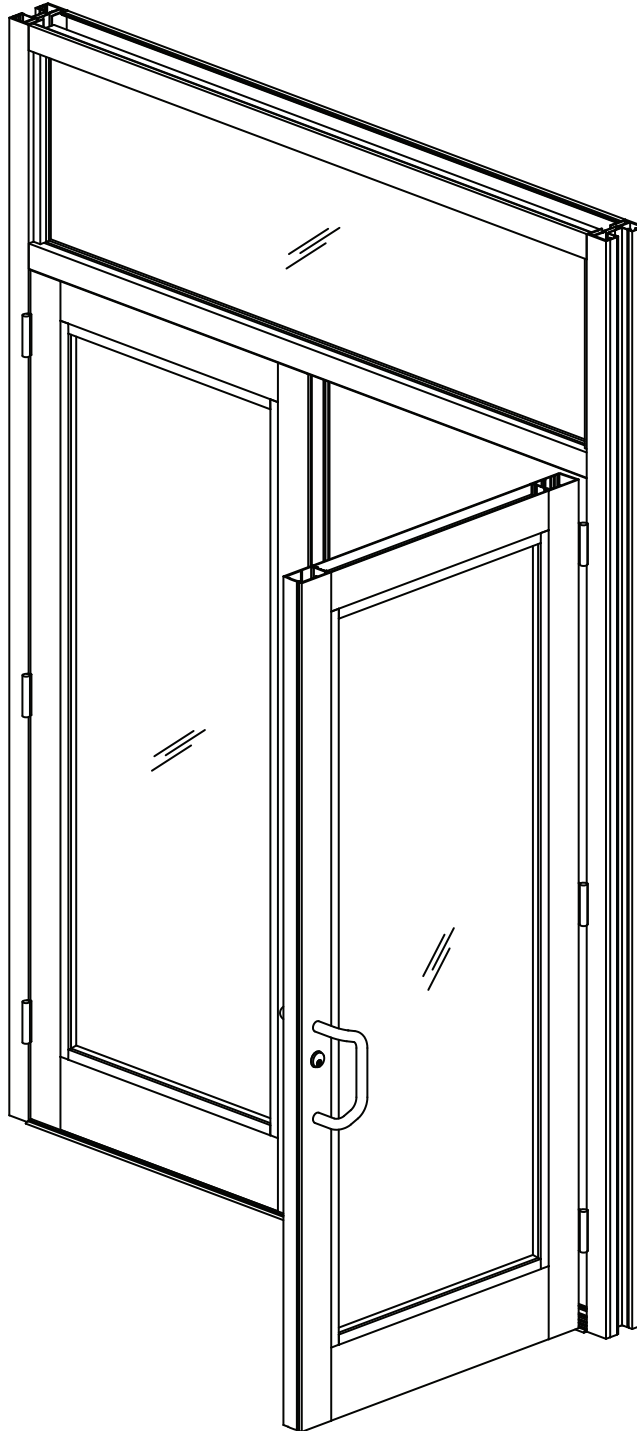


Model 35H / 50H Door



Installation Manual

TABLE OF CONTENTS

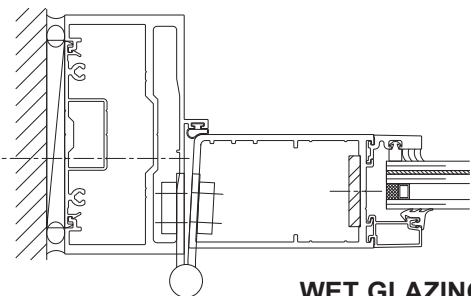
Installation Notes	Page ii
Door Types	Page 1 & 2
SILL FLASHING FABRICATION/INSTALLATION	
Fabricate Sill Flashing	Pages 3 to 5
Install Sill Flashing	Pages 6 & 7
DOOR FRAME FABRICATION	
Fabricate Door Frame	Pages 8 to 12
FRAME INSTALLATION	
Install Door Frames with Water Resistant Threshold	Pages 13 to 20
Install Door Frames with Air Tight Threshold E9-0487	Page 21
Apply Perimeter Sealant	Page 22
GLAZING	
Determine Glass Size	Pages 23 to 25
Transom Glazing	Pages 26 to 28
Door Glazing	Pages 29 & 30
Adjust Alignment of Model 35H Door	Page 30
Apply Structural Sealant to Door (Wet Glazing Only)	Pages 30 & 31
INSTALL HARDWARE	
Install Model 35H Door Hardware	Page 31
Install Threshold Ramp for ADA Compliance	Page 32

Installation Notes

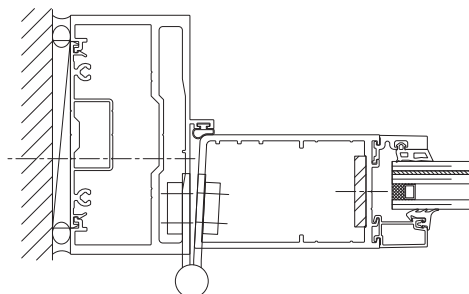
1. Do not drop, roll or drag boxes of aluminum framing. Move and stack boxes with proper support to prevent distortion. If fork lifts are used be especially careful about striking the boxes when lifting or moving.
2. Store in a dry, out of the way area. If rain exposure, condensation or any water contact is likely, then all packaging material should be removed. Wet packaging materials will discolor and may stain aluminum finishes and paints.
3. All materials should be checked for quality and quantity upon receipt, YKK AP must be notified immediately of any discrepancies in shipment. Check to make sure that you have the required shims, sealants, supplies and tools necessary for the installation.
4. Carefully check the openings and surrounding conditions that will receive your material. Remember, if the construction is not per the construction documents, it is your responsibility to notify the general contractor in writing. Any discrepancies must be brought to the general contractor's attention before you proceed with the installation.
5. Gather your shop drawings, materials, packing list, and this installation manual. Carefully review parts location, the sequence it goes therein, when you glaze it and how you seal it. Installation instructions are of a general nature and may not cover every condition you will encounter. The shop drawings and/or installation manuals were prepared specifically for the product.
6. Any material substitutions must be of equal or greater quality.
7. Make certain that material samples have been sent for compatibility testing for all manufacturer's sealants involved. Make certain sealants have been installed in strict accordance with the manufacturer's recommendations and specifications:
 - A. Specified metal to metal joints use Dow Corning[®] 795 or 995.
 - B. All metal to glazing must use Dow Corning[®] 995.
8. Remember to isolate, in an approved manner, all aluminum from uncured masonry or other incompatible materials.
9. System-to-structure fasteners are not supplied by YKK AP. Fasteners called out on shop drawings are to indicate minimum sizes for design loading.
10. Entrances are to be installed plumb, square, level and true.
11. If any questions arise concerning YKK AP products or their installation, contact YKK AP for clarification before proceeding.
12. YKK AP storefront and/or curtain wall framing is typically completed before drywall, flooring and other products which may still be in process. Take the extra time to wrap and protect the work produced.
13. Cutting tolerances are plus zero (0"), minus one thirty second (-1/32") unless otherwise noted.
14. Check our website, www.ykkap.com, for the latest installation manual update prior to commencing work.

This manual applies to the door types listed below.

35H DOOR W/ INSULATING GLASS

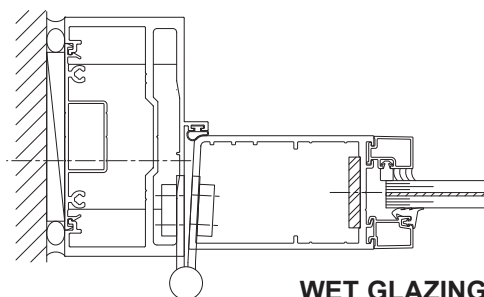


WET GLAZING

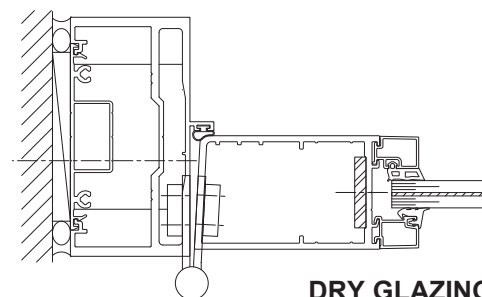


DRY GLAZING

35H DOOR W/ MONOLITHIC GLASS

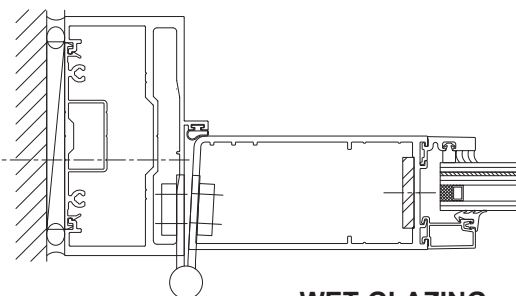


WET GLAZING

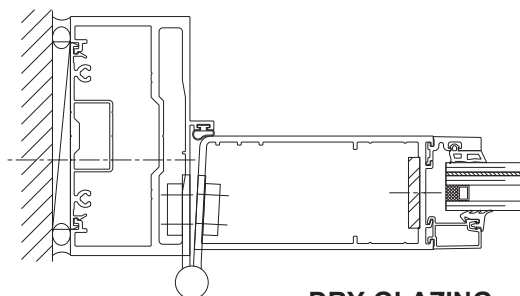


DRY GLAZING

50H DOOR W/ INSULATING GLASS

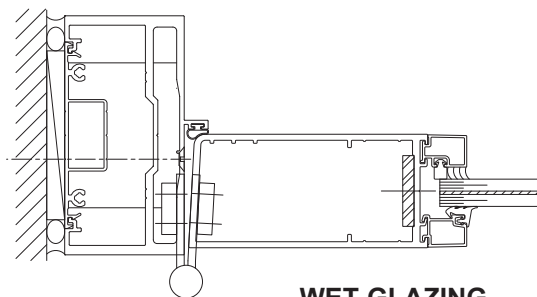


WET GLAZING

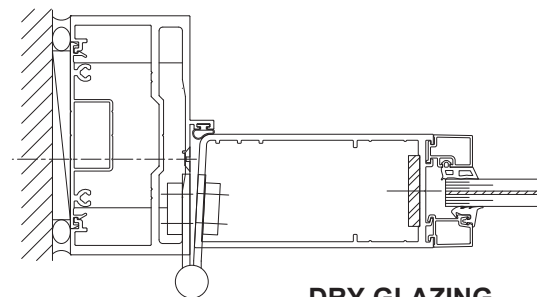


DRY GLAZING

50H DOOR W/ MONOLITHIC GLASS

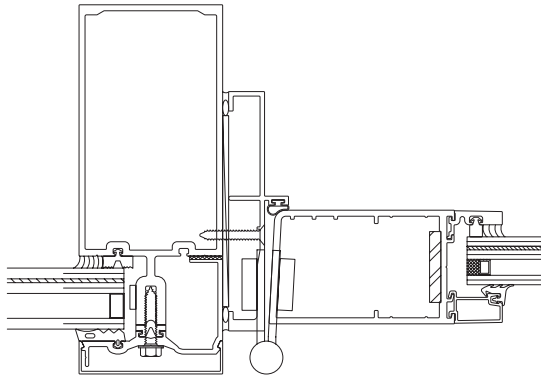


WET GLAZING

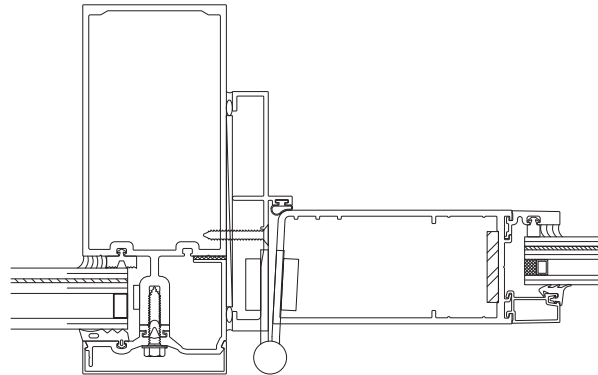


DRY GLAZING

YKK AP impact-resistant entrances can also be mounted into any YHC 300 series curtain wall systems via door subframes. These subframes will accomodate both 35H and 50H doors with all glazing methods and types.



**35H DOOR W/
YHC 300 OG SUBFRAME**



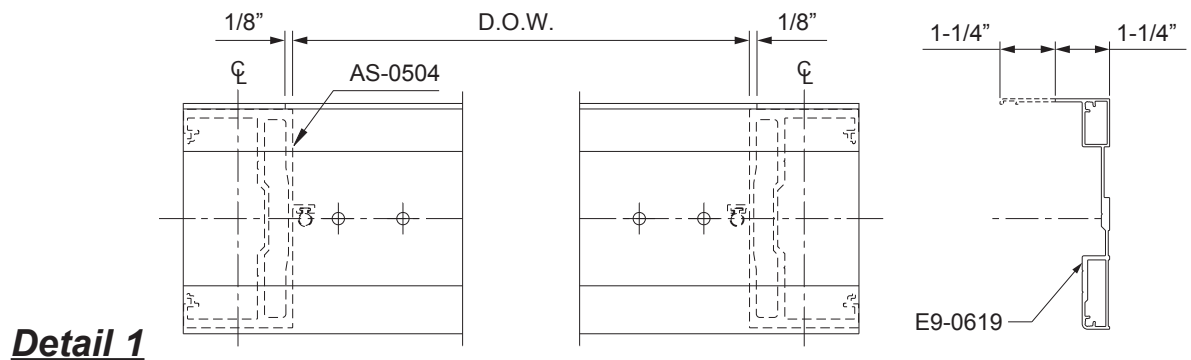
**50H DOOR W/
YHC 300 OG SUBFRAME**

SILL FLASHING FABRICATION / INSTALLATION

STEP 1

FABRICATE SILL FLASHING (for Punched Opening, Water Resistant threshold)

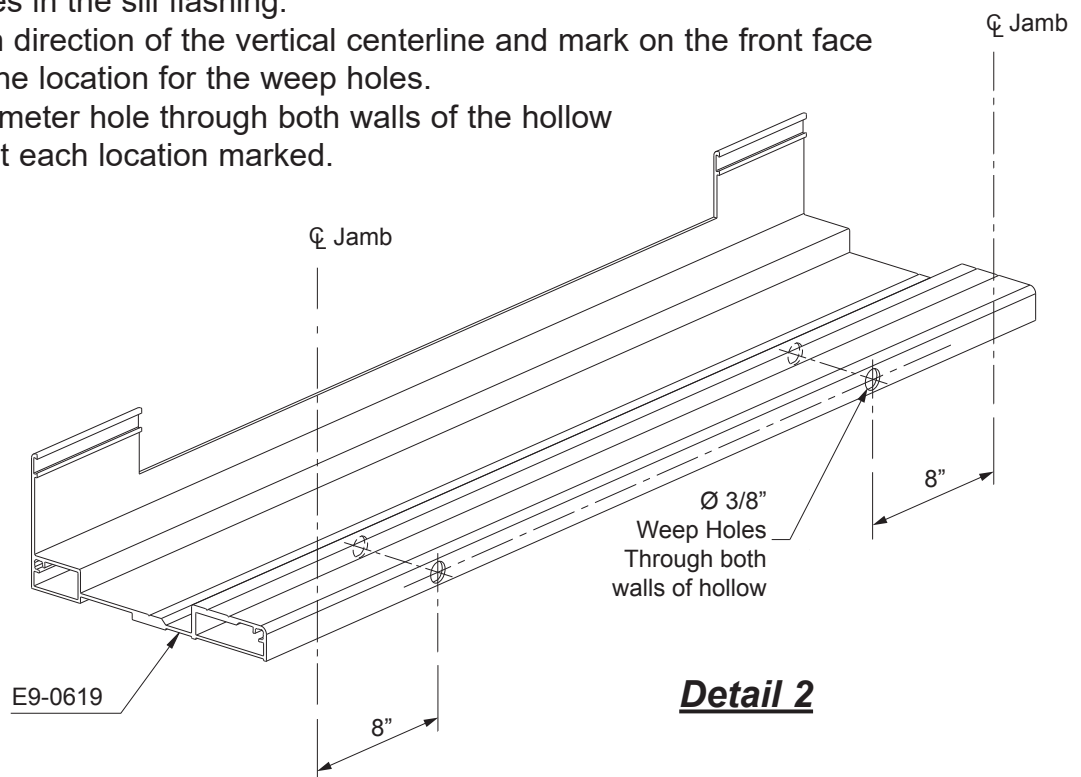
- Cut sill flashing, E9-0619, to the masonry opening dimension determined in Step 1 minus(-) 3/8".
 - Notch Sill Flashing when Using Threshold E9-0504:
 - Sill flashing back leg must be notch at all door thresh old locations 1-1/4" from the top of the leg and run the length of the door opening width.
 - Sill Flashing must be notched to Door Opening Width + 1/8" on both sides.
 - Locate and drill clearance holes in sill flashing for perimeter anchors. Refer to shop drawings for appropriate fastener and hole locations as determined by a qualified engineer or contact YKK AP.
 - Drill 5/16" dia. clearance holes for 1/4" fasteners or 7/16" dia. clearance holes for 3/8" fasteners.
- See **Detail 1** for anchor hole locations.



Fabricate weep holes in the sill flashing:

- Measure 8" in each direction of the vertical centerline and mark on the front face of the sill flashing the location for the weep holes.
- Drill a 3/8" (#V) diameter hole through both walls of the hollow in the sill flashing at each location marked.

See **Detail 2**.



SILL FLASHING FABRICATION / INSTALLATION

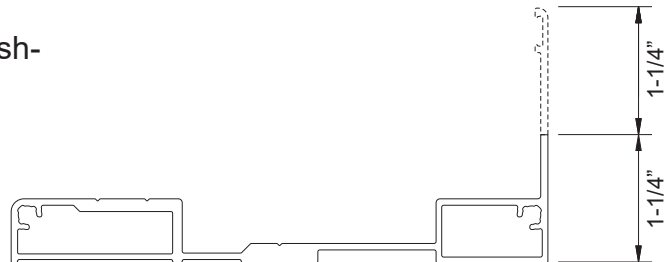
STEP 1

FABRICATE SILL FLASHING (for YHS 50 Storefront, Water Resistant Threshold)

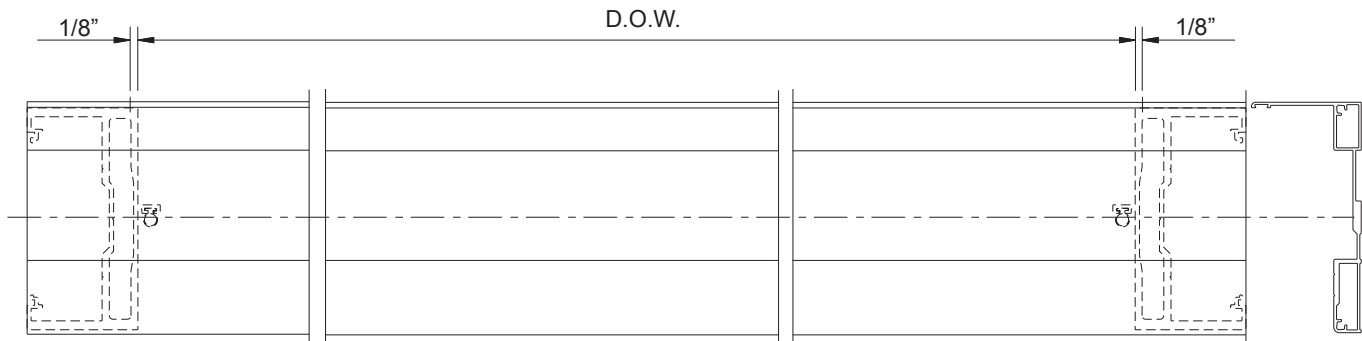
Notch Sill Flashing when Using Threshold E9-0504:

- Sill flashing back leg must be notch at all door threshold locations 1-1/4" from the top of the leg and run the length of the door opening width.
- Sill Flashing must be notched to Door Opening Width + 1/8" on both sides.

See **Detail 3**.

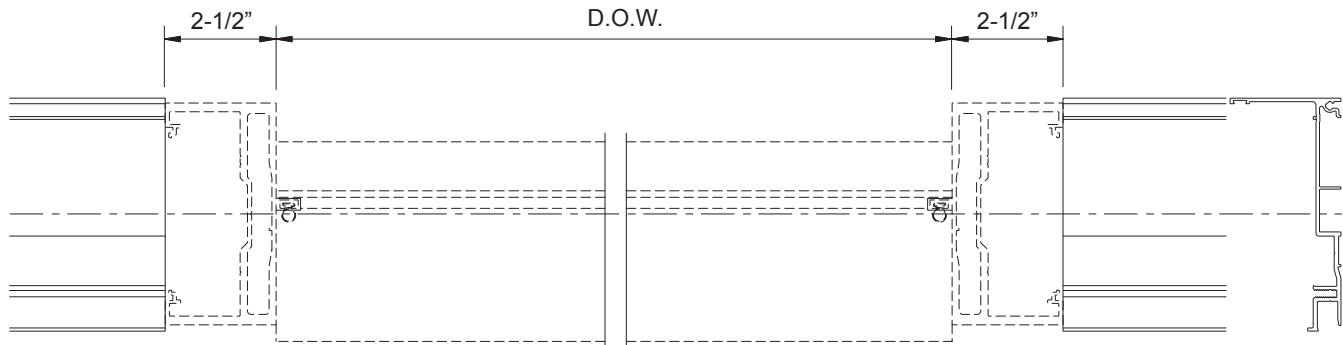


Detail 3



Note: Only the standard E9-0619 sill flashing is notched at the door jambs. The light duty E9-0625 sill flashing is used only with the air-resistant threshold and does not run under the door.

See **Detail 4**.



Detail 4

STEP 1 (Continued)

FABRICATE SILL FLASHING (for YHC 300 Subframe, Water Resistant Threshold)

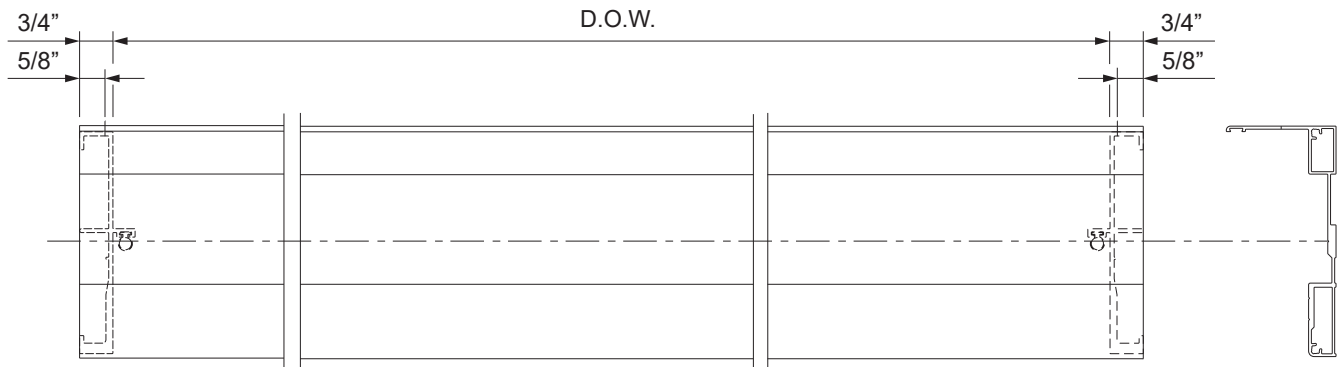
-Cut the E9-0619 sill flashing to Door Opening Width plus(+) 1-1/2".

Notch Sill Flashing when Using Threshold E9-0504:

-Sill flashing back leg must be notch at all door threshold locations 1-1/4" from the top of the leg and run the length of the door opening width.

-Sill Flashing must be notched to Door Opening Width + 1/8" on both sides.

See **Detail 5**.



Detail 5

SILL FLASHING FABRICATION / INSTALLATION

STEP 2

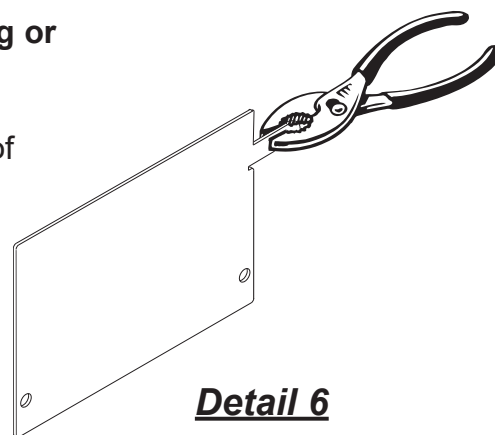
INSTALL SILL FLASHING END DAMS (for Punched Opening or YHC 300 Subframe, Water Resistant threshold)

- Hold the end dam with one hand and grab the tab with a pair of pliers.
- Bend the end dam tab left or right 90 degrees in the proper direction.

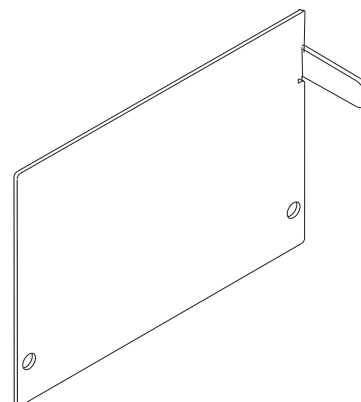
See **Details 6 & 7.**

Notes: The end dam tab must be bent in the correct position for the left or right end of the sill flashing. Also, for installation in a curtain wall subframe, counter-sinking of screw holes may be required.

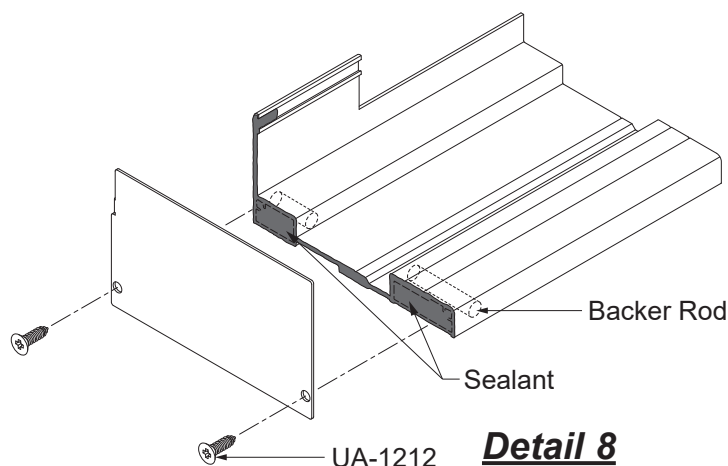
- Clean all joint surfaces using isopropyl Alcohol.
- Insert backer rods into the both cavities of the sill flashing, and fill the cavities with silicone sealant.
- Seal the entire end of the sill flashing as shown in **Detail 8.**
- Slide the tab into the top portion of the sill flashing.
- Tap the tab into place with a small tool until the end dam is snug against the end cut of the flashing.
- Fasten the end dam to the sill flashing with two UA-1212 screws, starting at the back, followed by the front as shown in **Detail 8.**
- Tool sealant along the joint between the end dam and the sill flashing as shown in **Detail 9.**
- Seal over any exposed screw threads.



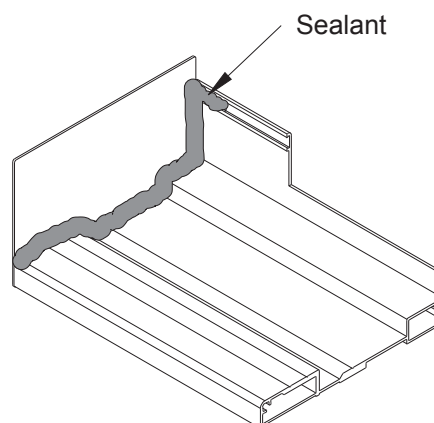
Detail 6



Detail 7



Detail 8



Detail 9

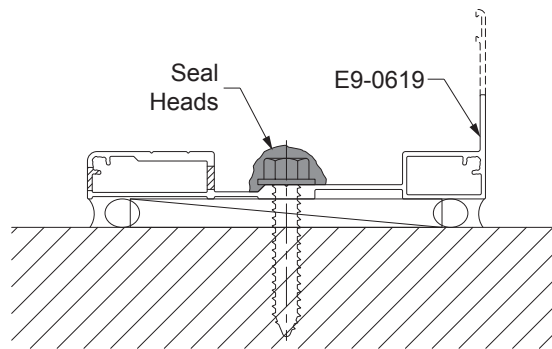
SILL FLASHING FABRICATION / INSTALLATION

STEP 3

INSTALL SILL FLASHING (for Punched Opening, Water Resistant threshold)

- Starting at the smallest opening height, install the sill flashing with a maximum of 3/8" shim underneath. Sill flashing must be installed level.
- Anchor the sill flashing to the structure a maximum of 4" from each end and then 18" to 24" on center.
- Apply and tool sealant to cover the heads of all fasteners.

See **Detail 10**.



Detail 10

DOOR FRAME FABRICATION

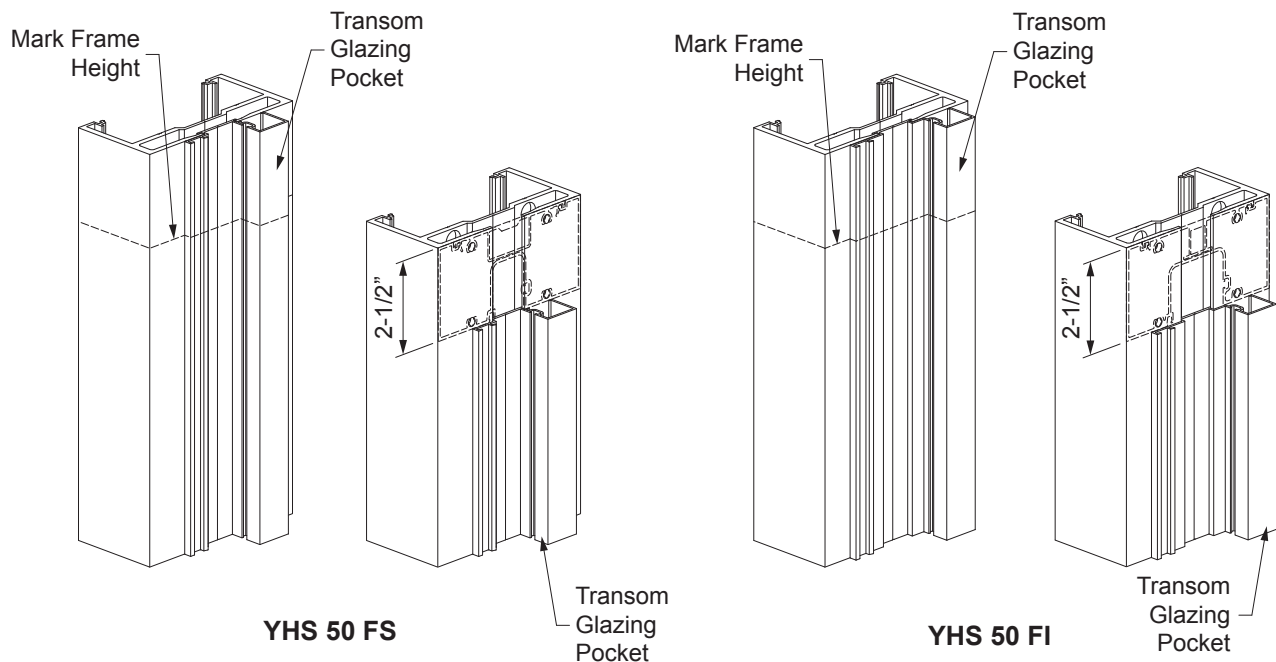
STEP 2

FABRICATE DOOR FRAME

Measure the height of each rough opening that is to receive a door frame. If there are several frame opening heights, it will be necessary to label each frame.

- For continuous sill flashing applications deduct 1-3/8" from the rough opening height to determine the door frame height. For air-resistant flashing applications, deduct 3/8" from the rough opening height.
- Slide the transom glazing pocket up so that it is flush with the end of the frame.
- Mark the frame height on the frame jambs by measuring up from the bottom of the frame.
- Cut the frame and transom glazing pocket.
- Slide the transom glazing pocket down into position.

See **Detail 11**.

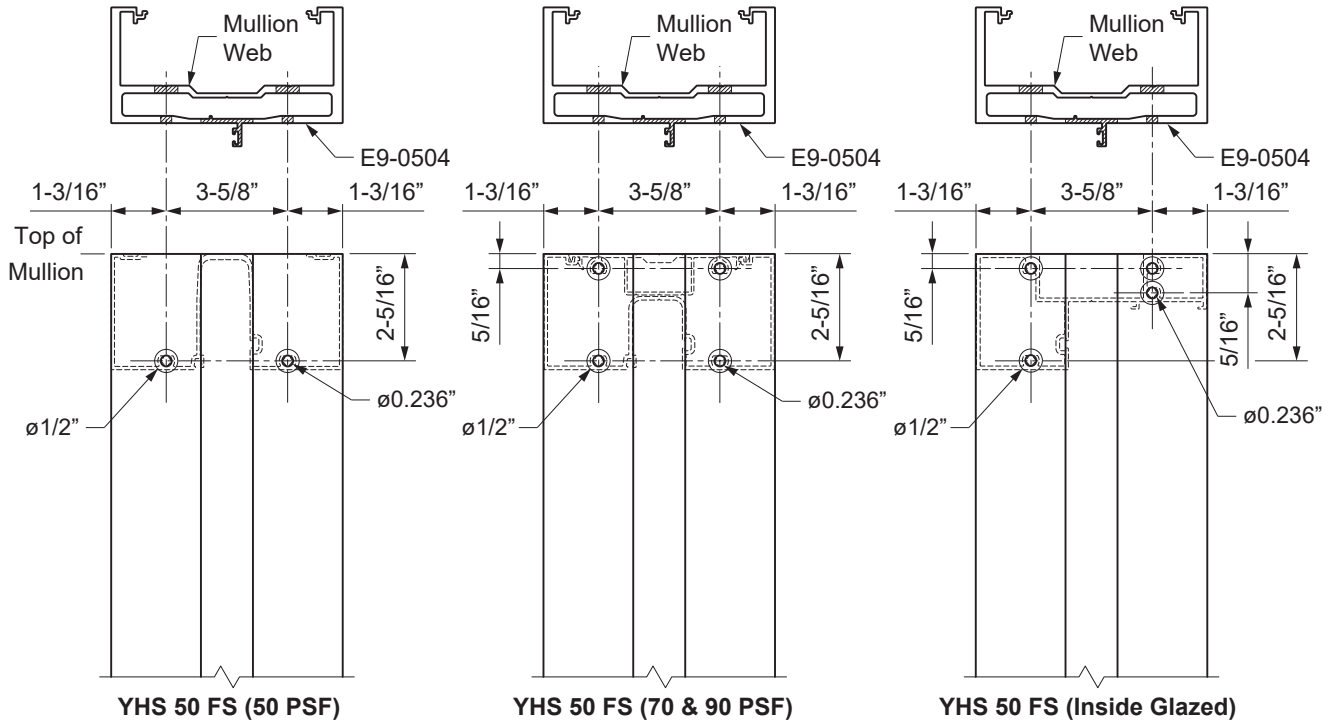


Detail 11

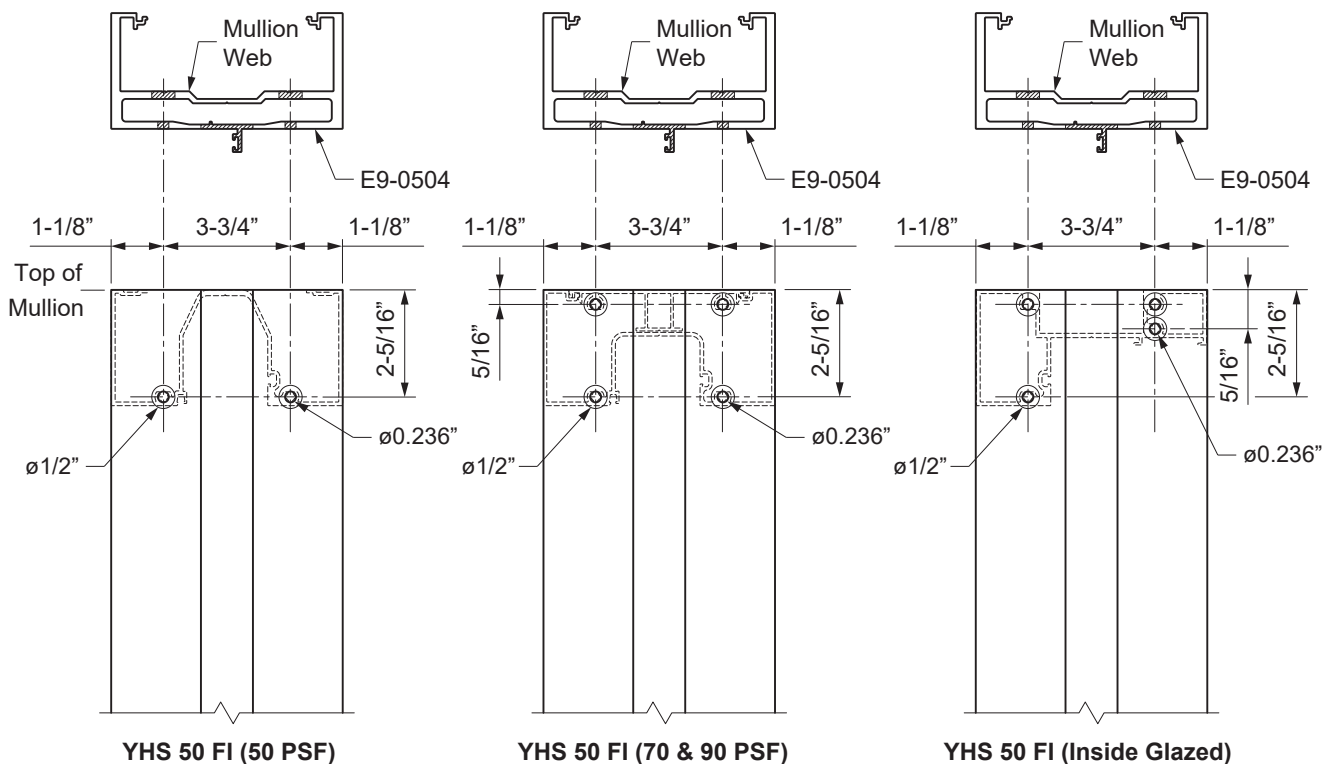
Fabricate the door jambs for the extreme head member, if applicable, according to **Detail 12**.

DOOR FRAME FABRICATION

STEP 2 (CONTINUED) FABRICATE DOOR FRAME



Detail 12

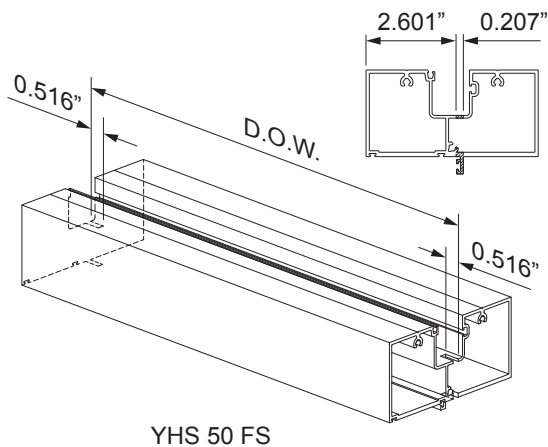


DOOR FRAME FABRICATION

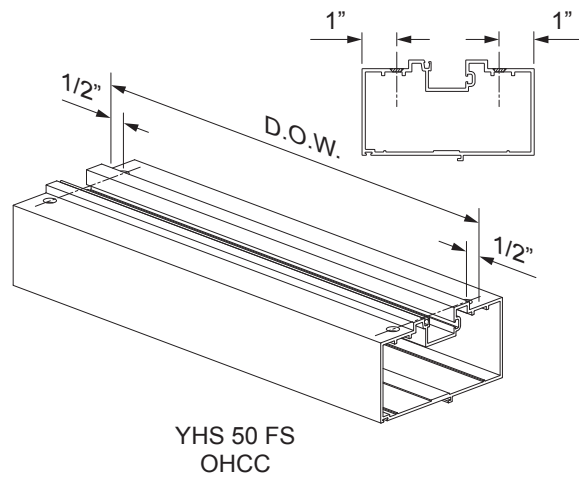
STEP 2 (Continued) FABRICATE DOOR FRAME

Measure the Door Opening Width (D.O.W.)

-Fabricate the transom bar according as shown in **Detail 13**.

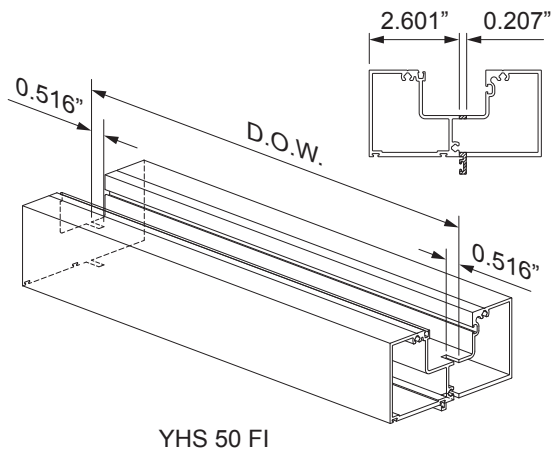


YHS 50 FS

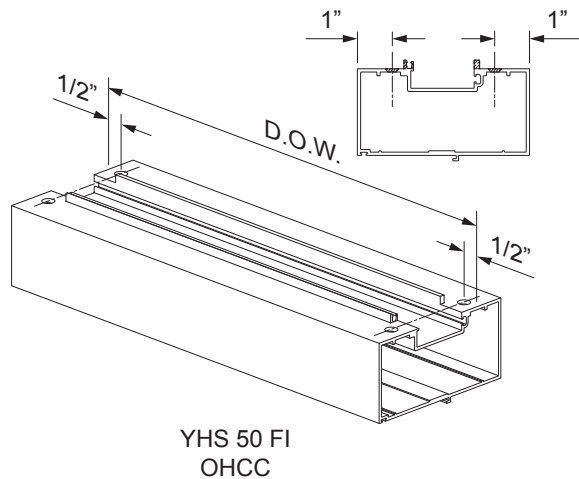


YHS 50 FS
OHCC

Detail 13



YHS 50 FI



YHS 50 FI
OHCC

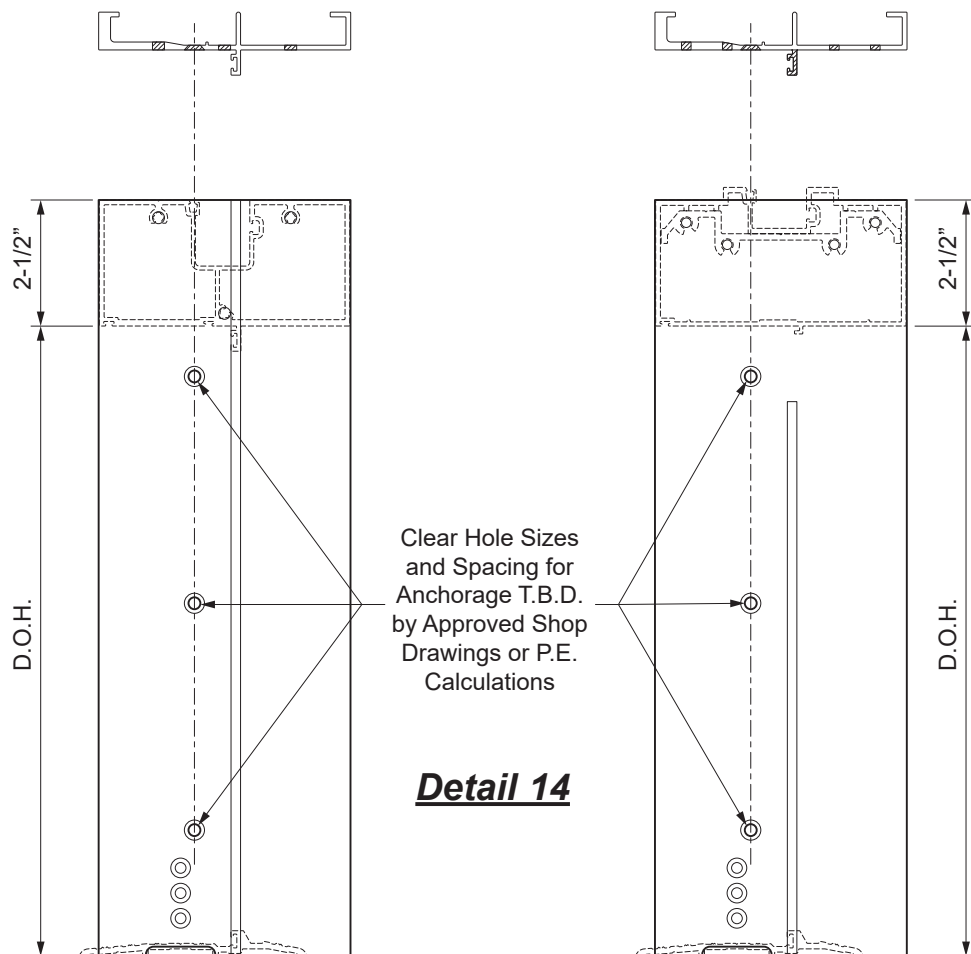
STEP 2A FABRICATE CURTAIN WALL SUBFRAMES

Installation of the curtain wall subframes is hardware and job specific. These instructions will focus on the most commonly used subframe members. For fabrication of fastener holes to anchor the subframe into the curtain wall framing, refer to your approved shop drawings or P.E. calculations.

For air-resistant threshold:

-Subframe jambs are cut to Door Opening Height plus(+) 2-1/2" as shown in **Detail 14**.

Note: Curtain wall subframes do not have transoms.

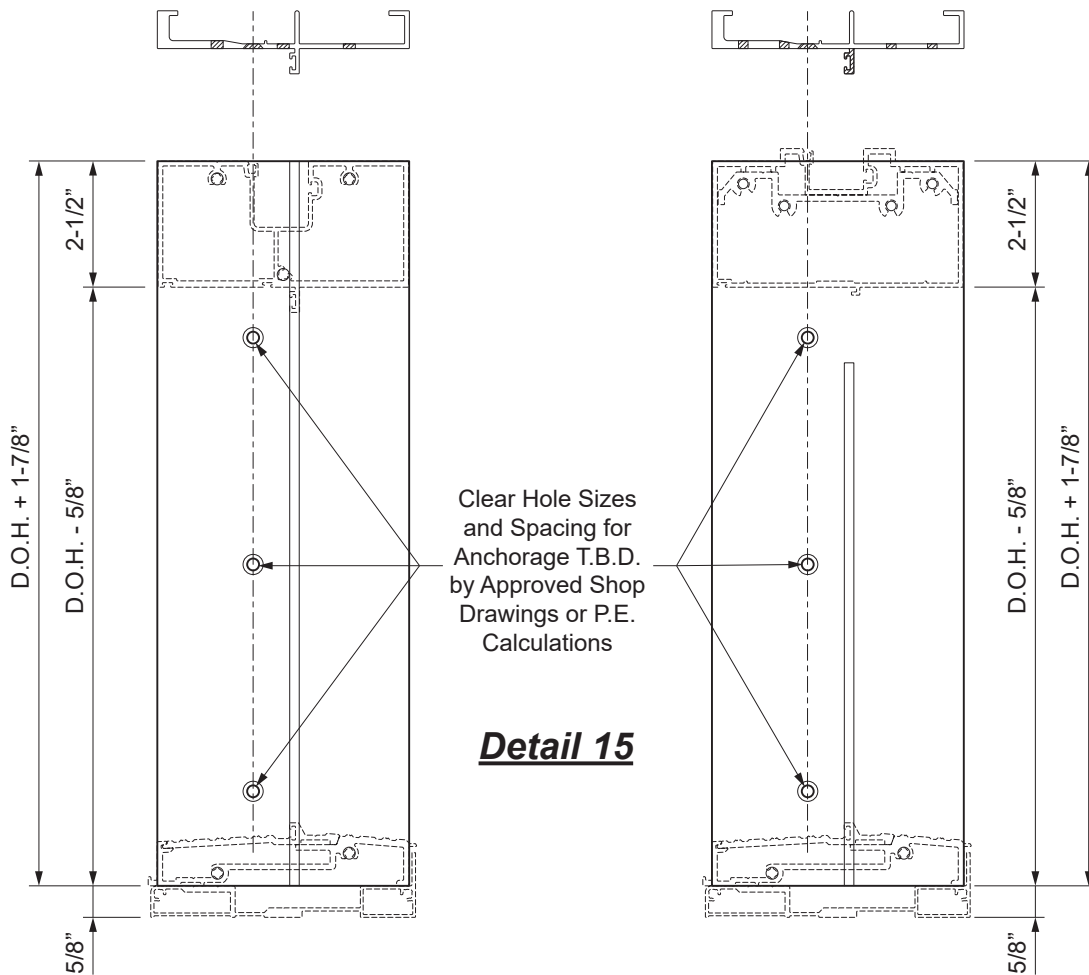


STEP 2A (Continued)
FABRICATE CURTAIN WALL SUBFRAMES

For water-resistant threshold:

-Subframe jambs are cut to Door Opening Height plus(+) 1-7/8" as shown in **Detail 15**.

Note: Curtain wall subframes do not have transoms.



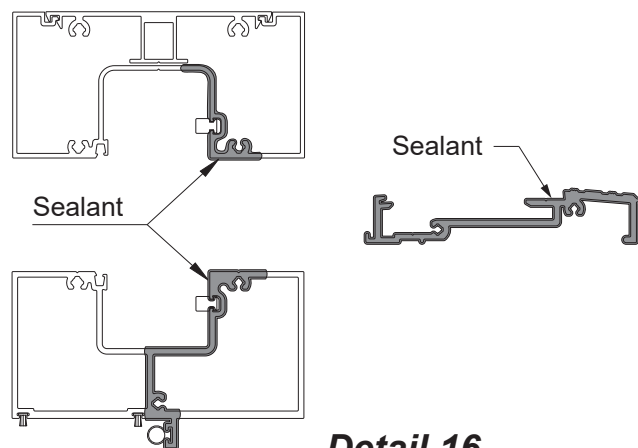
FRAME & DOOR INSTALLATION

STEP 3

INSTALL DOOR FRAMES WITH WATER RESISTANT THRESHOLD

Doors are shipped assembled, and door frames will be fabricated and shipped k.d.

- Before assembly of head, transom bar and jambs make sure that silicone spacer, E2-0084, and elastomer weathering, E2-0051, are installed.
 - Apply sealant to the ends of the head, water threshold, and transom bar. Seal the intersections of the jambs with the head and transom bars.
- See **Detail 16**.



Detail 16

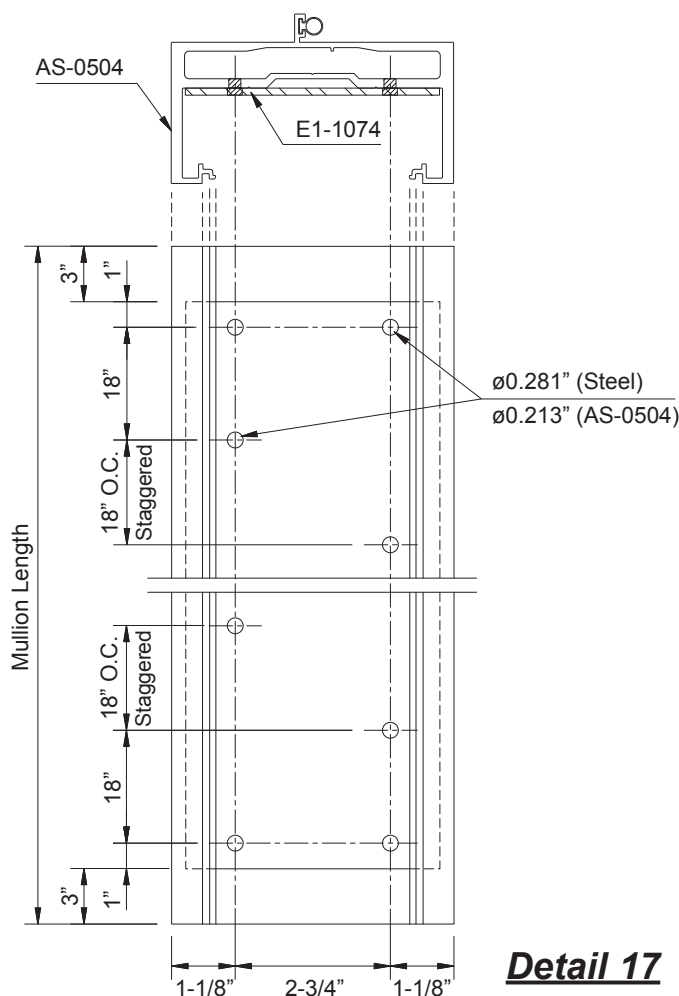
YHS 50 FI shown,
YHS 50 FS/TU similar

- Attach the transom bar and threshold members to the frames with PC-1216 fasteners at each end.
 - Attach head members to the frames with PC-1220 fasteners at each end.
- See **Detail 18** on **Page 14**.

- Attach steel reinforcing as required after horizontal members are attached to the frame.
- See **Detail 17**.

- Run silicone sealant along the back edge of the sill flashing, E9-0619.
- Set assembled door frame onto the sill flashing within ten minutes of applying sealant.
- Assembled door frame must be installed plumb, square, level, and true for the door to swing properly. Shim as required.

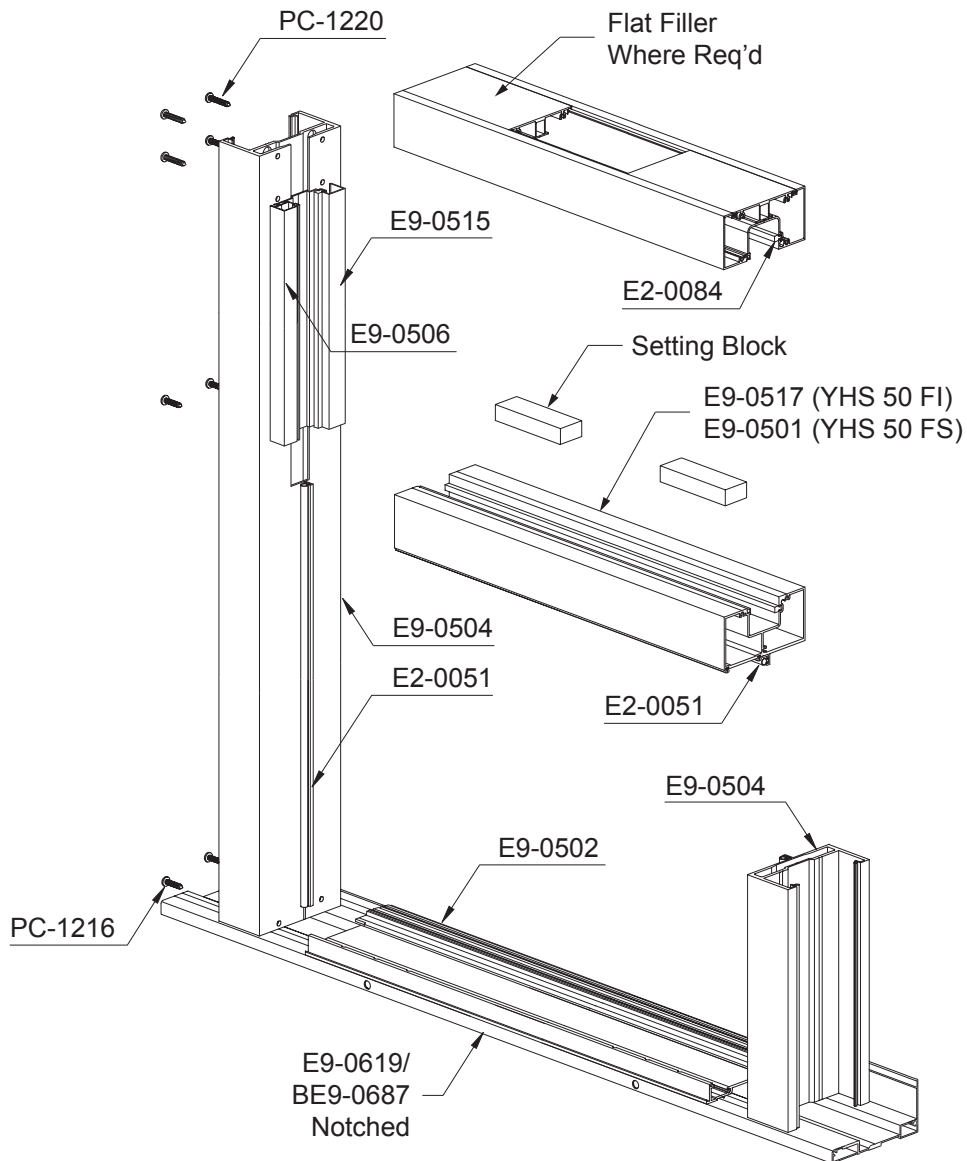
Note: If the door frame needs to be cut down, cut from the top of the frame and follow instructions in **Step 2** on **Page 6** to fabricate the door jamb to accept the head member.



Detail 17

FRAME & DOOR INSTALLATION

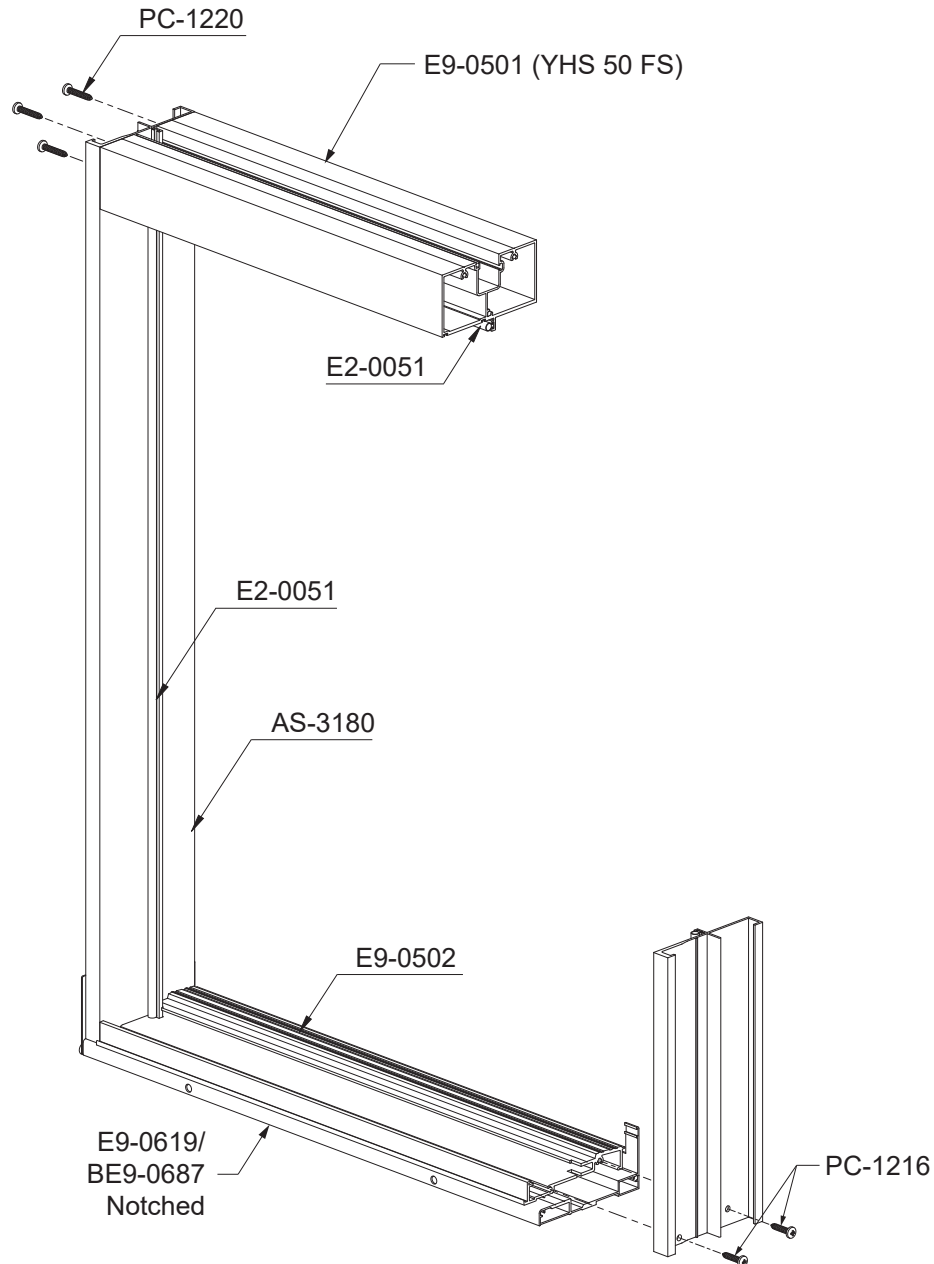
STEP 3 (Continued) INSTALL DOOR FRAMES WITH WATER RESISTANT THRESHOLD



Detail 18

YHS 50 FI shown,
YHS 50 FS &
YHS 50 TU similar

STEP 3 (Continued)
INSTALL DOOR FRAMES WITH
WATER RESISTANT THRESHOLD
(CURTAIN WALL SUBFRAME ASSEMBLY)



Detail 19
Curtain Wall
Subframe Shown,
End Dam Removed
for Clarity

FRAME & DOOR INSTALLATION

STEP 3 (Continued)

INSTALL DOOR FRAMES WITH WATER RESISTANT THRESHOLD (OHCC)

Doors are shipped assembled, and door frames will be fabricated and shipped k.d.

-Before assembly of head, transom bar and jambs make sure that silicone spacer, E2-0084, and elastomer weathering, E2-0051, are installed.

-Apply sealant to the ends of the head and transom bar. Seal the intersections of the jambs with the head and transom bars.

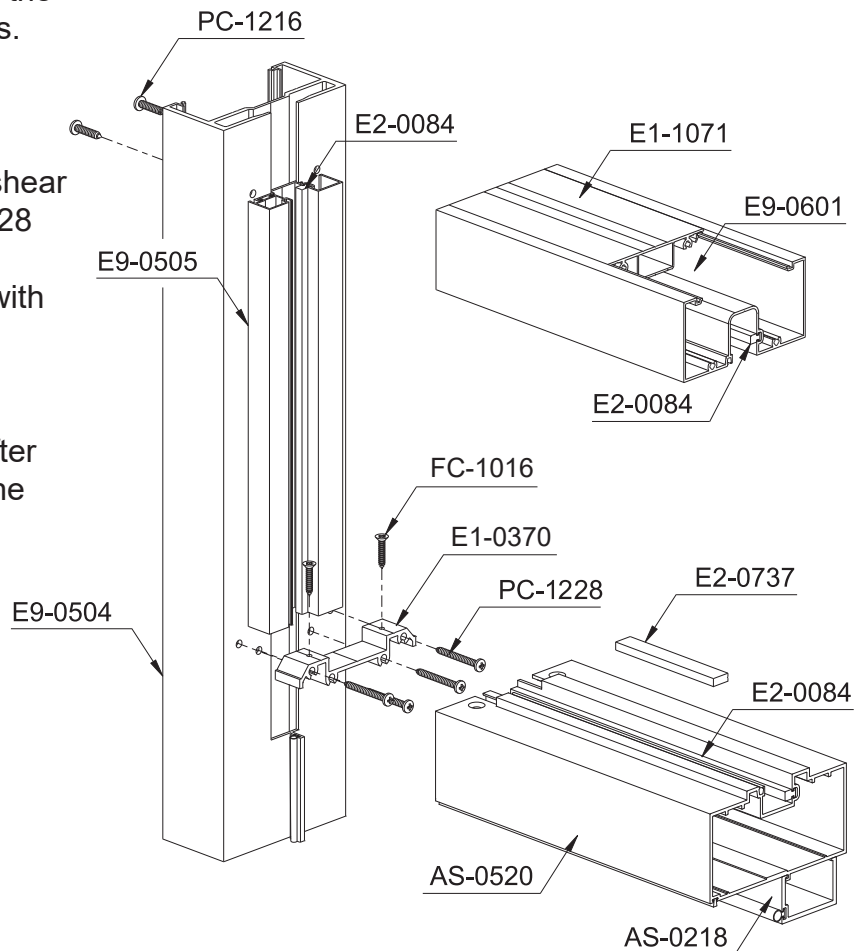
See **Detail 16** on **Page 13**.

-Attach the transom bar and threshold members to the frames via E1-0370 shear block at each end and with (4) PC-1228 and (2) FC-1016 fasteners.

-Attach head members to the frames with PC-1220 fasteners at each end.

See **Detail 20**.

-Attach steel reinforcing as required after horizontal members are attached to the frame. See **Detail 17** on **Page 13**.



Detail 20

YHS 50 FI Shown,
YHS 50 FS &
YHS 50 TU Similar

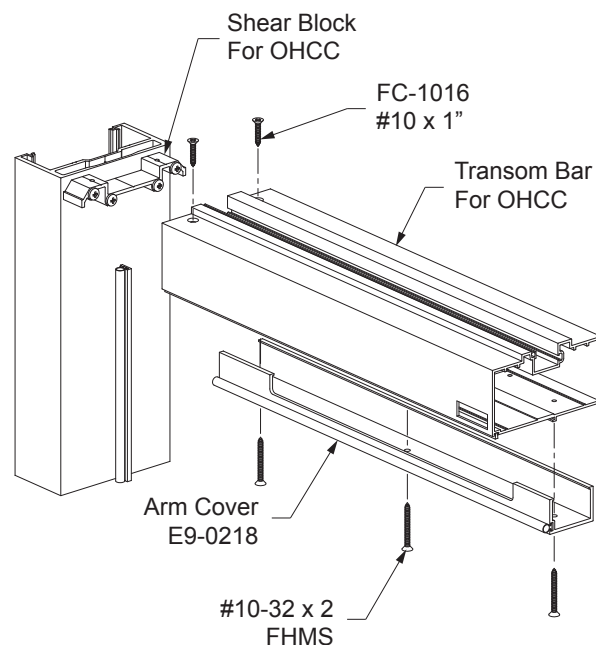
FRAME & DOOR INSTALLATION

STEP 3 (Continued)

INSTALL OVERHEAD CONCEALED CLOSER IN OFFSET PIVOT & BUTT HINGE FRAMES

- Assemble the frame by first attaching the transom bar/closer shear block to the pivot jamb of the frame.
- Complete the assembly and installation of the frame following the standard installation instructions.
- Install the overhead concealed closer into the frame.
- Attach the cover plate and the offset arm.
- The top door rail has been routed out to clear the offset arm of the closer.
- Locate the arm cover package that is in the frame box and attach it to the bottom of the transom bar with #10-32 x 2" fasteners provided (three for singles and four for pairs).

See **Details 21**.



Detail 21

YHS 50 Framing
Shown, Curtain Wall
Subframe Similar

FRAME & DOOR INSTALLATION

STEP 3 (Continued)

INSTALL DOOR FRAMES WITH WATER RESISTANT THRESHOLD

Recommended Anchoring As Tested:

- The door frame must be installed plumb, square, level and true.
- Shim as required (3/8" caulk joint at head and jambs).
- Anchor the frame to the structure according to **Detail 22** or refer approved shop drawings:

△ = Sill Flashing Anchor:

Concrete: 5/16" x 2" HH Tapcon masonry fastener

Wood: 5/16" x 3" HH Tapcon masonry fastener

▼ = Head Anchor:

Concrete: 5/16" x 3" FPH Tapcon masonry fastener

Wood: 5/16" x 3" FPH Tapcon masonry fastener

○ = Threshold Gutter Anchor:

#14 x 1/2" PHSMS Type AB

● = Sill Gutter Anchor:

#14 x 1-1/2" PHSMS Type AB

□ = Jamb Condition:

No anchor for frames 9'-0" and under up to 70 psf.

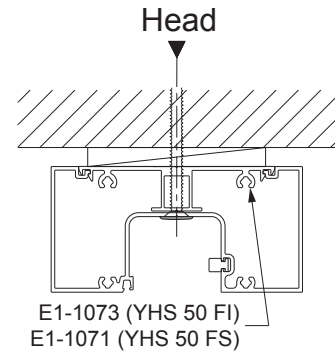
Contact YKK AP for frames over 9'-0" or for

design loads greater than 70 psf.

■ = Door Jamb / T-Bar w/o Transom Lite Anchor:

Concrete: 5/16" x 5" FPH Tapcon masonry fastener

Wood: 5/16" x 5" FPH Tapcon masonry fastener



*T-Bar w/o Transom Lite

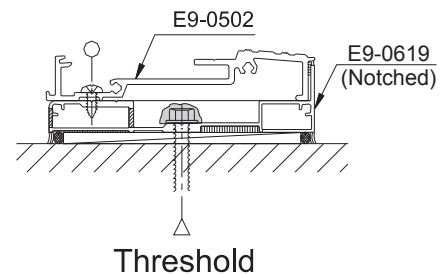
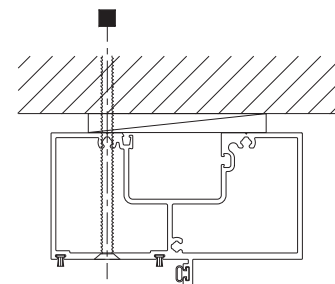
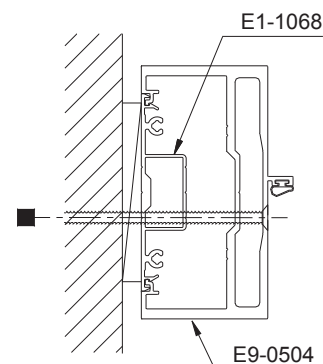


Table 1 - Minimum Embedment into Structure

Condition*	Minimum Embedment	
	Wood	Masonry
At Head (w/o Reinforcing)	3	1-1/2
At Sill Flashing (w/o Reinforcing)	3	1-1/2
At Head (w/ Reinforcing)	3	1-3/4
At Sill Flashing (w/ Reinforcing)	3	1-3/4

* Structure must be capable of resisting all loads imposed by fasteners and anchors.

Detail 22



Door Jamb

FRAME & DOOR INSTALLATION

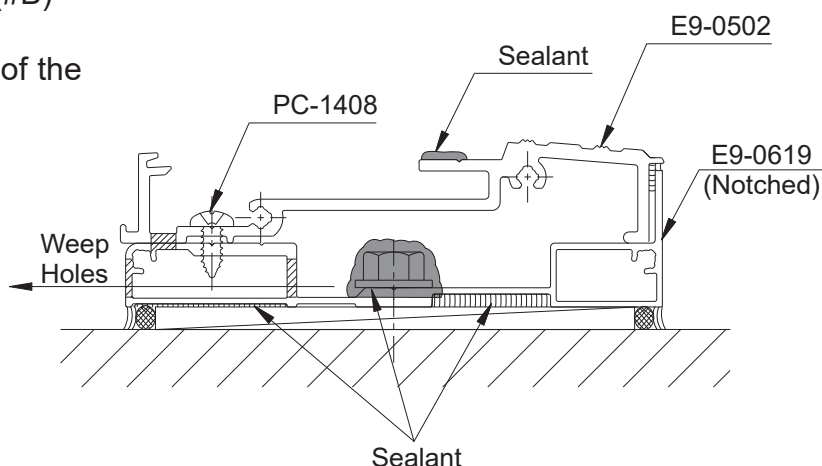
STEP 3 (Continued)

INSTALL DOOR FRAMES WITH WATER RESISTANT THRESHOLD

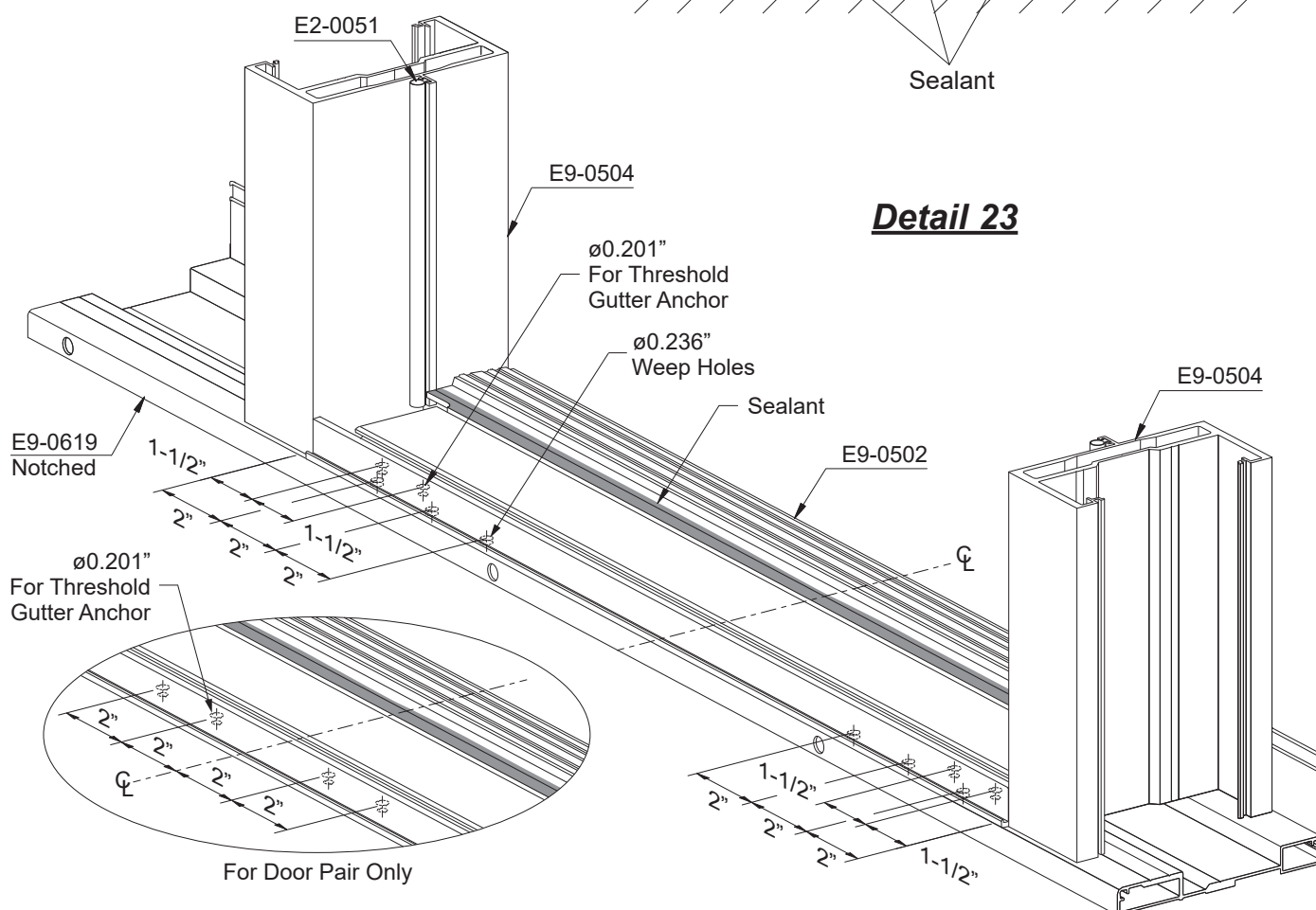
Anchor water resistant threshold of assembled door frame to sill flashing:

- Match drill the two holes at each end of the threshold, E9-0502, to sill flashing, E9-0619.
- Drill 0.201" dia. (#7) holes and attach using PC-1408 fasteners (4 for single doors, 8 for door pairs. See **Detail 23**.

- Match drill the three weep holes at each end of the threshold using a 0.238" dia. (#B) drill bit to sill flashing.
- Run sealant along the sill flashing notch of the back edge and up the door jamb at the sill flashing.
- Slide next frame section into place and snap together.
- Run sealant along the top leg of E9-0502 before attaching E9-0503.



Detail 23



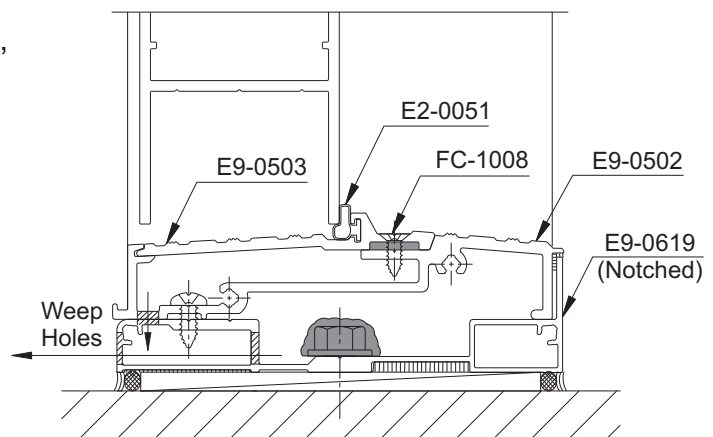
FRAME & DOOR INSTALLATION

STEP 3 (Continued)

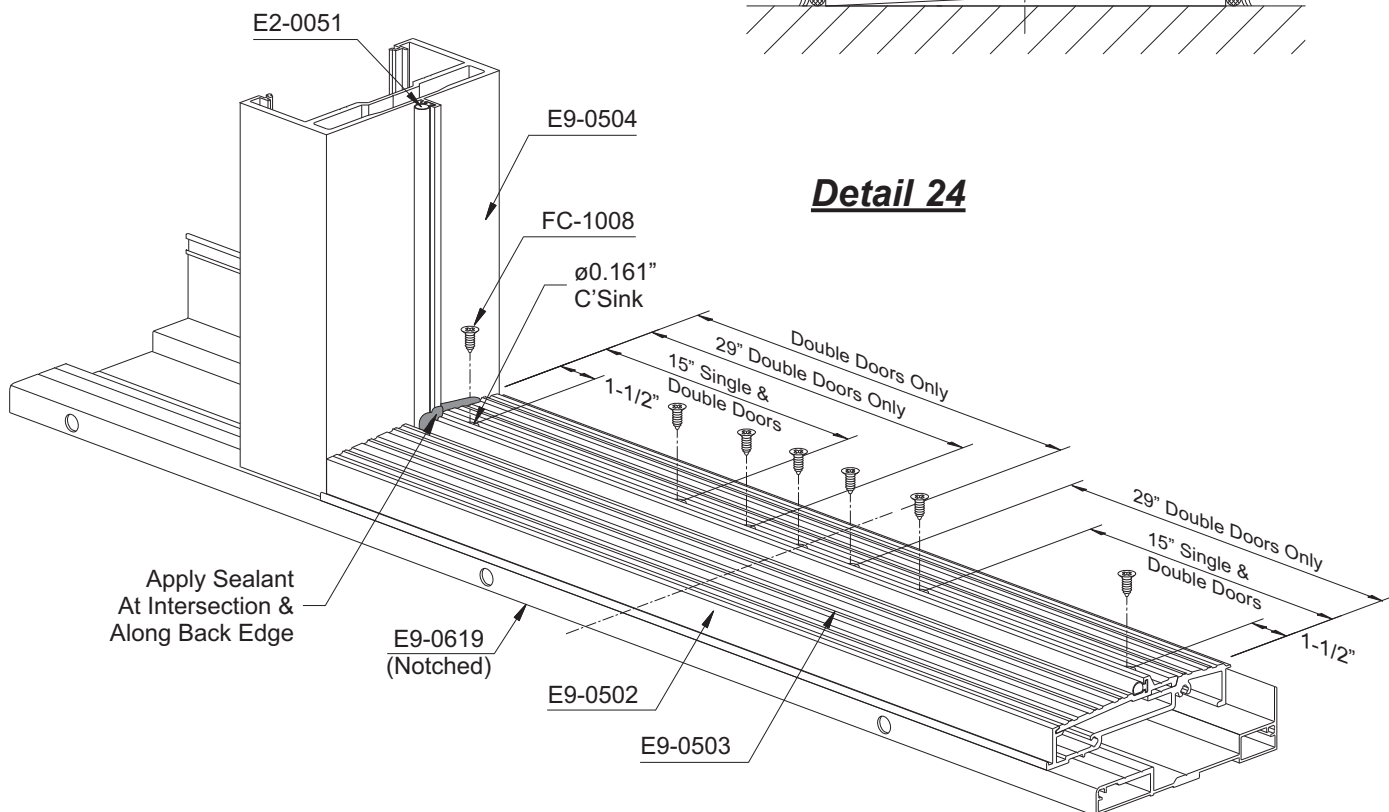
INSTALL DOOR FRAMES WITH WATER RESISTANT THRESHOLD

- Slide elastomer bulb E2-0051 into threshold trim E9-0503.
- Install threshold trim by hooking the outside edge and rotating towards the inside.
- Match drill top countersink holes to E9-0502 using a $\varnothing 0.161"$ (#20) drill bit.
- Fasten the inside edge with FC-1008 fasteners. See **Detail 24**.
- Carefully align the holes in the butt hinges with the holes in the back plates and secure the door to the frame using fasteners supplied with door package. Completely support door during this step.
- Assembled door frame must be installed plumb, square, level, and true to swing properly.

See **Detail 24**.



Detail 24

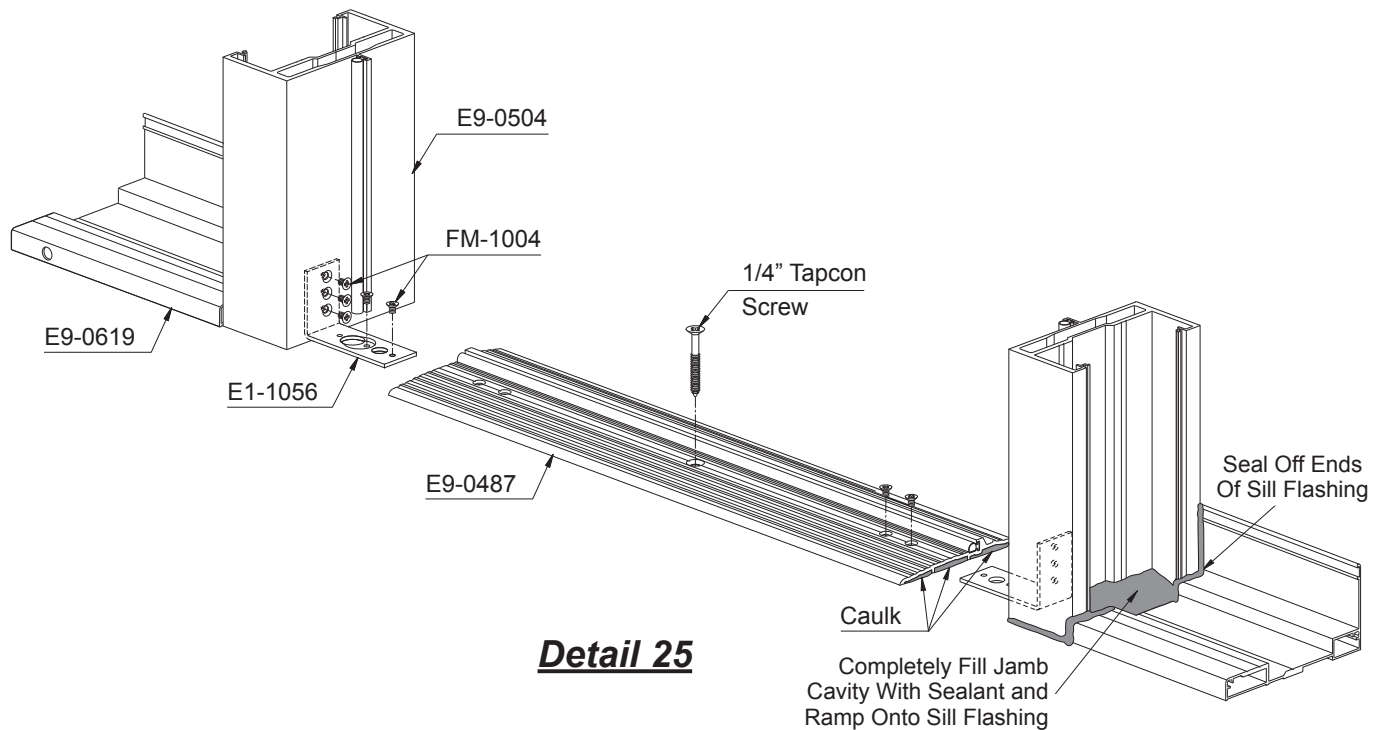


FRAME & DOOR INSTALLATION

STEP 4

INSTALL DOOR FRAMES WITH AIR TIGHT THRESHOLD (E9-0487)

- Fasten E1-1056 steel angles to door jambs, E9-0504, using three FM-1004 screws.
- Apply sealant to the ends of the heads and transom bars and to the intersections of the jambs with the head and transom bar.
- See **Detail 16** on **Page 13**.
- Install backer rod into the cavities at each end of the sill flashing and seal with sealant.
- Install sill flashing.
- Position and drill installation anchor holes in predrilled air tight threshold, E9-0487.
- Caulk all three recessed tracks on the underside of threshold and anchor to structure.
- Prior to installing the frame, seal the ends of the sill flashing to the door jambs as shown below.
- See **Detail 25**.



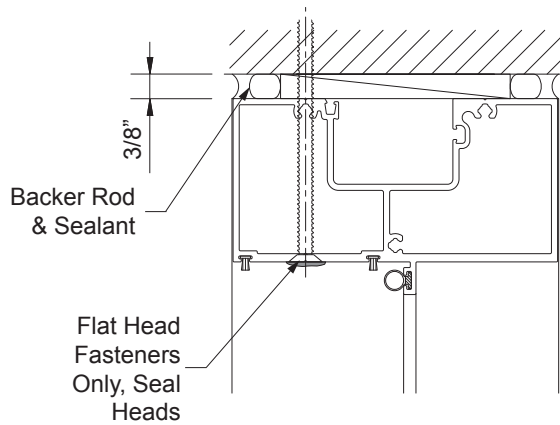
FRAME INSTALLATION

STEP 5

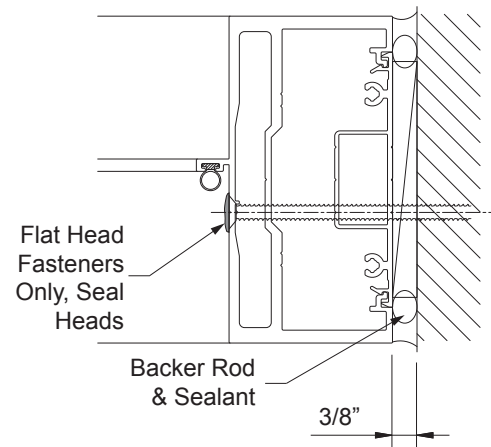
APPLY PERIMETER SEALANT

- Position backer rod around perimeter of frame.
- Apply sealant to the joint between frame and perimeter substrate (Dow Corning 795 or equal).
- Make sure all screw heads are sealed.

See **Detail 26**.



Detail 26



GLAZING

STEP 6

DETERMINE GLASS SIZE

Model 35H Door Monolithic and Insulating Glazing

Threshold Allowance Included:

Air Only - 3/8", Air & Water - 1-3/4".

Glass Type	Entrance System	Using Bottom Rail	Glass Formula		
			Height		Width
			Air Only Threshold	Air & Water Threshold	
Monolithic	Model 35H Single/Pair	7-5/16" E9-0221	D.O. -[minus] 11-3/8"	D.O. -[minus] 12-3/4"	Model 35H Single D.O. -[minus] 8-7/16"
		8" (Standard) E9-0235*	D.O. -[minus] 12-1/16"	D.O. -[minus] 13-7/16"	
		10" E9-0233	D.O. -[minus] 14-1/16"	D.O. -[minus] 15-7/16"	Model 35H Pair (D.O./2) -[minus] 8-7/16"
		12" E9-0235, E9-0238	D.O. -[minus] 16-1/16"	D.O. -[minus] 17-7/16"	
	Transom	—	D.L.O. +[plus] 1-1/8"		D.L.O. + [plus] 1-1/8"
Insulating	Model 35H Single/Pair	8-3/16" E9-0251	D.O. -[minus] 12-1/16"	D.O. -[minus] 13-7/16"	Model 35H Single D.O. -[minus] 8-7/16"
		10-3/16" E9-0252	D.O. -[minus] 14-1/16"	D.O. -[minus] 15-7/16"	
		12" E9-0235, E9-0238	D.O. -[minus] 16-1/16"	D.O. -[minus] 17-7/16"	Model 35H Pair (D.O./2) -[minus] 8-7/16"
	Transom	—	D.L.O. +[plus] 1-1/8"		D.L.O. + [plus] 1-1/8"

Refer to <http://www.ykkap.com/productmaster> (Entrances, Model 35H, Details) for D.O. and D.L.O. reference points.

* Effective 8/13/2012, doors ordered with a hard part number will receive this bottom rail.

GLAZING

STEP 6

DETERMINE GLASS SIZE

Model 50H Door Monolithic and Insulating Glazing

Threshold Allowance Included:

Air Only - 3/8", Air & Water - 1-3/4".

Glass Type	Entrance System	Using Bottom Rail	Glass Formula		
			Height		Width
			Air Only Threshold	Air & Water Threshold	
Monolithic	Model 50H Single/ Pair	7-5/16" E9-0221	D.O. -[minus] 12-1/2"	D.O. -[minus] 13-7/8"	Model 50H Single D.O. -[minus] 10-11/16"
		8" (Standard) E9-0235*	D.O. -[minus] 13-3/16"	D.O. -[minus] 14-9/16"	
		10" E9-0233	D.O. -[minus] 15-3/16"	D.O. -[minus] 16-9/16"	Model 50H Pair (D.O./2) -[minus] 10-11/16"
		12" E9-0235, E9-0238	D.O. -[minus] 17-3/16"	D.O. -[minus] 18-9/16"	
	Transom	—	D.L.O. + [plus] 1-1/8"		D.L.O. + [plus] 1-1/8"
Insulating	Model 50H Single/ Pair	8-3/16" E9-0251	D.O. -[minus] 13-3/16"	D.O. -[minus] 14-9/16"	Model 50H Single D.O. -[minus] 10-11/16"
		10-3/16" E9-0252	D.O. -[minus] 15-3/16"	D.O. -[minus] 16-9/16"	
		12" E9-0235, E9-0238	D.O. -[minus] 17-3/16"	D.O. -[minus] 18-9/16"	Model 50H Pair (D.O./2) -[minus] 10-11/16"
	Transom	—	D.L.O. + [plus] 1-1/8"		D.L.O. + [plus] 1-1/8"

Refer to <http://www.ykkap.com/productmaster> (Entrances, Model 50H, Details) for D.O. and D.L.O. reference points.

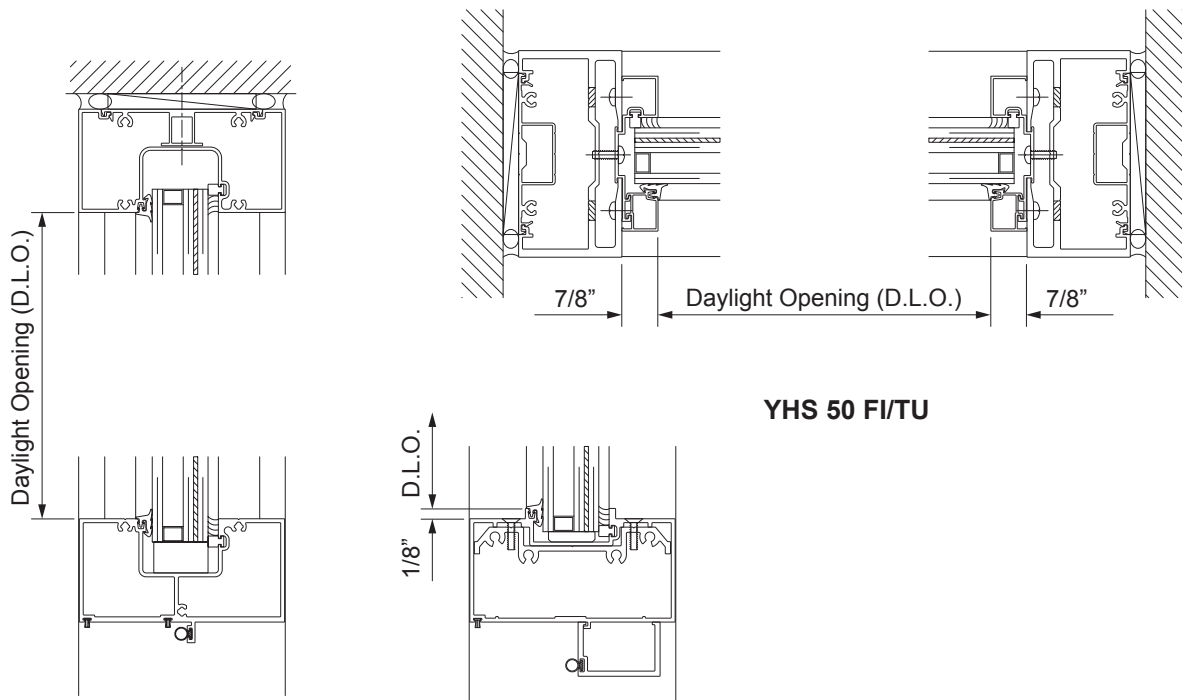
* Effective 8/13/2012, doors ordered with a hard part number will receive this bottom rail.

TRANSOM GLAZING

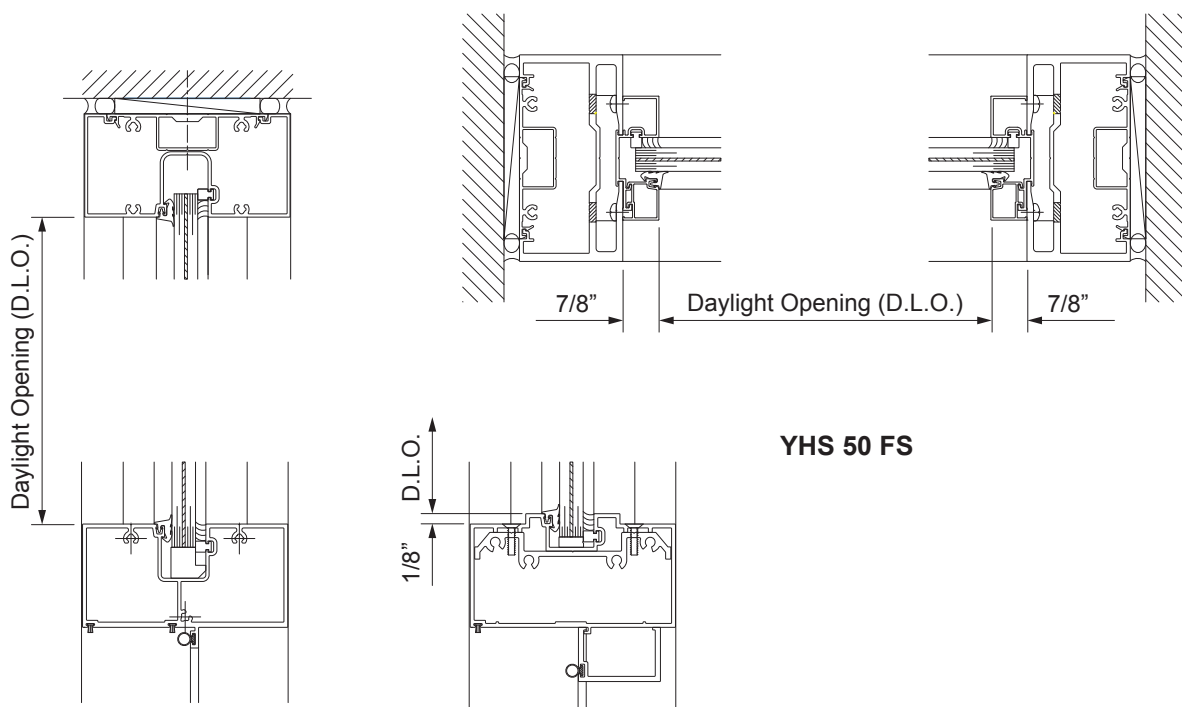
STEP 7

DETERMINE GLASS SIZE (Continued)

Transom Framing: **Glass Width = Daylight Opening plus(+) 1-1/8"**
 Glass Height = Daylight Opening plus(+) 1-1/8"



YHS 50 FI/TU



YHS 50 FS

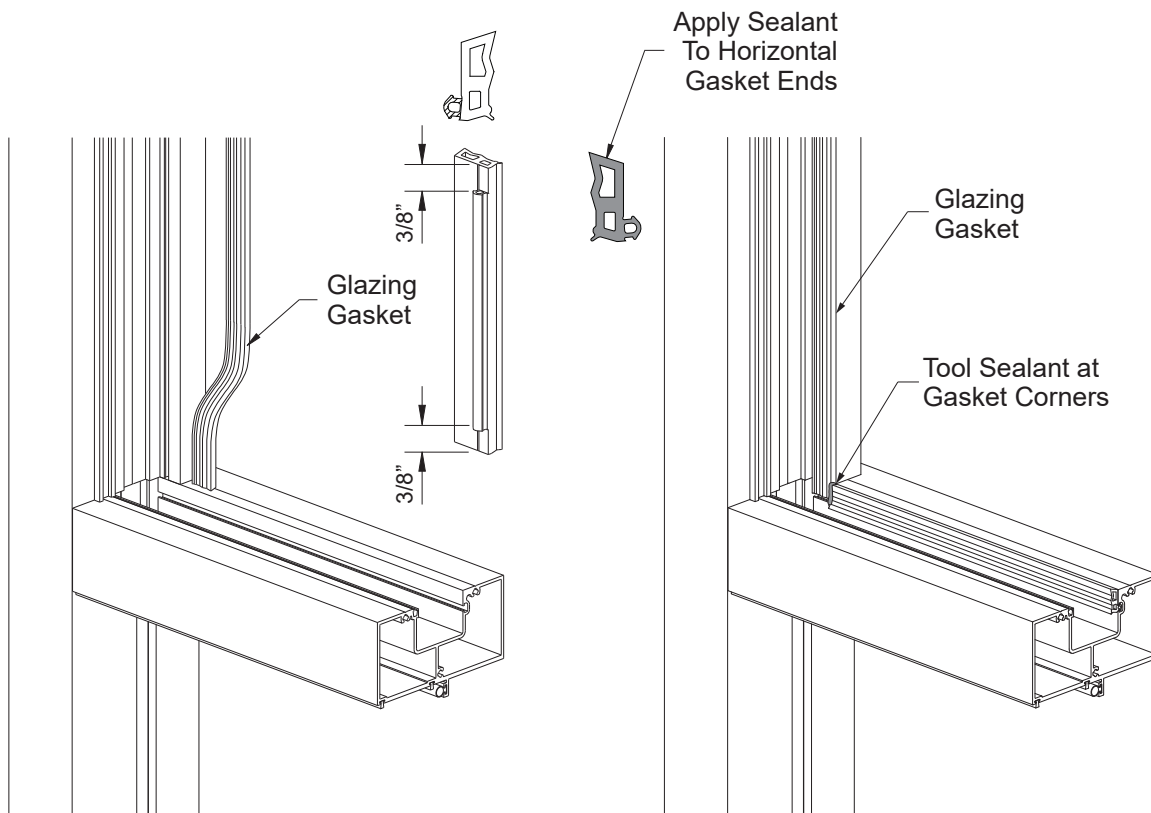
TRANSOM GLAZING

STEP 7

TRANSOM GLAZING: DRY GLAZING APPLICATIONS ONLY

- Cut horizontal & glazing gaskets, E2-0088, to daylight opening plus(+) 1/4" for each foot of length.
- Cut vertical interior glazing gaskets, E2-0088, to daylight opening plus(+) 3/4" plus(+) 1/4" for each foot of length.
- Using a small brush clean out any dirt that may have accumulated in the gasket reglets.
- Install the vertical gaskets first. Install the ends and middle of the gasket first; push in the remainder of gasket working from the middle towards the ends.
- Install the horizontal glazing gaskets next. Apply sealant to the gasket ends to seal horizontal gasket to the vertical gasket.
- Tool the excess sealant at the gasket corners to ensure a watertight seal.

See **Detail 27**.



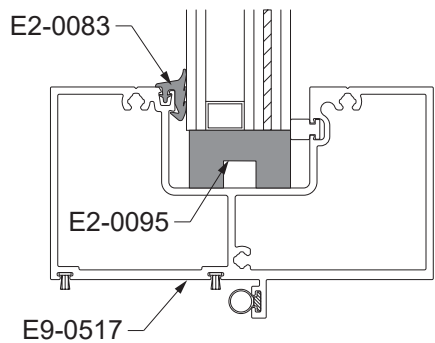
Detail 27

YHS 50 FI shown,
YHS 50 FS/TU similar

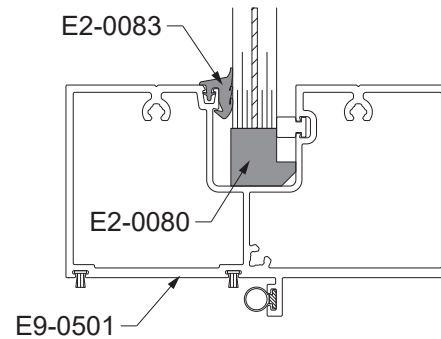
TRANSOM GLAZING

STEP 8 TRANSOM GLAZING

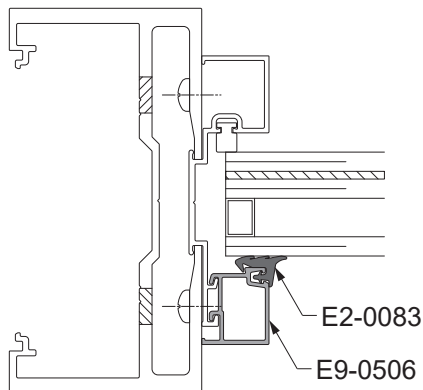
- Cut horizontal & vertical exterior gaskets to daylight opening plus(+) 1/4" for each foot of length.
- Clean all glazing surfaces and joints of foreign matter and contaminants such as grease, oil, dust, frost, and surface dirt. **Do not** use water or soap solutions to clean surfaces or tool sealant.



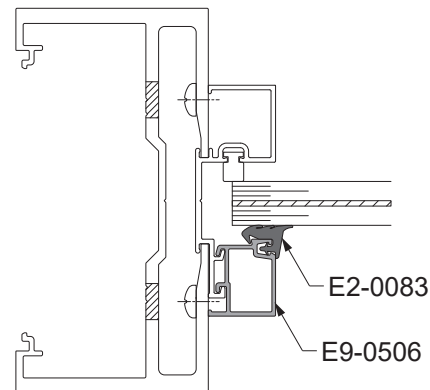
YHS 50 FI



YHS 50 FS



Detail 28



- Carefully install glass into the frame making sure that the side blocks are properly aligned with the glass. Impact resistant glass is **always** to the interior.
 - Slide the glass into the deep vertical pocket and then slide over until contact is made with the side block in the shallow glazing pocket. This will ensure proper location of the glass.
 - Lift the glass and place setting blocks at 1/4 points or according to the engineering calculations.
 - Install glass stop, E9-0506.
 - Install the vertical exterior gaskets first. Roll the gasket in working from the center towards each end.
 - Then install the horizontal exterior gaskets. Install each end and the center of the gasket into the reglet and roll in the remainder of gasket working from the center towards each end.
- See **Detail 28**.
- Install glass in the door using the same technique described above.

GLAZING

STEP 8 (Continued) TRANSOM GLAZING

The following steps are for applications where structural silicone is required on the interior.

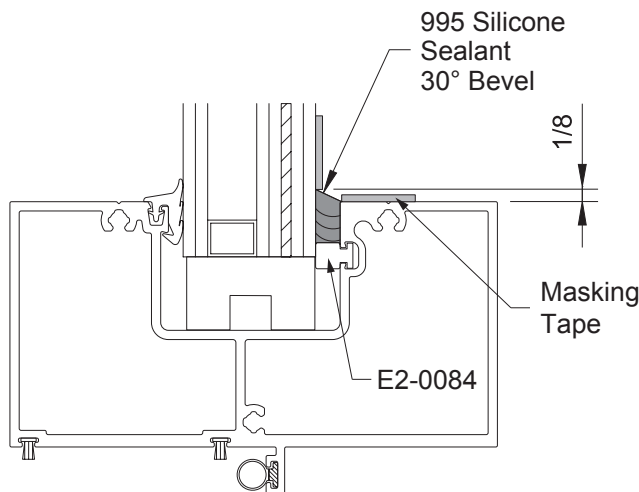
- Clean all sealant contact surfaces on metal and glass using method approved by sealant manufacturer.
- Apply masking tape to the aluminum and glass according to **Detail 29**.

Note: Apply tape to the glass 1/8" away from the aluminum to provide a 30° bevel.

- Apply approved structural silicone sealant from the bottom to the top of joint.
- Use positive pressure so that sealant completely fills the cavity between glass and aluminum.
- Using a 30° nylon beveled spatula, or other non-scratching implement, tool the structural silicone sealant immediately after running the joint. Exert positive pressure while tooling sealant to ensure that the silicone makes complete contact with all surfaces.

Note: Be careful not to remove too much silicone.
The finished joint should be 30° beveled around the glass.

- Immediately remove masking tape while wet; do not allow silicone to skin.
- Masking tape must be removed within 10 minutes of tooling.

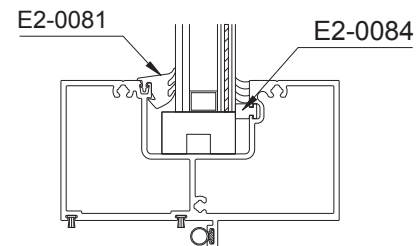


**1-5/16" Glass
(SSG APPLICATIONS)**

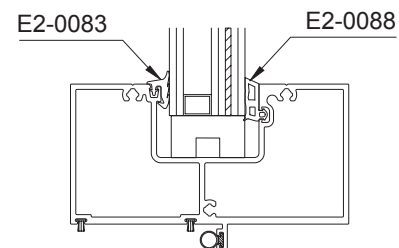
Detail 29

YHS 50 FI shown,
YHS 50 FS/TU similar

Glazing Options



**1-1/16" Glass
(SSG APPLICATIONS)**



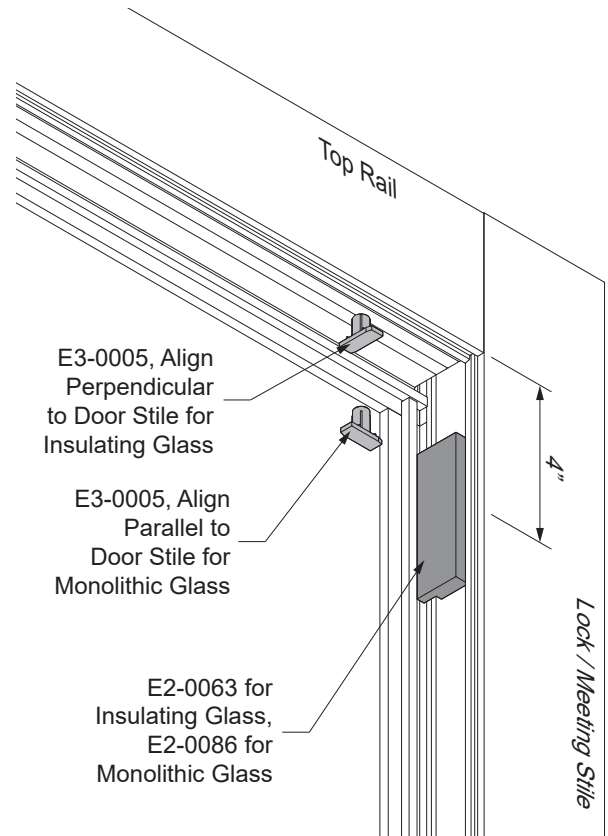
**1-5/16" Glass
(DRY GLAZE APPLICATIONS)**

GLAZING

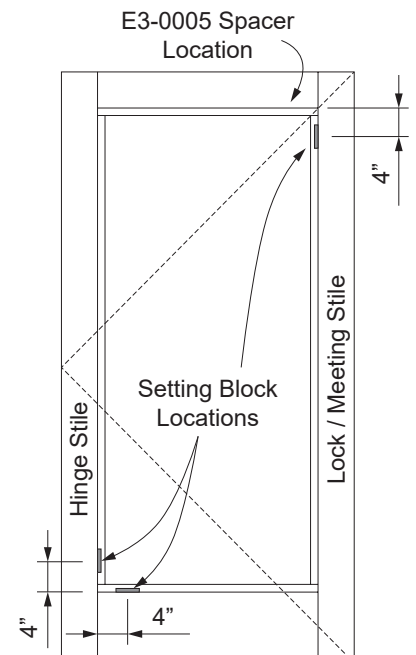
STEP 9 DOOR GLAZING

The interior glass stops and corresponding gaskets are pre-installed into the door leaf.

- Prior to installing the glass, ensure the E3-0005 adjustable cap is in its proper orientation for the type of glass as shown in **Detail 30**.
- Apply (3) setting blocks (E2-0063 for insulating glass and E2-0086 for monolithic glass) in the locations shown in **Detail 31**.
- Carefully install the glass lite into the door leaf.



Detail 30

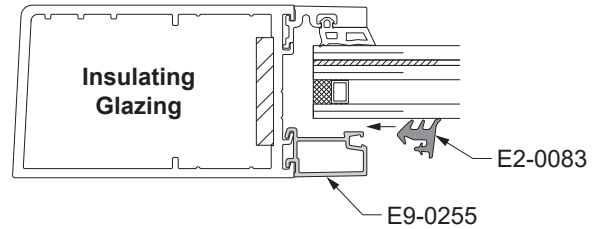


Detail 31

GLAZING

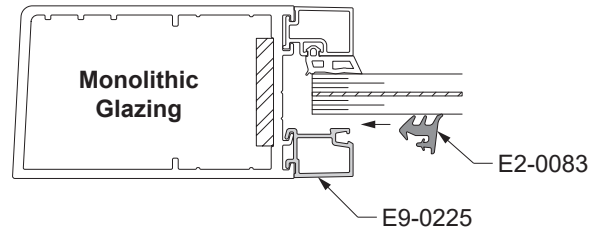
STEP 9 (Continued) DOOR GLAZING

-Attach the exterior glass stops along with the E2-0083 wedge gaskets as shown in **Detail 32**.



STEP 10 ADJUST ALIGNMENT OF MODEL 35H/50H DOOR

-If necessary, adjust the alignment of the door by turning the screw located in the top rail of the door:
Clockwise to raise corner.
Counterclockwise to lower the corner.



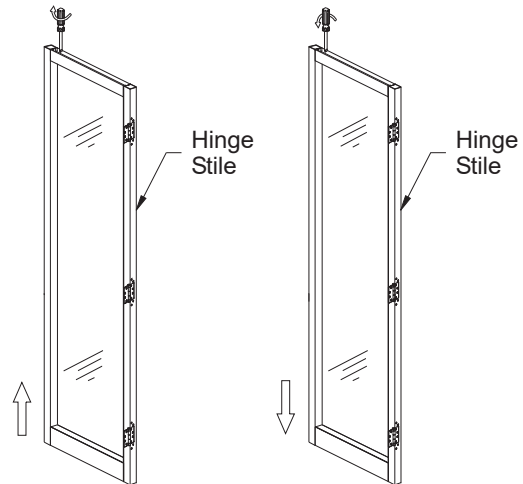
Detail 32

-Check the alignment of the door with frame.
-Apply structural silicone to interior glass stop according to instructions in **Step 8**.

Note: Door must be adjusted before applying structural silicone.

STEP 11 (Wet Glazing Only) APPLY STRUCTURAL SEALANT TO DOOR

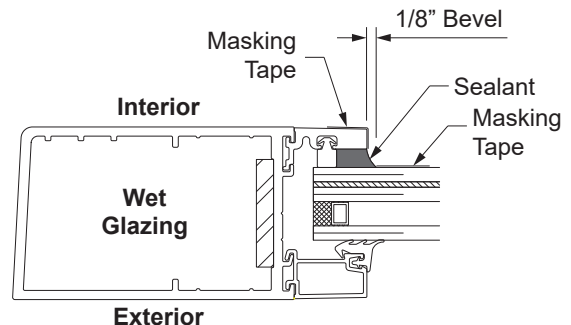
-Apply masking tape to the aluminum and glass according to **Detail 34**.



Detail 33

Note: Apply tape to the glass 1/8" away from the aluminum to provide a 30° bevel.

-Apply Dow Corning® 995 structural silicone sealant from the bottom to the top of joint.
-Use positive pressure so that sealant completely fills the cavity between glass and aluminum.
-Using a 30° nylon beveled spatula, or other non-scratching implement, tool the structural silicone sealant immediately after running the joint. Exert positive pressure while tooling sealant to ensure that the silicone makes complete contact with all surfaces.



Detail 34

INSTALL HARDWARE

STEP 11 (Continued, Wet Glazing Only) APPLY STRUCTURAL SEALANT TO DOOR

Note: Be careful not to remove too much silicone. The finished joint should be 30° beveled around the glass.

-Immediately remove masking tape while wet; do not allow silicone to skin. Masking tape must be removed within 10 minutes of tooling.

STEP 12 INSTALL MODEL 35H / 50H DOOR HARDWARE

Attach pull handle:

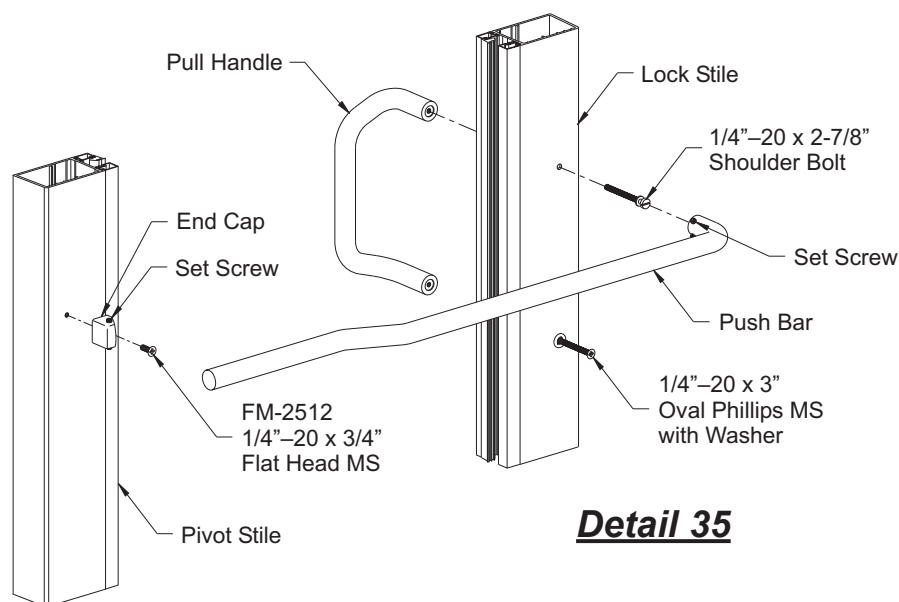
- Remove from the door carton the push/pull hardware and accessory package.
- Fasten the pull handle to the lock stile with the 2-7/8" shoulder bolt at the top and with the 3" oval head machine screw at the bottom. Make sure the washer is properly seated under the screw head.

Attach push bar:

- Attach the end cap to the pivot stile with the FM-2512 3/4" machine screw.
- Insert the straight end of the push bar into the end cap and swing the curved end onto the shoulder bolt head. Tighten the set screws at each end of the push bar using a 1/8" Allen wrench.

See **Detail 35**.

-Install the door closer according to manufacturer's instructions.



Detail 35

INSTALL HARDWARE

STEP 13

INSTALL THRESHOLD RAMP FOR ADA COMPLIANCE

-ADA designated entrances require additional considerations:

Frames that employ the water resistant threshold, E9-0502, and are designated as ADA entrances, require a 1:12 sloped ramp, or a maneuvering clearance* on both sides of the door. Maneuvering surfaces must be level and free of obstructions.

Note: Maneuvering surfaces on the exterior must drain water away from the entrance.

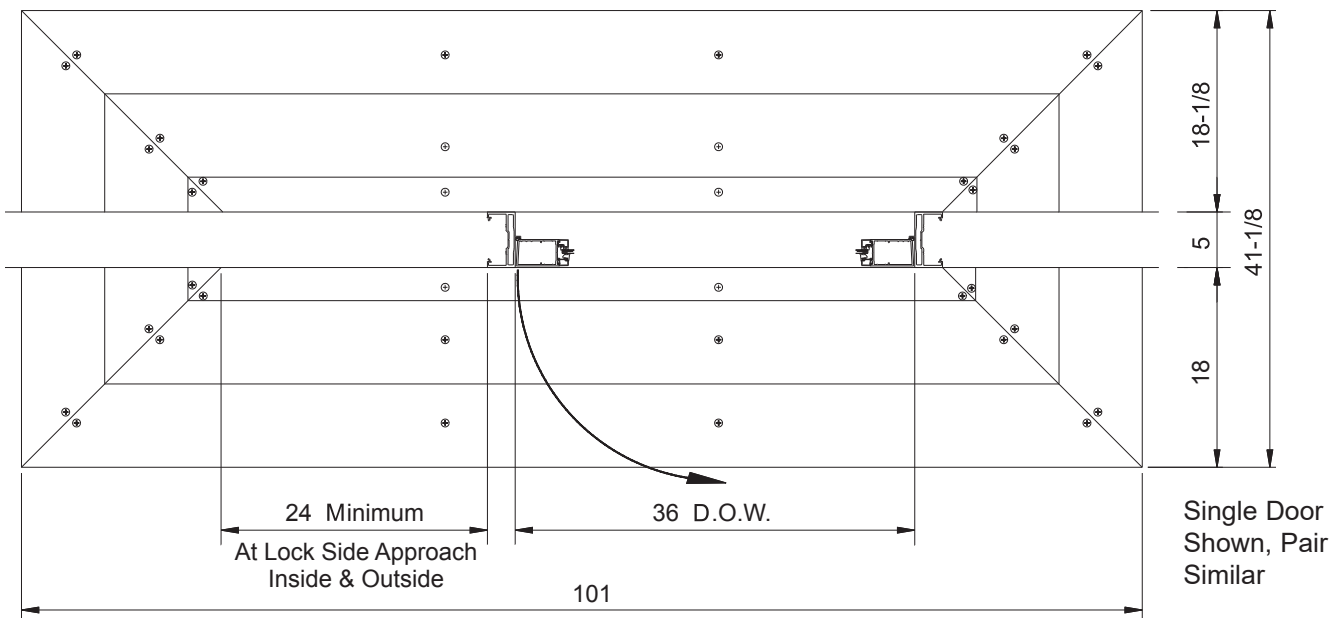
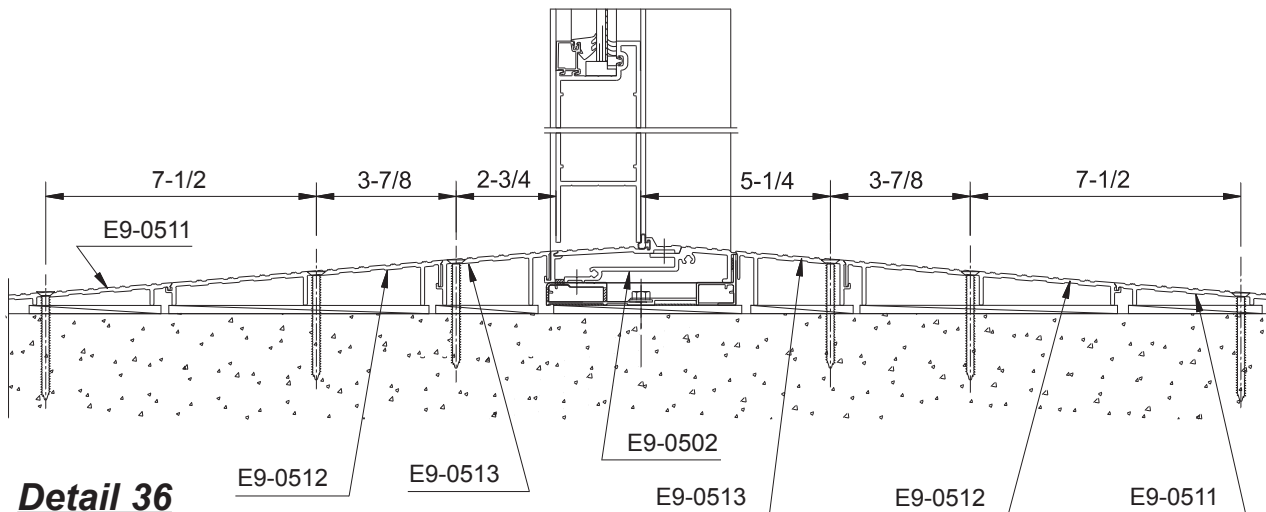
-YKK AP recommends a threshold ramp whenever the E9-0502 threshold is selected.

-Follow the instructions below for the installation of a threshold ramp offered by YKK AP.

-Assemble the fabricated threshold and anchor to the structure according to **Detail 36**.

-Shim as required. Shim should be no more than 1/4" thick at ramp per ADA compliance.

Note: Threshold ramp anchors are to provide a minimum of 1-1/2" embedment into structure.





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