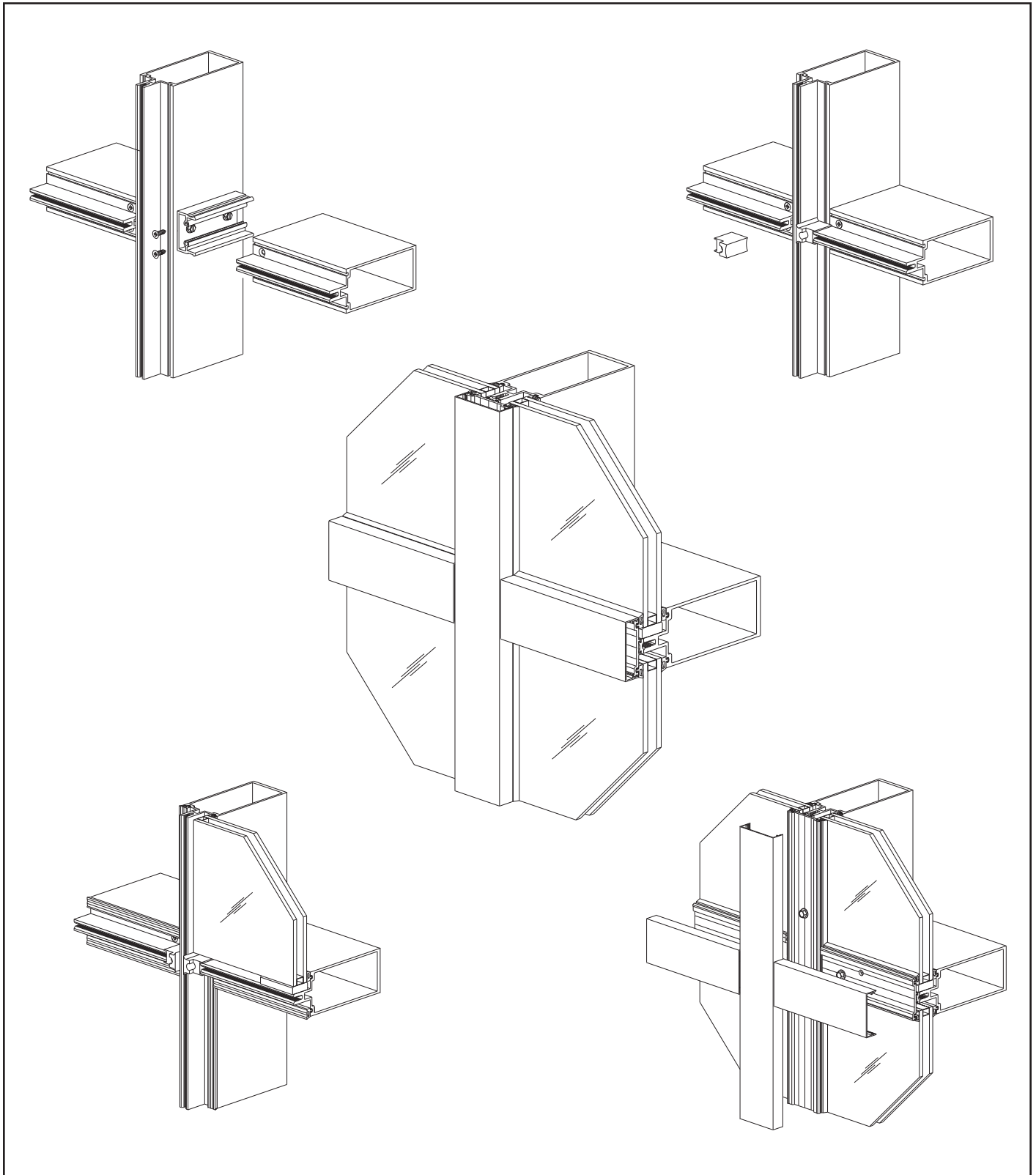


## YCW 750 OG Outside Glazed Curtain Wall System



## Installation Manual









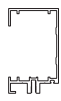


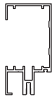





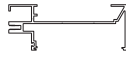








## TABLE OF CONTENTS

Installation Notes .....	Page ii
<b>PARTS DESCRIPTION</b>	
YCW 750 OG Framing Members .....	Pages 1 to 3
YCW 750 OG Accessories .....	Pages 3 to 6
<b>FRAME FABRICATION</b>	
Anchoring Methods/Framing Types.....	Pages 7 & 8
Fabricate Vertical Mullions .....	Pages 9 & 10
Using Steel Reinforcing .....	Page 11
Attach Shear Blocks/Clips for Horizontals.....	Page 12
Attach “J” Anchors .....	Page 13
Fabricate Horizontal Members .....	Pages 14 to 16
Fabricate Pressure Plates .....	Page 17
Fabricate Face Covers .....	Page 18
<b>FRAME INSTALLATION</b>	
Typical Vertical Splice .....	Pages 19 & 20
Install Continuous Perimeter Anchor .....	Page 21
Jamb/Vertical Installation with Perimeter Anchors .....	Page 22
Jamb Installation with Jamb Anchors .....	Page 23
Jamb/Vertical Installation with Mullion End Anchors.....	Pages 24 & 25
Install Wind Load/Dead Load Anchors .....	Pages 26 to 28
Attach Horizontal Members .....	Pages 29 to 32
Install Door Subframes .....	Page 33
Apply Perimeter Sealant.....	Pages 34 & 35
Install Joint Plugs.....	Page 36
<b>GLAZING</b>	
Install Glazing Adaptors.....	Page 37
Install Interior Glazing Gaskets .....	Page 38
Install Setting & Side Blocks .....	Page 39
Install Exterior Glazing Gaskets .....	Page 40
Install Glass .....	Page 40
Pressure Plate Layout and Assembly .....	Page 41
Install Exterior Face Covers .....	Page 42
Install Optional Deep Face Covers.....	Page 43

## **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. These installation instructions are of a general nature and may not cover every condition you will encounter. The shop drawings prepared should be specifically for the project.
6. Any material substitutions must be of equal or greater quality.
7. Make certain that material samples have been sent for compatibility and adhesion testing for all manufacturer's sealants involved. Make certain sealants have been installed in strict accordance with the sealant 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. If any questions arise concerning YKK AP products or their installation, contact YKK AP for clarification before proceeding.
11. YKK AP storefront and/or curtain wall framing is typically completed before drywall, flooring and other products which may still be in process. Wrap and protect the material when stored at job site.
12. Cutting tolerances are plus zero, minus one thirty second unless otherwise noted.
13. Check our website, [www.ykkap.com](http://www.ykkap.com), for the latest installation manual update prior to commencing work.

## FRAMING MEMBERS

	<b>Vertical / Horizontal</b> 2-1/2" x 5-1/4" For 1/4" Glazing	<b>E9-1246</b>		<b>Vertical / Horizontal</b> 2-1/2" x 3-3/4" For 1" Glazing	<b>E9-1235</b>
	<b>Vertical / Horizontal</b> 2-1/2" x 3-3/4" For 1/4" Glazing	<b>E9-1250</b>		<b>Vertical / Horizontal</b> Heavy Duty 2-1/2" x 3-3/4" For 1" Glazing	<b>E9-3537</b>
	<b>Jamb</b> Open Back 2-1/2" x 5-1/4" For 1/4" Glazing	<b>E9-3588</b>		<b>Vertical / Horizontal</b> 2-1/2" x 6-3/4" For 1" Glazing	<b>E9-1242</b>
	<b>Jamb</b> Open Back 2-1/2" x 3-3/4" For 1/4" Glazing	<b>E9-3592</b>		<b>Jamb</b> Open Back 2-1/2" x 5-1/4" For 1" Glazing	<b>E9-3580</b>
	<b>Head / Sill</b> Open Back 2-1/2" x 5-1/4" For 1/4" Glazing	<b>E9-3587</b>		<b>Jamb</b> Open Back 2-1/2" x 3-3/4" For 1" Glazing	<b>E9-3584</b>
	<b>Head / Sill</b> Open Back 2-1/2" x 3-3/4" For 1/4" Glazing	<b>E9-3591</b>		<b>Head / Sill</b> Open Back 2-1/2" x 5-1/4" For 1" Glazing	<b>E9-3579</b>
	<b>Optional Head</b> For Incidental Water 2-1/2" x 5-1/4" For 1/4" Glazing	<b>E9-3590</b>		<b>Head / Sill</b> Open Back 2-1/2" x 3-3/4" For 1" Glazing	<b>E9-3583</b>
	<b>Optional Head</b> For Incidental Water 2-1/2" x 3-3/4" For 1/4" Glazing	<b>E9-3594</b>		<b>Optional Head</b> For Incidental Water 2-1/2" x 5-1/4" For 1" Glazing	<b>E9-3582</b>
	<b>Horizontal</b> Open Back 2-1/2" x 5-1/4" For 1/4" Glazing	<b>E9-3589</b>		<b>Optional Head</b> For Incidental Water 2-1/2" x 3-3/4" For 1" Glazing	<b>E9-3586</b>
	<b>Horizontal</b> Open Back 2-1/2" x 3-3/4" For 1/4" Glazing	<b>E9-3593</b>		<b>Horizontal</b> Open Back 2-1/2" x 5-1/4" For 1" Glazing	<b>E9-3581</b>
	<b>Vertical / Horizontal</b> 2-1/2" x 5-1/4" For 1" Glazing	<b>E9-1215</b>		<b>Horizontal</b> Open Back 2-1/2" x 3-3/4" For 1" Glazing	<b>E9-3585</b>
	<b>Vertical / Horizontal</b> 2-1/2" x 5-1/4" For 1" Glazing	<b>E9-1225</b>		<b>Horizontal Flush Filler</b> For 5-1/4" Depth Open Back Members	<b>E9-3162</b>



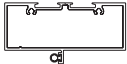




\* Splay mullions and other face covers are available, contact YKK AP.

**FRAMING MEMBERS**





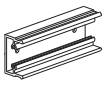




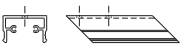
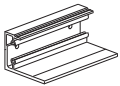
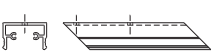


	<b>Horizontal Flush Filler</b> For 3-3/4" Depth Open Back Members	<b>E9-3595</b>		<b>Horizontal Face Cover</b> 11/16" x 2-1/2"	<b>E9-1207</b>
	<b>Pressure Plate</b> With PVC Isolator For 1/4" & 1" Glazing	<b>AS-1216</b>		<b>Bull Nose Face Cover</b> 2-1/2" x 2"	<b>E9-1293</b>
	<b>Perimeter Pressure Plate</b> With PVC Isolator For 1/4" Glazing	<b>AS-3572</b>		<b>90° Outside Corner Face Cover</b> For 1/4" Glazing	<b>E9-1238</b>
	<b>Perimeter Pressure Plate</b> With PVC Isolator For 1" Glazing	<b>AS-3569</b>		<b>90° Outside Corner Face Cover</b> For 1" Glazing	<b>E9-1228</b>
	<b>Pressure Plate</b> For Deep Covers With PVC Isolator For 1/4" & 1" Glazing	<b>AS-3574</b>		<b>Interior Cover Base</b> Use with E9-1281	<b>E9-1280</b>
	<b>Perimeter Pressure Plate</b> For Deep Covers With PVC Isolator For 1" Glazing	<b>AS-3576</b>		<b>Interior Cover</b> For 5-1/4" Back Depth 90° Outside Corner Use with E9-1280	<b>E9-1281</b>
	<b>90° Outside Corner Adaptor</b> For 1/4" Glazing	<b>E9-1236</b>		<b>Interior Cover</b> For 6-3/4" Back Depth 90° Outside Corner Use with E9-1280	<b>E9-3548</b>
	<b>90° Outside Corner Pressure Plate</b> With PVC Isolator For 1/4" Glazing	<b>AS-1237</b>		<b>Glazing Adaptor</b> For 1/4" glazing	<b>E9-1220</b>
	<b>90° Outside Corner Adaptor</b> For 1" Glazing	<b>E9-1226</b>		<b>Glazing Adaptor</b> For 1/2" Glazing	<b>E9-1232</b>
	<b>90° Outside Corner Pressure Plate</b> With PVC Isolator For 1" Glazing	<b>AS-1227</b>		<b>Flush Pocket Filler</b> For 1" glazing	<b>E9-1253</b>
	<b>Face Cover</b> 2-1/2 x 3/4"	<b>E9-1206</b>		<b>Perimeter Anchor</b> For 1/4" Glazing	<b>E9-1248</b>
	<b>Face Cover</b> 2-1/2" x 2-3/8" Use with AS-3574 & AS-3576	<b>E9-1219</b>		<b>Perimeter Anchor</b> For 1" Glazing	<b>E9-1223</b>

\* Splay mullions and other face covers are available, contact YKK AP.

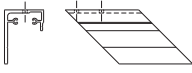
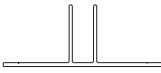
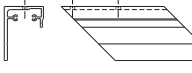
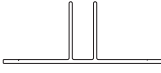
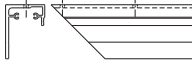

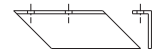


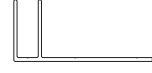





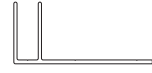







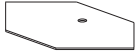
## FRAMING MEMBERS

	<b>Perimeter Channel</b> For 1" Glazing	<b>E9-1231</b>		<b>Snap-In Door Stop</b> Elastomer Weathering E2-0051 Included Use with E9-1224 & E9-3513	<b>AS-0417</b>
	<b>Single Acting Transom Bar</b> Elastomer Weathering E2-0051 Included	<b>AS-0402</b>		<b>Heavy Duty Door Jamb</b> Use with AS-0441	<b>E9-3531</b>
	<b>Standard Door Jamb</b> For 1/4" Glazing Use with AS-0417	<b>E9-1224</b>		<b>Heavy Duty Door Stop</b> Elastomer Weathering E2-0051 Included Use with E9-3531	<b>AS-0441</b>
	<b>Standard Door Jamb</b> For 1" Glazing Use with AS-0417	<b>E9-3513</b>			

## ACCESSORIES


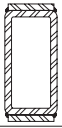
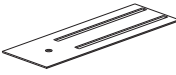

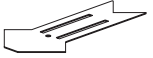
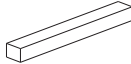
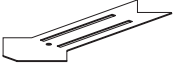
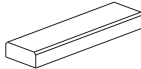
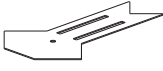
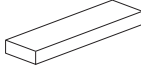
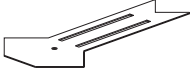

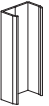

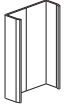

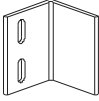




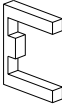
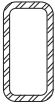

	<b>Standard Shear Block</b> For 3-3/4" Back Depth 3.125" Long	<b>E1-3503</b>		<b>Optional Shear Clip</b> For 5-1/4" Back Depth Incidental Water Head	<b>E1-3019</b>
	<b>Standard Shear Block</b> For 5-1/4" Back Depth 4.375" Long	<b>E1-3504</b>		<b>Shear Block</b> (For E-Slot) For 3-3/4" Back Depth 3.125" Long	<b>E1-1206</b>
	<b>Standard Shear Block</b> For 6-3/4" Back Depth 6.000" Long	<b>E1-3506</b>		<b>Shear Block</b> (For E-Slot) For 5-1/4" Back Depth 4.375" Long	<b>E1-1200</b>
	<b>"J" Anchor</b> For 3-3/4" Back Depth 3.125" Long	<b>E1-3501</b>		<b>Shear Block</b> (For E-Slot) For 6-3/4" Back Depth 6.000" Long	<b>E1-1236</b>
	<b>"J" Anchor</b> For 5-1/4" Back Depth 4.375" Long	<b>E1-3502</b>		<b>Shear Block for 90° Outside Corner</b> For 3-3/4" Back Depth 5.794" Long	<b>E1-3503A</b>
	<b>"J" Anchor</b> For 6-3/4" Back Depth 6.000" Long	<b>E1-3505</b>		<b>Shear Block for 90° Outside Corner</b> For 5-1/4" Back Depth 7.562" Long	<b>E1-3504A</b>
	<b>Optional Shear Clip</b> For 3-3/4" Back Depth Incidental Water Head	<b>E1-3523</b>		<b>Shear Block for 90° Outside Corner</b> For 6-3/4" Back Depth 9.860" Long	<b>E1-3506A</b>

**ACCESSORIES**

	<b>"J" Anchor for 90° Outside Corner</b> For 3-3/4" Back Depth 5.669" Long	<b>E1-3501A E1-3501B</b>		<b>Mullion "T" Anchor</b> For E9-1235, E9-1250, & E9-3537, 3.462" Long	<b>E1-1207</b>
	<b>"J" Anchor for 90° Outside Corner</b> For 5-1/4" Back Depth 7.437" Long	<b>E1-3502A E1-3502B</b>		<b>Mullion "T" Anchor</b> For E9-1215 Only 4.866" Long	<b>E1-1208</b>
	<b>"J" Anchor for 90° Outside Corner</b> For 6-3/4" Back Depth 9.375" Long	<b>E1-3505A E1-3505B</b>		<b>Mullion "T" Anchor</b> For E9-1225 & E9-1246 4.960" Long	<b>E1-1209</b>
	<b>Shear Clip for 90° Outside Corner (RH)</b> For 3-3/4" Depth Optional Incidental Water Head	<b>E1-3534</b>		<b>Mullion "T" Anchor</b> For E9-1242 6.453" Long	<b>E1-1238</b>
	<b>Shear Clip for 90° Outside Corner (LH)</b> For 3-3/4" Depth Optional Incidental Water Head	<b>E1-3535</b>		<b>Mullion "F" Anchor</b> For E9-1235, E9-1250, E9-3537, E9-3584 & E9-3592, 3.462" Long	<b>E1-1232</b>
	<b>Shear Clip for 90° Outside Corner (RH)</b> For 5-1/4" Depth Optional Incidental Water Head	<b>E1-3532</b>		<b>Mullion "F" Anchor</b> For E9-1215 4.866" Long	<b>E1-1233</b>
	<b>Shear Clip for 90° Outside Corner (LH)</b> For 5-1/4" Depth Optional Incidental Water Head	<b>E1-3533</b>		<b>Mullion "F" Anchor</b> For E9-1225, E9-1246, E9-3580 & E9-3588 4.960" Long	<b>E1-1231</b>
	<b>Mullion Splice Sleeve</b> For 3-3/4" Back Depth	<b>E1-1212</b>		<b>Mullion "F" Anchor</b> For E9-1242 6.453" Long	<b>E1-1240</b>
	<b>Mullion Splice Sleeve</b> For 5-1/4" Back Depth	<b>E1-1201</b>		<b>Temporary Glass Retainer</b> 2" Long	<b>E1-1294</b>
	<b>Mullion Splice Sleeve</b> For 6-3/4" Back Depth	<b>E1-1299</b>		<b>Mullion End Cap</b> 2.500" x 2.313" x 0.050"	<b>E1-1286</b>
	<b>Mullion Splice Sleeve</b> For 3-3/4" Back Depth Open Back Jambs	<b>E1-1354</b>		<b>Mullion End Cap for 90° Outside Corner</b> For 1/4" Glazing	<b>E1-3519</b>
	<b>Face Cover Splice Sleeve</b> For E9-1206	<b>E1-1202</b>		<b>Mullion End Cap for 90° Outside Corner</b> For 1" Glazing	<b>E1-3520</b>








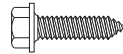

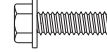

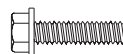

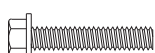

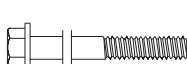







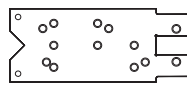

## ACCESSORIES

	<b>Mullion End Cap</b> For 3-3/4" Depth Optional Incidental Water Head	<b>E1-3527</b>		<b>Steel Reinforcement</b> 2" x 4" x 1/4" Steel Tube & (2) 1/4" x 1-3/4" Steel Bars With Zinc Oxide Paint	<b>E1-0154</b>
	<b>Mullion End Cap</b> For 5-1/4" Depth Optional Incidental Water Head	<b>E1-3526</b>		<b>Setting Block</b> For 1/4" Glazing EPDM with Pressure Sensitive Adhesive	<b>E2-0112</b>
	<b>90° O.C. Mullion End Cap</b> For 1/4" Glazing 3-3/4" Depth Optional Incidental Water Head	<b>E1-3531</b>		<b>Side Block</b> For 1/4" Glazing EPDM with Pressure Sensitive Adhesive	<b>E2-0113</b>
	<b>90° O.C. Mullion End Cap</b> For 1/4" Glazing 5-1/4" Depth Optional Incidental Water Head	<b>E1-3530</b>		<b>Setting Block</b> For 1" Glazing EPDM with Pressure Sensitive Adhesive	<b>E2-0104</b>
	<b>90° O.C. Mullion End Cap</b> For 1" Glazing 3-3/4" Depth Optional Incidental Water Head	<b>E1-3529</b>		<b>Side Block</b> For 1" Glazing EPDM with Pressure Sensitive Adhesive	<b>E2-0105</b>
	<b>90° O.C. Mullion End Cap</b> For 1" Glazing 5-1/4" Depth Optional Incidental Water Head	<b>E1-3528</b>		<b>Standard Joint Plug</b> For 1/4" Glazing EPDM Sponge	<b>E2-0125</b>
	<b>Optional Jamb Anchor Clip</b> For Open Back Jambs E9-3584 & E9-3592	<b>E1-3524</b>		<b>Standard Joint Plug</b> For 1" Glazing EPDM Sponge	<b>E2-0102</b>
	<b>Optional Jamb Anchor Clip</b> For Open Back Jambs E9-3580 & E9-3588	<b>E1-3525</b>		<b>Joint Plug</b> For Slide-In Horizontal at End Bays, 1/4" Glazing Use with E2-0123	<b>E2-0129</b>
	<b>Wind Load Anchor</b> Steel with Zinc Oxide Paint Refer to Shop Drawings for Anchor Dimensions	<b>E1-1204*</b> Project Specific		<b>Joint Plug</b> For Slide-In Horizontal at End Bays, 1" Glazing Use with E2-0123	<b>E2-0124</b>
	<b>Dead Load Anchor</b> Steel with Zinc Oxide Paint Refer to Shop Drawings for Anchor Dimensions	<b>E1-1205*</b> Project Specific		<b>End Dam Plug</b> Use with E9-1223 & E9-1231	<b>E2-0505</b>
	<b>Jamb Anchor Plate</b>	<b>E1-3536</b>		<b>E-Slot Plug</b> For Slide-In Horizontal at End Bays	<b>E2-0123</b>
	<b>Steel Reinforcement</b> 2" x 4" x 1/4" Steel Tube With Zinc Oxide Paint	<b>E1-0162</b>		<b>Isolator Tape</b> 1/8" x 7/16" Use with Perimeter Pressure Plate	<b>E2-0239</b>

\* Note: Project specific part number.

Exact size of anchors should be determined from loads calculated on each individual curtain wall frame.

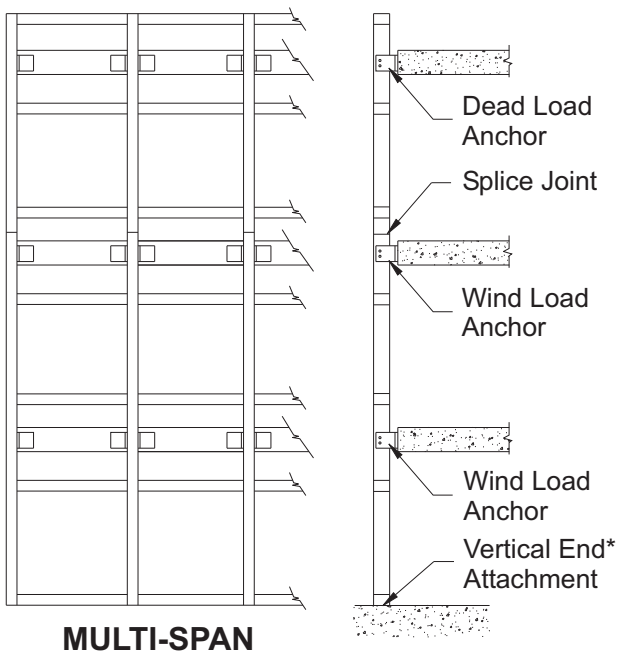
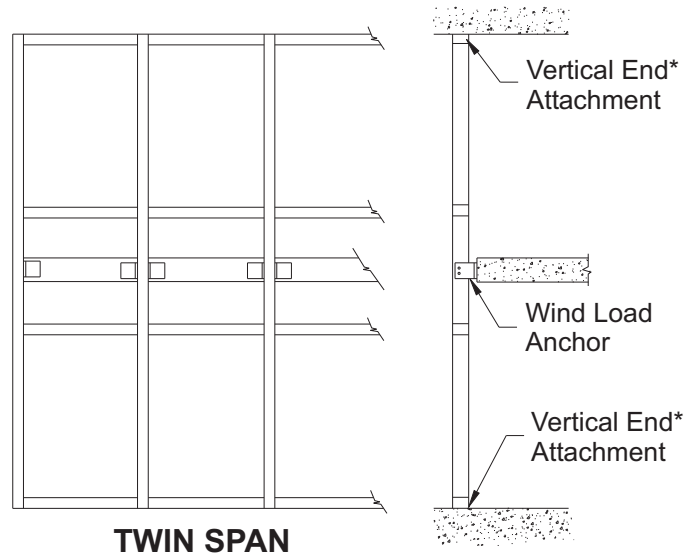
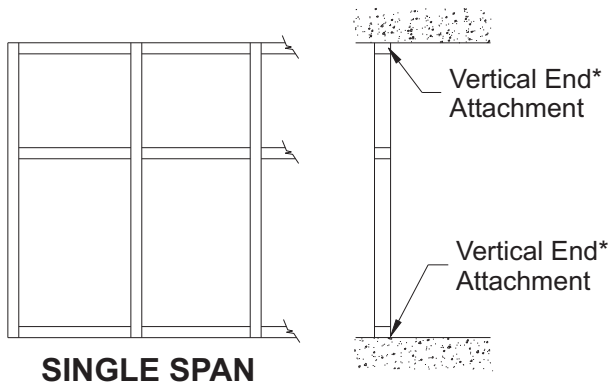
**ACCESSORIES**

	<b>Interior/Exterior Glazing Gasket</b>	<b>E2-0120</b>		<b>1/4"–20 x 1" HWHS Type F</b> Zinc Plated Steel, For Attachment of Std. Shear Block to Vertical with Steel Reinforcing	<b>HF-2516 -W1</b>
	<b>Weep Baffle</b> For Optional Incidental Water Head Members	<b>E2-0099</b>		<b>1/4"–20 x 1-3/4" HWHS</b> Type F, Zinc Plated Steel For Attachment of Opt. Shear Clip to Vertical	<b>HF-2528 -W1</b>
	<b>Anchor Slip Pad</b> For Dead Load & Wind Load Anchors	<b>E3-0103</b>		<b>1/4"–20 x 1" HWHMS</b> Type CA, Zinc Plated Steel For Attachment of Pressure Plate to Mullion	<b>HD-2516 -W3</b>
	<b>#8 x 3/8" PHSMS</b> Zinc Plated Steel For Attachment of Glazing Adaptors	<b>PC-0806</b>		<b>1/4"–20 x 3/4" HWHMS</b> , Zinc Plated Steel, For Attachment of 90° O.S. Corner Adaptor E9-1226 to Vertical (1" Glazing)	<b>HM-2512 -W3</b>
	<b>#8 x 1/2" FHSMS</b> Type AB Stainless Steel For Attachment of Deep Face Cover at Exposed Area	<b>FC-0808 -SS</b>		<b>1/4"–20 x 1" HWHMS</b> Zinc Plated Steel For Attachment of "J" Anchor at Jamb	<b>HM-2516 -W3</b>
	<b>#8 x 1/2" PHSMS</b> Type AB Stainless Steel For Attachment of Deep Face Cover at Concealed Area	<b>PC-0808 -SS</b>		<b>1/4"–20 x 1-1/4" HWHMS</b> Zinc Pl. Stl., For Attachment of 90° O.S. Corner Adaptor E9-1236 to Vertical (1/4" Glazing)	<b>HM-2520 -W3</b>
	<b>#8 x 1/2" PHSMS</b> Type F Stainless Steel For Attachment of Face Cover Splice Sleeves	<b>PF-0808 -SS</b>		<b>1/4"–20 x 3-1/2" HWHMS</b> Zinc Plated Steel, For Attachment of "J" Anchor at Intermediate Vertical	<b>HM-2556 -W3</b>
	<b>#12 x 1/2" PHSMS</b> Type AB Zinc Plated Steel For Attachment of Optional Head to Shear Clips	<b>PC-1208</b>		<b>1/4"–20 Nut HHMS</b> Zinc Plated Steel, For Attachment of "J" Anchor at Intermediate Vertical & Jamb	<b>HM-2500</b>
	<b>#12 x 3/4" FHSMS</b> Type AB Zinc Plated Steel (Exposed Fasteners), For Attachment of Horizontal to Shear Block	<b>FC-1212</b>		<b>1/4" Flat Washer</b> Zinc Plated Steel, For Attachment of "J" Anchor at Intermediate Vertical & Jamb	<b>WW-2500</b>
	<b>#12 x 1-1/4" FHSMS</b> Type AB Zinc Plated Steel (Concealed Fasten.) For Attachment of Horizontal to Shear Block	<b>FC-1220</b>		<b>1/4" Lock Washer</b> Zinc Plated Steel, For Attachment of "J" Anchor at Intermediate Vertical & Jamb	<b>WS-2500</b>
	<b>#14 x 5/8" FHSMS</b> Type AB, Zinc Plated Steel For Attachment of Mullion End Caps	<b>FC-1410</b>		<b>Drill Fixture</b>	<b>H-7210</b>
	<b>1/4"–20 x 5/8" HWHS</b> Type F, Zinc Plated Steel For Attachment of Std. Shear Block to Vertical	<b>HF-2510 -W1</b>			

## FRAME FABRICATION

### FRAME TYPES / ANCHORING METHODS

The following is a guideline for common types of frames. Refer to shop drawings for exact layout of frames.



Smaller units may be assembled on the ground and tipped in place. Larger units require being stick assembled in place.

**Note:** If YKK AP does not prepare the shop drawings for the project, a qualified engineer must approve all anchors, their arrangement, and mullion selection.

All anchors must be attached to structurally sound material that will accommodate the anchor reactions.

\* Vertical end attachment will be continuous perimeter anchor or mullion end anchors "J", "T" or "F".

**Fabrication of YCW 750 OG varies depending on the type of vertical end attachment required for a given project:**

**Perimeter Anchors** are for low load anchoring conditions (maximum 500lb. end load reaction):  
E9-1248, E9-1223, & E9-1231

**"J" Anchors** are for medium to high load conditions: E1-3501, E1-3502, & E1-3505.

**"T" & "F" Anchors** are for high load conditions: E1-1207, E1-1208, E1-1209, E1-1231, E1-1232, E1-1233, E1-1238, & E1-1240

## FRAME FABRICATION

### FRAME TYPES / ANCHORING METHODS

#### Using Perimeter Anchors:

-Vertical mullions must be notched as shown in **Detail 1** on **Page-9**.

#### Using Mullion End Anchors:

YCW 750 OG has four possible end anchoring conditions: "J", "T", "F", and Door Jamb.

- "J" anchors are used with jambs and intermediate verticals at the sill only.
- "T" anchors are used with intermediate verticals at the head and sill.
- "F" anchors are used with jamb mullions at the head and sill.
- "Door Jamb" anchors are used with mullions at a door jamb and are specified by the approved shop drawings or P.E. calcs.
- Anchor usage depends on end reaction, stress, and attachment.

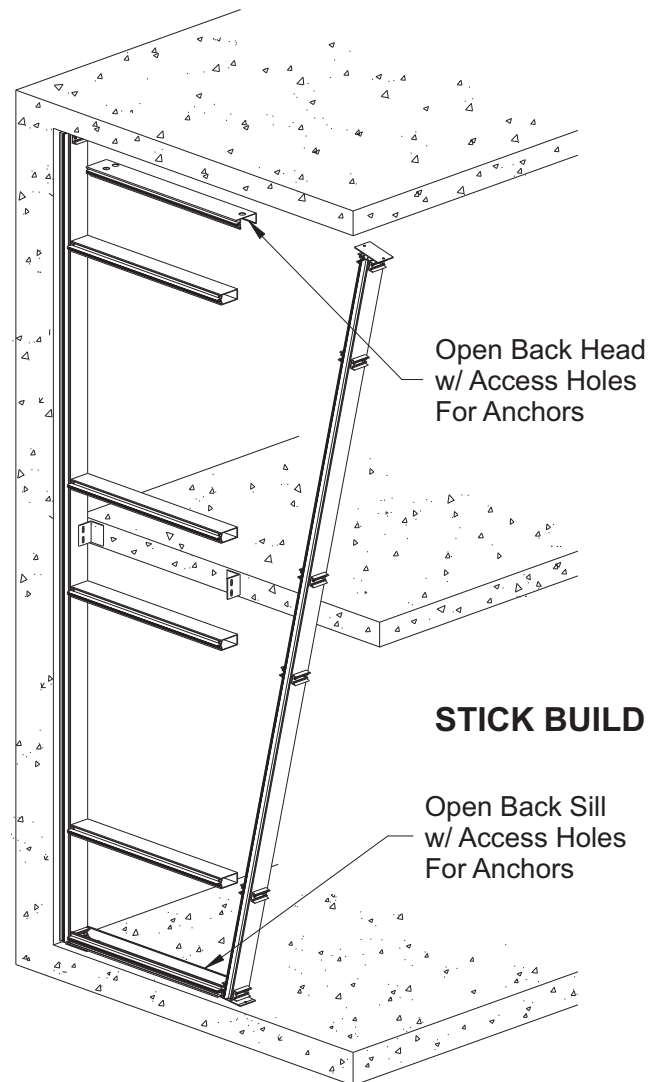
Mullions should be pre-assembled with shear blocks/clips, end anchors, and steel or aluminum reinforcing if necessary.

End anchors should be pre-drilled for anchor fasteners according to approved shop drawings or engineering calculations.

#### Framing Members for Stick Build:

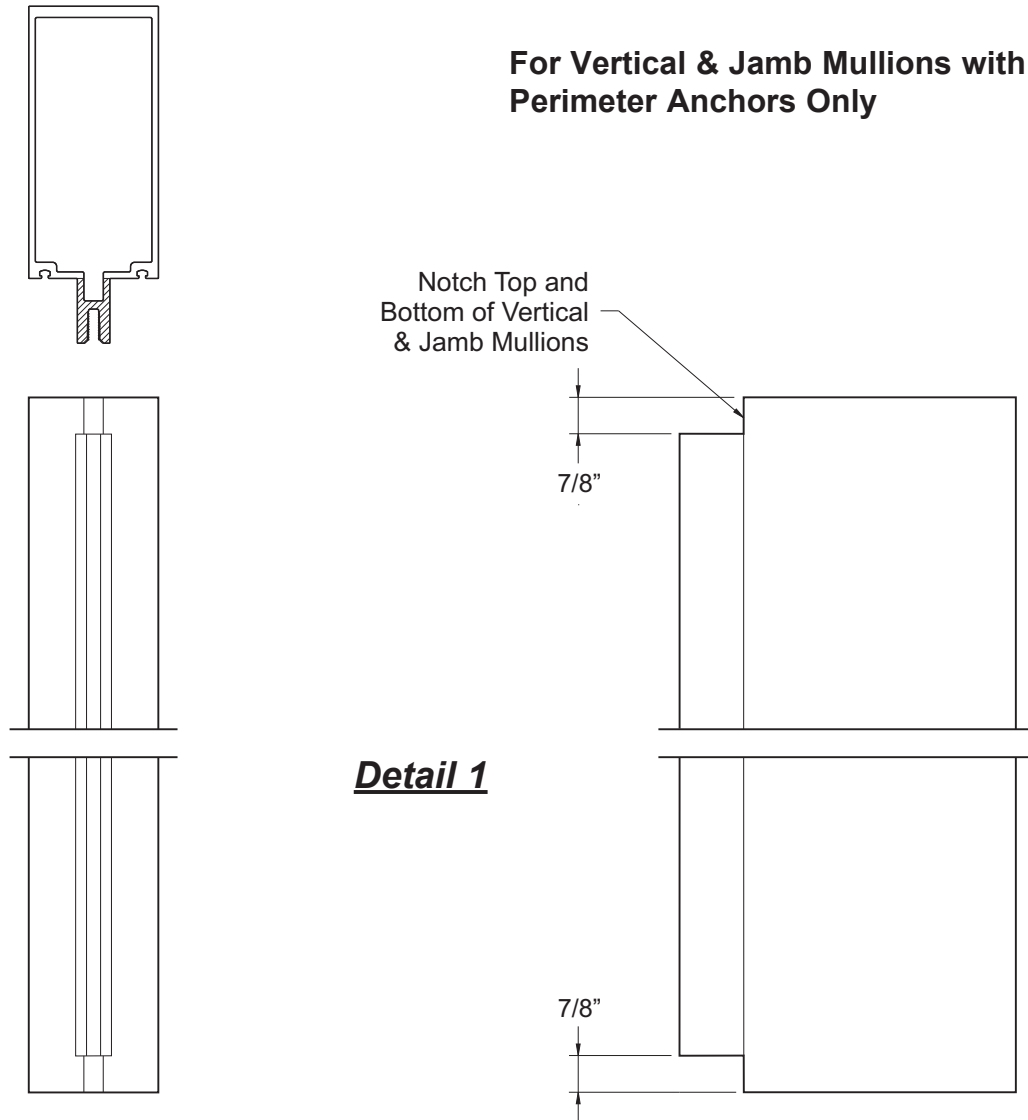
- Open back head and sill members provide easy access to end anchor bolts.
- Closed horizontal members are used at all intermediate locations except at end bays.
- Open back intermediate horizontals are used at end bays to clear the shear blocks.

**Note:** When using stick build construction, check overall frame width every fifth mullion as the wall is installed. A buildup of cumulative tolerance errors may occur, resulting in excessive DLO spacing.



## FRAME FABRICATION

### FABRICATE VERTICAL MULLIONS



#### Step 1

-Cut all vertical and jamb mullions to dimensions as shown on shop drawings.

Allow for 1/2" caulk joint around the frame & 1/2" joint at vertical splices.

**Note:** Mullions at door jambs are sealed against the substrate at the sill without a shim space at that location.

#### Step 2

-When using continuous perimeter anchors, E9-1223, E9-1231 or E9-1248, the top and bottom of vertical and jamb mullions must be notched as shown in **Detail 1**, and sealed as shown on **Page 22**.

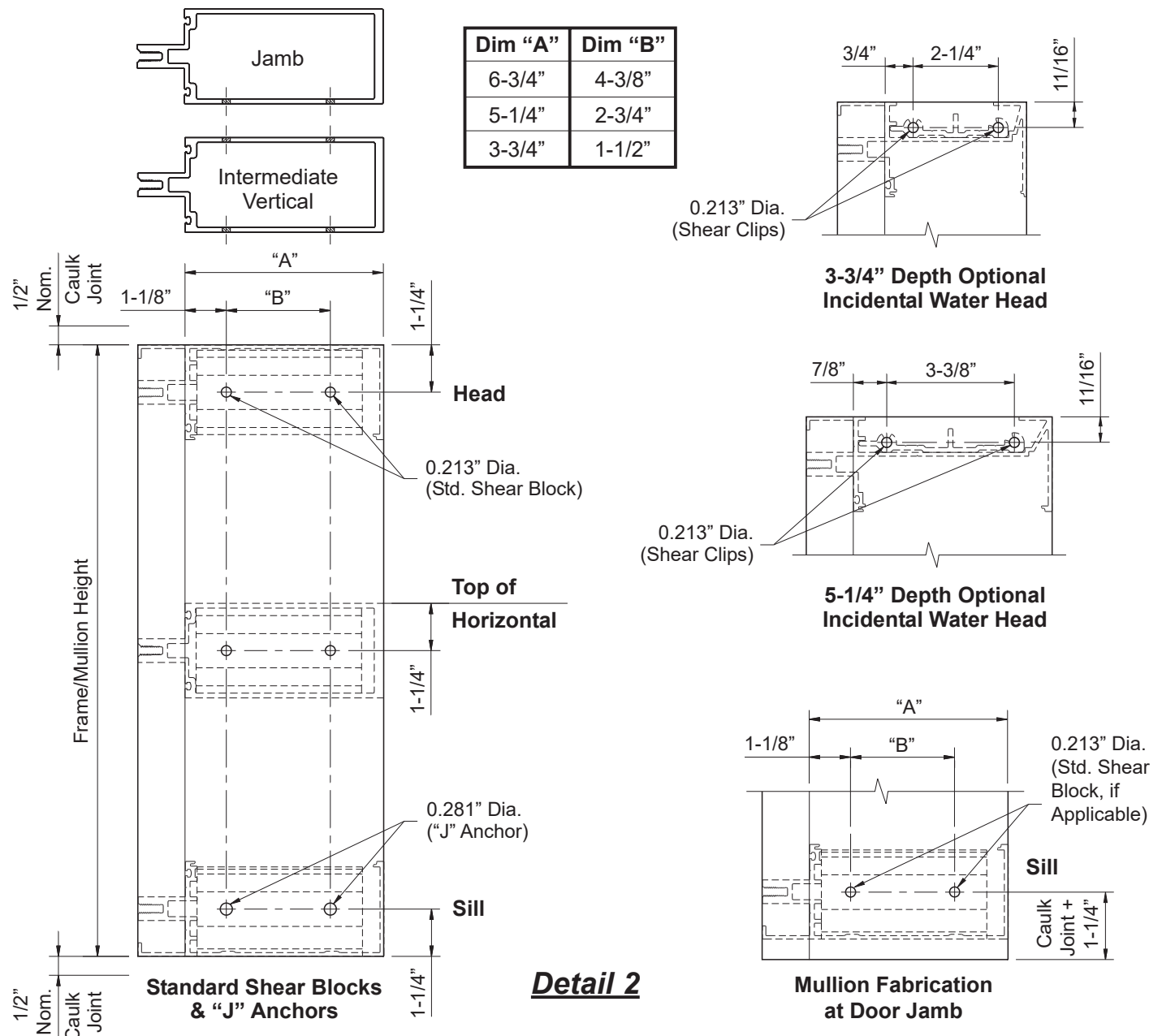
**Note:** Do not notch verticals when using mullion end anchors: "J", "T" or "F".

## FRAME FABRICATION

### STEP 3 FABRICATE VERTICAL MULLIONS

- Mullion hole locations for shear blocks, shear clips, and “J” anchors are shown below.
  - Drill 0.213” dia. (#3 bit) holes for shear block/clip attachment at the locations indicated.
  - Drill 0.281” dia. (#9/32 bit) holes for “J” anchor attachment at the sill at the locations indicated.
- See **Detail 2**.

**Note:** Hole locations for standard shear blocks are not the same as shear clips for optional incidental water head.



## FRAME FABRICATION

### STEP 4 (Optional) USING STEEL REINFORCING

-Steel reinforcing must be primed/coated to insulate the steel from the aluminum.

When engineering calculations require the vertical mullions to be reinforced with steel, secure the reinforcing to the vertical using the appropriate fasteners.

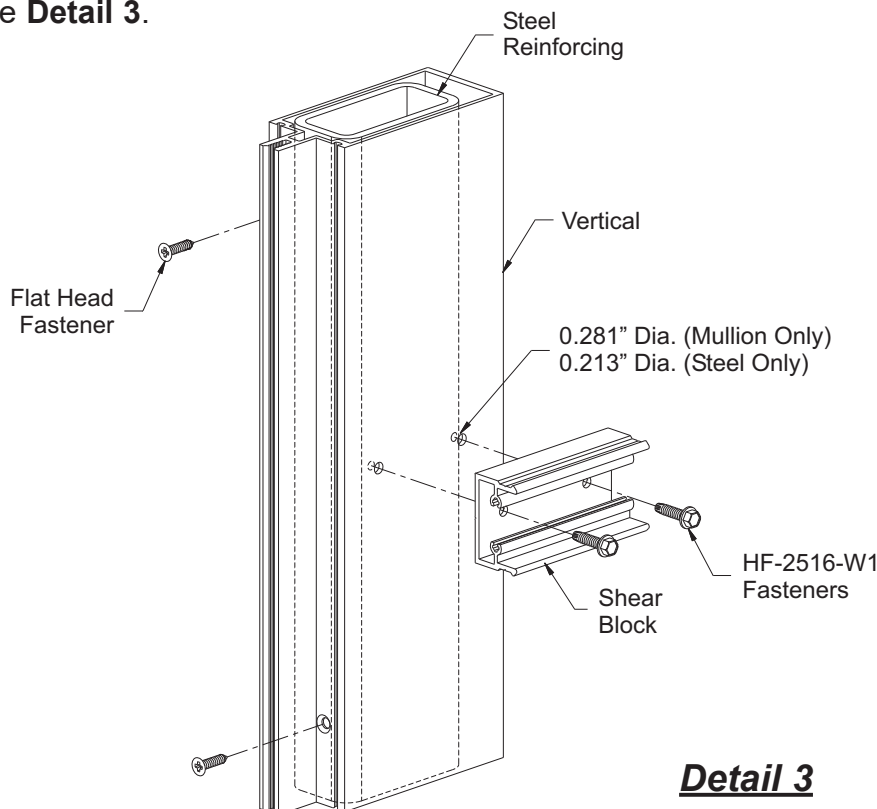
- Start 3" from both ends of the mullion and install a fastener on both sides of the mullion tongue.
- Stagger the fasteners on either side of the tongue going up the vertical.
- Seal all screw heads with sealant.

**Note:** Exact size of reinforcing, size and location of fasteners to be determined by a qualified engineer.

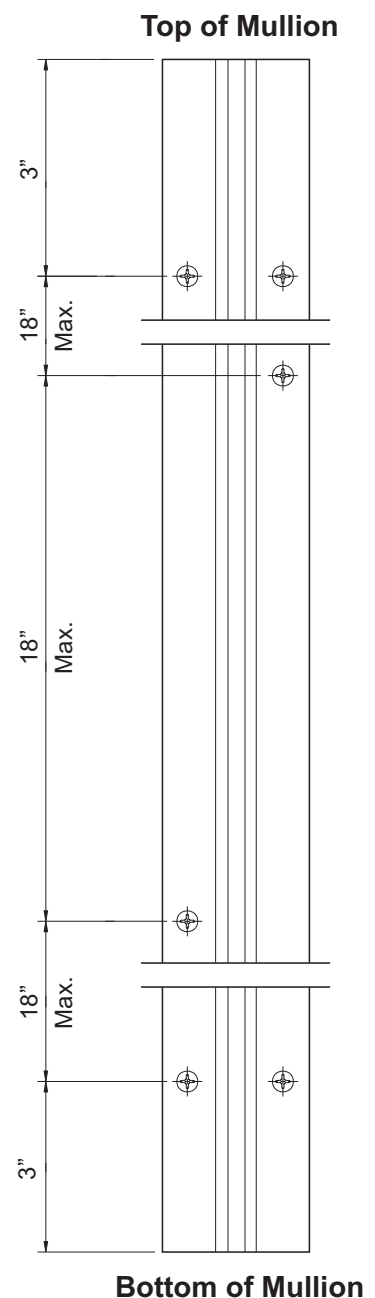
Steel reinforcing is also attached on the sides of the mullion with the attachment of shear blocks.

- Drill 0.281" dia. (9/32 bit) clear holes in the mullion only.
- Match drill 0.213 dia. (#3 bit) tap holes in the reinforcing only.
- Attach the shear blocks with HF-2516-W1 fasteners.

See **Detail 3**.



**Detail 3**



## FRAME FABRICATION

### STEP 5

#### ATTACH SHEAR BLOCKS/CLIPS FOR HORIZONTALS

Standard shear blocks are used to attach horizontal members to the jambs and verticals. Shear blocks for E-Slots (E1-1200, E1-1206 & E1-1236) are attached the same way.

E1-3503 for 3-3/4" back members.

E1-3504 for 5-1/4" back members.

E1-3506 for 6-3/4" back members.

-Attach shear blocks to jambs and verticals with (2) HF-2510-W1 fasteners per block.

Shear clips are used to attach optional incidental water head members to the jambs and verticals.

E1-3523 for 3-3/4" back members.

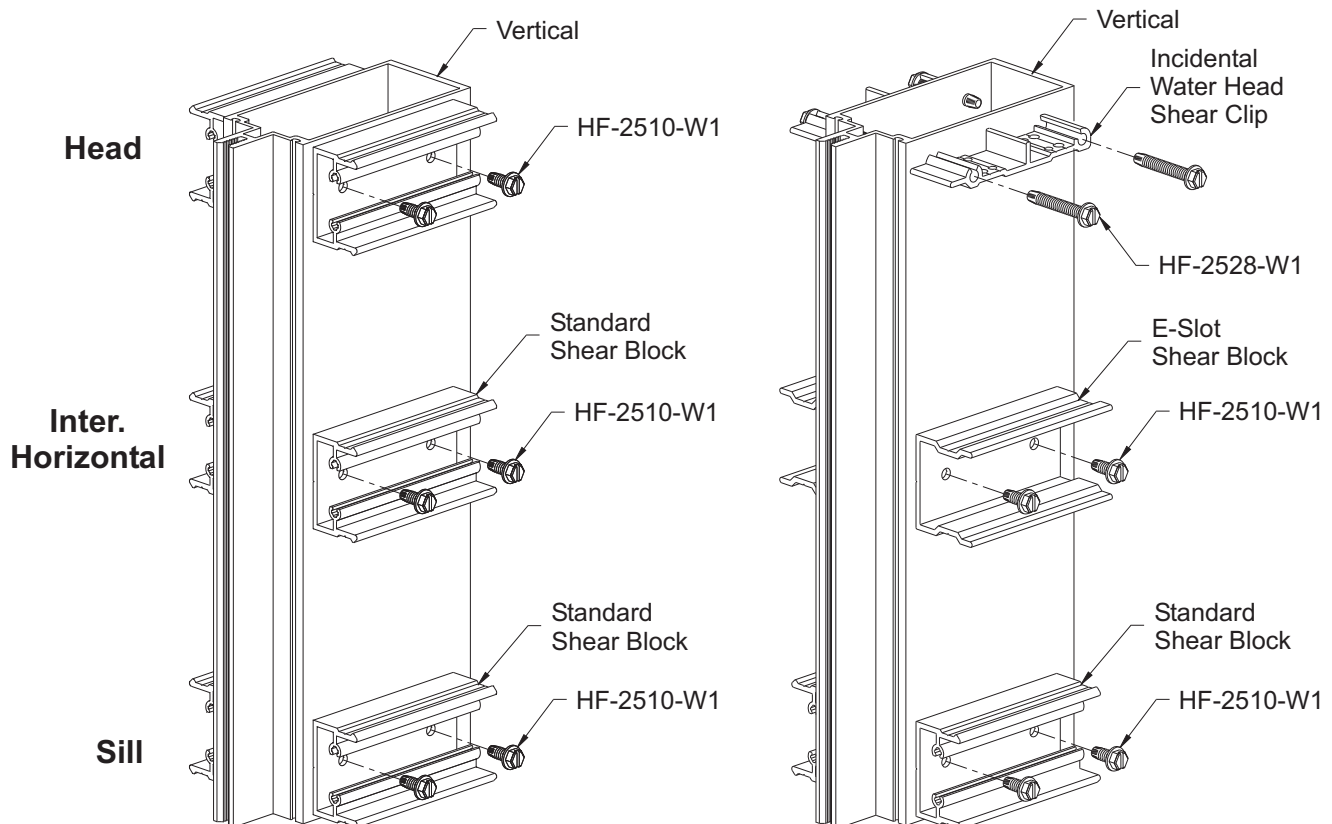
E1-3019 for 5-1/4" back members.

-Attach shear clips to jambs and verticals with (2) HF-2528-W1 fasteners per block.

See **Detail 4**.

**Note:** Do not attach standard shear blocks at the head and sill for end bays at this time.

See **Step 16** for head and sill end bay attachment.



**Detail 4**



**FRAME FABRICATION****STEP 6**  
**ATTACH “J” ANCHORS**

In addition to anchoring the curtain wall frame to the structure, “J” anchors are used to attach sill members to jamb and vertical mullions:

E1-3501 for 3-3/4” back members.

E1-3502 for 5-1/4” back members.

E1-3505 for 6-3/4” back members.

**Note:** “J” anchors are used at the sill only.

**Attach “J” Anchors at Jamb:**

-Align the “J” anchor with the mullion and insert the HM-2516 bolts through the inside of the mullion and out the “J” anchor.

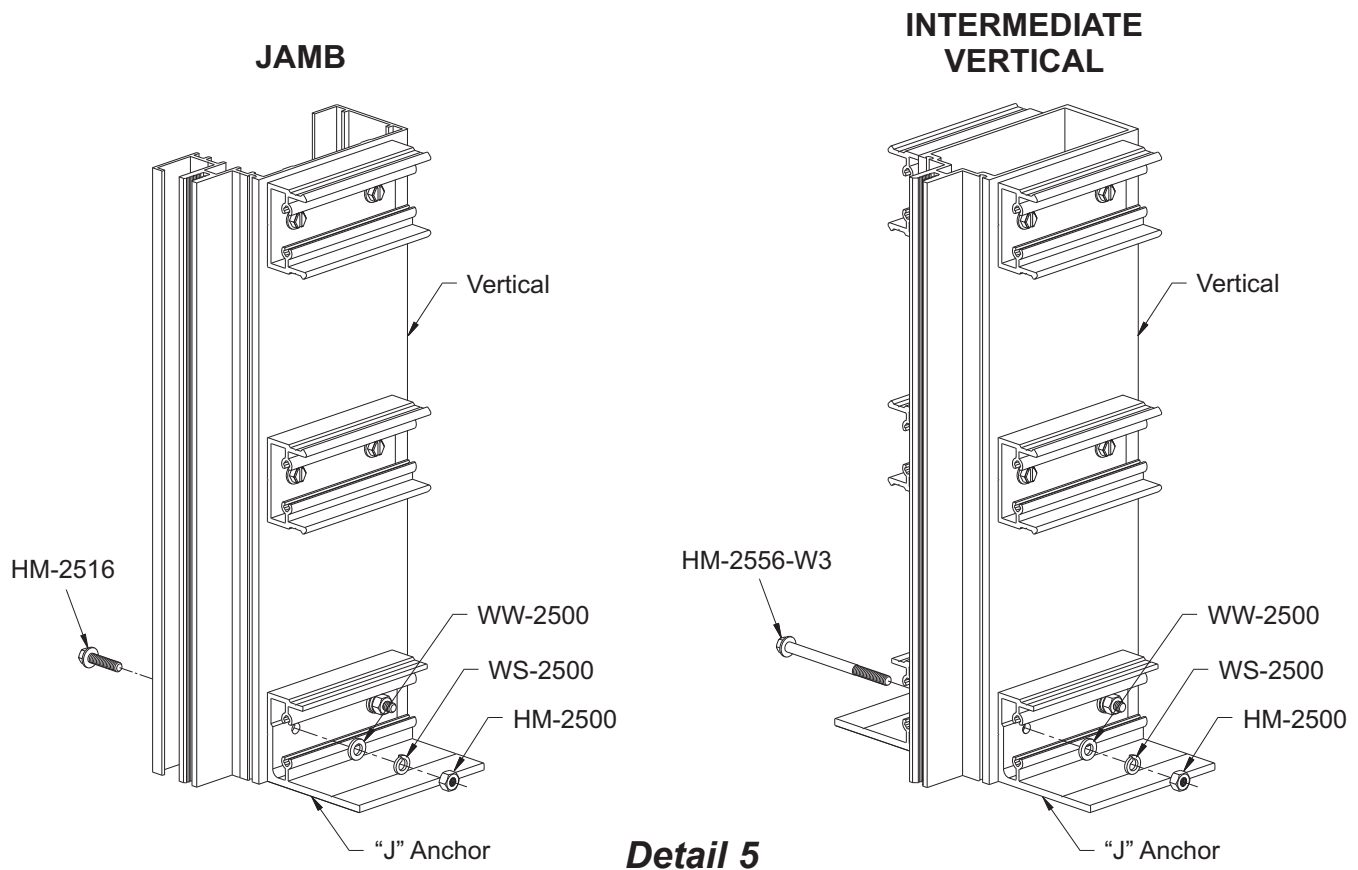
-Install 1/4” flat and lock washers between the anchor and HM-2500 hex nuts.

**Attach “J” Anchors at Intermediate Verticals:**

-Align the “J” anchors and insert the HM-2556 bolts through both anchors and the mullion.

-Install 1/4” flat and lock washers between the anchor and HM-2500 hex nuts.

See **Detail 5**.



## FRAME FABRICATION

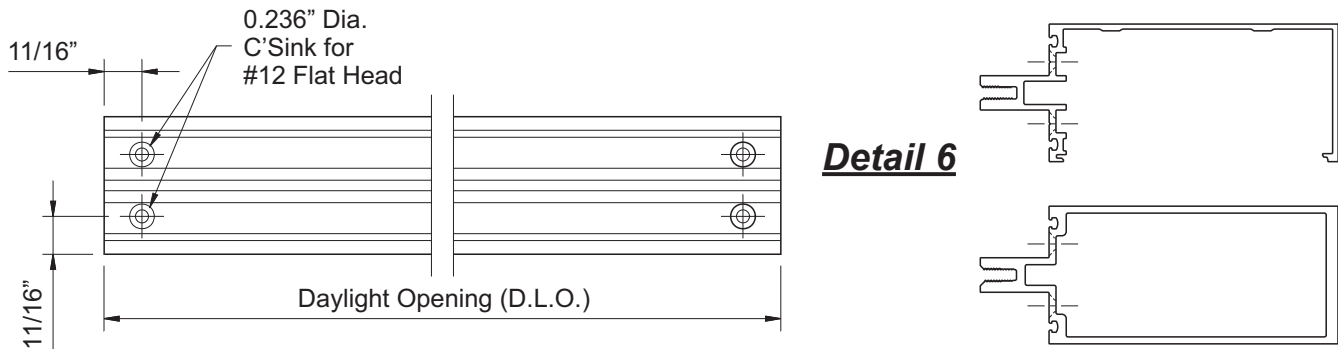
### STEP 7

#### FABRICATE HORIZONTAL MEMBERS

- Cut all horizontal members to the daylight opening as shown in shop drawings.
- Cut all horizontal flush fillers to the daylight opening minus(−) 1/32".
- Horizontal members must be fabricated for shear block/clip attachment as follows:

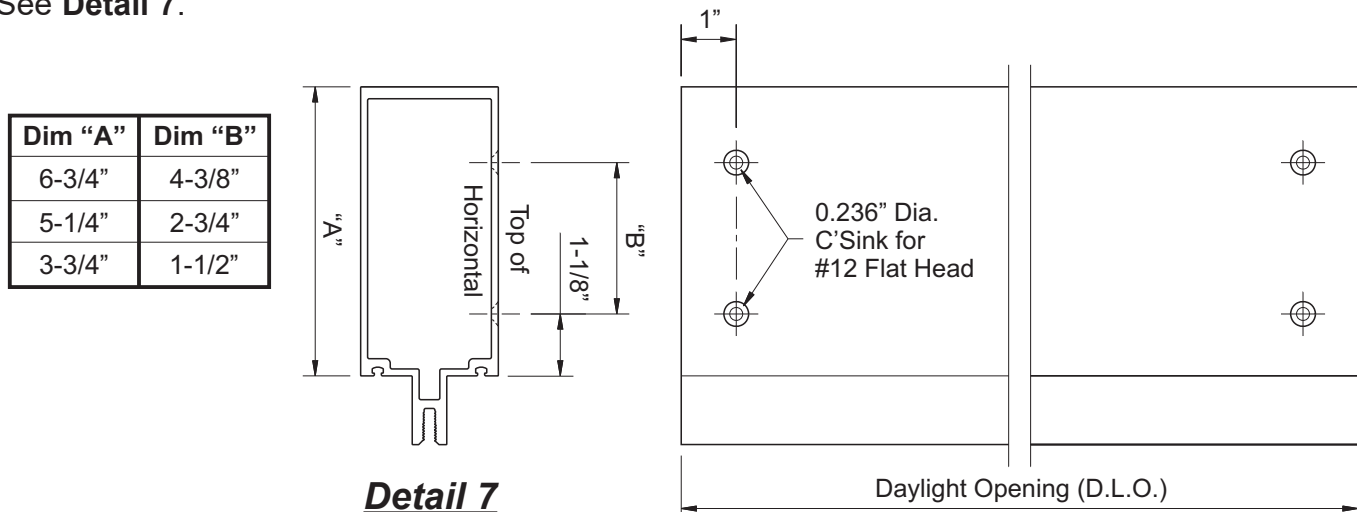
#### Horizontals with Concealed Fasteners (5-1/4" & 3-3/4" Back Depths Only):

- Layout hole locations on the face of the horizontal at both ends as shown below.
  - Drill 0.236" diameter (#B bit) holes and countersink for #12 flat head fasteners.
- See **Detail 6**.



#### Horizontals with Exposed Fasteners:

- Layout hole locations on the top of the horizontal at both ends as shown below.
  - Drill 0.236" diameter (#B bit) holes and countersink for #12 flat head fasteners.
- See **Detail 7**.



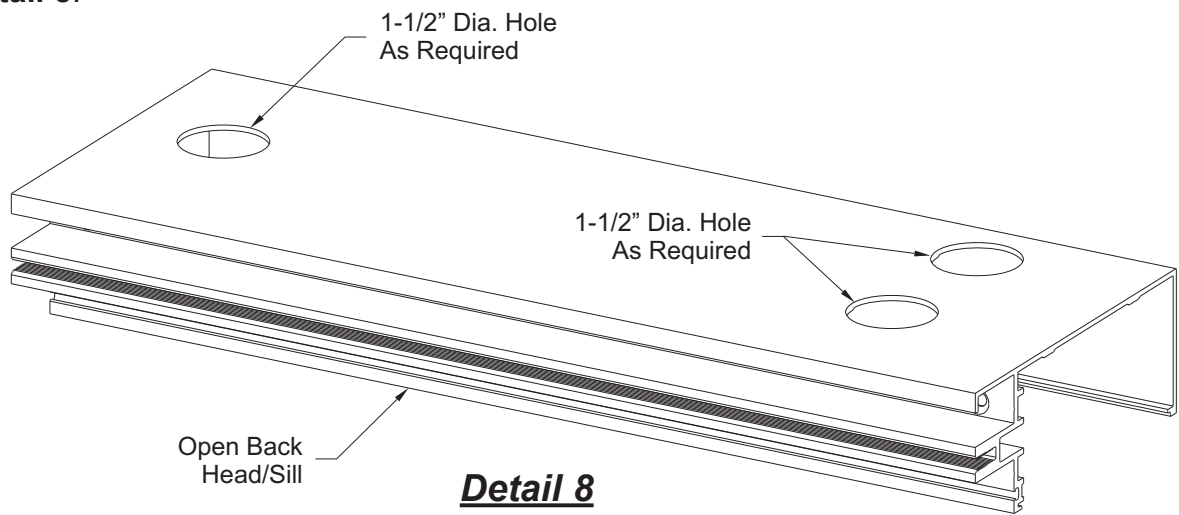
FRAME FABRICATION

STEP 7 (Continued)  
FABRICATE HORIZONTAL MEMBERS

Open Back Head & Sill with “T” & “F” Anchors (5-1/4” & 3-3/4” Back Depths Only):

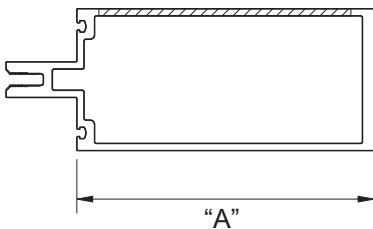
- Open back head & sill members require holes to access anchor bolts.
- Drill 1-1/2” dia. holes at anchor locations as required by approved shop drawings or engineering calculations.

See **Detail 8**.



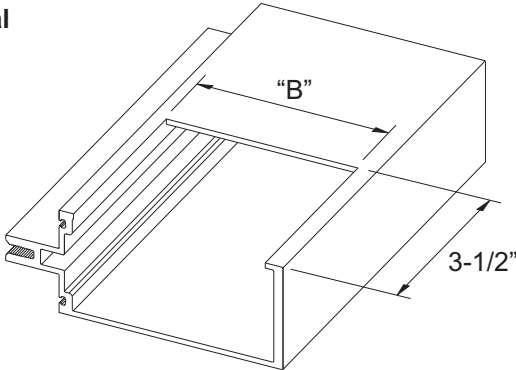
Tubular Head & Sill with “J”, “F” & “T” Anchors:

- Tubular head and sill members must be notched at each end to clear mullion end anchors and anchor bolts.
- See **Detail 9** below for notch dimensions.



Dim “A”	Dim “B”
6-3/4”	6-1/4”
5-1/4”	4-3/4”
3-3/4”	3-1/4”

Notch Horizontal  
Ends to Clear  
End Anchors  
& Anchor Bolts



**Detail 9**

## FRAME FABRICATION

### STEP 7 (Continued)

#### FABRICATE HORIZONTAL MEMBERS

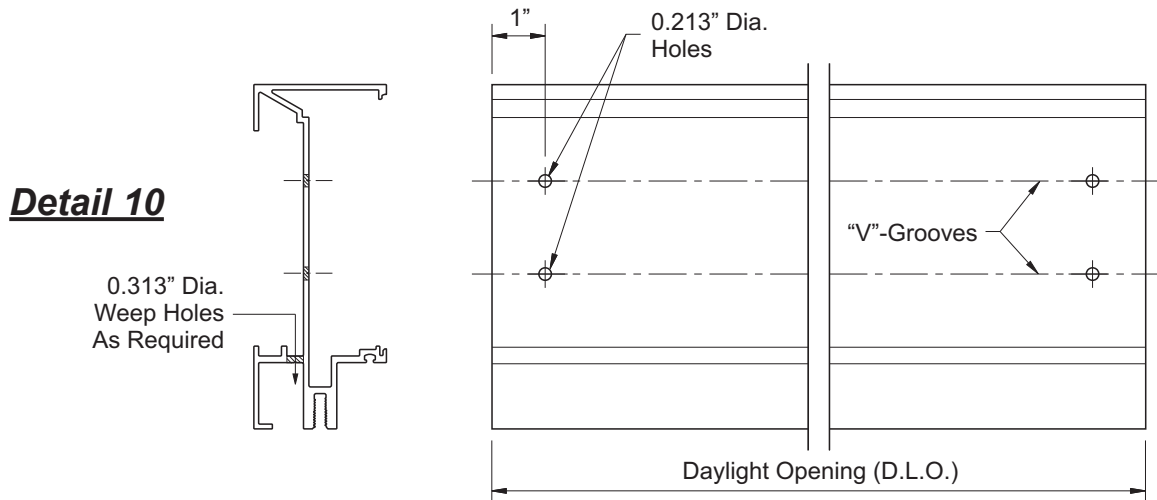
##### Optional Incidental Water Head (5-1/4" & 3-3/4" Back Depths Only):

- Layout hole locations on the bottom of the horizontal along the "V"-grooves at both ends.
- Drill 0.213" diameter (#3 bit) holes at each location.

Incidental water head members require weep holes along the top face of the mullion.

- Layout hole locations along the "V"-Groove of the top face as required according to approved shop drawings or engineering calculations.
- Drill 0.313" diameter weep holes at each location.

See **Detail 10**.

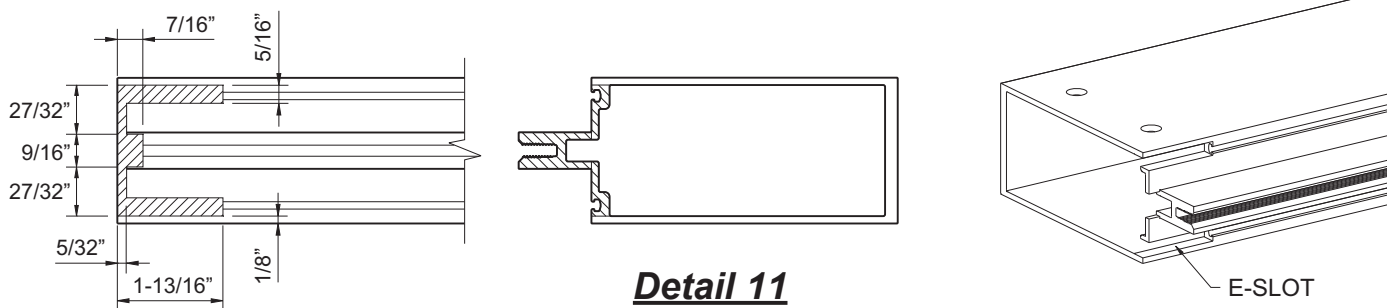


##### Optional Slide-In Tubular Horizontals at End Bays (E-SLOT):

When using tubular horizontals at end bays, horizontals must slide in from the interior.

- In order to clear the shear blocks on the verticals, notch the face and tongue of the horizontal at both ends as shown below.

See **Detail 11**.



## FRAME FABRICATION

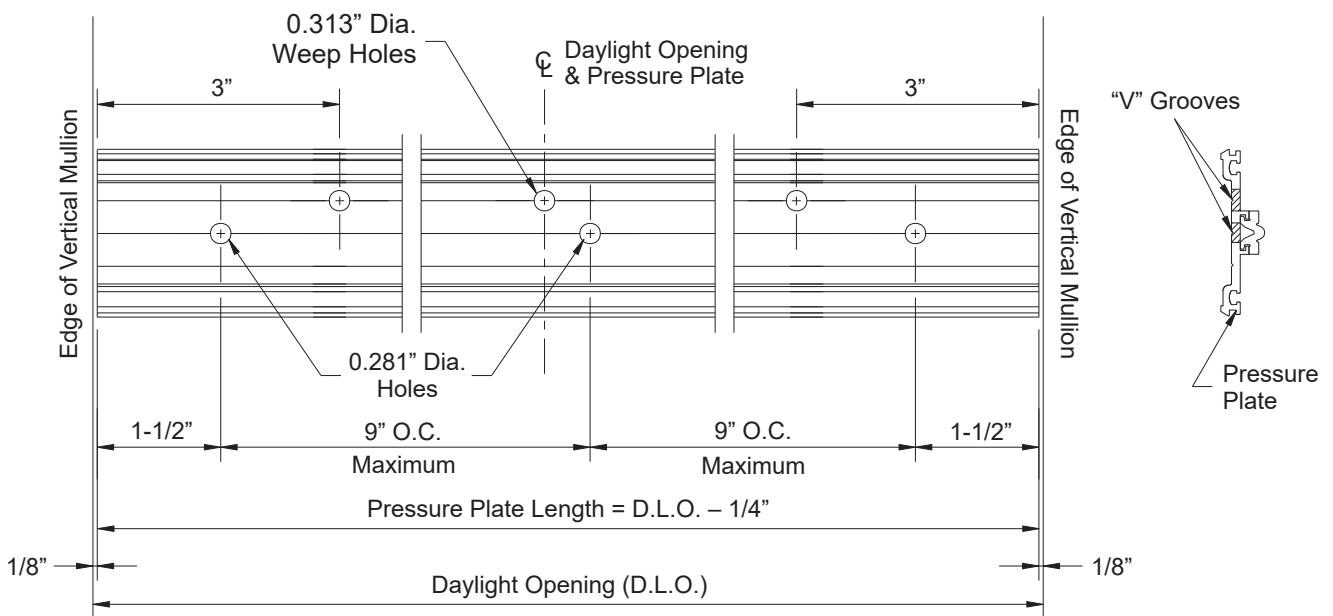
### STEP 8

### FABRICATE PRESSURE PLATES

#### Horizontal Pressure Plates:

- Cut horizontal pressure plates to the daylight opening between verticals minus(–) 1/4".
- Pressure plate stock lengths have 0.281" dia. holes factory drilled every 9".  
After cutting, drill additional holes if required to ensure that end holes are 1-1/2" from each end.
- If factory drilled holes are less than 1-1/2" from the ends, they must be sealed and not used.
- Drill two 0.313" (5/16") diameter weep holes 3" from each end and one at the centerline of the pressure plate.

See **Detail 12**.



**Detail 12**

#### Vertical Pressure Plates:

- Cut vertical and jamb pressure plates to the same length as the vertical mullions.
- If vertical mullions are spliced, cut pressure plates to accommodate for 1/2" expansion joint as shown in **Step 10** on **Pages 19 & 20**.
- Drill additional attachment holes if required to ensure that end holes are at 1-1/2" from each end.

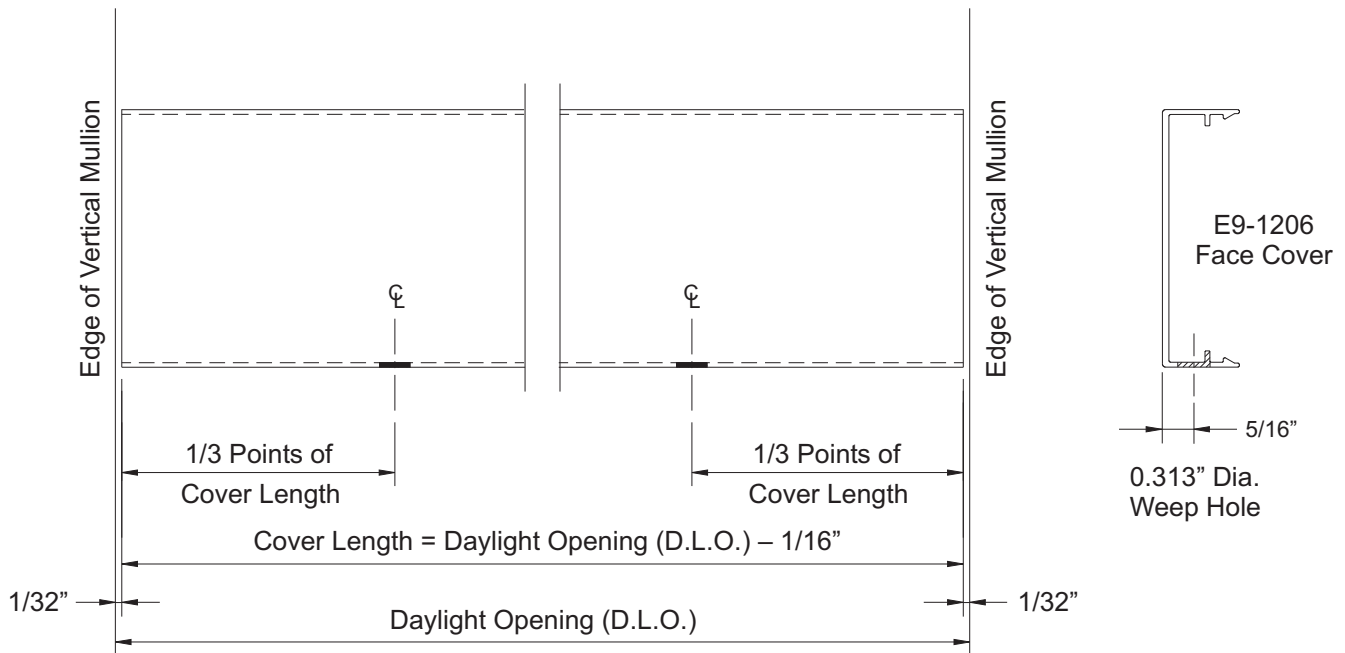
## FRAME FABRICATION

### STEP 9 FABRICATE FACE COVERS

#### Horizontal Face Covers:

- Cut horizontal face covers to the daylight opening between verticals minus(-) 1/16".
- Drill two 0.313" diameter weep holes at 1/3 points of cover as shown below.

See **Detail 13**.



**Detail 13**

#### Vertical Face Covers:

- Cut vertical face covers to the same length as the vertical mullions unless the verticals are spliced.
- If vertical mullions are spliced, cut vertical covers to accommodate for the 1/2" expansion joint as shown in **Step 10**.

## STEP 10

### TYPICAL VERTICAL SPLICE

**Detail 14**

Mullion Splice Sleeve  
E1-1201 (5-1/4")  
E1-1212 (3-3/4")  
E1-1299 (6-3/4")

Cover Splice Sleeve  
E1-1202

Vertical Mullion Splice

Pressure Plate Splice

Cover Splice

E1-1202  
Cover Splice

Mullion Splice Sleeve

1" 2" 1-1/2" 1-1/2" 1/2" 1/2"

3/4" 3/4"

2-3/4" 1" 2-3/4" 6"

## FRAME INSTALLATION

### STEP 10 (Continued)

#### TYPICAL VERTICAL SPLICE

- Clean all surfaces as recommended by sealant manufacturer.
- Apply bond breaker tape to the face of the splice sleeve at its midpoint (3" from top or bottom).
- Lower the splice sleeve into top of lower mullion 2-3/4" and attach with two FC-1212 fasteners on both sides of the mullion. Screws should be installed 3/4" from the front and back of mullion and 1" down from the top.
- When using 1" glazing mullions, stuff a small piece of backer rod 1/2" down the cavity behind mullion tongue and pump in sealant to fill the cavity.
- Apply sealant to the face of splice sleeve on the upper half and carefully slide the upper mullion down onto the splice sleeve. Place a 1/2" temporary shim between the mullions to locate them.
- Secure the upper mullion to the mid anchors and remove the temporary shims.
- Apply and tool sealant to the face and sides of the splice sleeve to create a water tight joint.

-Leave a 1/2" expansion joint between vertical pressure plate splices and fill the joint with sealant.

-Locate pressure plate fasteners 1-1/2" from each end of pressure plate splice as shown.

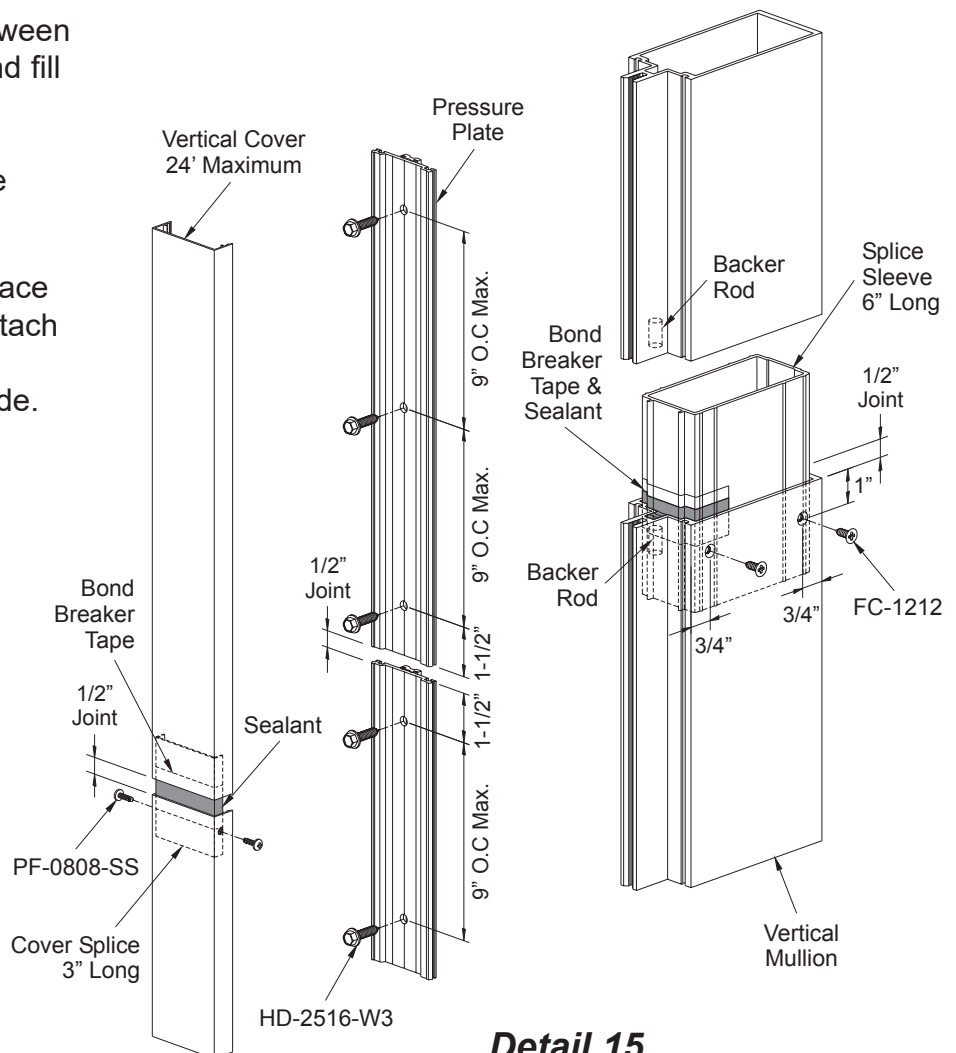
-Apply bond breaker tape to the face of the cover splice sleeve and attach it to the lower face cover with a PF-0808-SS fastener on each side.

-Prior to snapping on the upper portion of the face cover, apply sealant to the face of the splice.

-Leave a 1/2" expansion joint between face cover splices.

See **Details 14 & 15**.

**Note:** Face covers, pressure plates, and mullions are staggered at splice locations.

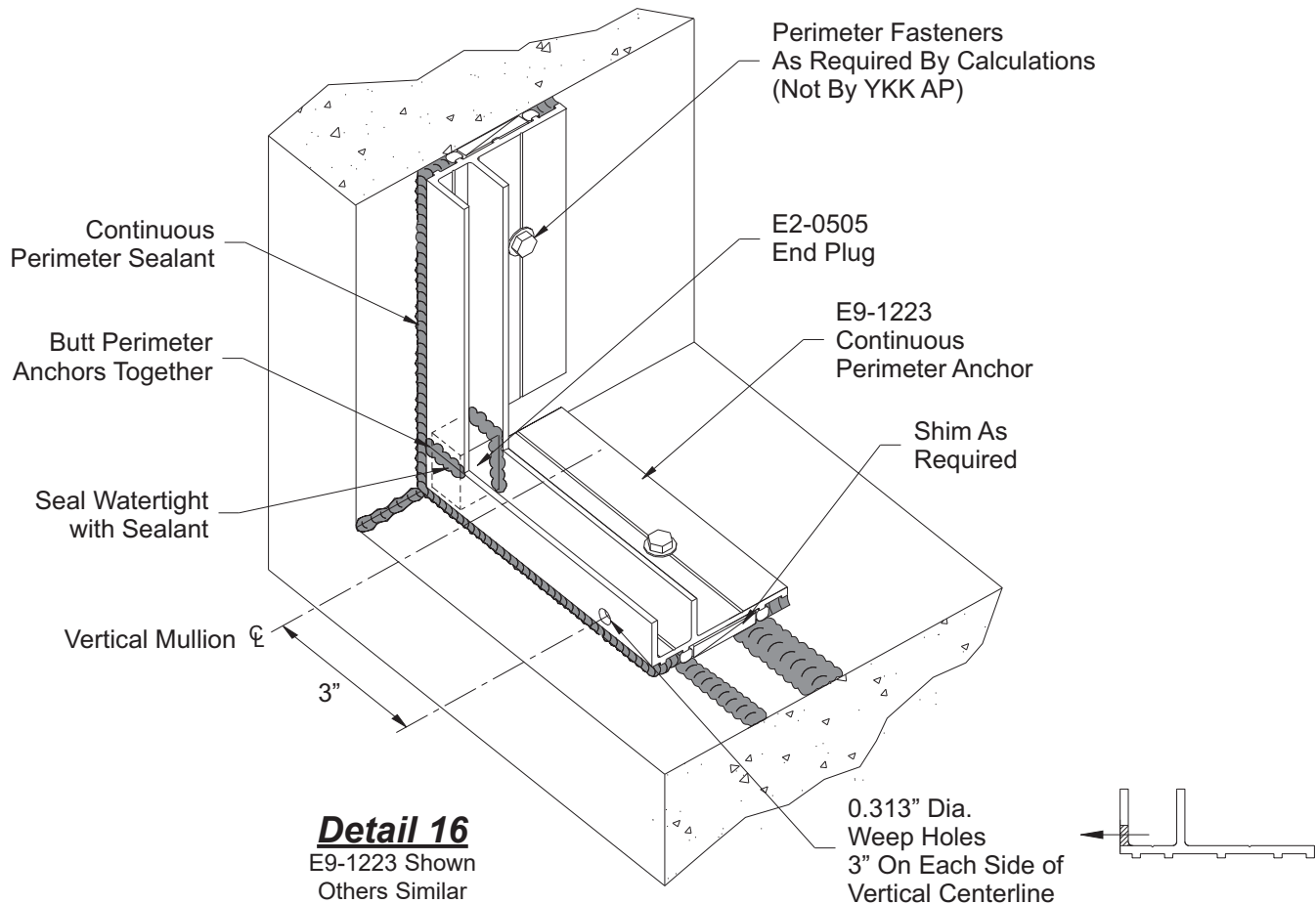


***Detail 15***



## FRAME INSTALLATION

### STEP 11 (When Required) INSTALL CONTINUOUS PERIMETER ANCHOR



- Cut perimeter anchors to size:  
Head and sill anchors stop 1/8" short of the structure.  
Vertical jamb anchors butt in between head and sill anchors.
- Prepare structure for anchor attachment.
- Install perimeter anchors with appropriate perimeter fasteners. Refer to shop drawings or engineering calculations for type and spacing of fasteners. Shim as required to install anchors level.
- When splicing head and sill pieces together, leave 3/8" joint for expansion and install end plug, E2-0505, that has been buttered with sealant on the front, back, and bottom at the joint.
- Run continuous sealant along the perimeter between the anchors and the substrate.
- Seal corners of butted perimeter anchors watertight with sealant.
- Butter E2-0505 end plug with sealant on all sides that touch the anchors.  
Then push end plug into place and tool excess sealant that comes through the cracks.
- Field drill 0.313" diameter weep holes in perimeter anchor (exterior face only) at sill only, 3" from center line of vertical on each side.

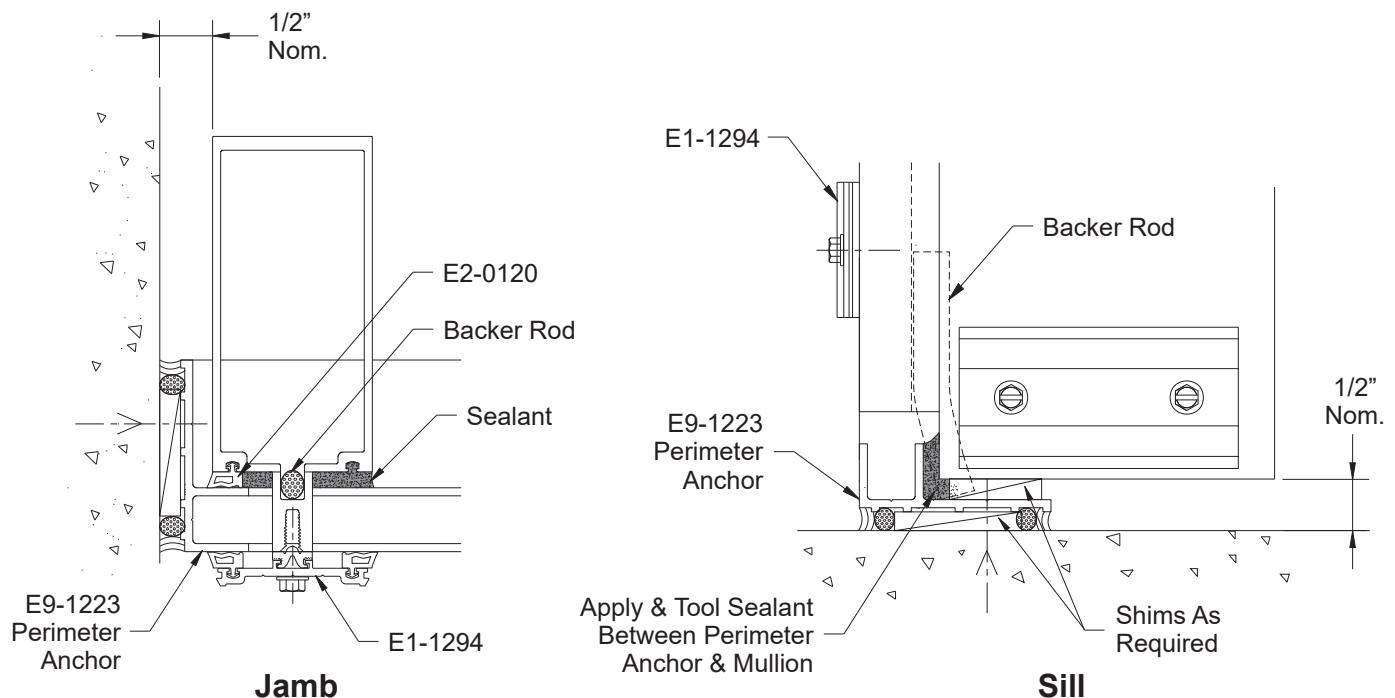
See **Detail 16**.

## FRAME INSTALLATION

### STEP 12 (When Required) JAMB/VERTICAL INSTALLATION WITH PERIMETER ANCHORS

- The notched ends of vertical mullions for 1" glazing leaves the interior of the mullion exposed and must be plugged prior to installation.
- Install a small piece of backer rod into the notched out space directly behind the tongue at the top and bottom of the vertical mullions.
- Push the backer rod into the opening at the face of the mullion.
- Apply and tool sealant to seal off the opening made by the notch.
- Install interior gasket, E2-0120, to jamb mullion (jamb side only) the full length of the mullion.
- Position jamb into opening as shown below.
- Seal the gap between the perimeter anchor and vertical glazing pocket(s) with sealant (one side for jambs – both sides for intermediate verticals).
- Install temporary retainer clip, E1-1294, at the top and bottom of the mullion.
- Repeat this step for all jamb and vertical mullions.

See **Detail 17**.



### **Detail 17**

E9-1223 Shown  
Others Similar

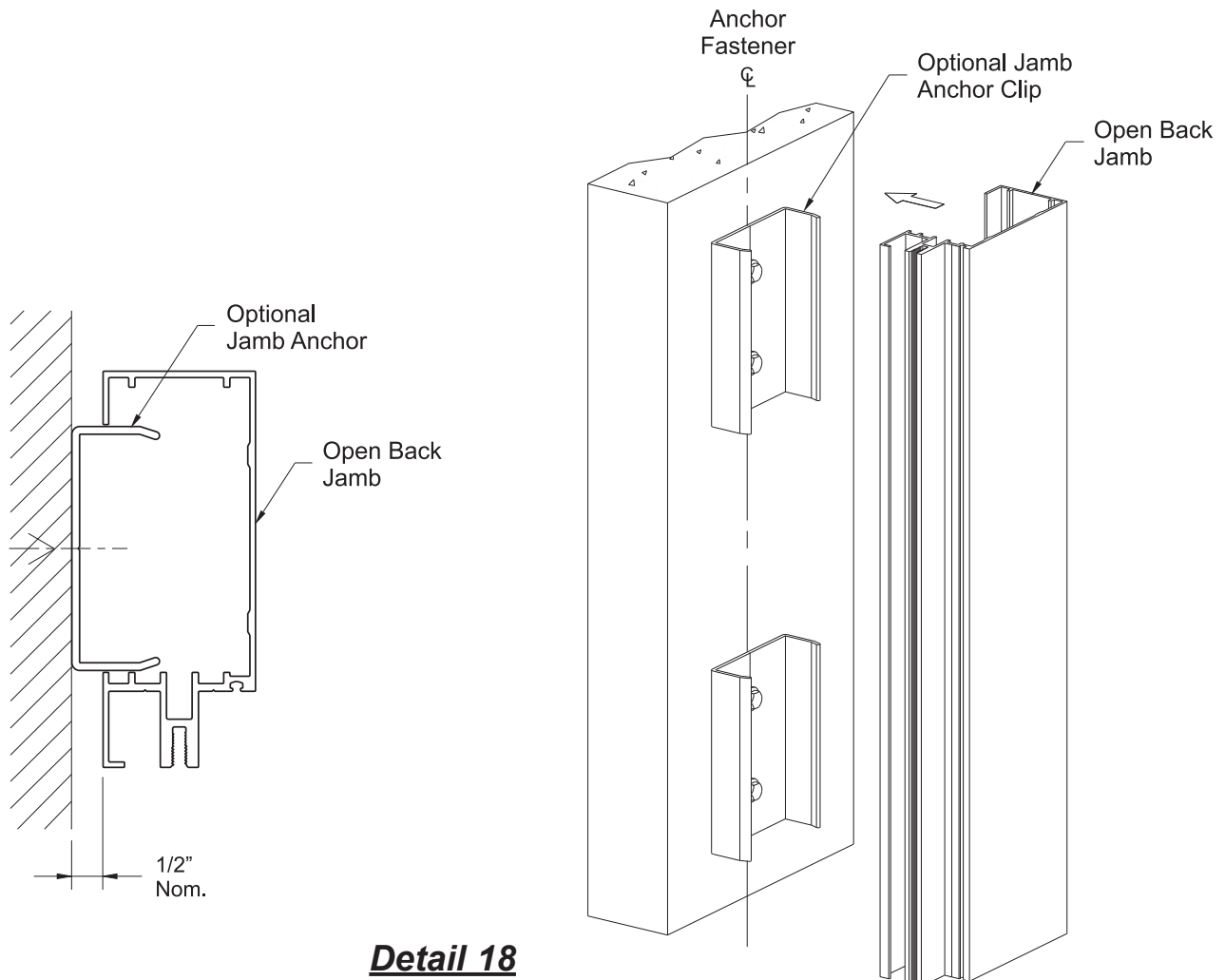
**FRAME INSTALLATION****STEP 13 (Optional)****JAMB INSTALLATION WITH JAMB ANCHORS**

Optional jamb anchor clips, E1-3524 for 3-3/4" back depth and E1-3525 for 5-1/4" back depth, may be used with open back jamb members to reduce deflection at the jamps.

- Locate the jamb anchor locations on the structure according to approved shop drawings.
- Strike a plumb line the length of the frame height at the center line of the anchor fasteners.
- Provide anchor fasteners as per approved shop drawings or engineering calculations.
- Install the anchor fasteners as recommended by fastener manufacturer.
- Install the jamb mullions as instructed in the next step.

**Note:** Jamb anchor clips must be installed plumb and line up straight with each other.

See **Detail 18**.



**Detail 18**

## FRAME INSTALLATION

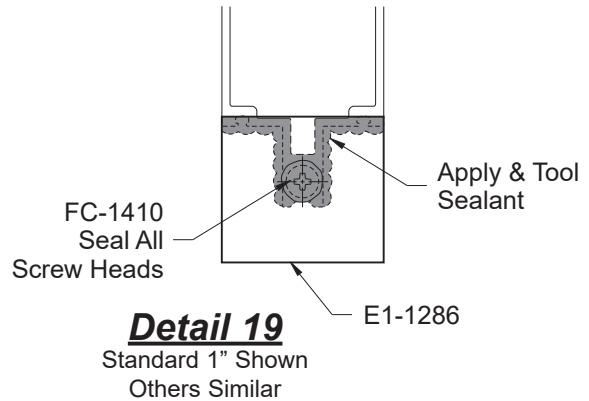
### STEP 14

#### JAMB/VERTICAL INSTALLATION WITH MULLION END ANCHORS

- Clean all contact surfaces as recommended by sealant manufacturer.
- Apply sealant into the screw raceway and along the front edge of the mullion at each end.
- Prior to erecting verticals, install mullion end caps, E1-1286, at the top and bottom of the mullions with FC-1410 fasteners.
- Seal all screw heads with sealant.

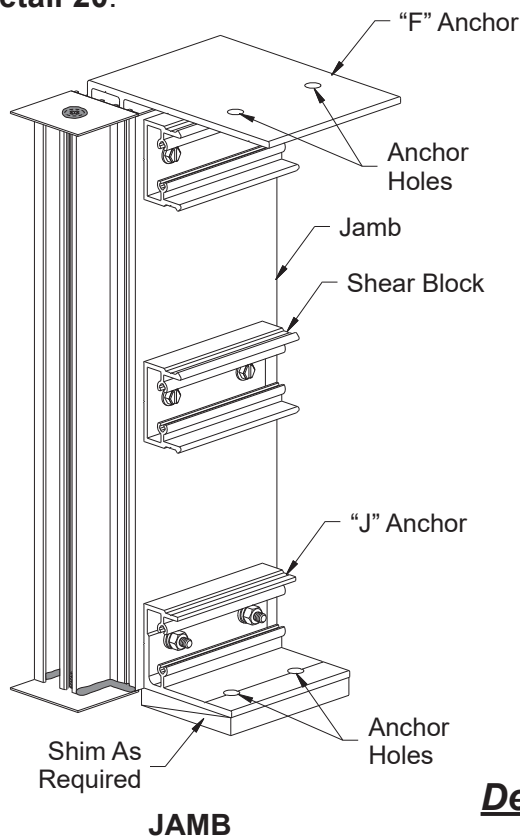
See **Detail 19**.

**Note:** End caps are not required at the bottom of the door jamb mullions as they run flat against the substrate.

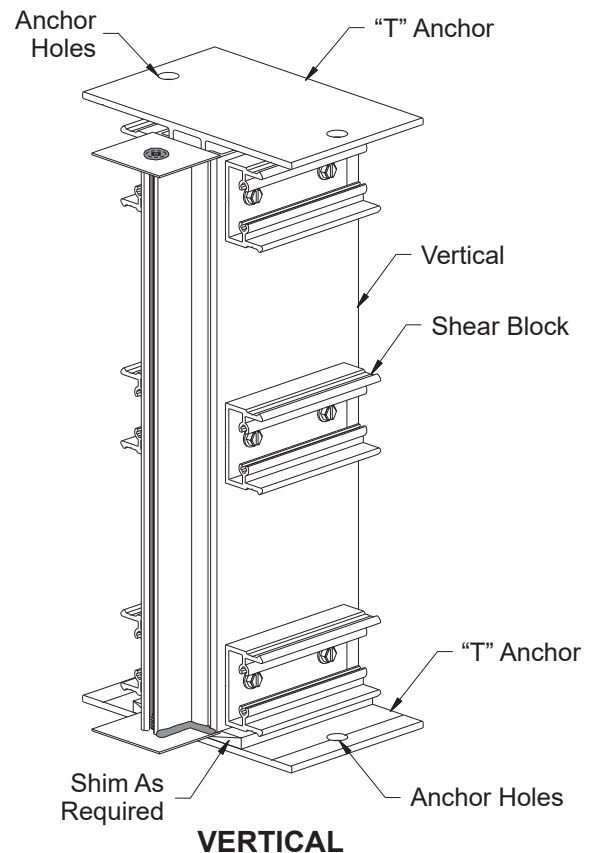


- Insert mullion "T" and "F" anchors into the top and bottom of the mullions before erecting them into the opening.
- Erect and locate the jamb and vertical mullions and temporarily attach them to the structure. All mullions must be installed plumb and true.
- Drill through the pre-drilled holes in "T", "F" and "J" anchors into the structure for the appropriate anchor fasteners according to approved shop drawings or engineering calculations.

See **Detail 20**.



**Detail 20**



## FRAME INSTALLATION

### STEP 14A VERTICAL INSTALLATION AT DOOR JAMB END ANCHORS

The mullions at the door jambs are set directly upon the sill substrate without any shims and are sealed against the substrate. The anchors to be used at this location are specified by the approved shop drawings and or P.E. calculations.

-Locate the mullion anchor for the door jamb and install it to the substrate according to the approved shop drawings and P.E. calculations.

**Note:** if using an exposed fasteners shear block as a mullion anchor, check to ensure the sill shear block fasteners will not cause interference. Field modify the shear block anchor as required. See **Detail 22**.

-Clean all contact surfaces as recommended by sealant manufacturer.

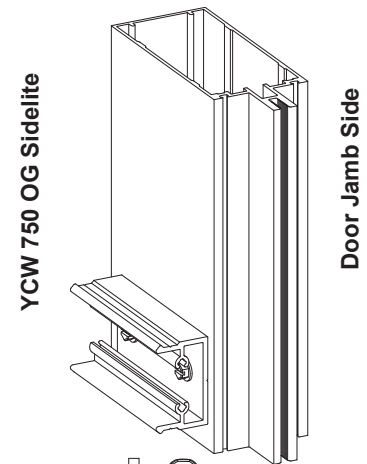
-Set the mullion on the anchor, directly onto the sill substrate in a bed of sealant. Avoid using shims at this location.

See **Detail 21**.

-Refer to the approved shop drawings for any additional fasteners required.

-Tool sealant at the bottom of the mullion at the sill substrate around the perimeter of the mullion.

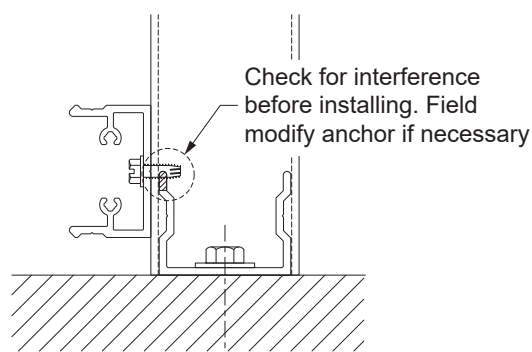
See **Detail 23**.



Mullion Anchor & Anchor Fasteners  
Per Approved Shop  
Drawings / P.E. Calcs

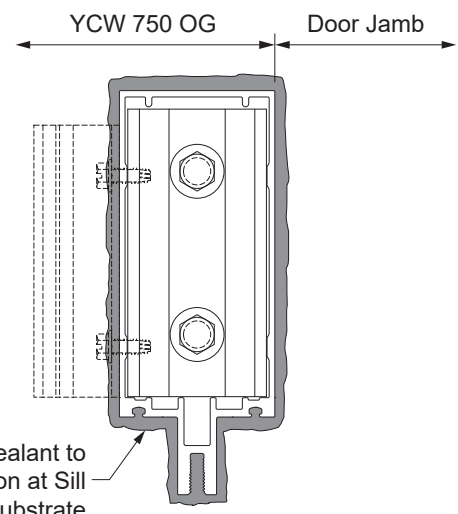
#### **Detail 21**

Bed of  
Sealant



#### **Detail 22**

For Exposed Fasteners Shear  
Block Used as Anchor



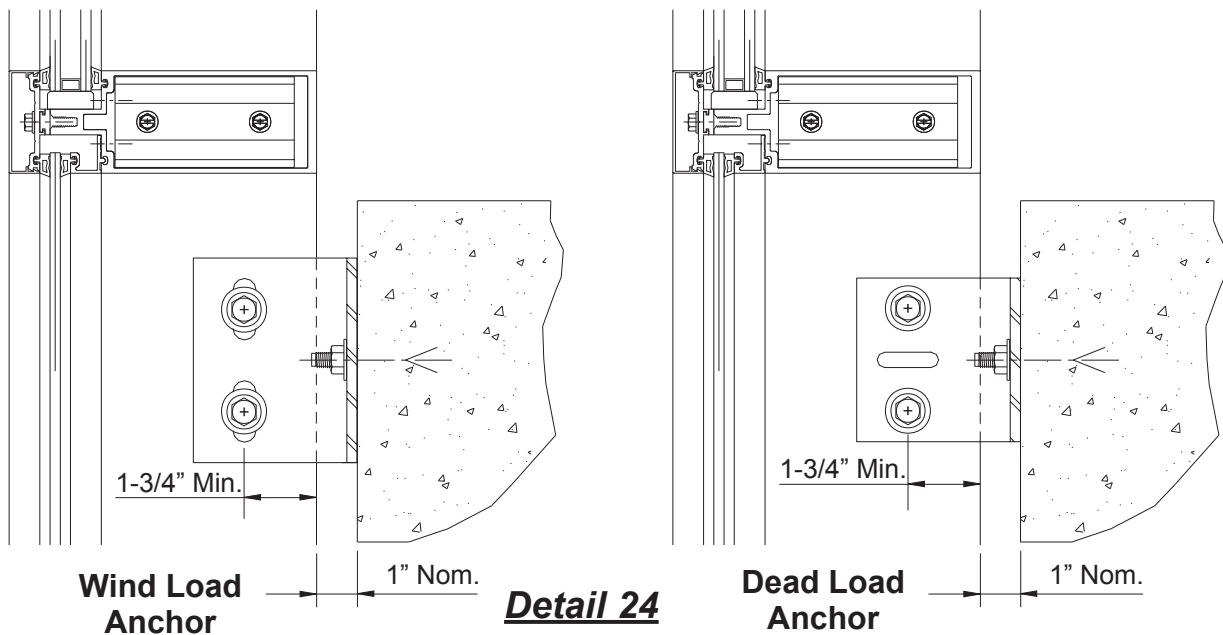
#### **Detail 23**

## FRAME INSTALLATION

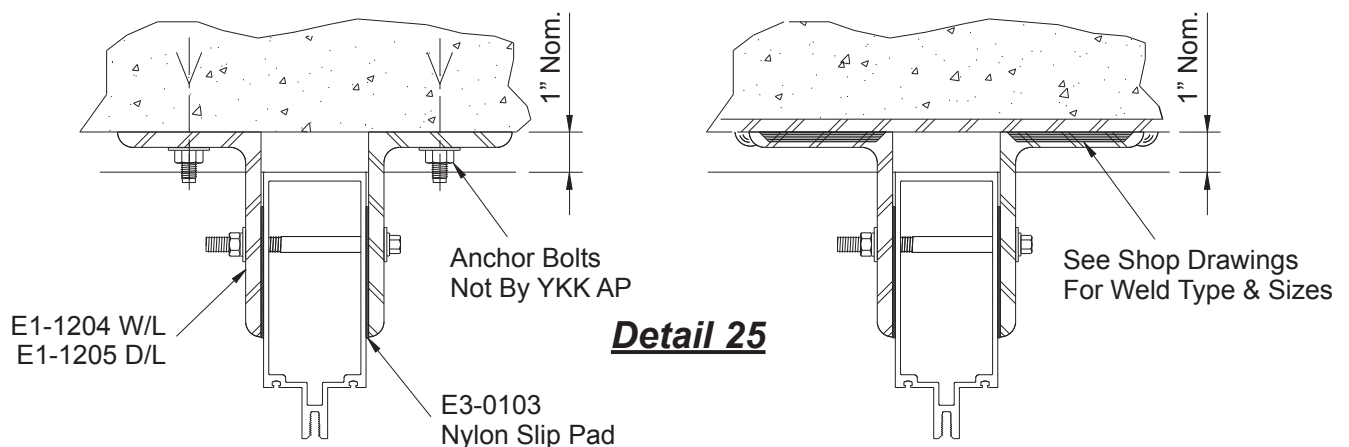
### STEP 15

#### INSTALL WIND LOAD/DEAD LOAD ANCHORS

- Install steel wind load and dead load anchors. Anchor are normally template or line set before mullions are hung. Outstanding leg of anchor must be set at 90° to offset line. The back of the vertical mullion should set about 1" from the anchoring substrate.
  - Torque all anchor bolts to 90 inch-pounds.
- See **Detail 24**.

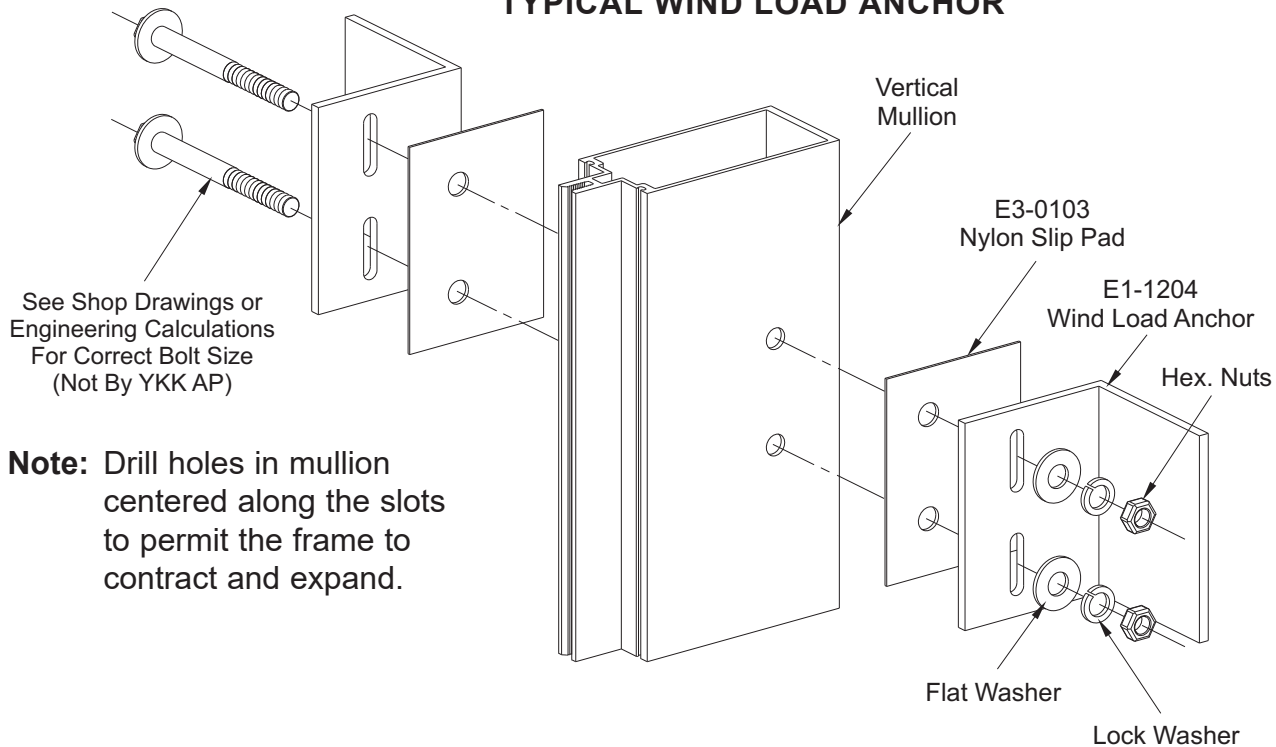


- Install, plumb, and align vertical mullions. Drill and install appropriate diameter anchor bolts per approved shop drawings or engineering calculations.
  - Nylon slip pads, E3-0103, must be installed between mullion and anchors.
- See **Detail 25**.



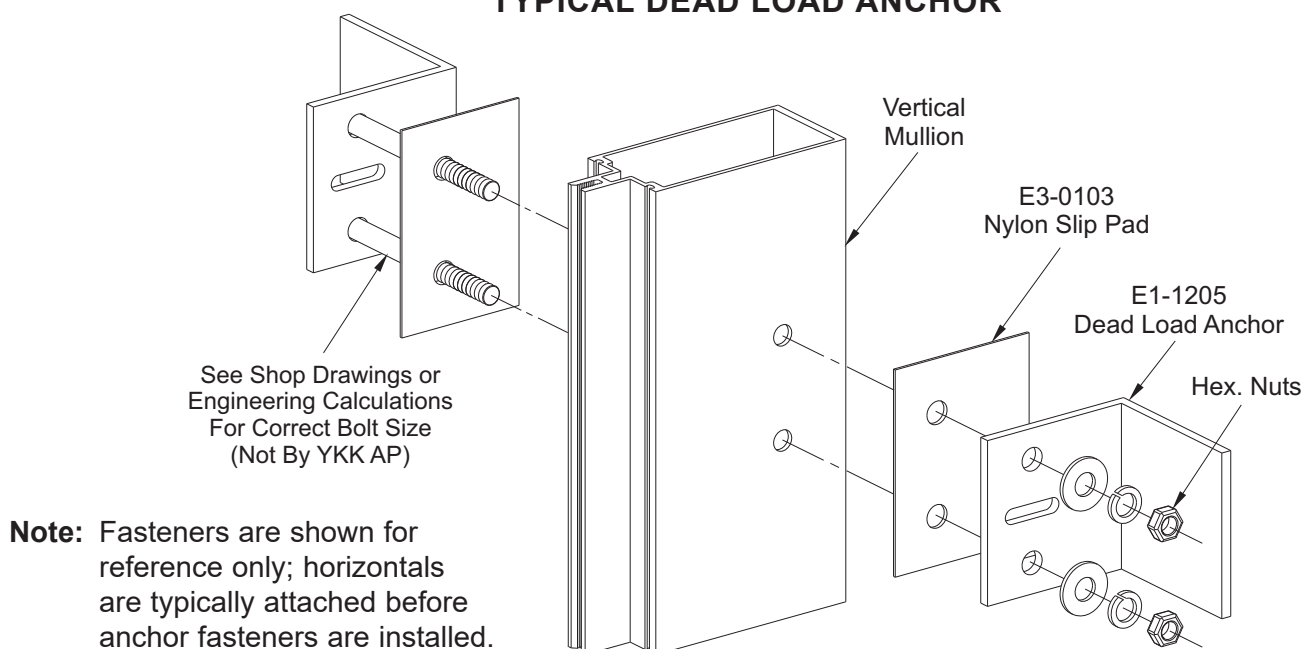
## FRAME INSTALLATION

### TYPICAL WIND LOAD ANCHOR



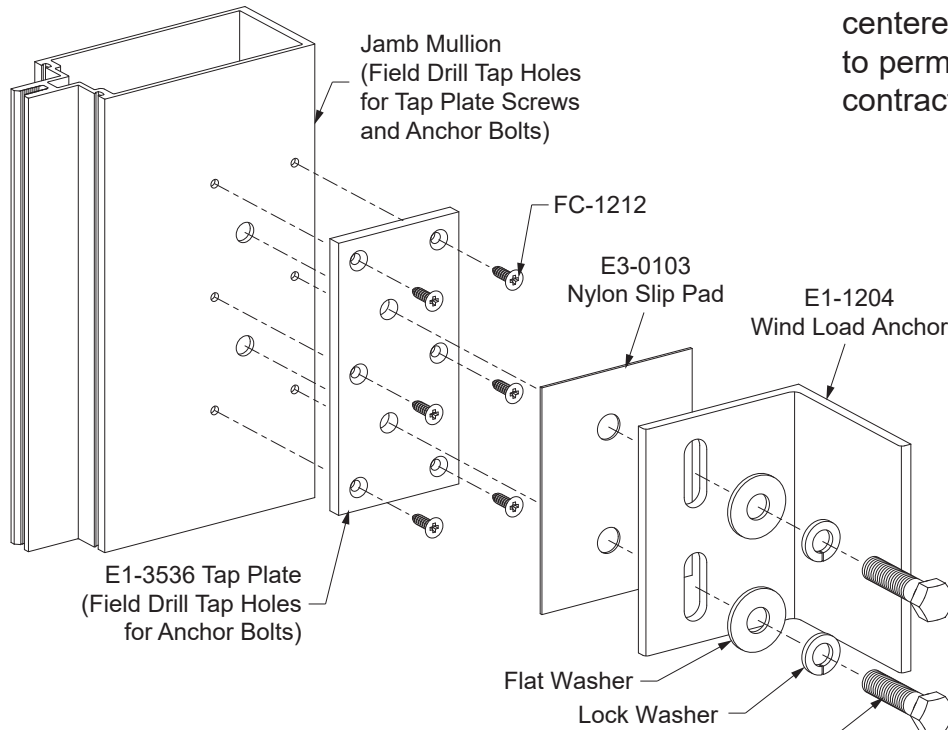
### Detail 26

### TYPICAL DEAD LOAD ANCHOR



## FRAME INSTALLATION

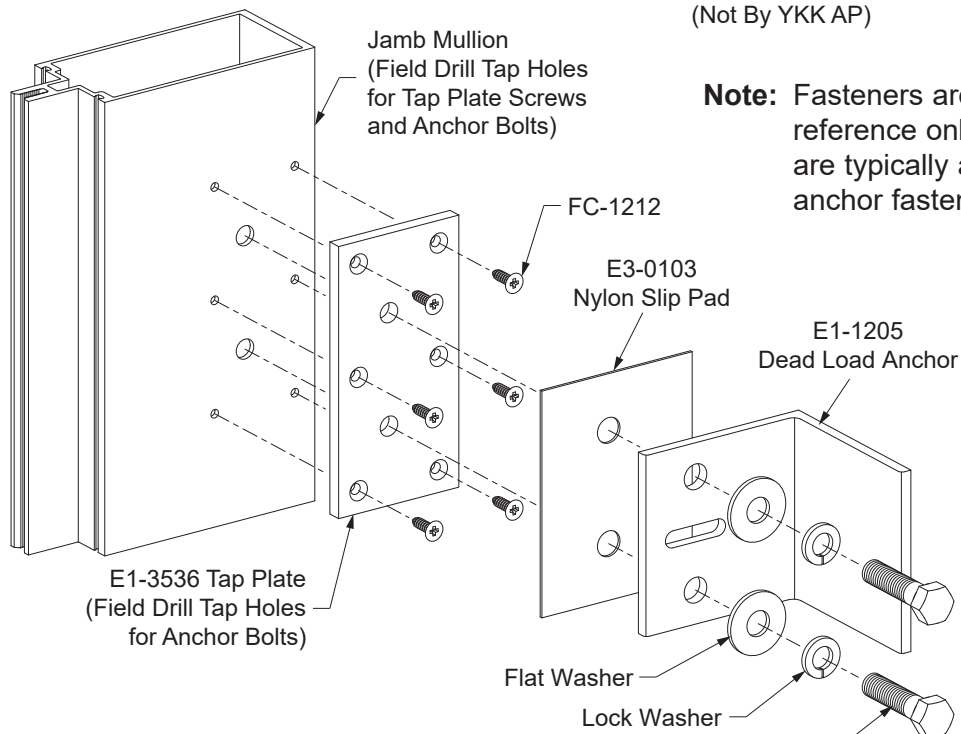
### JAMB WIND LOAD ANCHOR



**Note:** Drill holes in mullion centered along the slots to permit the frame to contract and expand.

### JAMB DEAD LOAD ANCHOR

#### **Detail 26A**



See Shop Drawings or  
Engineering Calculations  
For Correct Bolt Size  
(Not By YKK AP)

**Note:** Fasteners are shown for reference only; horizontals are typically attached before anchor fasteners are installed.

See Shop Drawings or  
Engineering Calculations  
For Correct Bolt Size  
(Not By YKK AP)



## FRAME INSTALLATION

### STEP 16

### ATTACH HORIZONTAL MEMBERS

**Note:** Before applying any sealant, clean aluminum surfaces using cleaner and method approved by sealant manufacturer.

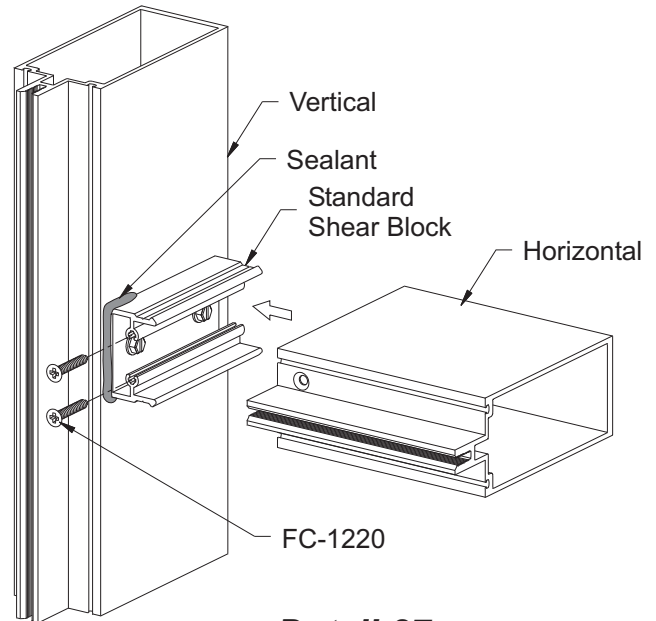
-Just prior to attaching the horizontal members to the vertical, apply sealant to the front of the shear block as shown.

#### Horizontals with Concealed Fasteners:

- Slide the horizontal members towards the vertical and attach them to the shear blocks at each end with two FC-1220 fasteners.
- Tool and wipe away any excess sealant at the vertical to horizontal joints.

See **Detail 27**.

#### CONCEALED FASTENERS



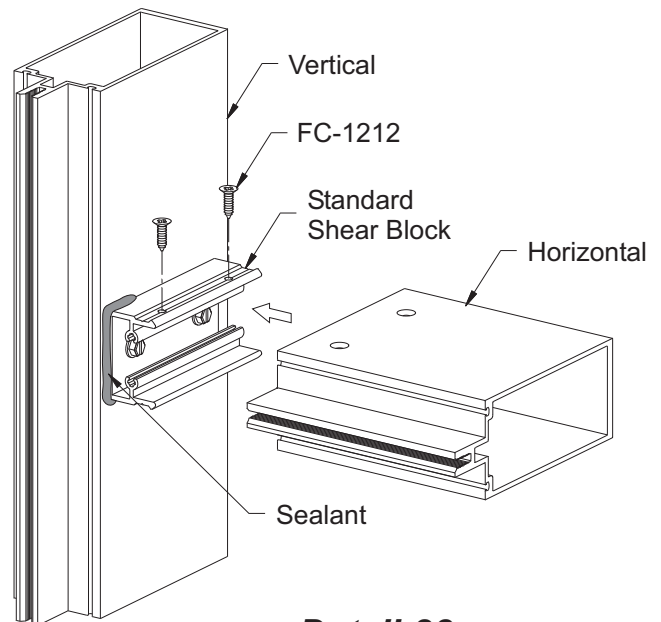
**Detail 27**

#### Horizontals with Exposed Fasteners:

- Slide and align the horizontal members towards the vertical and transfer the hole locations on top of the horizontal to the shear block.
- Remove the horizontal and drill a 0.189" dia. (#12 bit) hole at each hole location.
- Slide the horizontal back against the vertical and attach it to the shear block with two FC-1212 fasteners at each end.
- Tool and wipe away any excess sealant at the vertical to horizontal joints.

See **Detail 28**.

#### EXPOSED FASTENERS



**Detail 28**

## FRAME INSTALLATION

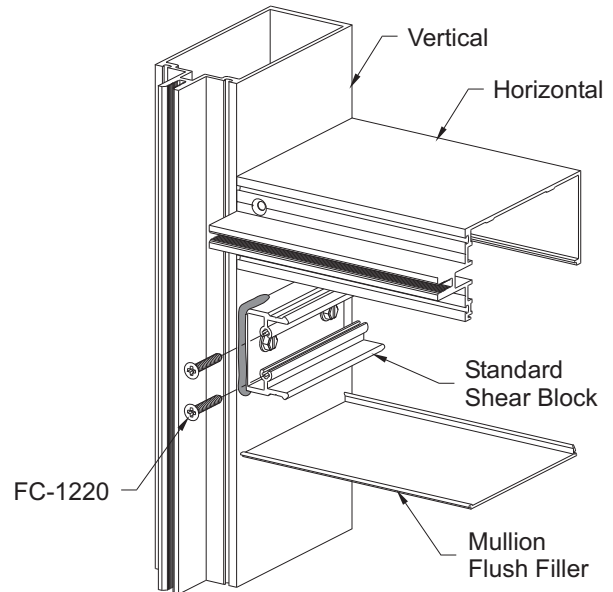
### STEP 16 (Continued)

#### ATTACH HORIZONTAL MEMBERS

##### Open Back Intermediate Horizontals:

- Just prior to attaching the horizontal members to the vertical, apply sealant to the front of the shear block as shown below.
  - Lower the horizontal down onto the shear block. Make sure the horizontal and vertical glazing pockets are flush.
  - Attach the horizontal to the shear block at the face of the horizontal with two FC-1220 fasteners at each end.
  - Tool and wipe away any excess sealant at the vertical to horizontal joints.
  - Snap on the mullion flush filler.
- See **Detail 29**.

##### OPEN BACK HORIZONTAL

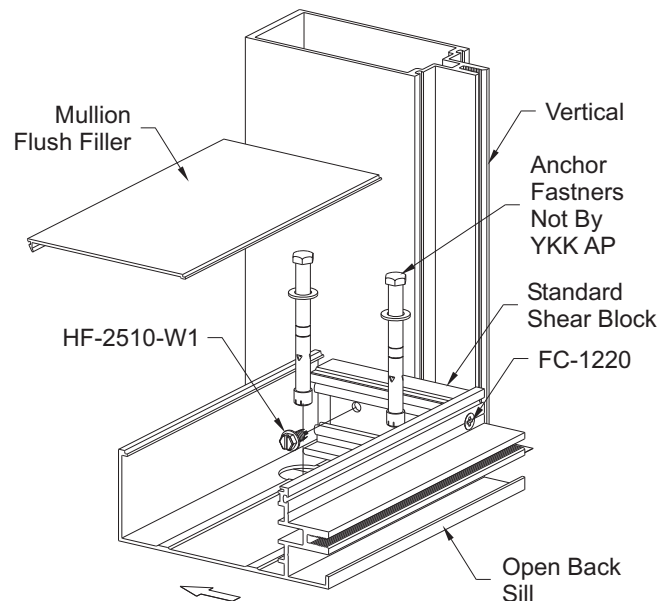


**Detail 29**

##### Open Back Head & Sill Members at End Bays:

- To clear the vertical mullions at end bays shear blocks must be pre-attached to the head and sill members through the face of the mullion with FC-1220 fasteners.
  - Position the head/sill members into place and attach the shear blocks to the verticals with two HF-2510-W1 fasteners per block.
  - Provide anchor fasteners per approved shop drawings or engineering calculations.
  - Install the anchor fasteners as recommended by fastener manufacturer.
  - Snap on the mullion flush filler.
- See **Detail 30**.

##### OPEN BACK HEAD/SILL AT END BAY



**Detail 30**

Sill Shown, Head Similar

**Caution:** A solid shim must be placed under the vertical mullion to transfer glazing dead loads to the foundation.

## FRAME INSTALLATION

### STEP 16 (Continued)

### ATTACH HORIZONTAL MEMBERS

#### Optional Incidental Water Head Members:

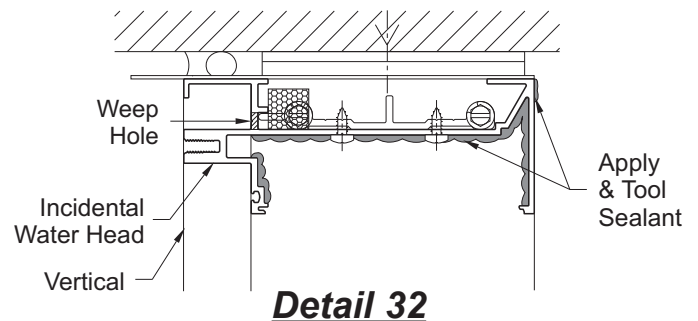
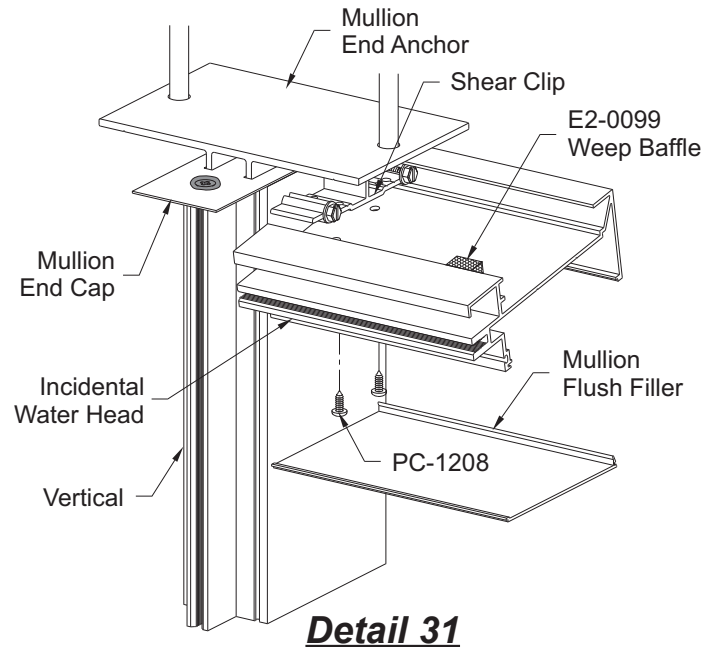
- End anchors must be installed before attaching incidental water heads; install the anchor bolts according to manufacturer's recommendations.
- Install a weep baffle, E2-0099, directly behind each weep hole. Dab a small amount of sealant on the bottom of the weep baffle to secure it.
- Just prior to installing the the incidental water head members, apply sealant to the underside of the shear clip where it meets the vertical.
- Incidental water head members must be joggled into place:
  - Tilt the head member towards the exterior and engage the back of the head with the back of the shear clip. Rotate the head into place and push it forward to properly seat the head member on the shear clip.
- Attach the head member to the shear clip with two PC-1208 fasteners per clip.
- Apply and tool sealant to the head to vertical intersection at each end as shown in **Detail 32**.
- Snap on the mullion flush filler as shown on **Detail 31**.

#### Tubular Head & Sill Members:

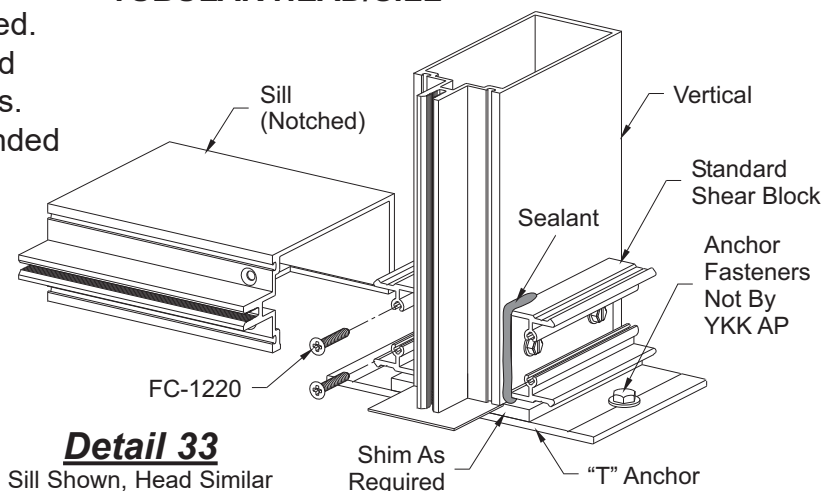
- Mullion end anchors must be installed before head and sill members are attached.
- Provide anchor fasteners as per approved shop drawings or engineering calculations.
- Install the anchor fasteners as recommended by fastener manufacturer. See **Detail 30**.
- Clean, seal, and attach head and sill members as previously shown on **Page 30**.

**Caution:** A solid shim must be placed under the vertical mullion to transfer glazing dead loads to the foundation.

#### INCIDENTAL WATER HEAD



#### TUBULAR HEAD/SILL



## FRAME INSTALLATION

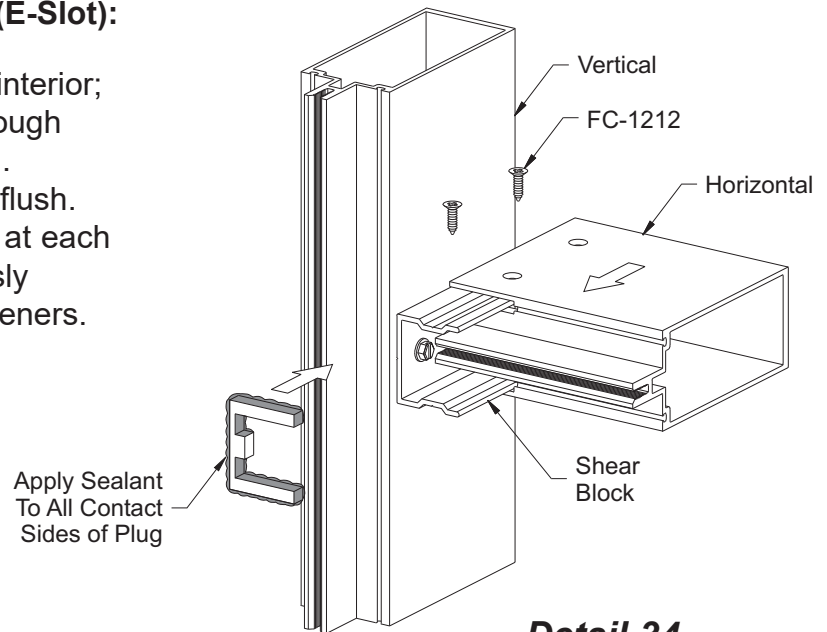
### STEP 16 (Continued) ATTACH HORIZONTAL MEMBERS

#### TUBULAR HORIZONTALS AT END BAYS

##### For Tubular Horizontals at End Bays (E-Slot):

- Slide the horizontal into place from the interior; the shear blocks should easily pass through the E-Slots at the ends of the horizontal. Make sure that the glazing pockets are flush.
- Attach the horizontal to the shear block at each end with FC-1212 fasteners as previously shown for horizontals with exposed fasteners.

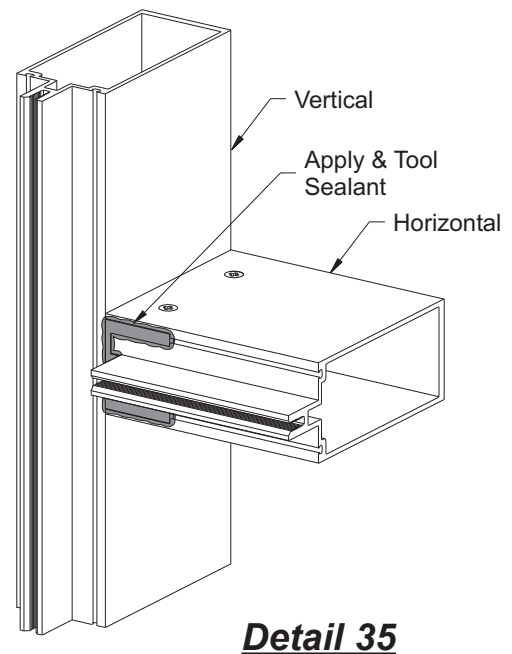
See **Detail 34**.



**Detail 34**

- Apply sealant to all contact sides of the E-Slot plug, E2-0123.
- Insert the E-Slot plug into place and press it firmly against the shear blocks.
- Cover the entire slot with sealant and tool the sealant to ensure a watertight seal.

See **Detail 35**.



**Detail 35**

## FRAME INSTALLATION

### STEP 17

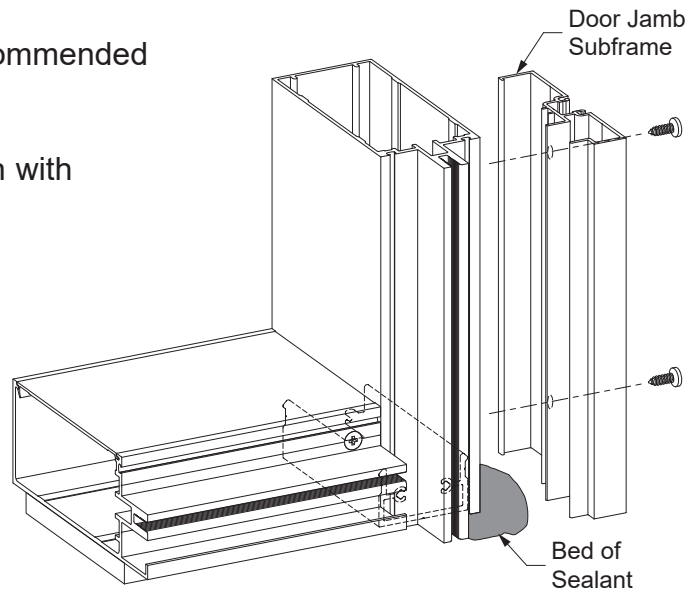
### INSTALL DOOR SUBFRAMES

Refer to the **Entrances Installation Manual** for assembly of the door subframes. These subframes are typically glazed into the curtain wall framing at the jambs, and set directly upon the sill substrate without any shims. The subframe members are determined by the approved shop drawings.

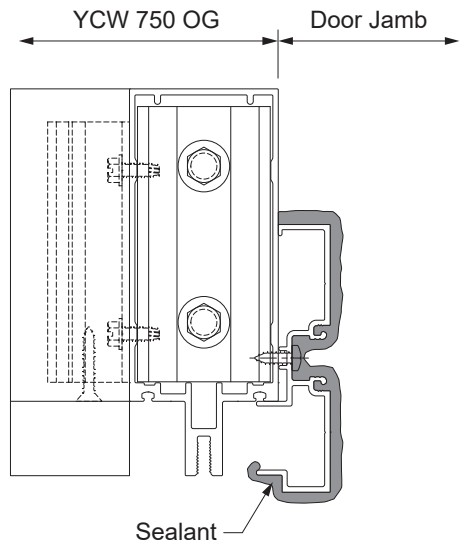
-Clean all sealant contact surfaces as recommended by the sealant manufacturer.

-Install the jamb subframe onto the mullion with fasteners according to the approved shop drawings and/or P.E. calculations, setting the subframe jambs in beds of sealant as shown in **Detail 36**.

-Apply and tool sealant to the bottom of the jamb subframe as shown in **Detail 37**.



**Detail 36**



**Detail 37**

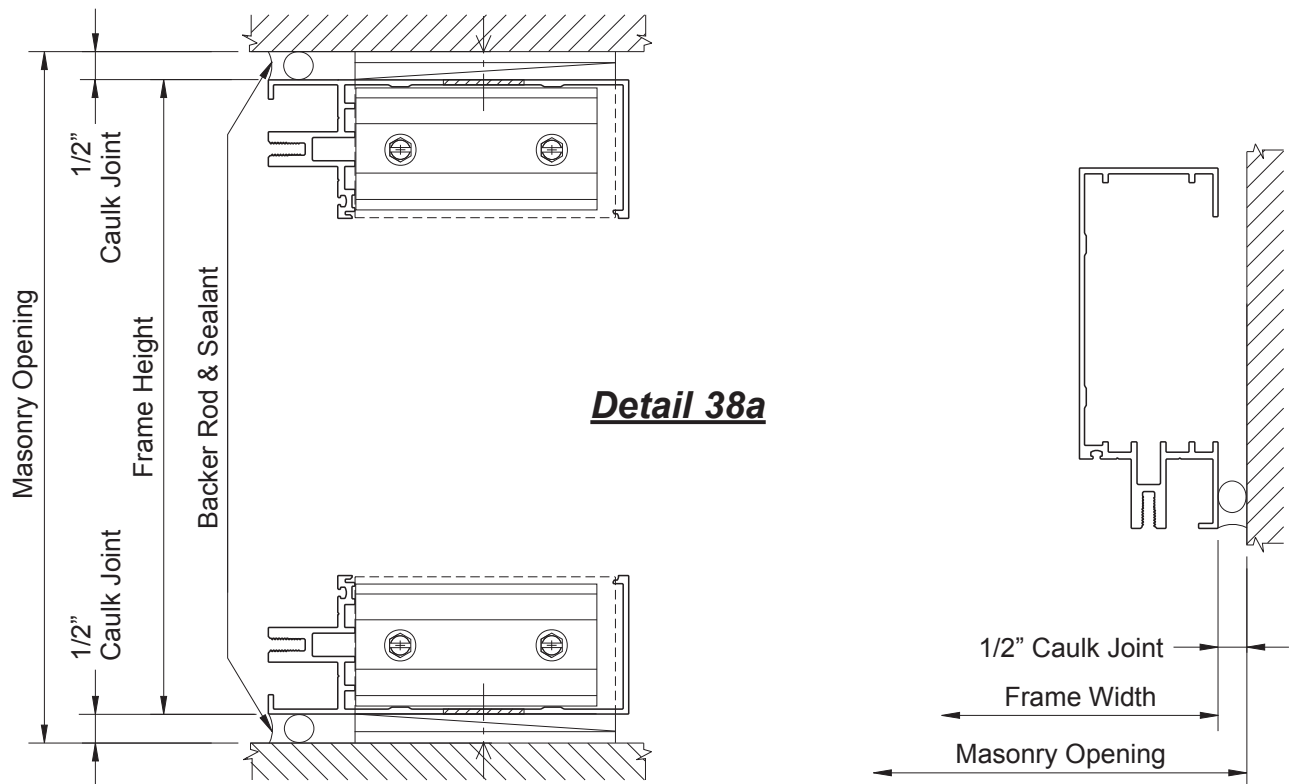
## FRAME INSTALLATION

### STEP 18a

#### APPLY PERIMETER SEALANT WHEN USING STANDARD JAMB MEMBERS

- Clean the area around the perimeter of the frame with cleaner and method approved by sealant manufacturer.
- Push in backer rod between the perimeter of the frame and the substrate about 1/4".
- Apply sealant to the perimeter of the frame.
- Tool the sealant to ensure a water tight joint.

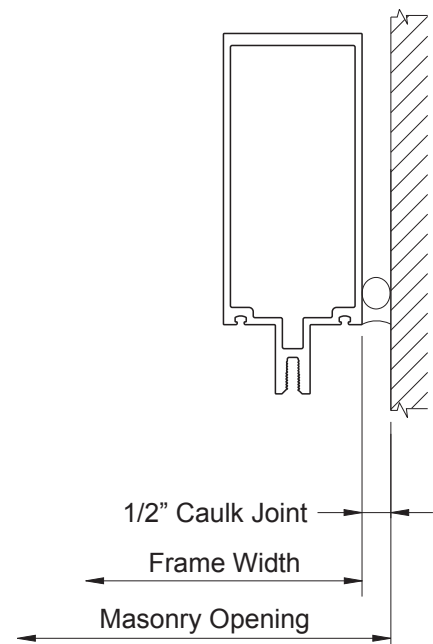
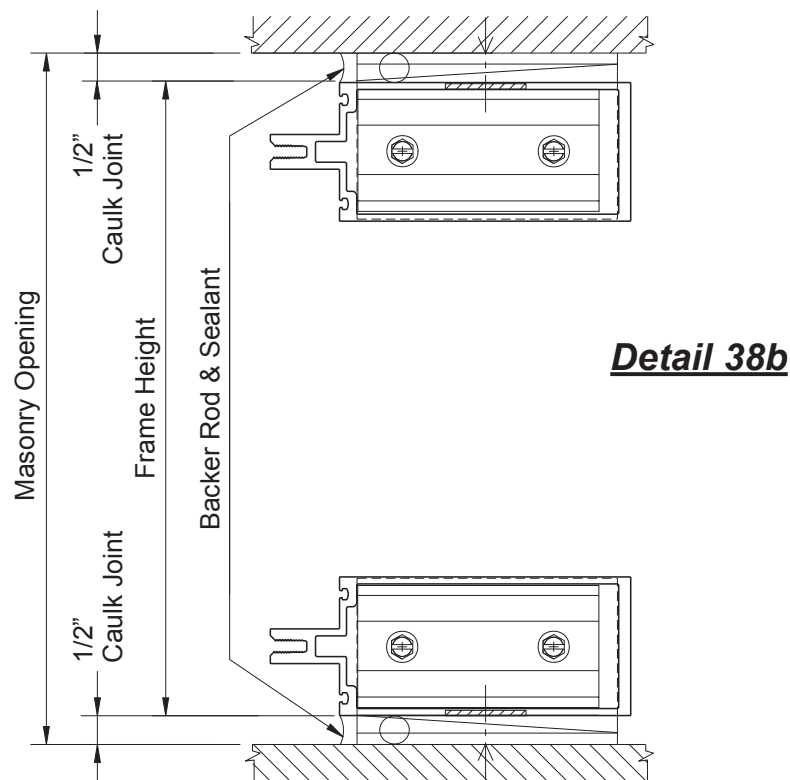
See **Detail 38a**.



**FRAME INSTALLATION****STEP 18b****APPLY PERIMETER SEALANT WHEN USING OPTIONAL JAMB MEMBERS**

- Clean the area around the perimeter of the frame with cleaner and method approved by sealant manufacturer.
- Push in backer rod between the perimeter of the frame and the substrate about 1/4".
- Apply sealant to the perimeter of the frame.
- Tool the sealant to ensure a water tight joint.

See **Detail 38b**.



## FRAME INSTALLATION

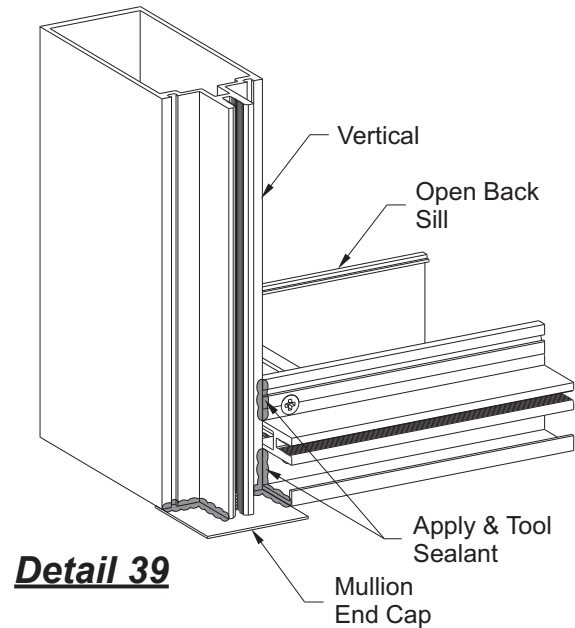
### STEP 19 INSTALL JOINT PLUGS

The tongue of each head, horizontal and sill must be sealed to the tongue of the vertical and jamb mullions at each end with joint plugs, E2-0102 for 1" glazing or E2-0125 for 1/4" glazing.

#### For Open Back Sill Members:

- Just prior to installing joint plugs, clean the area around the intersection of the vertical and the sill member with an approved cleaner.
- Apply and tool sealant to the joint where the sill member meets the vertical and along the joint between the mullion end cap and the perimeter leg of the sill member.

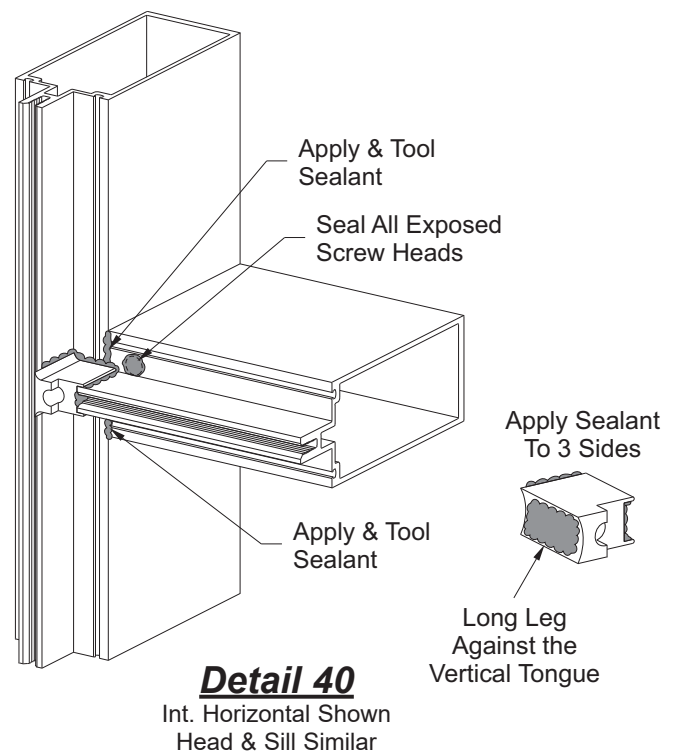
See **Detail 39**.



- Clean the area around the mullion tongue ends with an approved cleaner.
- Apply and tool sealant to the joint where the horizontal meets the vertical.
- Apply sealant to the three contact sides of the joint plug.
- Install joint plug as shown with the long leg of the joint plug against the vertical tongue.
- Press the joint plug firmly against the face of the mullion.
- Tool the sealant to ensure a watertight seal.
- Seal all exposed screw heads on the face of the mullion.

See **Detail 40**.

**Note:** For E-Slot horizontals, E2-0124 joint plug must be used.

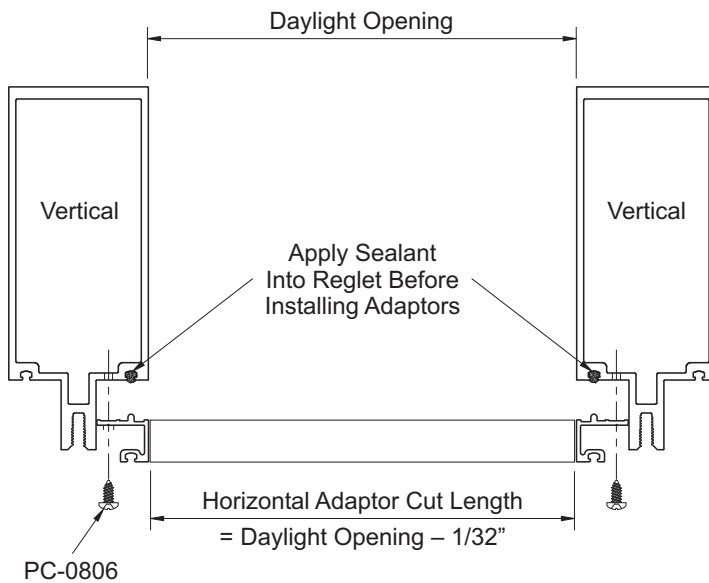




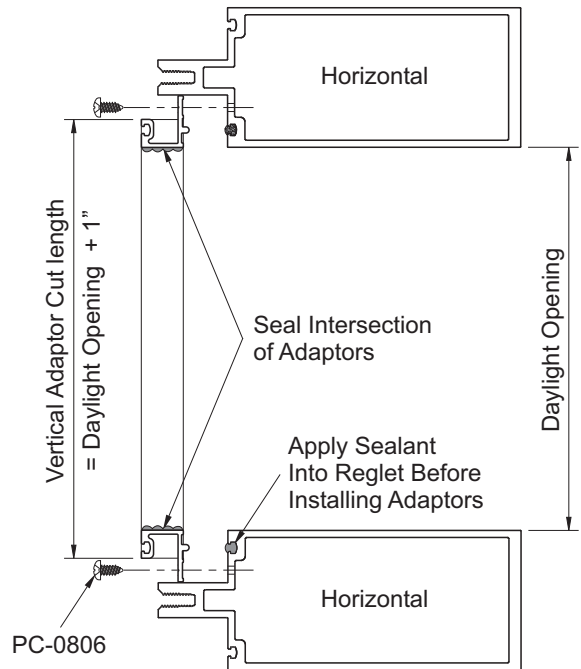
## GLAZING

### STEP 20 (Optional) INSTALL GLAZING ADAPTORS

**Note:** 1/4" glazing adaptor, E9-1220 shown  
1/2" glazing adaptor, E9-1232 similar.

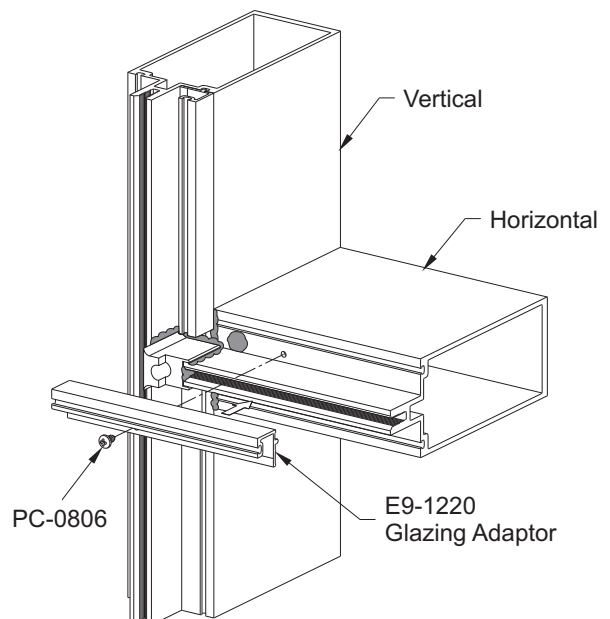


**Detail 41**



- Cut glazing adaptors to:  
Vertical Cut Length = D.L.O. plus(+) 1".  
Horizontal Cut Length = D.L.O. minus(-) 1/32".

- Predrill each adaptor along the "V"-groove with 0.189" dia. holes 2" from each end and 24" O.C.
- Dry fit adaptors and match drill 0.141" dia. holes (drill #28) on the mullion to receive PC-0806 fasteners.
- Clean the area around the mullion glazing reglet and the glazing adaptor with a cleaner approved by the sealant manufacturer.
- Apply sealant into the glazing reglet of the mullion and the ends of the horizontal adaptors.
- Install the adaptors with PC-0806 screws at each hole location. Install the vertical adaptors first; make sure they are centered along the day light opening.
- Tool sealant at all adaptor intersections and seal all screw heads.



**Detail 42**

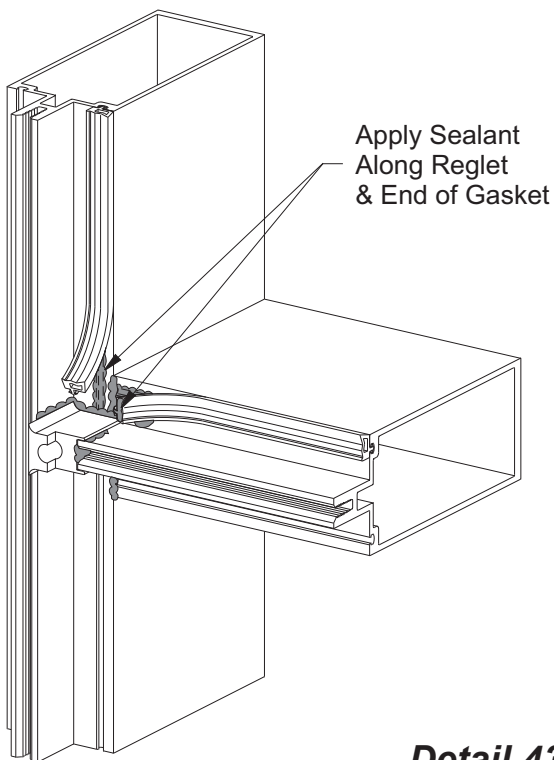
See **Detail 41 & 42.**

## GLAZING

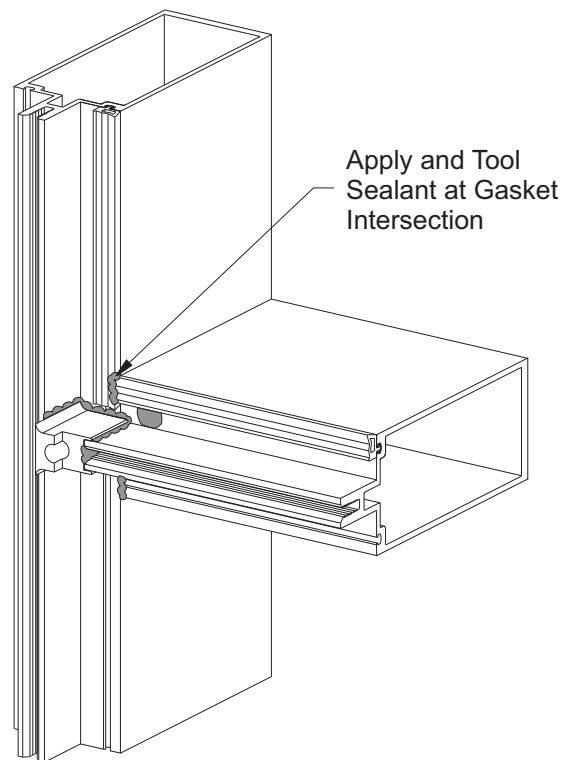
### STEP 21

#### INSTALL INTERIOR GLAZING GASKETS

- Cut interior glazing gaskets to size:  
Vertical Gasket = Daylight Opening + 1-1/2".  
Horizontal Gasket = Daylight Opening + 1/4" per each foot of opening width.
- Install vertical gaskets first, centered along the daylight opening.
- Install horizontal glazing gaskets next.
  - Insert the glazing gasket into the reglet at each end first.
  - Snap the rest of the glazing gasket into the reglet starting at the center and work towards each end.

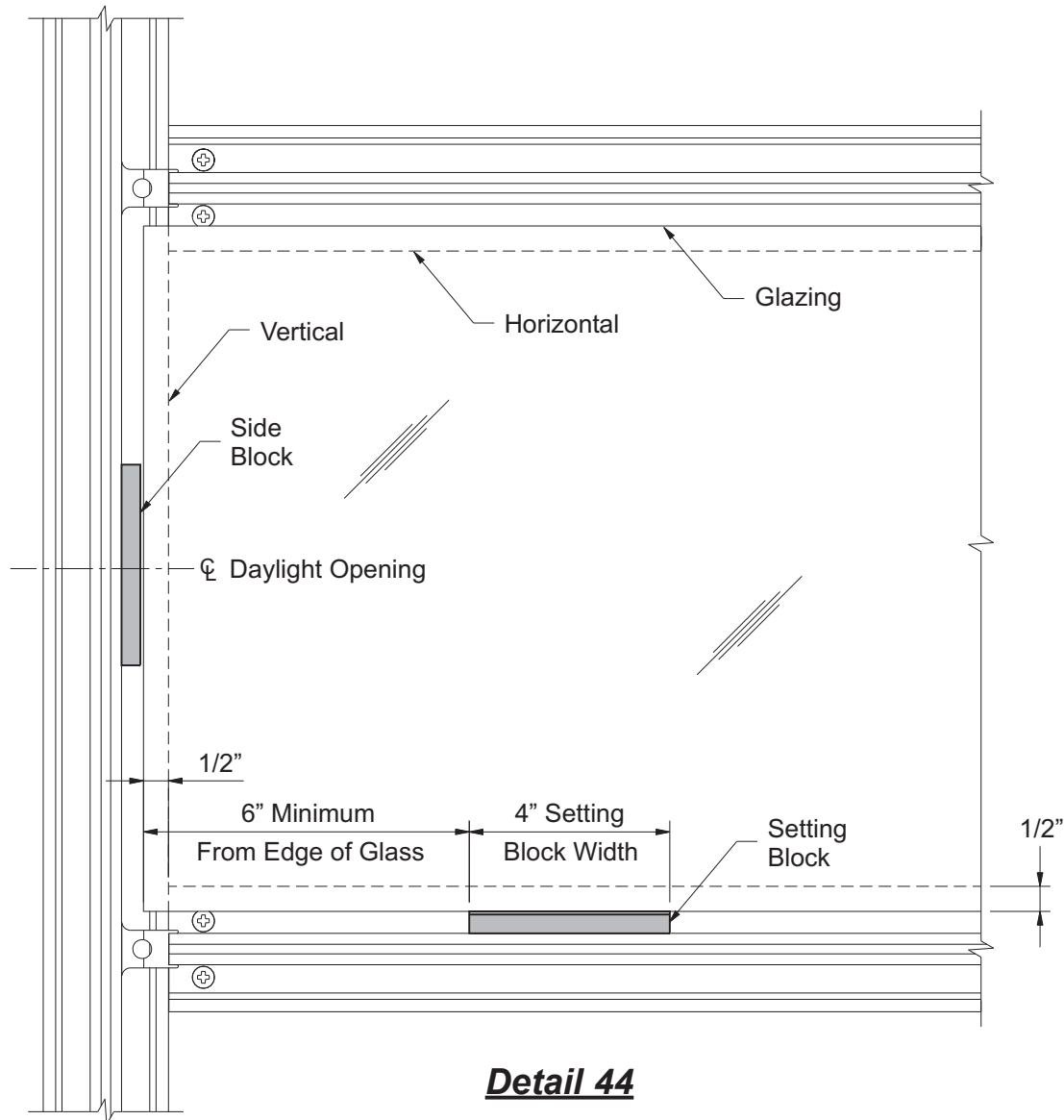


**Detail 43**



- Pull the last 3" of each gasket away from the reglet.
- With gasket end held out of the way, run a 2-3" bead of sealant into the reglet at the ends.
- Apply sealant at the ends of the horizontal gaskets.
- Reinsert the ends of the gaskets pressing them firmly against the face of the mullions.
- Apply and tool sealant at the intersection of the vertical and horizontal gaskets.

See **Detail 43**.

**GLAZING****STEP 22****INSTALL SETTING & SIDE BLOCKS**

- Install setting blocks, E2-0104 for 1" glazing or E2-0112 for 1/4" glazing, at 1/4 points of D.L.O. or minimum of 6" from edge of glass, whichever is greater.  
Consult YKK AP for setting block requirements on units that exceed 60" x 90" or 40 sq. ft.
- Install side blocks, E2-0105 for 1" glazing or E2-0113 for 1/4" glazing, centered along the daylight opening on both sides of glazing material.

See **Detail 44**.

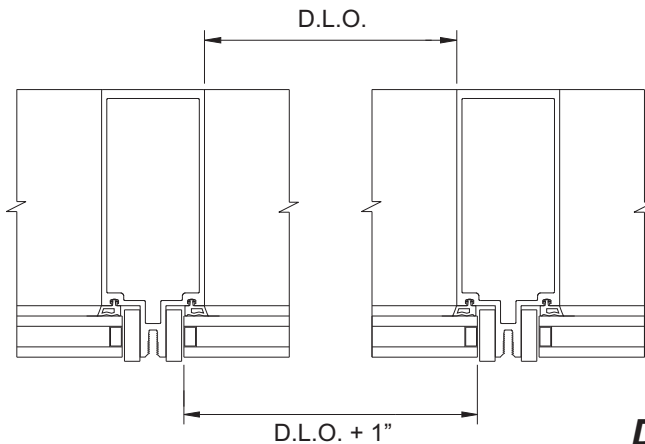
## GLAZING

### STEP 23

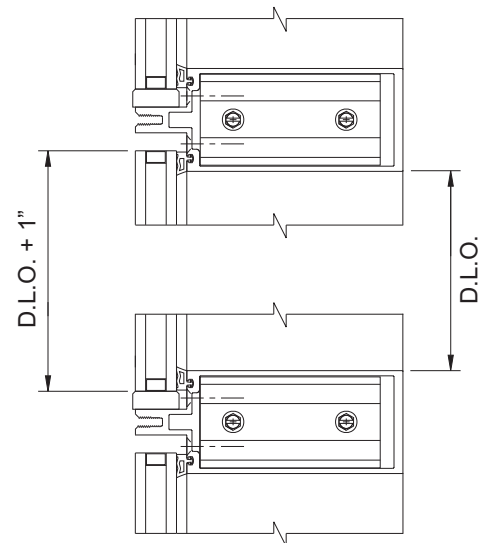
#### INSTALL EXTERIOR GLAZING GASKETS

- Preload exterior vertical glazing gaskets to the same length as the vertical pressure plates.
- Preload exterior horizontal glazing gaskets to daylight opening plus 1/4" per foot of opening width.
- Install vertical glazing gaskets onto the vertical pressure plates.
- Install horizontal gaskets by pushing each end into the reglet of the pressure plate. Next, press center of gasket into reglet; then push gasket into reglet working from center towards the ends.

**Caution:** Do not stretch the gaskets.



**Detail 45**



### STEP 24

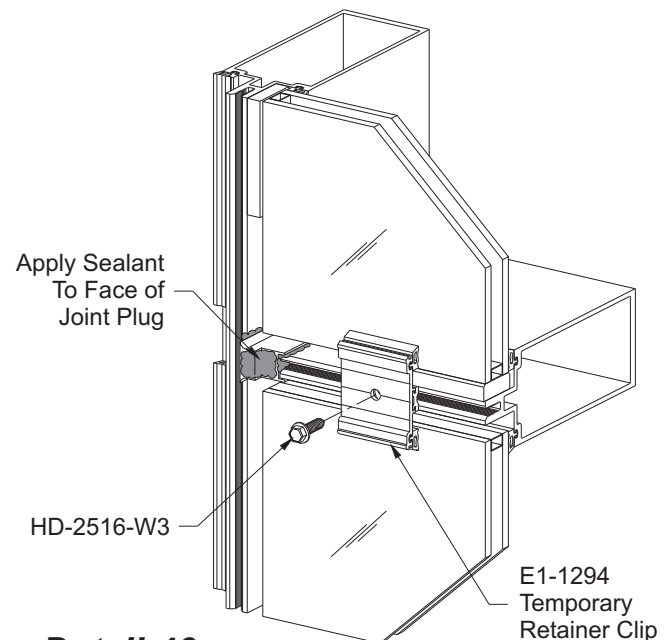
#### INSTALL GLASS

**Glass and Spandrel Size = Daylight Opening + 1\"**  
**Horizontally and Vertically.**

- As each lite is installed, attach a temporary retaining clip, E1-1294, in the middle of each horizontal and 4" from glass edge at each end using HD-2516-W3 fasteners.
- Reuse the temporary retaining clips.
- Apply sealant to the face of the joint plugs just prior to installing vertical pressure plates. Do not allow sealant to skim over prior to installing pressure plates.

**Note:** Sealant must form a complete seal between the exterior gasket, pressure plate, thermal isolator, and the joint plug.

See **Detail 45 & 46.**

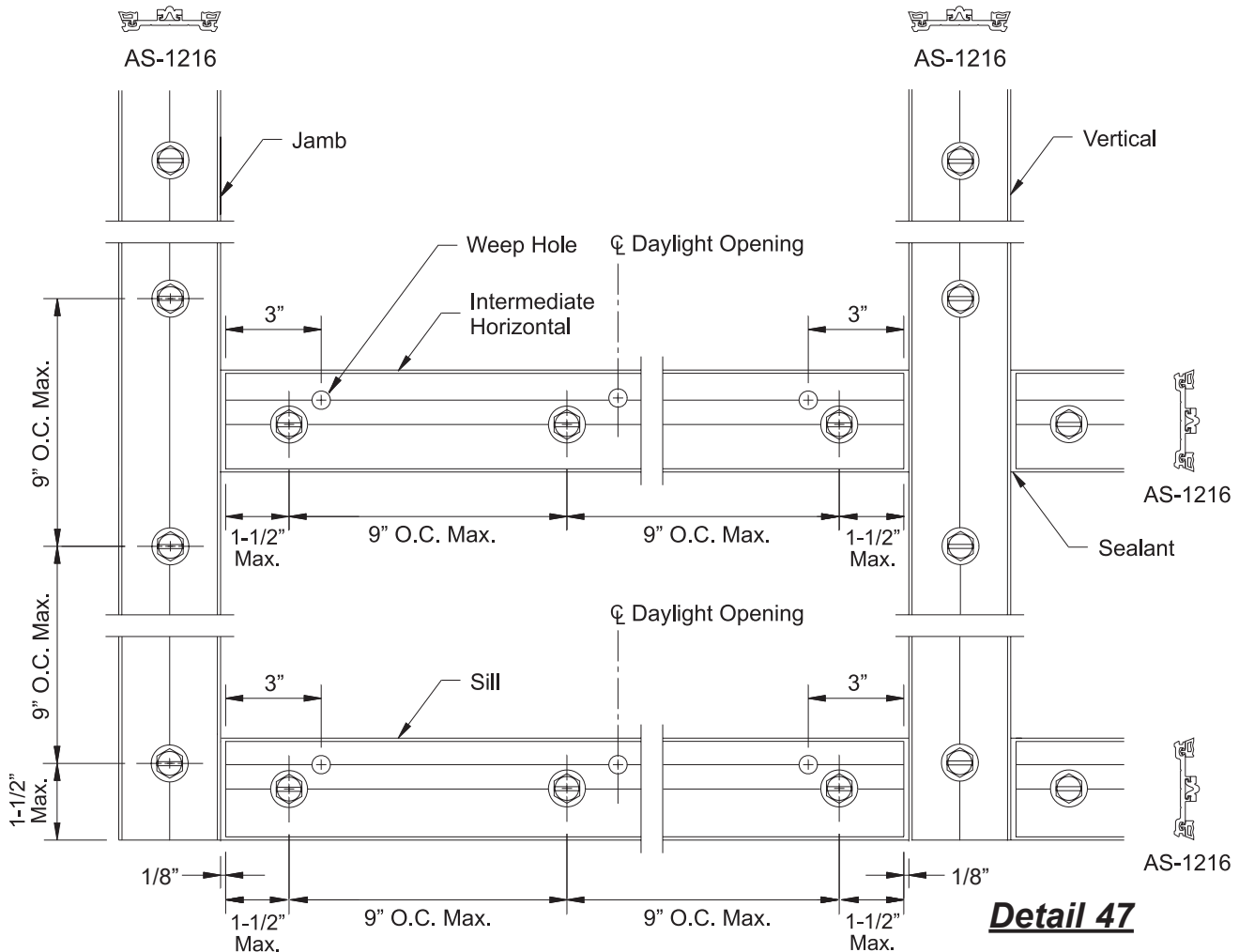


**Detail 46**

## GLAZING

## STEP 25

## PRESSURE PLATE LAYOUT AND ASSEMBLY



-Pressure plate stock lengths are factory punched with 0.281" diameter holes at 9" O.C. maximum. After cutting, additional holes may be required to have screws 1-1/2" from each end.

See **Detail 47**.

-Install vertical pressure plates using HD-2516-W3 screws. Initially torque screws to 30 inch-pounds with a speed wrench or torque limiting screw gun. Work from the bottom up.

-Torque all vertical pressure plate screws to 50 inch-pounds.

-Install vertical face cover E9-1206 using a mallet and a clean piece of lumber. Start at the top of the cover and work block and mallet down the vertical. See **Detail 48**. For installation of deep face covers, see **Step 26A on Page 43**.

-Center and install horizontal pressure plates in opening, leaving a 1/8" gap at the ends.

-Starting at the center of each pressure plate, tighten each retainer screw to 50 inch-pounds.

See **Detail 47**.

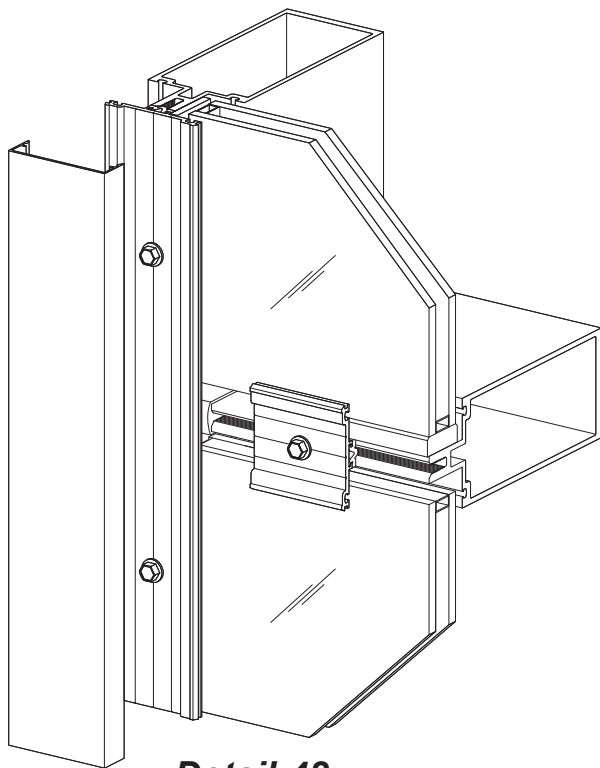
**Note:** Perimeter pressure plates AS-3569 (1" glazing) and AS-3572 (1/4" glazing) with isolator tape E2-0239 must be used when using tubular head and sill members. Mullion end caps must be installed when using mullion end anchors.

## GLAZING

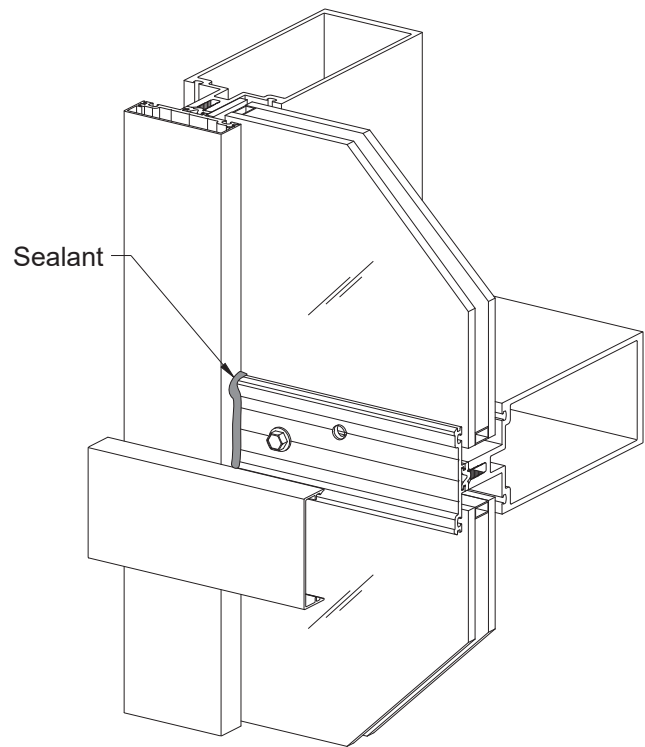
### STEP 26 INSTALL EXTERIOR FACE COVERS

- Apply and tool sealant to the gap between horizontal pressure plate and the vertical face cover.
- Install horizontal face cover E9-1206. Start at one end and work block and mallet across the horizontal.

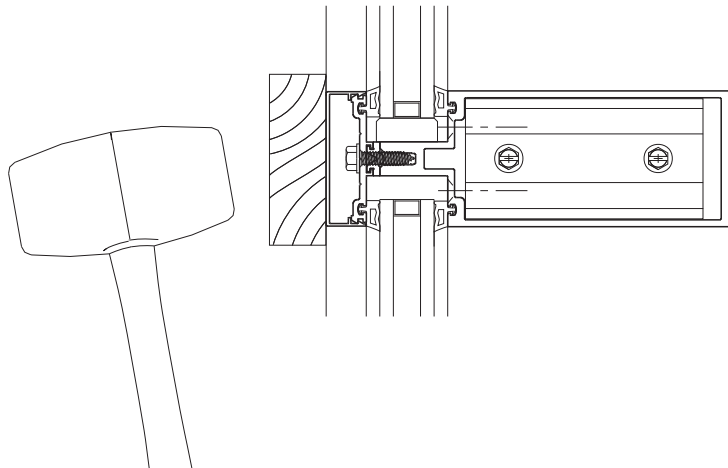
See **Detail 49**.



**Detail 48**



**Detail 49**



## GLAZING

## STEP 26A

## INSTALL OPTIONAL DEEP FACE COVERS

Installation of a deep vertical cover is similar to that of the standard face cover, except a fastener is required to keep the cover from possibly sliding down over time. Typically, the face cover is fastened with one PC-0808-SS screw at a horizontal to be concealed by the horizontal face cover, unless otherwise specified on the approved shop drawings.

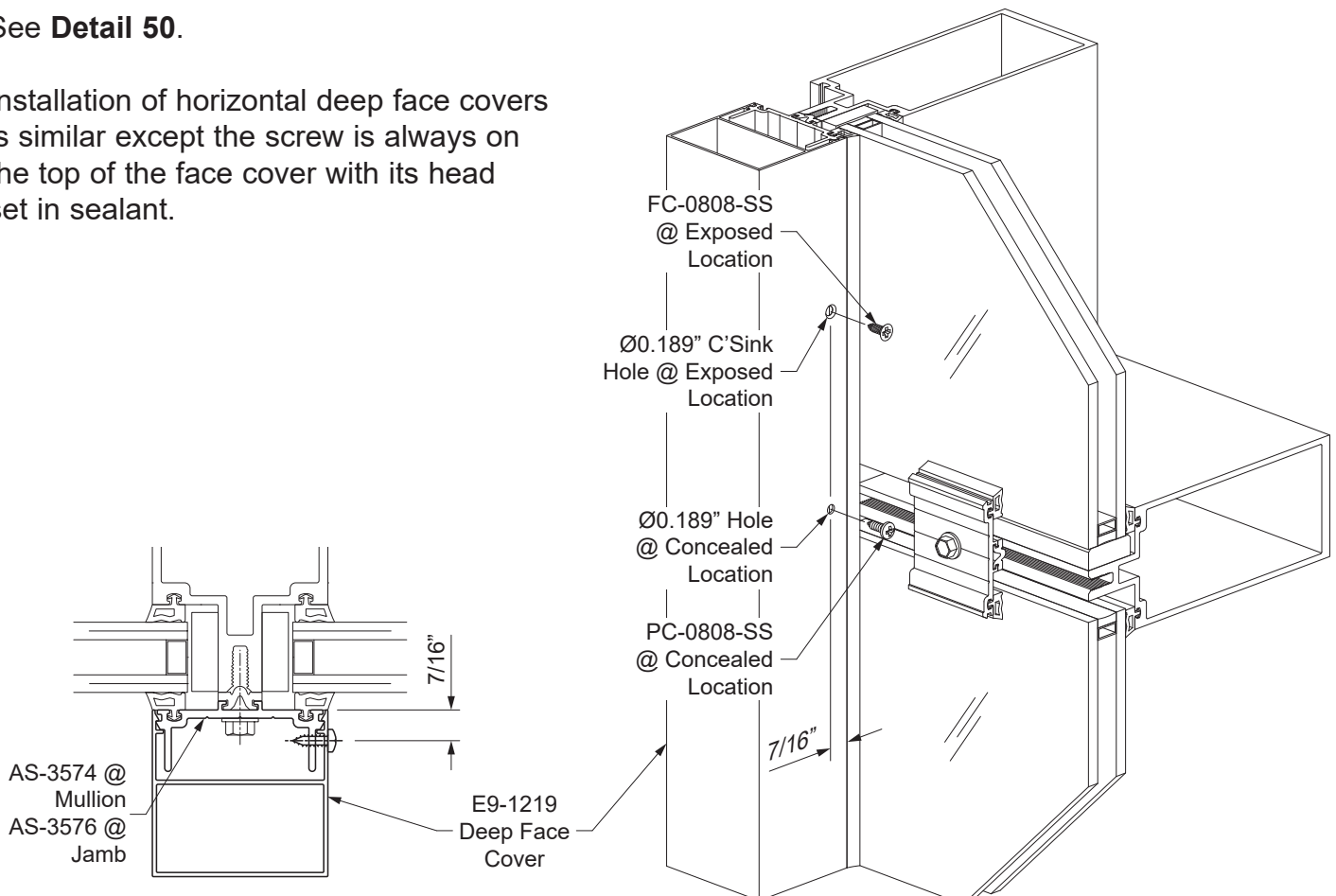
-For concealed fastener locations, drill a 0.189" diameter hole into the side of the face cover, 7/16" from the snap interface of the cover. Snap on the deep cover at its intended location. Using the clear hole as a pilot hole, drill a 0.141" diameter tap hole into the leg on the deep pressure plate. Secure the face cover in place with a PC-0808-SS.

-If the face cover requires it to be fastened at an exposed location, drill a 0.189" diameter countersunk hole into the side of the cover. Snap on the deep cover at its intended location. Using the clear hole as a pilot hole, drill a 0.141" diameter tap hole into the leg on the deep pressure plate. Secure the face cover in place with an FC-0808-SS screw.

-Continue to install the horizontal pressure plate and face cover as specified on **Pages 41 & 42**.

See **Detail 50**.

Installation of horizontal deep face covers is similar except the screw is always on the top of the face cover with its head set in sealant.



**Detail 50**



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