



INSTALLATION INSTRUCTIONS

AF Series Fiberglass Doors & Frames

Includes seal installation supplement for AF-100 Pultruded Fiberglass Door with 20-minute fire rating.

Read all instructions before beginning installation.

- These instructions are provided to help prevent installation problems caused by most common errors. They are strictly recommendations and are not intended to be a step-by-step, foolproof installation checklist suitable for every situation. There are many variations of installations not covered in these instructions that Special-Lite assumes are general construction knowledge to an experienced installer.
- **WARNING: Failure to follow good practice during installation of Special-Lite products will void the warranty.** Selection of an experienced installer is the sole responsibility of the project owner or responsible party.
- If you have any questions about the installation of your project, please call 1-800-821-6531 and ask for a Special-Lite Customer Service Representative. You can find these and other Installation Instructions and videos by visiting special-lite.com/installation-instructions or by scanning the QR code.

Installation
Resources:



Installation Kit:

An optional Installation Kit is available to order. See page 3 for details.



Installation Instructions - AF Series Fiberglass Doors & Frames

1. Verify new frame and door components.

- A. Inspect all packaging and its contents for damage before installation.
- B. If the frame is factory welded or assembled, do not remove any banding tape prior to removing it from the box.
- C. Check work orders or prints to ensure all materials have arrived before starting the job.
- D. Measure the new framing and doors to make sure everything is sized and located correctly. This is especially important to verify before demolition in retrofit situations.

2. Inspect rough opening and existing constructed wall.

- A. Review existing wall construction and follow the correct anchor instructions below.
- B. Check plans for door swing to determine locations of hinge and strike jambs.
- C. Measure the opening and verify it is 1/2" wider and 1/4" taller in height than the frame.
- D. Check all existing constructed walls, headers, and floor for plumb and level. If not level, mark the low side to shim later.

3. Identify the anchor type ordered for framing and follow the corresponding frame anchoring instructions.

Drywall Anchoring

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Installation Instructions - AF Series Fiberglass Doors & Frames

4. Optional Frame Install Kit—Parts List

NOTE: The Frame Install Kit is only provided upon order. Any references to “provided” in the install instructions refer to the factory provided items only.


Standard Frame Install Kit (optional) consists of:

- (16) EZ Shims
- (8) 4" Tapcon (Crete-Flex) T-25 Torx Head S.S. Anchors
- (2) 6" Tapcon (Crete-Flex) T-25 Torx Head S.S. Anchors
- (4) #8 x 1-3/4" SS Flat Head Screws
- (8) 3-1/4" Hex Wash Head S.S. Anchors
- (15) Anchor Plugs (Color Black)
- (16) #10 x 3/4" SS Pan Head Sheet Metal Screws

NOTE: Standard Frame Install Kit items are compatible with TDI-DR-715, TDI-DR-756, FL-17714, and FL-19664 approved hurricane ratings.

Guide: See below for list of Standard Frame Install Kit items that are used for different anchoring conditions.

Frame Install Kit Anchor Guide	DRYWALL ANCHORING				MASONRY ANCHORING		
	Existing Opening		New Construction		Existing Opening		New Construction
	Wrap - Wood Studs (KD Only)	Punch & Dimple Wrap - Wood or Metal Studs (KD Only)	Jamb Anchor Tuck - Metal Studs	Punch and Dimple Tuck - Wood or Metal Studs	Standard Anchor - Existing Masonry	Concealed Anchor - Existing Masonry	T-Straps with Sill Anchor Block - New Concrete Block
PARTS							
EZ Shims	X	X	X	X	X	X	Frame Install Kit is optional for shims and tapcons. T-Straps will be provided per opening.
4" Tapcon (Crete-Flex) T-25 Torx Head S.S. Anchors	X	X	X	X	X	X	
6" Tapcon (Crete-Flex) T-25 Torx Head S.S. Anchors	X	X	X	X	X	X	
#8 x 1-3/4" S.S. Flat Head Screws	X						
3-1/4" Hex Washer Head S.S. Anchors						X	
Anchor Plugs (Color Black)						X	
#10 x 3/4" SS Pan Head Sheet Metal Screws			X				

 Applicable to AF-FR

Heavy Hurricane Frame Install Kit (optional) consists of:

- (16) EZ Shims
- (28) 4" Tapcon (Crete-Flex) T-25 Torx Head S.S. Anchors
- (8) 6" Tapcon (Crete-Flex) T-25 Torx Head S.S. Anchors

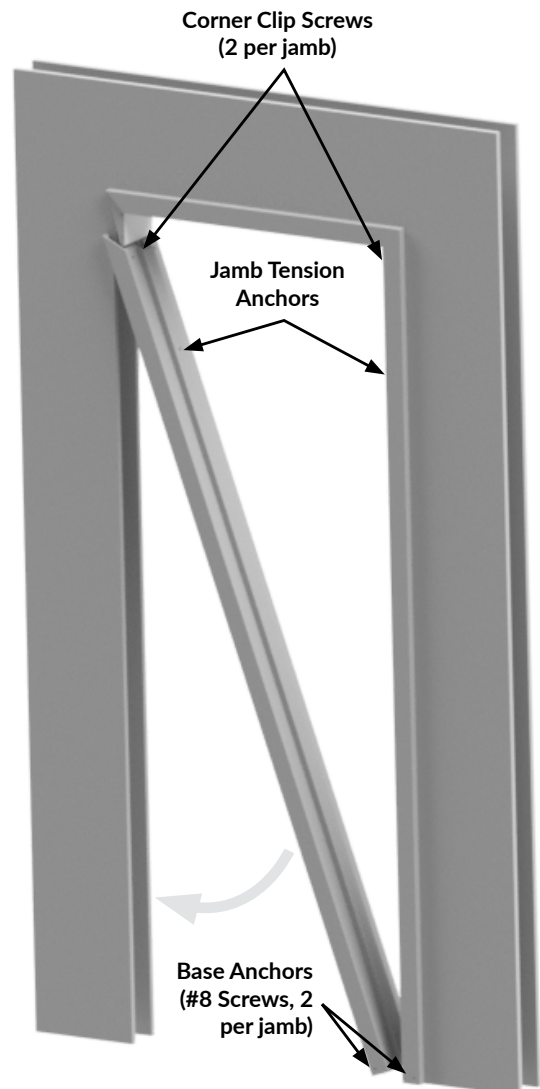
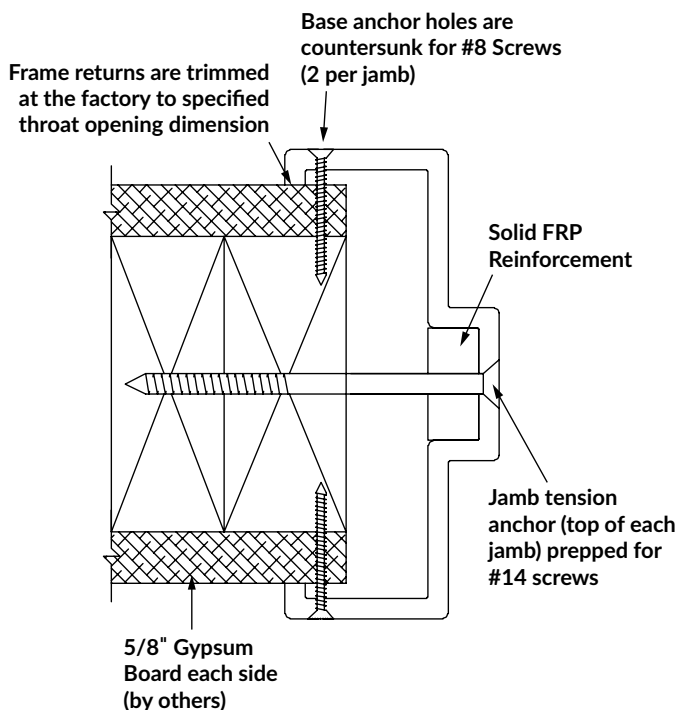
NOTE: Heavy Hurricane Frame Install Kit items are compatible with TDI-DR-968, FL-21856, and FL-19927 approved hurricane ratings.

Installation Instructions - AF Series Fiberglass Doors & Frames

Drywall Anchoring | Existing Opening

Wrap - Wood Studs (KD Only)

- A. Hold the header while sliding in one of the jambs and fasten the corner clip to the jamb with the provided #12 x 3/4" stainless steel sheet metal screws.
- B. Place the other jamb in as shown and use the #12 x 3/4" stainless steel sheet metal screws to fasten to corner clip.
- C. If floor is not level, shim the low side of frame jamb using a straight edge and level.
- D. Measure the opening at several points to make sure they match the print dimensions and that the jambs are plumb (shim as needed), before placing the jamb tension anchor at the top.
- E. Place the threshold or spreader bar the same length as the door opening to keep the strike and hinge jamb square to the header.
- F. Once the opening measures correct, secure the base anchor fasteners (#8 Screws) through the interior and exterior faces at the bottom of both jambs.



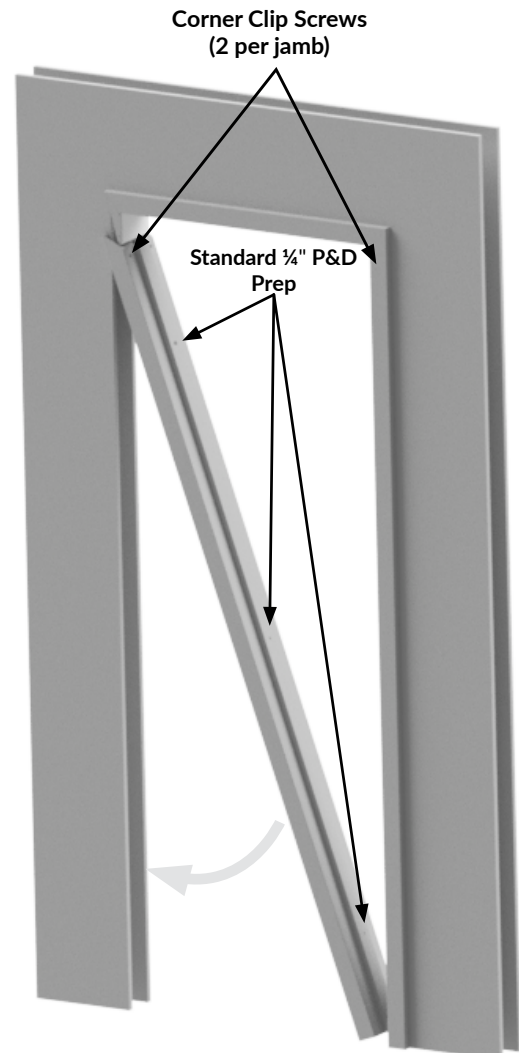
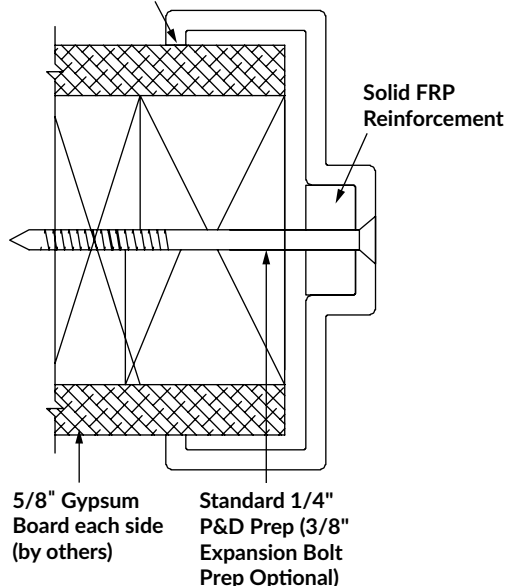
Installation Instructions - AF Series Fiberglass Doors & Frames

Drywall Anchoring | Existing Opening

Punch & Dimple Wrap - Wood or Metal Studs (KD Only)

- A. Hold the header while sliding in one of the jambs and fasten the corner clip to jamb with the provided #12 x 3/4" stainless steel sheet metal screws.
- B. Place the other jamb in as shown and use the #12 x 3/4" stainless steel sheet metal screws to fasten to corner clip.
- C. If floor is not level, shim the low side of frame jamb using a straight edge and level.
- D. Measure the opening at several points to make sure they match the print dimensions and that the jambs are plumb.
- E. Place the threshold or spreader bar the same length as the door opening and use it to keep the strike and hinge jamb square to the top.
- F. Secure the hinge jamb to the stud using Stainless Steel 1/4" x 4" Flat Head Wood Screw (for wood studs), or Stainless Steel 1/4" x 4" Flat Head Sheet Metal Screw (Metal Studs) . Check measurements after securing as it's possible for the jambs to move if they are fastened too tight. If this occurs, shim behind the anchor points.
- G. If the door is on site, we recommend hanging the door before anchoring the strike jamb to verify an 1/8" reveal is maintained between the door and frame.
- H. Once the door closes and has the proper reveal, fasten the remaining anchors into the strike jamb.

Frame returns are trimmed at the factory to specified throat opening dimension

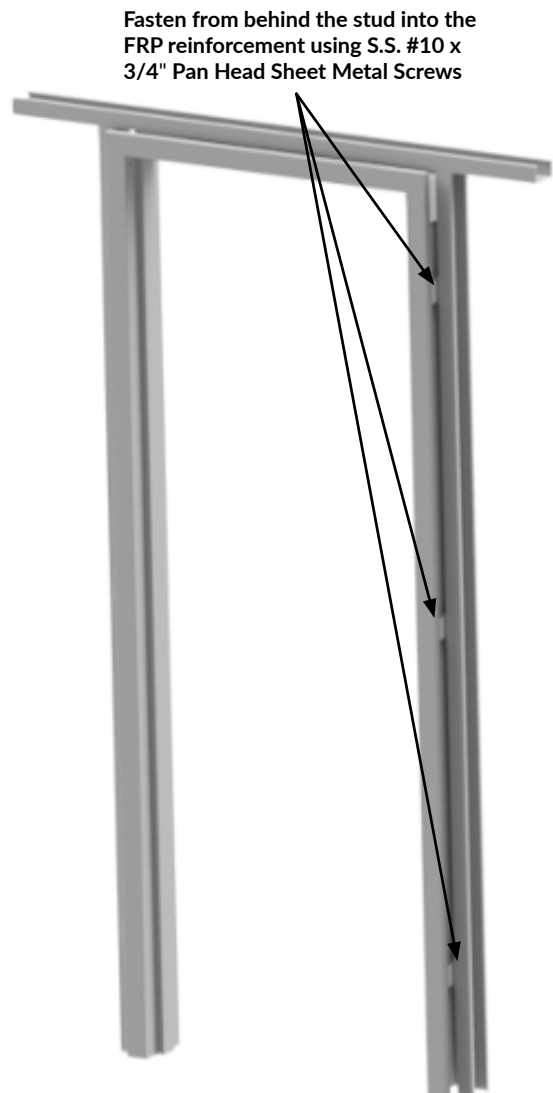
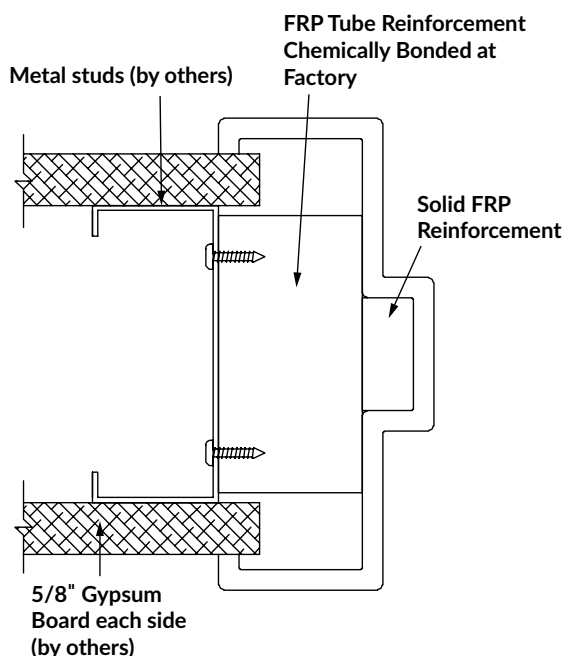


Installation Instructions - AF Series Fiberglass Doors & Frames

Drywall Anchoring | New Construction

Jamb Anchor Tuck - Metal Studs

- A. If a knock down frame, assemble the frame by sliding the jambs onto the header corner clips and fasten using the supplied #12 x 3/4" stainless steel sheet metal screws.
- B. Place frame in the opening.
- C. If floor is not level, shim the low side of frame jamb using a straight edge and level.
- D. Shim the jambs so the frame is tight up against the studs. Measure the opening at several points to make sure they match the print dimensions and that the jambs are plumb (shim as needed).
- E. Fasten from behind the stud into the FRP reinforcement at the top using S.S. #10 x 3/4" Pan Head Sheet Metal Screws. The frame must be centered on stud to have clearance for drywall to be tucked under the frame returns on both sides.
- F. Place the threshold or spreader bar the same length as the door opening and use it to keep the strike and hinge jamb square to the top.
- G. Secure the remaining hinge jamb anchors and shim accordingly.
- H. If the door is on site, we recommend hanging the door before anchoring the strike jamb to verify an 1/8" reveal is maintained between the door and frame.
- I. Once the door closes and has proper reveal, fasten the anchors (S.S. #10 x 3/4" Pan Head Sheet Metal Screws) into the strike jamb reinforcements.

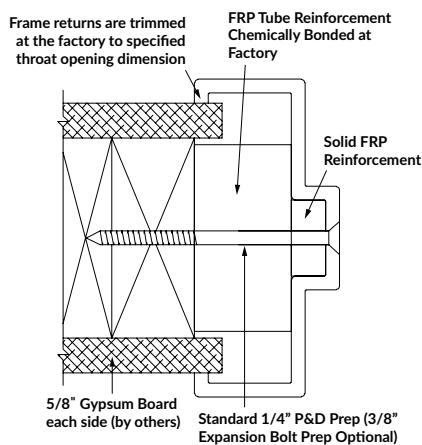


Installation Instructions - AF Series Fiberglass Doors & Frames

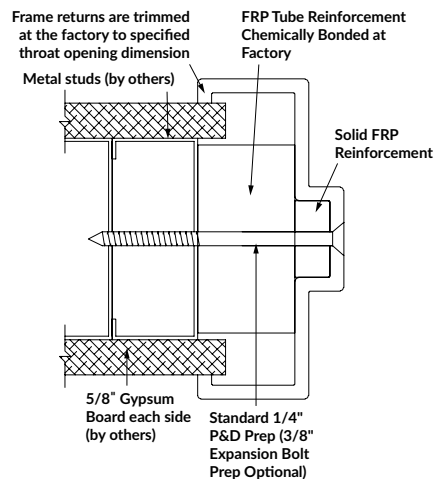
Drywall Anchoring | New Construction

Punch & Dimple Tuck - Wood or Metal Studs

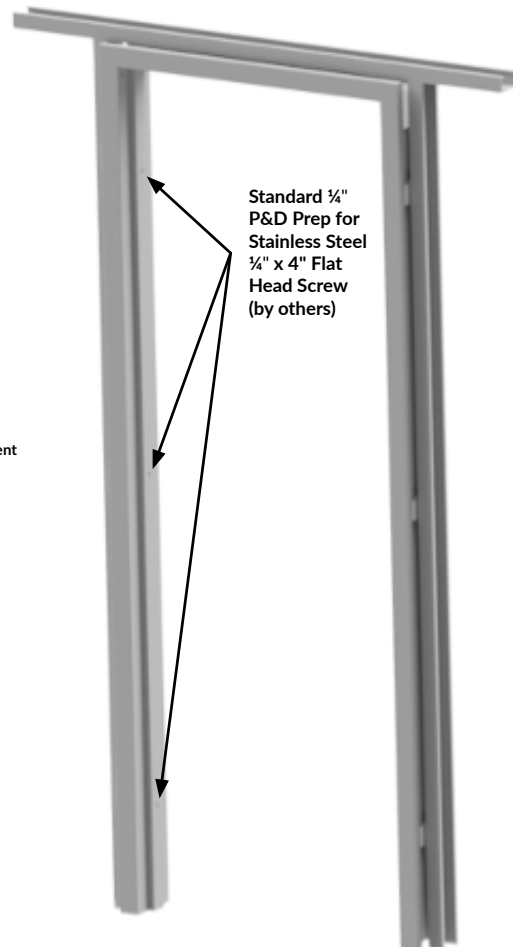
- A. If a knock down frame, assemble the frame by sliding the jambs onto the header corner clips and fasten using the supplied #12 x 3/4" stainless steel sheet metal screws.
- B. Place frame in the opening.
- C. If floor is not level, shim the low side of frame jamb using a straight edge and level.
- D. Shim the jambs so the frame is tight up against the studs. Measure the opening at several points to make sure they match the print dimensions and that the jambs are plumb (shim as needed).
- E. Anchor the top of hinge jamb using the Stainless Steel 1/4" x 4" Flat Head Wood Screw for wood studs and Stainless Steel 1/4" x 4" Flat Head Sheet Metal Screw for metal studs. The frame must be centered on stud to have clearance for drywall to be tucked under the frame returns on both sides.
- F. Place the threshold or spreader bar the same length as the door opening and use it to keep the strike and hinge jamb square to the top.
- G. Finish securing the hinge jamb to the stud using the remaining anchor locations and shim accordingly.
- H. If the door is on site, we recommend hanging the door before anchoring the strike jamb to verify an 1/8" reveal is maintained between the door and frame.
- I. Once the door closes and has proper reveal, fasten the strike jamb anchors through the punch and dimples to the studs using S.S. 1/4" x 4" Flat Head Sheet Metal Screws.



Wood Studs



Metal Studs

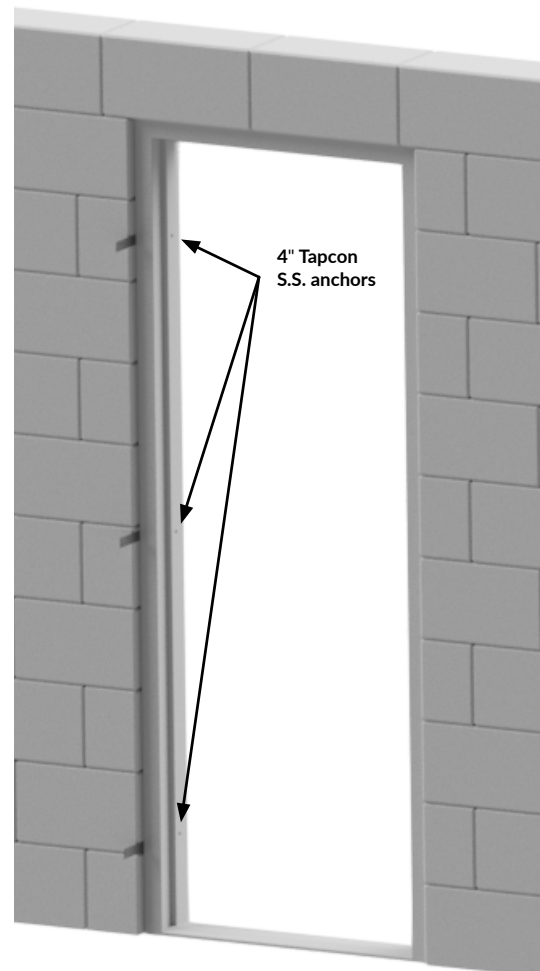
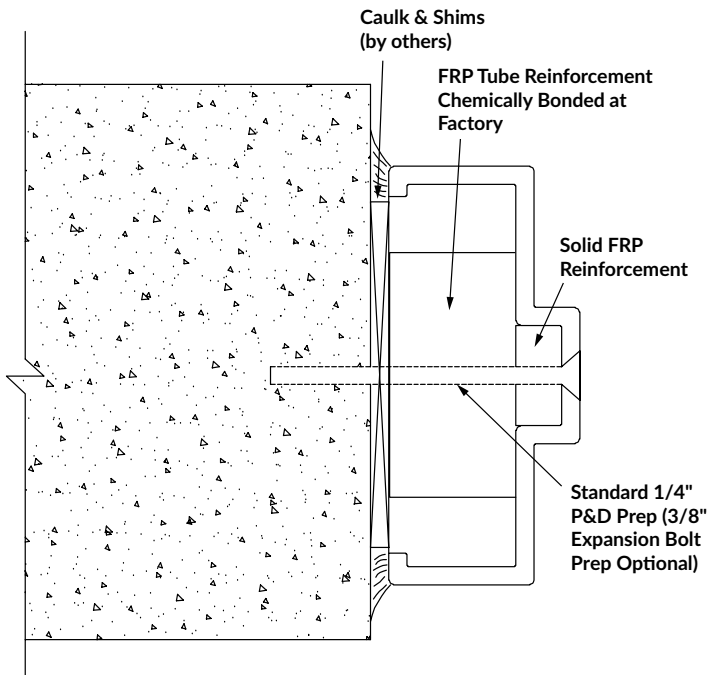


Installation Instructions - AF Series Fiberglass Doors & Frames

Masonry Anchoring | Existing Opening

Standard Anchor - Existing Masonry

- A. If a knock down frame, assemble the frame by sliding the jambs onto the header corner clips and fasten using the supplied #12 x 3/4" stainless steel sheet metal screws. Then place in the opening.
- B. If floor is not level, shim the low side of frame jamb using a straight edge and level. If installation kit was ordered, refer to item list on page 3.
- C. Shim the jambs so the frame is tight up against the opening. Measure the frame opening at several points to make sure they match the print dimensions and that the jambs are plumb (shim as needed).
- D. Place the threshold or spreader bar the same length as the door opening and use it to keep the strike and hinge jamb square to the top.
- E. Drill the mounting holes with a 7/32" x 5-1/2" masonry bit in the rough opening through the dimples on the hinge jamb. Using #14 Tapcon anchors, check the frame stays plumb and square as you install the anchors and adjust shims.
- F. If the door is on site, we recommend hanging the door before anchoring the strike jamb to verify an 1/8" reveal is maintained between the door and frame.
- G. Once the door closes and has proper reveal, fasten the strike jamb to the opening using the #14 Tapcon anchors.

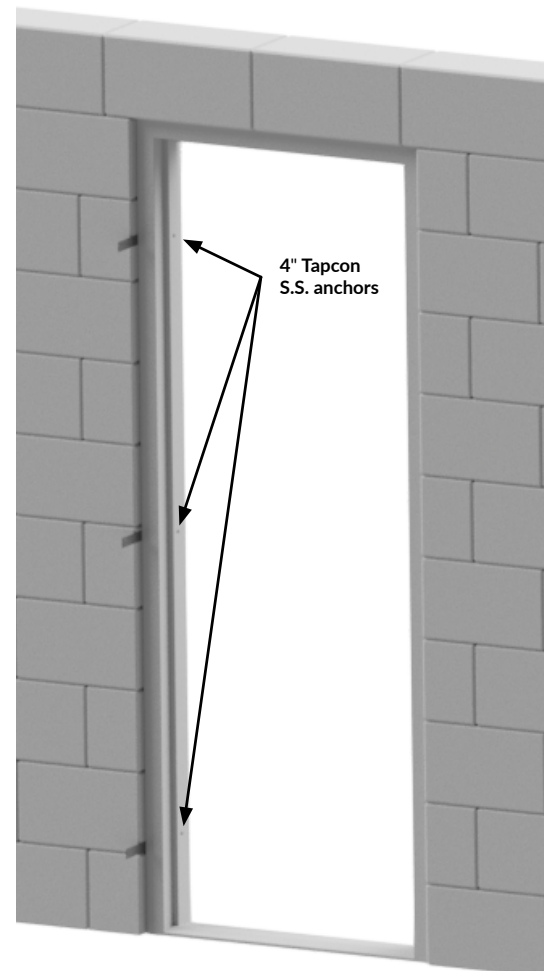
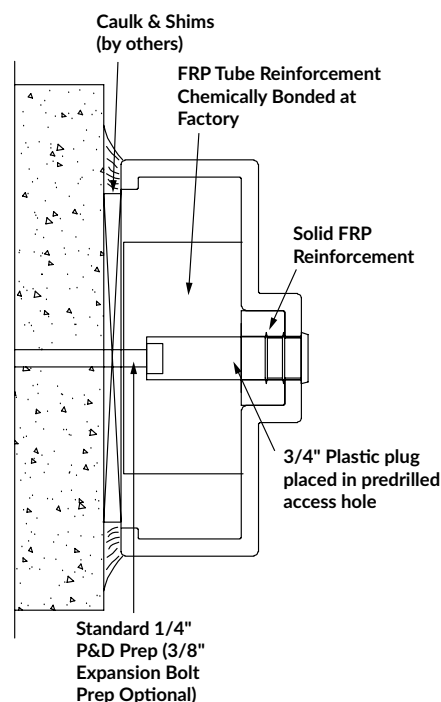


Installation Instructions - AF Series Fiberglass Doors & Frames

Masonry Anchoring | Existing Opening

Concealed Anchor - Existing Masonry

- A. If a knock down frame, assemble the frame by sliding the jambs onto the header corner clips and fasten them using the supplied #12 x 3/4" stainless steel sheet metal screws. Then place in the opening.
- B. If floor is not level, shim the low side of frame jamb using a straight edge and level. If installation kit was ordered, refer to item list on page 3.
- C. Shim the jambs so the frame is tight up against the opening. Measure the frame opening at several points to make sure they match the print dimensions and that the jambs are plumb (shim as needed).
- D. Place the threshold or spreader bar the same length as the door opening and use it to keep the strike and hinge jamb square to the top.
- E. Drill the mounting holes with a 7/32" x 5-1/2" masonry bit in the rough opening through the pre-drilled access holes on the hinge jamb. Using 3-1/4" Hex Wash Head S.S. anchors, make sure the frame stays plumb and square as you install the anchors and adjust shims.
- F. If the door is on site, we recommend hanging the door before anchoring the strike jamb to verify an 1/8" reveal is maintained between the door and frame.
- G. Once the door closes and has proper reveal, fasten the strike jamb to the opening using the 3-1/4" Hex Wash Head S.S. anchors.
- H. Place the 3/4" plastic plugs in the jamb access holes to conceal the anchors.

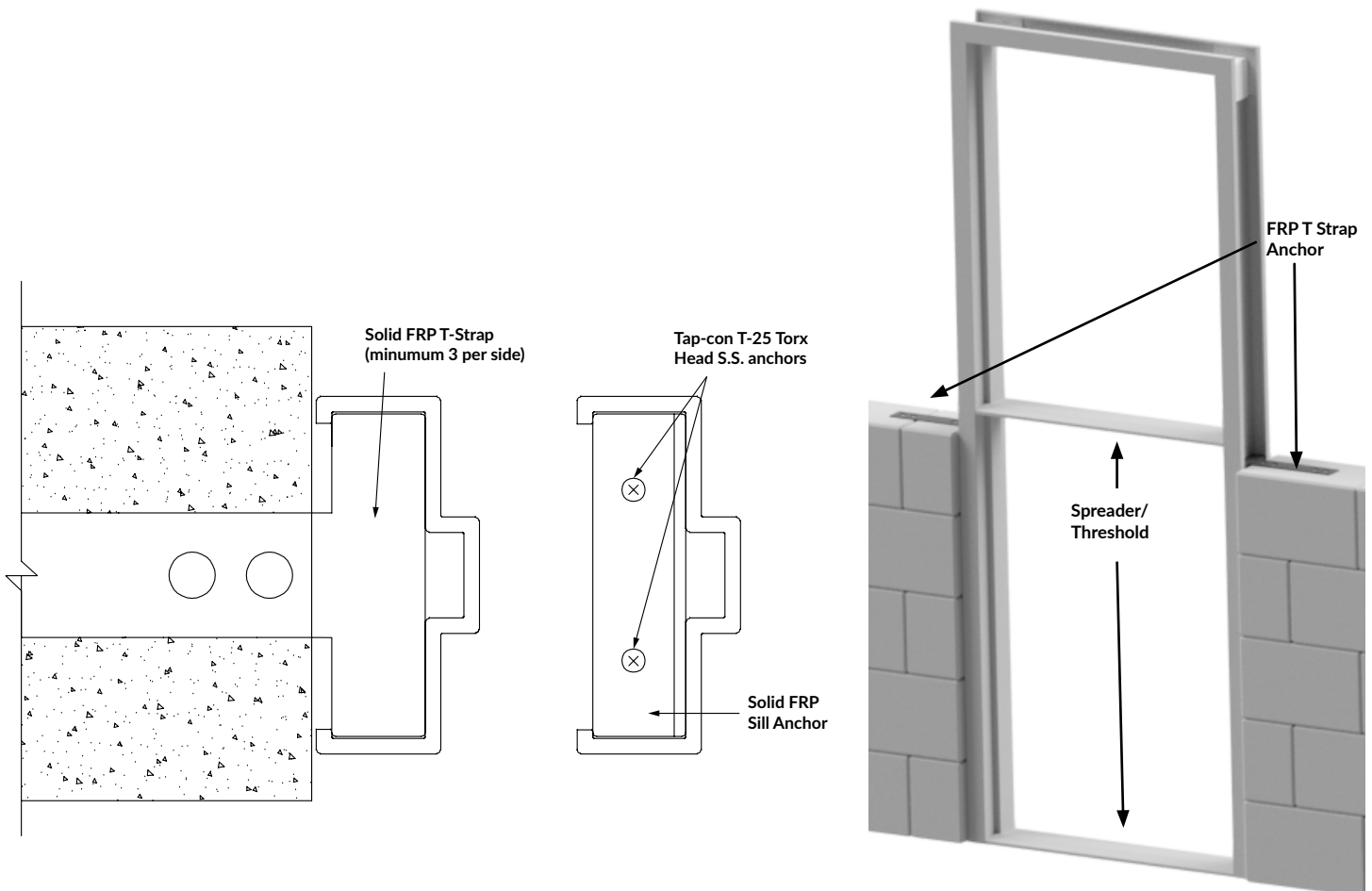


Installation Instructions - AF Series Fiberglass Doors & Frames

Masonry Anchoring | New Construction

T-Straps with Sill Anchor - New Concrete Block

- A. Mark the location of the frame and fasten the solid FRP sill anchors into the floor for the jambs to slide onto and help keep the frame upright for new concrete block walls.
- B. If a knock down frame, assemble the frame by sliding the jambs onto the header corner clips and fasten using the supplied #12-3/4" stainless steel sheet metal screws. Then place in the opening.
- C. If floor is not level, shim the low side of frame jamb using a straight edge and level. If installation kit was ordered, refer to item list on page 3.
- D. Set spreader/threshold and fasten to the floor once frame is square (please refer to **Step 5-B. on Page 11** for threshold installation). Use temporary bracing to keep the frame stable while new concrete blocks are built around it.
- E. Use a second spreader at the midpoint of the frame as shown to maintain door opening dimensions.
- F. While block courses are laid up, install FRP T-strap anchors, and add grout while continually checking plumb and square. The FRP T-strap anchors are installed at hinge center-line locations and corresponding locations on strike jamb.



Installation Instructions - AF Series Fiberglass Doors & Frames

4. Hang the Doors (follow the steps below for continuous or butt hinges based on your order).

Hanging Doors with Butt Hinges

WARNING: If the stile edge of the doors and rabbet of the frames are provided prepped for butt hinges, use only the stainless-steel sheet metal screws provided (#12-11x1-1/2) (SL-SC-140). **DO NOT USE MACHINE SCREWS, SELF-DRILLING, SELF-TAPPING, OR COMBINATION SCREWS!** Hinge screws are best installed with a screw gun that has an adjustable clutch set at the lowest setting to seat the screw.

Important: When fastening screws in fiberglass frames/doors, the sheet metal screws are cutting threads into the material. It is best to use a #3 Phillips power bit to drive the screw in part way and then back it out. Repeat this until the screw is completely seated.

- A. Install the hinges to the door using the stainless steel sheet metal screws provided (#12-11x1-1/2)(SL-SC-140).
- B. Hang the door(s) by starting with 1 screw in each butt hinge on jamb at top, middle, and bottom.
- C. Close the door and check for Special-Lite recommended clearances:
 - 1/8" at strike jamb on single doors
 - 1/4" at meeting stiles
 - 1/8" at head
- D. Shimming behind the hinges and adjusting the frame may be required to maintain the recommended clearances around the door.
- E. Install remaining hinge screws in frame.

Hanging Doors with Continuous Gear Hinges

WARNING: If the stile edge of the doors and rabbet of the frames are provided prepped for continuous hinges, use only the stainless-steel sheet metal screws provided (#12-11x1-1/2) (SL-SC-140). **DO NOT USE MACHINE SCREWS, SELF-DRILLING, SELF-TAPPING, OR COMBINATION SCREWS!** Hinge screws are best installed with a screw gun that has an adjustable clutch set at the lowest setting to seat the screw.

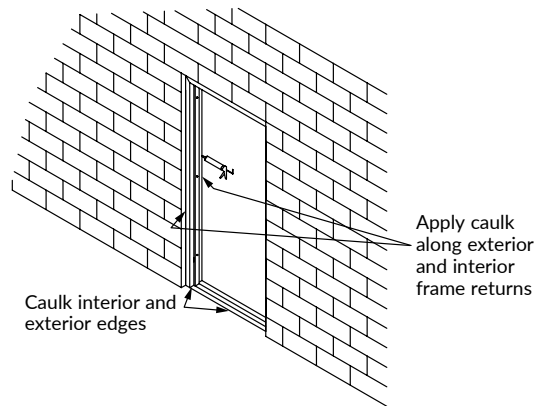
Important: When fastening screws in fiberglass frames/doors, the sheet metal screws are cutting threads into the material. It is best to use a #3 Phillips power bit to drive the screw in part way and then back it out. Repeat this until the screw is completely seated.

- A. If the hinge needs to be prepped for in the field, use the hinge manufacturer's templates and pre-drill the screw holes with a 5/32" drill bit.
- B. Hang the door(s) by starting with 2 screws at top, 1 in the middle and 1 at the bottom.
- C. Close the door and check for Special-Lite recommended clearances:
 - 1/8" at strike jamb on single doors
 - 1/4" at meeting stiles
 - 1/8" at head
- D. Shimming behind the hinge and adjusting the frame may be required to maintain the recommended clearances around the door.
- E. Install remaining hinge screws in frame.

Installation Instructions - AF Series Fiberglass Doors & Frames

5. Seal the frame perimeters and install threshold if required.

- A. Apply caulk along the interior and exterior of frame return edges.
- B. If a threshold is required, place in position and check for proper clearance. Drill and countersink for a 1/4" x 2-1/4" Stainless Steel Flat Head Tapcon. Be sure to set threshold in caulk to prevent leaking. Secure threshold to floor with Tapcon fasteners.

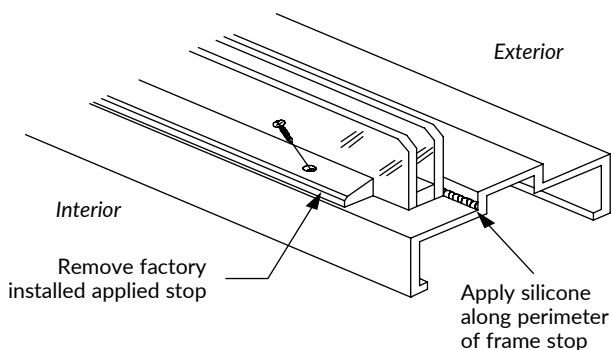


6. Install hardware.

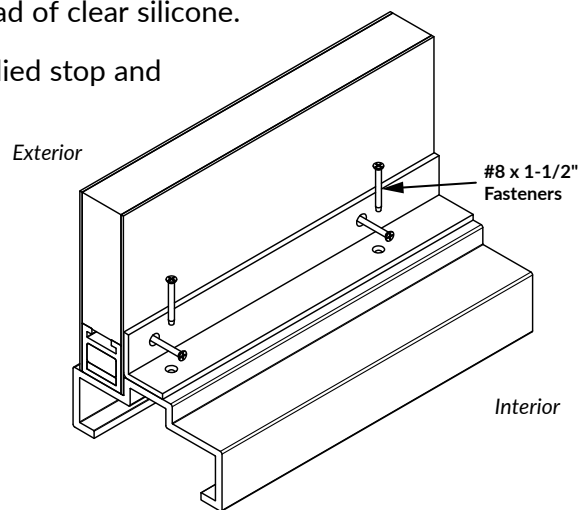
- A. Consult hardware manufacturer for proper and or appropriate use and installation.
- B. **AF Pultruded Fiberglass Doors (AF-100):** mount common surface hardware using SS sheet metal screws, wood screws, or through bolts. Exit devices must be through bolted. (Do not use machine screws, self-drilling, self-tapping or combination screws).
AF Composite Fiberglass Doors (AF-200, AF-217, AF-219, AF-219-1, AF-220): Surface hardware must be through-bolted.

7. Complete frame glazing (transoms, side-lites, borrowed lites).

- A. Remove glazing applied stop from frame opening.
- B. Along the perimeter of the frame stop apply a bead of clear silicone.
- C. Install glass or panel and secure in place with applied stop and stainless-steel sheet metal screws provided.



Standard Glass or Panel Installation

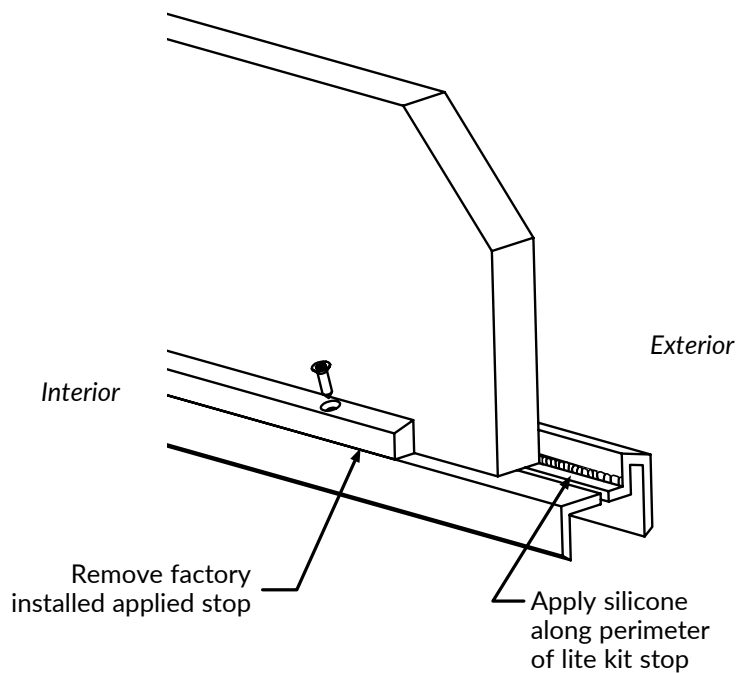


1 3/4" AF Panel Installation

Installation Instructions - AF Series Fiberglass Doors & Frames

8. Complete door vision lite glazing.

- A. Remove glazing applied stop from vision lite kit opening. Along the perimeter of the glazing stop apply a bead of clear silicone.
- B. Install glass or panel and secure in place with applied stop and stainless-steel sheet metal screws provided.



9. Clean and inspect doors and frames.

- A. Wipe down surfaces with mild soap and water.
- B. Check door for nicks and scratches.
- C. Touch up kit for painted products provided for minor imperfections.

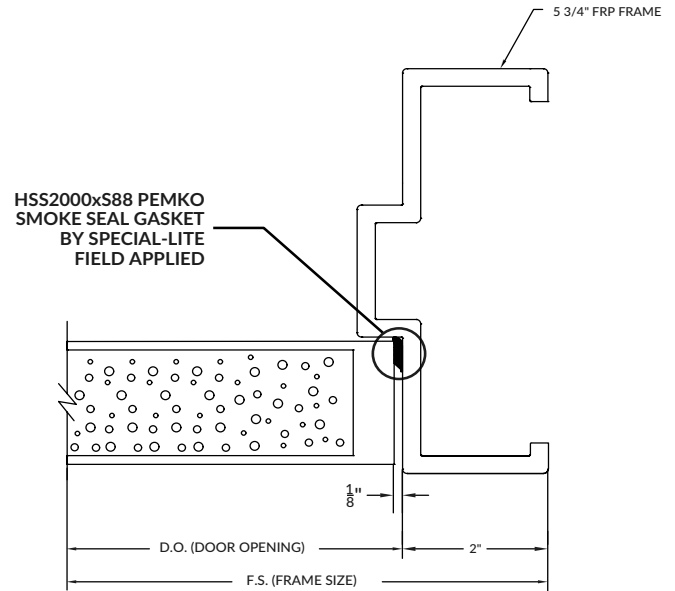
Installation Instructions - AF Series Fiberglass Doors & Frames

Seal application for the AF-100 Fiberglass Door with 20-Minute Fire Rating*

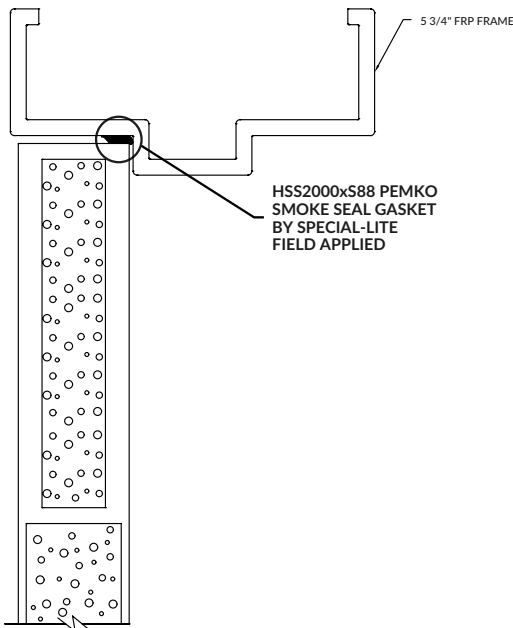
The AF-100 Pultruded Fiberglass Door is available with a 20-Minute Fire Rating. If this option is selected, these openings will come from the factory with all the necessary Category H Smoke and Draft control gaskets to be applied in the field. These seals must be installed to meet the 20-Minute Fire Rating.

Note: Existing non-rated doors cannot be modified for a 20-Minute Rating. The 20-min fire-rated option must be selected at the time of order.

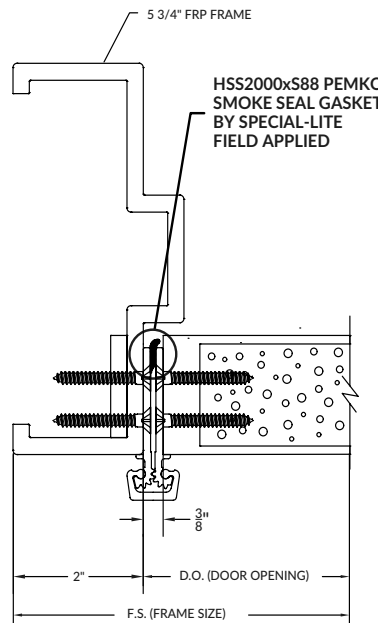
[Please refer to the configuration sheet for all limitations.](#)



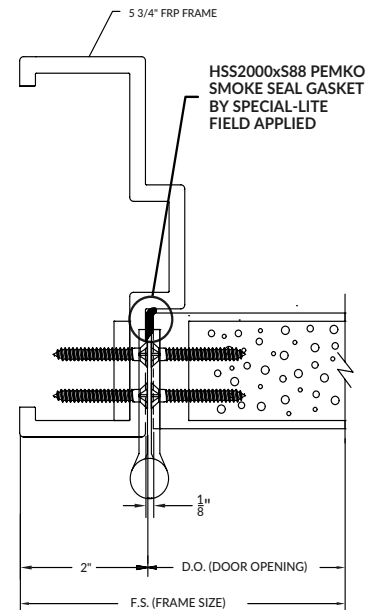
**AF-100 with 20-minute Fire Rating
LOCK JAMB DETAIL**



**AF-100 with 20-minute Fire Rating
HEAD DETAIL**



**AF-100 with 20-minute Fire Rating
CONTINUOUS HINGE JAMB DETAIL**



**AF-100 with 20-minute Fire Rating
BUTT HINGE JAMB DETAIL**

*20-Minute Fire Rating available on the AF-100 model ONLY. Not available with vision lites.