Heavy Duty	Heavy Commercial & Institutional applications with high use
<b>B18</b>	18 Ga (1.0mm)	Exterior - Galvannealed Steel		
<b>B16</b>	16 Ga (1.3mm)	Interior - Cold Rolled Steel	Extra Heavy Duty	Extra HeavyCommercial applications with potential of very high use
<b>B16</b>	16 Ga (1.3mm)	Exterior - Galvannealed Steel		
<b>B14</b>	14 Ga (1.7mm)	Interior - Cold Rolled Steel	Maximum Duty	Extra HeavyCommercial applications with extremely high use
<b>B14</b>	14 Ga (1.7mm)	Exterior - Galvannealed Steel		

**STANDARD HARDWARE PREPARATIONS**

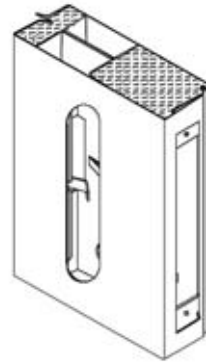
Typical hardware applications shown. Refer to section 8 for more details.



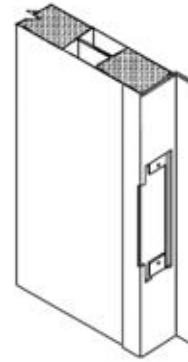
**Universal Mortise Hinge**  
7 Gage Universal hinge reinforcement



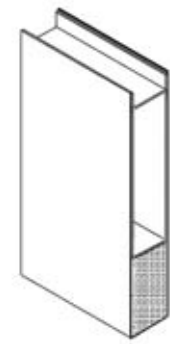
**61L Lock**



**86 Lock**



**Inactive Leaf ASA  
Strike Prep with  
Astragal attached**



**Optional 14 Gage  
Closer Reinforcement**

**Standard: mortised and reinforced for**

- Patented **Universal hinge preparations** allow for easy field conversion from standard 4-1/2" x .134" standard weight hinges to 4-1/2" x .180" heavy weight hinges. Optional hinge preparation for 5" x .146" standard weight hinges or for 5" (127mm) x .190" (4.8mm) heavy weight hinges is also available.
- The cylindrical 161, 61L and mortise 86 lock preps are the most commonly used active leaf preparations. The 4 7/8 (124mm) strike prep is the most commonly used inactive leaf preparation.
- Optional reinforcements for surface and concealed Closers are available.
- Special hardware applications are available.

**Door Sizes and ANSI A250.8 Conversions**

Steelcraft product selection for B Series Doors has been matched to ANSI/SDI Level and Model designations.

- In accordance with ANSI A250.8, core material is not specific to the level or model designations. Core material selection is specified based on preference and application.
- Recommended minimum frame gage also applies to the frequency of operation of the opening.

Series	ANSI A250.8 - SDI 100			Edge Construction Options	Maximum Sizes		Recommended Gage of Frame
	Level	Model	Description		Single	Pair	
<b>Level 2 - Heavy Duty Commercial &amp; Institutional</b>							
<b>B18</b>	2	1	Full Flush	Visible	4'-0" x 10'-0" 1219mm x 3048mm	8'-0" x 10'-0" 2438mm x 3048mm	16 Gage [0.053" (1.3mm)]
<b>BF18</b>		2	Seamless	Epoxy Filled			
<b>BW18</b>		2	Seamless	Welded			
<b>Level 3 - Extra Heavy Duty Commercial &amp; Institutional</b>							
<b>B16</b>	3	1	Full Flush	Visible	4'-0" x 10'-0" 1219mm x 3048mm	8'-0" x 10'-0" 2438mm x 3048mm	16 Gage [0.053" (1.3mm)]
<b>BF16</b>		2	Seamless	Epoxy Filled			
<b>BW16</b>		2	Seamless	Welded			
<b>Level 4 - Maximum Duty Commercial &amp; Institutional</b>							
<b>B14</b>	4	1	Full Flush	Visible	4'-0" x 10'-0" 1219mm x 3048mm	8'-0" x 10'-0" 2438mm x 3048mm	14 Gage [0.067" (1.7mm)]
<b>BF14</b>		2	Seamless	Epoxy Filled			
<b>BW14</b>		2	Seamless	Welded			

### DOOR EDGE CONSTRUCTION:

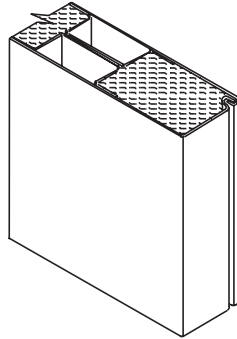
- Vertical edges (both hinge and lock) are beveled 1/8" (3.2mm) in 2" (51mm) with a visible seam.
- Top and bottom edges are closed with inverted 14 gage [0.067" (1.7mm)] welded channels. Exterior applications require the addition of top caps to protect against the weather.
- Optional Edge Seams available in the B Series doors:
  - a. **BF** – the mechanical edge seam is filled and finished prior to applying the factory primer.
  - b. **BW** – the mechanical edge seam is welded and finished prior to applying the factory primer.

### Beveled Edge with Full Height Mechanical Interlock

#### Full Flush

##### B Series Visible Seam Features

- Full height mechanical interlock
- Interlock filled with epoxy adhesive
- Visible edge seam



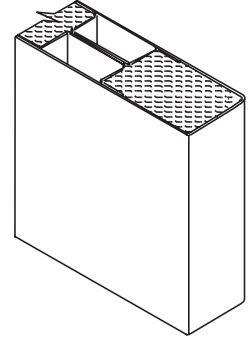
#### Seamless

##### BF Series Seam Filled Features

- Full height mechanical interlock
- Interlock is tack welded and filled with epoxy adhesive
- Edge seam is epoxy filled and finished
- No visible edge seam

##### BW Series Seam Welded Features

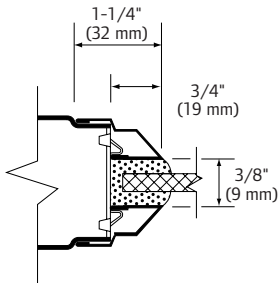
- Full height mechanical interlock
- Interlock filled with epoxy adhesive
- Edge is seam welded 1" (25mm) long, 6" (152mm) O.C.
- No visible edge seam



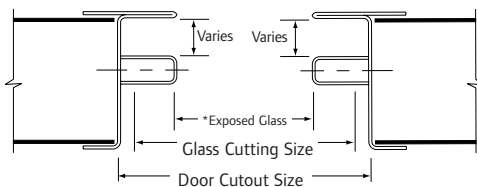
### GLASS LIGHT OPTIONS – REFER TO THE LIGHTS AND LOUVERS SECTION FOR FURTHER DETAILS

#### Standard Designer® Trim for 1/4" Thick Glass

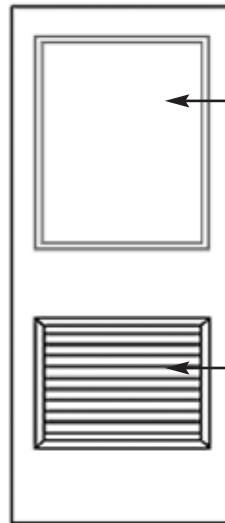
- Optional 1/2" Thick Glass



#### Typical Optional Overlapping Steel Trim for Glass Over 1/4" to 5/8" or 3/4" to 1" Thick



Divider Muntins Are Not Available



Note: Glazing type and thickness vary per job requirements.

Note: Louver size and type vary per requirements.