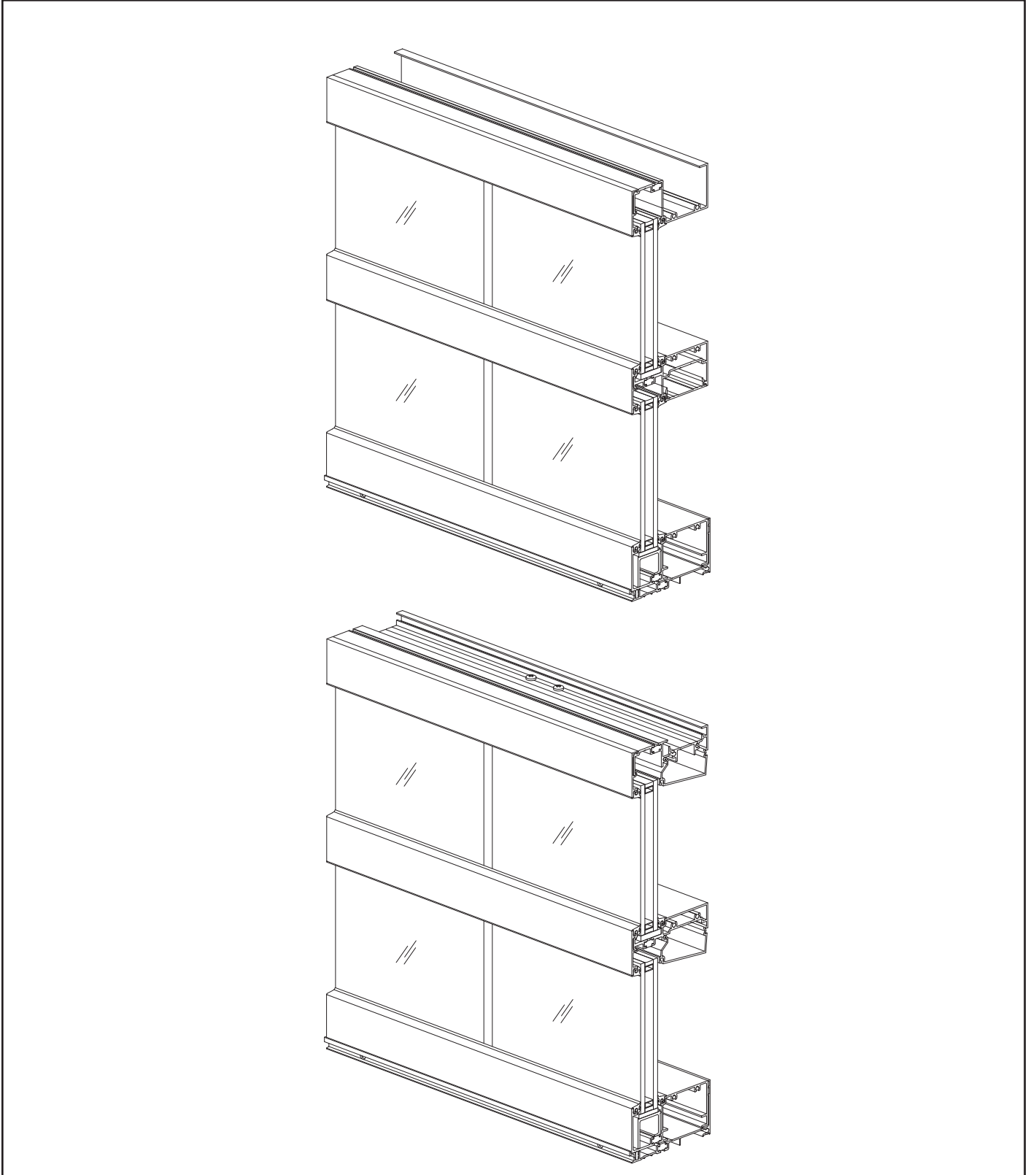


**YES 45 TU SSG Front Set Storefront System**



**Installation Manual**



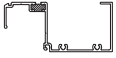





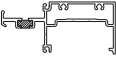




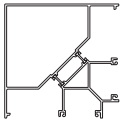
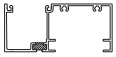
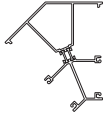
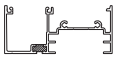

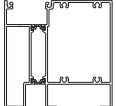








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











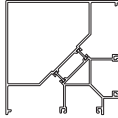




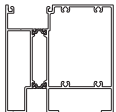







**Installation Notes**

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.
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](http://www.ykkap.com), for the latest installation manual update prior to commencing work.

## FRAMING MEMBERS (2" x 4-1/2") FOR OUTSIDE GLAZING





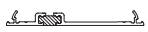




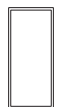
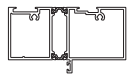






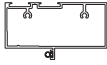




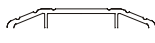
	<b>Head</b> For SSG Framing	<b>BE9-2575</b>		<b>SSG Expansion Mullion (Female)</b> , Use with Cont. Head & Sill	<b>E9-2548</b>
	<b>Head Receptor</b>	<b>BE9-2562</b>		<b>SSG Expansion Mullion (Male)</b> , Use with Cont. Head & Sill	<b>E9-2549</b>
	<b>Head Receptor Stop</b> Use with BE9-2562	<b>E9-1033</b>		<b>90° Outside Corner Mullion</b> Use with Continuous Head & Sill Only	<b>E9-2510</b>
	<b>Horizontal</b>	<b>BE9-2573</b>		<b>90° Outside Corner Trim Base</b> For 1" Glazing	<b>E9-2550</b>
	<b>Glass Stop</b> Use with BE9-2575	<b>E9-2501</b>		<b>90° Outside Corner Trim Cover</b>	<b>E9-3439</b>
	<b>Glass Stop</b> Use with BE9-2573	<b>E9-2508</b>		<b>90° Inside Corner Mullion</b>	<b>BE9-2506</b>
	<b>Sill/Jamb Screw Spline Assembly</b>	<b>BE9-2513</b>		<b>135° Inside Corner Mullion</b>	<b>BE9-2505</b>
	<b>Sill Shear Block Assembly</b>	<b>BE9-2518</b>		<b>0°-12.5° Hinged Inside Corner Mullion (Male)</b>	<b>BE9-2524</b>
	<b>4-1/2" Sill Screw Spline Assembly</b>	<b>BY7-9762</b>		<b>0°-15° Hinged Outside Corner Mullion (Male)</b>	<b>BE9-2527</b>
	<b>Thermal Sill Flashing</b>	<b>BE9-2578</b>		<b>Hinged Corner Mullion (Female)</b> Use with BE9-2524 or BE9-2527	<b>BE9-2528</b>
	<b>Snap-in Filler</b> Use with E9-0490 at Jamb Conditions	<b>E9-0491</b>		<b>Glazing Adaptor</b> For 1/4" Glazing	<b>E9-1040</b>
	<b>Flush Filler</b>	<b>E9-2512</b>		<b>SSG Glazing Adaptor</b> For 1/4" Glazing	<b>E9-2509</b>
	<b>SSG Mullion</b> Use with Continuous Head & Sill Only	<b>E9-2547</b>			

## FRAMING MEMBERS (2" x 4-1/2") FOR INSIDE GLAZING


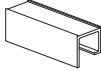

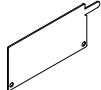

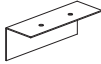

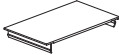

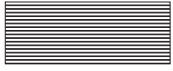



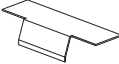



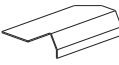






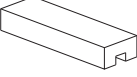

	<b>Head</b> For I.G. SSG	<b>BE9-2574</b>		<b>SSG Mullion</b> Use with Continuous Head & Sill Only	<b>E9-2547</b>
	<b>Head Receptor</b>	<b>BE9-2562</b>		<b>SSG Expansion Mullion (Female)</b> , Use with Cont. Head & Sill	<b>E9-2548</b>
	<b>Head Receptor Stop</b> Use with BE9-2562	<b>E9-1033</b>		<b>SSG Expansion Mullion (Male)</b> , Use with Cont. Head & Sill	<b>E9-2549</b>
	<b>Horizontal Shear Block Assembly</b>	<b>BE9-2572</b>		<b>90° Outside Corner Mullion</b> Use with Continuous Head & Sill Only	<b>E9-2510</b>
	<b>Glass Stop</b> Use with BE9-2574 & BE9-2572	<b>E9-2523</b>		<b>90° Outside Corner Trim Base</b> For 1" Glazing	<b>E9-2550</b>
	<b>Glass Stop</b> Use with BE9-2574	<b>E9-2501</b>		<b>90° Outside Corner Trim Cover</b>	<b>E9-3439</b>
	<b>Glass Stop</b> Use with BE9-2572	<b>E9-2508</b>		<b>90° Inside Corner Mullion</b>	<b>BE9-2506</b>
	<b>Sill/Jamb Screw Spline Assembly</b>	<b>BE9-2513</b>		<b>135° Inside Corner Mullion</b>	<b>BE9-2505</b>
	<b>Sill Shear Block Assembly</b>	<b>BE9-2518</b>		<b>0°-12.5° Hinged Inside Corner Mullion (Male)</b>	<b>BE9-2524</b>
	<b>4-1/2" Sill Screw Spline Assembly</b>	<b>BY7-9762</b>		<b>0°-15° Hinged Outside Corner Mullion (Male)</b>	<b>BE9-2527</b>
	<b>Thermal Sill Flashing</b>	<b>BE9-2578</b>		<b>Hinged Corner Mullion (Female)</b> Use with BE9-2524 or BE9-2527	<b>BE9-2528</b>
	<b>Snap-in Filler</b> Use with E9-0490 at Jamb Conditions	<b>E9-0491</b>		<b>Glazing Adaptor</b> For 1/4" Glazing	<b>E9-1040</b>
	<b>Flush Filler</b>	<b>E9-2512</b>		<b>SSG Glazing Adaptor</b> For 1/4" Glazing	<b>E9-2509</b>

## DOOR FRAMING MEMBERS

**THERMAL**
**STANDARD**




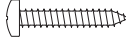



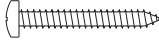


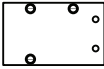

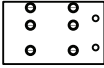





	<b>Door Jamb</b> For 25T/35T/50T Doors E2-0051 Not Included	<b>BE9-1340</b>		<b>Door Jamb</b> Use with AS-0409	<b>E9-0490</b>
	<b>Snap-in Pocket Filler</b>	<b>E9-2546</b>		<b>Snap-in Pocket Filler</b>	<b>E9-2546</b>
	<b>Snap-in Filler</b>	<b>BE9-2571</b>		<b>Snap-in Filler</b> Use With E9-0490 and BE9-1340 at Jamb Conditions	<b>E9-0491</b>
	<b>Interior Transom Glass Stop</b> Use With BE9-1342	<b>E9-1343</b>		<b>Snap-in Filler</b>	<b>E9-1020</b>
	<b>Applied Exterior Transom Glass Stop</b> Use With E9-1343 & FC-0808	<b>BE9-1342</b>		<b>Intermediate Door Jamb</b> Use with AS-0409	<b>E9-9312</b>
	<b>Transom Bar</b> For 25T/35T/50T Doors E2-0051 Not Included	<b>BE9-1341</b>		<b>Applied Door Stop</b> E2-0052 Elastomer Weath- ering Included	<b>AS-0409</b>
	<b>Exterior Transom Head Glass Stop</b> Use With BE9-1341	<b>E9-2425</b>		<b>Door Stop Base</b> Used with AS-0409	<b>E9-1113</b>
	<b>Interior Transom Head Glass Stop</b> Use With BE9-1341	<b>E9-2536</b>		<b>Transom Jamb Pocket Adaptor</b>	<b>E9-2543</b>
	<b>Threshold</b> 1/2" x 4-1/2" For 25T/35T/50T Doors	<b>BE9-0465</b>		<b>Transom Bar</b> E2-0051 Elastomer In- cluded	<b>AS-0488</b>
				<b>OHCC Transom Bar</b>	<b>E9-0489</b>
				<b>OHCC Door Stop</b> E2-0051 Elastomer In- cluded	<b>AS-0718</b>
				<b>Exterior Transom Head Glass Stop</b>	<b>E9-2425</b>
				<b>Interior Transom Head Glass Stop</b>	<b>E9-2540</b>
				<b>Threshold</b> 1/2" x 4"	<b>E9-0407</b>

## ACCESSORIES

	<b>Glazing Gasket</b>	<b>E2-0052</b>		<b>Setting Block Chair</b> Use with E2-0177 Setting Block at Sill	<b>E1-2530</b>
	<b>Structural Glazing Spacer</b> (1/4" F.C.) For I.G.	<b>E2-0543</b>		<b>End Dam</b> For Sill Flashing	<b>E1-0199</b>
	<b>Structural Glazing Spacer</b> (1/4" F.C.) For O.G	<b>E2-0544</b>		<b>End Cap</b> For Head Receptor BE9-2562	<b>E1-2603</b>
	<b>Elastomer Weathering</b>	<b>E2-0051</b>		<b>Snap-in Filler</b> Use with AS-2539 at Jamb Conditions	<b>E1-1148</b>
	<b>Pile Weathering</b>	<b>E2-0062</b>		<b>Splice Sleeve</b> for BE9-2578 Sill Flashing and BE9-2562 Head Receptor	<b>E2-0070</b>
	<b>Weathering Gasket</b> Use with Expansion Mullions	<b>E2-0065</b>		<b>Water Deflector</b>	<b>E2-0047</b>
	<b>Shear Block</b> Use with BE9-2575 Head at Expansion Mullions	<b>E1-1144</b>		<b>Horizontal Water Deflector</b> For SSG	<b>E1-1189</b>
	<b>Shear Block</b>	<b>E1-1145</b>		<b>RH 90° Corner Water Deflector</b> For SSG Outside Glazing	<b>E1-1179</b>
	<b>Setting Block</b> For Intermediate Horizontal	<b>E2-0611</b>		<b>LH 90° Corner Water Deflector</b> For SSG Outside Glazing	<b>E1-1180</b>
	<b>Setting Block</b> For 1" Glazing Transom Head	<b>E2-0104</b>		<b>1-1/8" "W" Side Block</b> For Jamb	<b>E2-0545</b>
	<b>Setting Block</b> For Sill	<b>E2-0177</b>		<b>3/4" "W" Side Block</b> Only at Thermal Transom Jamb Pocket	<b>E2-0519</b>
	<b>Setting Block</b> For 1/4" Glazing	<b>E2-0019</b>		<b>3/8" "W" Side Block</b> Only at Standard Transom Jamb Pocket	<b>E2-0533</b>
	<b>Setting Block</b> For 1" Glazing Used with BY7-9762	<b>E2-0020</b>		<b>End Dam</b> For BE9-2521 Head, Continuous Head & Sill Frames	<b>E2-0069</b>



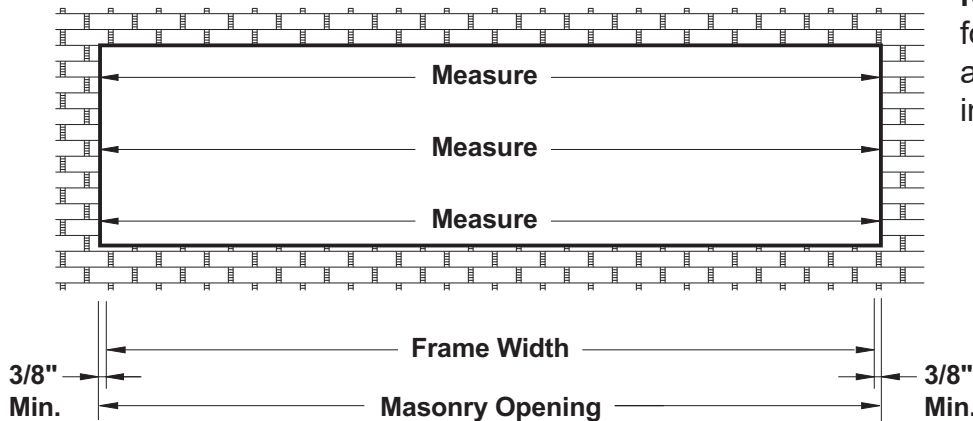
## ACCESSORIES

	<b>End Dam</b> For BE9-2575 Head, Continuous Head & Sill Frames	<b>E2-0548</b>		<b>#12 x 5/8" PHSMS Type AB,</b> Zinc Plated Steel, For Attach- ment of horizontals to shear blocks	<b>PC-1210</b>
	<b>Temporary Glass Retainer</b> For 90° Outside SSG Corner	<b>E1-3588</b>		<b>#12 x 1-1/4" PHSMS Type AB,</b> Zinc Plated Steel, For Screw Spline Attachment	<b>PC-1220</b>
	<b>Temporary Glass Retainer</b> For 1" GL.	<b>E3-0001</b>		<b>#12 x 1-1/2" PHSMS Type AB,</b> Zinc Plated Steel, For Screw Spline Attachment	<b>PC-1224</b>
	<b>Temporary Glass Retainer</b> For 1/4" GL.	<b>E3-0006</b>		<b>#12 x 1-3/4" PHSMS Type AB</b> Zinc Plated Steel, For Attachment of Shear Block to Vertical	<b>PC-1228</b>
	<b>Frame Filler</b> (Optional) Use with BE9-2513 & BE9-2574	<b>E3-0028</b>		<b>#8 x 1/2" FHSMS Type AB,</b> Zinc Plated Steel For Attach- ment of E9-2541 to Transom Jamb	<b>FC-0808</b>
	<b>Drill Fixture</b> For Outside Glazing	<b>H-7214</b>		<b>#12 x 1/2" FHSMS Type AB</b> Zinc Plated Steel, For Attachment of E1-2603 End Cap to Head Receptor	<b>FC-1208</b>
	<b>Drill Fixture</b> For Inside Glazing	<b>H-7215</b>		<b>#10-32 x 2" FHSMS</b> Zinc Plated Steel, For Attachment of OHCC Door Stop	<b>FN-1032</b>
	<b>#8 x 3/8" PHSMS</b> Zinc Plated Steel For Hinged Mullions	<b>PC-0806</b>		<b>#12 x 3/4" UFHSMS Type A,</b> Zinc Plated Steel Alternative End Dam Attach. in Restrictive Spaces	<b>UA-1212</b>
	<b>#10-24 x 3/8" PHMS,</b> Stainless Steel, For Attachment of Sill to Sill Flashing	<b>PM-1006 -SS</b>		<b>#1/4"-20 x 1" HWHMS</b> Zinc Plated Steel For Attachment Corner Temp Glass Retainer	<b>HM-2516</b>

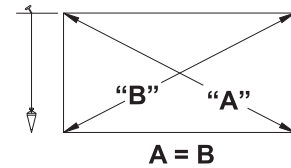
## FRAME FABRICATION

### STEP 1 DETERMINE FRAME SIZE

#### Determine Frame Width:



**Note:** Check the opening for squareness and plumb at both ends. Units must be installed in a true rectangle.



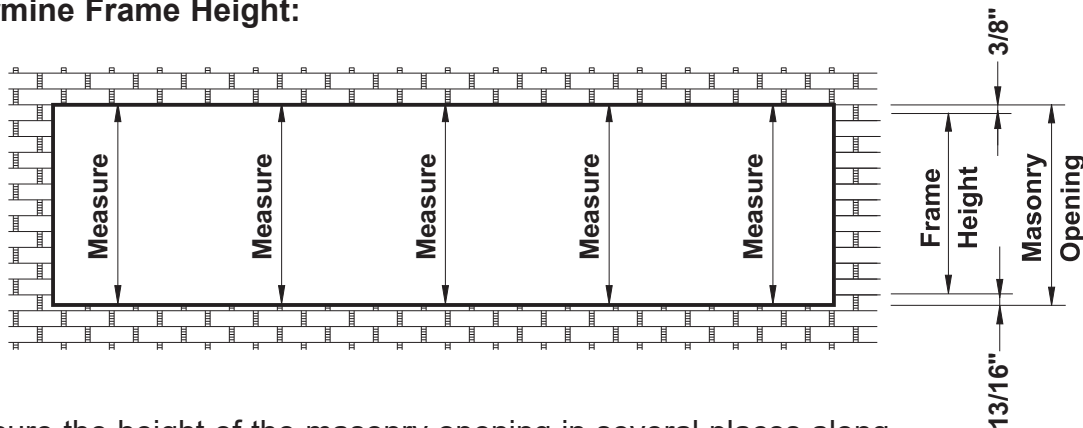
**Detail 1**

- Measure the width of the masonry opening at the top, middle and bottom.
- Select the smallest dimension measured and subtract 3/4" to the determine the frame width to be used.

See **Detail 1**.

**Note:** Frame widths over 24'-0" require expansion mullions every 12 to 15 feet (best location at vertical next to the door jamb.)

#### Determine Frame Height:



- Measure the height of the masonry opening in several places along the entire length of the opening.
- Select the smallest dimension measured and subtract 1-3/16" to determine the frame height to be used:

Minimum 3/8" shim/caulk joint at the head.

7/16" for sill flashing.

Minimum 3/8" shim/caulk joint below the sill flashing.

See **Detail 2**.

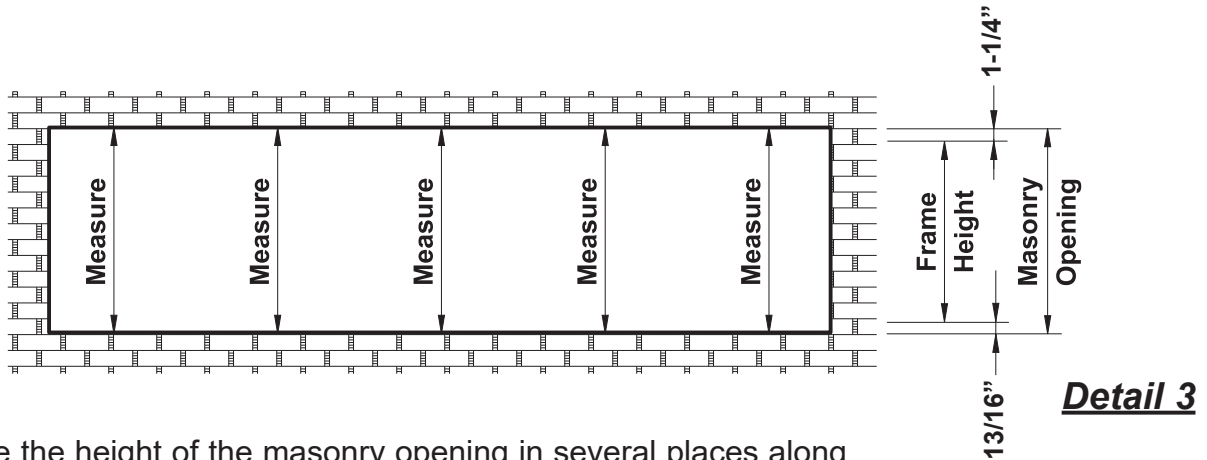
**Detail 2**

## FRAME FABRICATION

### STEP 1

### DETERMINE FRAME SIZE

Determine Frame Height for Receptor Conditions:



-Measure the height of the masonry opening in several places along the entire length of the opening.

-Select the smallest dimension measured and subtract 2-1/16" to determine the frame height to be used:

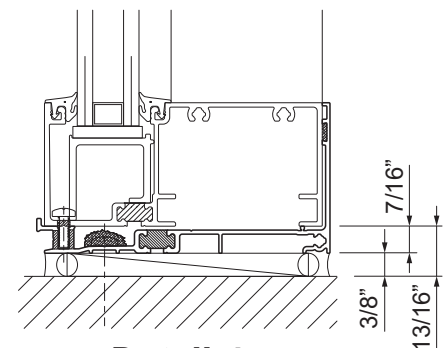
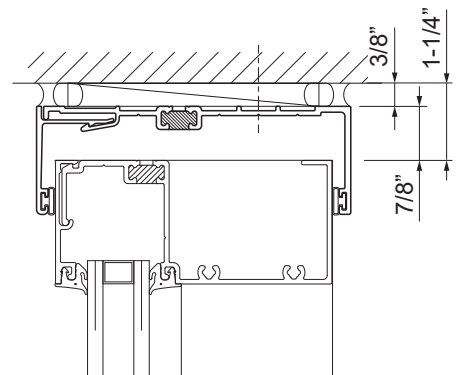
Minimum 3/8" shim/caulk joint at the head.

7/8" for the head receptor

7/16" for sill flashing.

Minimum 3/8" shim/caulk joint below the sill flashing.

See **Details 3 & 4**.



**Detail 4**

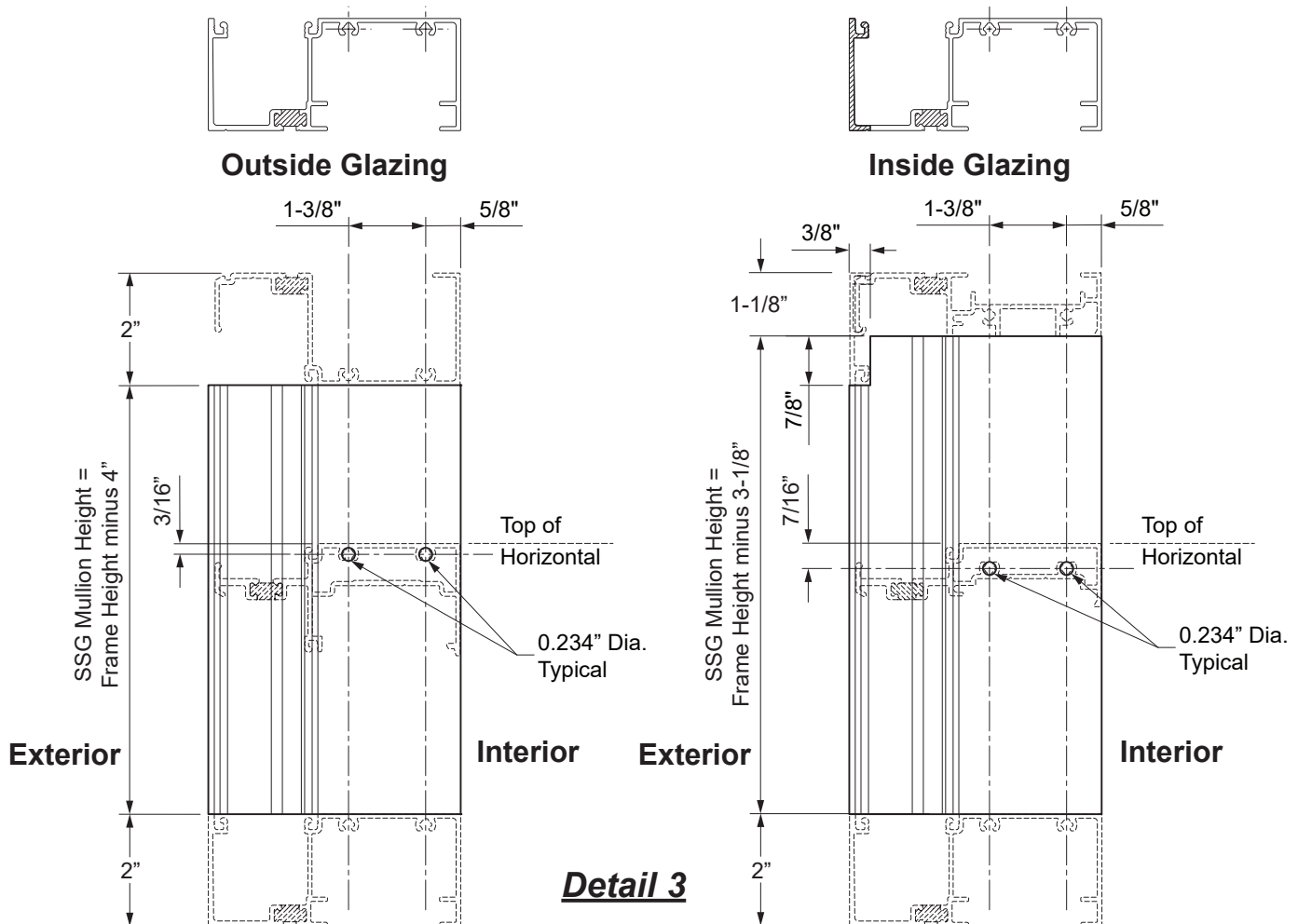
## FRAME FABRICATION

### STEP 2 FABRICATE JAMBS

-Cut the jamb mullion as shown in **Detail 3**.

-Fabricate holes in mullions for screw spline attachment using one of the methods below:

1. Layout the hole locations as shown in **Detail 3** and drill a 0.234" dia. (15/64" drill bit) clearance hole at each location marked, or per drill fixture.
2. Use punch press with appropriate die set.



## FRAME FABRICATION

### STEP 2 (Continued) FABRICATE INTERMEDIATE SSG MULLIONS

**Notes:** SSG Mullions can only be used in continuous head and sill applications. For inside glazed SSG framing, horizontal Daylight Openings must be 24" or greater where SSG mullions are used.

-Cut the SSG mullion as shown in **Detail 4**.

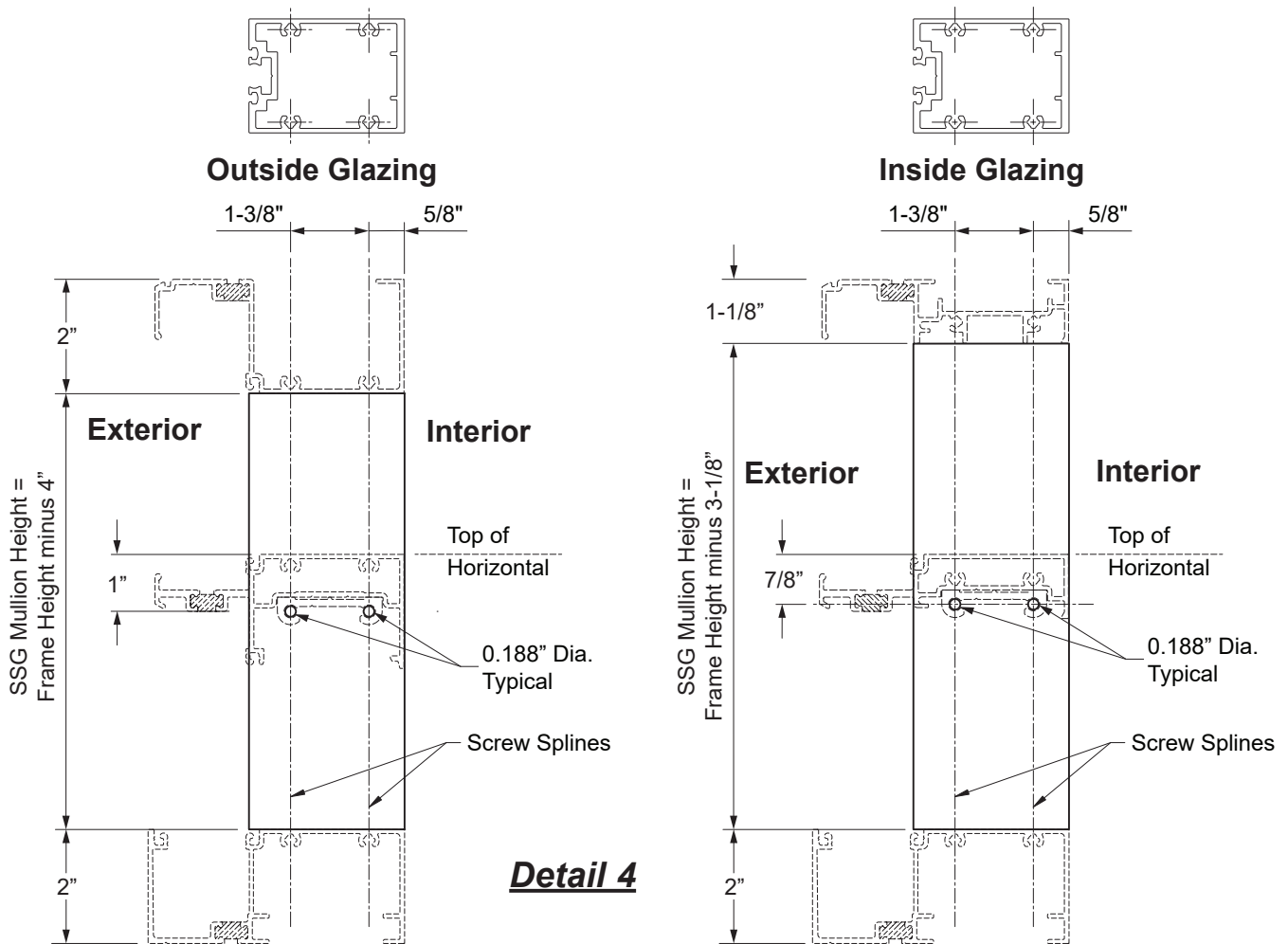
**Note:** Open back horizontals, BE9-2572 and BE9-2573, must be used when using shear blocks.

-Mark the location for each shear block using one of the methods below:

1. Use a short piece of each horizontal member with a shear block installed as a template. Center the template on the face of the vertical and mark each hole location.
2. Layout the shear blocks as shown in **Detail 4**.

-Drill a 0.188" diameter hole (#12 or 3/16" drill bit) at each location marked.

-Attach the shear blocks to the verticals using three (3) PC-1228 fasteners.



## FRAME FABRICATION

### STEP 2 (Continued) FABRICATE CORNER MULLIONS

-Tubular mullions require shear blocks for the attachment of horizontal members:

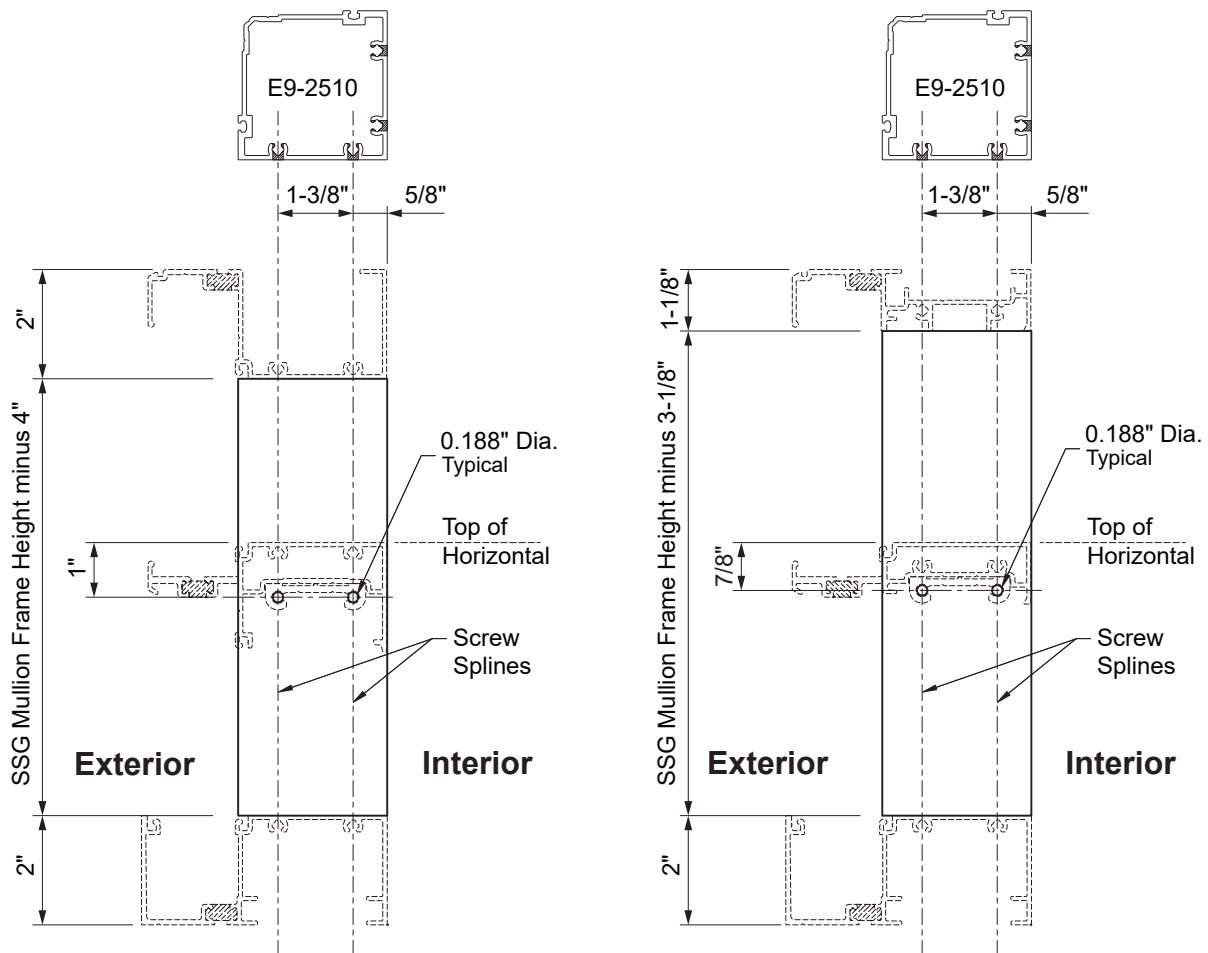
**Note:** Open back horizontals, BE9-2572 and BE9-2573, must be used when using shear blocks.

-Mark the location for each shear block using one of the methods below:

1. Layout the shear blocks as shown in **Detail 5**.

-Drill a 0.188" diameter hole (#12 or 3/16" drill bit) at each location marked.

-Attach the shear blocks to the verticals using two (2) PC-1228 fasteners.



**Detail 5**

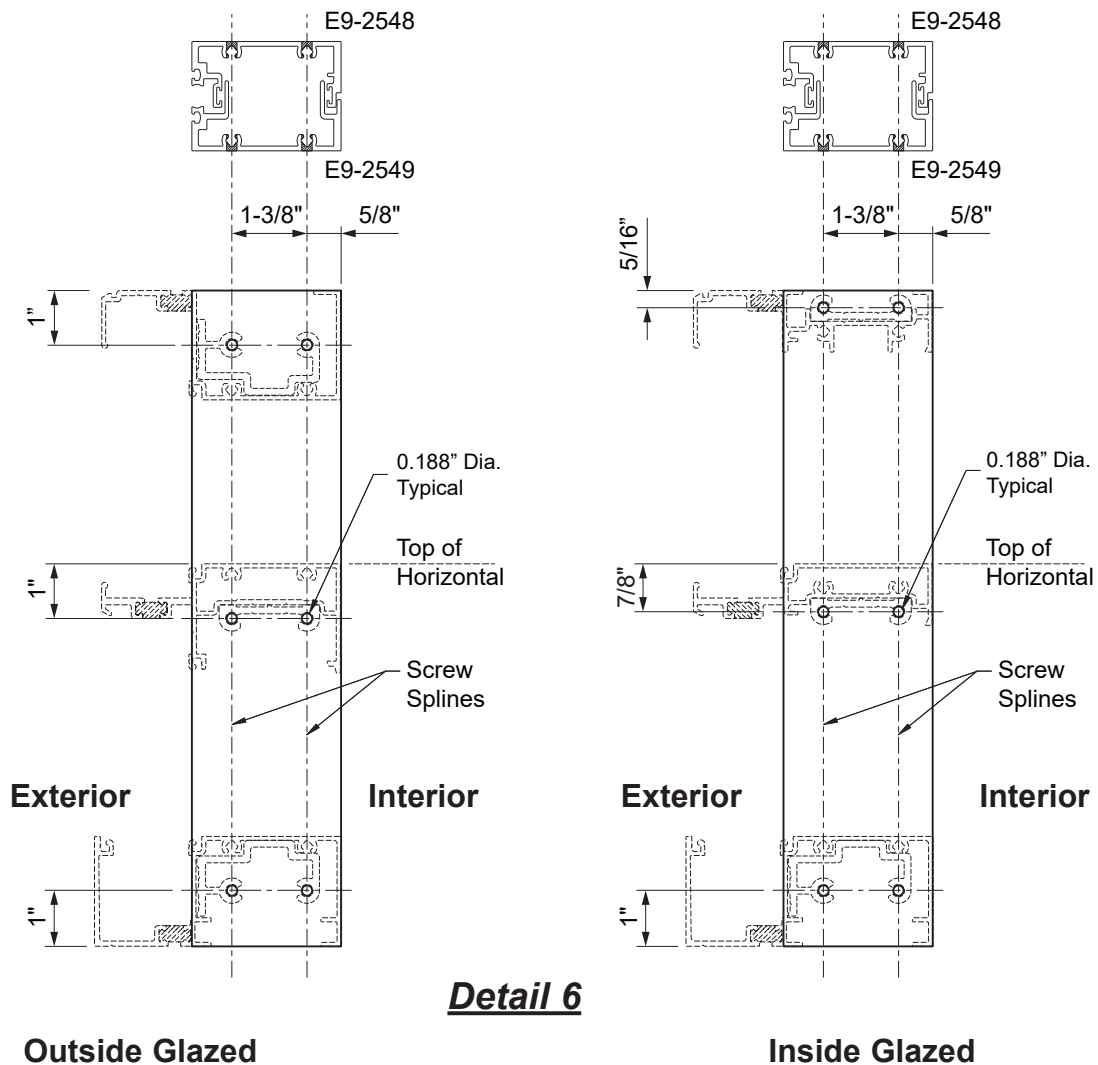
## FRAME FABRICATION

### STEP 2 (Continued) FABRICATE EXPANSION MULLIONS

-Cut the E9-2548 and E9-2549 expansion mullions to the frame height determined in **Step 1**.

-Drill 0.188" diameter holes (#12 or 3/16" drill bit) at each location marked at the intermediate horizontals.

See **Detail 6**.



## FRAME FABRICATION

### STEP 2 (Continued)

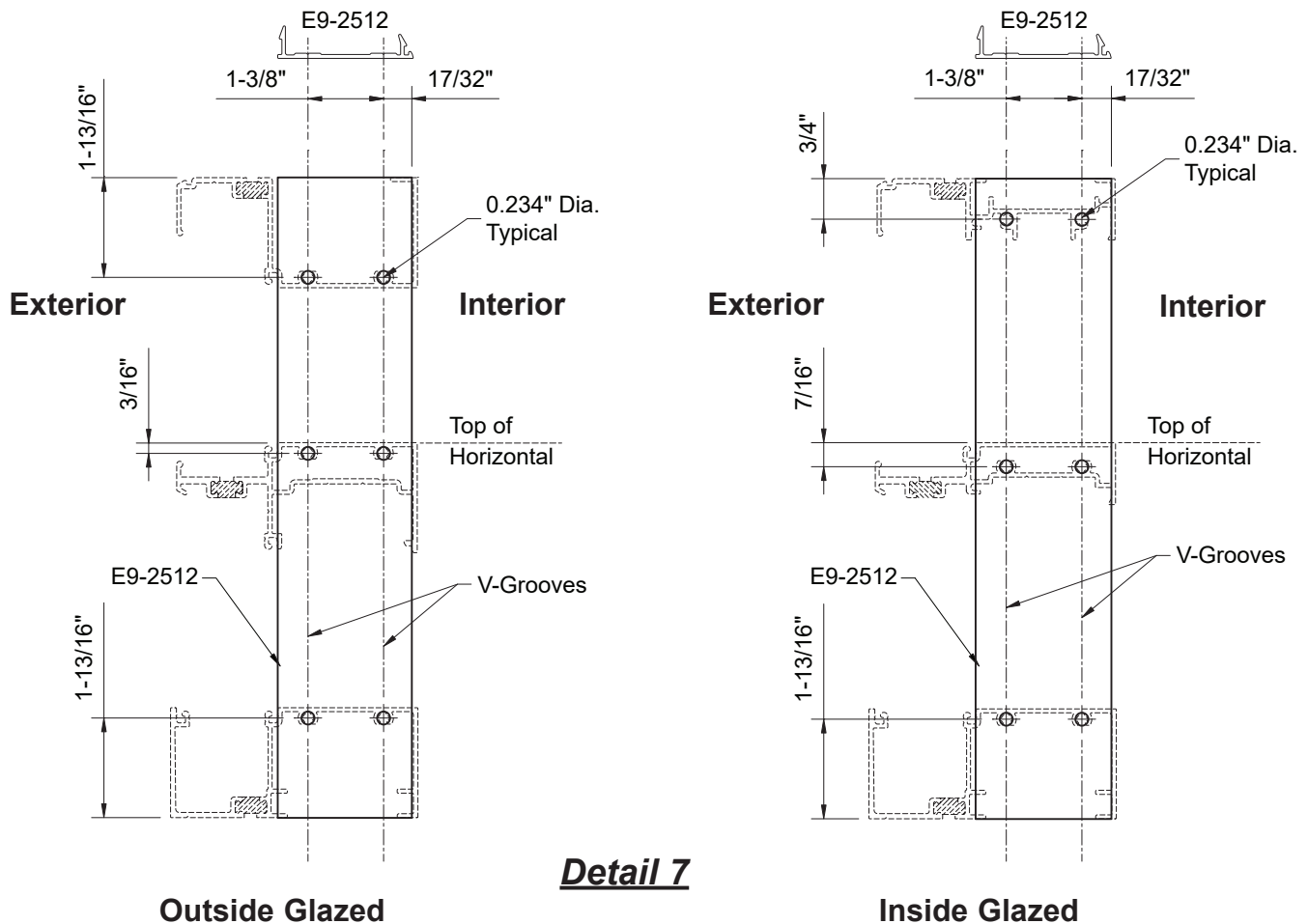
### FABRICATE SNAP-IN FILLER FOR INSIDE CAPTURED CORNER MULLIONS

-Cut the E9-2512 snap in fillers to the frame height determined in **Step 1**.

-Fabricate holes in vertical mullions for screw spline attachment using one of the methods below:

1. Layout the hole locations as shown in **Detail 7** and drill a 0.234" dia. (15/64" drill bit) clearance hole at each location marked.
2. Use punch press with appropriate die set.

See **Detail 7**.





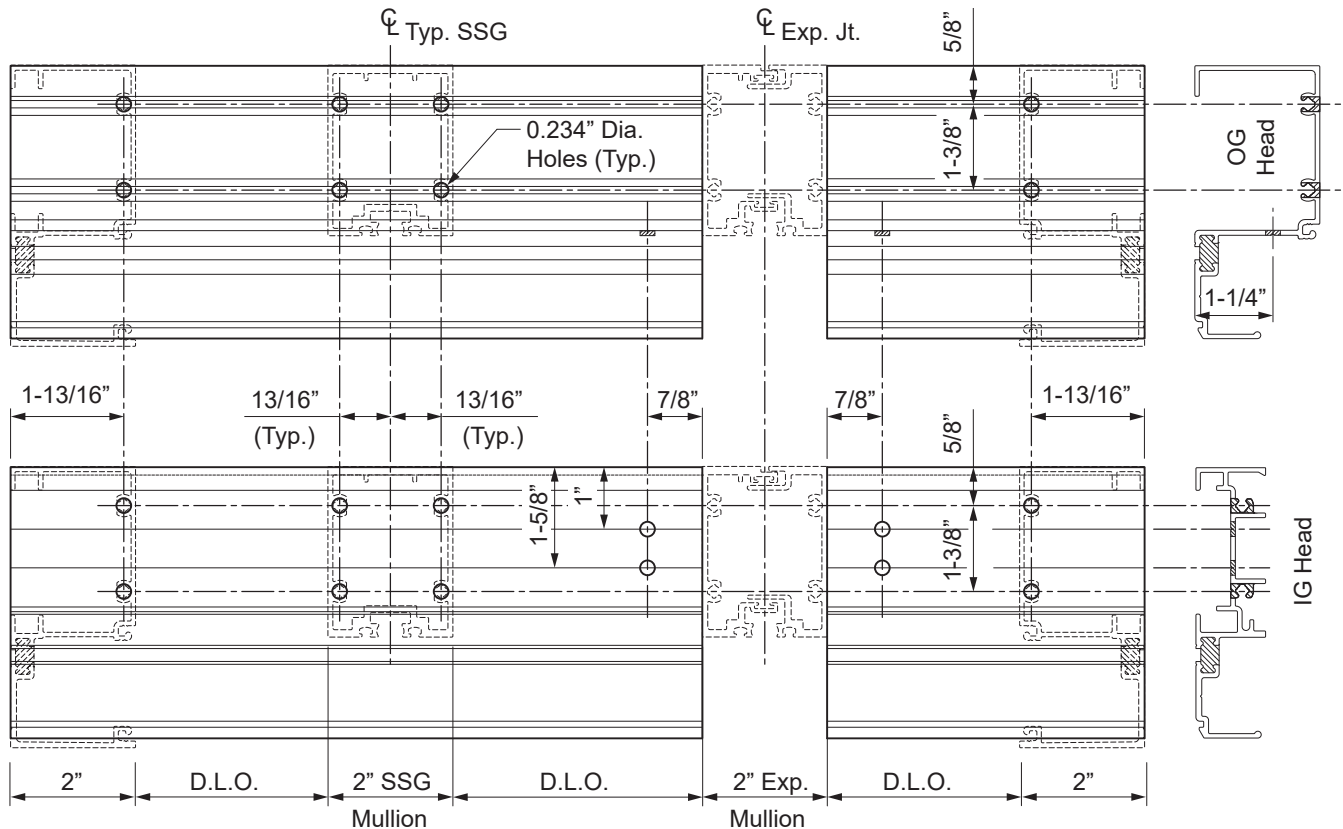
## FRAME FABRICATION

### STEP 3 FABRICATE CONTINUOUS HEAD FOR SSG GLAZING

**Notes:** Due to framing geometry of the inside glazed system, the horizontal Daylight Openings must be 24" or greater where SSG mullions are used. Also, expansion ssg mullions run through and require shear block attachment at the head.

- Cut head members as continuous run through as indicated on the shop drawings.
- Both inside and outside glazed heads will receive the same fabrication. Drill a 0.234" diameter hole (15/64" drill bit) at each location marked for a #12 (PC-1220) fastener.
- For storefront frames greater than 24 feet wide, the continuous heads and sills will have to be spliced every 12 to 15 feet. Allow for 3/8" expansion joint at continuous head and sill where ssg expansion mullions are used.

See **Detail 9**.



**DETAIL 9**

**FRAME FABRICATION**

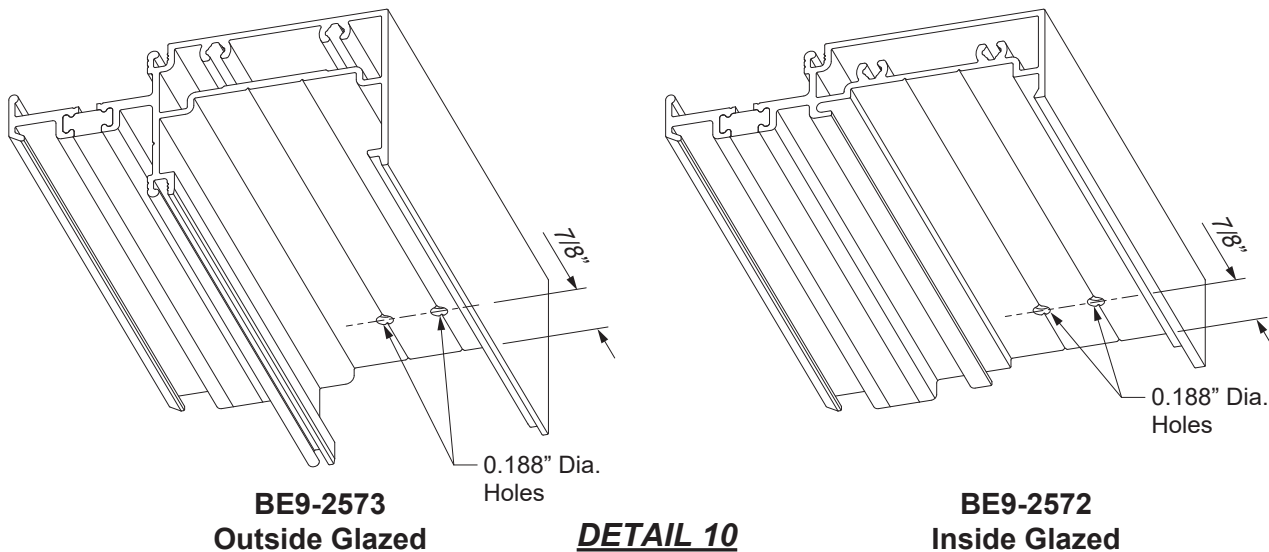
**STEP 3  
FABRICATE HORIZONTALS**

- Cut horizontal members to the daylight opening (D.L.O.) as indicated on the shop drawings.
- Intermediate horizontal members that will be attached to shear blocks require additional fabrication:

**BE9-2572 & BE9-2573 Intermediate Horizontal Members:**

- Mark hole location at each end, 7/8" from the ends and centered along the "V"-groove.
- Drill a 0.188" diameter hole (#12 or 3/16" drill bit) at each location marked for a #12 (PC-1210) fastener.

See **Detail 10**.



## FRAME FABRICATION

### STEP 4 FABRICATE SILL FLASHING

**Note:** Sill flashing is required in all conditions including continuous head and sill.

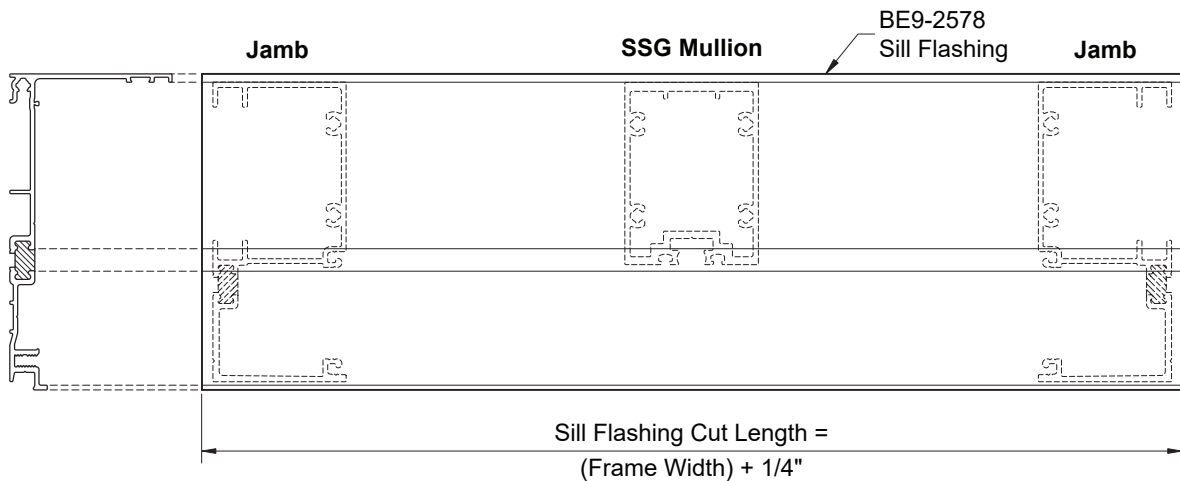
**For elevations without door framing:**

-Cut sill flashing, BE9-2578 to the end of the frame plus (+) 1/8" at each jamb.

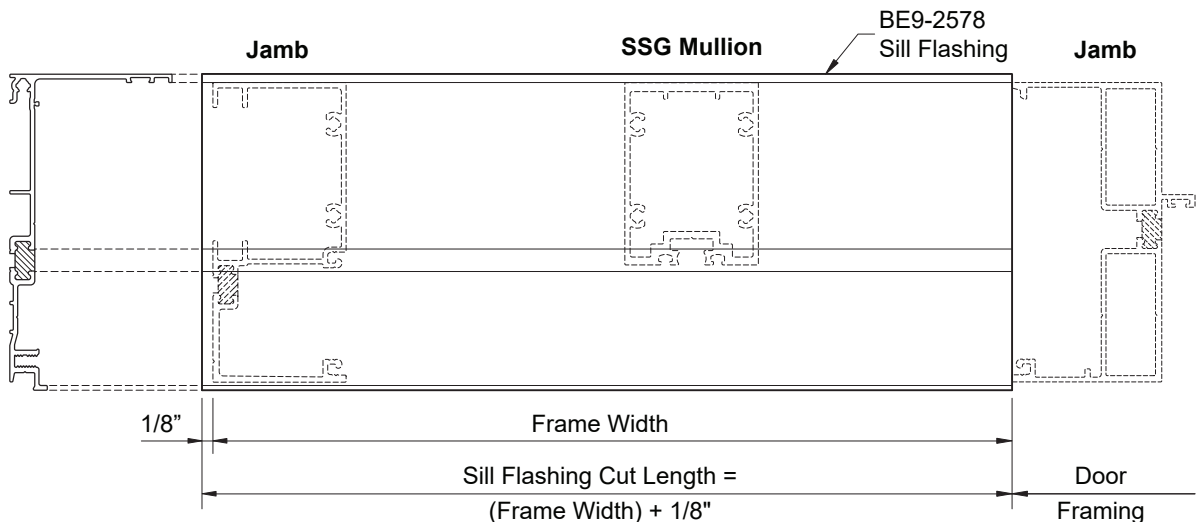
**For elevations with door framing:**

-Cut the sill flashing from the end of the frame to the door jamb plus (+) 1/8".  
(See approved shop drawings for this dimension)

See **Detail 11**.



**DETAIL 11**

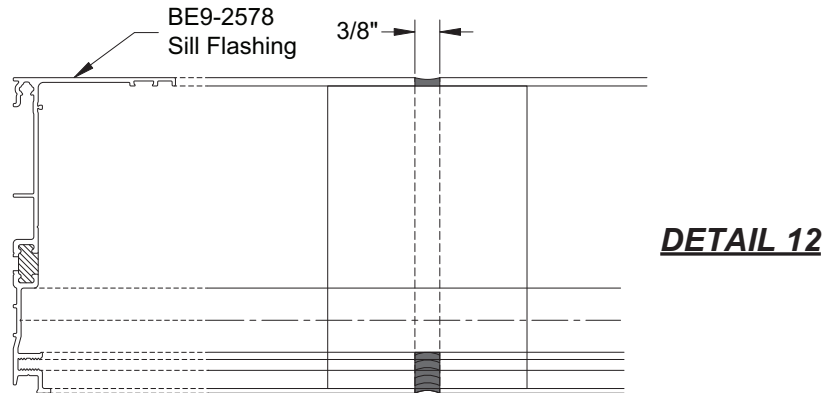


**FRAME FABRICATION**

**STEP 4 (Continued)  
FABRICATE SILL FLASHING**

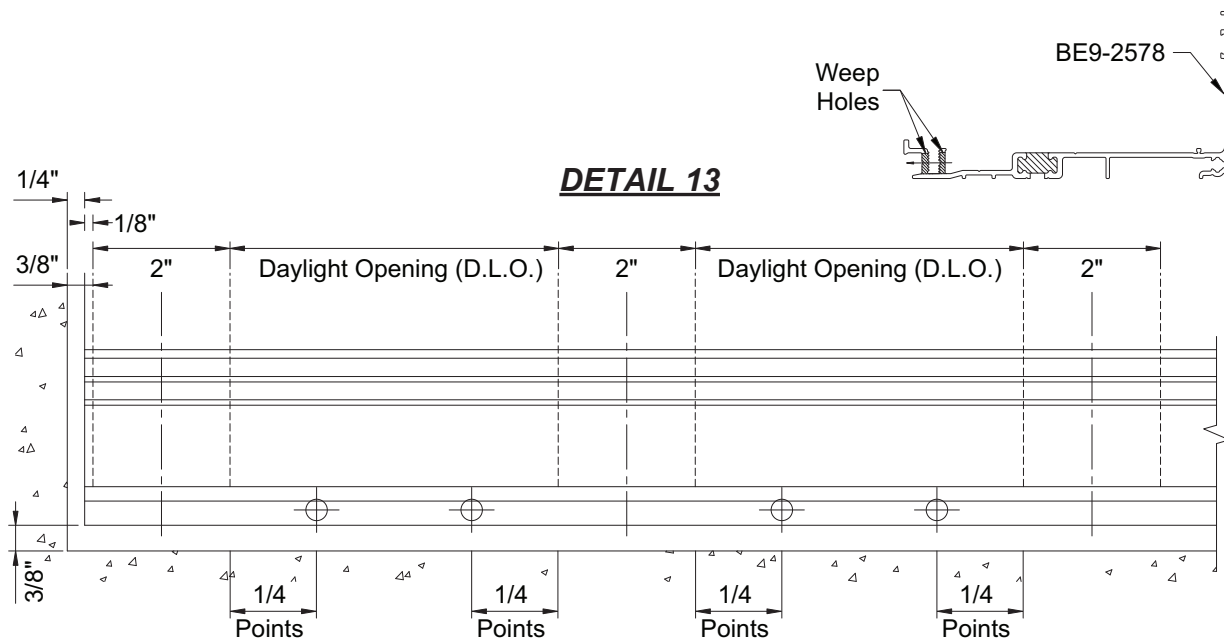
- For openings longer than 24'-0" the sill flashing needs to be spliced every twelve to fifteen feet.
- Allow for a 3/8" joint between sill flashing members.
- Mark the quarter points between vertical mullions on the sill flashing.

See **Detail 12**.



- Mark and drill a 5/16" diameter weep hole in the front of the sill flashing at each D.L.O. quarter point.

See **Detail 13**.



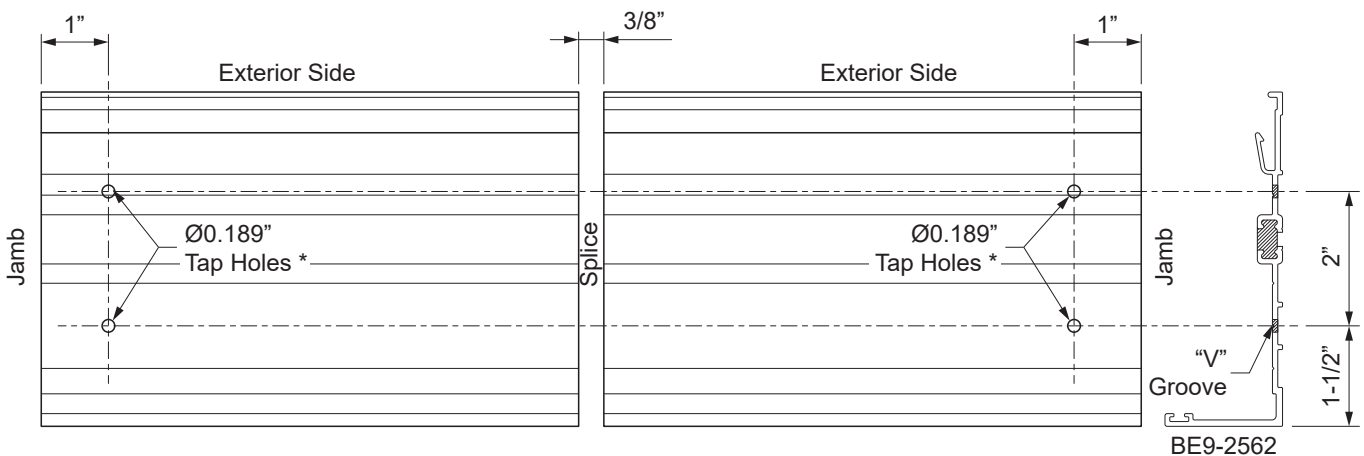
## FRAME FABRICATION

### STEP 6A FABRICATE HEAD RECEPTOR

- Cut the head receptor BE9-2562 and the E9-1033 snap cover to the frame width + 1/8" at each jamb or as indicated on the approved shop drawings.
- At each jamb, drill two Ø0.189" tap holes in to the BE9-2562 head receptor as shown.
- For openings longer than 24'-0" the head receptor needs to be spliced every twelve to fifteen feet at the center of a D.L.O.
- Allow for a 3/8" joint for expansion between head receptor members.

See **Detail 14**.

\* **Note:** The Ø0.189" tap hole in the exterior side of the receptor will be slightly off the V-Groove. Drilling this hole from the top side of the receptor after the interior side hole is recommended.



**DETAIL 14**

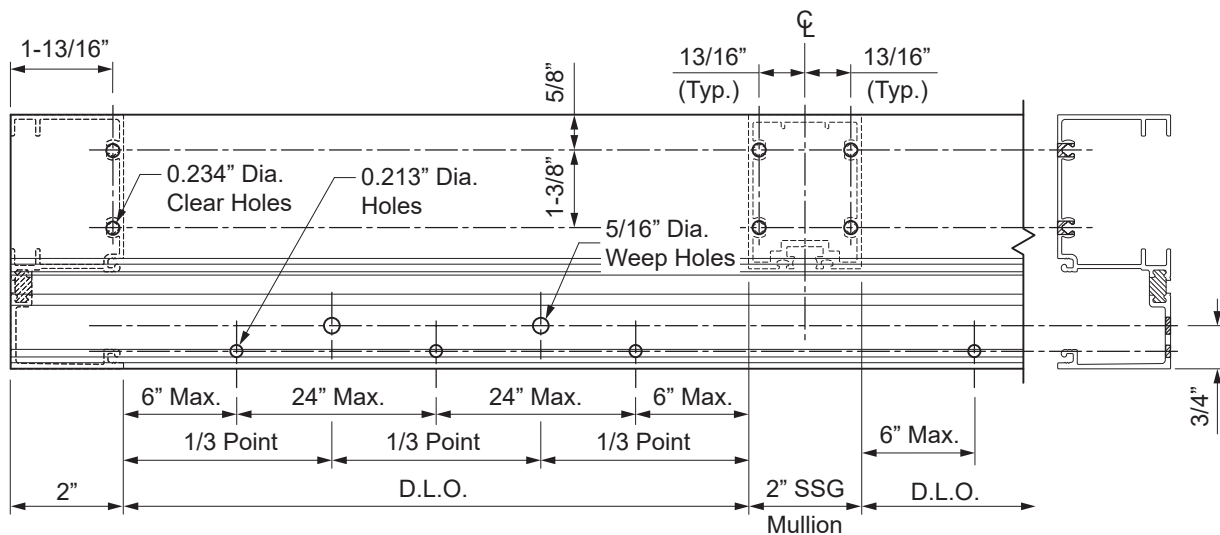
## FRAME FABRICATION

### STEP 5

### FABRICATE CONTINUOUS SILL MEMBERS FOR SSG GLAZING

For YES 45 TU SSG applications, sill members run through, except at expansion mullions. Expansion mullions where required are to be every 12 to 15 feet.

- Sill members are to be cut as shown on **Details 14 & 15**.
- For end reactions over 500 lbs., fabricate sill members for anchoring to sill flashing:
- Drill a 0.234" diameter hole (15/64" drill bit) at each location marked for a #12 (PC-1220) fastener.
  
- Measure in 6" from each end of the sill member and mark hole locations along the "V"-groove located on bottom of profile as shown in **Details 14 & 15**.
- Mark additional hole locations a maximum of 24" on center (O.C.).
- Drill a 0.213" diameter (#3 drill bit) hole at each location marked.
- Drill two Ø5/16" weep holes at 1/3 points of the D.L.O. at each location marked.
- See **Details 14 & 15**.

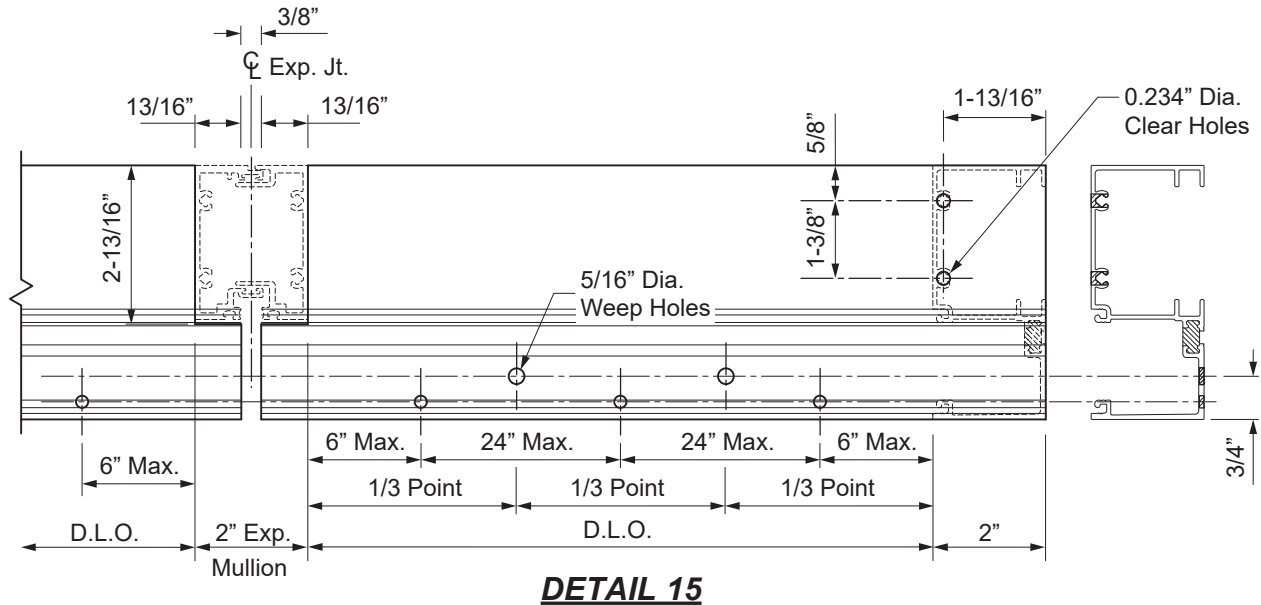


**DETAIL 14**

FRAME FABRICATION

STEP 5 (Continued)

FABRICATE CONTINUOUS SILL MEMBERS FOR SSG GLAZING



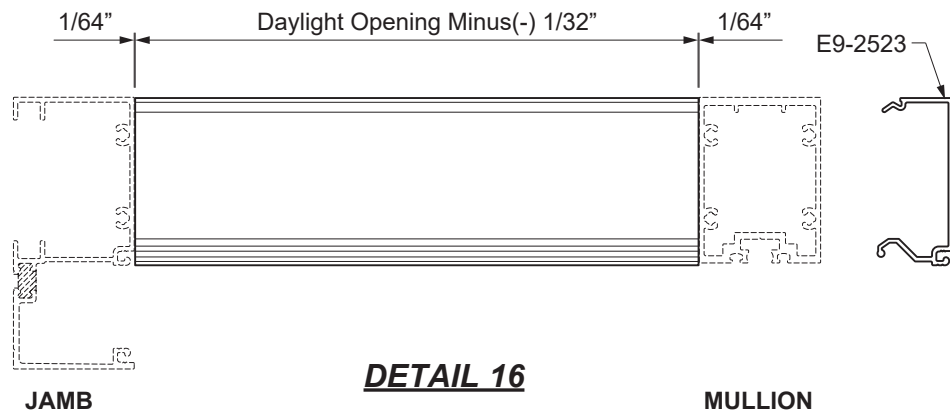
STEP 6

FABRICATE GLASS STOPS

For Inside Glazing

- Cut glass stops to Daylight Opening Minus(-) 1/32".
- Cut glazing adaptors to Daylight Opening Minus(-) 1/32".

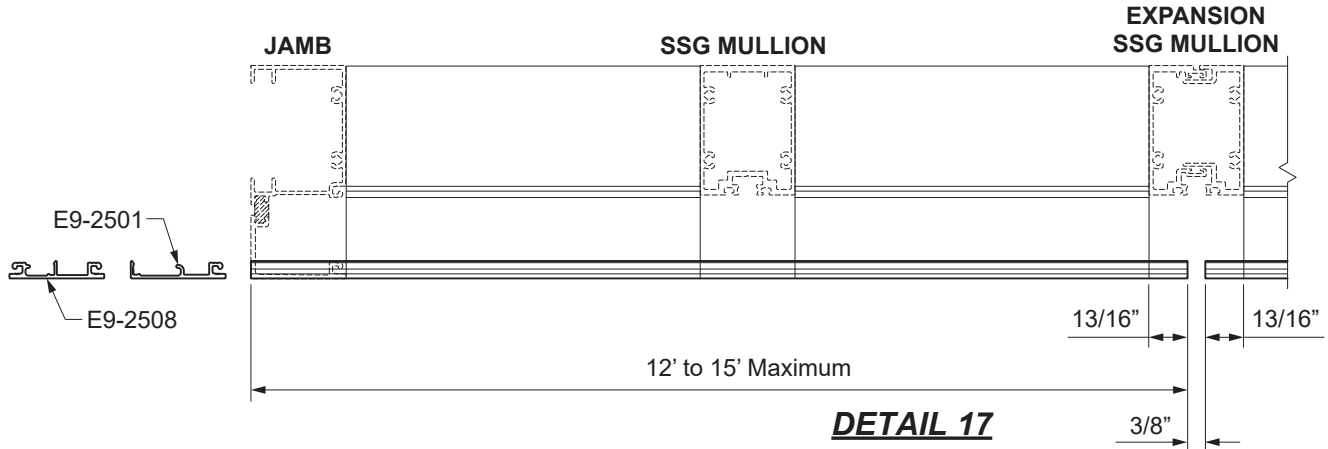
See **Detail 16**.



## FRAME FABRICATION

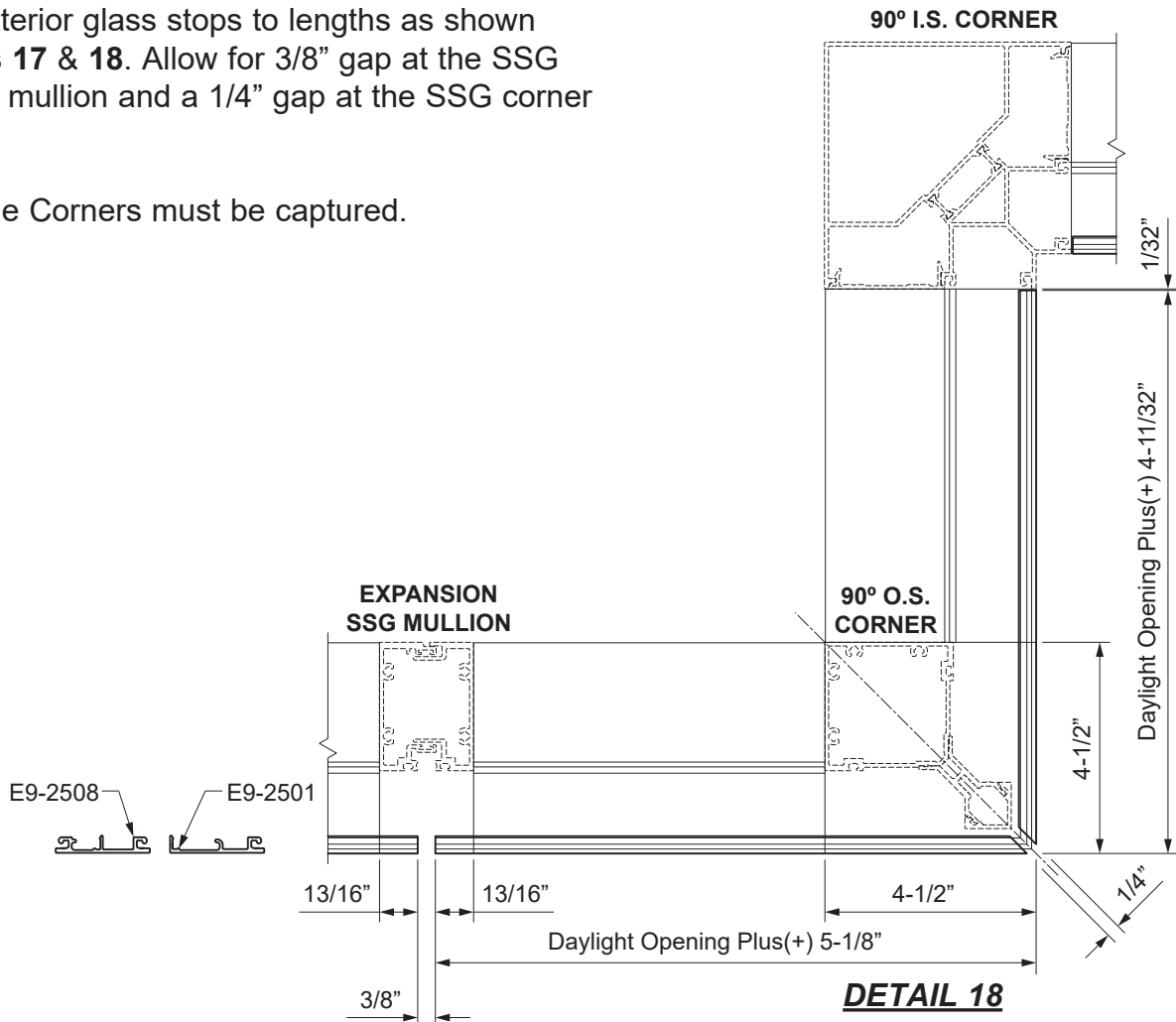
### STEP 6 (Continued) FABRICATE GLASS STOPS

For Exterior Glass Stops



-Cut the exterior glass stops to lengths as shown on **Details 17 & 18**. Allow for 3/8" gap at the SSG expansion mullion and a 1/4" gap at the SSG corner mullion.

**Note:** Inside Corners must be captured.





## FRAME ASSEMBLY

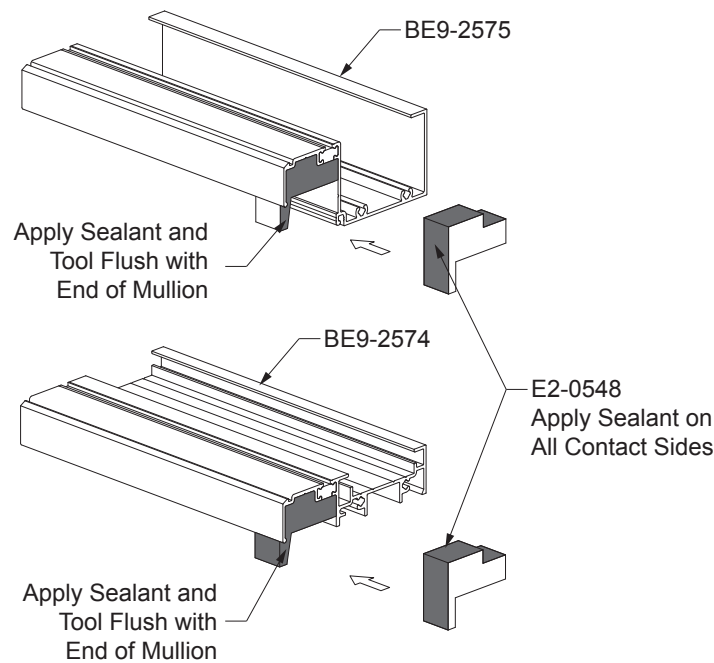
### STEP 7 INSTALL END DAMS FOR HEAD

The ends of head members of the continuous head and sill frames must be plugged using end dams, E2-0548 at the outside glazed head, and E2-0069 at the inside glazed head.

Use the following technique to install end dams at the head and sill:

- Clean the ends of the head and sill members using a cleaner approved by sealant manufacturer.
- Apply sealant to all contact sides of the end dam.
- Insert the end dam into each end, leaving it 1/8" recessed from the edge of the mullion.
- Apply sealant to the end dams and tool the sealant flush with the ends of the mullion.

See **Detail 19**.



**DETAIL 19**

## FRAME ASSEMBLY

### STEP 8 ASSEMBLE FRAMES

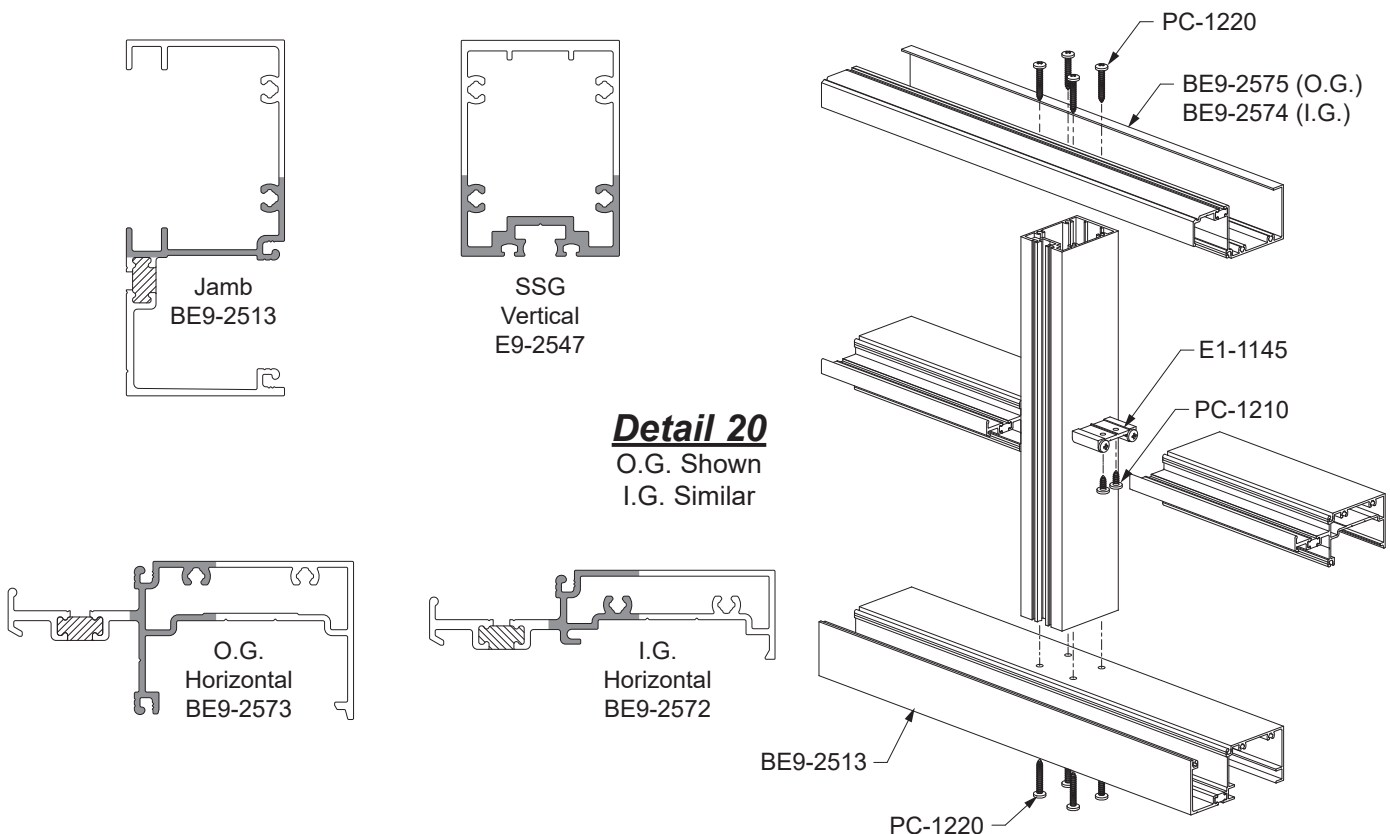
#### SSG Assembly

- Clean all joint surfaces using cleaner approved by sealant manufacturer.
- Apply sealant to both ends of jamb and ssg Mullions just prior to assembly.

**Note:** Exterior glass stop E9-2501 should be applied to the inside glazed head member prior to assembly.

- Attach vertical members to the head and sill using (2) PC-1220 fasteners per jamb and (4) PC-1220 fasteners per SSG mullion at each end.
- Attach shear blocks to verticals with PC-1228 fasteners as shown.
- Match drill shear block with 3/16" (#12 drill bit) hole for PC-1210 fastener.
- Apply sealant to both ends of intermediate horizontal members just prior to assembly. Make sure that the sealant does not get into the glass stop reglets of the horizontal.
- Attach horizontals to the shear blocks with (2) PC-1210 fasteners at each end.
- Using a clean cloth, wipe off the excess sealant while pushing it into the joints.

See **Detail 20**.

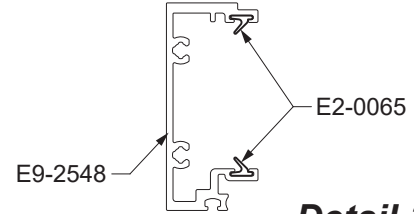


## FRAME ASSEMBLY

### STEP 8 (Continued) ASSEMBLE FRAMES

#### Install End Caps for SSG Expansion Mullions

Since the expansion mullions run through for ssg applications, no splice sleeve is needed at the head, but an end cap will need to be installed prior to erection.



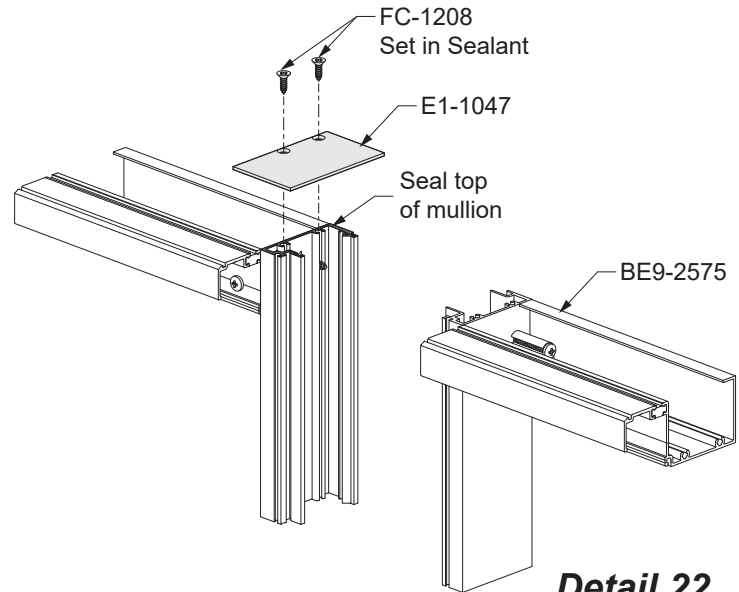
**Detail 21**  
O.G. Head

#### For Inside Glazing Only:

-Snap on the exterior glass stops onto the head and horizontals prior to erection.

E9-2501 for the head  
E9-2508 for the horizontals

-Allow the glass stops to overlap the mullion by 13/16".



**Detail 22**  
O.G. Head

#### For all SSG Expansion Mullions:

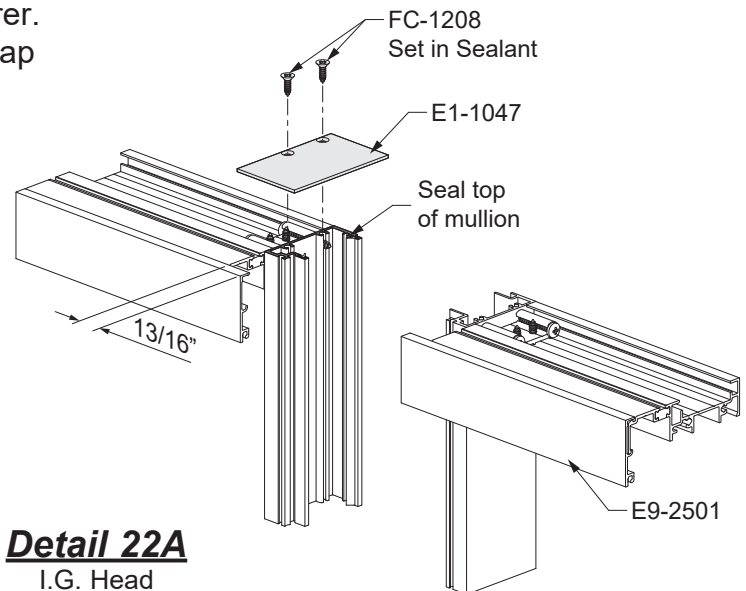
-Cut (2) weathering gaskets E2-0065 each running full length of the female mullion, and insert them into the reglets as shown in **Detail 21**.

-Clean all sealant contact surfaces with cleaner and method approved by sealant manufacturer.

-Apply sealant to the mullion where the end cap will be fastened.

-Install the E1-1047 end cap to the top of the mullion using (2) FC-1208 fasteners.

See **Details 22 & 22A**.



**Detail 22A**  
I.G. Head

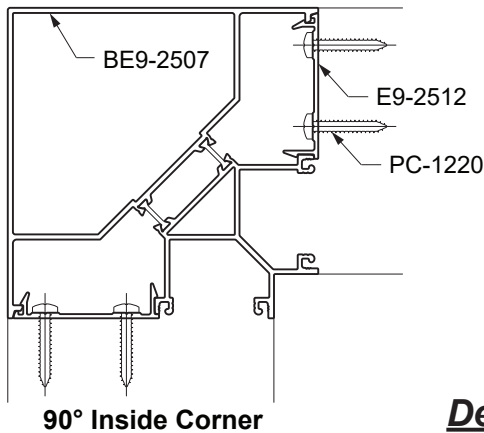
## FRAME ASSEMBLY

### STEP 8 (Continued)

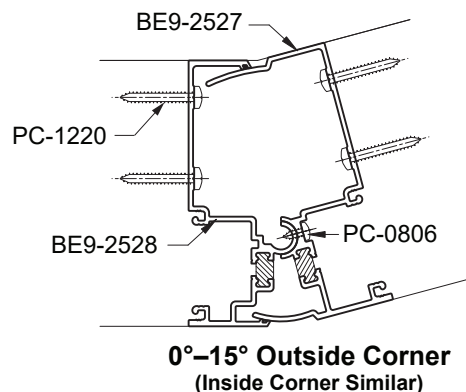
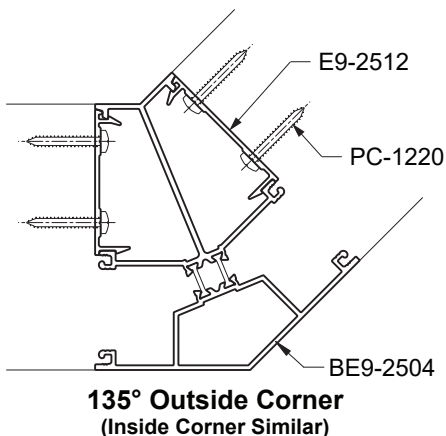
### ATTACH CAPTURED CORNER ASSEMBLIES

- For YES 45 TU SSG, 90° inside corner mullions, 135° inside and outside corner mullions, and all hinged mullions are captured only and run through.
- Attach horizontal members to standard mullions as previously shown.
- Attach the other end of the horizontals to the corner mullions, hinged mullions, or flat fillers, or using the same technique.
- Snap the corner framing members together to form the corner assemblies.
- Hinged mullions must be fastened through the ball joint 6" from each end and no more than 18" on center with PC-0806 fasteners.
- Carefully move the corner assembly into place and snap it into the rest of the frame one side at a time.

See **Detail 23**.



**Detail 23**



## FRAME ASSEMBLY

### STEP 8 (Continued) INSTALL CORNER SSG MULLIONS

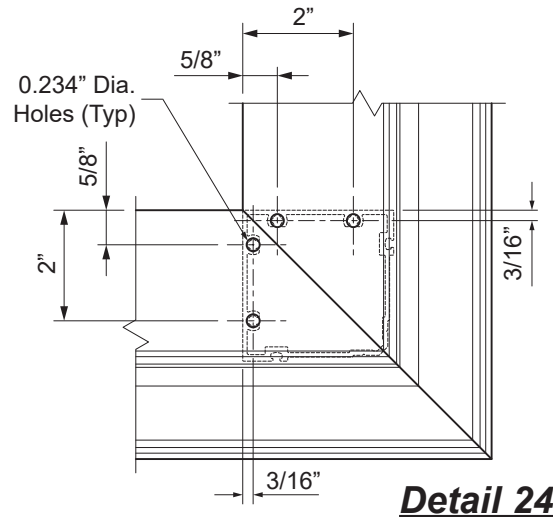
90° outside corner SSG mullions are available only for OG continuous head and sill frames.

#### Fabricate Head and Sill Members for Corners:

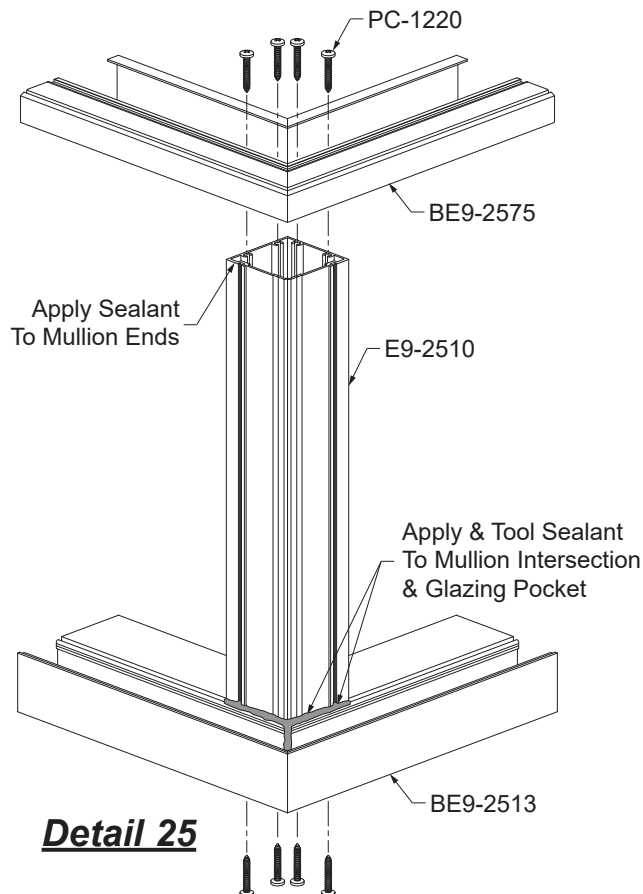
Head and sill members are mitered (45°) at the corners and must be fabricated for attachment of the SSG corner mullion, E9-2510.

- Layout hole locations shown on **Detail 24**.
- OR
- Using a short piece of E9-2510 as a template, line up the glazing pockets and mark hole locations through the screw splines.
- Drill a 0.236" diameter hole at each location marked.

See **Detail 24**.



**Detail 24**



**Detail 25**

#### Install Corner Assemblies:

- Apply sealant to the ends of the corner mullions and attach them to the head and sill members with (4) PC-1220 fasteners at each end.
- Apply and tool sealant to the joint where the corner mullion and the head & sill members intersect and along the glazing pocket where the head and sill members are mitered.

See **Detail 25**.

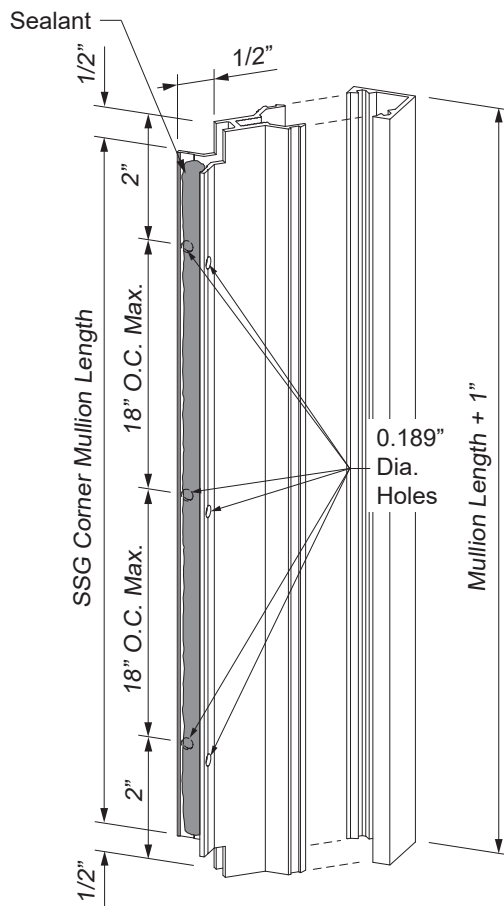
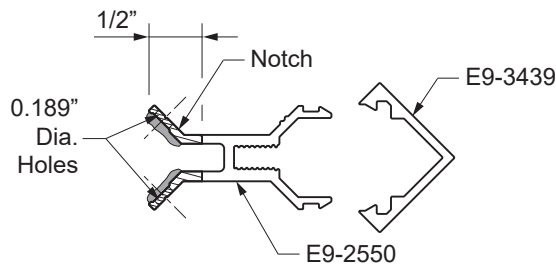
- Attach intermediate horizontal members (only BE9-2572 & BE9-2573 may be used with SSG corners) to the verticals and corner mullion using shear blocks as shown in **Page 22**.
- Carefully move the corner assembly into place and anchor the frame to the structure as shown in **Step 14**.

**Note:** For wider frames, YKK AP recommends expansion mullions be used adjacent to the corner mullion on both sides of the corner mullion as shown in **Page 23**.

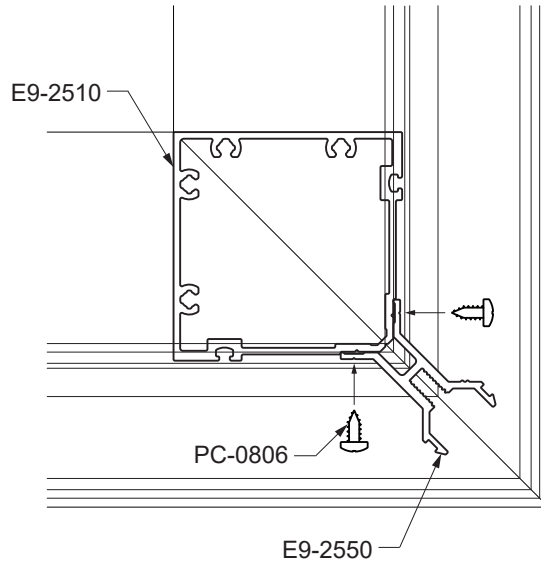
**FRAME ASSEMBLY**

**STEP 8 (Continued)  
INSTALL CORNER SSG MULLIONS**

- Cut the E9-2550 Corner mullion Trim Adaptor Base and the E9-3439 Corner Cover to the length of the SSG corner mullion plus(+) 1”.
- Notch 1/2” x 1/2” from each end of the legs of the E9-2550 corner mullion trim adaptor base as shown in **Detail 26**. Drill 0.189” diameter clear holes in the legs of the adaptor 2” from each end and at 18” on center. Apply sealant to the legs of the trim adaptor prior to fastening to the corner mullion.
- Install the E9-2550 adaptor using PC-0806 fasteners at 18” on center. Do not snap on the corner cover yet.



**Detail 26**



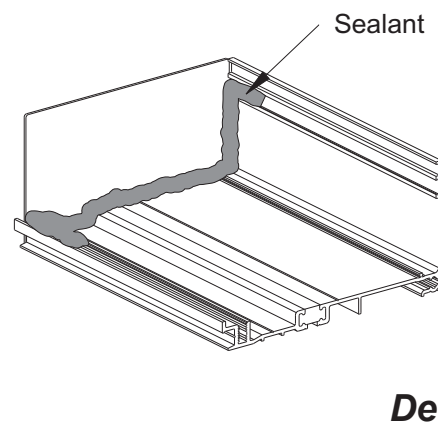
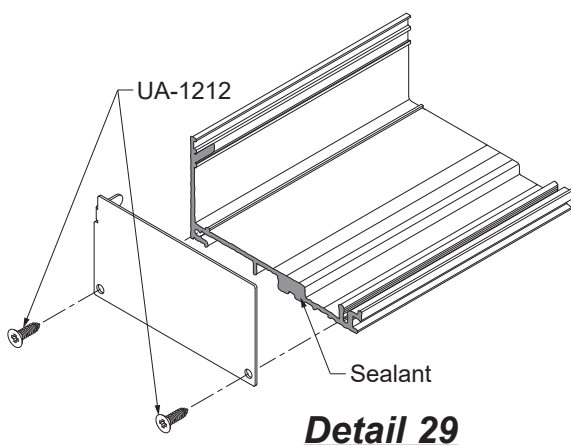
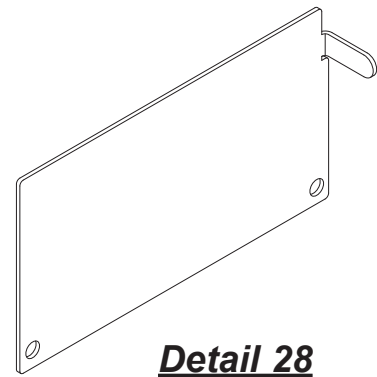
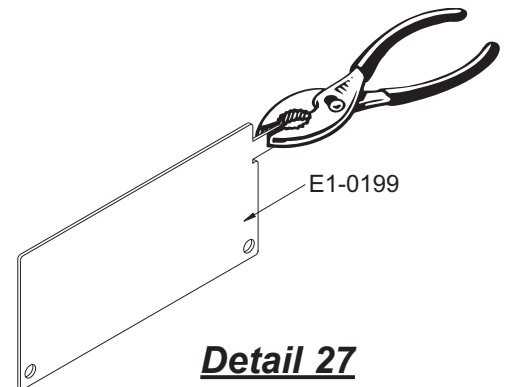
## FRAME INSTALLATION

### STEP 9 INSTALL SILL FLASHING END DAMS

- 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 order to “hand” the end dam for the left or right end of the flashing.

See **Detail 27 & 28.**

- Clean all joint surfaces using cleaner approved by sealant manufacturer.
- Apply sealant to end of the sill flashing as shown in **Detail 29.**
- 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 29.**
- Tool sealant along the joint between the end dam and the sill flashing as shown in **Detail 30.**
- Seal over any exposed screw threads.



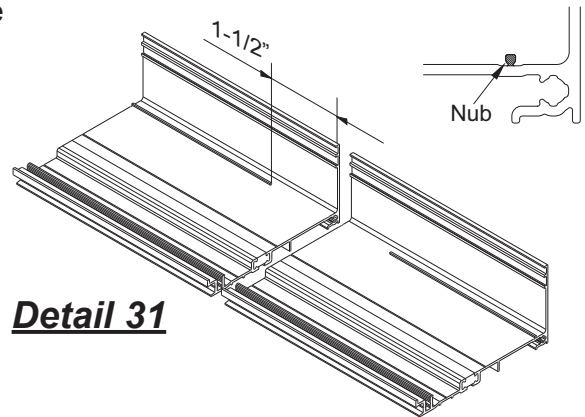
## FRAME INSTALLATION

### STEP 10 INSTALL SILL FLASHING

- Install the sill flashing with a minimum 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 anchors.

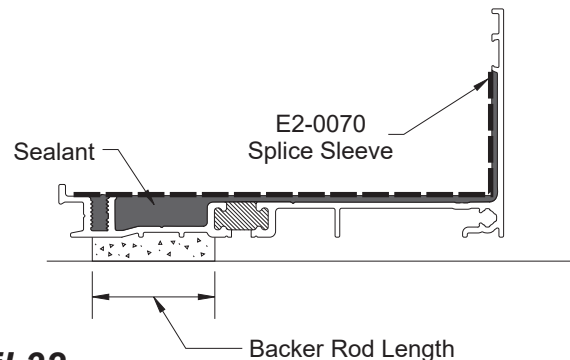
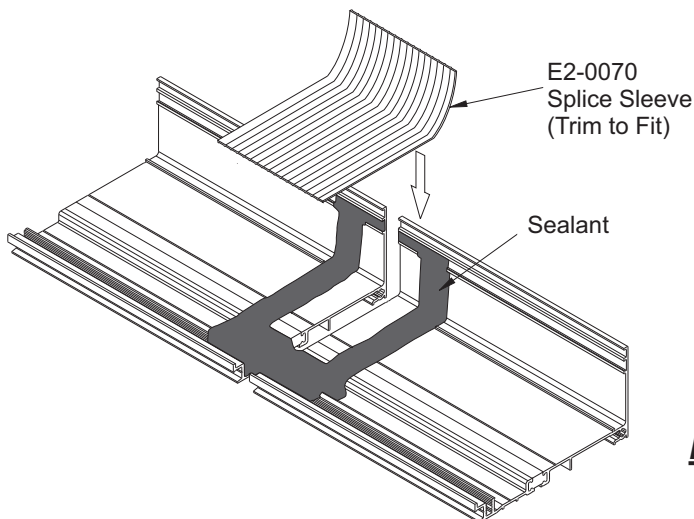
### STEP 11 INSTALL SILL FLASHING SPLICE SLEEVE

- Remove the nub with a chisel or pliers 1-1/2" on both sides of splice joint as shown in **Detail 31**.
- After the sill flashing has been shimmed and installed to the building structure, insert a small backer rod under the sill flashing as shown in **Detail 32**.
- Position the Silicone Splice Sleeve against the back wall below the groove.
- Bend the Silicone Splice Sleeve into the front on the channel as shown. Mark and cut the sleeve at this position.
- Clean Sill Flashing and Silicone Splice Sleeve with isopropyl alcohol at the splice location
- Seal the flashing at the splice location as shown in **Detail 32**, before positioning the flashing. Set the Silicone Splice Sleeve into the Silicone Splice Sleeve.
- Tool sealant tight as shown in **Detail 33**, squeezing the sheet flat with a seam roller.



**Detail 31**

When using E2-0070, a compatible Silicone Sealant must be used at the splice. Compatible Silicone Sealants include Tremco® Spectrem 2® and Dow Corning® 795.



**Detail 32**

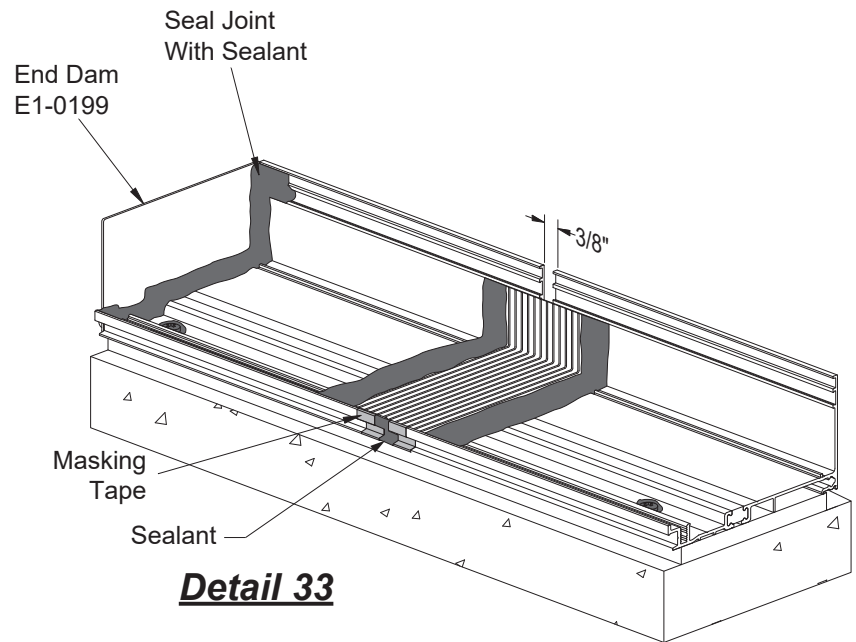


## FRAME INSTALLATION

### STEP 11

#### INSTALL SILL FLASHING SPLICE SLEEVE (Continued)

- Apply masking tape to the front of the sill flashing at the splice as shown in **Detail 33**.
- Thoroughly seal the small joint directly in front of the Silicone Splice Sleeve. Remove masking tape from the front gap after applying the sealant.

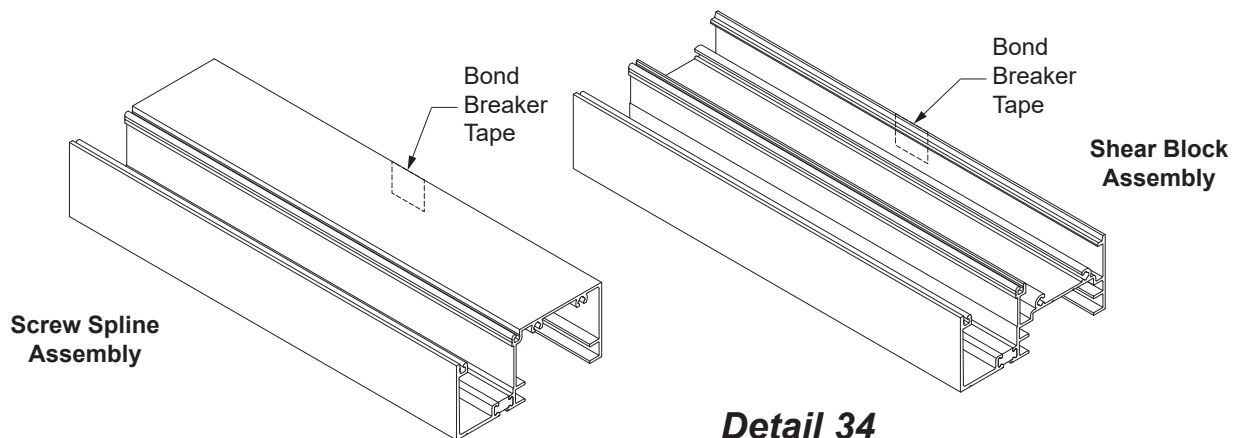


**Detail 33**

### STEP 12

#### SILL PREPARATION

At every splice condition, apply bond breaker tape to the back of the sill member before the joint is sealed between the sill and sill flashing. See **Detail 34**.

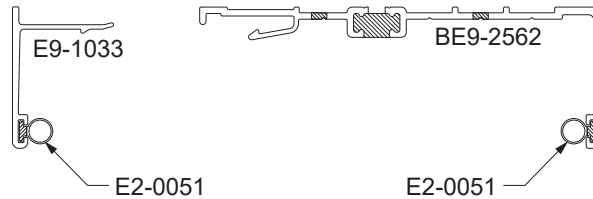


**Detail 34**

**FRAME INSTALLATION**

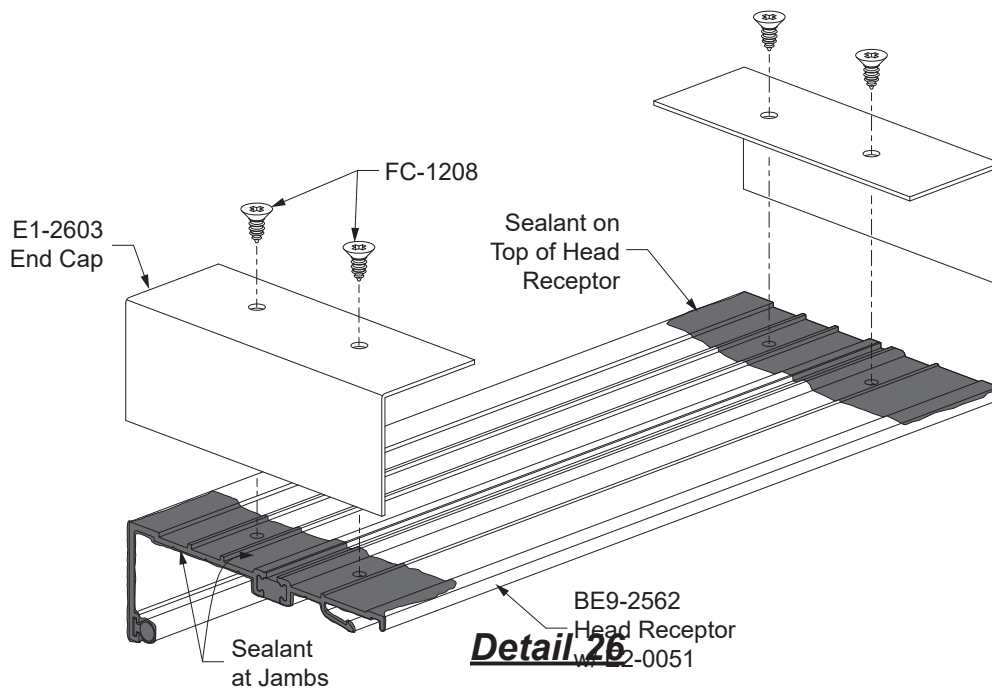
**STEP 12  
ATTACH HEAD RECEPTOR END CAPS**

-Cut E2-0051 bulb gaskets to the same length as the head receptor and insert them into the reglet of both the BE9-2562 head receptor and E9-1033 snap cover. See **Detail 25**.



**Detail 25**

- Clean all joint surfaces using cleaner approved by sealant manufacturer.
- Apply sealant to the end of the head receptor as shown in **Detail 26**.
- Fasten the E1-2603 end caps to each jamb using two FC-1208 fasteners.
- Tool sealant to the inside of the end caps at the jambs similar to that for the sill flashing end dams (see **Detail 28**). Tape down the top corners to hold the end cap in place until the sealant cures.



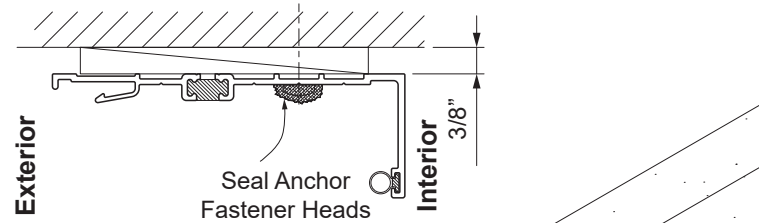
**Detail 26**

## FRAME INSTALLATION

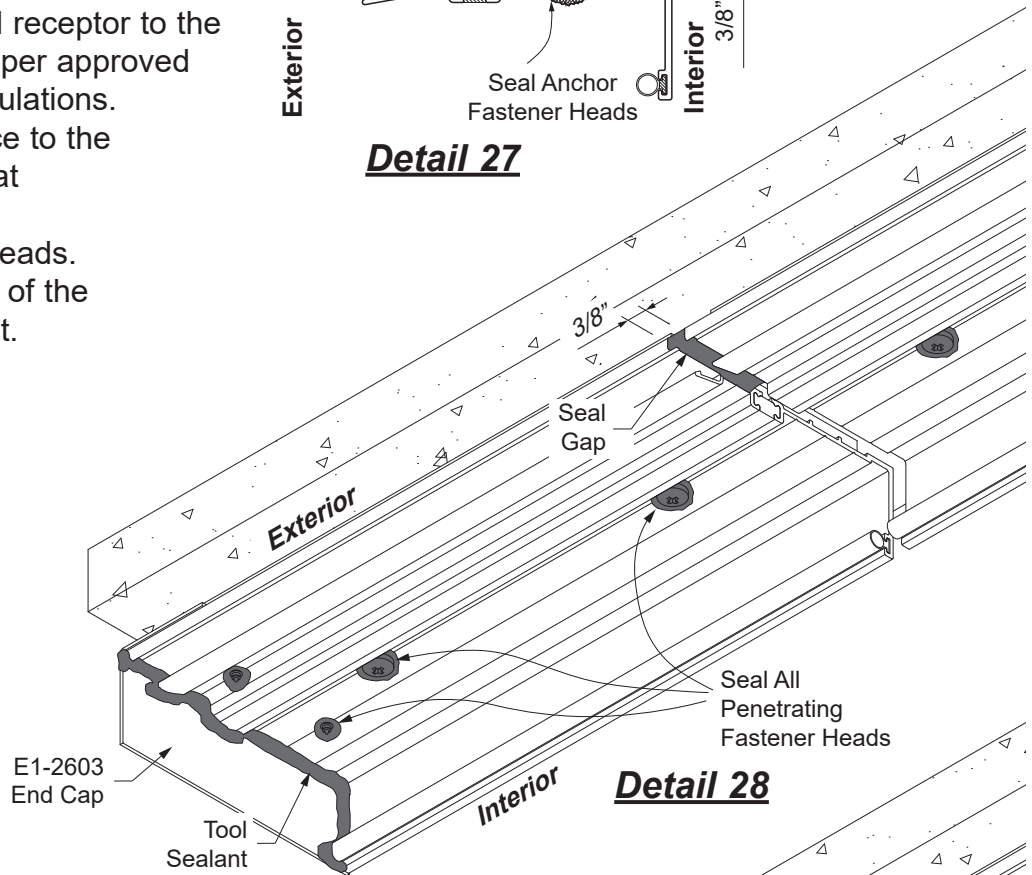
### STEP 12A INSTALL HEAD RECEPTOR

- Install the BE9-2562 head receptor to the substrate using fasteners per approved shop drawing or P.E. calculations. Allow for a 3/8" shim space to the substrate and a 3/8" gap at the splice joints.
- Seal all anchor fastener heads.
- Fill the gap at the exterior of the head receptor with sealant.

See **Details 27 & 28.**



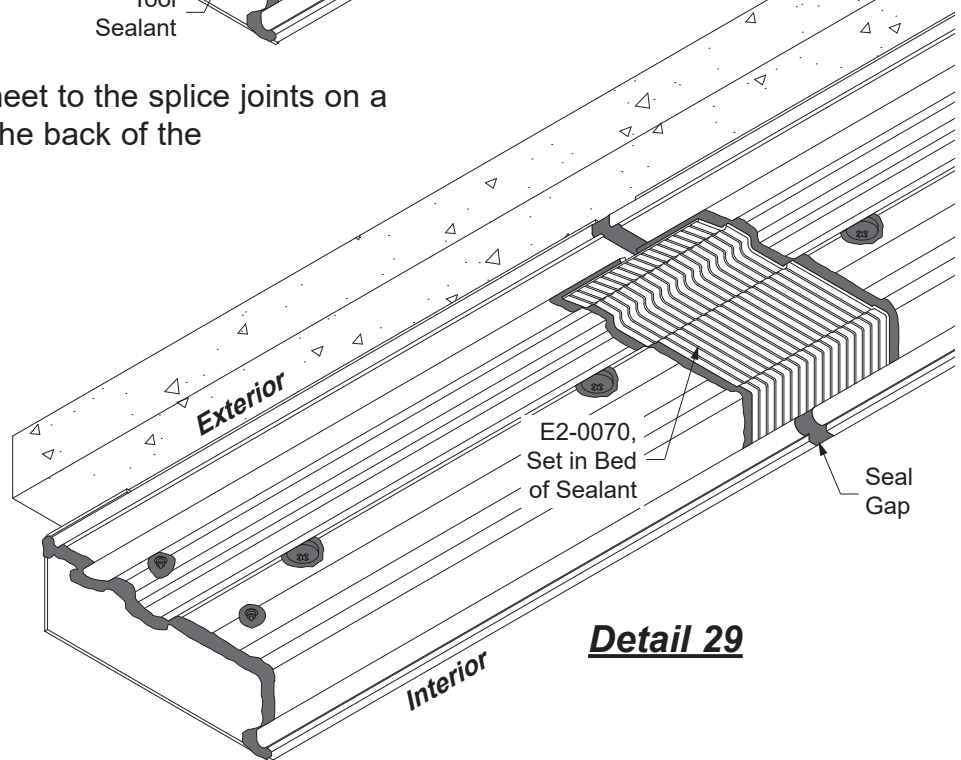
**Detail 27**



**Detail 28**

- Adhere an E2-0070 silicone sheet to the splice joints on a bed of sealant. Fill the gap at the back of the head receptor with sealant.

See **Detail 29.**



**Detail 29**

**FRAME INSTALLATION**

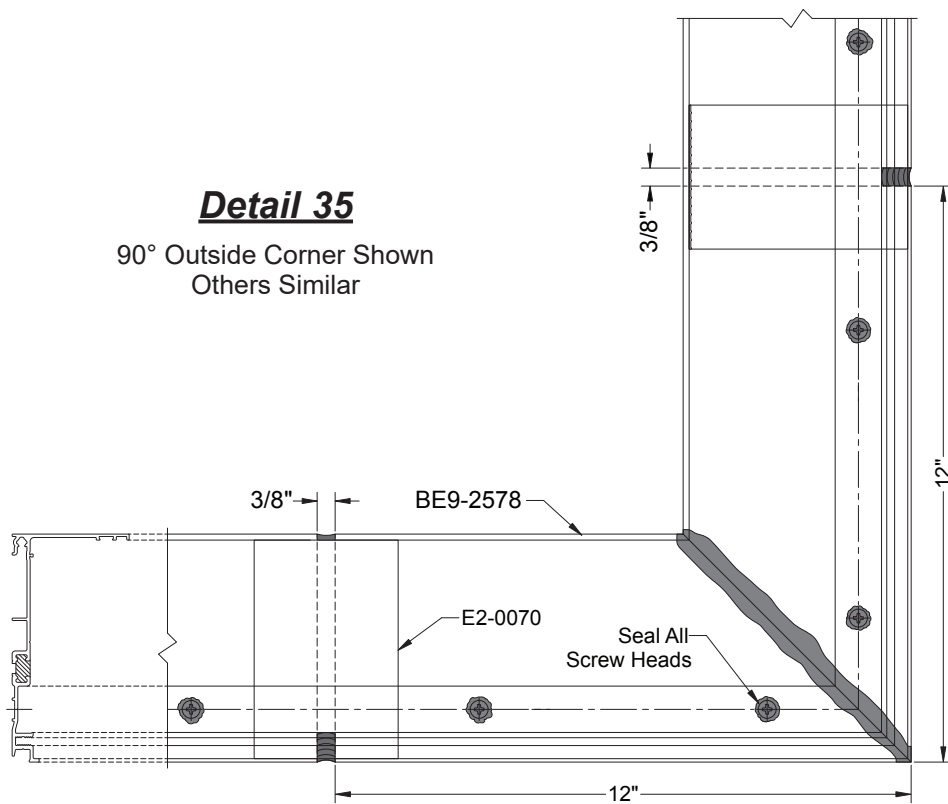
**STEP 13  
FABRICATE / INSTALL SILL FLASHING FOR CORNERS**

**Install sill flashing at corners:**

- Cut two 12" long pieces of sill flashing BE9-2578 and miter (45° for 90° corners and 67.5° for 135° corners).
- Align the two pieces at the corner condition with the mitered ends pushed together tight and anchor the sill flashing as called out on shop drawings.
- Apply and tool sealant to the mitered joint and anchor heads.

See **Detail 35**.

- Continue installing the rest of the sill flashing providing a 3/8" joint at splices as shown in **Step 11 on Page 28**.



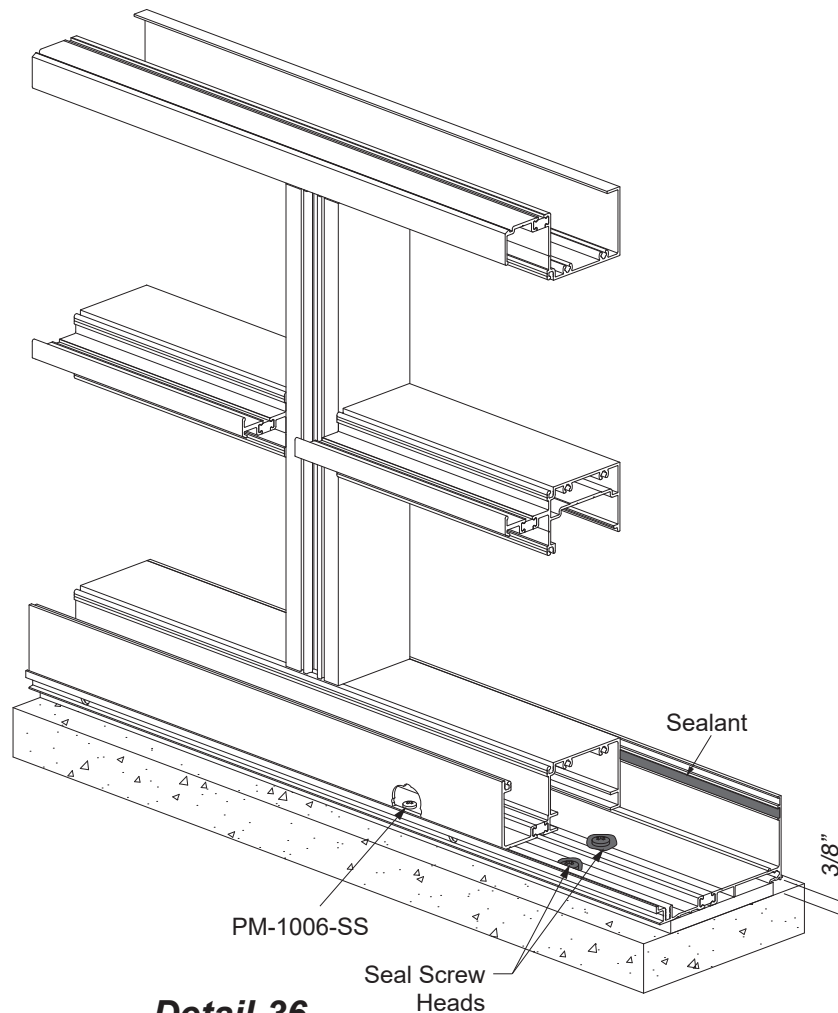
## FRAME INSTALLATION

### STEP 14 INSTALL FRAMES

- Snap assembled frames together if using screw spline assembly.
- Apply sealant continuously to the front of the back leg of the sill flashing and immediately set the frame into the opening.

See **Detail 36**.

- Shim jamb and head members with a minimum of 3/8" shim.
- Anchor the frame to the structure at the sill\*, head, and jamb: 3" from the ends and then 18" to 24" on center, or as required by P. E. calculations.
- Always install a shim at all anchor locations.
- Seal all screw heads.

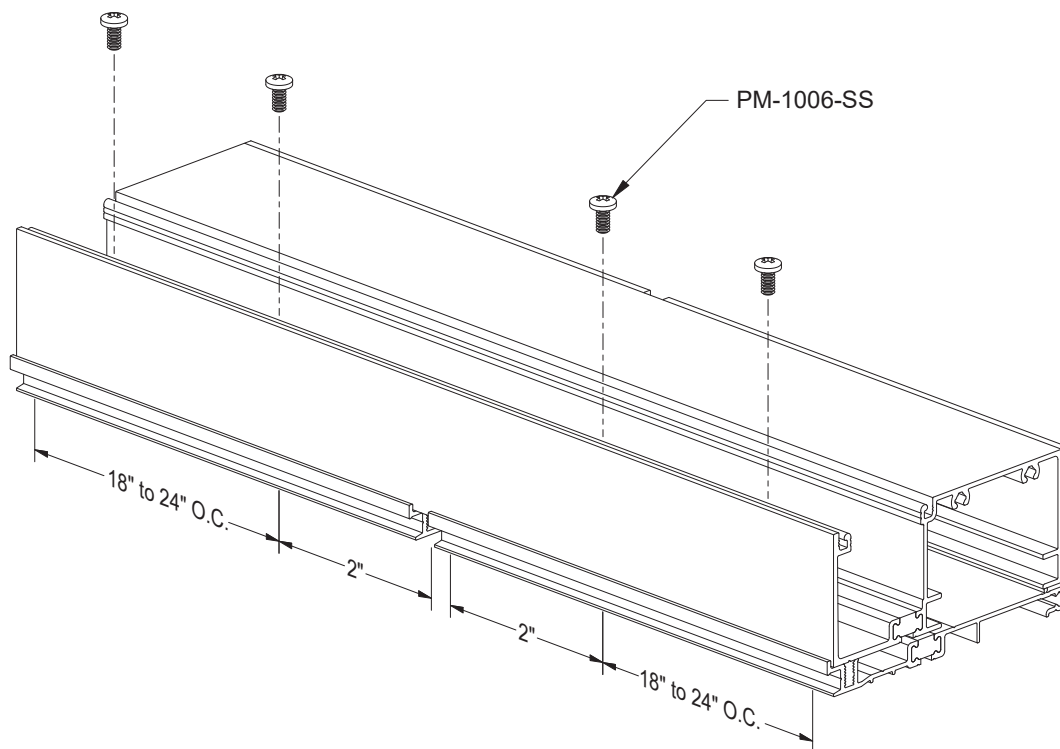


**FRAME INSTALLATION****STEP 14 (Continued)  
INSTALL FRAMES**

-For mullion end load reactions over 500 lbs., attach the sill to the sill flashing using PM-1006-SS screws.\*

-Also, add one (1) PM-1006-SS fastener 2" in both directions from the center line of the splice. See **Detail 37**.

\*To determine end load reactions, refer to approved shop drawings or P. E. stamped calculations.



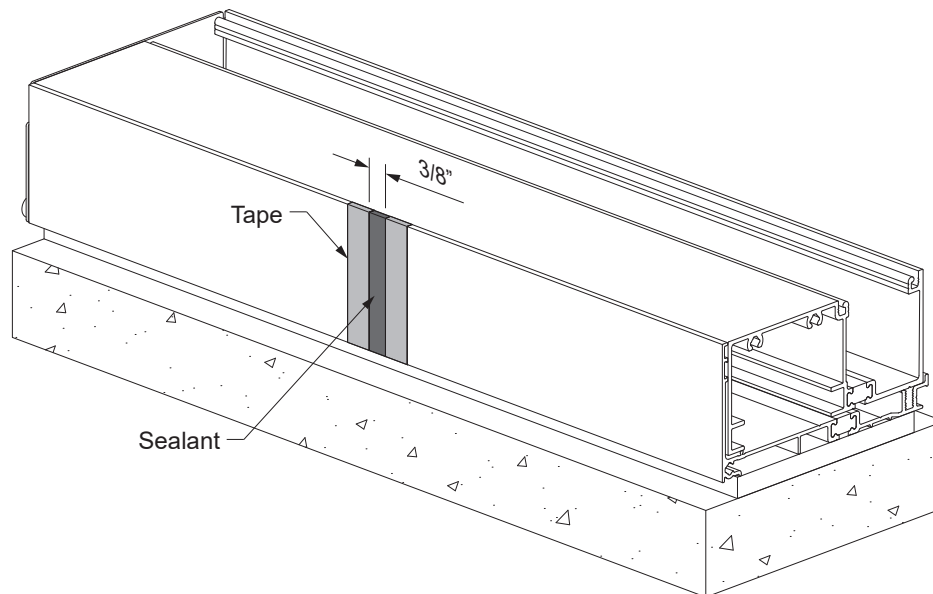
**Detail 37**

## FRAME INSTALLATION

### STEP 14 (Continued) INSTALL FRAMES

- Apply masking tape to the edges of sill flashing splice joint at the interior of the sill flashing.
- Apply and tool sealant to the gap in the interior running the full height of the sill flashing.
- Carefully remove tape before sealant skins over.

See **Detail 38**.



**Detail 38**

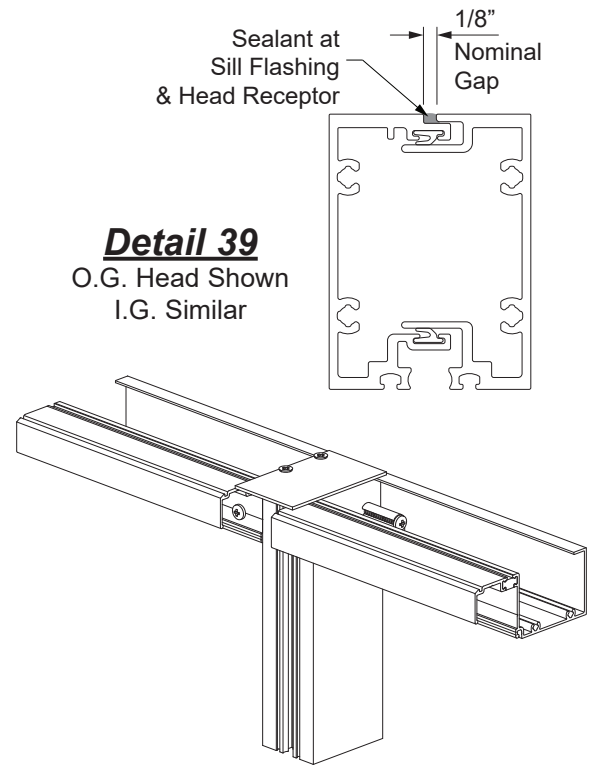
**FRAME INSTALLATION**

**STEP 14 (Continued)  
INSTALL FRAMES**

**Join the Expansion Mullions**

- Erect and slide the expansion mullions into place leaving a 1/8" nominal gap between the mullion halves (1/4" maximum at lowest service temperature.)
- Fill the interior gap between the mullion halves with sealant at the sill flashing and head receptor.

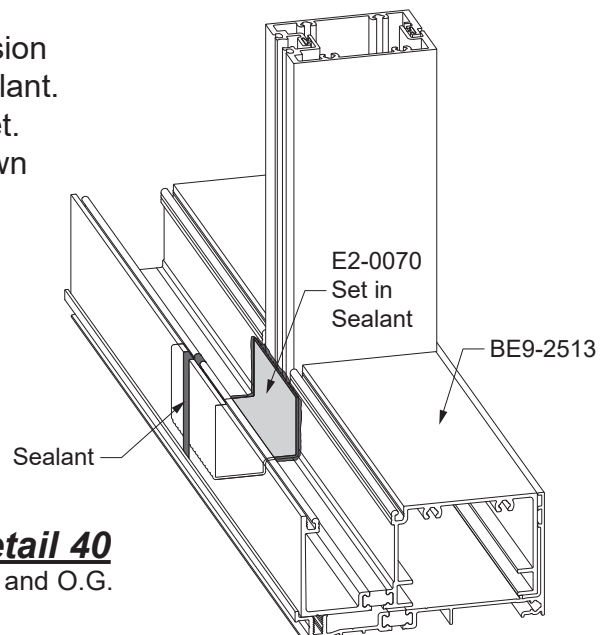
See **Detail 39**.



**Detail 39**  
O.G. Head Shown  
I.G. Similar

**Splice the sill at the Expansion Mullion:**

- Apply sealant to the contact surfaces in the glazing pocket of the sill where the E2-0070 will be placed.
- Firmly press into place the E2-0070 silicone splice sleeve into the sealant bed, centered on the expansion joint, and with the ribs of the sleeve against the sealant. Trim the splice sleeve as required to fit in the pocket.
- Apply and tool sealant to the face of the sill as shown in **Detail 40**.



**Detail 40**  
I.G. and O.G.



## FRAME INSTALLATION

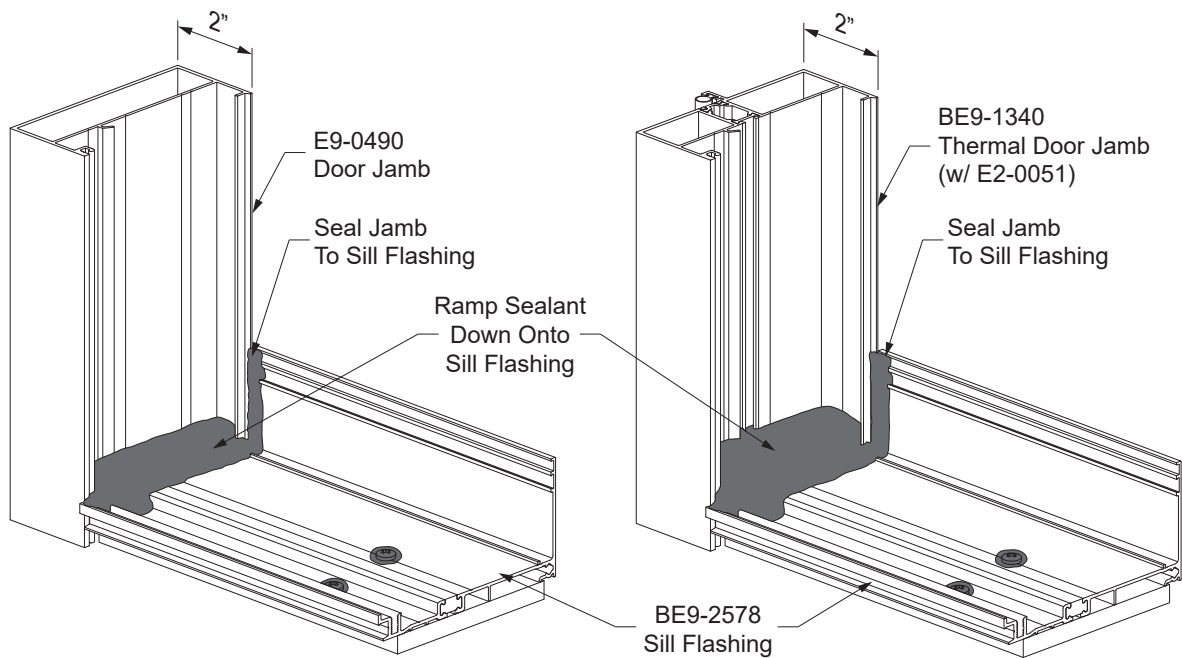
### STEP 14 (Continued) INSTALL FRAMES

Prior to snapping the assembled frames into the door jamb, the end of the sill flashing needs to be sealed to the door jamb.

- Apply and tool sealant to all sill flashing to door jamb joints.
- Apply sealant to completely fill the door jamb cavity and ramp the sealant down onto the sill flashing.

See **Detail 41**.

Refer to the **Entrances Installation Manual** for door installation instructions.



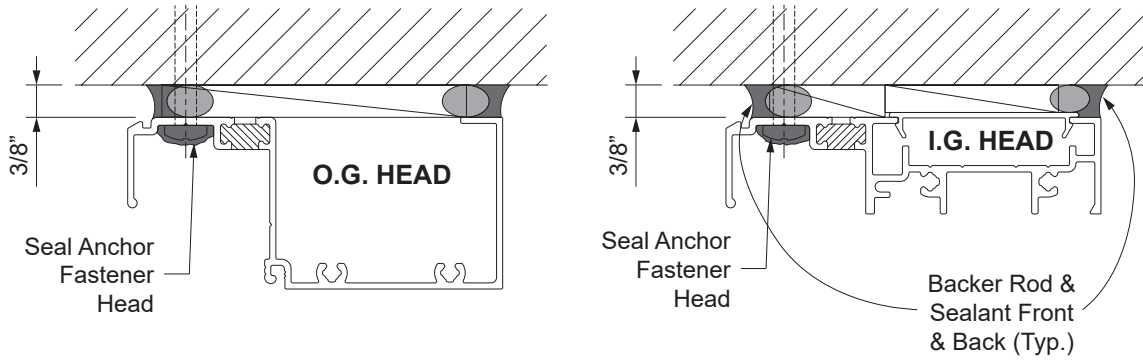
**Detail 41**

**FRAME INSTALLATION**

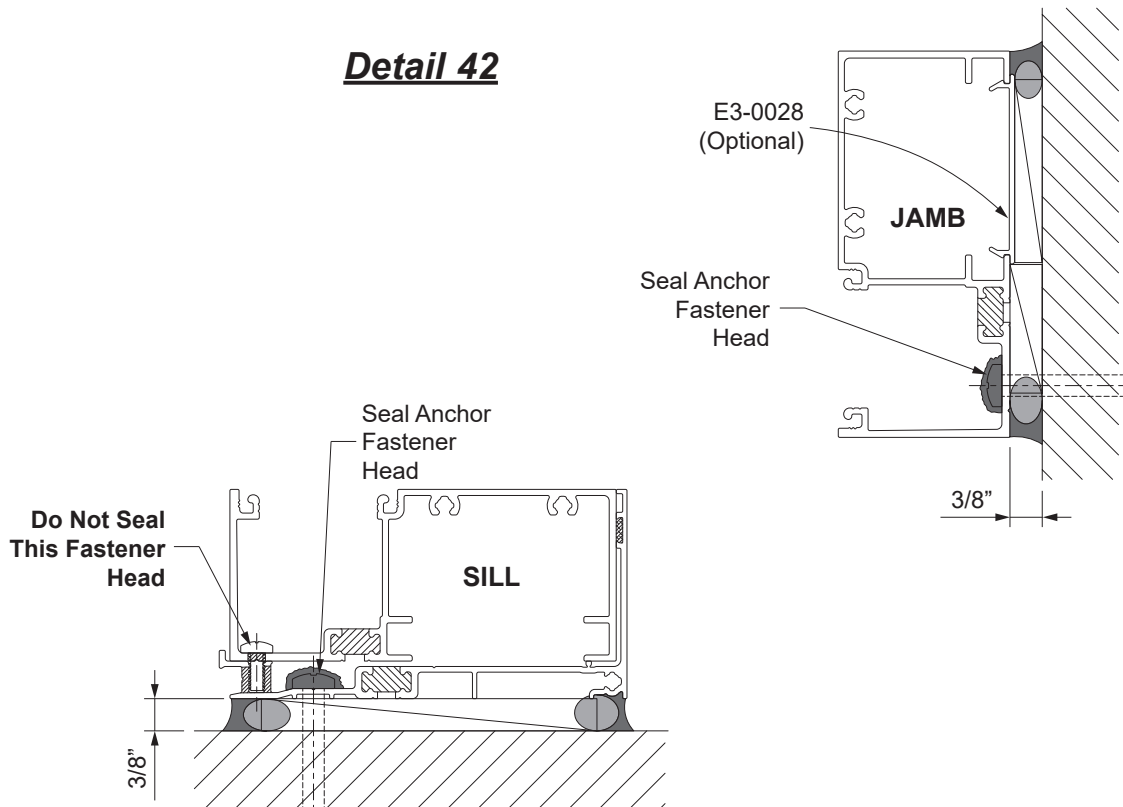
**STEP 15  
APPLY PERIMETER SEALANT**

- Perimeter seal required at interior and exterior.
- Install backer rod around the perimeter of the frame.
- Apply sealant to the joint between the frame and the structure.
- Do not** block the weep holes with sealant.
- Make sure all screw and anchor heads are sealed.

See **Detail 42**.



**Detail 42**

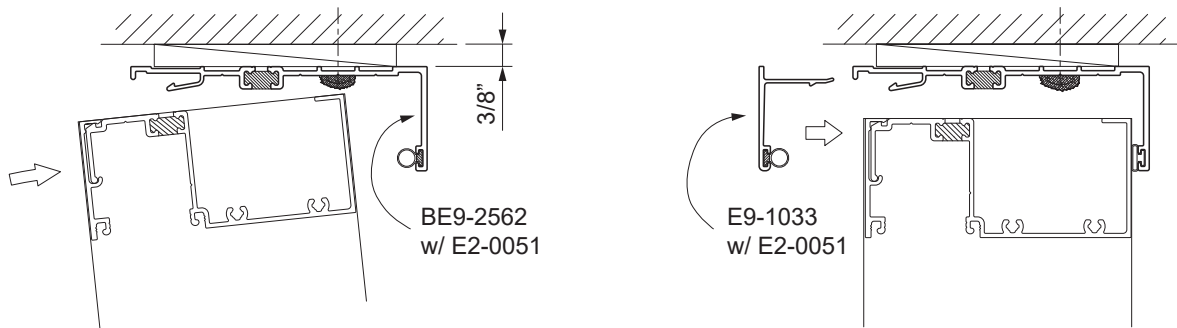


## FRAME INSTALLATION

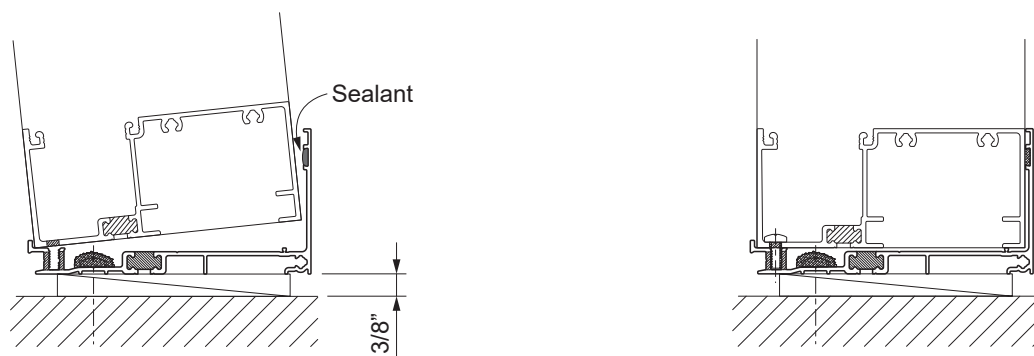
### STEP 14 (Continued) INSTALL FRAMES W/ HEAD RECEPTOR

- Rotate the assembled frames into position from the exterior, ensuring engagement into the sill flashing.
- Snap on the E9-1033 snap cover (with E2-0051 bulb gasket) into the head receptor.
- For mullion end load reactions over 500 lbs., attach the sill to the sill flashing using PM-1008-SS screws. Also add one (1) PM-1008-SS fastener 2" in both directions from the center line of the splice.

See **Detail 42**.



### Detail 42



**FRAME INSTALLATION**

**STEP 16  
INSTALL WATER DEFLECTORS**

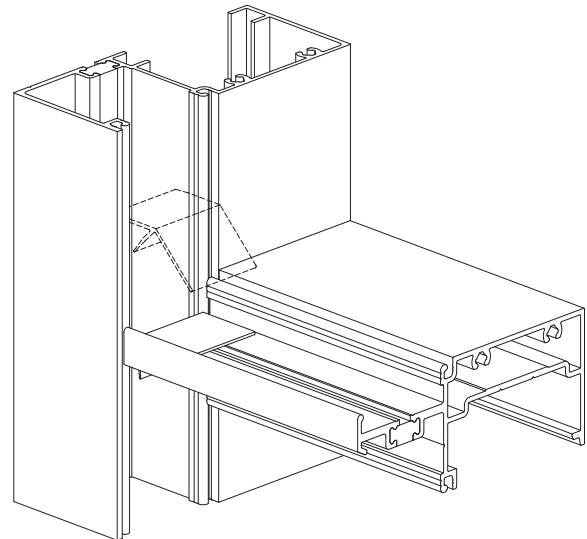
YES 45 TU requires the installation of a water deflector, E2-0047, at the ends of the intermediate horizontals at the jambs to keep water off of the insulating glass units.

-Peel away the protective paper from the bottom of the water deflector, E2-0047, and install the water deflector by rotating it over each end of the horizontal.

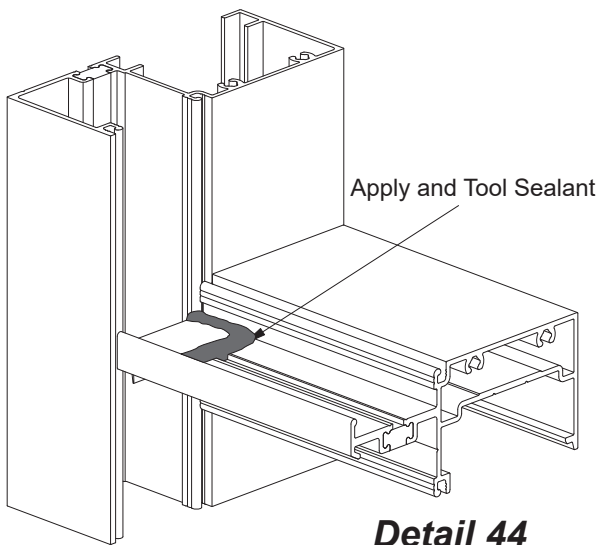
-Position the vertical leg of the water deflector against the end of the horizontal.

**Note:** For best adhesion, make sure that the horizontal is clean and dry.

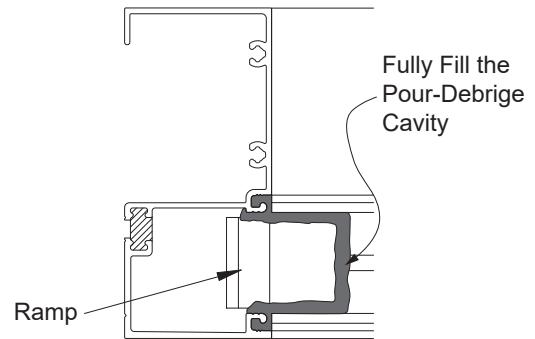
See **Detail 43**.



**Detail 43**  
1" Glazing Shown



**Detail 44**  
1" Glazing Shown



**Detail 45**  
1" Glazing Shown

-Apply and tool sealant along the edges of the water deflector and down onto the horizontal.  
See **Detail 44**.

-Seal the ramp of the water deflector to the sides of the vertical gasket reglets. Ensure the sealant fills the pour debride cavity.  
See **Detail 45**.

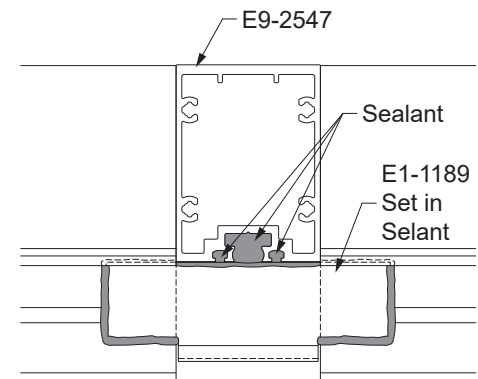
## FRAME INSTALLATION

### STEP 16A INSTALL WATER DEFLECTORS

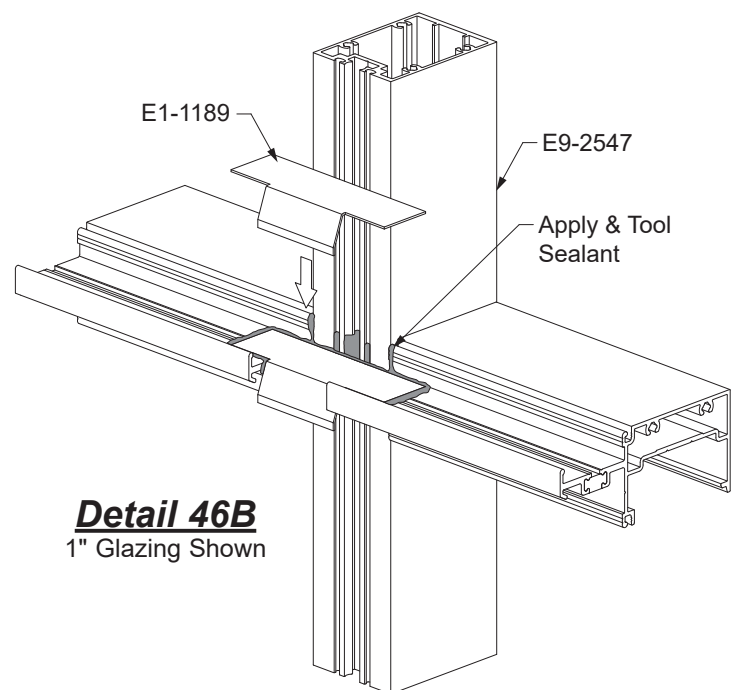
For SSG mullions, the installation of water deflectors, E1-1189, is required to bridge the gap between intermediate horizontals at the SSG mullion. SSG corner mullions use E1-1179 & E1-1180 (OG only).

- Clean and dry off the glazing pocket of each horizontal at the ends.
- Apply sealant to the reglet of the SSG mullion as shown in **Detail 46A**.
- Peel away the protective paper on the underside of the SSG water deflector.
- Install the water deflector centered over the gap, pressing it firmly down onto the glazing pocket.
- Apply and tool sealant at all bridge to horizontal and vertical joints to ensure a watertight seal.

See **Detail 46B**.



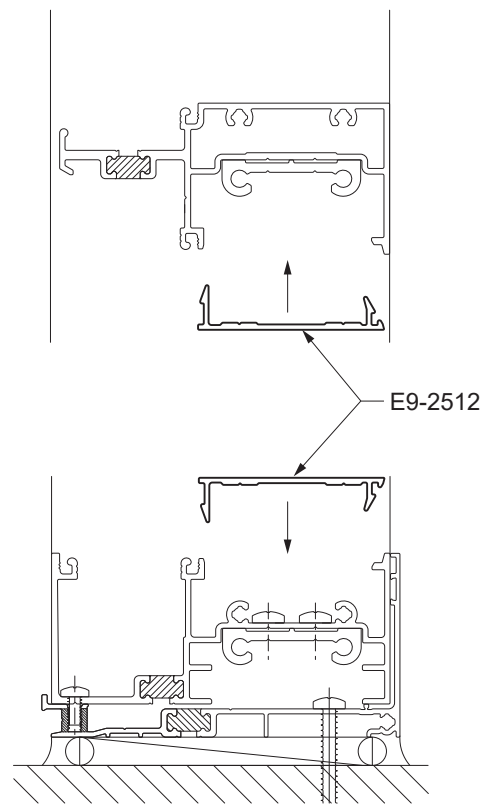
**Detail 46A**  
1" Glazing Shown



**Detail 46B**  
1" Glazing Shown

**FRAME INSTALLATION****STEP 17  
INSTALL HORIZONTAL FLUSH FILLERS**

-Snap in the E9-2512 flush filler into the horizontals and sill members as shown in **Detail 47**.



**Detail 47**  
1" Glazing Shown

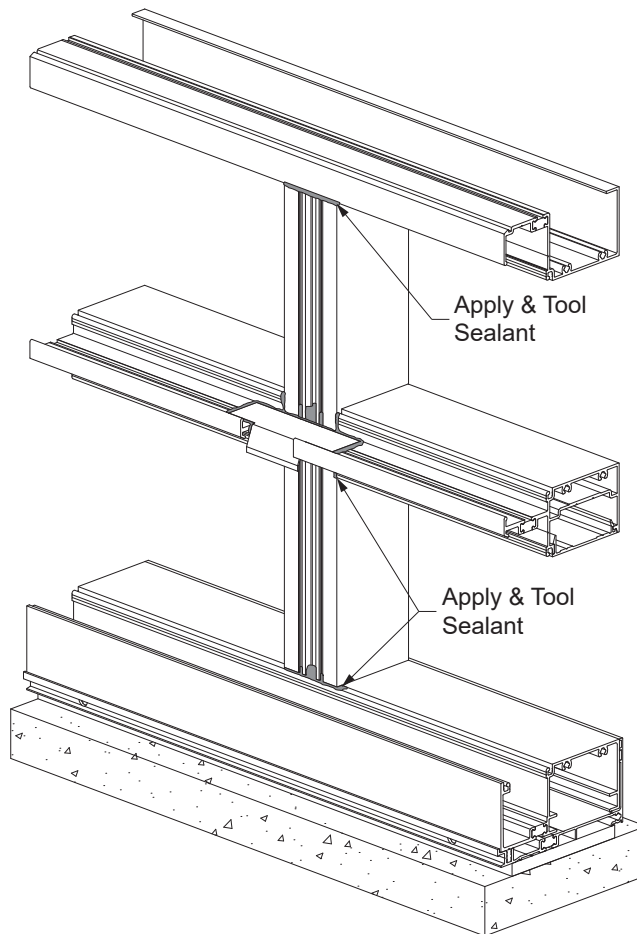
## FRAME INSTALLATION

### STEP 18

### APPLY INTERNAL SEALANT

- Apply sealant to the vertical intersection of the horizontal and vertical members.
- Tool all of the sealant to ensure a water tight joint.
- Make sure all exposed screw heads are sealed.

See **Detail 48**.



**Detail 48**

## GLAZING

### STEP 19 (Optional) INSTALL GLAZING ADAPTORS

For SSG applications, the E9-2509 glazing adaptor can be utilized for 1/4" glazing only.

- Cut glazing adaptor E9-2509 for SSG mullions:
  - Cut length between intermediate horizontals = Daylight Opening plus(+) 1-1/8"
  - Cut length involving one continuous head or sill = Daylight Opening plus(+) 9/16"
  - Cut length with both a continuous head and sill and no horizontals = length of SSG mullion.
- Cut glazing adaptor E9-1040 for horizontals:
  - Cut length = Daylight Opening minus(-) 1/32"
- Run a bead of sealant along the gasket reglets.

#### Attach the SSG vertical glazing adaptor first:

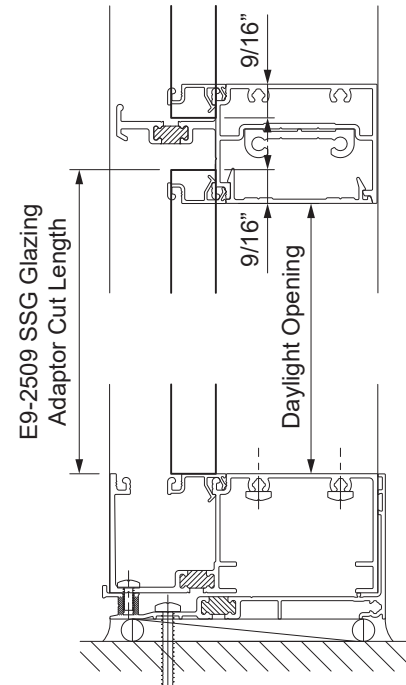
- Center the SSG vertical adaptor in the opening.
- Attach the SSG glazing adaptor, E9-2509, to the mullion with PC-1016 fasteners, 3" from each end and no more than 18" on center, and seal all screw heads.

Attach the horizontal glazing adaptors last:

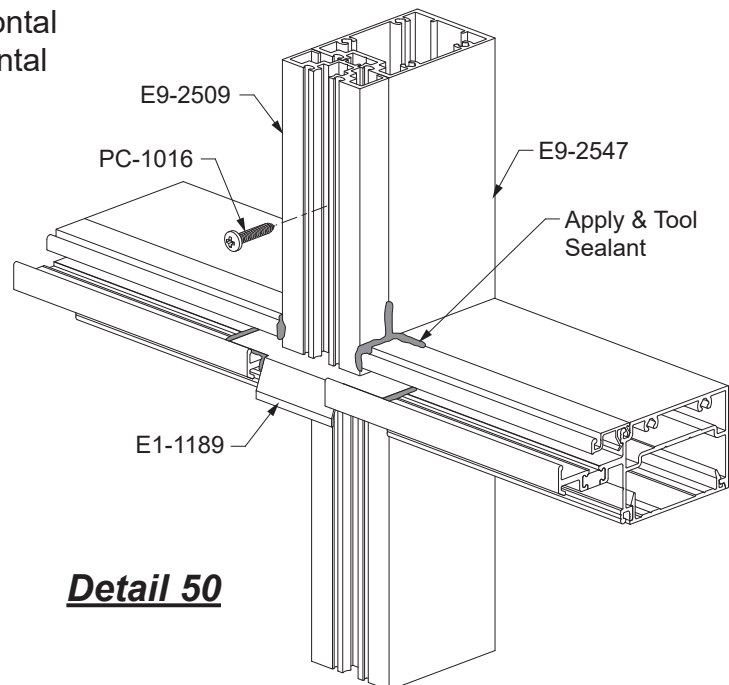
- Apply sealant to the ends of the horizontal glazing adaptors and install the horizontal adaptors.

- Tool the excess sealant at the intersections of the adaptors to completely seal the joint.

See **Details 49 & 50**.



**Detail 49**



**Detail 50**



## GLAZING

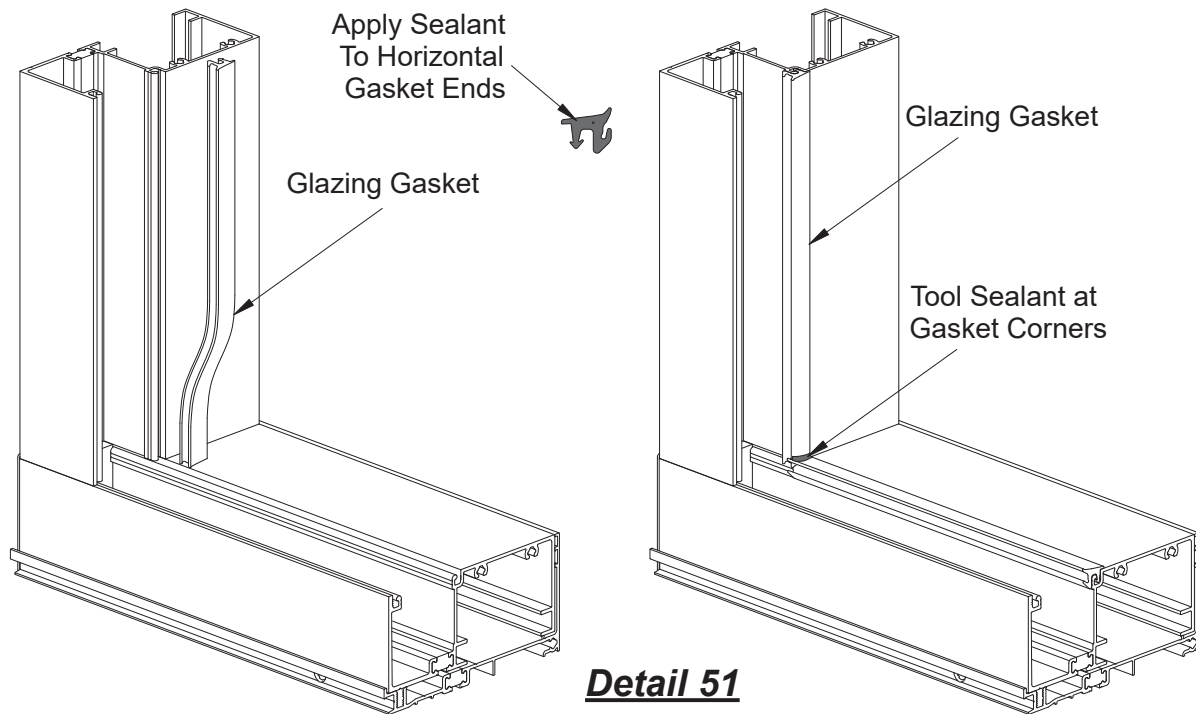
### STEP 20 INSTALL INTERIOR GLAZING GASKETS AT JAMBS

The interior glazing gaskets must be installed prior to the glazing process.

-Using a small brush clean out any dirt that may have accumulated in the gasket reglets.

Vertical glazing gaskets must be installed first:

- Cut vertical glazing gaskets to Daylight Opening plus(+) 1/4" for each foot of length.
- Insert the gasket into the reglet at each end first, and then insert the gasket at the midpoint of the opening.
- Push the gasket into the reglet starting at the midpoint and work towards each end.



Install horizontal glazing gaskets next:

- Cut horizontal glazing gaskets to Daylight Opening plus(+) 1/4" for each foot of length.
- Apply sealant to each end of the horizontal glazing gasket prior to inserting into the reglet.
- Insert the gasket into the reglet at each end first and push each end tight against the vertical gasket.
- Then insert the gasket at the midpoint of the opening and push the gasket into the reglet starting at the midpoint and work towards each end.
- Tool the excess sealant at the gasket corners to ensure a watertight seal.

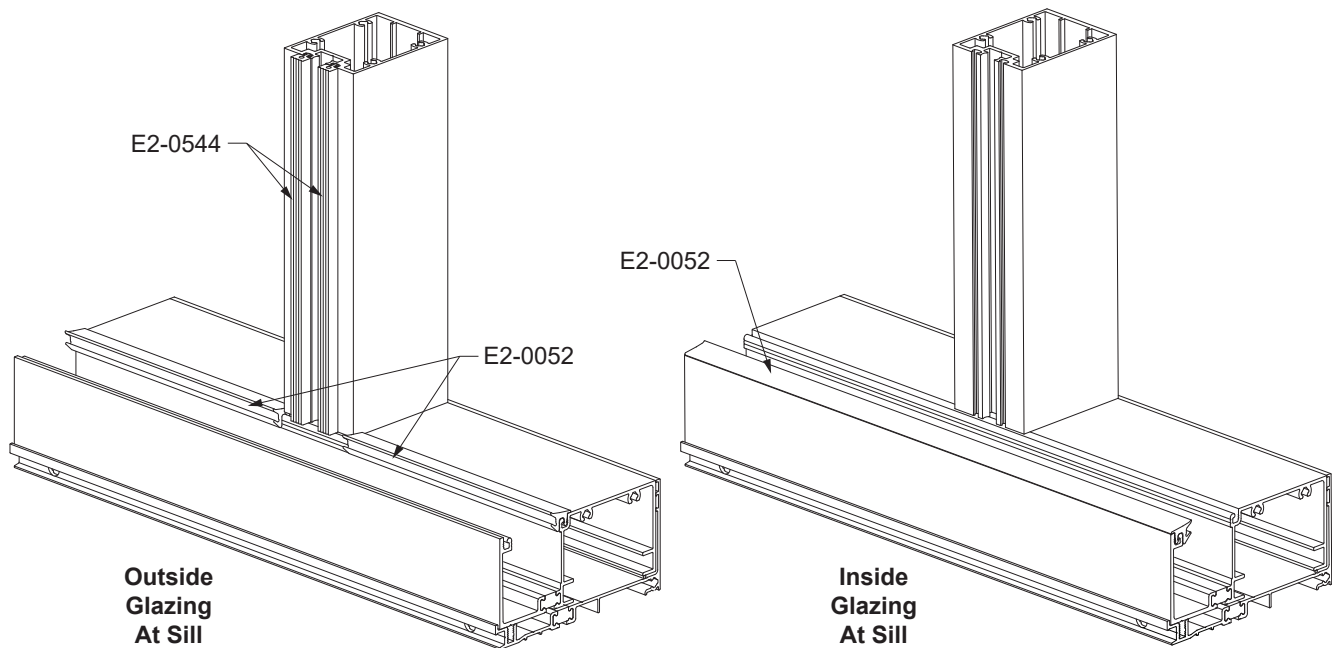
See **Detail 51**.

## GLAZING

### STEP 20 (CONTINUED) INSTALL GLAZING GASKETS AT SSG MULLIONS

The glazing gaskets must be installed prior to the glazing process. For outside glazing, use the outside gasket reglet, and for inside glazing, use the inside reglet.

- Using a small brush clean out any dirt that may have accumulated in the gasket reglets.
- Cut horizontal glazing gaskets to Daylight Opening plus(+) 1/4" for each foot of length.
- Insert the gasket into the reglet at each end first and push each end tight against the vertical gasket.
- Then insert the gasket at the midpoint of the opening and push the gasket into the reglet starting at the midpoint and work towards each end.



**Detail 52**

#### For Outside Glazing Only:

- Cut E2-0544 vertical glazing spacers to length of the SSG mullion.
- Insert the gasket into the reglet at each end first, and then insert the gasket at the midpoint of the opening.
- Push the gasket into the reglet starting at the midpoint and work towards each end.

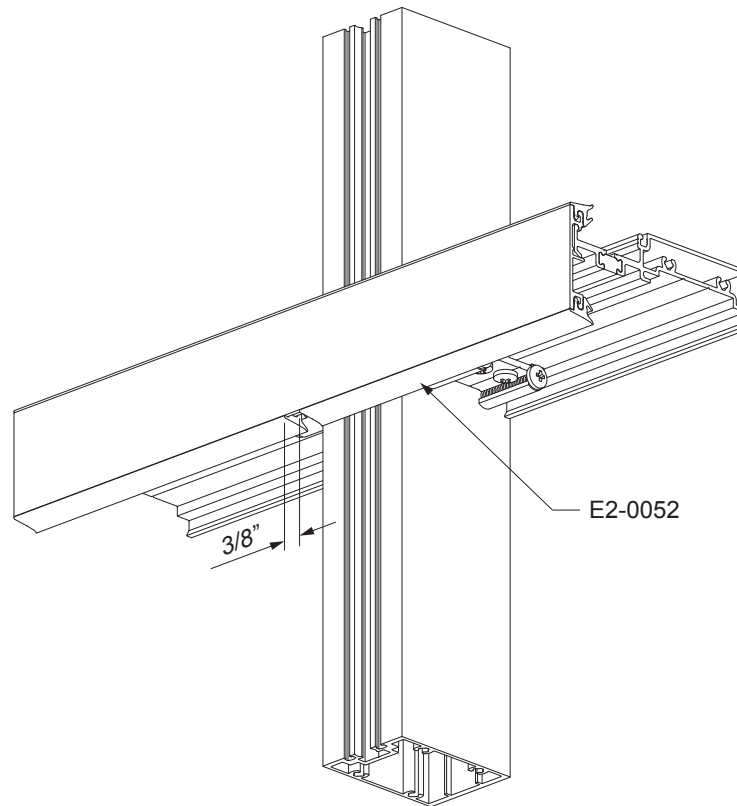
See **Detail 52**.

## GLAZING

### STEP 20 (CONTINUED) INSTALL GLAZING GASKETS AT SSG MULLIONS

Prior to glazing an inside glazed SSG system, snap on the exterior glass stops and install the E2-0052 gaskets.

- The gasket on the upper side of the exterior glass stop is to be cut to length of glass stops.
- The gasket on the sill is also to be cut to the length of the sill as previously shown in **Detail 51**.
- For the lower side of the glass stops, allow a 3/8" space at the center of each SSG mullion as shown in **Detail 53**. This will allow the system to weep.



**Detail 53**

## GLAZING

### STEP 21 INSTALL GLASS FOR OUTSIDE GLAZED STRUCTURAL SILICONE GLAZING

	Width	Height
Jamb to SSG	D.L.O. + 1-1/8"	D.L.O. + 3/4"
SSG to SSG	D.L.O. + 1-1/2"	D.L.O. + 3/4"

-Determine the glass size:

-Install setting blocks at 1/4 points or according to engineering calculations; E2-0611 at the intermediate horizontal and E2-0177 with setting block chair E1-1080 at the sill.

-Cut the structural silicone glazing spacers, E2-0544, to the same dimension as the glass plus(+) 3/16" per foot.

-Install the ssg spacers centered along the opening.

-Carefully install the first lite of glass from the exterior starting at one of the jambs.

-Slide the glass into the glazing pocket of the jamb until it clears the vertical; slide the glass back 7/8" over in front of the first vertical.

-Install glazing gaskets to the jambs and glass stops as shown in **Step 20** except leave 3/8" gaps on the underside where the glass stops are spliced or notched to allow proper weepage.

-Install the next the lite and center it to maintain a 1/2" joint between lites.

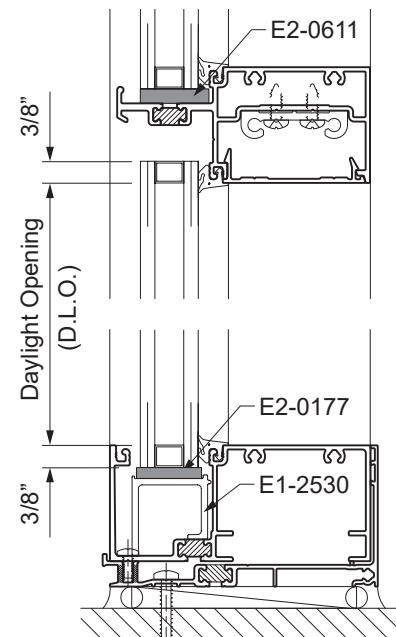
-Insert temporary glass retainers, E3-0001 (1" gl.) or E3-0006 (1/4" gl.), from the open side of the vertical and twist them 90° clockwise to engage. Locate temporary glass retainers 18" to 24" on center.

-At 90° outside corner mullions, use E1-3588 with HM-2516 fasteners.

-Install the next the lite and center it to maintain a 1/2" joint between lites.

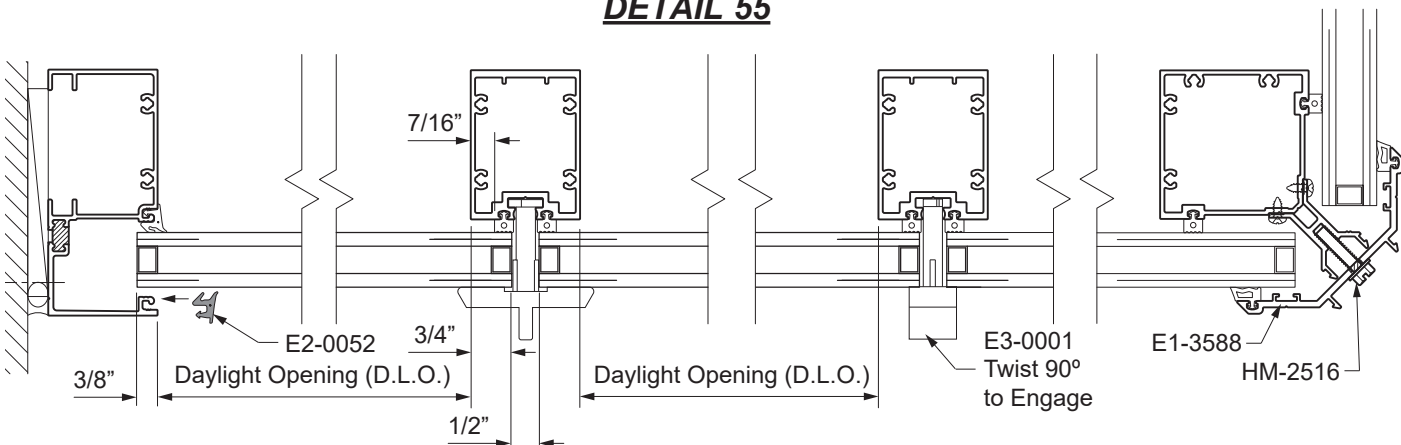
-Repeat the instructions above until all lites are installed.

See **Details 54 & 55**.



**DETAIL 54**

### **DETAIL 55**



## GLAZING

### STEP 21 (CONTINUED) INSTALL GLASS FOR INSIDE GLAZED STRUCTURAL SILICONE GLAZING

	Width	Height
Jamb to SSG	D.L.O. + 1-1/8"	D.L.O. + 3/4"
SSG to SSG	D.L.O. + 1-1/2"	D.L.O. + 3/4"

-Determine the glass size:

-Install setting blocks at 1/4 points or according to engineering calculations; E2-0611 at the intermediate horizontal and E2-0177 with setting block chair E1-1080 at the sill.

-Install glazing gaskets to the glass stops except leave 1/2" gaps on the underside where the glass stops are spliced or notched to allow proper weepage.

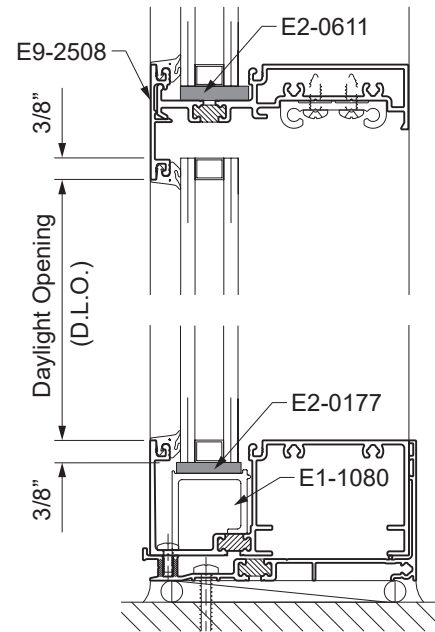
-Carefully install the first lite of glass from the interior starting at one of the jambs. Bring the glass in front of the SSG mullion first, and then swing the other end past the vertical to where it can be lowered onto the setting blocks.

-Final alignment of the glass will leave a 1/2" wide gap between the glass lites (3/4" glass bite at SSG mullions). However, in order to glaze this SSG system from the inside, it may be necessary to delay the alignment of the glass lites with respect to the D.L.O. until all SSG glass lites between captured verticals have been set and lowered onto their setting blocks. Then, the glass lites may be aligned to their proper position.

See **Details 56 & 57**.

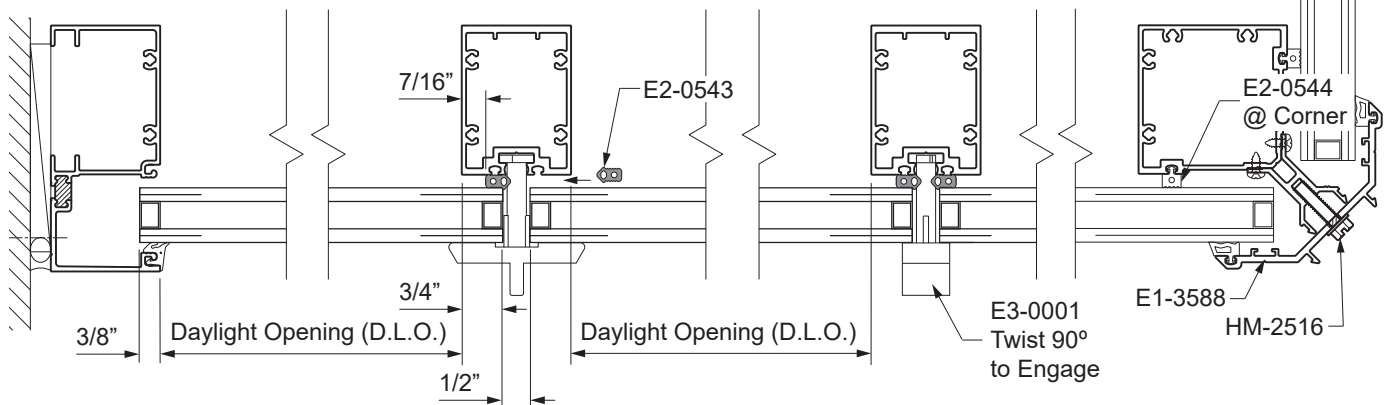
-Cut the structural silicone glazing spacers, E2-0543, to the same dimension as the glass plus(+) 3/16" per foot.

-Align the bottom of the spacer with the bottom of the glass. Push the spacer in until it locks into place and work your way up the vertical until the entire spacer is installed.



**DETAIL 56**

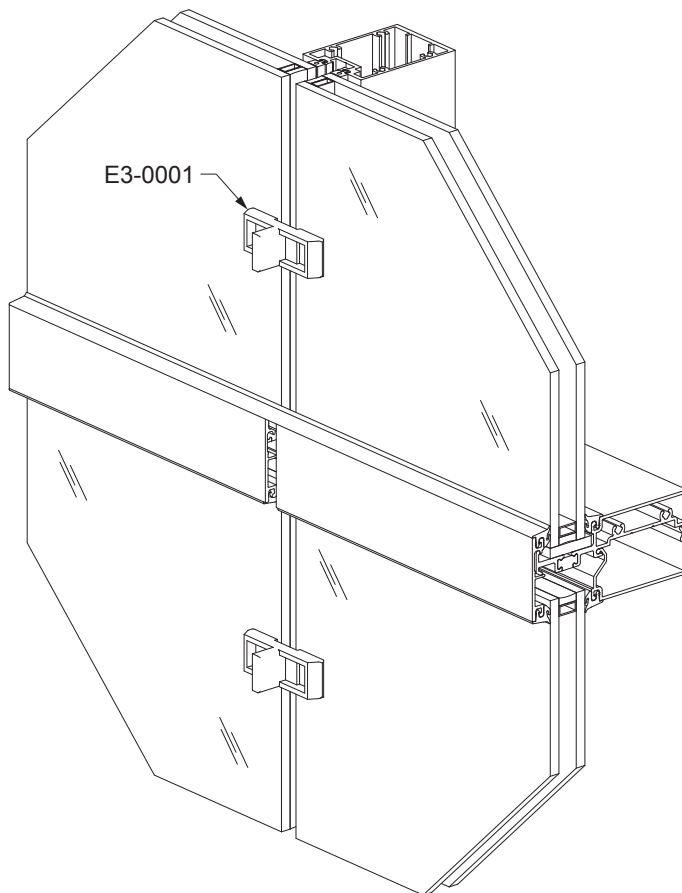
### DETAIL 57



**GLAZING****STEP 22  
INSTALL GLASS FOR INSIDE GLAZED  
STRUCTURAL SILICONE GLAZING**

-Insert temporary glass retainers, E3-0001 (1" gl.) or E3-0006 (1/4" gl.), from the open side of the vertical and twist them 90° clockwise to engage. Locate temporary glass retainers 18" to 24" on center.

See **Detail 58**.

**DETAIL 58**

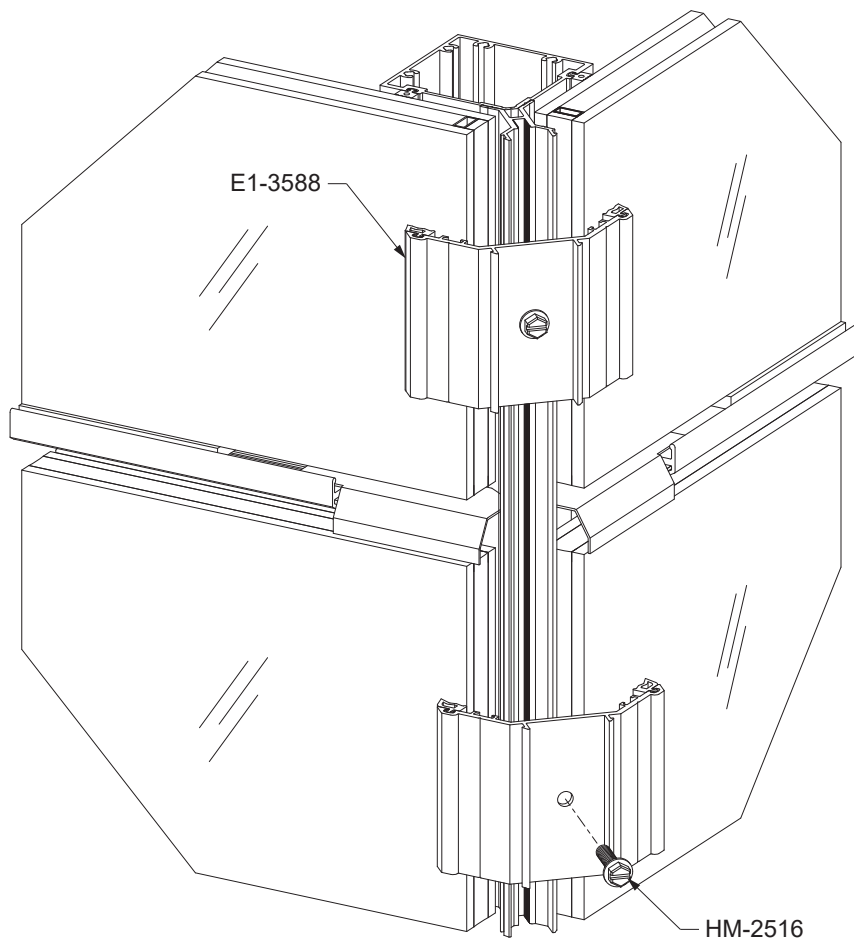
IG Shown  
OG Similar

## GLAZING

### STEP 22A INSTALL GLASS FOR INSIDE GLAZED STRUCTURAL SILICONE GLAZING

-At the 90° corner SSG mullions, use E1-3588 retainers with HM-2516 fasteners, spaced at 2'-0" maximum on center.

See **Details 59**.



**DETAIL 59**

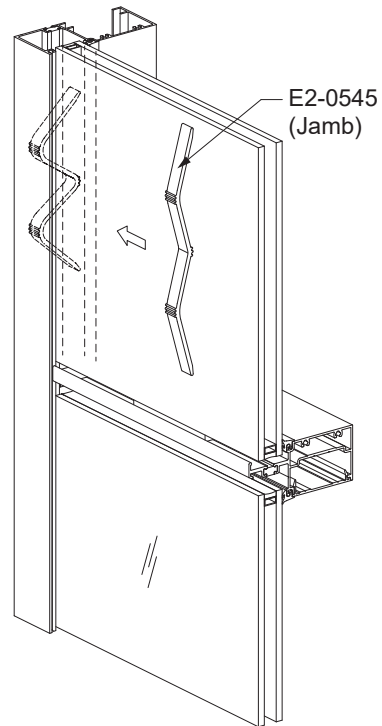
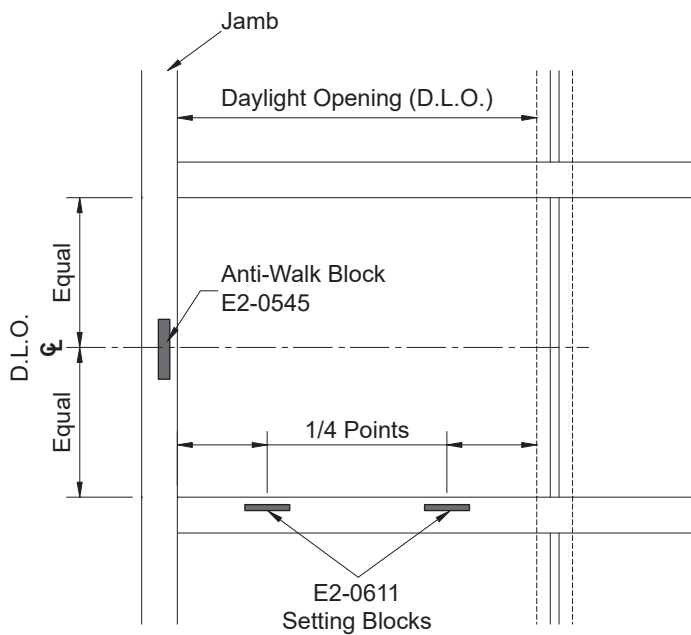
**GLAZING**

**STEP 23  
INSTALL ANTI-WALK BLOCKS AT JAMBS**

YES 45 TU SSG frames require the installation of an anti-walk block E2-0545, in the glazing pocket at the jambs, centered on the daylight opening.

-Flatten the anti-walk block against the exterior surface of the glass and push it into the opening between the glass and the mullion until it is released into the glazing pocket.

See **Detail 60**.



**Detail 60**

1" Glazing Shown  
1/4" Glazing Similar



## GLAZING

### STEP 24 INSTALL EXTERIOR GLASS STOPS & GLAZING GASKETS (INSIDE GLAZING)

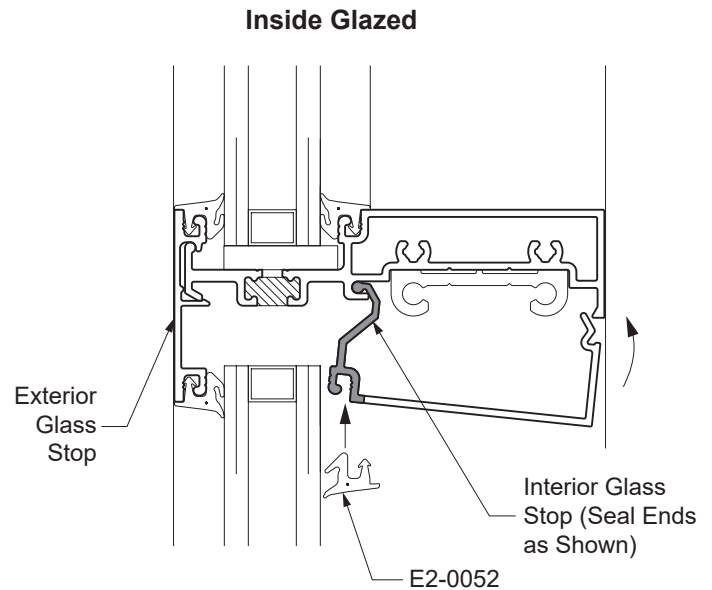
-Snap the interior glass stops into place as shown in **Detail 61**.

-Install the exterior glazing gaskets using the same technique described in **Step 20** on **Page 45**.

Always install the vertical glazing gasket at the jamb first.

**Note:** Do not seal the 3/8" gap in the gaskets at the underside of the glass stop.

Repeat **Steps 21 through 24** until all lites are installed.



### **Detail 61**

1" Glazing Shown  
1/4" Glazing Similar

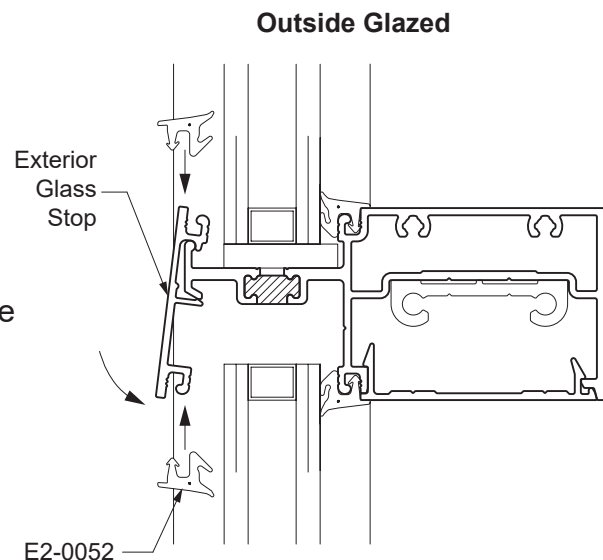
### STEP 24A INSTALL INTERIOR GLASS STOPS & GLAZING GASKETS (OUTSIDE GLAZING)

-Apply sealant to the ends of the interior glass stops as shown in **Detail 61A**.

-Install exterior glass stops, E9-2508 at the intermediate horizontal. Do not yet install the glass stops at the corner SSG mullion.

-Install the interior glazing gaskets using the same technique described in **Step 20** on **Page 45**. Always install the vertical glazing gasket first.

Repeat **Steps 21 through 24A** until all lites are installed.



### **Detail 61A**

## GLAZING

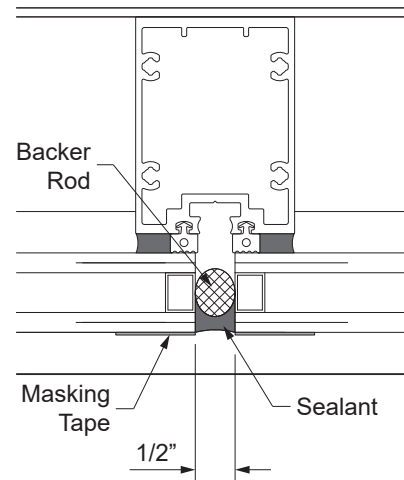
### STEP 25 APPLY EXTERIOR WEATHERSEAL

Once the interior structural silicone has cured\*, it is necessary to seal the 1/2" wide exterior joint between the lites of glass.

**Note:** \* Please consult sealant manufacturer for recommended cure time.

- Remove the temporary glass retainers and insert an approved, open cell polyurethane backer rod between the lites of glass. At the SSG expansion mullion, run the backer rod all the way to the top of the head member.
- Clean all contact surfaces with an approved cleaner and apply masking tape to both vertical edges of the glass.
- Starting at the bottom of the lite, pump sealant into the joint between the lites of glass. Apply moderate pressure so that the void is completely filled.

See **Detail 62**.



**Detail 62**

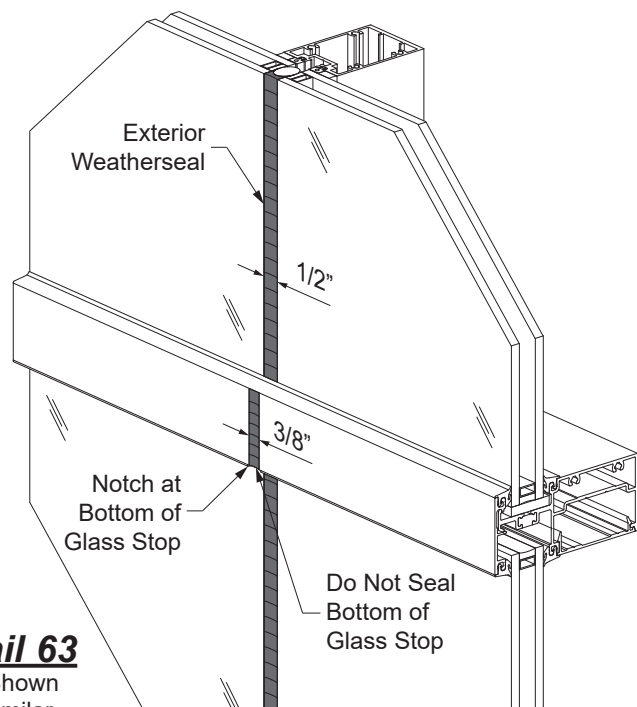
**Caution:** Be careful not to puncture the backer rod or push it out of the way.

- At face member splices, carry the sealant down over the face member without sealing off the bottom.

See **Detail 63**.

- Using a nylon spatula or other non-scratching implement, tool the silicone immediately after running the vertical joint. Exert positive pressure while tooling to ensure that the silicone completely fills the cavity.

- Be careful not to remove too much silicone. The silicone should make complete contact with the glass and aluminum surfaces. The finished joint should be flush with the edge of the vertical.



**Detail 63**

OG Shown  
IG Similar

**Caution:** Do not permit the silicone to skin over before it is tooled. Immediately remove masking tape after tooling the silicone.

## GLAZING

### STEP 25

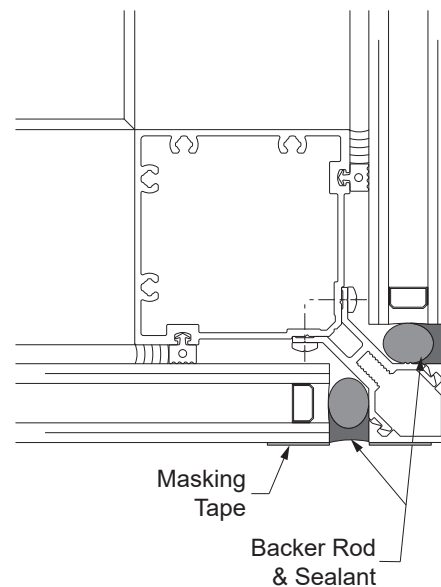
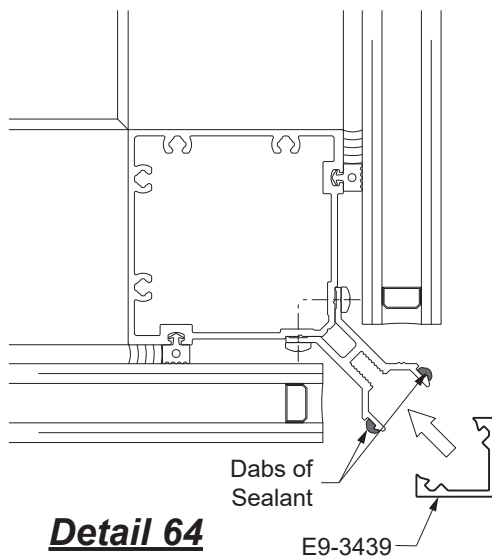
#### APPLY EXTERIOR WEATHERSEAL @ SSG CORNER

Once the interior structural silicone has cured\*, it is necessary to seal the 1/2" wide exterior joint at the corner ssg mullion.

**Note:** \* Please consult sealant manufacturer for recommended cure time.

- Remove the temporary glass retainers. Apply dabs of sealant onto the corner trim base as shown in **Detail 64**, and snap on the E9-3439 corner trim cover onto the corner trim base.
- Clean all contact surfaces with an approved cleaner and apply masking tape to both vertical edges of the glass.
- Insert an approved, open cell polyurethane backer rod between the glass and the corner trim.
- Starting at the bottom of the lite, pump sealant into the joint between the lites of glass. Apply moderate pressure so that the void is completely filled.

See **Detail 65**.



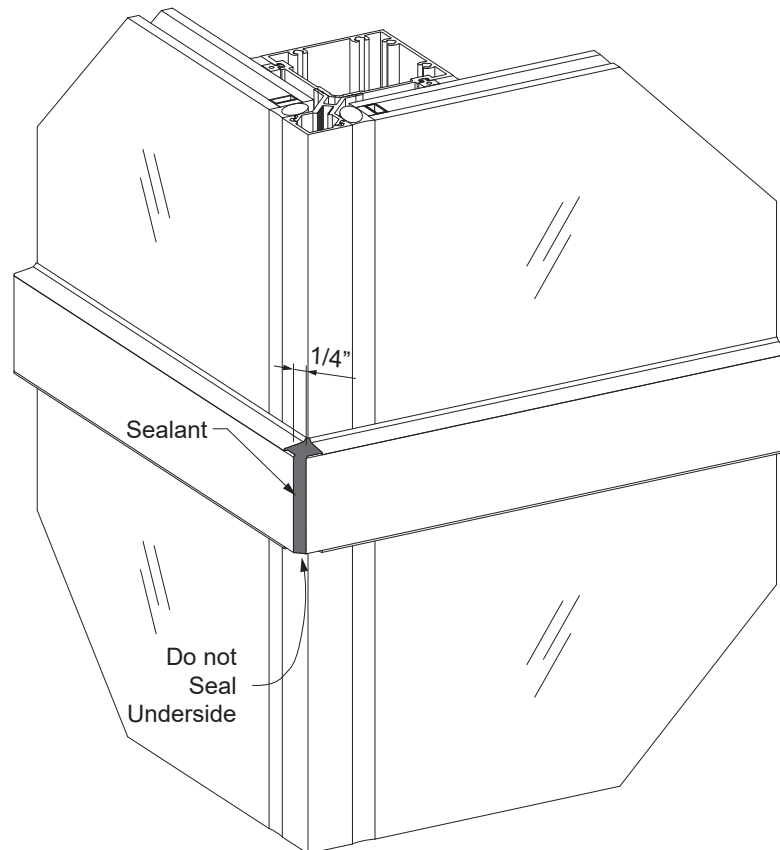
**GLAZING****STEP 26****INSTALL HORIZONTAL GLASS STOPS @ SSG CORNER**

-Once the corner structural silicone has cured\*, install the glass stops at the intermediate horizontals along with the E2-0052 glazing gaskets. Be sure to leave a 1/4" gap between the glass stops at the corner.

-Apply and tool sealant, filling the gap between the glass stops, but not the underside of the gap.

See **Detail 66**.

**Note:** \* Please consult sealant manufacturer for recommended cure time.



**Detail 66**





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