



INSTALLATION INSTRUCTIONS

AF-FR Series Doors & Frames

IMPORTANT: 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.

Selection of an experienced installer is the sole responsibility of the project owner or responsible party. **Failure to follow good practice in installation will void the warranty on Special-Lite products.**

If you have any questions about installation techniques for your particular project, please call 1-800-821-6531 and ask for a Special-Lite Customer Service Representative.

This and other Installation Instructions can be found on Special-Lite's web site at www.special-lite.com.



AF-FR Series Fiberglass Doors & Frames

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

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.
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						T-Straps will be provided per opening.
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

AF-FR Series Doors & Frames

CHECK NEW FRAME & DOOR COMPONENTS

1. It is important to field inspect all cartons and crates for damage as well as contents of package for damages.
2. Framing is always K.D.
3. Check work orders or a print to ensure proper material has been shipped before starting job.
4. Measure the new framing and door(s) to make sure everything is sized and located correctly. This is especially important in retrofit situations before demolition of an existing opening is commenced.

ROUGH OPENING AND EXISTING CONSTRUCTED WALL INSPECTION

5. Review existing wall construction to determine type of construction
 - Masonry
 - Stud and drywall
 - CMU
6. Check plans for swing and location of jambs in structure.
7. Measure all framing.
8. Measure the opening to verify it is $\frac{1}{2}$ " larger in width and $\frac{1}{4}$ " taller in height.
9. Check all existing constructed walls and headers for plumb and level.
10. Check the top of the opening and floor to make sure they are level.
11. Determine high side of floor.

NOTE:

Use a level and straight edge to determine the high side of the floor.

ASSEMBLE THE FRAME

12. Slide head onto jamb legs. Install the provided #12 x $\frac{3}{4}$ " stainless steel sheet metal screws in the rabbets at the top of the frame legs (4 places)

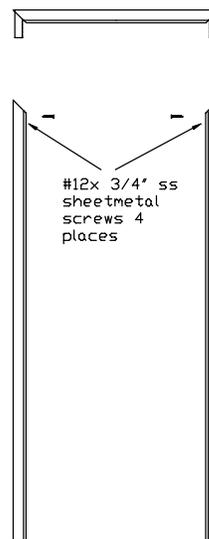


FIGURE A

SET FRAME IN OPENING

NOTE:

The door frame may be set flush with one side of the wall, recessed, or centered.

13. Upon determination of frame location, set frame into position.

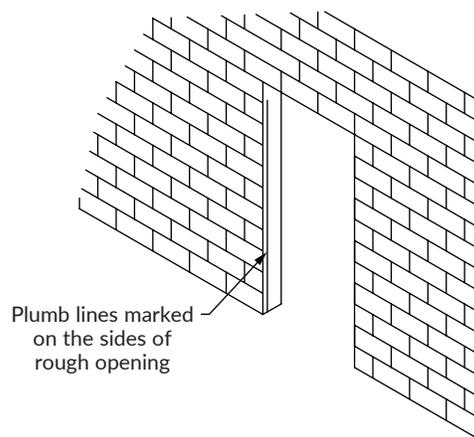


FIGURE B

AF-FR Series Doors & Frames

ANCHORING FRAME INTO ROUGH OPENING (existing masonry construction)

NOTE:

An Installation Kit (optional) can be ordered. Refer to Page 3.

14. When frame is in position, place the threshold or a spreader bar the same length as the door opening to keep the strike and hinge jamb parallel.
15. Use fire-rated tapered shims while centering the frame in the opening making sure the door jambs are plum and level, and shim under the jamb if necessary to level the head.

NOTE:

Frames are factory punched and dimpled at each hinge location and corresponding location on the strike jamb. #12 packaging screws must be removed from top and bottom dimple of each jamb at this time.

16. 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. As the fasteners (Tap Con #14 Torx Flat Head) are installed in the hinge jamb with a T-25 Torx bit, the jamb may move out of plumb or square. Shims can be added, removed, or adjusted as needed to keep the jamb in position.

NOTE:

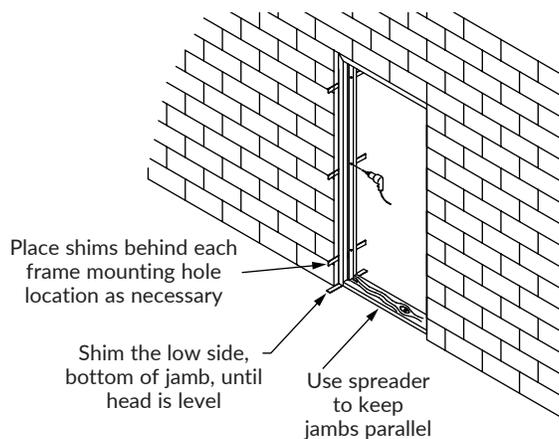


FIGURE C

Anchors must be at least 5" long in order to accommodate for the increase in face width when using a 4" head. If the door is on site then the installer might find it easier to hang the door after the hinge jamb is fastened to the wall. Then close the door into the opening and adjust the frame as needed to maintain an even margin (1/8") across the top of the door by placing shims at the bottom of the strike jamb to hold it in place. The strike jamb is installed in the same manner as the hinge jamb by using shims to maintain a 1/8" latch jamb clearance. Make sure that the head is still level and then the strike jamb is installed in the same manner as the hinge jamb.

HANG THE DOOR(S)

NOTE:

If the stile edge of the door and rabbet of the frame have been sized for a continuous hinge or provided field prepped for butt hinges, use only 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 drill or screw gun that has an adjustable clutch set at the lowest setting to seat the screw.

Shimming behind hinges and adjusting the frame may be required to maintain the recommended clearances.

Installation of doors with butt hinges

17. Install the hinges to the door using the stainless steel sheet metal screws provided.
18. Hang door(s) in frame with 3 screws in hinge jamb—one at top, middle and bottom.
19. Close door and check for recommended clearances:
 - 1/8" at strike jamb on single doors
 - 3/16" at meeting stiles
 - 1/8" at head. Adjust as needed.
20. Install remaining hinge screws in frame.

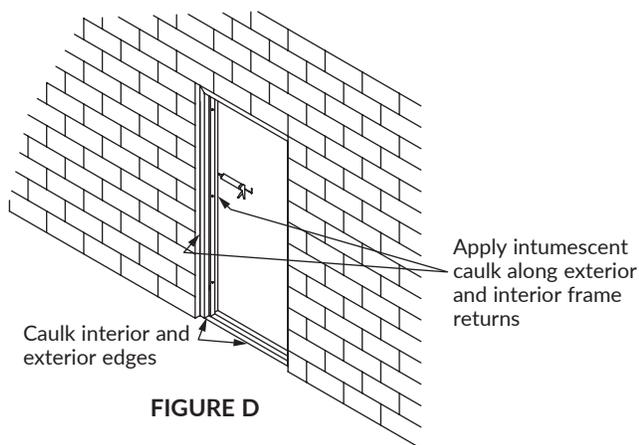
Installation of doors with continuous hinge

21. If the hinge needs to be prepped in the field, use the hinge manufacturer's recommendations and pre-drill the screw holes with a 5/32" drill bit.
22. Using a # 3 Phillips power bit, drive the screw in part way. Then reverse all the way out and repeat until screw is seated all the way. This may take 2-3 cycles. Remember you are creating a threaded hole in the fiberglass reinforcement.
23. Hang door(s) in frame with 3 screws in hinge jamb—one at top, middle and bottom.
24. Close door and check for recommended clearances:
 - 1/8" at strike jamb on single doors
 - 3/16" at meeting stiles
 - 1/8" at head. Adjust as needed.
25. Install remaining hinge screws in frame.

AF-FR Series Doors & Frames

SEAL FRAME PERIMETERS

26. Apply intumescent caulk along the interior and exterior frame return edges.
27. If a threshold is required, place in position and check for proper door clearance. Be sure to set threshold in caulk to prevent threshold from leaking. Secure threshold with proper fasteners.



HARDWARE INSTALLATION

28. Consult manufacturer for proper and or appropriate use and installation.

NOTE:

Use only stainless steel sheet metal screws provided by Special-Lite or wood screws from the hardware manufacture. Do not use machine screws, self drilling and self tapping or combination screws! Closers and surface mounted hardware must be through-bolted.

Raceways must be installed horizontal and can not be installed on an angle. Raceway must be horizontally in straight line with Electric Power Transfer or Electric Hinge Wire Connection or Wire Loop Connection with the Electrified Hardware on latch side of door for proper installation.

29. Field adjustment may be necessary. All hardware must be field adjusted after door is hung, for proper function. (Strikes, closers, mullions, etc.)

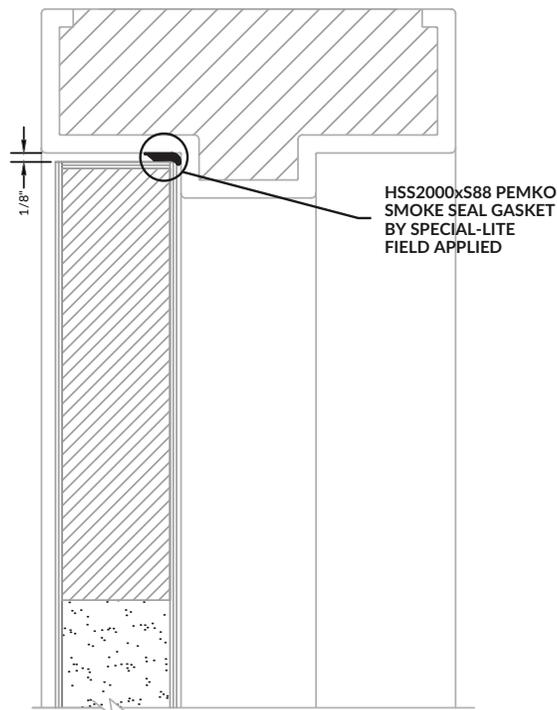
CLEAN AND INSPECT DOOR & FRAMES

30. Wipe down surface with mild soap and water.
31. Check door for nicks and scratches. Touch up kit for painted products provided for minor imperfections.

SMOKE SEAL APPLICATION

32. After the door is installed into the frame, the gaskets and smoke seals supplied by Special-Lite must be installed per manufacturer's instructions. Pemko HSS2000xS88 smoke seal (or listed and labeled equivalent) must be applied to both jambs and header and Pemko S771 smoke seal (or listed and labeled equivalent) must be installed between pairs to meet the requirements of NFPA 80 standards and to meet the fire door listing rating.

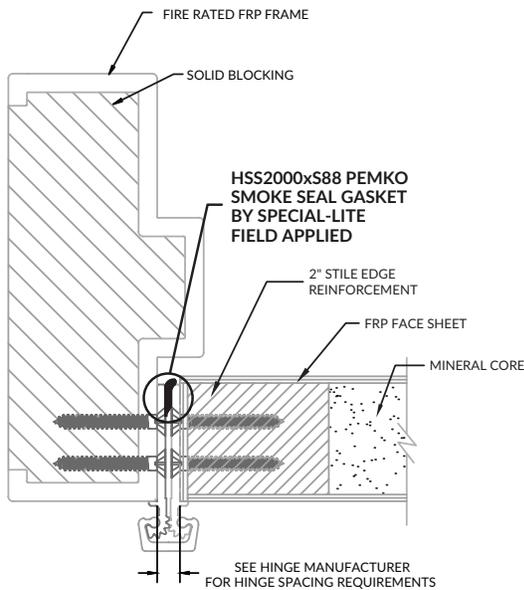
The diagrams below detail the installation locations for the gasket and smoke seals on jambs, headers, mullions, and between pairs of doors. If glass is to be installed in vision lites in the field, the glazing tape provided should be used. Uneven tightening, or over tightening can cause glass breakage.



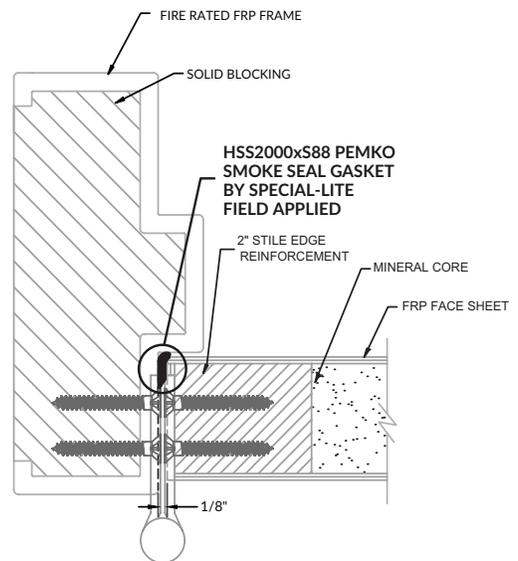
DOOR HEAD DETAIL

AF-FR Series Doors & Frames

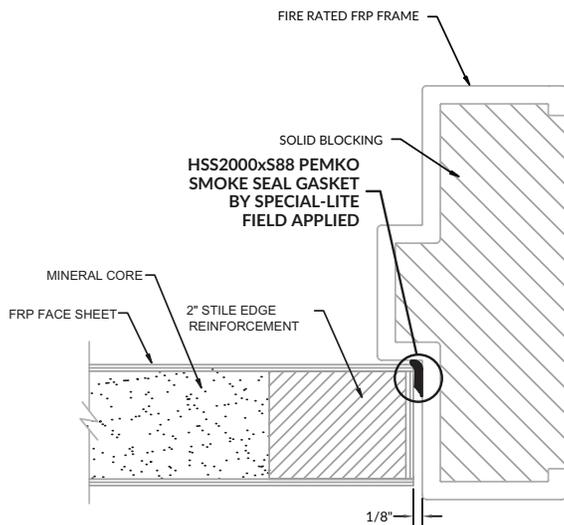
SMOKE SEAL APPLICATION (Cont.)



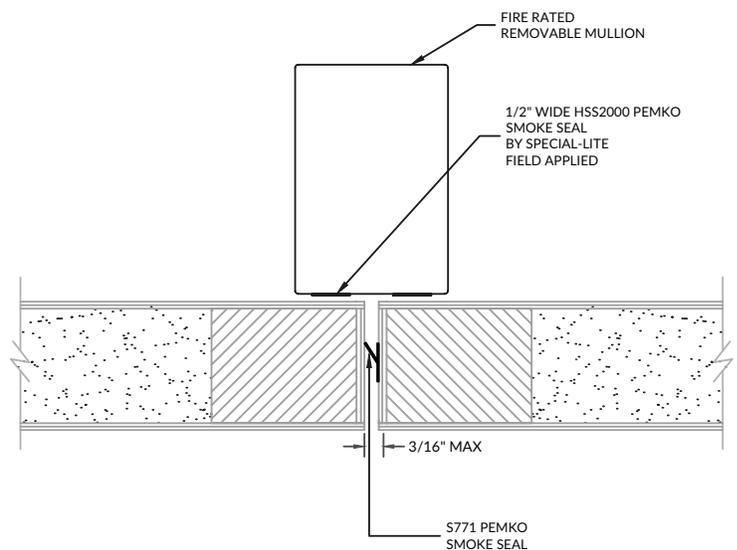
CONTINUOUS HINGE JAMB



BUTT HINGE JAMB



LOCK JAMB



STANDARD MEETING DETAIL