

AUXILIARY HARDWARE

MANUAL FLUSH BOLTS

Manual flush bolts are door hardware devices designed to secure the inactive leaf of double doors, available for both metal and wood door applications. These bolts feature a spring loaded snap action lever that retracts the bolt when moved to the 'up' position and projects into the head frame when moved to 'down' position. Installation requires one pair (top and bottom) of manual flush bolts on the inactive leaf. The bolts provide both security and convenience when occasional use of both door leaves is needed. Metal door applications utilize specific models designed for metal door construction, while wood door versions are engineered with appropriate mounting and operation mechanisms suited for wood door materials.

Model No. FB100M



Product Information

Features	<ul style="list-style-type: none">• Easy-grip finger lever action for simple installation• Plunger features milled surface on side that engages with matching guide to prevent bolt rotation and loosening
Face Size	6-3/4" x 1" (171mm x 25.4mm)
Length of Bolt Rod	10" (254mm) or 12" (305mm)
Bolt Throw	5/8" (16mm)
Bolt Diameter	1/2" (12.7mm)
Material	Forged brass body with aluminum faceplate
Dimensions	All lengths measured from center of bolt mechanism with retracted bolt head
Max. Door Size	48" (1219mm) x 96" (2438mm), Hollow-metal
Finishes	US3, US10B, US15, US19, US26, US26D
Certification	UL/cUL listed for fire ratings of 3 hours

Model No. FB100W



Product Information

Features	<ul style="list-style-type: none">• Easy-grip finger lever action for simple installation• Plunger features milled surface on side that engages with matching guide to prevent bolt rotation and loosening
Face Size	6-3/4" x 1" (171mm x 25.4mm)
Bolt Throw	5/8" (16mm)
Bolt Diameter	1/2" (12.7mm)
Material	Forged brass body with aluminum faceplate
Dimensions	All lengths measured from center of bolt mechanism with retracted bolt head
Max. Door Size	48" (1219mm) x 96" (2438mm), Wood covered composite
Finishes	US3, US10B, US15, US19, US26, US26D
Certification	UL/cUL listed for fire ratings of 1.5 hours

Model No. DP005



The dust-proof strike DP005 comes with bottom manual flush bolts. Made of solid brass, it features a face plate measuring 1-3/8" x 2-7/8", with a 2-1/4" length and 7/8" barrel diameter. Available in multiple finishes: US3, US10B, US15, US19, US26, and US26D.

AUXILIARY HARDWARE

AUTOMATIC FLUSH BOLTS

Model No.

FB610M (Metal Doors)

FB610W (Wood Doors)

Specifications

- Non-handed design
- Faceplate Size:
 - ♦ FB610M – 1" x 6-3/4" (25.4mm x 171mm)
 - ♦ FB610W – 1" x 8-1/2" (25.4mm x 216mm)
- Faceplate Material: Steel or Stainless steel
- Finishes: US3, US4, US10, US10B, US15, US26, US26D, US28, US32D
- Certifications:
 - ♦ UL/cUL listed for fire ratings of 1.5 hours (Wood Doors)
 - ♦ UL/cUL listed for fire ratings of 3 hours (Metal Doors)
 - ♦ Conforms to ANSI A156.3-2020 Grade 1, Type 25

Operation

- Designed to be installed in pairs at the top and bottom of inactive doors.
- In double door applications, opening the active door automatically retracts both top and bottom bolts. When the active door closes, the bolts automatically extend into the frame and sill strikes, securing the inactive door. An optional dust-proof strike (DP005_ can be installed at the bottom location.
- For top-only installation, combine with a fire latch bolt (FL001) in place of the bottom bolt. This configuration minimizes floor preparation and prevents issues caused by door warping or changing field conditions.

Model No. FL001

This auxiliary fire latch bolt is a temperature-actuated bolt that automatically extends from the active door into the inactive door when the temperature exceeds the rating of the fusible link (210 -250°C/410 -480°F). It is installed on the bottom edge of the active door to replace the bottom flush bolt.

FB610M
(Single Bolt)

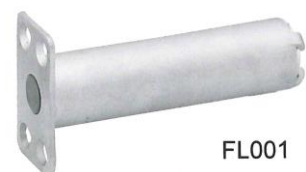


FB610W
(Single Bolt)



FB620W
(Bolt Set, 2 pieces)

FB620M
(Bolt Set, 2 pieces)



FL001

AUXILIARY HARDWARE

CONSTANT SELF-LATCHING FLUSH BOLTS

Model No.

FB510M (Metal Doors)

FB510W (Wood Doors)

Specifications

- Non-handed design
- Faceplate Size:
 - ♦ FB610M – 1" x 6-3/4" (25.4mm x 171mm)
 - ♦ FB610W – 1" x 8-1/2" (25.4mm x 216mm)
- Faceplate Material: Steel or Stainless steel
- Finishes: US3, US4, US10, US10B, US15, US26, US26D, US28, US32D
- Certifications:
 - ♦ UL/cUL listed for fire ratings of 1.5 hours (Wood Doors)
 - ♦ UL/cUL listed for fire ratings of 3 hours (Metal Doors)
 - ♦ Conforms to ANSI A156.3-2020 Grade 1, Type 25

Operation

- The Self-Latching Flush Bolt must be installed at the top of the door and paired with an Automatic Flush Bolt at the bottom of the door for proper operation.
- Top Bolt Operation (Model 510M/510W): The bolt automatically engages with the frame strike when the inactive door closes. To disengage, press the plunger located on the bolt face.
- Bottom Bolt Operation (Model 610M/610W): The bolt engages with the sill strike upon closing the active door. Both top and bottom bolts secure in place when both active and inactive doors are closed. Optional dust-proof strike (DP005) can be installed on the bottom side.
- Adjustment Feature: All bolts include vertical adjustment capabilities to compensate for uneven floor surfaces or frame conditions.

Model No. DP005

The dust-proof strike DP005 is available for separate purchase and is not included with flush bolts. This component is constructed of solid brass with dimensions of 1-3/8" x 2-7/8" faceplate, 2-1/4" length, and 7/8" barrel diameter. It can be ordered in various finishes: US3, US10B, US15, US19, US26, and US26D. Compatible with bottom self-latching and manual flush bolts.



FB510W
Self-Latching Bolt



FB510M
Self-Latching Bolt



FB560M for Metal Doors:
Top Bolt: FB510M
Bottom Bolt: FB610M

FB560W for Wood Doors
Top Bolt: FB510W
Bottom Bolt: FB610W



DP005

AUXILIARY HARDWARE

UNIVERSAL FLUSH BOLTS

Universal Flush Bolts represent a UL-listed fire hardware solution designed for both metal and wood doors. These flush bolts feature a unique design that simplifies door preparation and installation while meeting rigorous fire safety standards with a 3-hour rating. Engineered for global application and enhanced with special mechanisms to reduce installation defects, they offer superior performance under high temperatures up to 2000°F to prevent flame spread in case of fire.



Specifications

- Faceplate Size: 1-1/8" x 2-9/32" (28.5mm x 58mm)
- Faceplate Material: Steel or Stainless steel
- Finishes: US3, US4, US10, US10B, US15, US26, US26D, US28, US32D
- Certifications:
 - ♦ UL/cUL listed for fire ratings of 3 hours
 - ♦ Conforms to ANSI A156.3-2020 Grade 1, Type 25

Features

- Installation Features
 - ♦ Simple door preparation
 - ♦ Easy and faster installation
 - ♦ Non-handed design (no need to reverse top or bottom bolt)
 - ♦ No cutout required on inactive door
 - ♦ Just drill a 1-1/8 vertical round hole from top edge and a horizontal round hole from door edge
- Versatility & Application
 - ♦ Universal compatibility with both metal and wood door constructions
 - ♦ Available for all buildings
 - ♦ Comprehensive selection of four specialized combination models catering to diverse architectural requirements
- Performance & Certification
 - ♦ Tested and approved by UL Fire Protection Division in USA and American Intertek Testing Service (ITS) laboratory
 - ♦ High temperature resistance up to 2000°F for fire protection

AUXILIARY HARDWARE

UNIVERSAL FLUSH BOLTS

Model No. FB810 or FB820

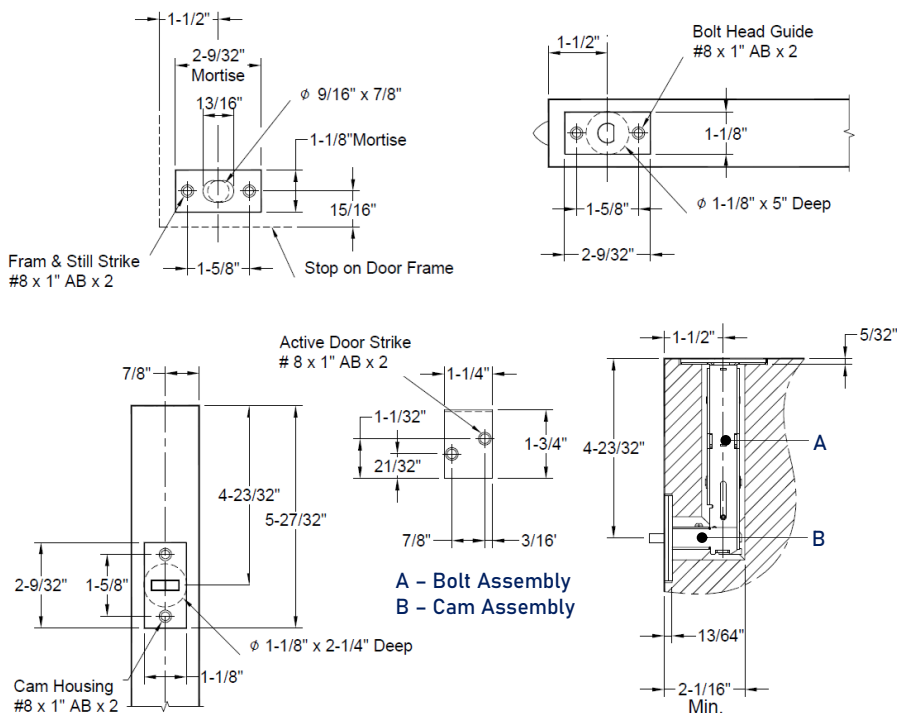
Use

The bolts are designed to be installed in pairs, positioned at the top and bottom corners of the fire-rated inactive door.

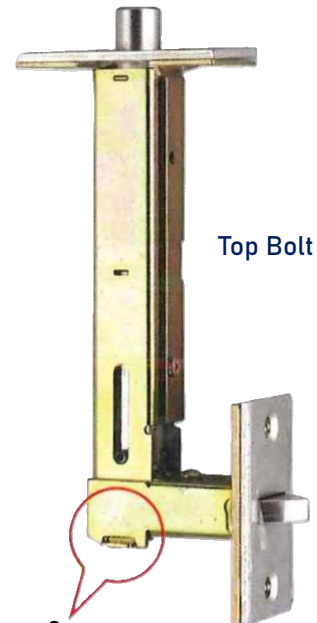
In double door applications, the system features automatic operation where the top and bottom bolts automatically retract when the active door is opened (via exit device, mortise lock, or cylindrical lock on push side). Upon closing the active door, the bolts automatically extend into the frame strike and sill strike. The operation of both bolts is synchronized, meaning they move simultaneously whether retracting from or extending into the strikes.

For installing the FB810 flush bolt on the inactive door, begin by drilling or pre-making a vertical hole of 1-1/8" (28mm) diameter on the top edge of the door, followed by creating a horizontal hole of the same diameter on the door edge. The installation process continues by inserting the bolt assembly into the first hole, then placing the cam assembly into the second hole. Ensure the grooves on the cam assembly properly align with the salient on the bolt assembly. The final step involves installing and fastening the bolt head guide and cam cover plate after both bolts are properly connected. This entire installation process has been engineered to be simple and straightforward to execute.

Dimensions & Template



FB810
(Single Bolt)



Top Bolt

Groove
&
Salient



Bottom Bolt

FB820
(Bolt Set, 2 pieces)

UNIVERSAL FLUSH BOLTS

Use

For complete door security, the bottom bolt (Model FB810) engages with the sill strike when the active door closes. The system is designed so that both the top and bottom bolts simultaneously engage with their respective strikes - the top frame strike and sill strike - once both active and inactive doors are fully closed. For enhanced protection against environmental elements, an optional dust-proof strike (Model DP005) can be installed in place of the standard sill strike (refer to page 42 for details).

Technical drawings of the door assembly showing front, side, and detail views with dimensions and labels.

Front View (Top Left):

- Overall width: 1-1/2"
- Mortise width: 2-9/32"
- Frame Lip Strike (2)#8 x 1" AB
- Stop on Door Frame
- Dimensions: 5/16", 1-5/8", 11/16", 13/16", 1-1/8", 15/16", 9/16"
- Ø11/16" x 3/4" Deep
- 3/32" Mortise

Side View (Top Right):

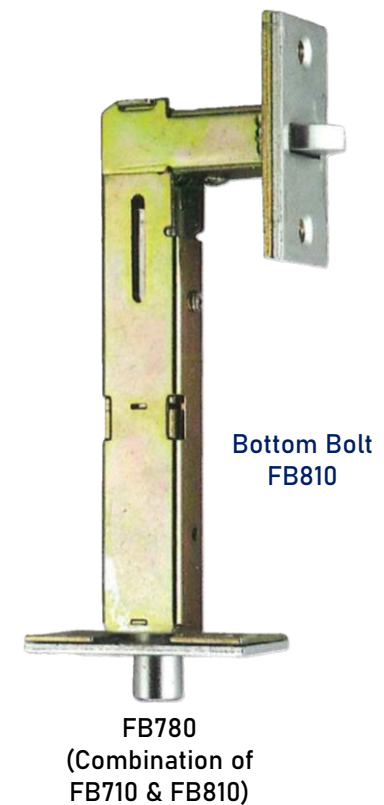
- Bolt Head Guide (2)#8 x 1" AB
- Dimensions: 1-1/2", 1-5/8", 2-9/32", 1-1/8"
- Ø1-1/8" x 5" Deep
- 15/16"

Detail View (Bottom Left):

- Cam Housing (2)#8 x 1" AB
- Ø1-1/8" x 2-1/4" Deep
- Dimensions: 7/8", 4-23/32", 5-27/32", 2-9/32", 1-5/8", 1-1/8"

Detail View (Bottom Right):

- Dimensions: 1-1/2", 5/32", 4-23/32", 13/64", 2-1/16" MIN.
- A - Bolt Assembly
- B - Plunger Assembly



AUXILIARY HARDWARE

UNIVERSAL FLUSH BOLTS

Model No.

FB710 + FL001

FB810 + FL001

Use

The FB710 and FL001 or FB810 and FL001 combinations are UL listed and specifically designed for pairs of fire rated doors. The top bolt (FB710 or FB810) is installed on the top edge of inactive door only, while the bottom fire latch bolt serves as a replacement for the automatic flush bolt. While the bottom fire latch bolt cannot eliminate the top automatic flush bolt and dead proof strike, these combinations provide significant benefits. They reduce door preparation requirements and help eliminate field issues that commonly arise from door warp or distortion under field conditions.

The FL001 fire latch bolt is engineered as a temperature-actuated latch bolt. Installation is performed horizontally in the lower edge of the inactive door, with a corresponding mating hole placed in the same lower edge of the active door. During a fire event, when temperatures exceed the fusible link's rating, the bolt automatically extends from the inactive door into the active door. This action locks the leaves together, preventing the doors from opening and effectively stopping flames from spreading through the doorway.

Fire Latch Bolt Installation

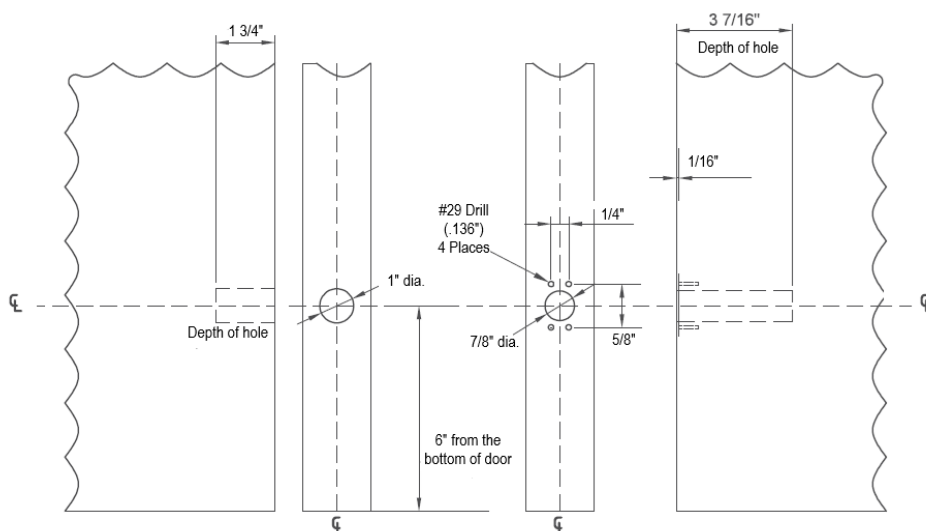
(Used with the automatic or self-latching flush bolt)

Inactive Door

1. Measure 6" from bottom of the inactive door.
2. Drill a 7/8" dia. x 3-7/16" deep hole for fire latch bolt.
3. Install fire latch bolt by striking squarely with a hammer.

Active Door

1. Drill a 1" dia. x a-3/4" deep hole for plug at the same height as the fire latch bolt.
2. Install plug in the door striking with a hammer.



FB810 + FL001



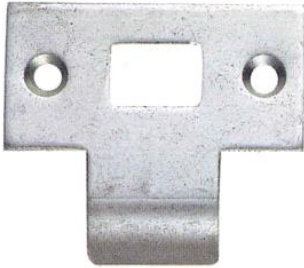
FB710 + FL001



AUXILIARY HARDWARE

STRIKE PLATES FOR UNIVERSAL FLUSH BOLTS

For Self-Latching Flush Bolt Use



1. Frame Lip Strike



2. Bolt Head Guide



3. Faceplate of
Plunger Housing

For Automatic Flush Bolt Use



4. Frame & Sill Strike



5. Bolt Head Guide



6. Faceplate of Cam
Housing



7. Active Door Strike

Strike Plate Information

- Material: All strike plates are made by stainless steel
- Dimensions: See page 39 & 40.
- Finishes: See page 38.

* The flush bolt comes with these accessories (No. 1-3, or No. 4-7). No separate ordering is required.