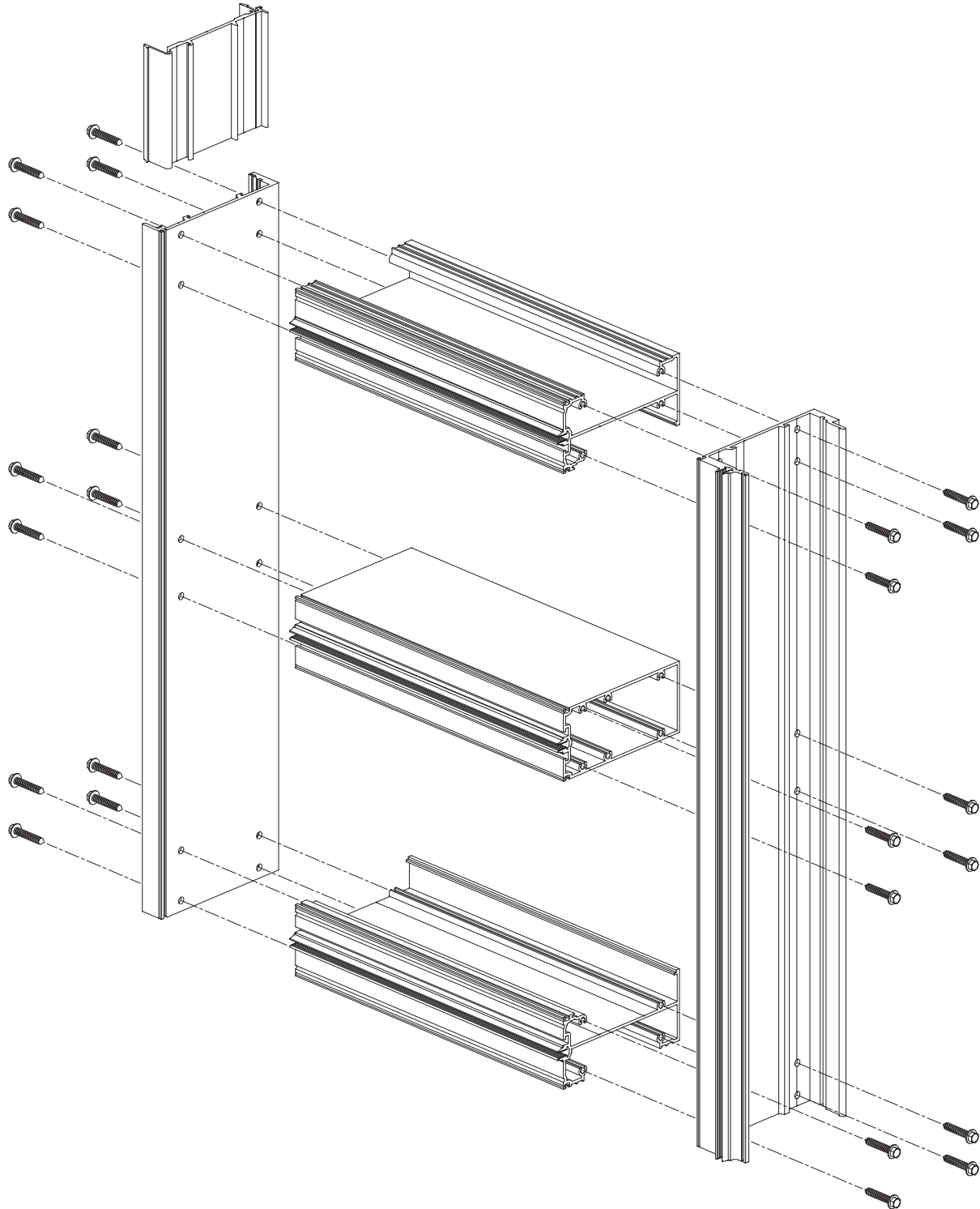


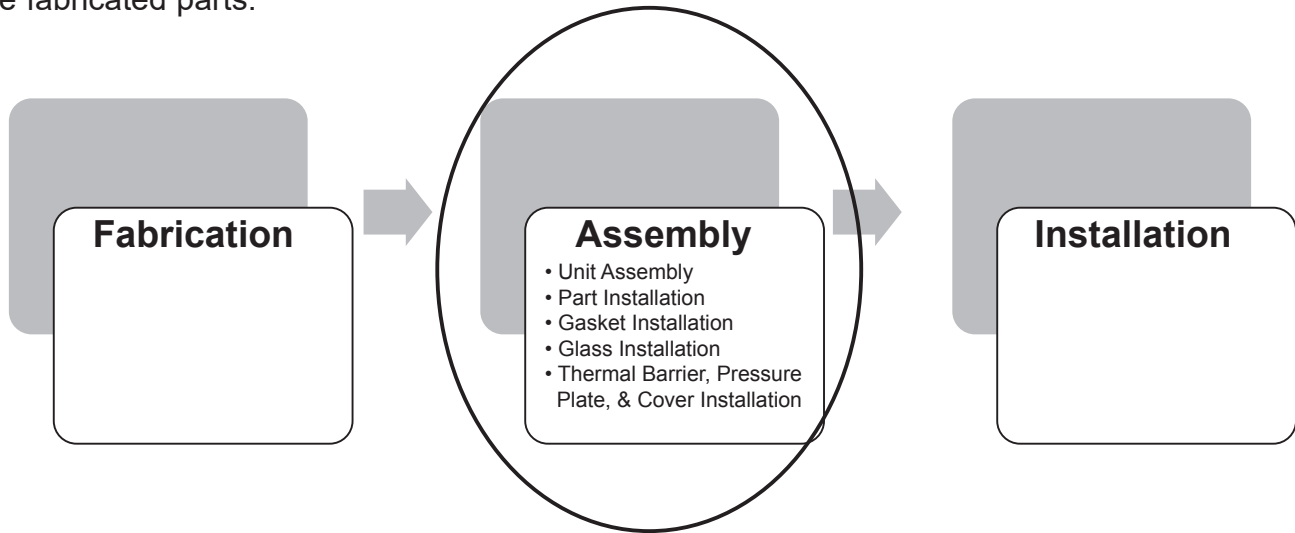
**YUW 750 XT
4 Side SSG - Window Wall**



Assembly Manual

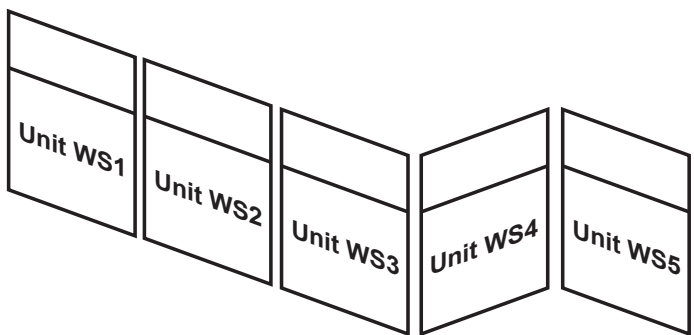
INTRODUCTION

YKK AP Fabrication, Assembly, and Installation manuals for Unitized Wall Systems are organized in to three specific manuals. The focus of this manual is the assembly and glazing of the fabricated parts.



The assembly manual from the YKK AP YUW 750 XT Unitized SSG Window Wall System is designed and organized to directly connect with the fabrication manual supplied by YKK AP and the example elevation below.

The assembly manual is broken out by unit in the appropriate sequence. This assembly manual illustrates units with 1” insulating glass. Other infills will require optional framing members and accessories. Installation of the collective units is covered in the installation manual.



This manual was designed to take you through each unit of the **example elevation**. It is a step-by-step reference for unit assembly.

Not all projects are the same and your project may differ from the example elevation. Please refer to your specific project plan to ensure contents are relevant to your project.

If you have any additional questions or need assistance, please contact YKK AP Engineering Center for more information.

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. 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. Take the extra time to wrap and protect the work produced.
12. Cutting tolerances are plus zero, minus one thirty second unless otherwise noted.
13. Check our website, www.ykkap.com, for the latest installation manual update prior to commencing work.

Important Notice for SSG Curtain Wall Systems:

In order to properly perform and to maintain structural integrity, in addition to all other installation requirements, structurally glazed curtain wall systems rely specifically upon effective and appropriate structural sealant selection and installation.

It is the responsibility of the glazing contractor to take all steps to ensure the installed structural sealant is capable of meeting all applicable project requirements in accordance with industry standards. Such steps on each project may include, but are not limited to, design reviews, formal adhesion testing, project specification compliance, validating applications, field testing, auditing, sealant design strength analysis, and the quality control review of the installation and surrounding conditions.

Subject to project specific design pressures, requirements, and/or specifications, the structural sealant that is used between the glass and framing system must be capable of withstanding tensile and shear stresses imposed by the curtain wall without failing adhesively or cohesively.

The structural sealant's capability to withstand these stresses are dependent on several factors including, but not limited to, type of structural sealant, method of application (i.e. cleaning, primer), construction of glazing material (i.e. insulating glass unit (IGU), other infill, and finish of framing (i.e. anodizing, paint)).

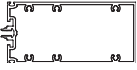

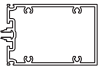

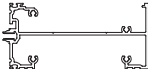
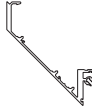
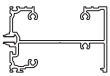




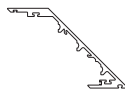




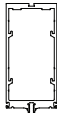



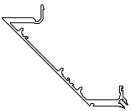

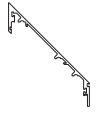

- Adhesive failure occurs when sealant pulls away from substrate cleanly, leaving no sealant material behind.
- Cohesive failure occurs when sealant breaks or tears within itself but does not separate from each substrate because sealant-to-substrate bond strength exceeds sealant's internal strength.

The IGU and/or other infill must be constructed for installation into structurally sealant glazed curtain walls. Notify the manufacturer or fabricator of the IGU and/or infill and advise of the product's application into 2 or 4-sided structurally sealant glazed curtain walls along with the project's design requirements so that appropriate fabrication steps are taken.

Secondary Notice for SSG Curtain Wall Systems:

Standard product details and system offering supports single and twin span applications only. For multi-span applications or elevation configurations that require the application of vertical expansion components, please contact YKK AP engineering for review.

FRAMING MEMBERS

	Intermediate Horizontal For 7-1/2" System	E9-7097		Outside Corner Male Mullion For 6" System	E9-7068
	Intermediate Horizontal For 6" System	E9-7064		Outside Corner Female Mullion For 6" System	E9-7069
	Open Back Head/Sill For 7-1/2" System	E9-7099		Inside Corner Male Mullion For 7-1/2" System	E9-7047
	Open Back Head/Sill For 6" System	E9-7065		Inside Corner Female Mullion For 7-1/2" System	E9-7048
	Male Mullion Half For 7-1/2" System	E9-7095		Inside Corner Male Mullion For 6" System	E9-7070
	Female Mullion Half For 7-1/2" System	E9-7002		Inside Corner Female Mullion For 6" System	E9-7071
	Male Mullion Half For 6" System	E9-7061		Flush Filler Use with E9-7043	E9-7044
	Female Mullion Half For 6" System	E9-7062		Flush Filler Use with E9-7065	E9-7066
	Jamb Mullion For 7-1/2" System	E9-7098		Pressure Plate For 1" Glazing	AS-7054
	Jamb Mullion For 6" System	E9-7063		Pressure Plate For 1-5/16" Glazing	AS-7057
	Outside Corner Male Mullion For 7-1/2" System	E9-7045		Face Cover	E9-1206
	Outside Corner Female Mullion For 7-1/2" System	E9-7046		Glazing Adaptor used at 80 psf	E9-7749

4 Side SSG







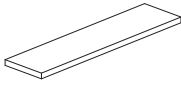

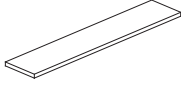


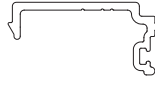











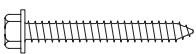


FRAMING MEMBERS

	SSG Jamb Spacer (Optional) For 1-5/16" Glazing	E9-4597		SSG Jamb Adaptor Base	E9-7053
	SSG Jamb Adaptor Base (Optional)	E9-7052			

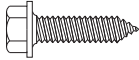


ACCESSORIES

	End Dam	E1-7002		Mullion Anchor For 6" System	E1-7004
	Interlocking Mullion Clip Use with E9-7002 For 7-1/2" system	E1-7003		Jamb Anchor For 6" System	E1-7005
	Interlocking Mullion Clip Use with E9-7062 For 6" system	E1-7072		Mullion Anchor For 7-1/2" System	E1-7024
	Mullion Reinforcement For 7-1/2" System	E1-7007		Jamb Anchor For 7-1/2" System	E1-7025
	Mullion Reinforcement For 6" System	E1-7046		90° I.S. Corner Anchor For 7-1/2" System	E1-7088
	Corner Mullion Clip Use with E9-7046 & E9-7069	E1-7050		90° O.S. Corner Anchor For 7-1/2" System	E1-7089
	Mullion Anchor Sleeve For 7-1/2" system	E1-7006		90° I.S. Corner Anchor For 6" System	E1-7090
	SSG Setting Block Chair For 1" Glazing	E1-7067		90° O.S. Corner Anchor For 6" System	E1-7091
	SSG Setting Block Chair For 1-5/16" Glazing	E1-7011		End Cap	E1-7008

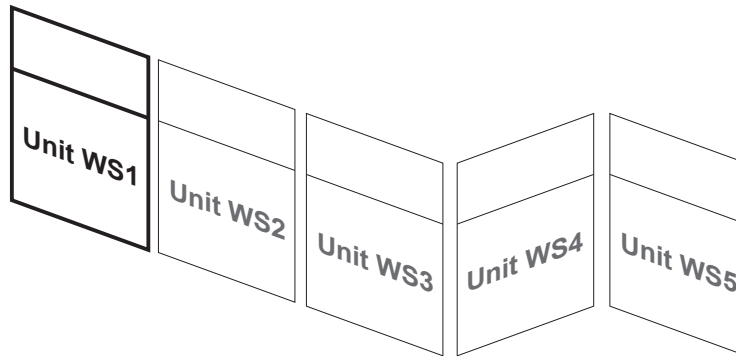
ACCESSORIES

	Interior Gasket	E2-7001		Captured Tongue Adaptor	E3-7017
	Air Water Seal Gasket	E2-7002		SSG Tongue Adaptor For 1" Glazing	E3-7013
	Horizontal Gasket	E2-7003		SSG Tongue Adaptor For 1-5/16" Glazing	E3-7011
	SSG Setting Block For 1" Glazing	E2-7011		SSG Corner Tongue Adaptor For 1-5/16" Glazing	E3-7020
	SSG Setting Block For 1-5/16" Glazing	E2-7017		Perimeter Spacer For 1" Glazing	E3-7008
	SSG Vertical Rainsreen Gasket	E2-7009		Perimeter Spacer For 1-5/16" Glazing	E3-7015
	SSG Corner Rainsreen Gasket	E2-7015		PVC End Cap For Face Cover	E3-7024
	Weather Seal Gasket	E2-7010		#10 x 1/2" PHSMS Type AB, Stainless Steel For Attachment of Angle to Jamb	PC-1008-SS
	Captured Joint Plug	E2-0102		1/4" x 5/8" FHSMS Type AB Zinc Plated Steel For Attachment of End Cap to Vertical Tongue Adaptor	FC-1410
	Exterior Gasket	E2-7005		1/4" x 3/4" FHMS Stainless Steel	FM-2512-SS
	1/4" x 1/4" Glazing Spacer Tape	E2-0724		#12 x 1-1/4" HWHS Stainless Steel, For Screw Spline Attachment	HC-1220-SS
	SSG Corner Spacer	E2-7014		#12 x 1-2/4" HWHSMS Stainless Steel For Screw Spline Attachment at Corner	HC-1228-SS
	3/4" Spacer Sponge	E2-0725		1/4"-20 x 2" HHMS Stainless Steel For Pressure Plate Attachment	HM-2532-SS

ACCESSORIES

	<p>1/4 - 20 x 1" HWHMS Type CA, Zinc Plated Steel</p>	<p>HD-2516- W3</p>	 <p>#10 x 5/8" PHSMS Type AB, Stainless Steel For Attachment of End Dam to Sill Starter</p>	<p>PC-1010- SS</p>
	<p>#10-24 x 1/2" FHUCMS Stainless Steel For Attachment of End Cap to Vertical Mullion</p>	<p>UF-1008- SS</p>		

WS1 TABLE OF CONTENTS



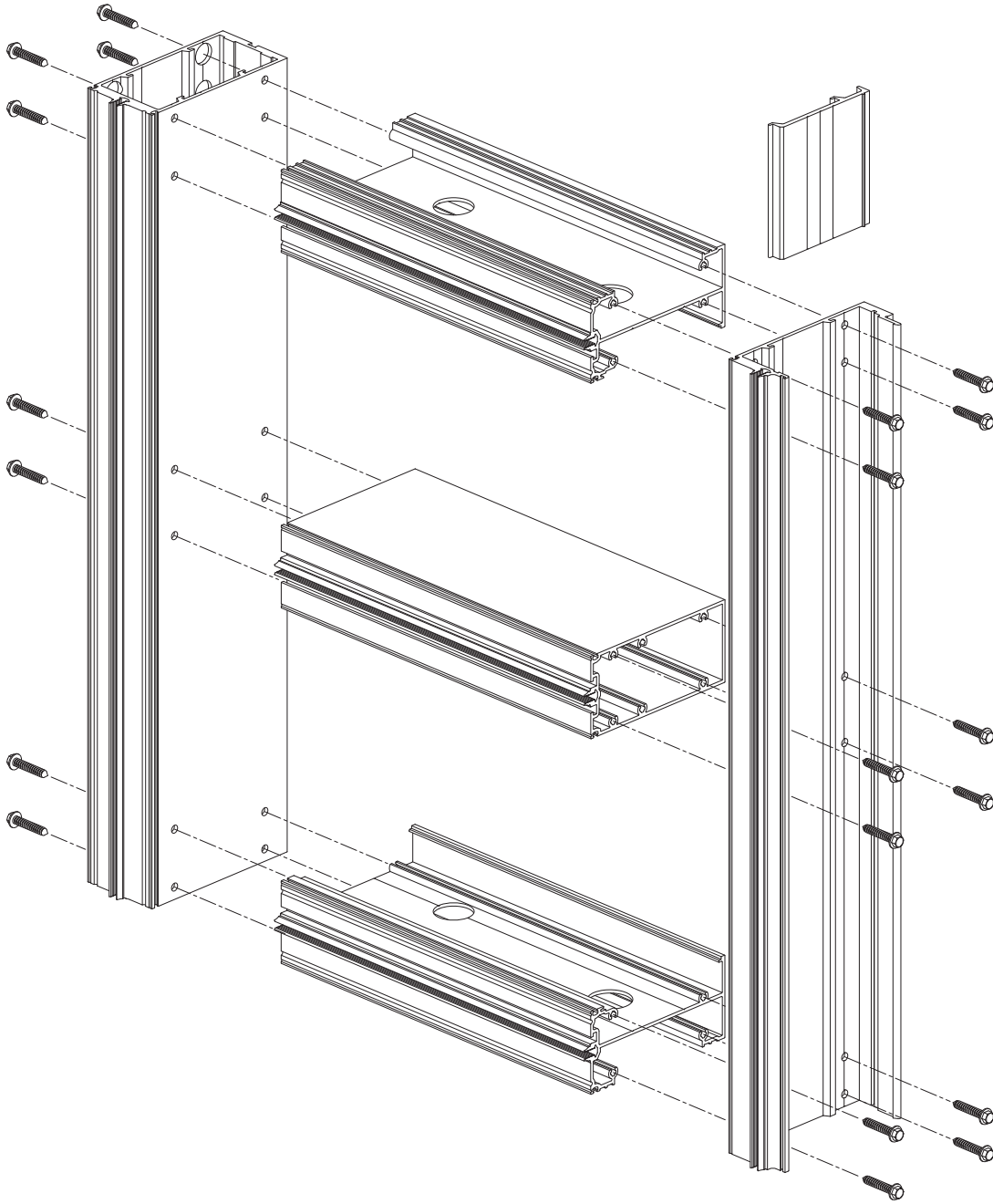
The following is intended for use as a guide for assembly of **Unit WS1** of the **YUW 750 XT 4-Sided SSG Window Wall System**. It is organized into five steps which will take you from assembly of parts to completed units.

Step 1: WS1 Unit Assembly	Pages 2 to 5
Step 2: WS1 Parts Installation	Page 6
Step 3: WS1 Gasket Installation	Pages 7 to 9
Step 4: WS1 Glass Installation	Pages 10 to 12
Step 5: WS1 Thermal Barrier & Cover Installation.....	Pages 13 to 23

Care should be taken to ensure you have inventory of all items required to complete this assembly. We recommend you refer to the parts list (pages iv - vi) as a reference and compare it to your specific project to ensure you have all the correct parts and tools required to complete the assembly.

STEP 1: WS1 UNIT ASSEMBLY

MAJOR COMPONENTS



STEP 1: WS1 UNIT ASSEMBLY

STEP 1a

APPLY SEALANT TO HORIZONTALS

-Clean, prime and apply sealant to both ends of horizontals per typical unit detail and approved shop drawings.

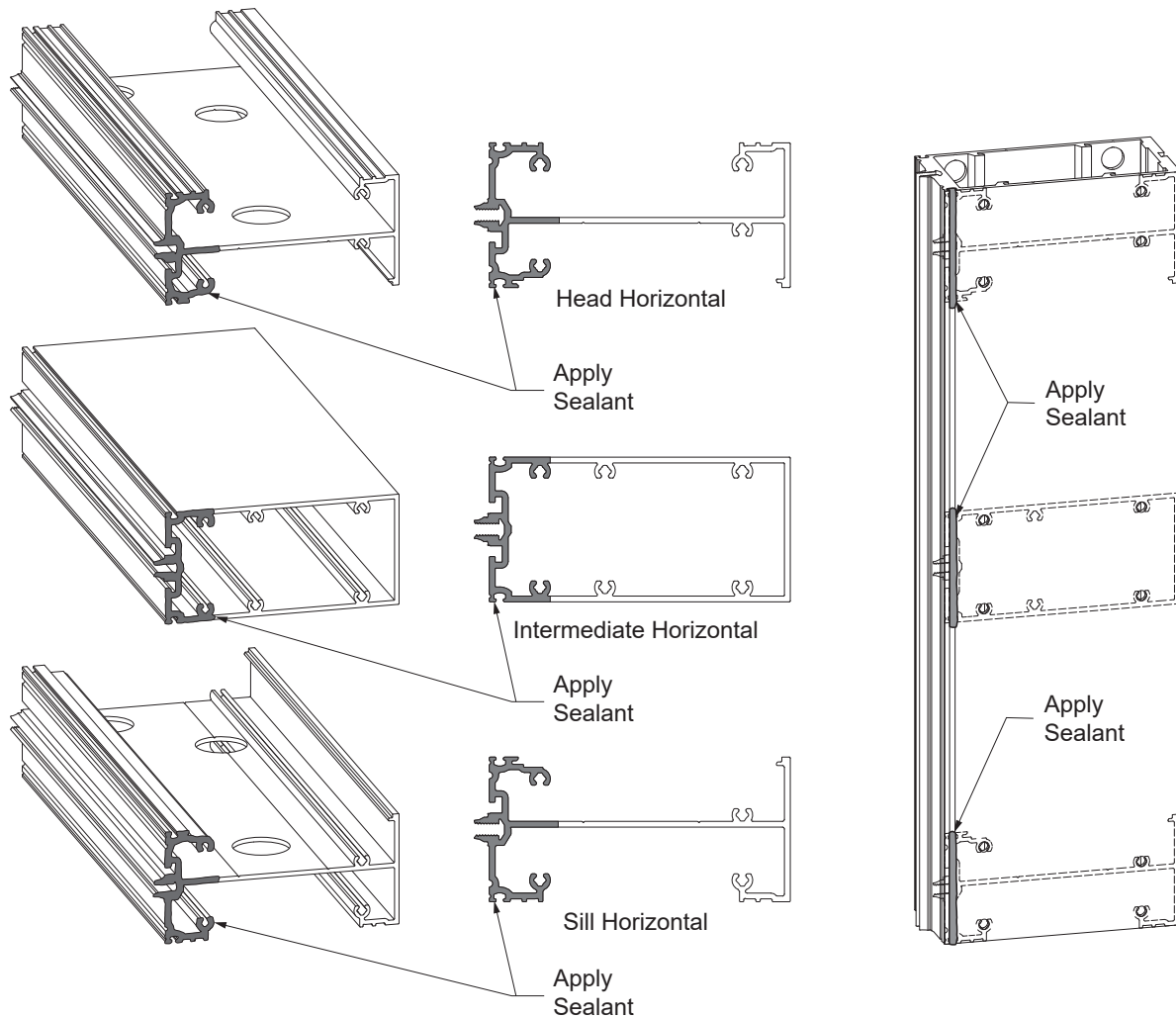
See **Detail 1-1**.

Head Horizontal: Seal at the front, extending back to 1st screw spline.

Intermediate Horizontals: Seal at the front of tube back to 1st screw spline.

Sill Horizontal: Seal at the front, extending back to 1st screw spline.

All Verticals: Fill the reglets with sealant where the head, horizontals, and sills meet the verticals.



Detail 1-1

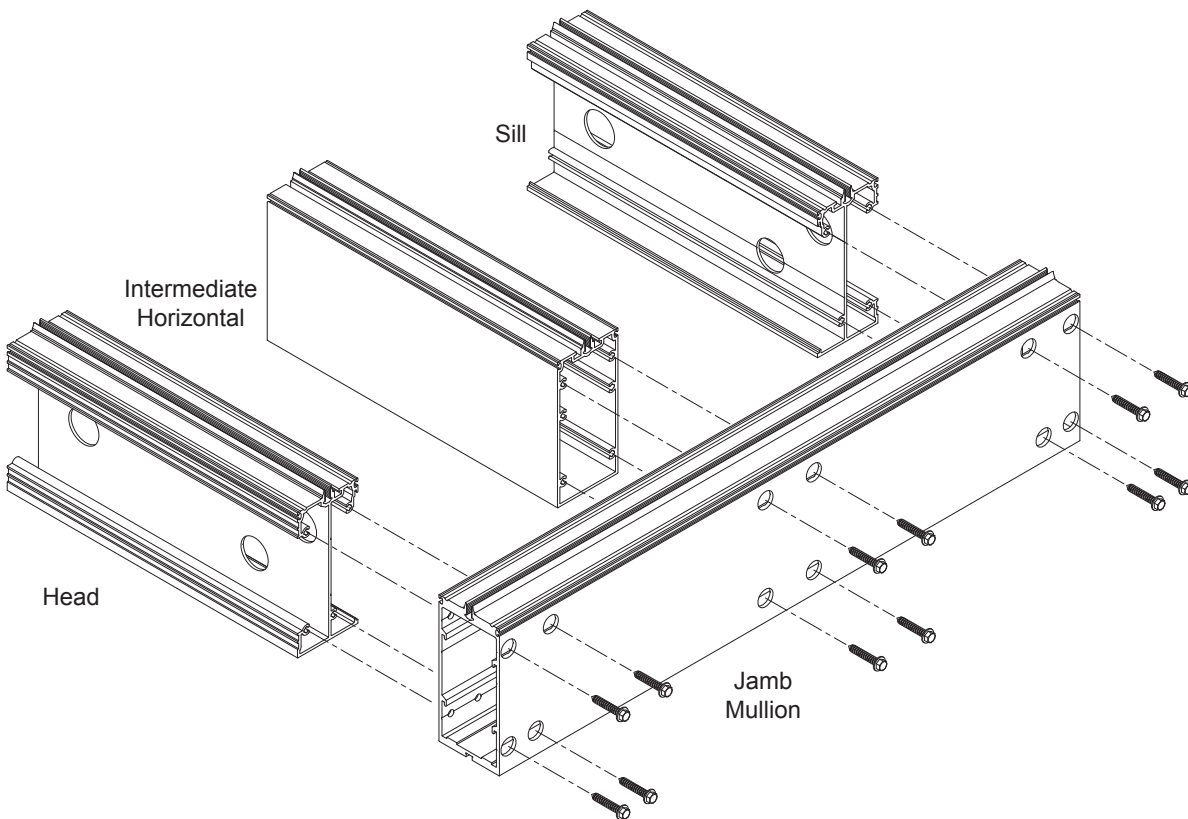
Unit WS1 shown,
Unit WS2 similar

STEP 1: WS1 UNIT ASSEMBLY**STEP 1b****ATTACH VERTICAL MULLIONS TO HORIZONTALS**

-Position horizontal members aligning splines with screw holes in the jamb mullion and assemble with HC-1220-SS fasteners as shown in **Detail 1-2**. Wipe off excess sealant.

Note: Take care to keep sealant from getting into gasket raceways, setting block chair pockets and around stems.

-Tool all excess sealant flush.



Detail 1-2

STEP 1: WS1 UNIT ASSEMBLY

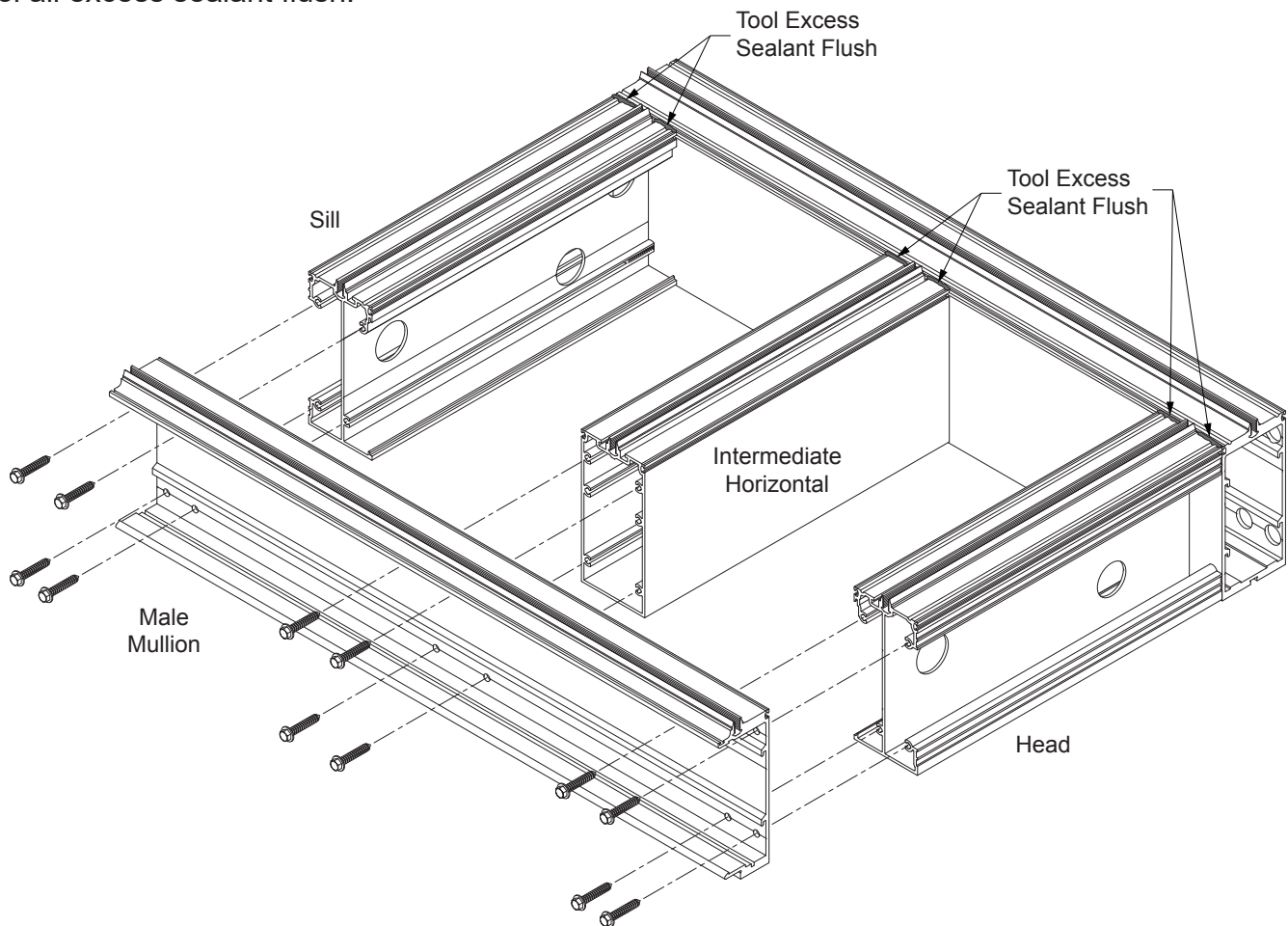
STEP 1b (Continued)

ATTACH VERTICAL MULLIONS TO HORIZONTALS

-Position horizontal members aligning splines with screw holes in the male mullion and assemble with HC-1220-SS fasteners as shown in **Detail 1-3**. Wipe off excess sealant.

Note: Take care to keep sealant from getting into gasket raceways, setting block chair pockets and around stems.

-Tool all excess sealant flush.

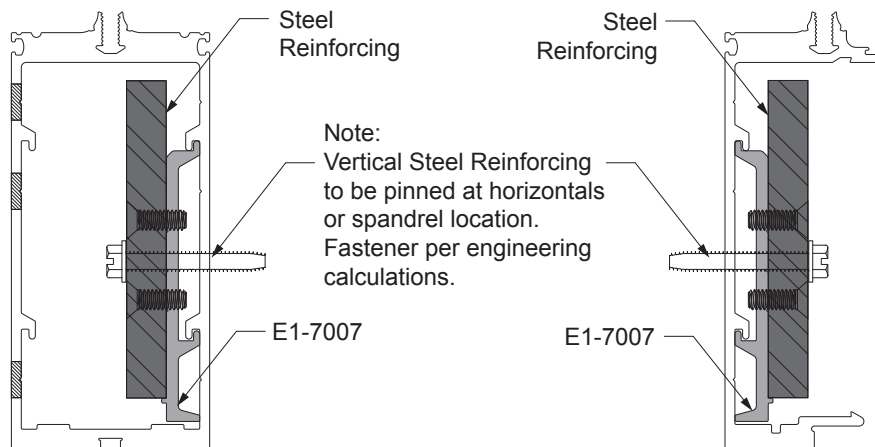


Detail 1-3

STEP 2: WS1 PARTS INSTALLATION**STEP 2a****INSTALL STEEL REINFORCING (If Required)**

-Install steel or aluminum reinforcing as required to the mullions per approved shop drawings.
Shim and fasten as required. Coordinate installation of steel with anchor lug backup.

See **Detail 1-4**.



Detail 1-4

STEP 3: WS1 GASKET INSTALLATION

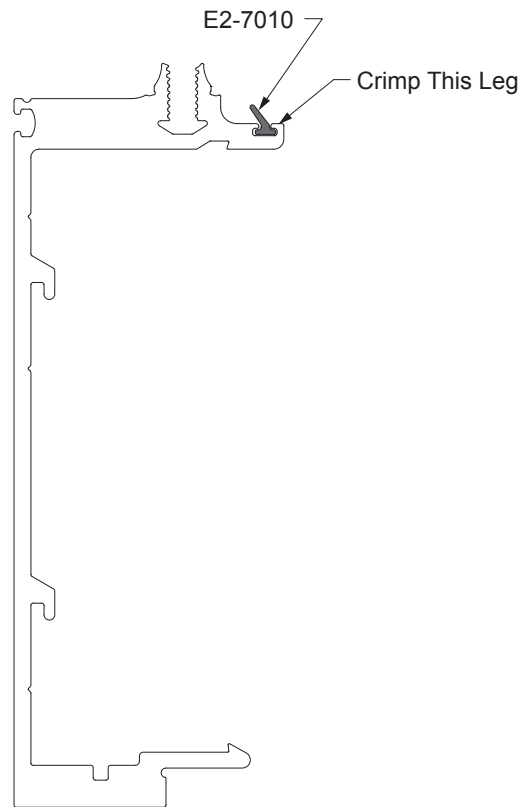
STEP 3a

INSTALL WEATHER SEAL GASKETS

-Slide in weather seal gasket at the outer leg gasket raceway of the male mullion half as shown in **Detail 1-5**.

-Crimp raceway at both ends of mullion by deforming the retaining leg of the gasket raceway in order to keep the gasket from sliding out during unit installation. Gaskets to run full length of mullion.

Note: Weather seal gasket is handed. Install gasket in the orientation as shown below.



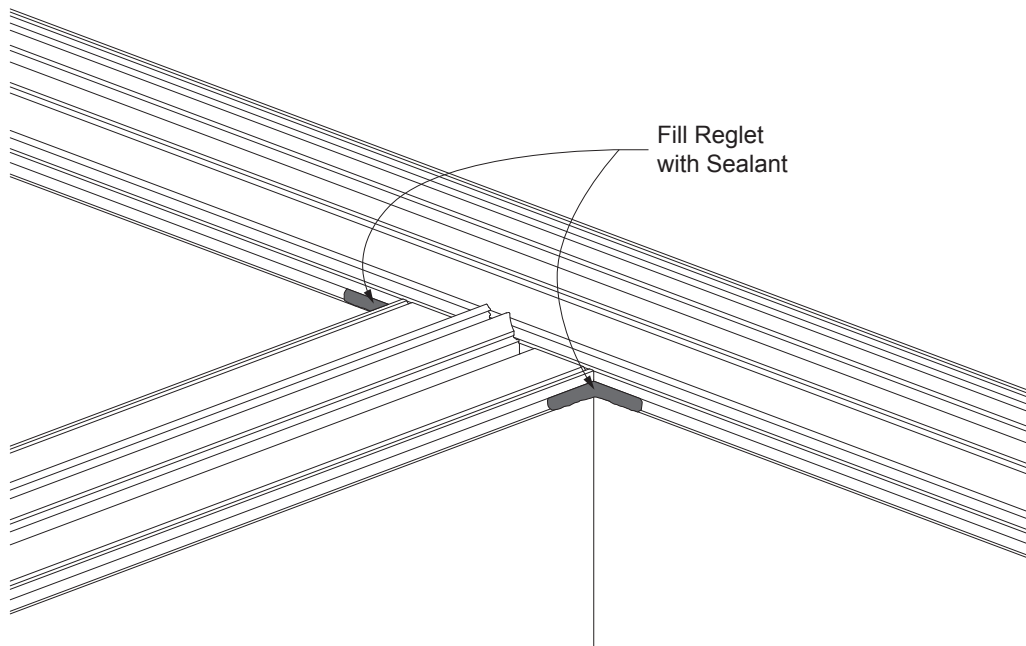
Detail 1-5

STEP 3: CC1 GASKET INSTALLATION**STEP 3b
SEAL HORIZONTAL INTERSECTIONS**

-Just prior to installing the E2-7001 interior gaskets, shoot silicone into the vertical glazing reglets at the corners where the horizontals meet the vertical mullion (including at the head and sill). Completely fill the reglet cavities 1/4" to 1/2" in both directions. Immediately install gaskets before sealant begins to cure.

See Detail **1-6**.

Note: Inside and outside corner mullions will not require this.

**Detail 1-6**

Unit WC1 shown,
Unit WC2, WC3,
& WC5 similar

STEP 3: WS1 GASKET INSTALLATION

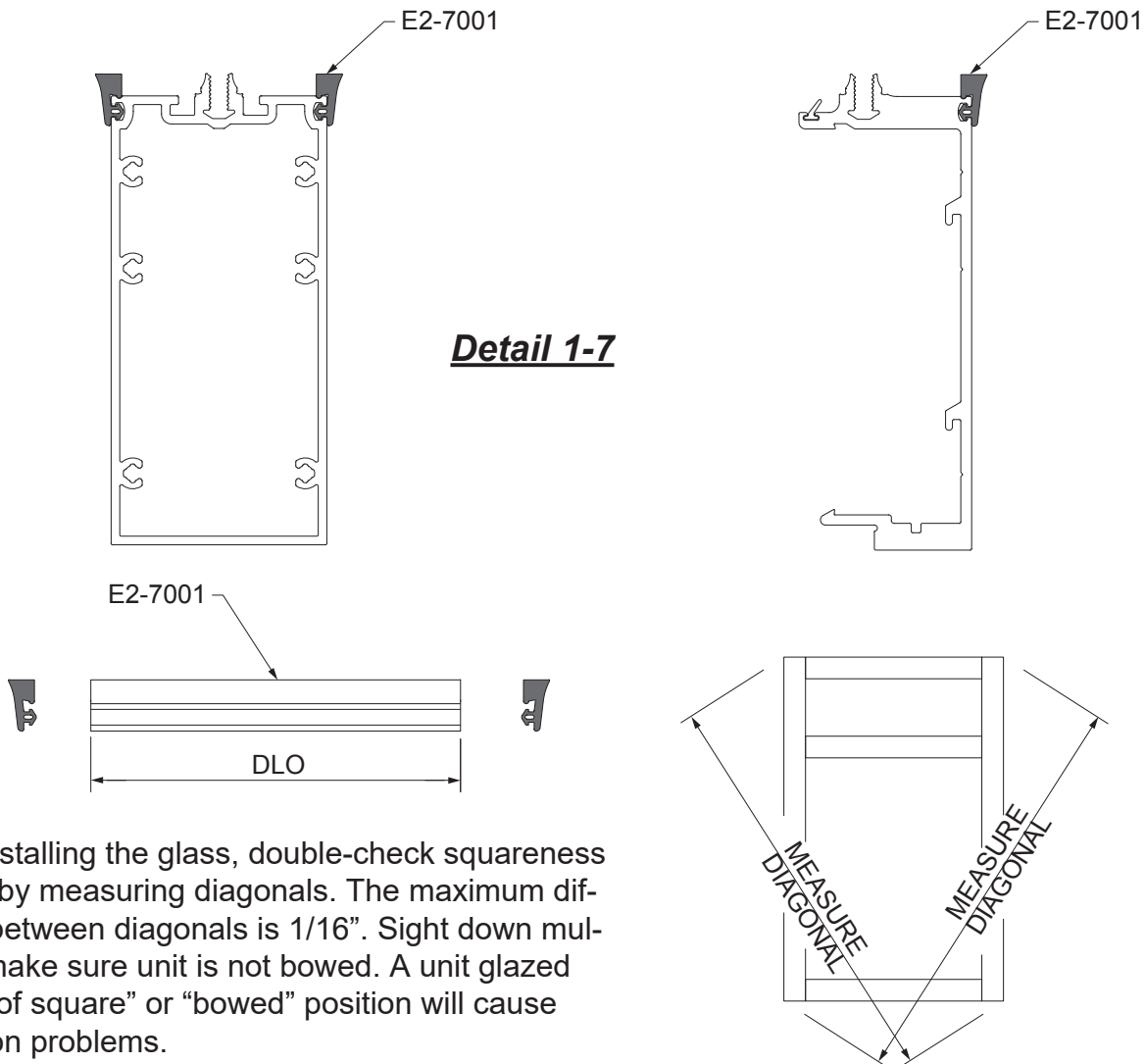
**STEP 3c
INSTALL INTERIOR GLAZING GASKETS**

-Secure the assembled unit to a flat surface with the exterior facing up. Table must be flat and level, and must support frame at all locations. A unit glazed with any mullion deflection will cause installation problems. Additional bracing under the glass may be required with large glass lites to prevent glass deflection.

-Clean and prepare glass and aluminum surfaces in strict conformity with sealant manufacturer's specifications and requirements.

-Install E2-7001 interior gasket. Both vertical and horizontal gaskets are to be cut to D.L.O. Vertical gaskets are to be installed first, followed by the horizontal gaskets.

See **Detail 1-7**.



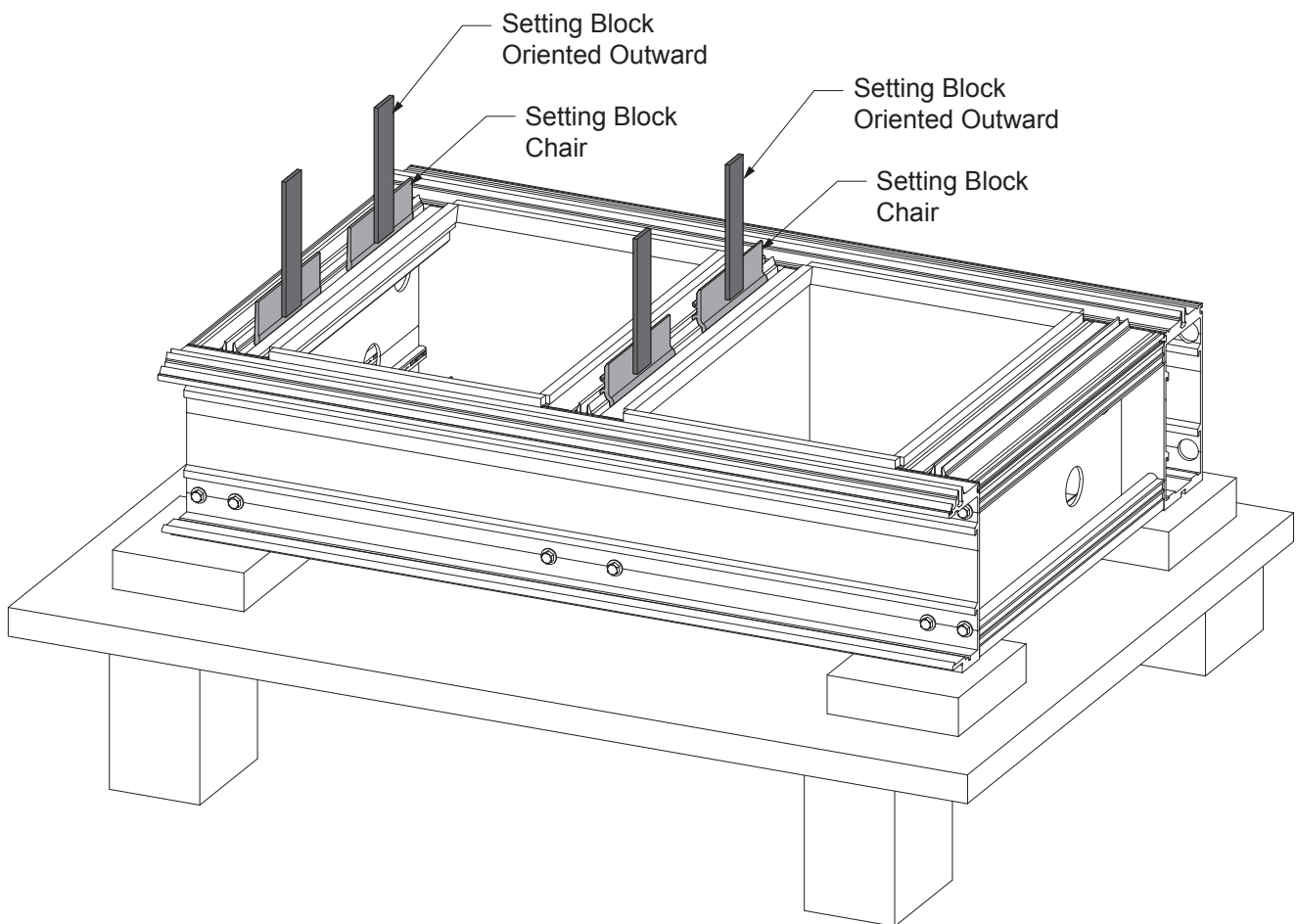
Note:
Before installing the glass, double-check squareness of frame by measuring diagonals. The maximum difference between diagonals is 1/16". Sight down mullions to make sure unit is not bowed. A unit glazed in a "out of square" or "bowed" position will cause installation problems.

STEP 4: WS1 GLASS INSTALLATION

STEP 4a

INSTALL SETTING BLOCK CHAIRS AND SETTING BLOCKS

-Apply setting block chairs and temporarily apply setting blocks oriented outward on setting block chairs placed at 1/4 points of horizontals as shown in **Detail 1-8**.



Detail 1-8

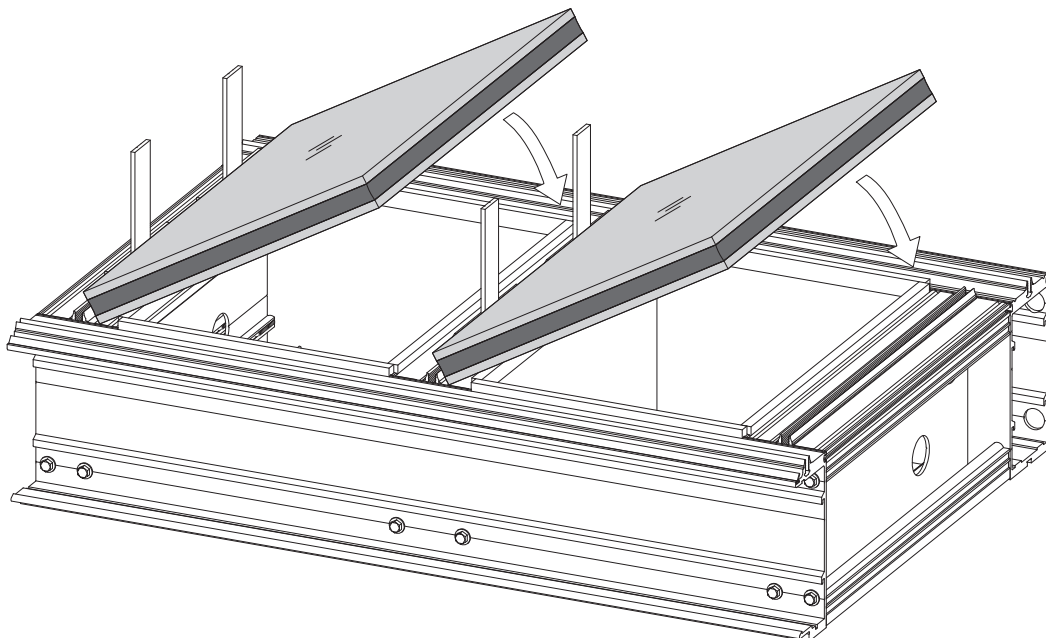
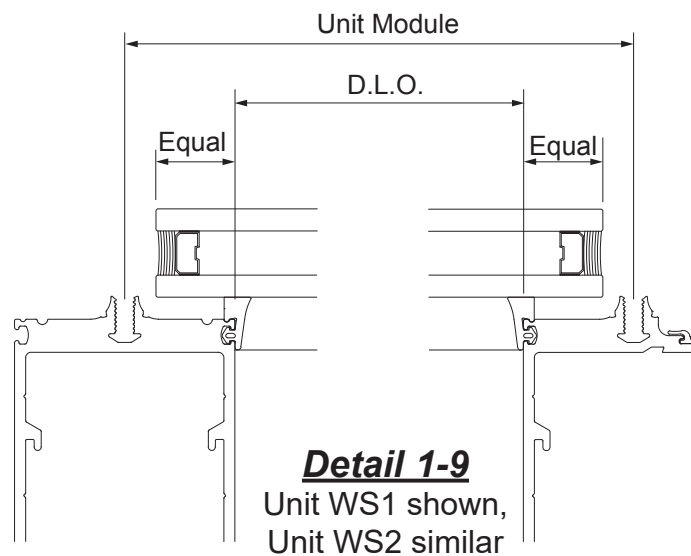
Unit WS1 shown,
Unit WS2 similar

STEP 4: WS1 GLASS INSTALLATION

STEP 4b INSTALL GLASS

- Set the glass centered laterally in the D.L.O.
- Install glass by placing bottom edge against both setting blocks and lower into place.
- When glass is properly positioned, remove setting blocks. Take caution to not move glass during setting block removal.
- Reference shop details and glazing details for non typical conditions.

See **Detail 1-9**.

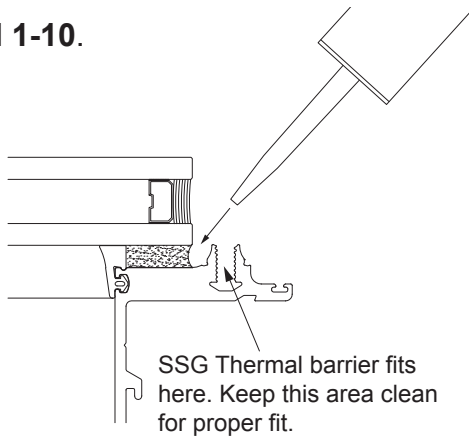


STEP 4: WS1 GLASS INSTALLATION

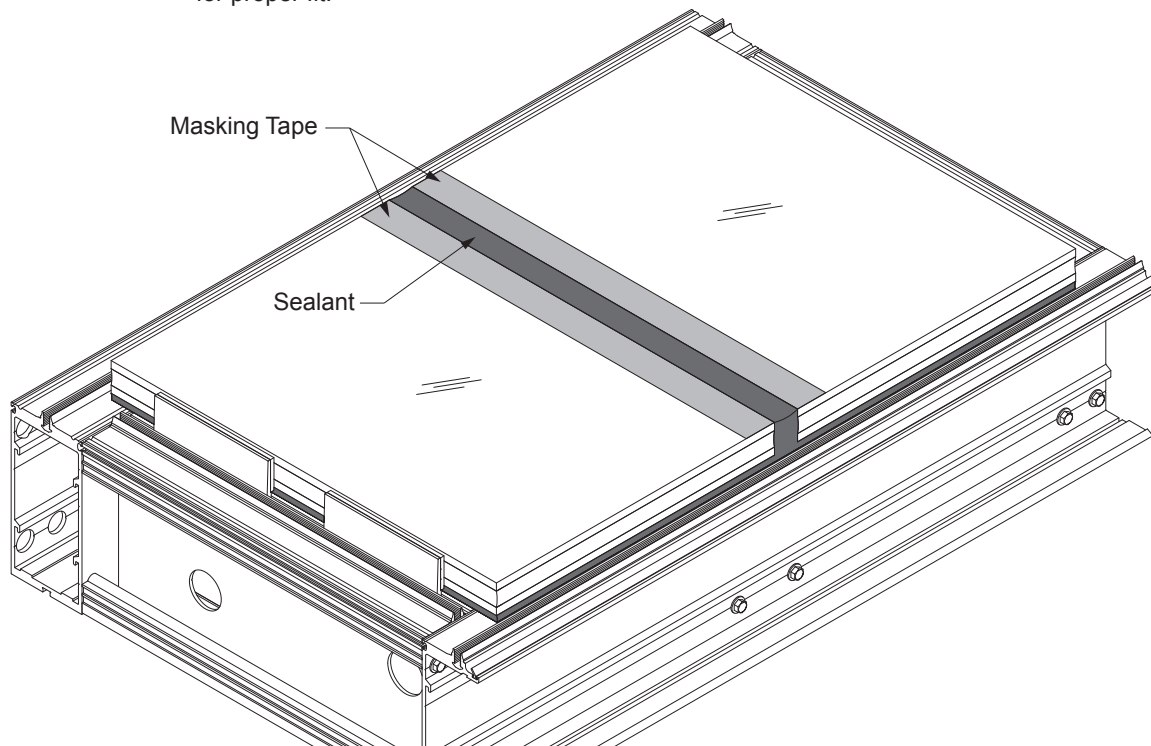
**STEP 4b (Continued)
INSTALL GLASS**

- Ensure that the glass and metal surfaces are clean and prepared per sealant manufacturer's specifications and recommendations.
- Apply structural silicone sealant completely filling the space between the glass and the mullion. (Slide setting block chairs out of the way temporarily while sealing units.)
- Tool sealant. Clean out any excess sealant in horizontal groove and engagement areas.
- Also fill any horizontal SSG joints with sealant. Apply masking tape to the face of the glass at the horizontal joint between the glass lites. Insert a backer rod into the joint between the lites. Apply and tool sealant to fill the joint. Immediately remove the masking tape. Do not allow the sealant to skin over.

See **Detail 1-10**.



Detail 1-10
Unit WS1 shown,
Unit WS2 similar

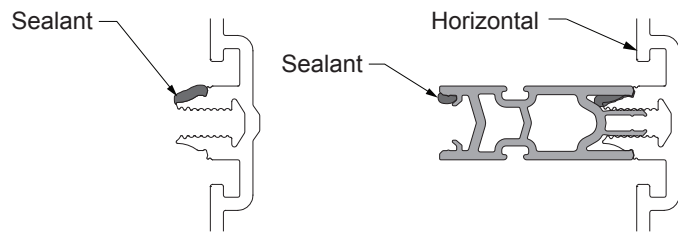


STEP 5: WS1 THERMAL BARRIER & COVER INSTALLATION

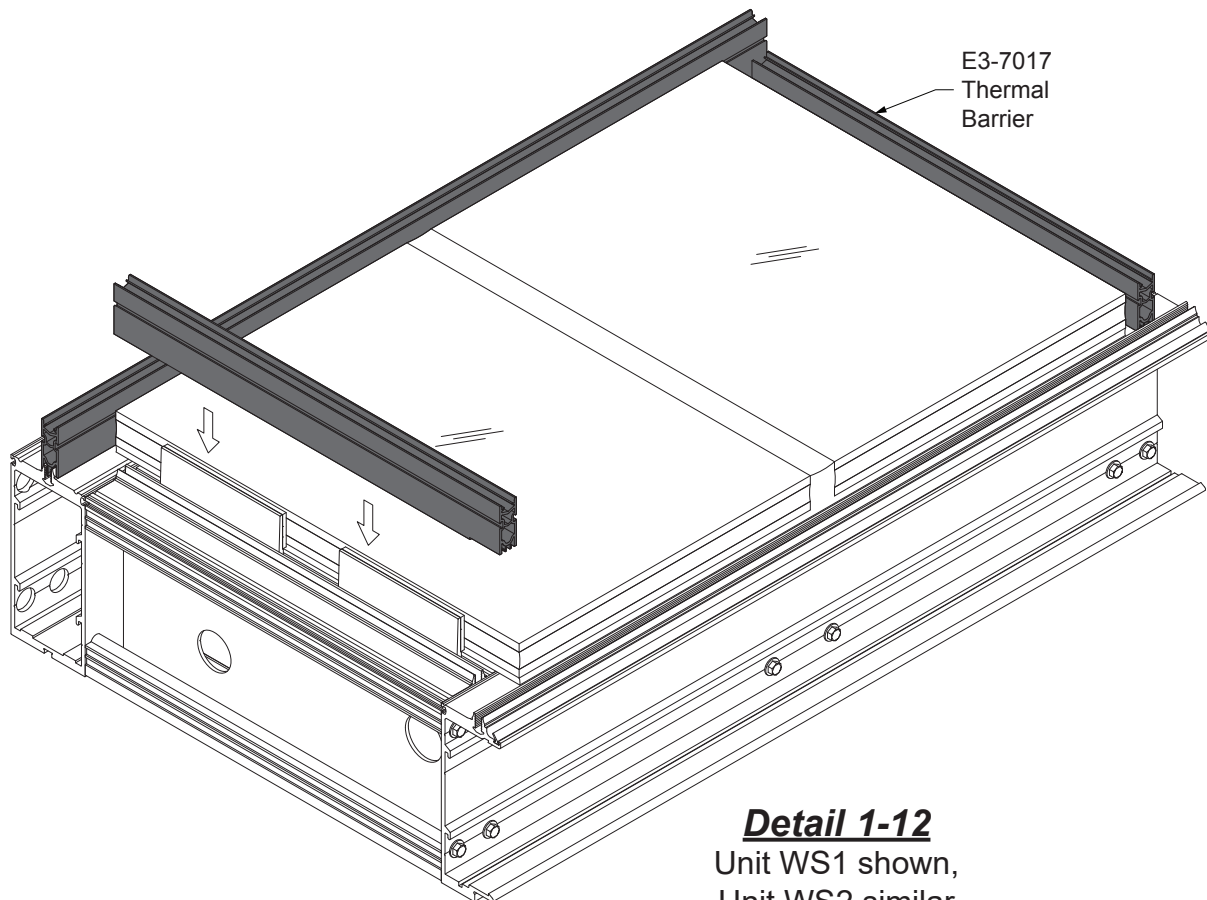
STEP 5a

INSTALL CAPTURED THERMAL BARRIERS

- Slide setting block chairs back into proper position (1/4 points or as specified in approved shop drawings) and insert setting blocks.
- Horizontal thermal barriers (E3-7017) will require a continuous cap bead the length of the horizontal as shown in **Detail 1-11** prior to installation.
- Before sealant cures, snap in thermal barriers as shown in **Detail 1-12**.



Detail 1-11



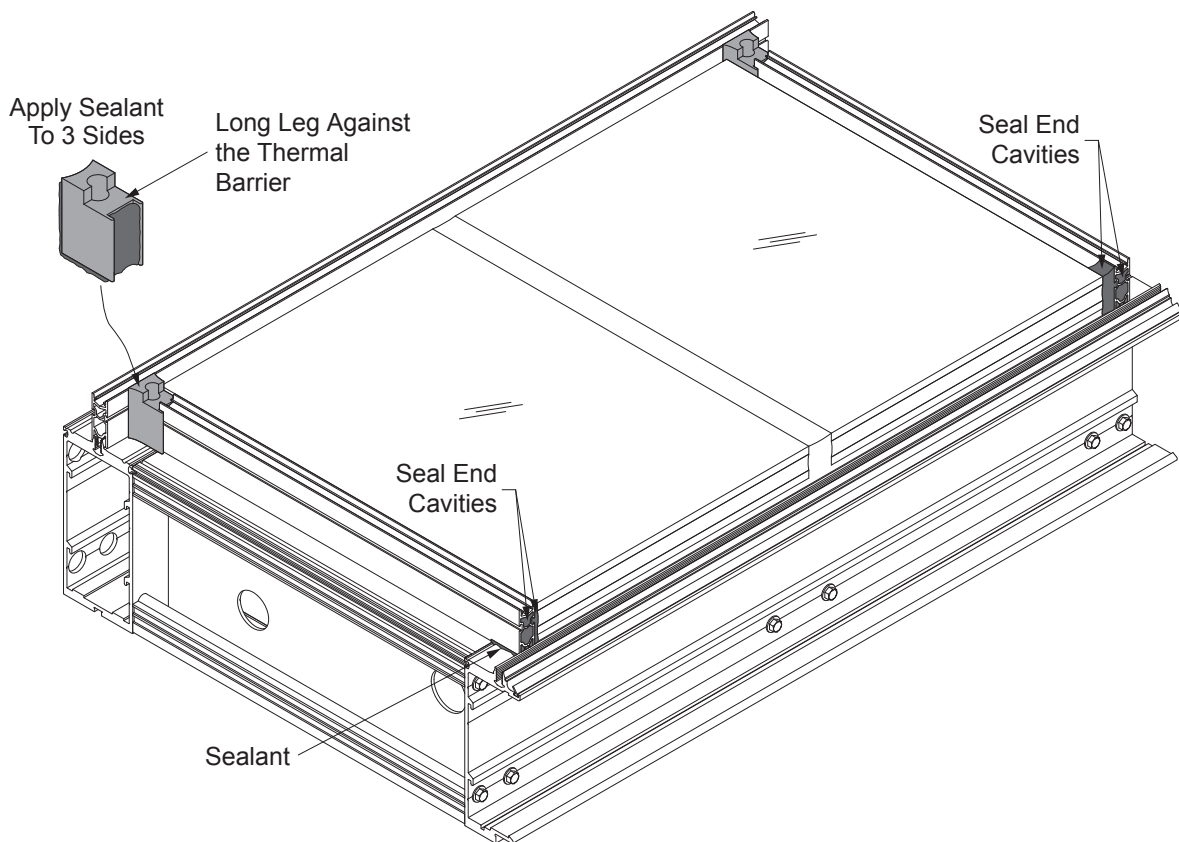
Detail 1-12

Unit WS1 shown,
Unit WS2 similar

STEP 5: WS1 THERMAL BARRIER & COVER INSTALLATION**STEP 5b
INSTALL JOINT PLUGS**

- Joint plugs are to be installed at the captured head and sill at the jamb mullion.
- Clean the area around the thermal barrier ends with an approved cleaner.
- Apply and tool sealant to the void where the joint plug will be installed, including at the thermal barrier ends.
- Apply sealant to the three contact sides of the joint plug.
- Install joint plugs as shown with the long leg of the joint plug against the vertical thermal barrier.
- Press the joint plug firmly against the face of the mullion.
- Tool the sealant to ensure a complete seal.
- At the SSG mullion, seal the end cavities at the thermal barrier and also in between the thermal barrier and the glass.

See **Detail 1-13**.



Detail 1-13

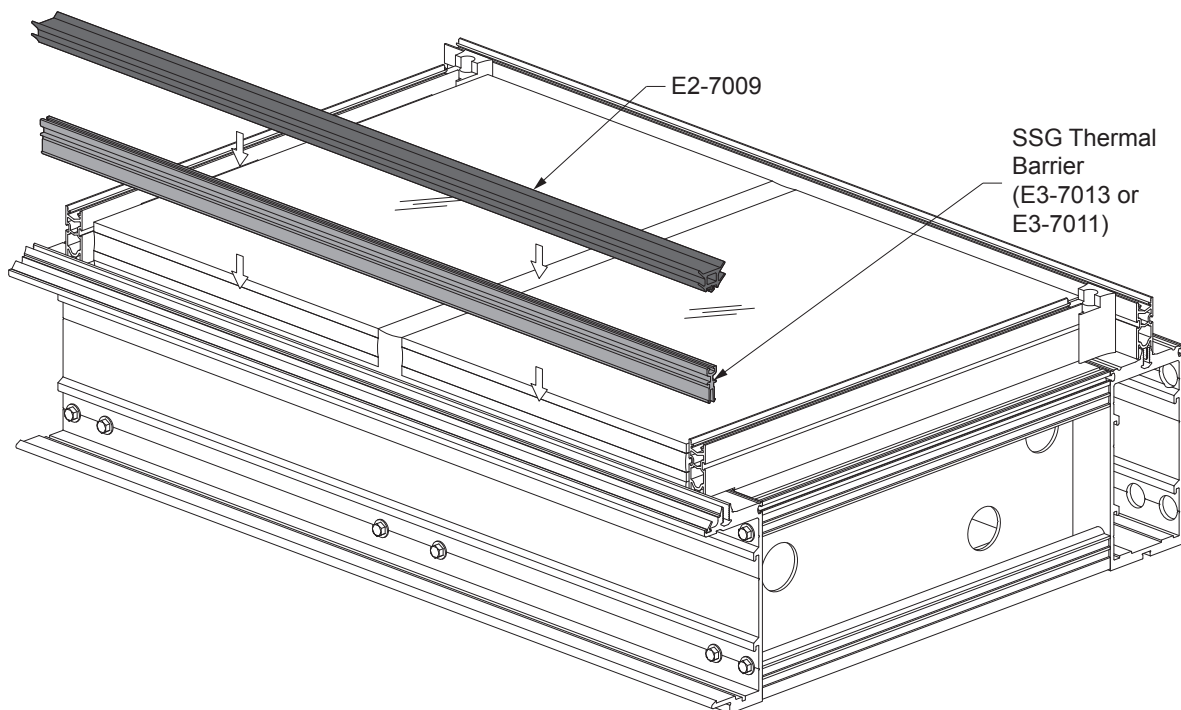
STEP 5: WS1 THERMAL BARRIER & COVER INSTALLATION

STEP 5c

INSTALL SSG THERMAL BARRIER & GASKET

- Snap in SSG Thermal Barrier into the jamb raceway.
- Push in the SSG Wiper Gasket E2-7009 into the SSG thermal barrier. Align according to unit module.
- Seal the cavity between the SSG thermal barrier and the head and sill thermal barrier.

See **Detail 1-14**.



Detail 1-14

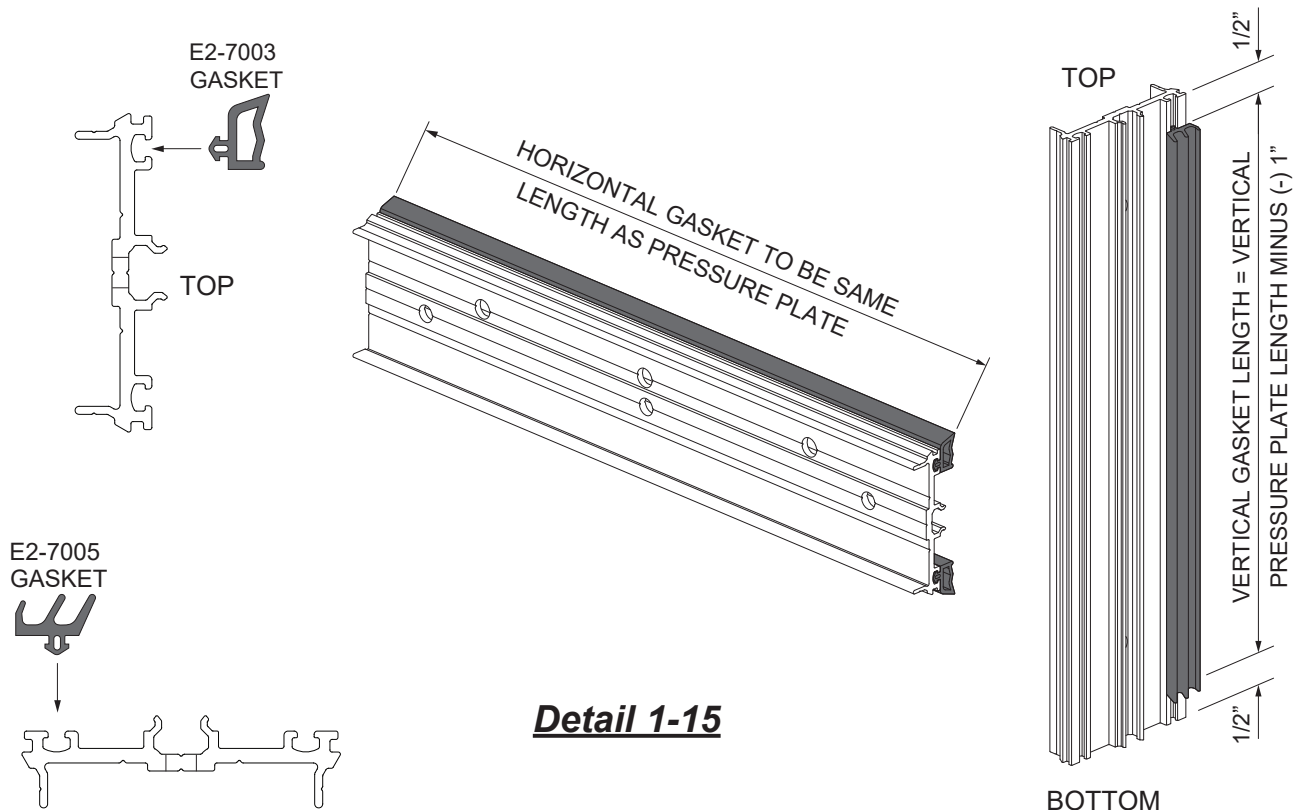
Unit WS1 shown,
Unit WS2 similar

STEP 5: WS1 THERMAL BARRIER & COVER INSTALLATION

**STEP 5d
PRESSURE PLATE ASSEMBLY**

- Gasket material, gasket grooves and pockets should be clean.
- Gaskets can become somewhat deformed during storage in cartons. They should be removed from cartons several hours prior to glazing and laid flat or hung to allow recovery of correct shape.
- Horizontal gaskets are to be the length of their corresponding pressure plates. Gaskets should never be “stretched to fit.”
- Vertical gasket is to be the length of the pressure plate minus (-) 1”, centered on the pressure plate. This will allow clearance for the perimeter pocket fillers at the head and sill.
- Horizontal pressure plate length = D.L.O. - 1/4”.
- Vertical pressure plate = Frame Height - 1/8”.
- Push in E2-7003 gasket into horizontal pressure plate reglets. Seal or crimp in place.
- Push in E2-7005 gasket into vertical pressure plate reglets.
- Gaskets should be flush with edge of pressure plate. Trim off any excess gasket to prevent interference with the end cap.

See **Detail 1-15**.

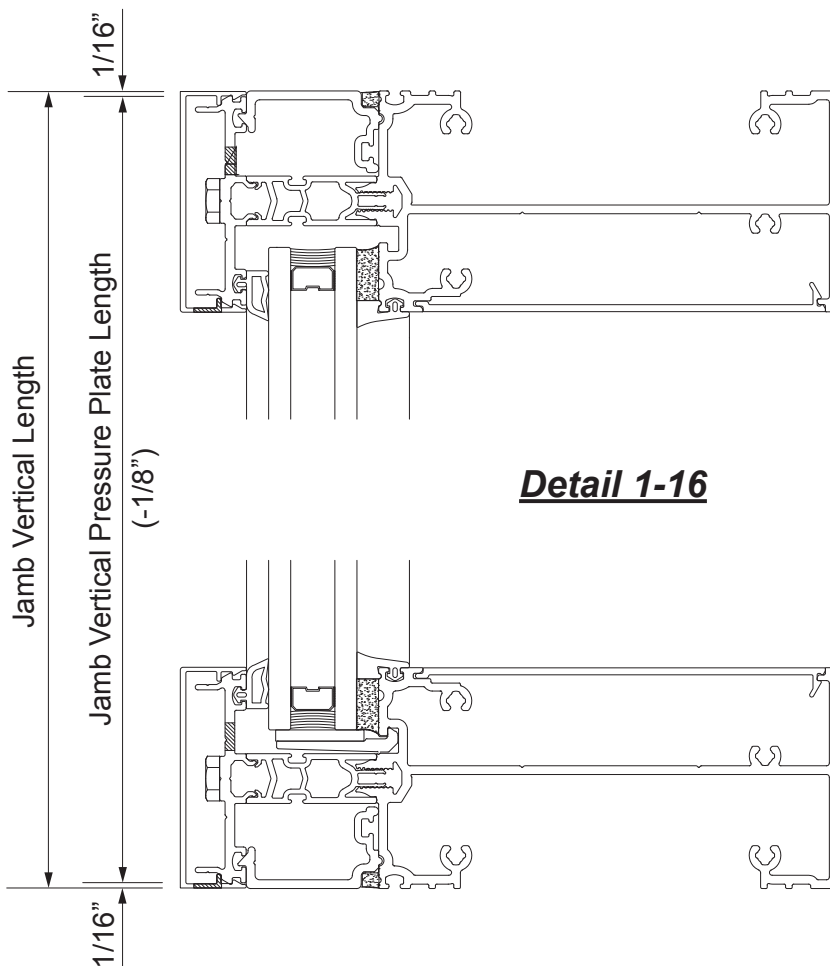


STEP 5: WS1 THERMAL BARRIER & COVER INSTALLATION

**STEP 5e
INSTALL VERTICAL PRESSURE PLATES**

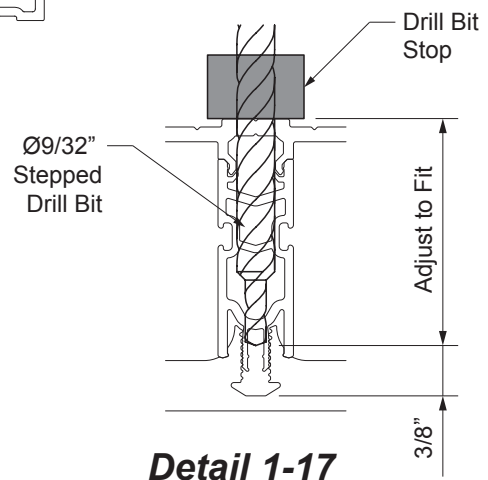
-Properly index all jamb pressure plates at exterior face of jamb.

See **Detail 1-16**.



-If the pressure plates are already pre-drilled, drill $\text{Ø}9/32''$ clear holes into the thermal barriers through the existing holes on the pressure plates. Use a stepped drill bit and bit stop to ensure the end of the bit doesn't penetrate within $3/8''$ from the mullion itself.

-If the pressure plates are not already pre-drilled, drill $\text{Ø}9/32''$ clear holes into the pressure plates and thermal barriers, at 9" maximum on center, using a stepped drill bit and bit stop.

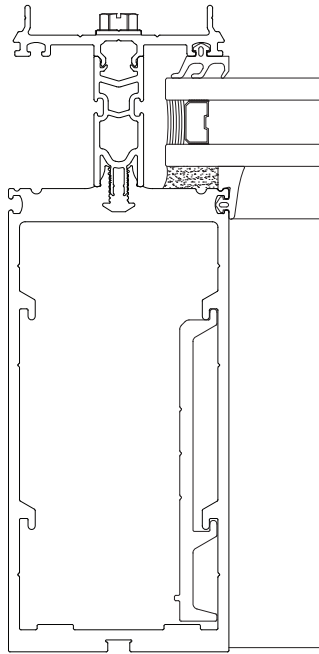


See **Detail 1-17**.

STEP 5: WS1 THERMAL BARRIER & COVER INSTALLATION**STEP 5f
INSTALL JAMB PRESSURE PLATES**

- Snap in pressure plates into the thermal barriers.
- Attach the pressure plates using HM-2532-SS fasteners.

See **Detail 1-18**.

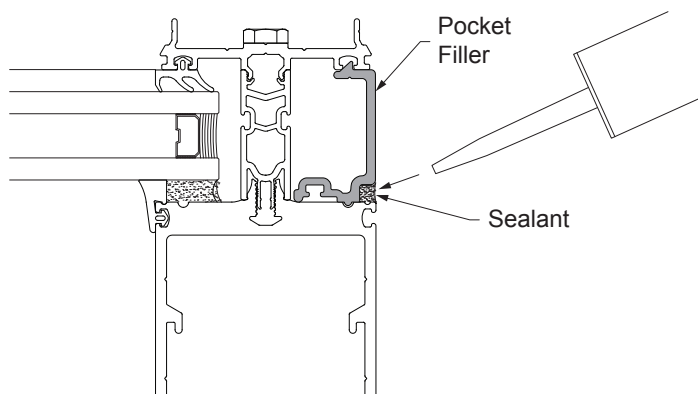


Detail 1-18

**STEP 5g
INSTALL POCKET FILLER**

- At jamb locations, cut pocket filler to vertical mullion length.
- Snap in pocket filler.
- Apply sealant along interface between pocket filler and mullion.

See **Detail 1-19**.



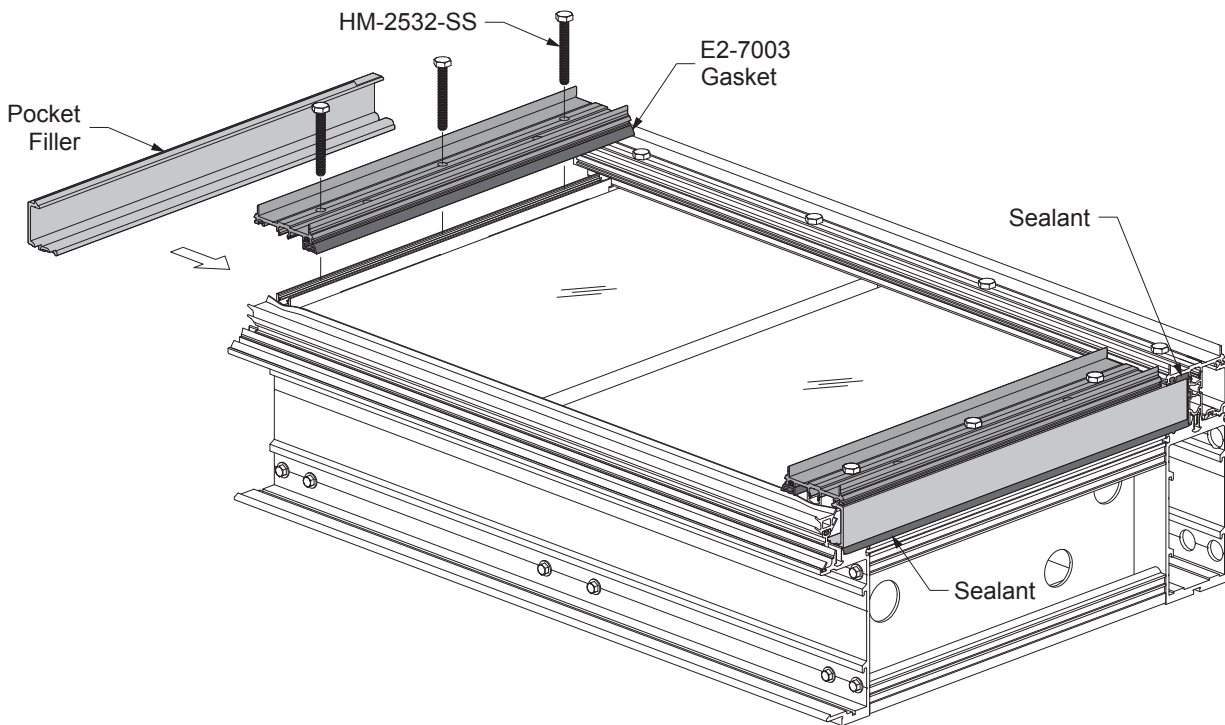
Detail 1-19

STEP 5: WS1 THERMAL BARRIER & COVER INSTALLATION

STEP 5h

INSTALL HEAD AND SILL PRESSURE PLATES

- Properly index all head and sill pressure plates at exterior face of the head and sill.
- If the pressure plates are already pre-drilled, drill Ø9/32" clear holes into the thermal barriers through the existing holes on the pressure plates, using a stepped drill bit as indicated on **Page 17, Detail 1-17**.
- Otherwise, clear drill Ø9/32" holes into the pressure plates and thermal barriers at 9" maximum on center, unless otherwise noted, using a stepped drill bit.
- At all intermediate horizontals, apply sealant to snap area to maintain a watertight barrier.
- Using HM-2532-SS fasteners, install horizontal pressure plate, centered on the D.L.O.
- Snap in the pocket filler into the head and sill. Apply and tool sealant into the cavities as shown in **Detail 1-20**.

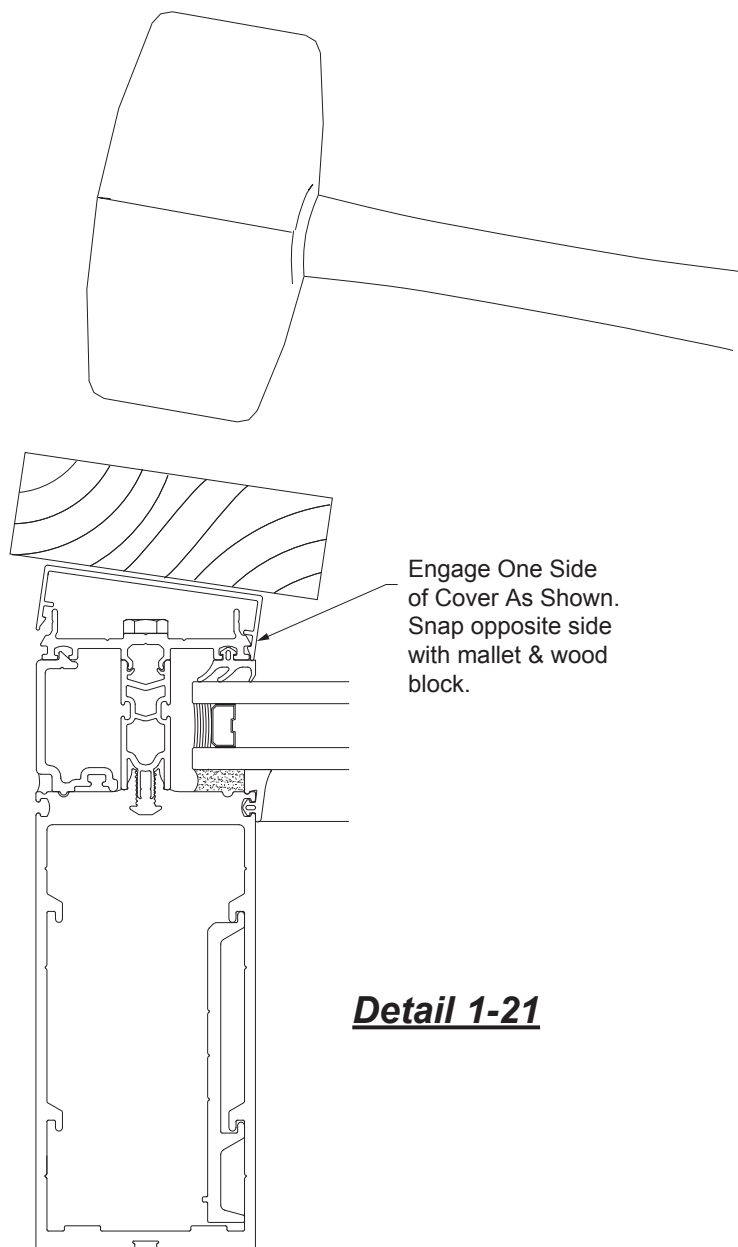


Detail 1-20

STEP 5: WS1 THERMAL BARRIER & COVER INSTALLATION**STEP 5j
INSTALL FACE COVERS**

- Install E9-1206 vertical covers first.
- Care must be taken to avoid damage to covers during installation. Use a block of wood along with a hammer or mallet to seat the cover.

See **Detail 1-21**.

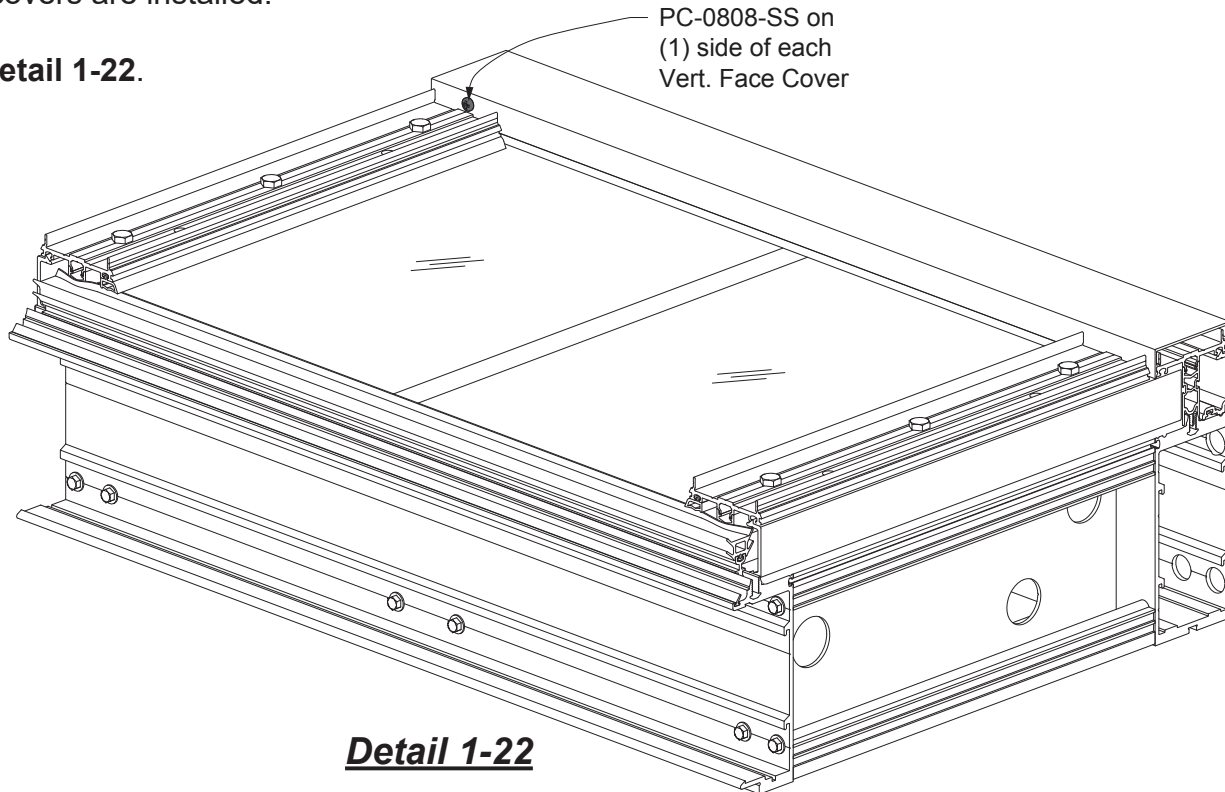


STEP 5: WS1 THERMAL BARRIER & COVER INSTALLATION

STEP 5j (Continued) INSTALL FACE COVERS

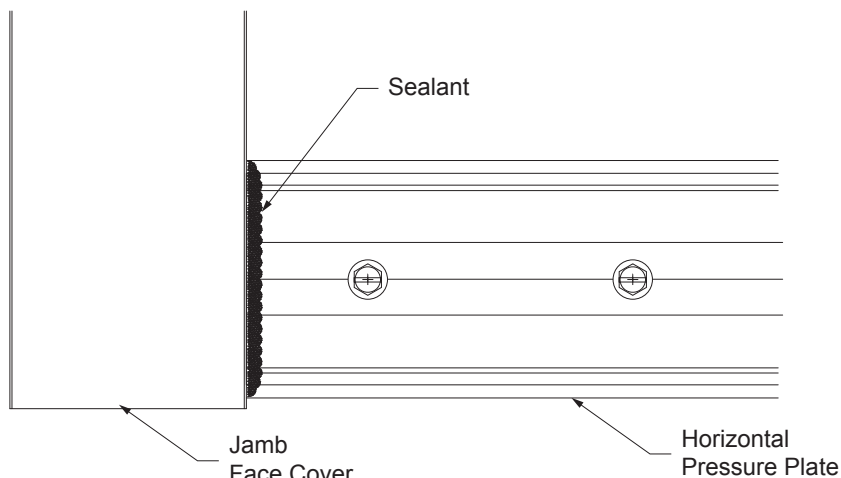
-Secure the the jamb face cover to the pressure plates by installing a PC-0808-SS fastener on one side of the cover at the captured sill. These fasteners will be concealed once the horizontal face covers are installed.

See **Detail 1-22**.



-Clean joint between end of horizontal pressure plate and vertical face cover per sealant manufacturer's recommendations. Apply and tool sealant.

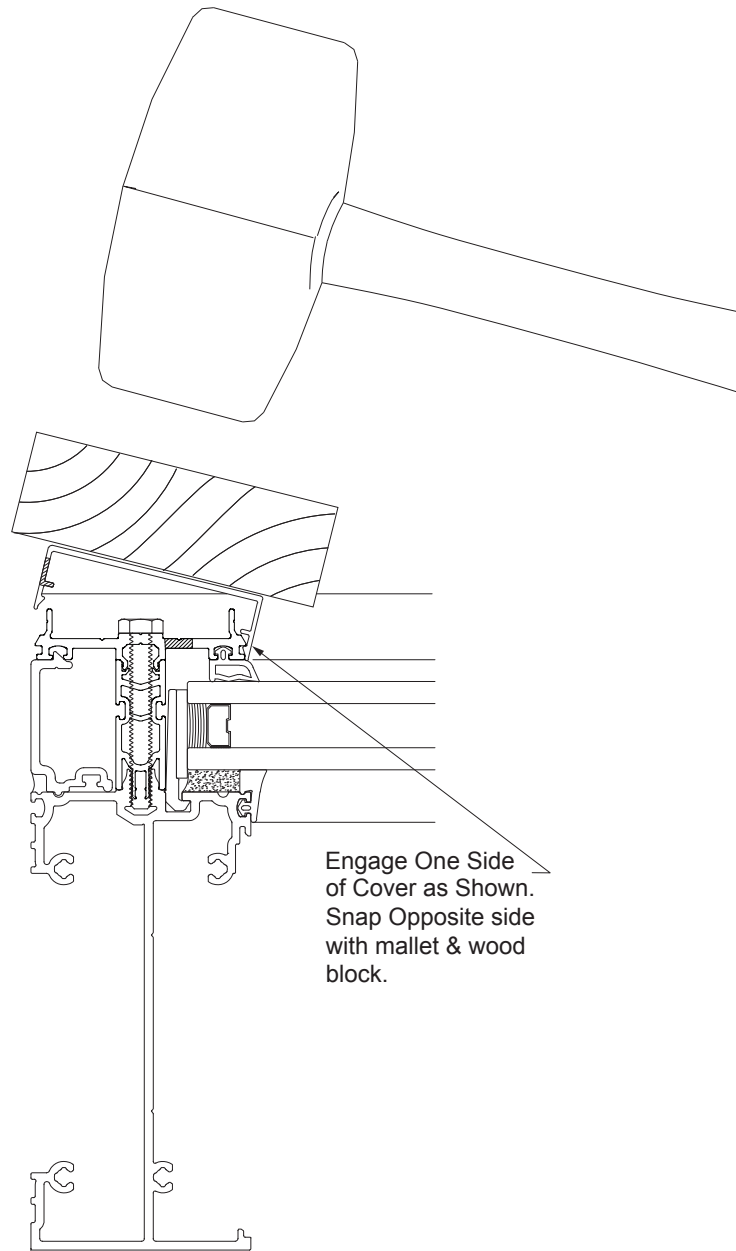
See **Detail 1-23**.



STEP 5: WS1 THERMAL BARRIER & COVER INSTALLATION**STEP 5j (Continued)
INSTALL FACE COVERS**

- Horizontal cover length = D.L.O. + 1-1/16"
- Care must be taken to avoid damage to covers during installation. Use a block of wood along with a hammer or mallet to seat the cover.

See **Detail 1-24**.



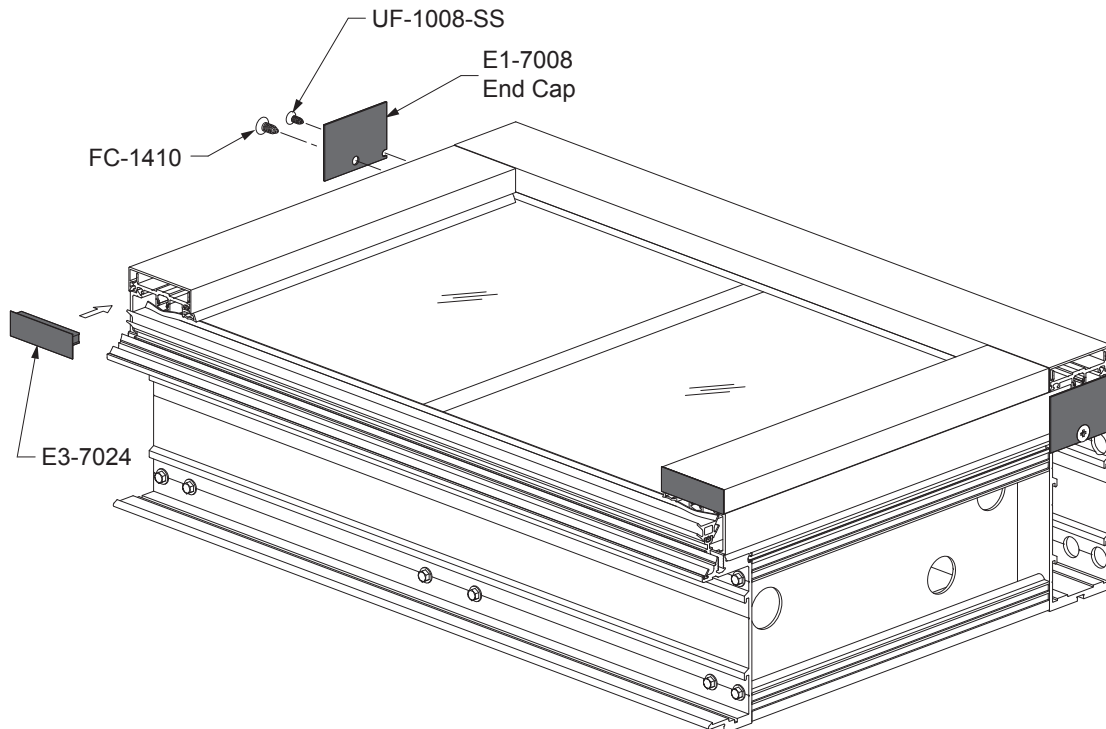
Detail 1-24

STEP 5: WS1 THERMAL BARRIER & COVER INSTALLATION

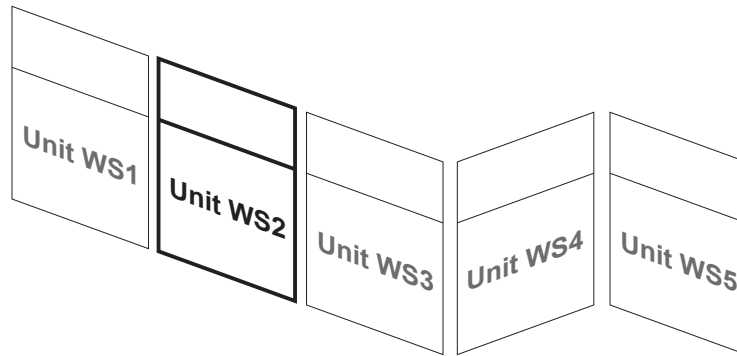
STEP 5k INSTALL END CAPS

- After glass installation, prepare mullion end caps, E1-7008, for installation at the top and bottom of the mullions with FC-1410 fastener at the tongue adaptor, and UF-1008-SS at the mullion glazing reglet.
- Clean all contact surfaces as recommended by sealant manufacturer.
- “Butter” ends of verticals with sealant prior to installing end cap E1-7008.
- Apply sealant into the screw raceway and along the front edge of the mullion at each end.
- Fasten and seal all screw heads with sealant.
- Affix E3-7024 end caps to the exposed ends of the head and sill face cover as shown below.
- Apply a small amount of silicone sealant between the pressure plate and face cover, and slide in the end cap. Wipe excess sealant clean.

See **Detail 1-25**.



Detail 1-25

WS2 TABLE OF CONTENTS

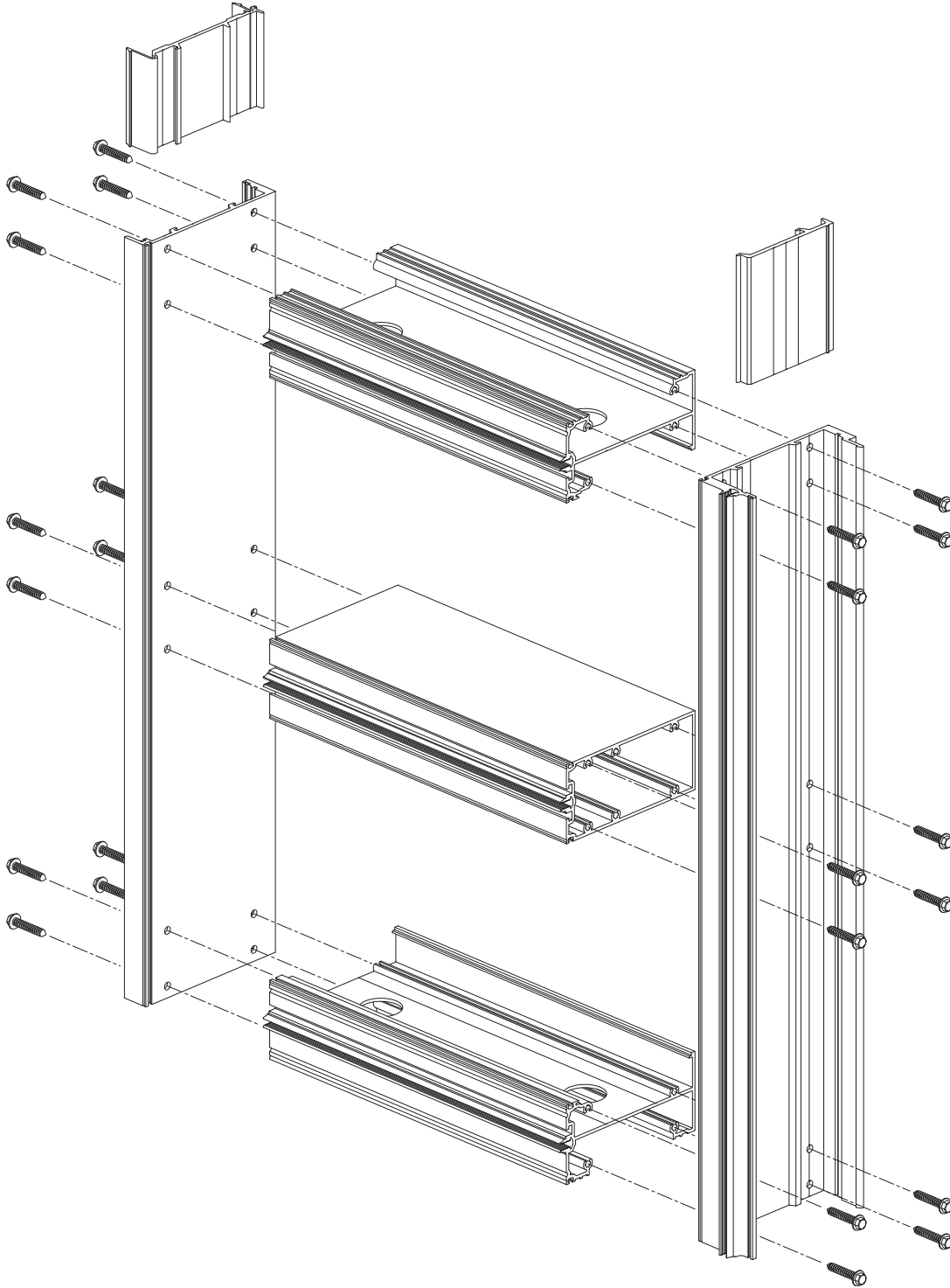
The following is intended for use as a guide for assembly of **Unit WS2** of the **YUW 750 XT 4-Sided Captured Window Wall System**. It is organized into five steps which will take you from assembly of parts to completed units.

Step 1: WS2 Unit Assembly	Pages 25 to 27
Step 2: WS2 Parts Installation	Pages 28 & 29
Step 3: WS2 Gasket Installation	Page 30
Step 4: WS2 Glass Installation	Page 31
Step 5: WS2 Thermal Barrier & Cover Installation.....	Pages 31 to 33

Care should be taken to ensure you have inventory of all items required to complete this assembly. We recommend you refer to the parts list (pages iv - vi) as a reference and compare it to your specific project to ensure you have all the correct parts and tools required to complete the assembly.

STEP 1: WS2 UNIT ASSEMBLY

MAJOR COMPONENTS



STEP 1: WS2 UNIT ASSEMBLY**STEP 1a****APPLY SEALANT TO HORIZONTALS**

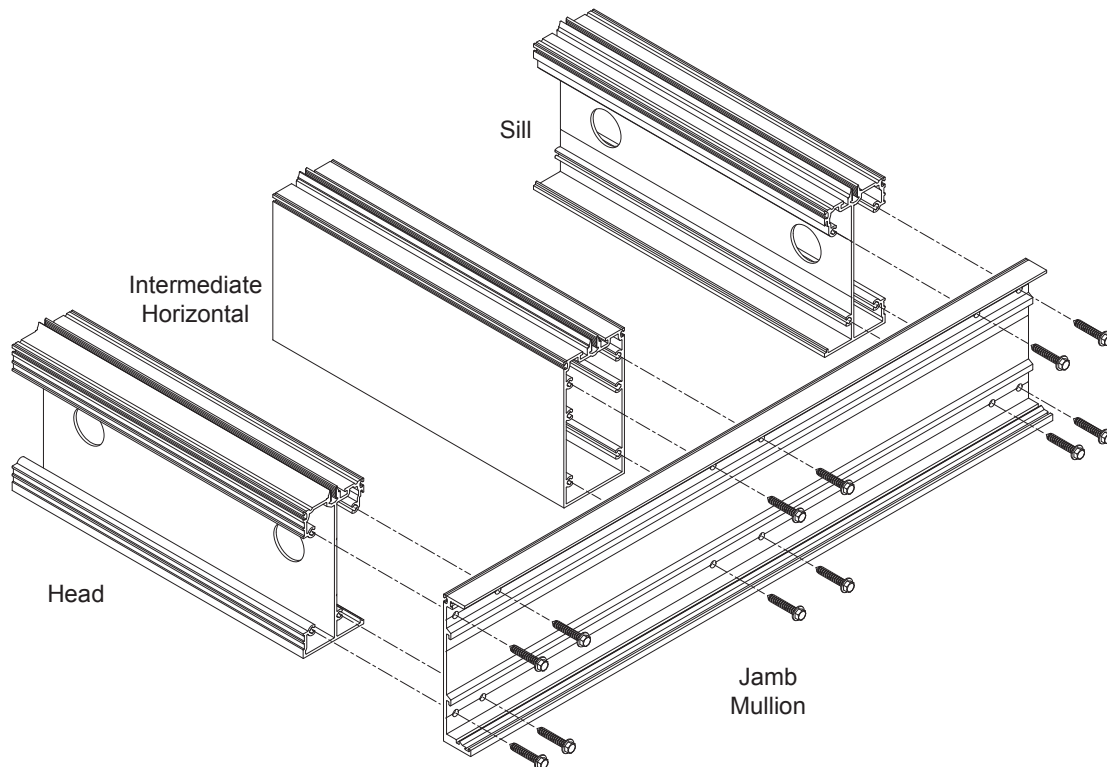
-Refer to **WS1 Unit Assembly, Step 1a** on **Page 3**.

STEP 1b**ATTACH VERTICAL MULLIONS TO HORIZONTALS**

-Position horizontal members aligning splines with screw holes in the female mullion and assemble with HC-1220-SS fasteners as shown in **Detail 2-1**. Wipe off excess sealant.

Note: Take care to keep sealant from getting into gasket raceways, setting block chair pockets and around stems.

-Tool all excess sealant flush.



Detail 2-1

STEP 1: WS2 UNIT ASSEMBLY

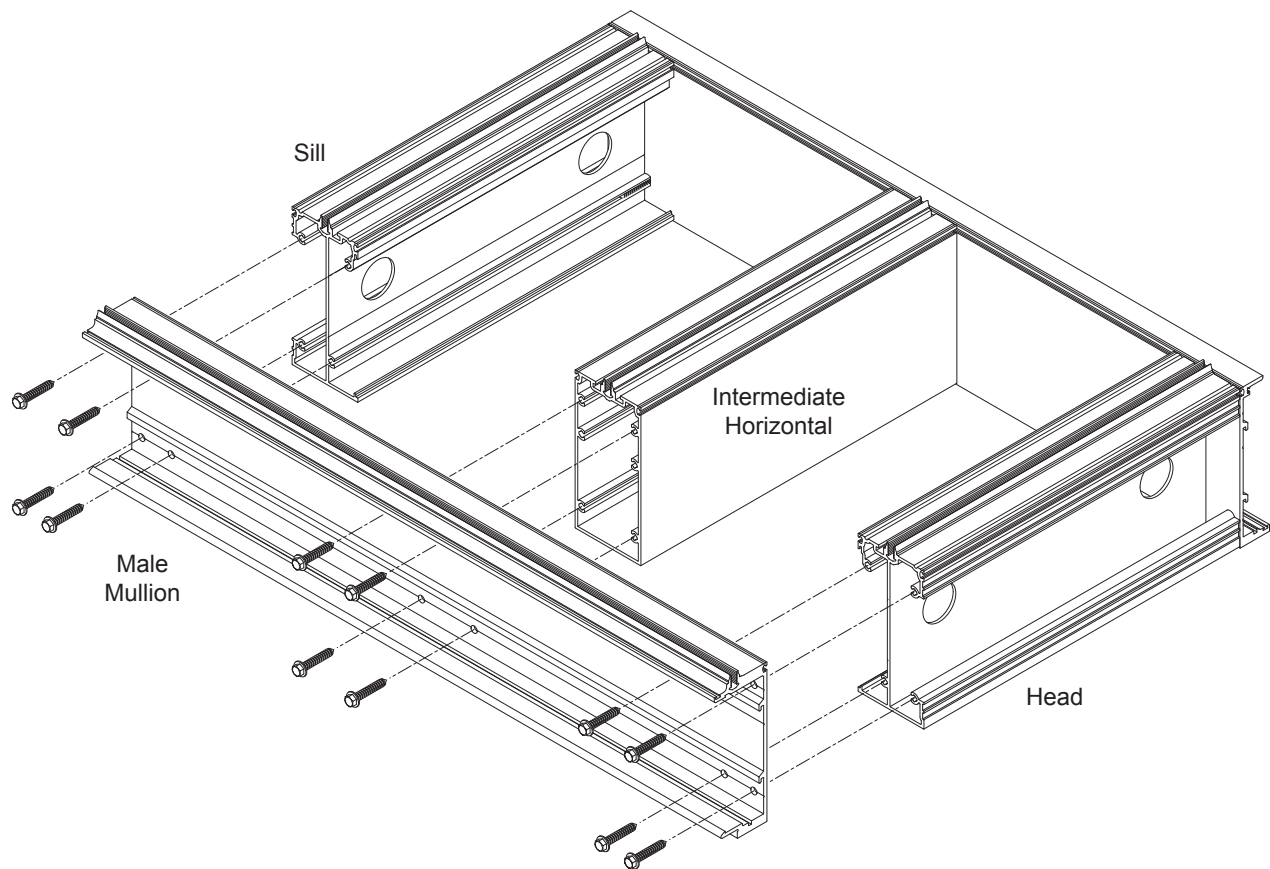
STEP 1b (Continued)

ATTACH VERTICAL MULLIONS TO HORIZONTALS

-Position horizontal members aligning splines with screw holes in the male mullion and assemble with HC-1220-SS fasteners as shown in **Detail 2-1**. Wipe off excess sealant.

Note: Take care to keep sealant from getting into gasket raceways, setting block chair pockets and around stems.

-Tool all excess sealant flush.



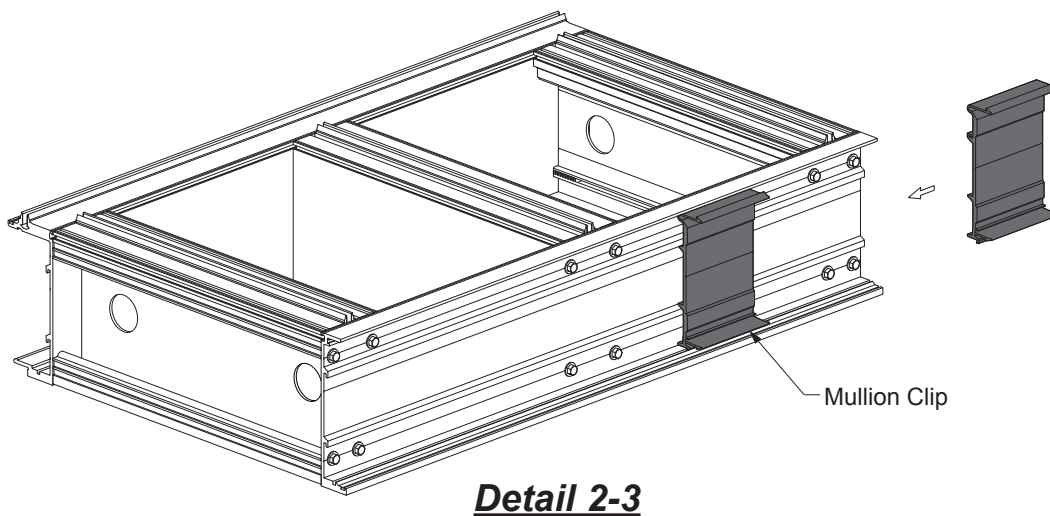
Detail 2-2

STEP 2: WS2 PARTS INSTALLATION

**STEP 2a
INSTALL MULLION INTERLOCKING CLIPS**

Mullion interlock clips are required. Refer to approved shop drawings / engineering calculations for location and quantity.

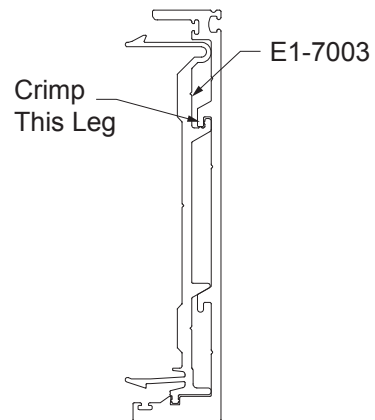
-Install mullion interlock clips into the female mullion half and crimp in place.
See **Detail 2-3** and **Detail 2-4**.



NOTE: If clip location coincides with an anchor lug or horizontal location, crimp clips in place just above or below to allow for tapping bar or screw installation.

****REVIEW WITH PROJECT ENGINEER TO MAKE SURE IF ADDITIONAL INTERLOCKING CLIPS ARE REQUIRED.

If steel is being installed in mullion, mullion interlock clips will have to be installed with steel after bay assembly to allow access to fasten horizontal mullions.



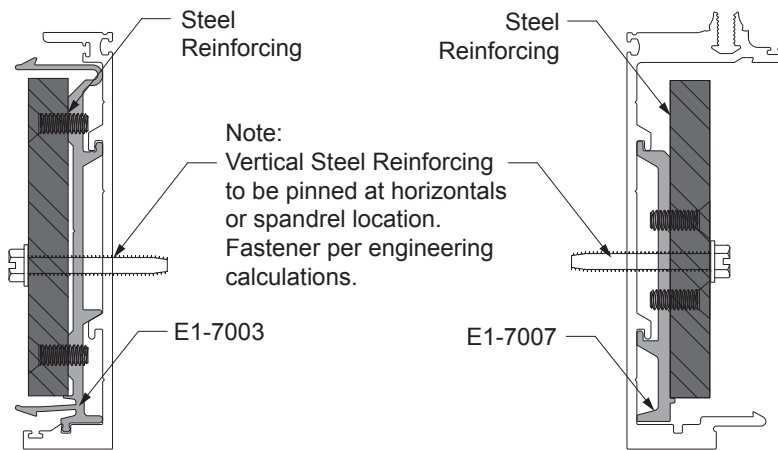
STEP 2: WS2 PARTS INSTALLATION

STEP 2b

INSTALL STEEL REINFORCING (If Required)

-Install steel or aluminum reinforcing as required to the mullions per approved shop drawings. Shim and fasten as required. Coordinate installation of steel with anchor lug backup.

See **Detail 2-5**.



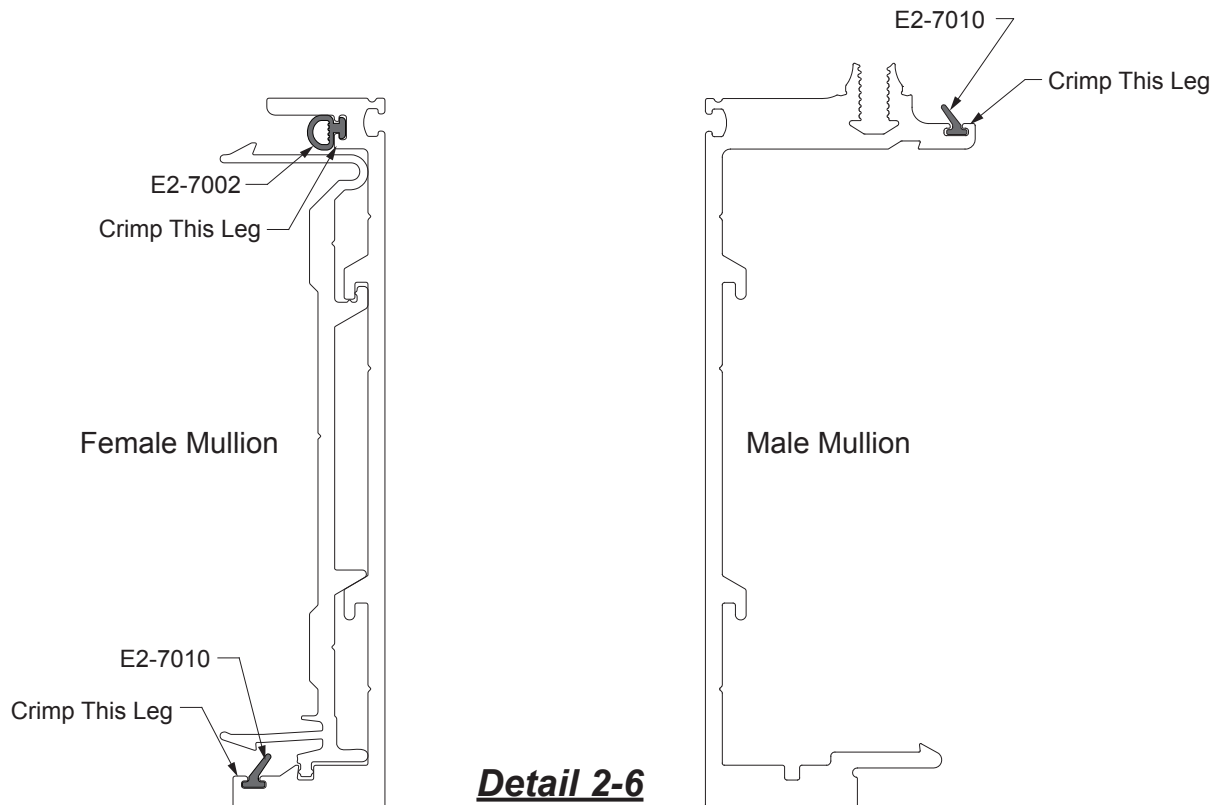
Detail 2-5

STEP 3: WS2 GASKET INSTALLATION

**STEP 3a
INSTALL WEATHER SEAL GASKETS**

- Slide in weather seal gasket at the outer leg gasket raceway of the male mullion and into the inner leg gasket raceway of the female mullion as shown in **Detail 2-6**.
- Slide in the air water seal gasket at the outer leg gasket raceway of the female mullion.
- Crimp raceway at both ends of mullion by deforming the retaining leg of the gasket raceway in order to keep the gasket from sliding out during unit installation. Gaskets to run full length of mullion.

Note: Weather seal gasket is handed. Install gasket in the orientation as shown below.



**STEP 3b
SEAL HORIZONTAL INTERSECTIONS**

-Refer to **WS1 Gasket Installation, Step 3b** on **Page 8**.

**STEP 3c
INSTALL INTERIOR GLAZING GASKETS**

-Refer to **WS1 Gasket Installation, Step 3c** on **Page 9**.

STEP 4: WS2 GLASS INSTALLATION

STEP 4a

INSTALL SETTING BLOCK CHAIRS AND SETTING BLOCKS

-Refer to **WS1 Glass Installation, Step 4a on Page 10.**

STEP 4b

INSTALL GLASS

-Refer to **WS1 Glass Installation, Step 4b on Page 11.**

STEP 5: WS2 THERMAL BARRIER & COVER INSTALLATION

STEP 5a

INSTALL CAPTURED THERMAL BARRIERS

-Refer to **WS1 Glass Installation, Step 5a on Page 13.**

STEP 5b

INSTALL SSG THERMAL BARRIER & GASKET

-Refer to **WS1 Glass Installation, Step 5c on Page 15.**

STEP 5c

PRESSURE PLATE ASSEMBLY

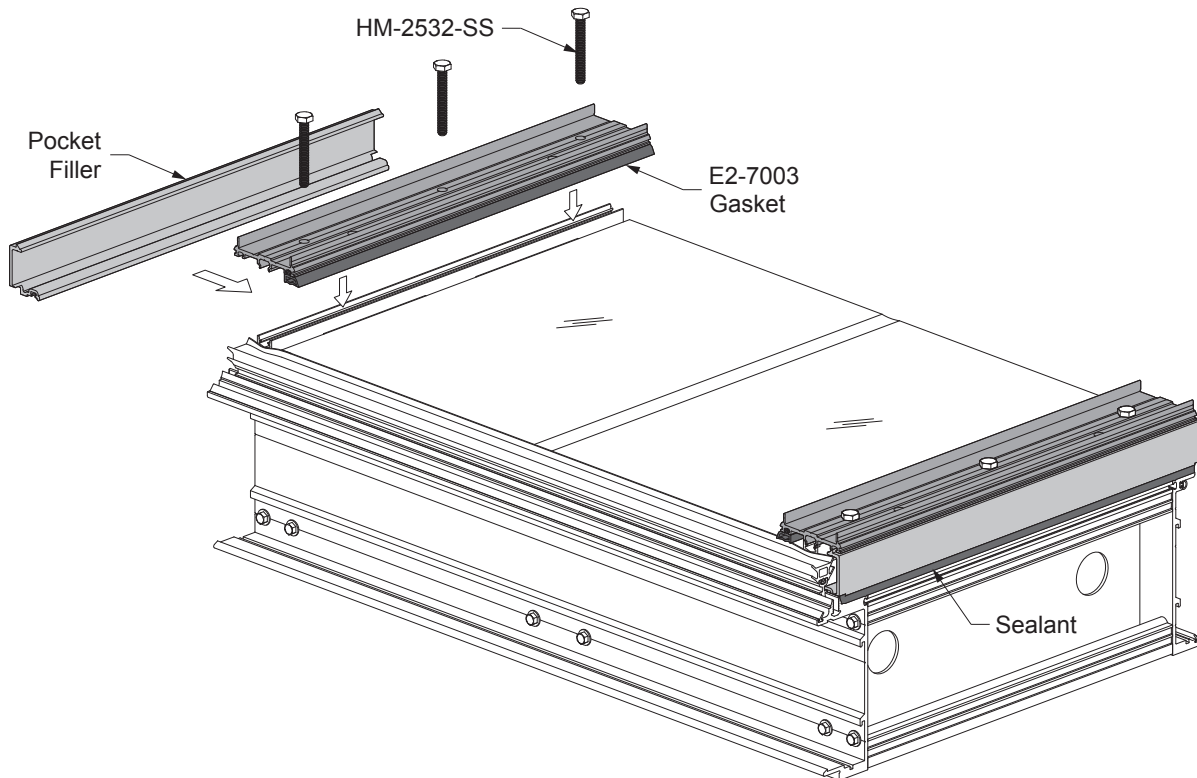
-Refer to **WS1 Glass Installation, Step 5d on Page 16.**

STEP 5: WS2 THERMAL BARRIER & COVER INSTALLATION

STEP 5d

INSTALL HEAD AND SILL PRESSURE PLATES

- Properly index all head and sill pressure plates at exterior face of the head and sill.
- If the pressure plates are already pre-drilled, drill Ø9/32" clear holes into the thermal barriers through the existing holes on the pressure plates, using a stepped drill bit as indicated on **Page 17, Detail 1-17**.
Otherwise, clear drill Ø9/32" holes into the pressure plates and thermal barriers at 9" maximum on center, unless otherwise noted, using a stepped drill bit.
- At all intermediate horizontals, apply sealant to snap area to maintain a watertight barrier.
- Using HM-2532-SS fasteners, install horizontal pressure plate, centered on the D.L.O.
- Snap in the pocket filler into the head and sill. Apply and tool sealant into the cavities as shown in **Detail 2-7**.



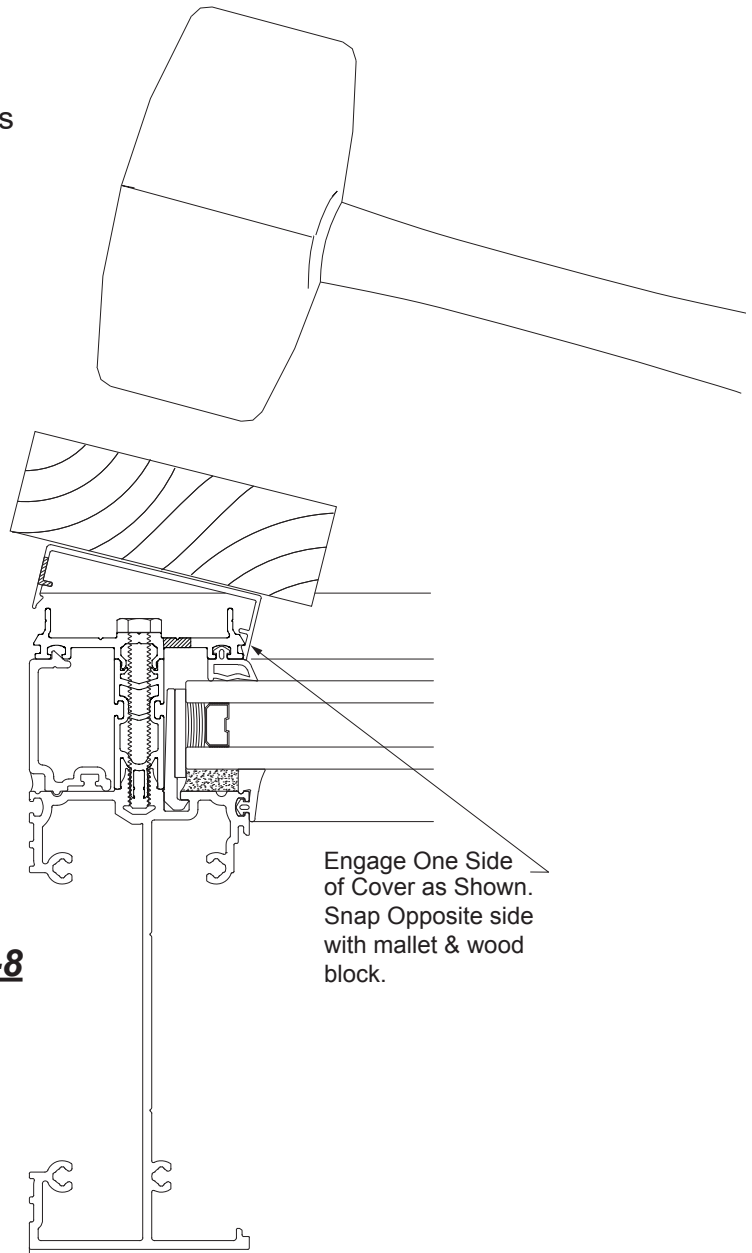
Detail 2-7

STEP 5: WS2 THERMAL BARRIER & COVER INSTALLATION

**STEP 5e
INSTALL FACE COVERS**

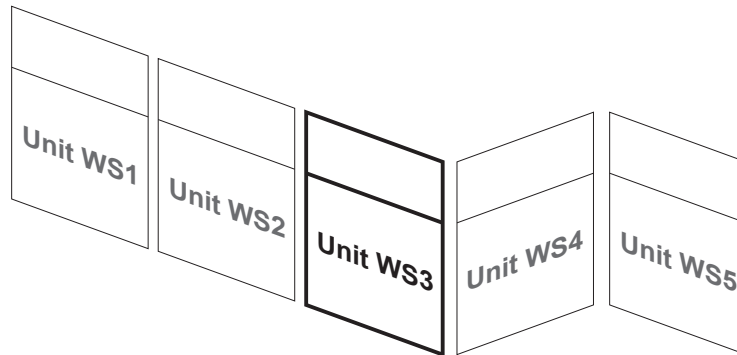
- Horizontal cover length = D.L.O. + 2-1/4", centered on the D.L.O.
- Care must be taken to avoid damage to covers during installation. Use a block of wood along with a hammer or mallet to seat the cover.

See **Detail 2-8**.



**STEP 5f
INSTALL END CAPS**

- Refer to **WS1 Thermal Barrier & Cover Installation, Step 5j on Page 23**.

WS3 TABLE OF CONTENTS

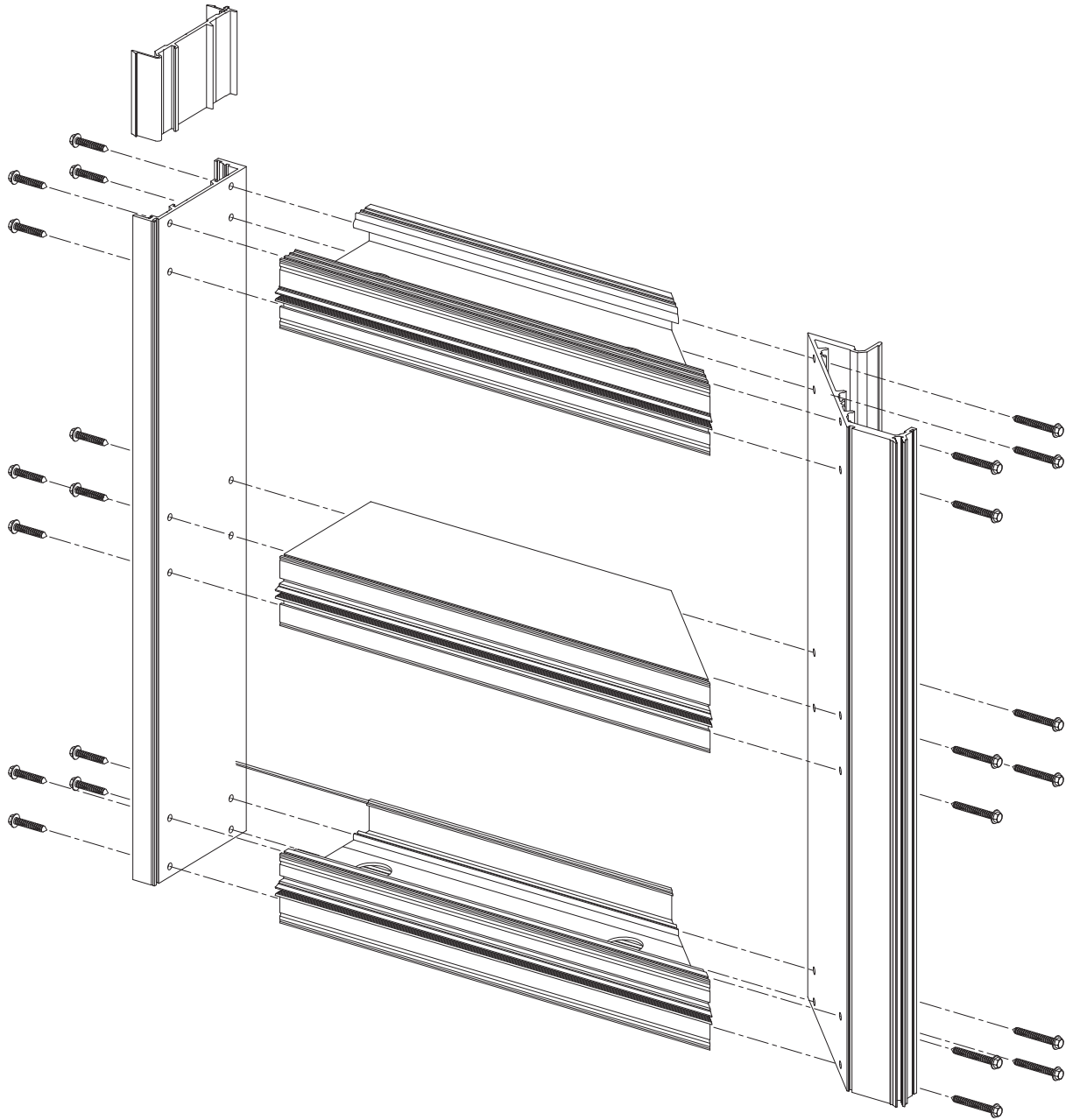
The following is intended for use as a guide for assembly of **Unit WS3** of the **YUW 750 XT 4-Sided SSG Window Wall System**. It is organized into five steps which will take you from assembly of parts to completed units.

Step 1: WS3 Unit Assembly	Pages 35 to 38
Step 2: WS3 Parts Installation	Page 39
Step 3: WS3 Gasket Installation	Pages 40 & 41
Step 4: WS3 Glass Installation	Pages 42 to 44
Step 5: WS3 Thermal Barrier & Cover Installation.....	Pages 45 to 51

Care should be taken to ensure you have inventory of all items required to complete this assembly. We recommend you refer to the parts list (pages iv - vi) as a reference and compare it to your specific project to ensure you have all the correct parts and tools required to complete the assembly.

STEP 1: WS3 UNIT ASSEMBLY

MAJOR COMPONENTS



STEP 1: WS3 UNIT ASSEMBLY

**STEP 1a
APPLY SEALANT TO FRAMING MEMBERS**

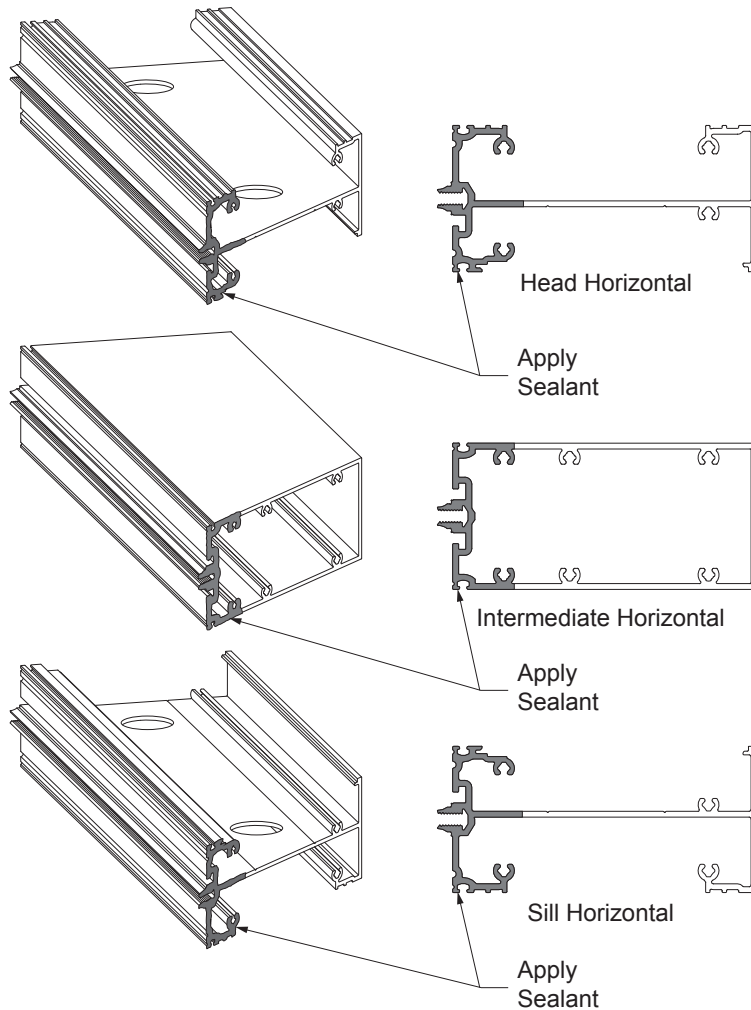
-Clean, prime and apply sealant to both ends of horizontals and tops of verticals per typical unit detail and approved shop drawings.

See **Detail 3-1**.

Stacking Tray: seal at the front wall and bottom wall back to 1st screw spline.

Intermediate Horizontals: seal at the front of tube back to 1st screw spline.

Stacking Sill: seal at the front leg, 1" back along top of sill.



Detail 3-1

STEP 1: WS3 UNIT ASSEMBLY

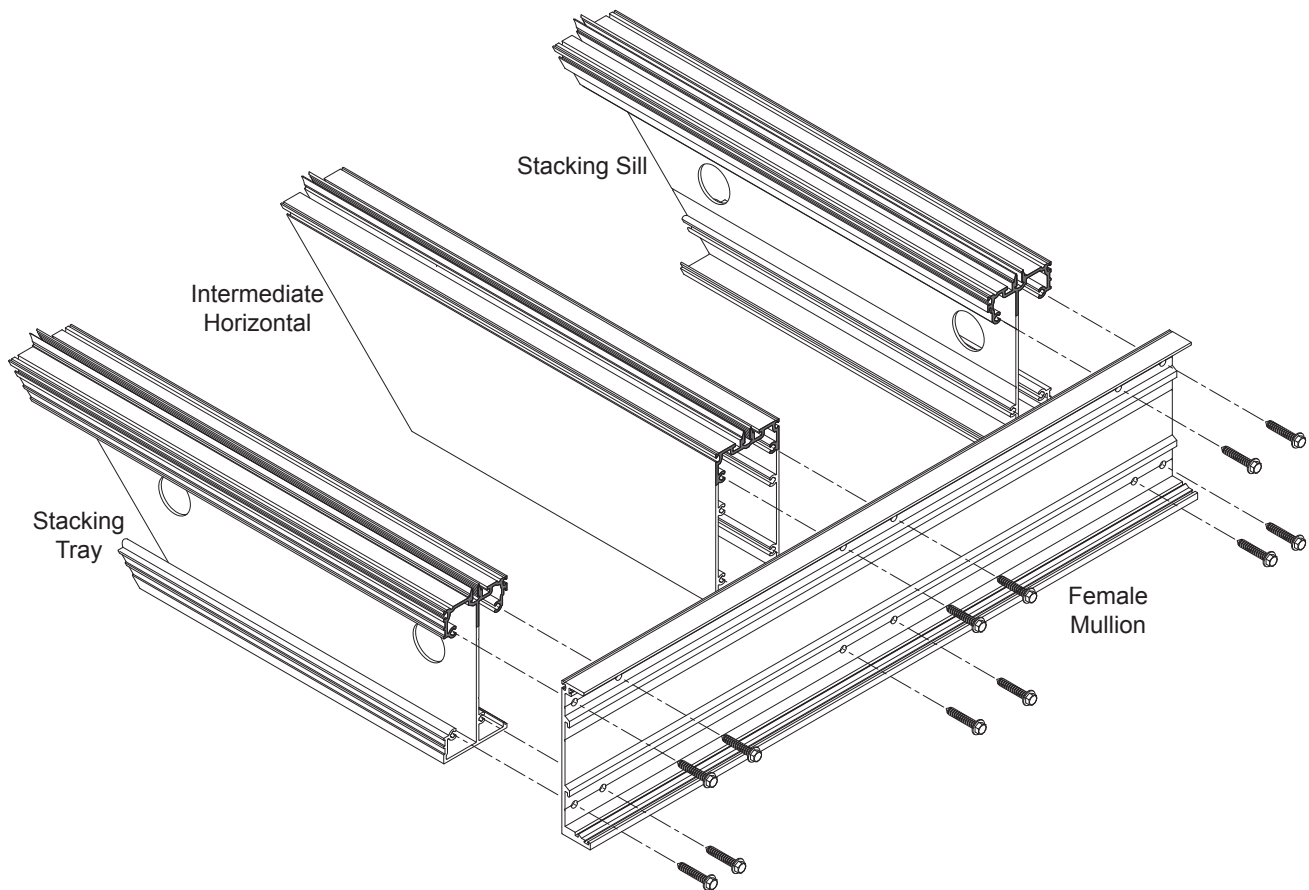
STEP 1b

ATTACH VERTICAL MULLIONS TO HORIZONTALS

-Position horizontal members aligning splines with screw holes in the female mullion and assemble with HC-1220-SS fasteners as shown in **Detail 3-2**. Wipe off excess sealant.

Note: Take care to keep sealant from getting into gasket raceways, setting block chair pockets and around stems.

-Tool all excess sealant flush.



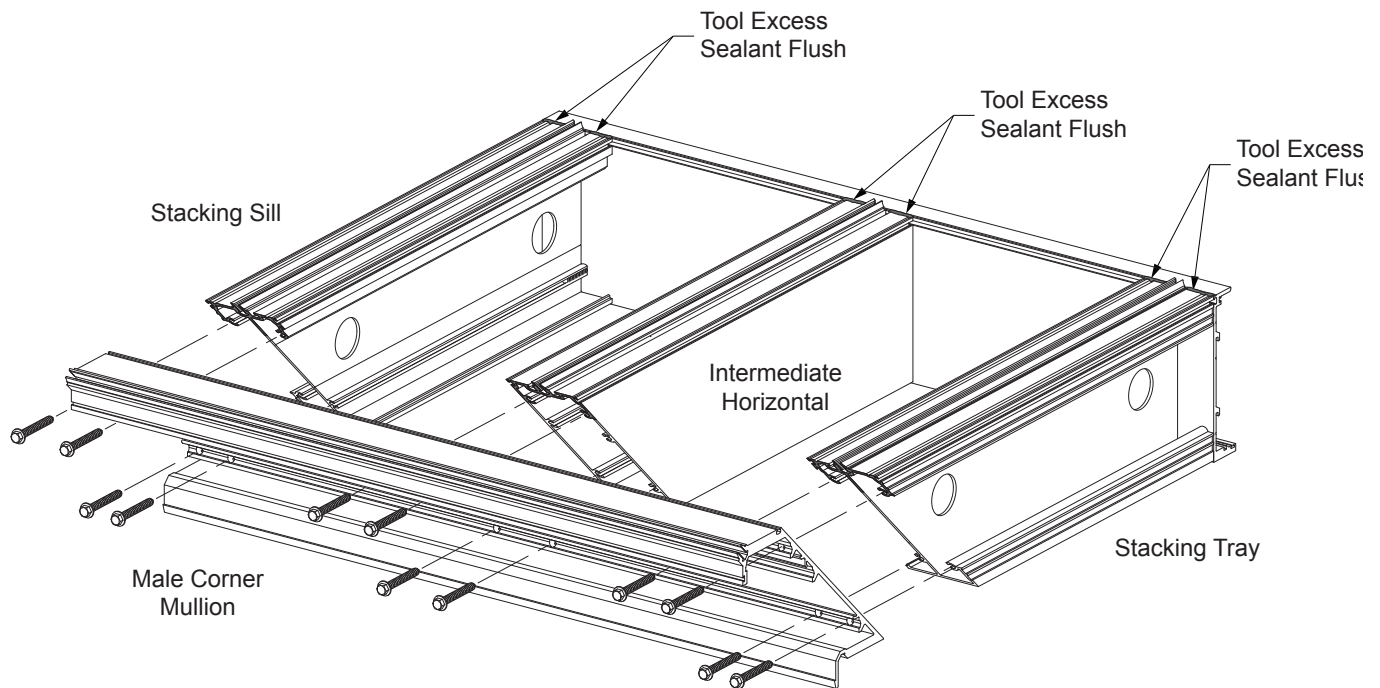
Detail 3-2

STEP 1: WS3 UNIT ASSEMBLY**STEP 1b (Continued)****ATTACH VERTICAL MULLIONS TO HORIZONTALS**

-Position horizontal members aligning splines with screw holes in the outside corner male mullion and assemble with HC-1228-SS fasteners as shown in **Detail 3-3**. Wipe off excess sealant.

Note: Take care to keep sealant from getting into gasket raceways, setting block chair pockets and around stems.

-Tool all excess sealant flush.



Detail 3-3

STEP 2: WS3 PARTS INSTALLATION

STEP 2a

INSTALL MULLION INTERLOCKING CLIPS

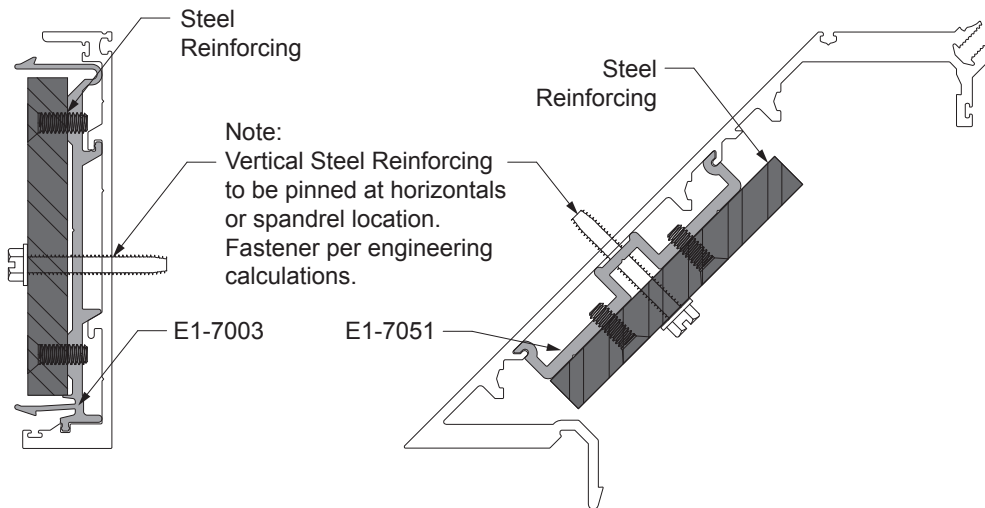
-Refer to **WC2 Parts Installation, Step 2a** on **Page 28**.

STEP 2b

INSTALL STEEL REINFORCING (If Required)

-Install steel or aluminum reinforcing as required to the mullions per approved shop drawings. Shim and fasten as required. Coordinate installation of steel with anchor lug backup.

See **Detail 3-4**.

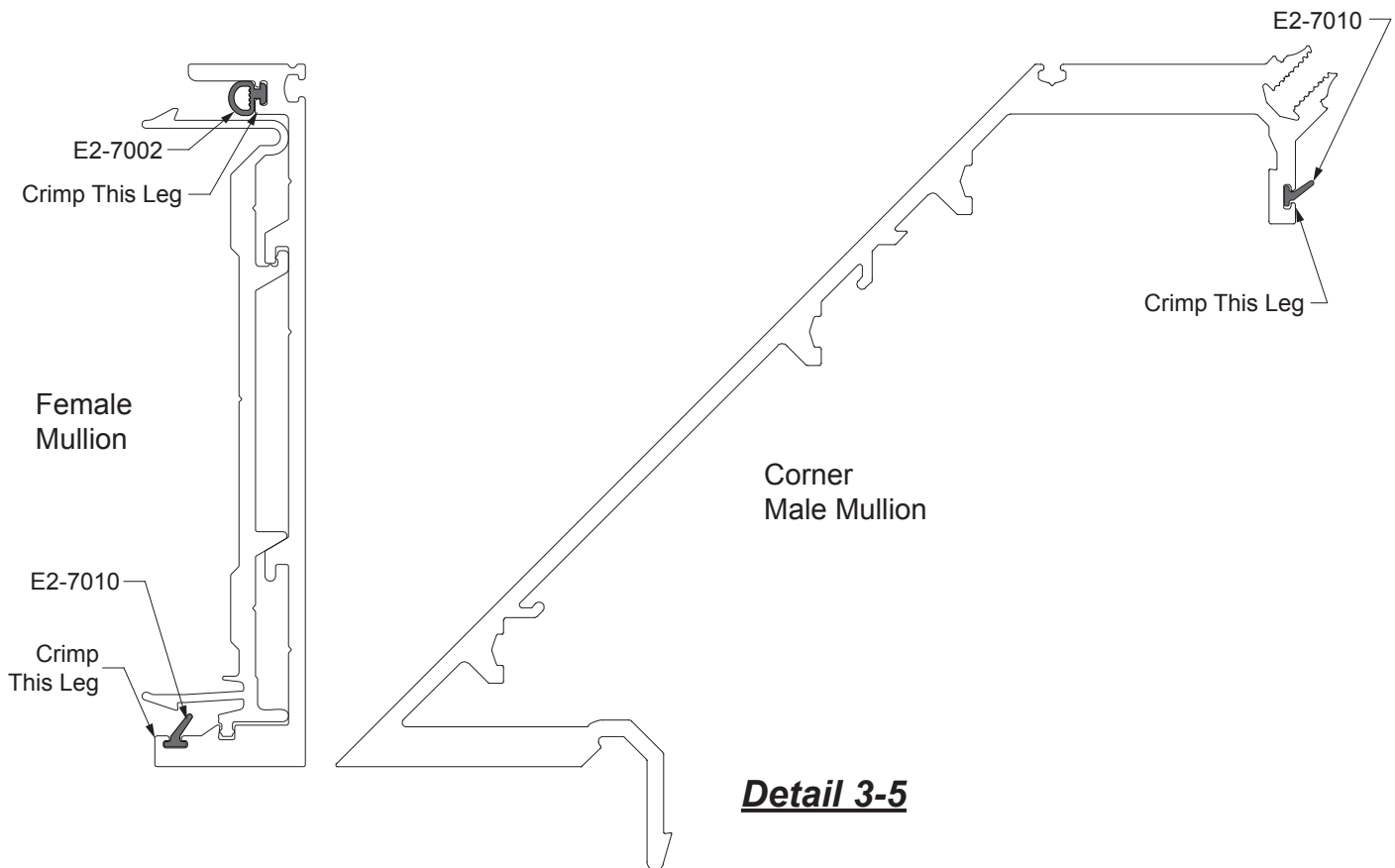


Detail 3-4

STEP 3: WS3 GASKET INSTALLATION**STEP 3a****INSTALL WEATHER SEAL GASKETS**

- Slide in weather seal gasket at the outer leg gasket raceway of the corner male mullion and into the inner leg gasket raceway of the female mullion as shown in **Detail 3-5**.
- Slide in the air water seal gasket at the outer leg gasket raceway of the female mullion.
- Crimp raceway at both ends of mullion by deforming the retaining leg of the gasket raceway in order to keep the gasket from sliding out during unit installation. Gaskets to run full length of mullion.

Note: Weather seal gasket is handed. Install gasket in the orientation as shown below.

**STEP 3b****SEAL HORIZONTAL INTERSECTIONS**

- Refer to **WS1 Gasket Installation, Step 3b** on **Page 8**.

STEP 3: WS3 GASKET INSTALLATION

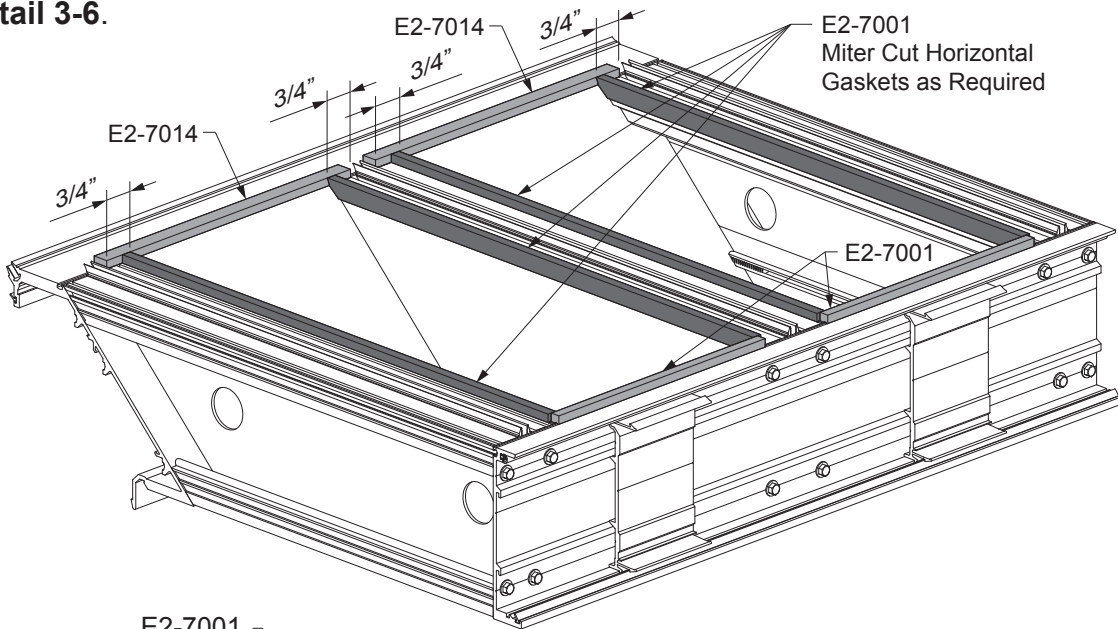
**STEP 3c
INSTALL INTERIOR GLAZING GASKETS**

-Secure the assembled unit to a flat surface with the exterior facing up. Table must be flat and level, and must support frame at all locations. A unit glazed with any mullion deflection will cause installation problems. Additional bracing under the glass may be required with large glass lites to prevent glass deflection.

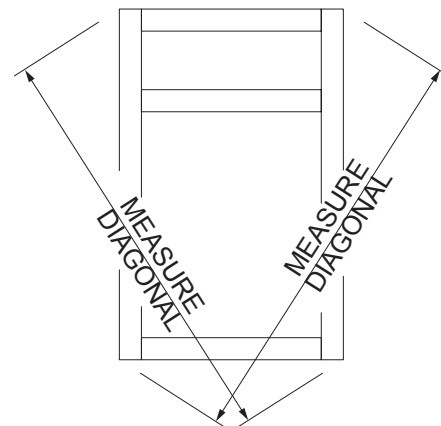
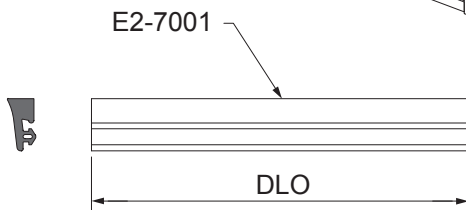
-Clean and prepare glass and aluminum surfaces in strict conformity with sealant manufacturer’s specifications and requirements.

-Install E2-7001 interior gasket on all horizontals and the female mullion. Install E2-7014 spacer on the corner mullion. Both female and horizontal gaskets are to be cut to D.L.O. Corner spacer is to be cut to D.L.O. + 1-1/2”. Vertical gaskets are to be installed first, followed by the horizontal gaskets.

See **Detail 3-6**.



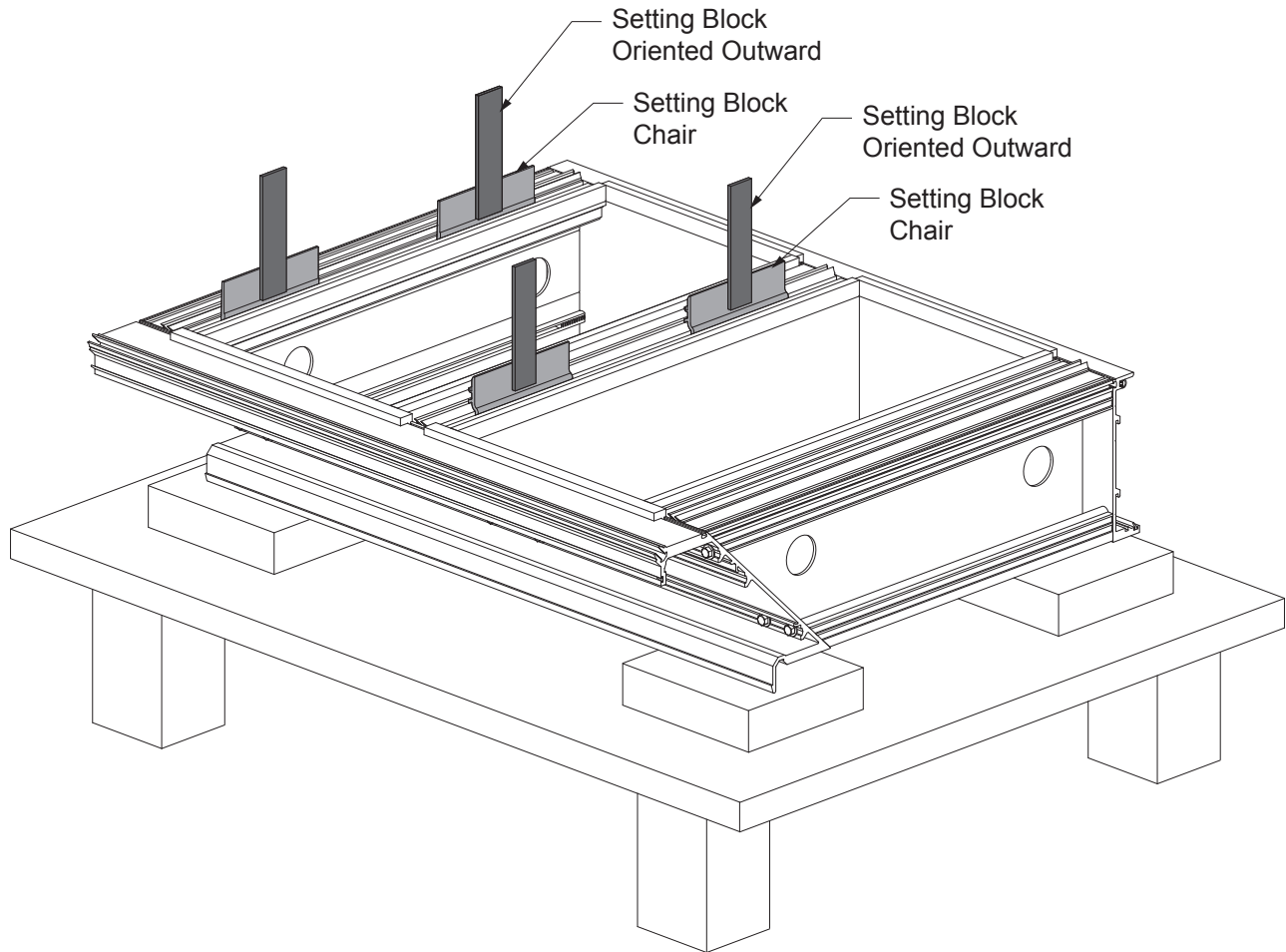
Detail 3-6



Note:
Before installing the glass, double-check squareness of frame by measuring diagonals. The maximum difference between diagonals is 1/16”. Sight down mullions to make sure unit is not bowed. A unit glazed in a “out of square” or “bowed” position will cause installation problems.

STEP 4: WS3 GLASS INSTALLATION**STEP 4a****INSTALL SETTING BLOCK CHAIRS AND SETTING BLOCKS**

-Apply setting block chairs and temporarily apply setting blocks oriented outward on setting block chairs placed at 1/4 points of horizontals as shown in **Detail 3-7**.

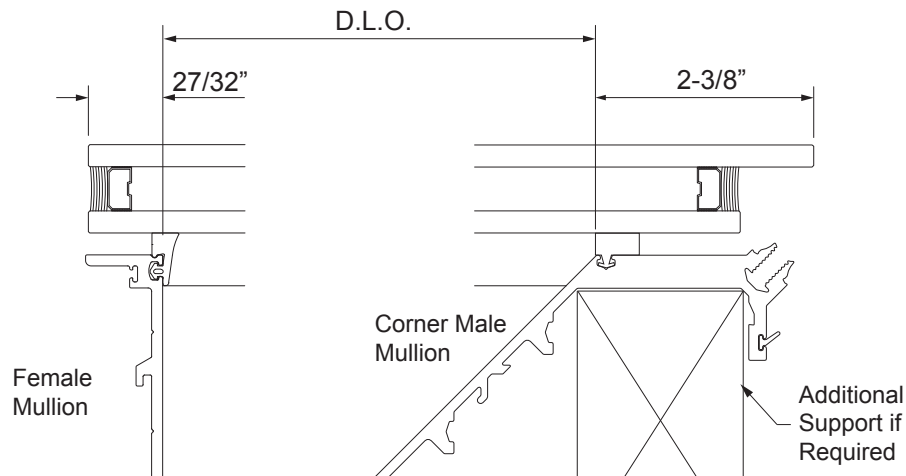


Detail 3-7

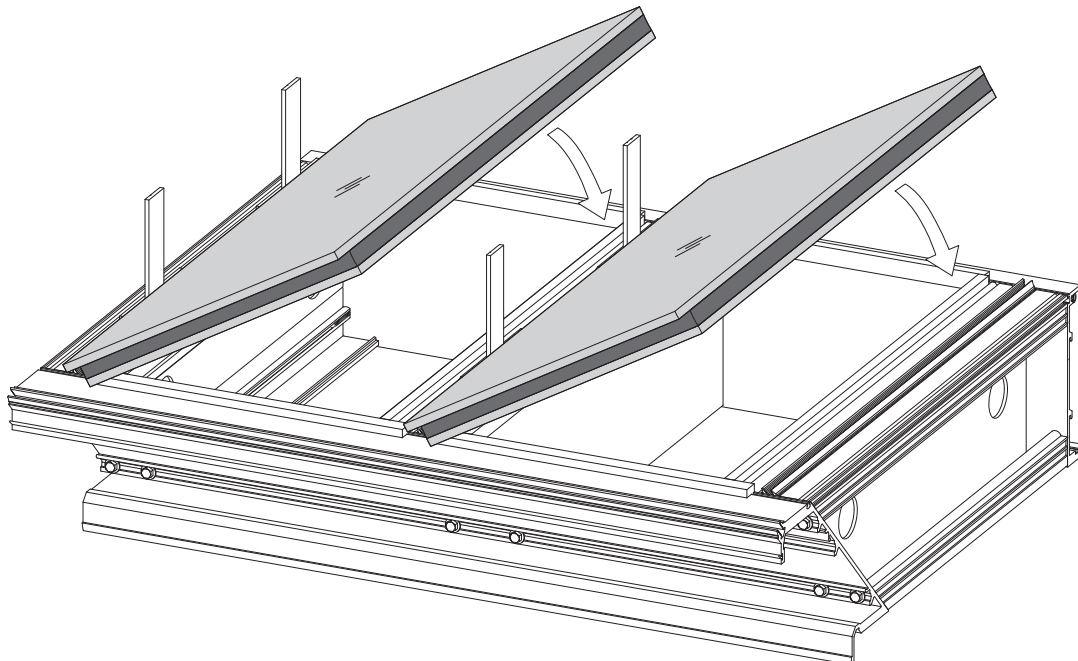
STEP 4: WS3 GLASS INSTALLATION

**STEP 4b
INSTALL GLASS**

- Position the glass laterally in the D.L.O. as shown in Detail 3-8.
- Install glass by placing bottom edge against both setting blocks and lower into place.
- When glass is properly positioned, remove setting blocks. Take caution to not move glass during setting block removal. Large units may require additional support at the corner mullion to prevent distortion under the weight of the glass.
- Reference shop details and glazing details for non typical conditions.



Detail 3-8

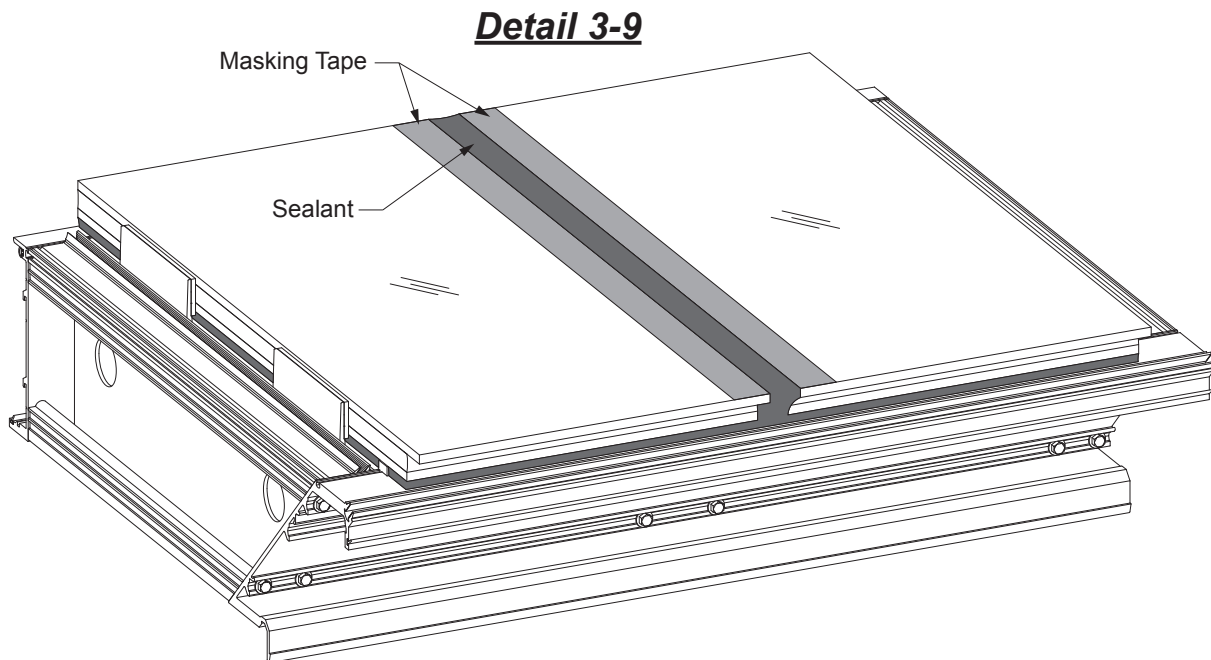
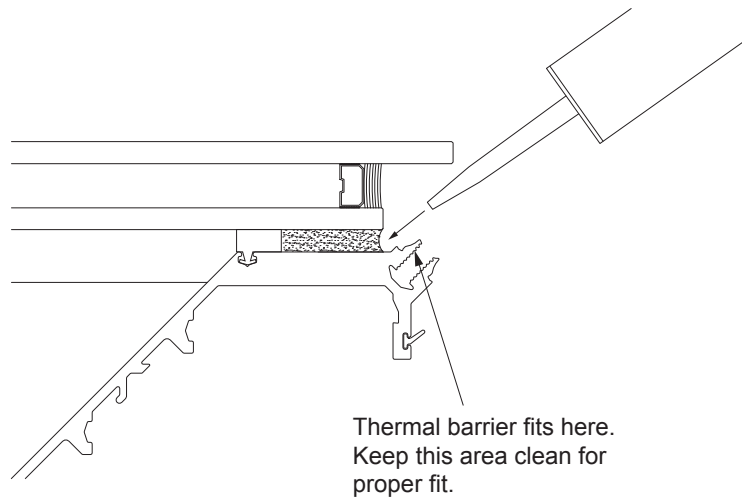


STEP 4: WS3 GLASS INSTALLATION

**STEP 4b (Continued)
INSTALL GLASS**

- Ensure that the glass and metal surfaces are clean and prepared per sealant manufacturer's specifications and recommendations.
- Apply structural silicone sealant completely filling the space between the glass and the mullion. (Slide setting block chairs out of the way temporarily while sealing units.)
- Tool sealant. Clean out any excess sealant in horizontal groove and engagement areas.
- Also fill any horizontal SSG joints with sealant. Apply masking tape to the face of the glass at the horizontal joint between the glass lites. Insert a backer rod into the joint between the lites. Apply and tool sealant to fill the joint. Immediately remove the masking tape. Do not allow the sealant to skin over.

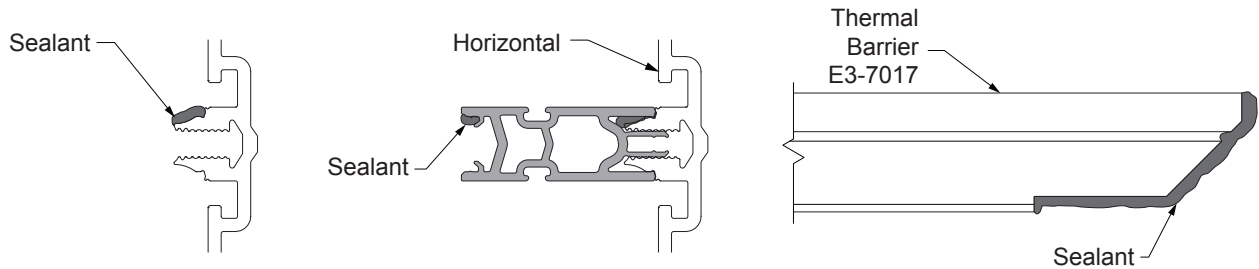
See **Detail 3-9**.



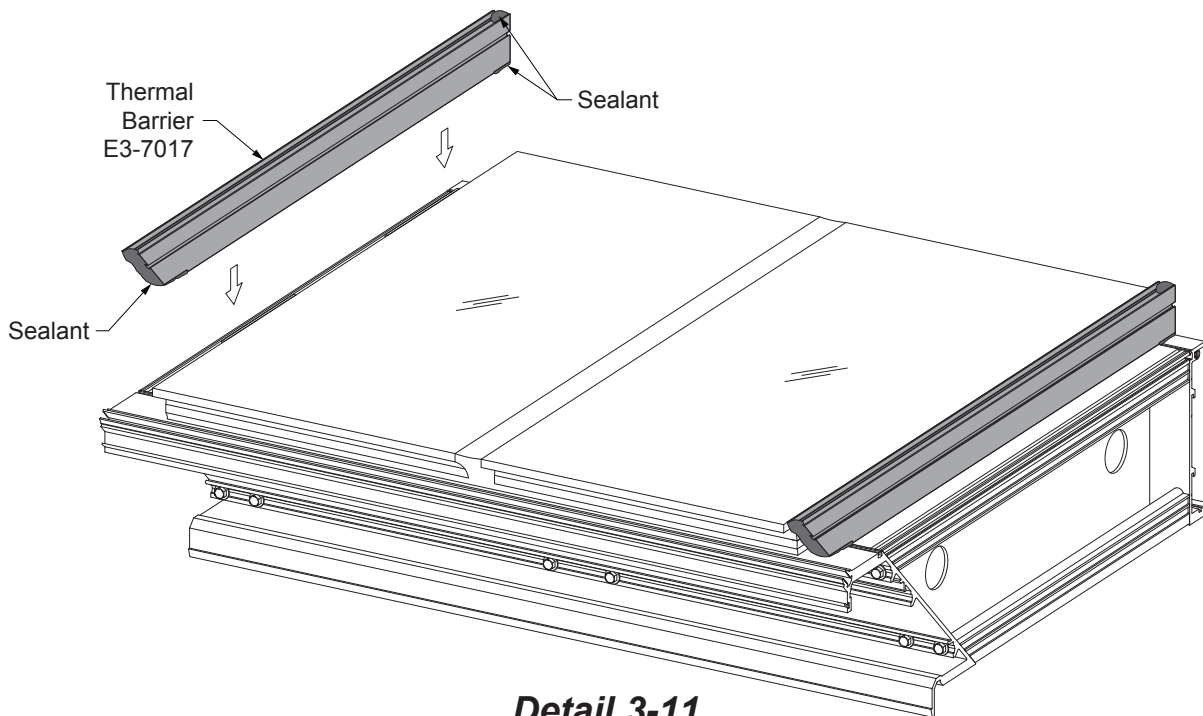
STEP 5: WS3 THERMAL BARRIER & COVER INSTALLATION

**STEP 5a
INSTALL THERMAL BARRIERS**

- Slide setting block chairs back into proper position (1/4 points or as specified in approved shop drawings) and insert setting blocks.
- Snap in corner thermal barrier first.
- Horizontal thermal barriers (E3-7017) will require a continuous cap bead the length of the horizontal as shown in **Detail 3-10** prior to installation. Also, apply a liberal amount of sealant to both ends of the thermal barrier, including the notched area for the corner.
- Before sealant cures, snap in thermal barriers as shown in **Detail 3-11**. Tool the sealant between the intermediate horizontal thermal barrier and the corner thermal barrier.



Detail 3-10

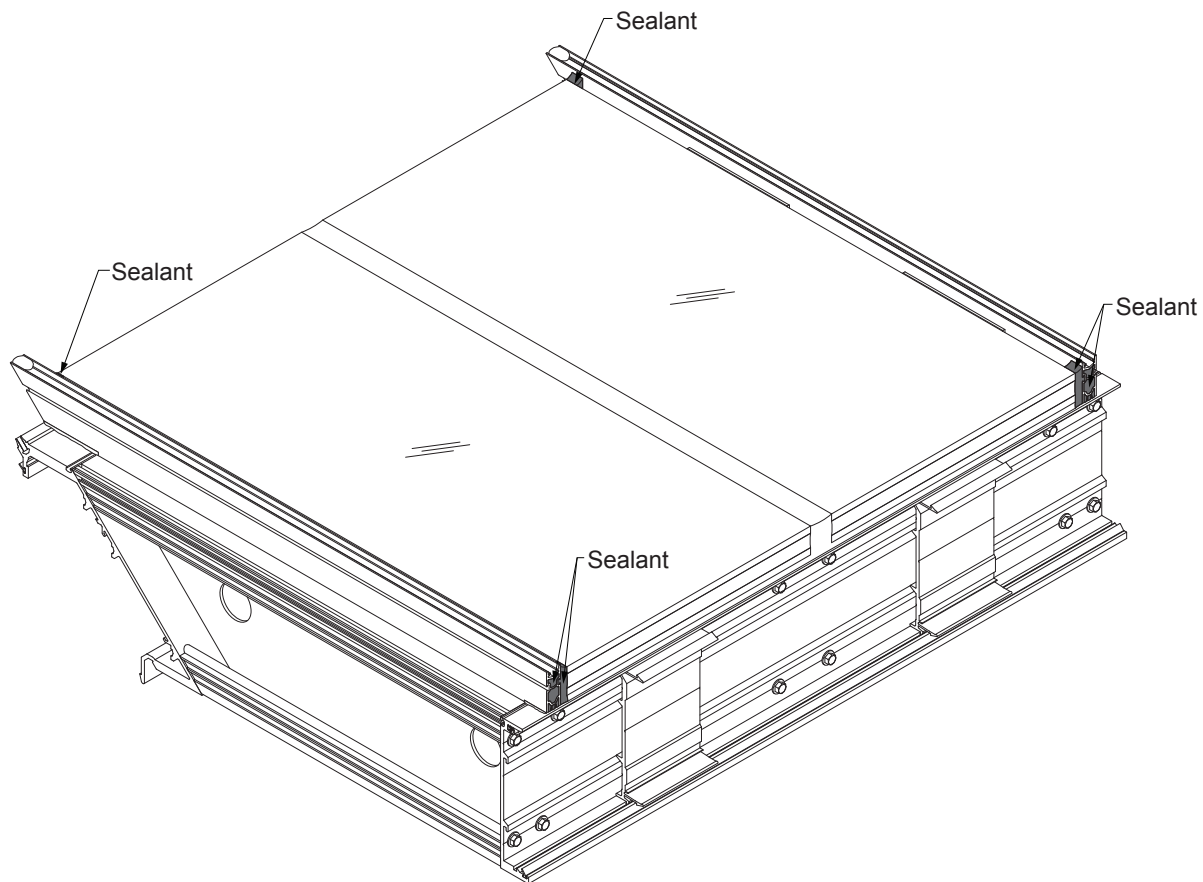


Detail 3-11

STEP 5: WS3 THERMAL BARRIER & COVER INSTALLATION**STEP 5a (Continued)****INSTALL THERMAL BARRIERS**

-Seal the end cavities at the ends of the thermal barriers and the gap between the thermal barriers and the glass.

See **Detail 3-12**.



Detail 3-12

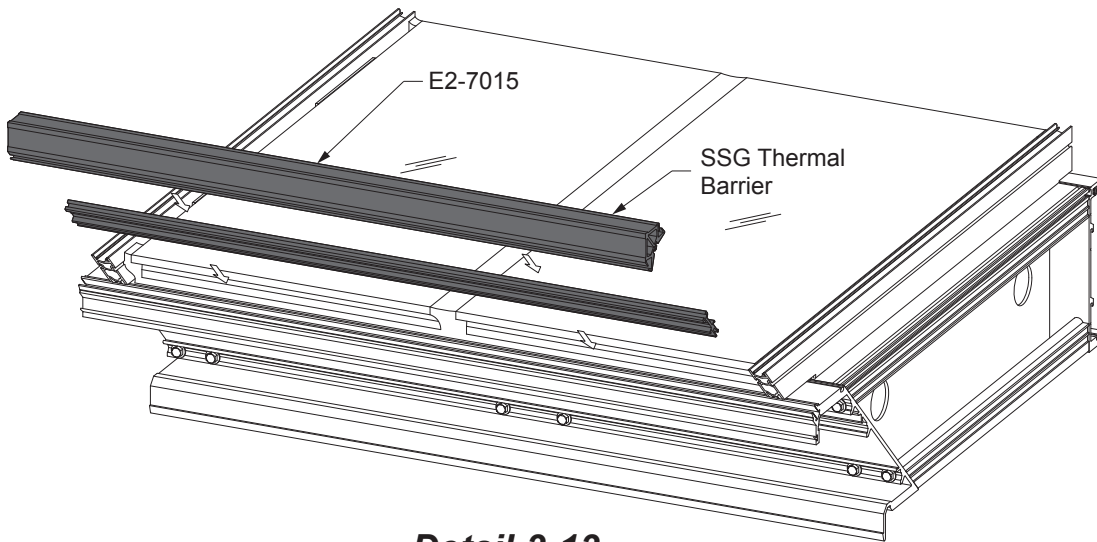
STEP 5: WS3 THERMAL BARRIER & WEATHERSEAL INSTALLATION

STEP 5b

INSTALL CORNER SSG THERMAL BARRIER & GASKET

- Snap in SSG Thermal Barrier into the corner mullion raceway.
- Push in the SSG Wiper Gasket E2-7015 into the SSG thermal barrier. Align according to unit module.

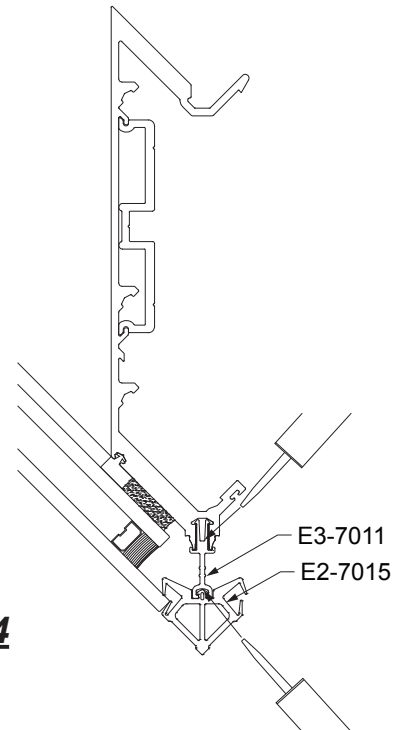
See **Detail 3-13**.



Detail 3-13

- Apply a dab of sealant at both ends of the gasket and thermal barrier to hold them in place.

See **Detail 3-14**.

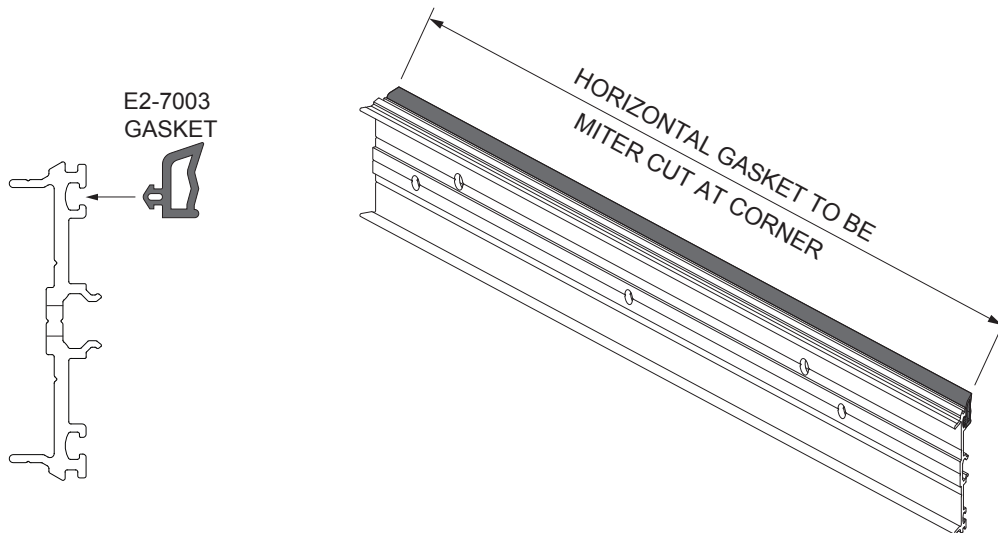


Detail 3-14

STEP 5: WS3 THERMAL BARRIER & COVER INSTALLATION**STEP 5c****PRESSURE PLATE ASSEMBLY**

- Gasket material, gasket grooves and pockets should be clean.
- Gaskets can become somewhat deformed during storage in cartons. They should be removed from cartons several hours prior to glazing and laid flat or hung to allow recovery of correct shape.
- Horizontal gaskets are to be the length of their corresponding pressure plates at the reglet. Gaskets are to be miter cut at corners and should never be “stretched to fit.”
- Push in E2-7003 gasket into horizontal pressure plate reglets. Seal or crimp in place.
- Gaskets should be flush with edge of pressure plate. Trim off any excess gasket to prevent interference with the end cap.

See **Detail 3-15**.



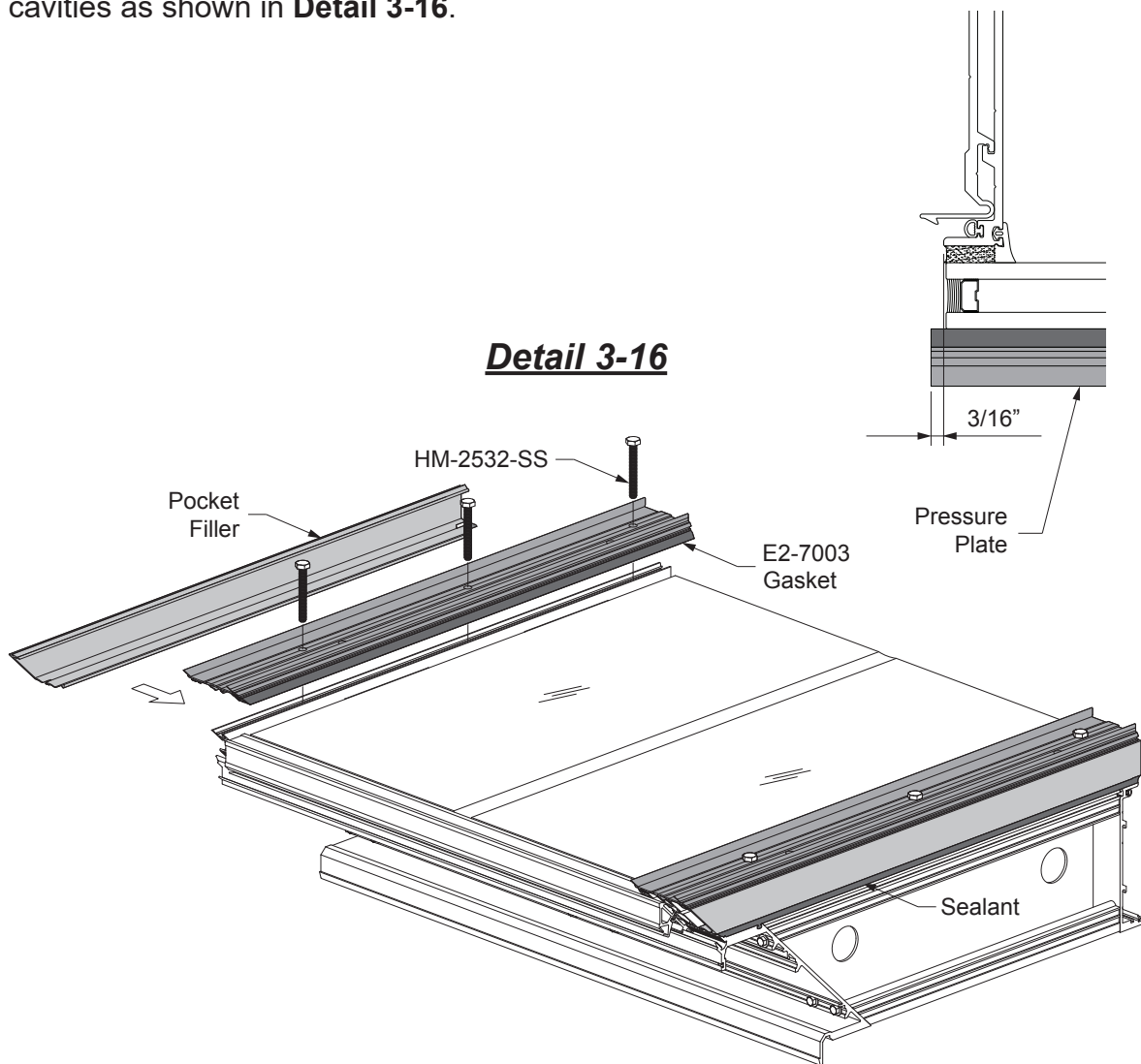
Detail 3-15

STEP 5: WS3 THERMAL BARRIER & COVER INSTALLATION

STEP 5d

INSTALL HEAD AND SILL PRESSURE PLATES

- Properly index all head and sill pressure plates at exterior face of the head and sill.
- If the pressure plates are already pre-drilled, drill Ø9/32” clear holes into the thermal barriers through the existing holes on the pressure plates, using a stepped drill bit as indicated on **Page 17, Detail 1-17**.
- Otherwise, clear drill Ø9/32” holes into the pressure plates and thermal barriers at 9” maximum on center, unless otherwise noted, using a stepped drill bit.
- At all intermediate horizontals, apply sealant to snap area to maintain a watertight barrier.
- Using HM-2532-SS fasteners, install horizontal pressure plate, positioned 3/16” from the outermost edge of the female ssg mullion.
- Snap in the pocket filler into the head and sill. Apply and tool sealant into the cavities as shown in **Detail 3-16**.

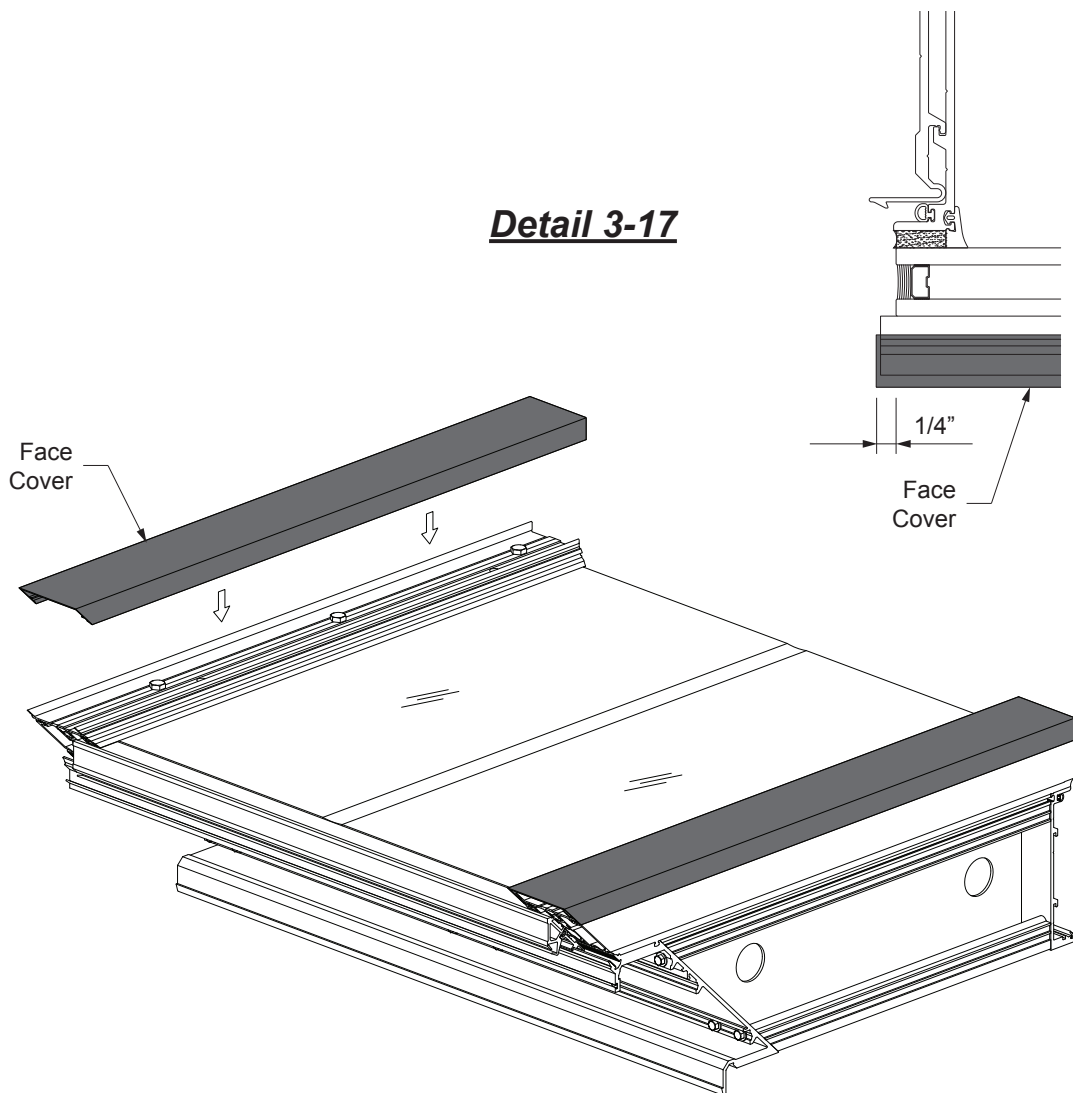


STEP 5: WS3 THERMAL BARRIER & COVER INSTALLATION

**STEP 5e
INSTALL FACE COVERS**

- Horizontal face covers are to be positioned 1/4" from the outermost edge of the female ssg mullion. This will allow the face cover to extend beyond the pressure plate below by 1/16".
- Care must be taken to avoid damage to covers during installation. Use a block of wood along with a hammer or mallet to seat the cover.

See **Detail 3-17**.

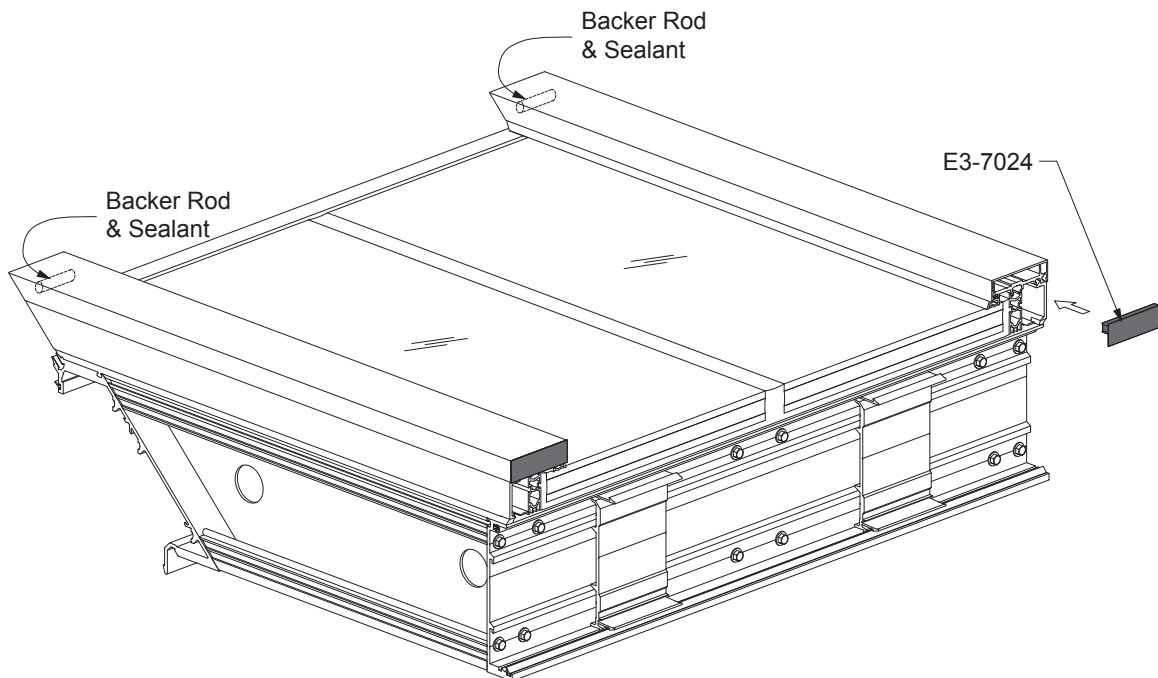


STEP 5: WS3 THERMAL BARRIER & COVER INSTALLATION

STEP 5f INSTALL END CAPS

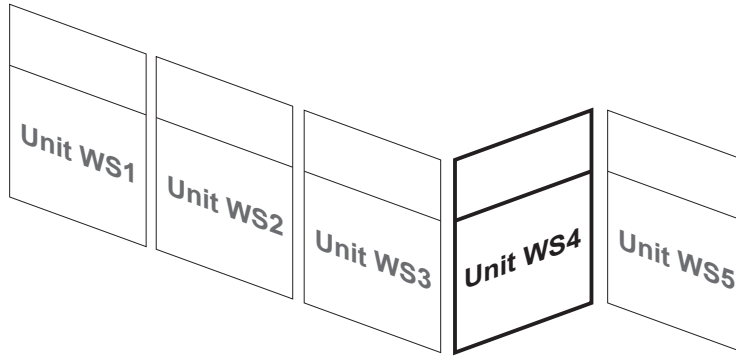
- Clean all contact surfaces as recommended by sealant manufacturer.
- Affix E3-7024 end caps to the exposed ends of the head and sill face cover as shown below.
- Apply a small amount of silicone sealant between the pressure plate and face cover, and slide in the end cap. Wipe excess sealant clean.
- Insert a backer rod into the mitered end of the installed face cover, and fill the end cavity with sealant. Wipe excess sealant clean.

See **Detail 3-18**.



Detail 3-18

WS4 TABLE OF CONTENTS



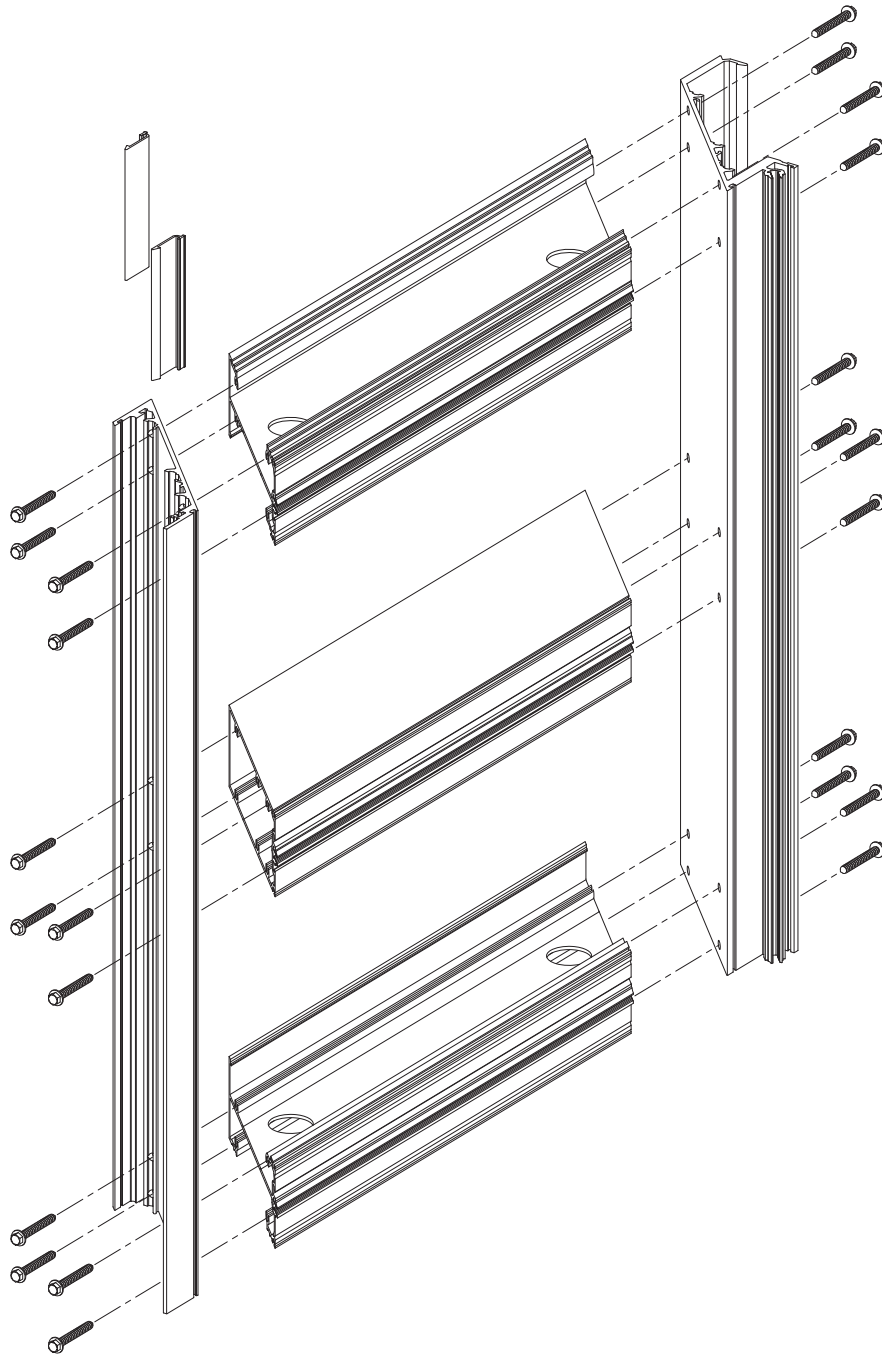
The following is intended for use as a guide for assembly of **Unit WS4** of the **YUW 750 XT 4-Sided SSG Window Wall System**. It is organized into five steps which will take you from assembly of parts to completed units.

Step 1: WS4 Unit Assembly	Pages 52 to 55
Step 2: WS4 Parts Installation	Pages 56 & 57
Step 3: WS4 Gasket Installation	Pages 58 & 59
Step 4: WS4 Glass Installation	Pages 60 to 62
Step 5: WS4 Thermal Barrier & Cover Installation.....	Pages 63 to 68

Care should be taken to ensure you have inventory of all items required to complete this assembly. We recommend you refer to the parts list (pages iv - vi) as a reference and compare it to your specific project to ensure you have all the correct parts and tools required to complete the assembly.

STEP 1: WS4 UNIT ASSEMBLY

MAJOR COMPONENTS



STEP 1: WS4 UNIT ASSEMBLY

STEP 1a

APPLY SEALANT TO FRAMING MEMBERS

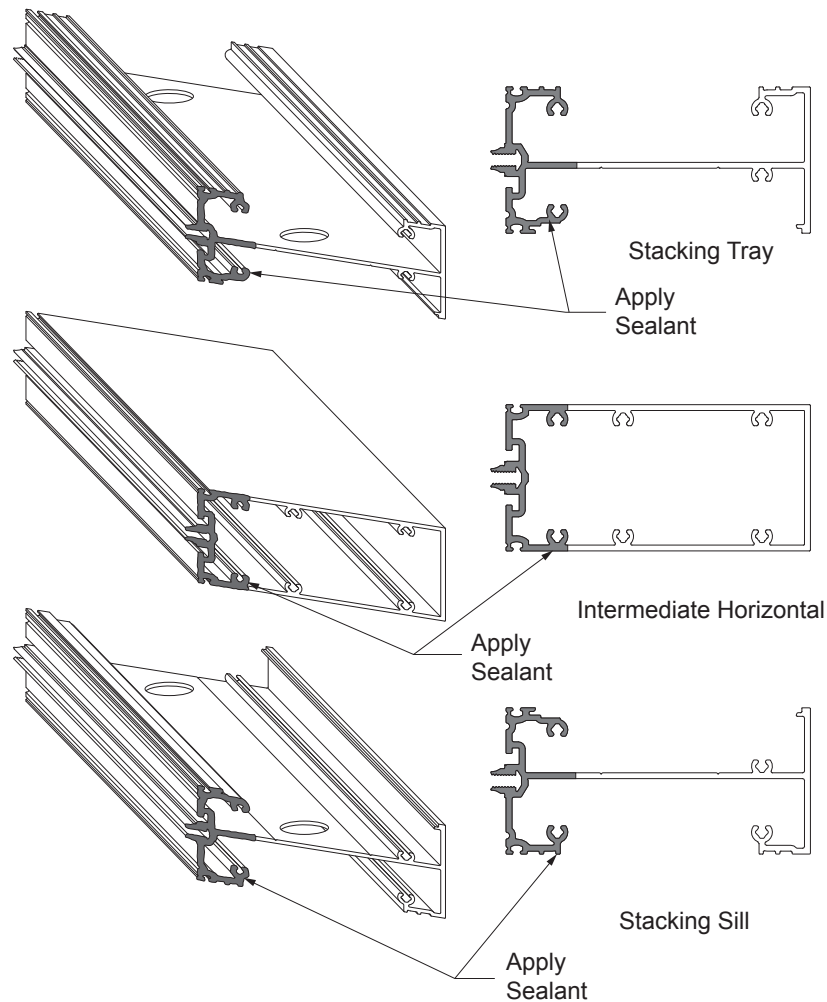
-Clean, prime and apply sealant to both ends of horizontals and tops of verticals per typical unit detail and approved shop drawings.

See **Detail 4-1**.

Stacking Tray: seal at the front wall and bottom wall back to 1st screw spline.

Intermediate Horizontals: seal at the front of tube back to 1st screw spline.

Stacking Sill: seal at the front leg, 1" back along top of sill.



Detail 4-1

STEP 1: WS4 UNIT ASSEMBLY

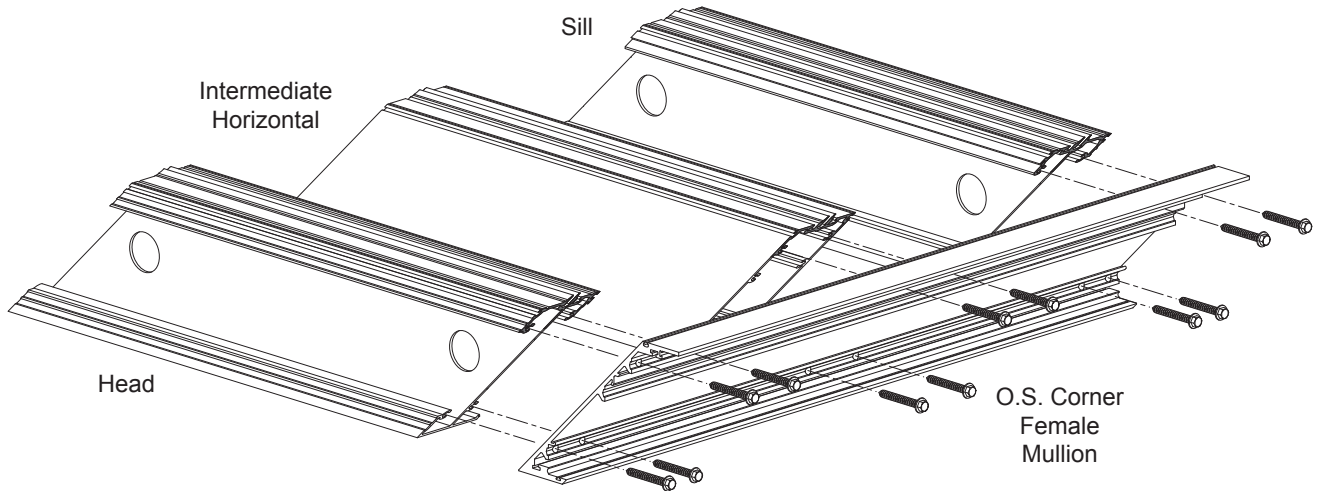
STEP 1b

ATTACH VERTICAL MULLIONS TO HORIZONTALS

-Position horizontal members aligning splines with screw holes in the outside corner female mullion and assemble with HC-1228-SS fasteners as shown in **Detail 4-2**. Wipe off excess sealant.

Note: Take care to keep sealant from getting into gasket raceways, setting block chair pockets and around stems.

-Tool all excess sealant flush.



Detail 4-2

STEP 1: WS4 UNIT ASSEMBLY

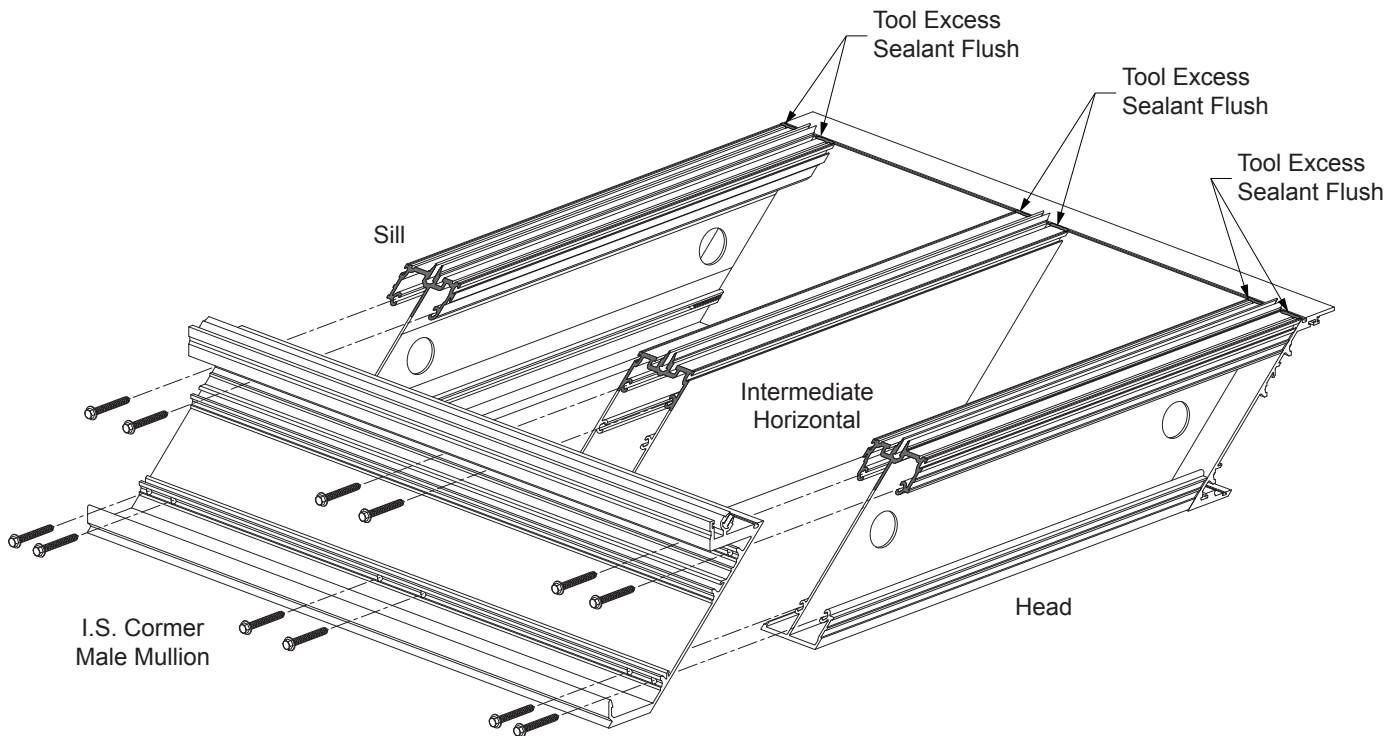
STEP 1b (Continued)

ATTACH VERTICAL MULLIONS TO HORIZONTALS

-Position horizontal members aligning splines with screw holes in the inside corner male mullion and assemble with HC-1228-SS fasteners as shown in **Detail 4-3**. Wipe off excess sealant.

Note: Take care to keep sealant from getting into gasket raceways, setting block chair pockets and around stems.

-Tool all excess sealant flush.



Detail 4-3

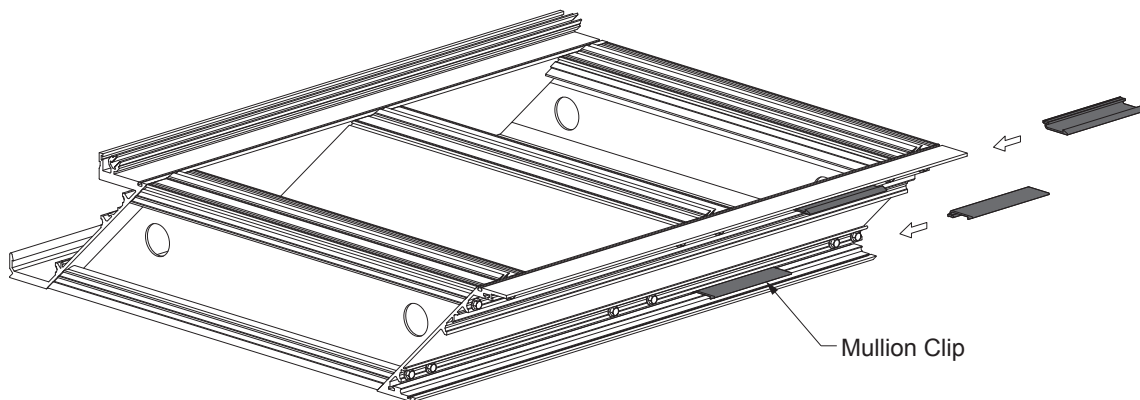
STEP 2: WS4 PARTS INSTALLATION

STEP 2a INSTALL MULLION INTERLOCKING CLIPS

Mullion interlock clips are required. Refer to approved shop drawings / engineering calculations for location and quantity.

-Install mullion interlock clips into the outside corner female mullion and secure the clips in place with tape and sealant.

See **Detail 4-4** and **Detail 4-5**.

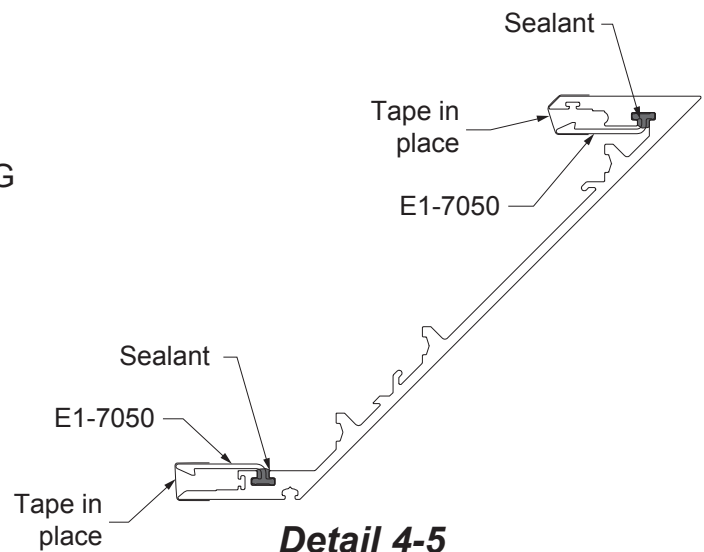


Detail 4-4

NOTE: If clip location coincides with an anchor lug or horizontal location, secure clips in place with sealant and tape just above or below to allow for tapping bar or screw installation.

****REVIEW WITH PROJECT ENGINEER TO MAKE SURE IF ADDITIONAL INTERLOCKING CLIPS ARE REQUIRED.

If steel is being installed in mullion, mullion interlock clips will have to be installed with steel after bay assembly to allow access to fasten horizontal mullions.

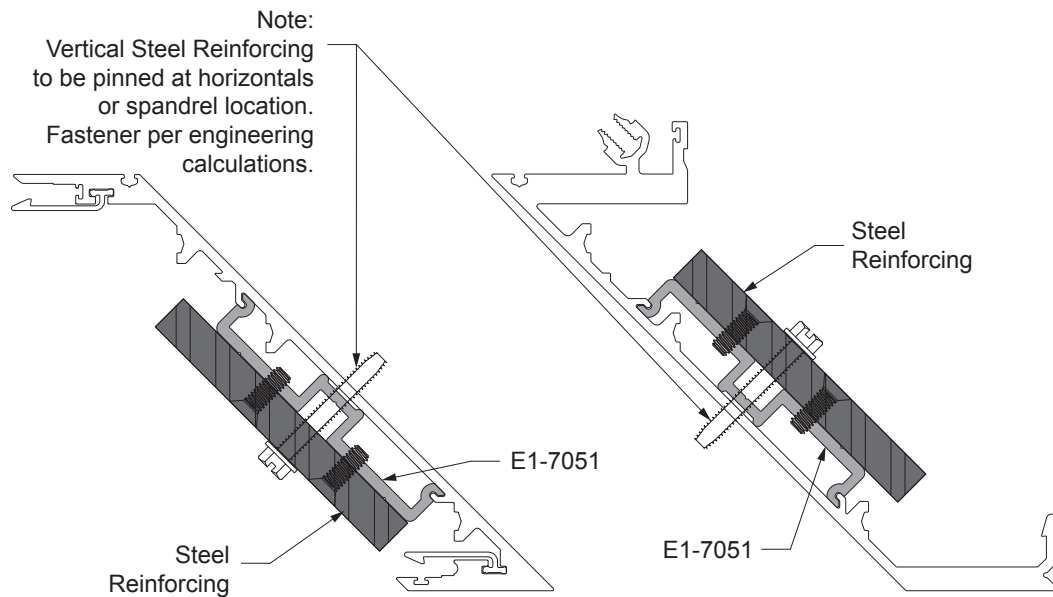


Detail 4-5

STEP 2: WS4 PARTS INSTALLATION**STEP 2b****INSTALL STEEL REINFORCING (If Required)**

-Install steel or aluminum reinforcing as required to the mullions per approved shop drawings.
Shim and fasten as required. Coordinate installation of steel with anchor lug backup.

See **Detail 4-6**.



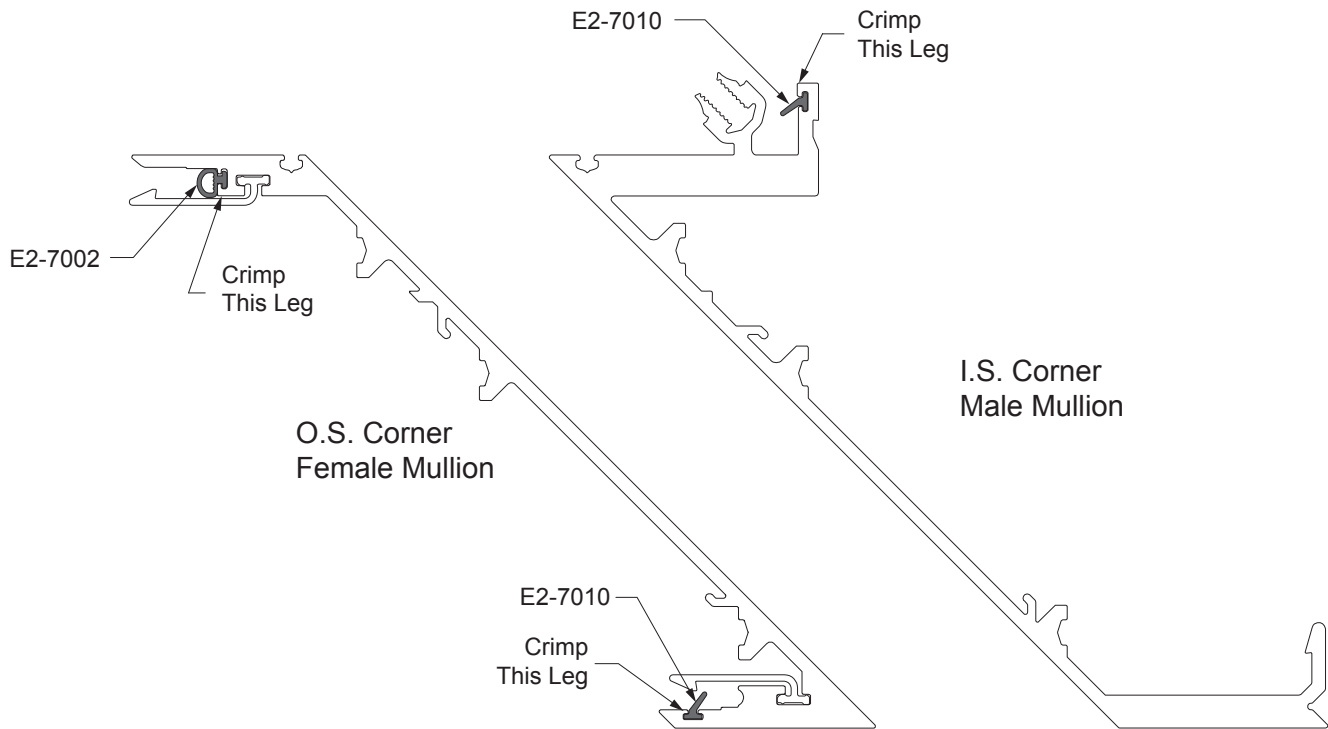
Detail 4-6

STEP 3: WS4 GASKET INSTALLATION

STEP 3a INSTALL WEATHER SEAL GASKETS

- Slide in weather seal gasket at the outer leg gasket raceway of the inside corner male mullion and into the inner leg gasket raceway of the outside corner female mullion as shown in **Detail 4-7**.
- Slide in the air water seal gasket at the outer leg gasket raceway of the outside corner female mullion.
- Crimp raceway at both ends of mullion by deforming the retaining leg of the gasket raceway in order to keep the gasket from sliding out during unit installation. Gaskets to run full length of mullion.

Note: Weather seal gasket is handed. Install gasket in the orientation as shown below.



Detail 4-7

STEP 3b SEAL HORIZONTAL INTERSECTIONS

- Refer to **WS1 Gasket Installation, Step 3b** on **Page 8**.

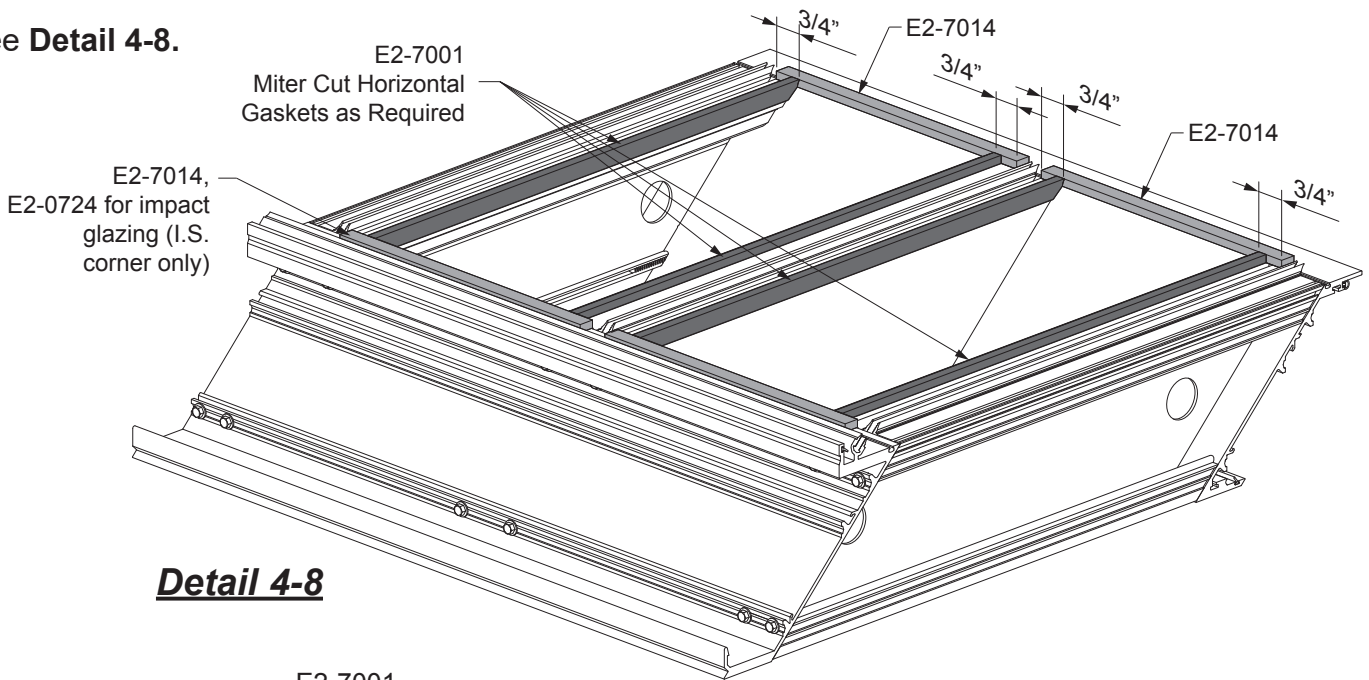
STEP 3: WS4 GASKET INSTALLATION

STEP 3c

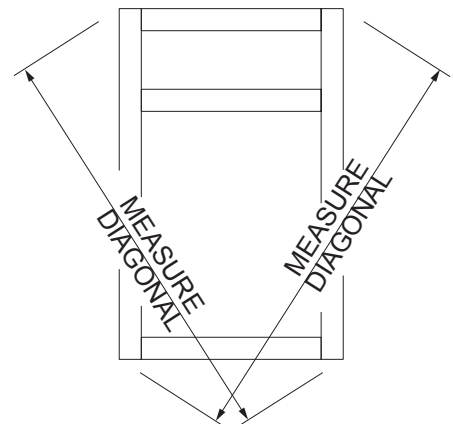
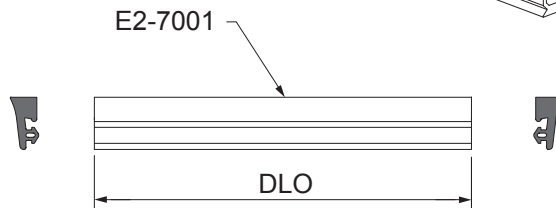
INSTALL INTERIOR GLAZING GASKETS

- Secure the assembled unit to a flat surface with the exterior facing up. Table must be flat and level, and must support frame at all locations. A unit glazed with any mullion deflection will cause installation problems. Additional bracing under the glass may be required with large glass lites to prevent glass deflection.
- Clean and prepare glass and aluminum surfaces in strict conformity with sealant manufacturer's specifications and requirements.
- Install E2-7001 interior gasket on all horizontals. Install E2-7014 spacer on the corner mullions (except for impact systems where E2-0724 is used on the inside corner male mullion). Horizontal gaskets are to be cut to D.L.O. Corner spacer is to be cut to D.L.O. + 1-1/2". Vertical gaskets are to be installed first, followed by the horizontal gaskets.

See **Detail 4-8**.



Detail 4-8



Note:

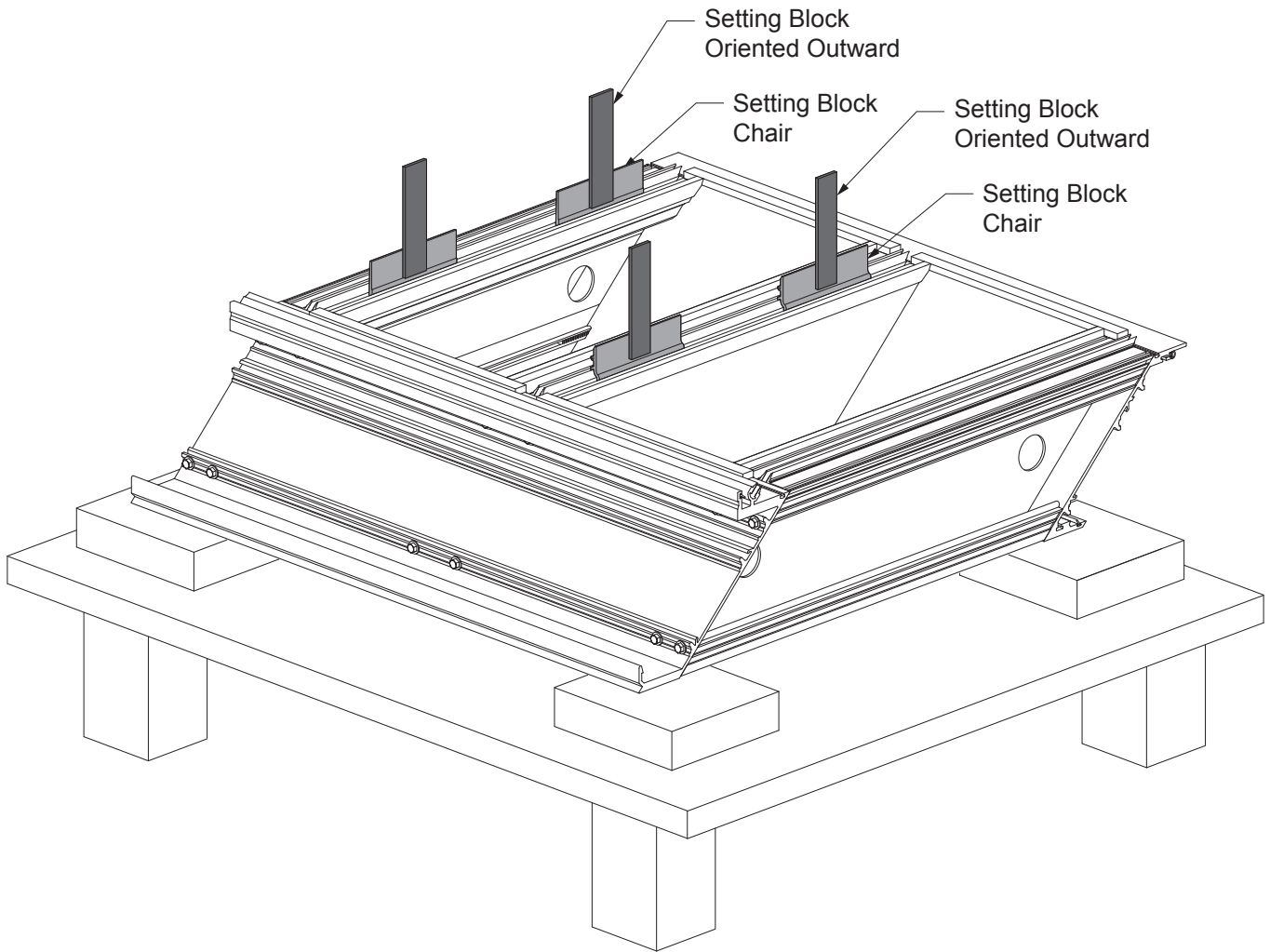
Before installing the glass, double-check squareness of frame by measuring diagonals. The maximum difference between diagonals is 1/16". Sight down mullions to make sure unit is not bowed. A unit glazed in a "out of square" or "bowed" position will cause installation problems.

STEP 4: WS4 GLASS INSTALLATION

STEP 4a

INSTALL SETTING BLOCK CHAIRS AND SETTING BLOCKS

-Apply setting block chairs and temporarily apply setting blocks oriented outward on setting block chairs placed at 1/4 points of horizontals as shown in **Detail 4-9**.

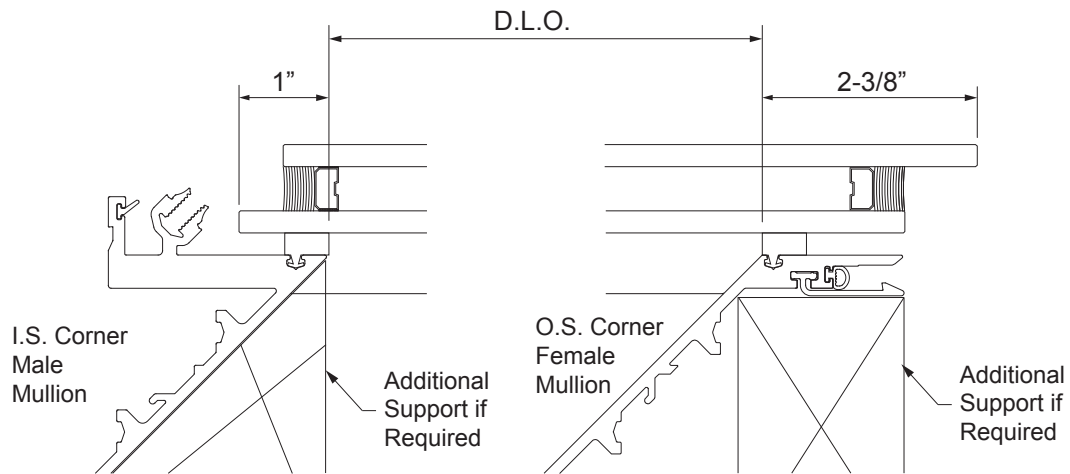


Detail 4-9

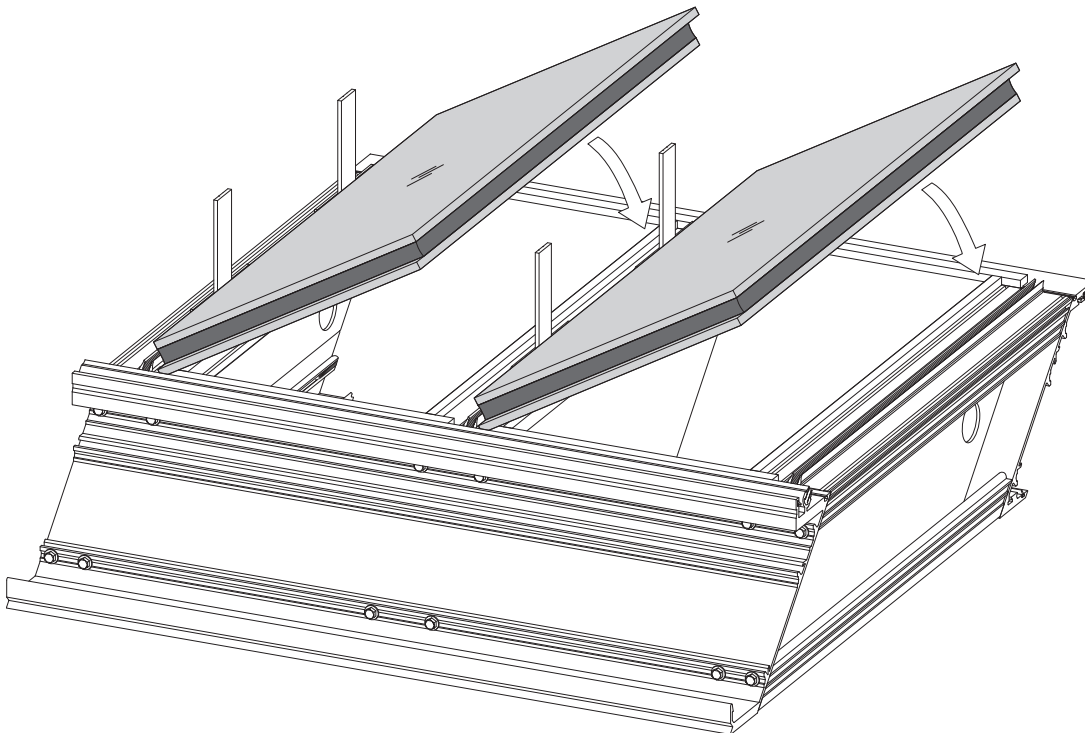
STEP 4: WS4 GLASS INSTALLATION

**STEP 4b
INSTALL GLASS**

- Position the glass laterally in the D.L.O. as shown in Detail 4-10.
- Install glass by placing bottom edge against both setting blocks and lower into place.
- When glass is properly positioned, remove setting blocks. Take caution to not move glass during setting block removal. Large units may require additional support at the corner mullion to prevent distortion under the weight of the glass.
- Reference shop details and glazing details for non typical conditions.



Detail 4-10

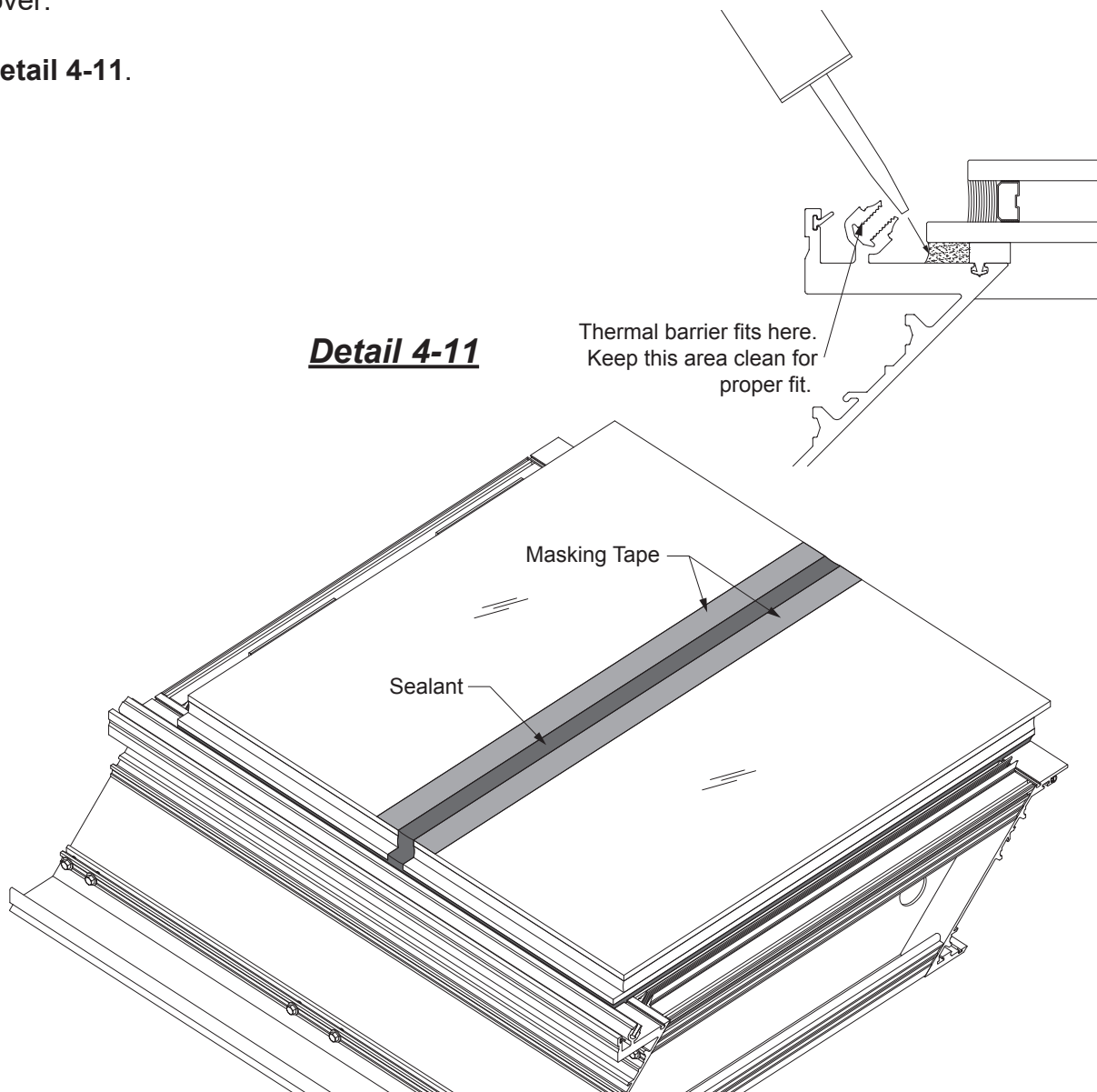


STEP 4: WS4 GLASS INSTALLATION

STEP 4b (Continued) INSTALL GLASS

- Ensure that the glass and metal surfaces are clean and prepared per sealant manufacturer's specifications and recommendations.
- Apply structural silicone sealant completely filling the space between the glass and the mullion. (Slide setting block chairs out of the way temporarily while sealing units.)
- Tool sealant. Clean out any excess sealant in horizontal groove and engagement areas.
- Also fill any horizontal SSG joints with sealant. Apply masking tape to the face of the glass at the horizontal joint between the glass lites. Insert a backer rod into the joint between the lites. Apply and tool sealant to fill the joint. Immediately remove the masking tape. Do not allow the sealant to skin over.

See **Detail 4-11**.

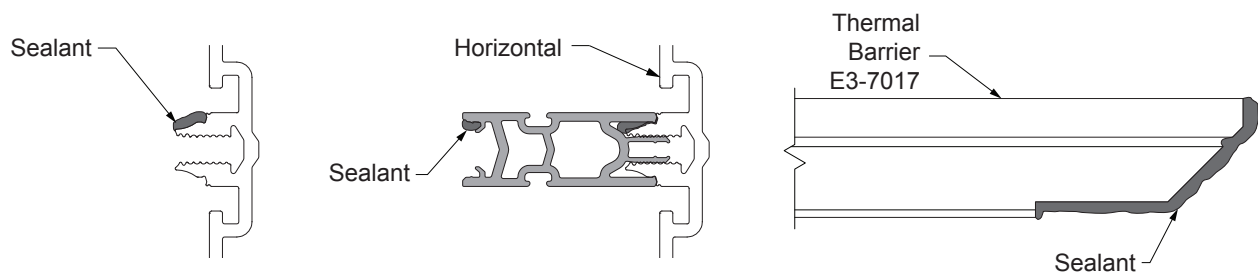


Detail 4-11

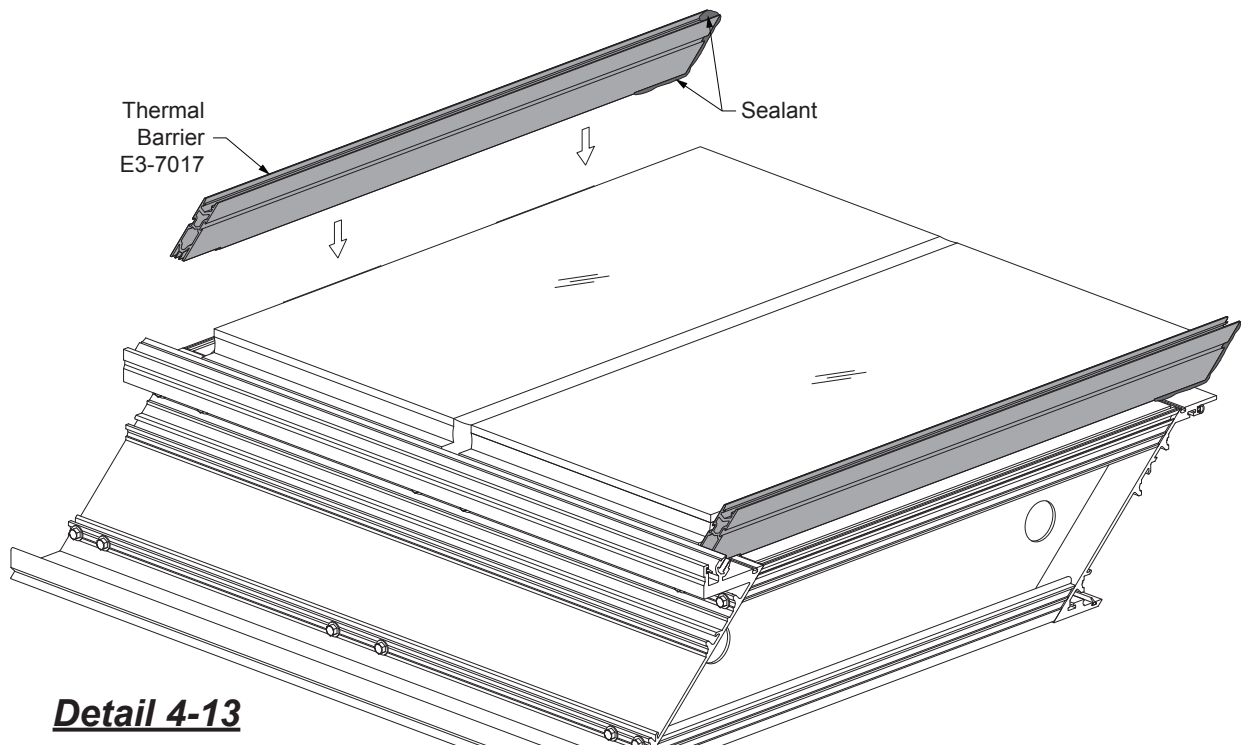
STEP 5: WS4 THERMAL BARRIER & COVER INSTALLATION

**STEP 5a
INSTALL HORIZONTAL THERMAL BARRIERS**

- Slide setting block chairs back into proper position (1/4 points or as specified in approved shop drawings) and insert setting blocks.
- Snap in corner thermal barrier first.
- Horizontal thermal barriers (E3-7017) will require a continuous cap bead the length of the horizontal as shown in **Detail 4-12** prior to installation. Also, apply a liberal amount of sealant to the end of the thermal barrier to be positioned at the outside SSG corner.
- Before sealant cures, snap in thermal barriers as shown in **Detail 4-13**. Tool the sealant between the intermediate horizontal thermal barrier and the corner thermal barrier.



Detail 4-12



Detail 4-13

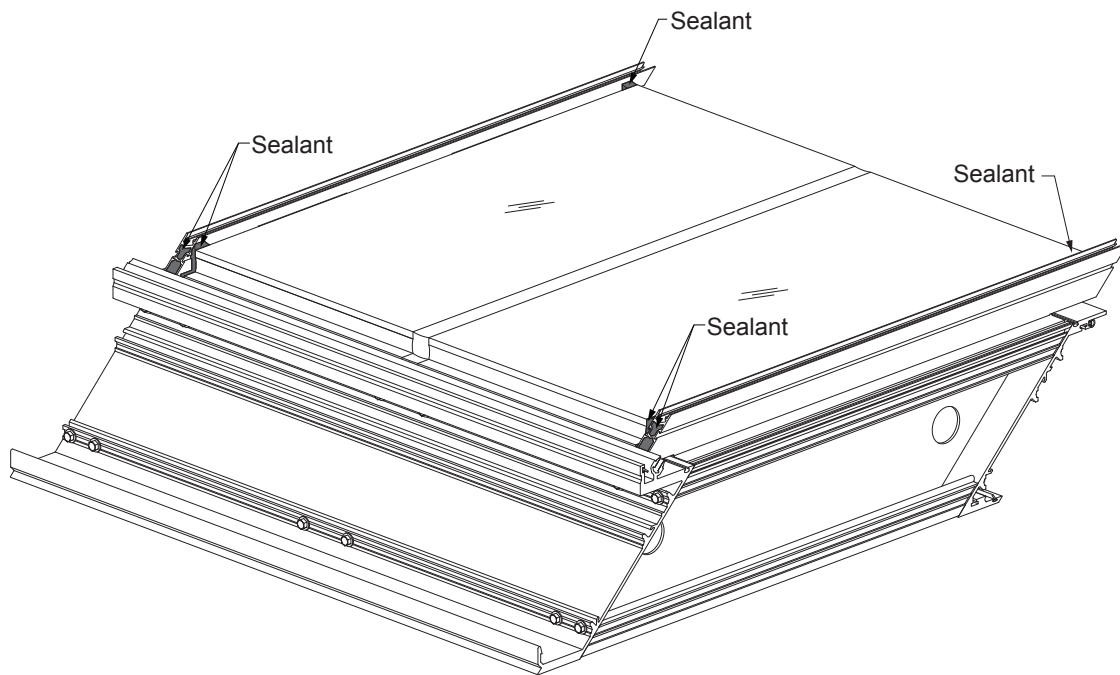
STEP 5: WS4 THERMAL BARRIER & COVER INSTALLATION

STEP 5a (Continued)

INSTALL THERMAL BARRIERS

-Seal the end cavities at the ends of the thermal barriers and the gap between the thermal barriers and the glass.

See **Detail 4-14**.



Detail 4-14

STEP 5: WS4 THERMAL BARRIER & COVER INSTALLATION

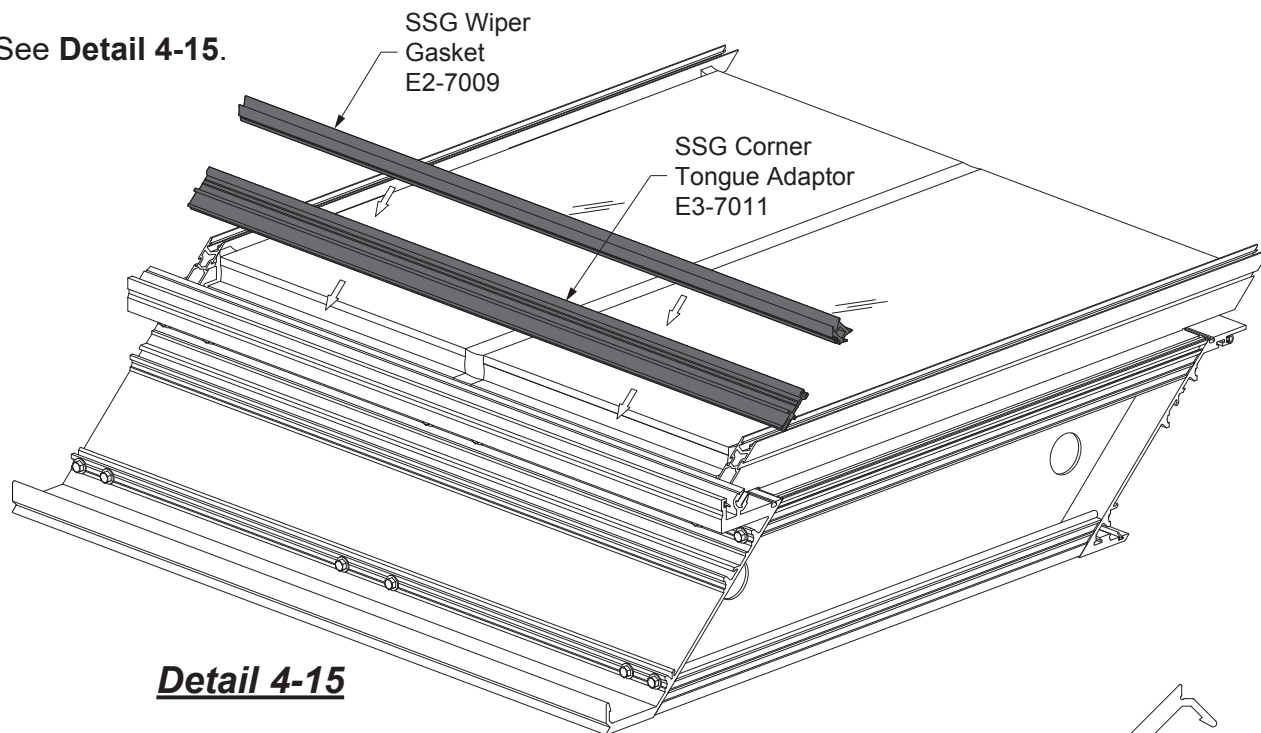
STEP 5b

INSTALL SSG WIPER GASKET

-Apply a few dabs of sealant to the SSG corner tongue adaptor E2-7011. Snap the tongue adaptor into the inside corner male mullion raceway.

-Apply a few dabs of sealant to the SSG wiper gasket E2-7009. Insert the gasket into the SSG corner tongue adaptor.

See **Detail 4-15**.

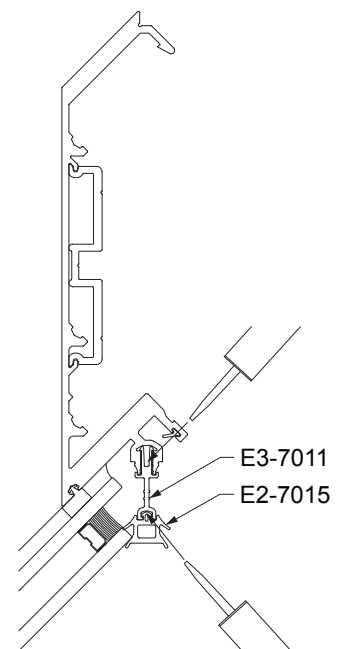


Detail 4-15

-Apply a dab of sealant at both ends of the gasket and thermal barrier to hold them in place.

See **Detail 4-16**.

Detail 4-16



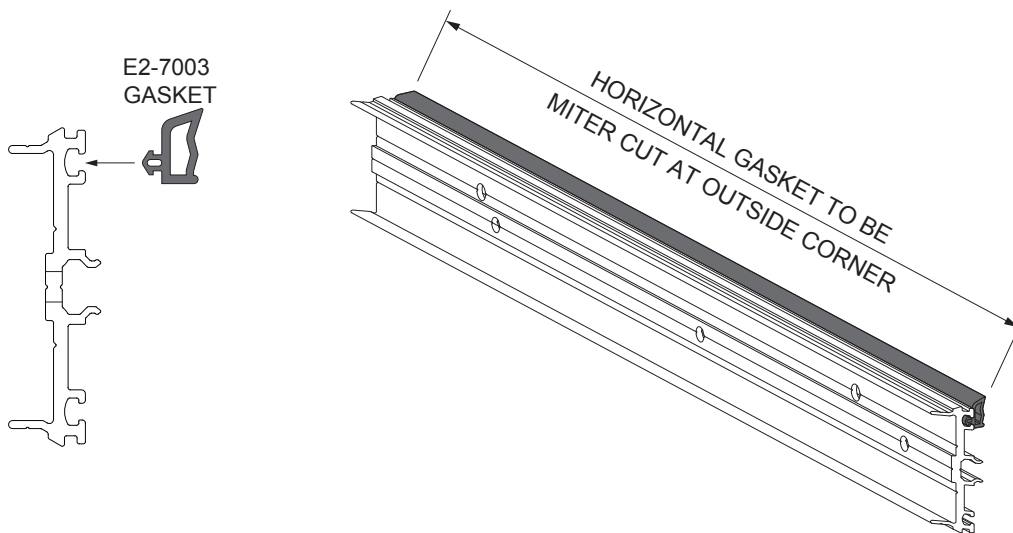
STEP 5: WS4 THERMAL BARRIER & COVER INSTALLATION

STEP 5c

PRESSURE PLATE ASSEMBLY

- Gasket material, gasket grooves and pockets should be clean.
- Gaskets can become somewhat deformed during storage in cartons. They should be removed from cartons several hours prior to glazing and laid flat or hung to allow recovery of correct shape.
- Horizontal gaskets are to be the length of their corresponding pressure plates. Gaskets should never be “stretched to fit.”
- Push in E2-7003 gasket into horizontal pressure plate reglets. Seal or crimp in place.
- Gaskets should be flush with edge of pressure plate, miter cut at outside corner and square cut at the inside corner.

See **Detail 4-17**.



Detail 4-17

STEP 5d

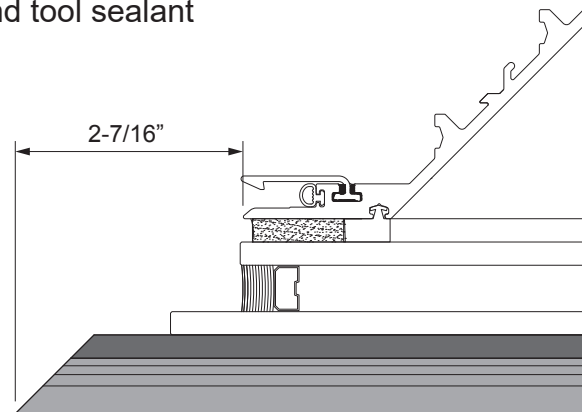
INDEX HORIZONTAL PRESSURE PLATES / DRILL THERMAL BARRIERS

- Refer to **WS1 Parts Installation, Step 5e** on **Page 17**.

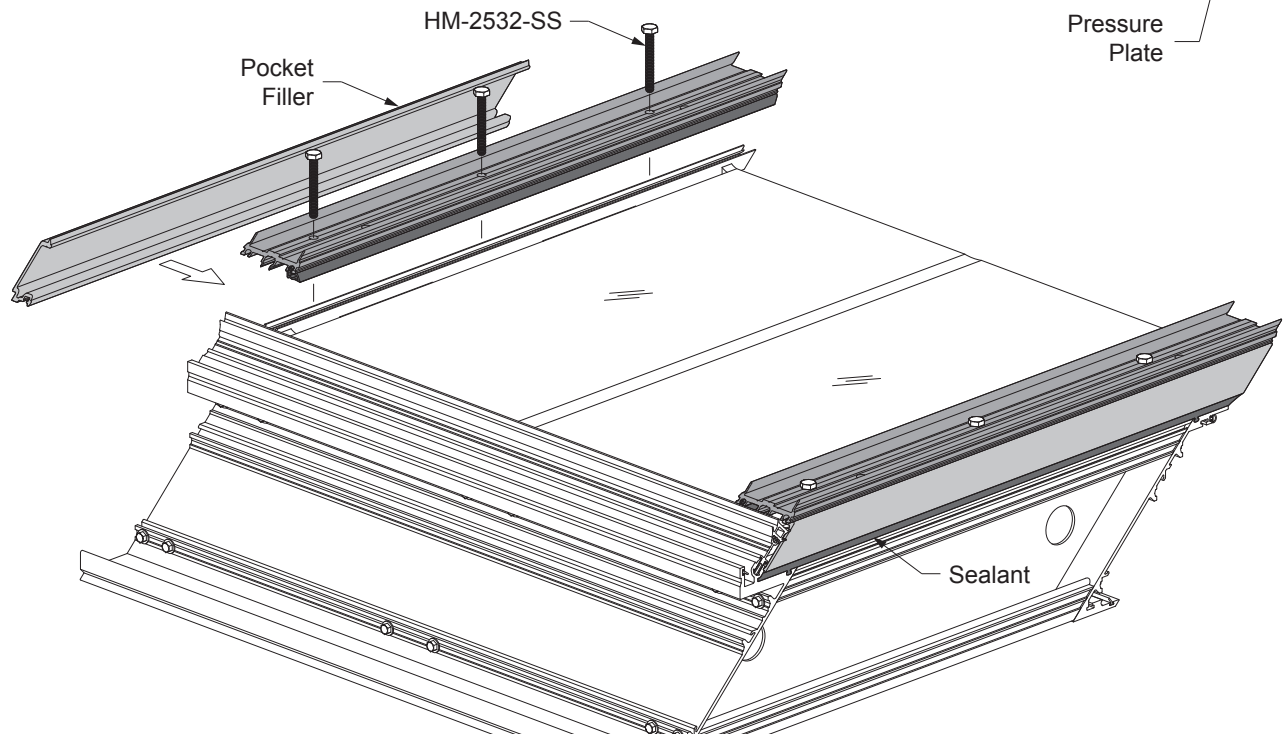
STEP 5: WS4 THERMAL BARRIER & COVER INSTALLATION

**STEP 5e
INSTALL HORIZONTAL PRESSURE PLATES**

- Properly index all horizontal pressure plates at exterior face of horizontal mullions.
- If the pressure plates are already pre-drilled, drill Ø9/32" clear holes into the thermal barriers through the existing holes on the pressure plates, using a stepped drill bit as indicated on **Page 17, Detail 1-17**.
Otherwise, clear drill Ø9/32" holes into the pressure plates and thermal barriers at 9" maximum on center, unless otherwise noted, using a stepped drill bit.
- At all intermediate horizontals, apply sealant to snap area to maintain a watertight barrier.
- Using HM-2532-SS fasteners, install horizontal pressure plate, with the miter cut outside corner 2-7/16" from the outermost edge of the outside corner female mullion.
- Snap in the pocket filler into the head and sill. Apply and tool sealant into the cavities as shown in **Detail 4-18**.



Detail 4-18

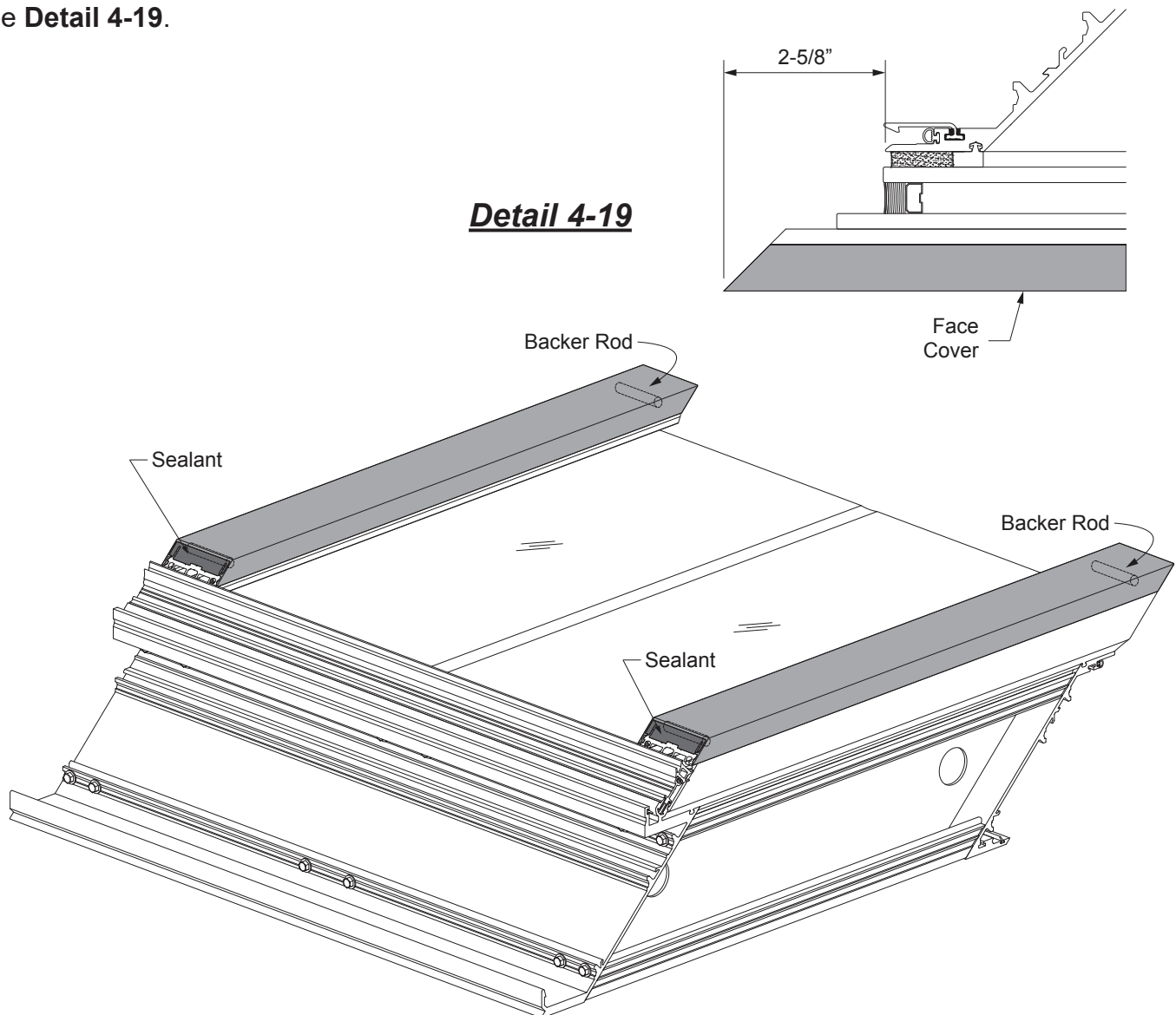


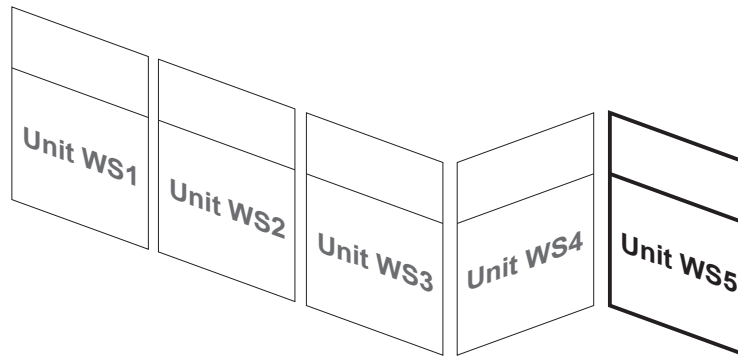
STEP 5: WC4 THERMAL BARRIER & COVER INSTALLATION

STEP 5f INSTALL FACE COVERS

- Horizontal face covers are to be positioned flush with the mitered end of the outside corner pressure plate, 2-5/8" from the outside edge of the outside corner female mullion.
- Care must be taken to avoid damage to covers during installation. Use a block of wood along with a hammer or mallet to seat the cover.
- Insert a backer rod into the ends of the installed face covers, and fill the end cavities with sealant. Wipe excess sealant clean..

See **Detail 4-19**.



WS5 TABLE OF CONTENTS

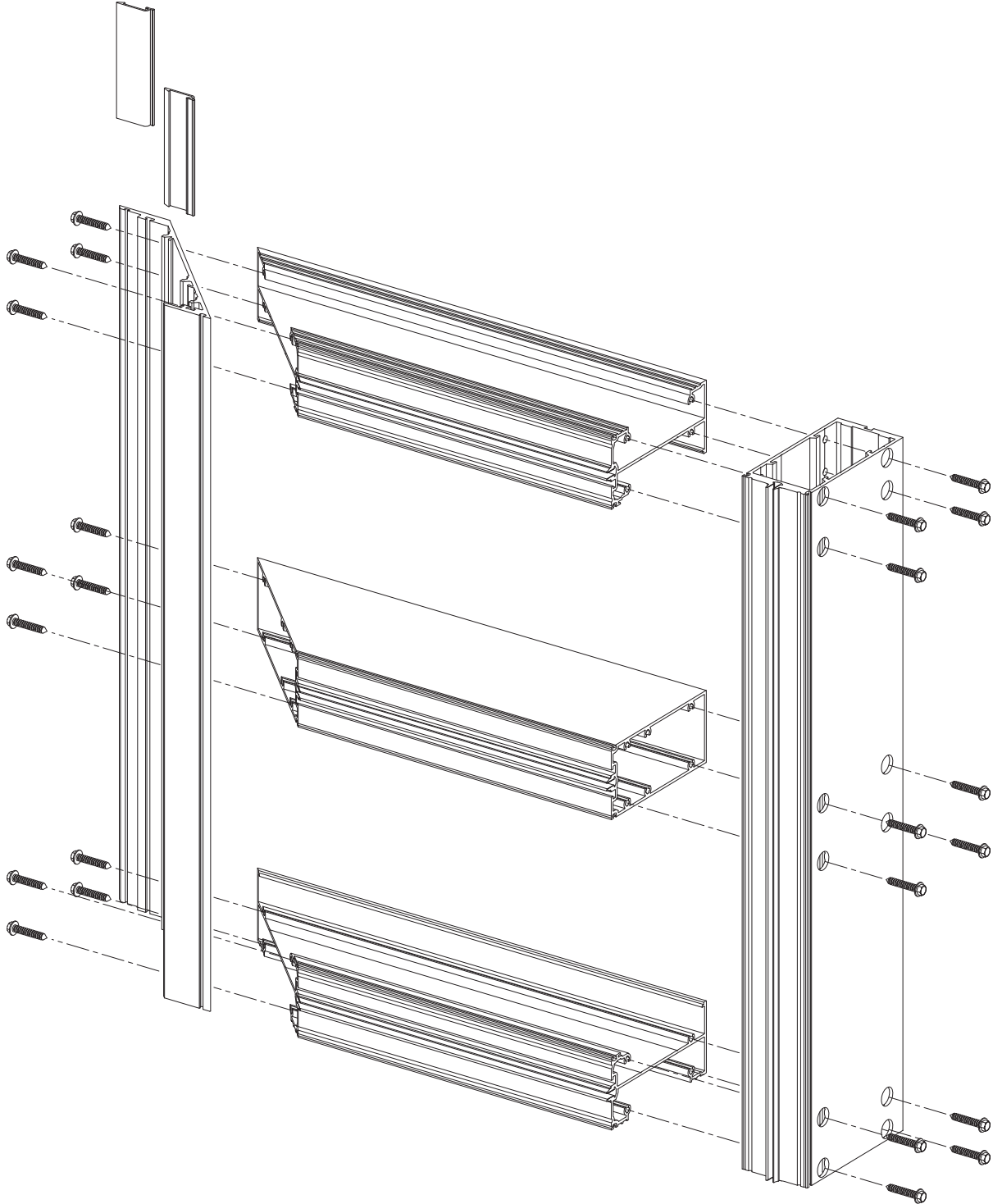
The following is intended for use as a guide for assembly of **Unit WS5** of the **YUW 750 XT 4-Sided SSG Curtain Wall System**. It is organized into five steps which will take you from assembly of parts to completed units. Note that the inside corner of Unit WC5 is SSG only.

Step 1: WS5 Unit Assembly	Pages 71 to 74
Step 2: WS5 Parts Installation	Pages 75 & 76
Step 3: WS5 Gasket Installation	Pages 77 & 78
Step 4: WS5 Glass Installation	Pages 79 to 81
Step 5: WS5 Thermal Barrier & Cover Installation.....	Pages 82 to 90

Care should be taken to ensure you have inventory of all items required to complete this assembly. We recommend you refer to the parts list (pages iv - viii) as a reference and compare it to your specific project to ensure you have all the correct parts and tools required to complete the assembly.

STEP 1: WS5 UNIT ASSEMBLY

MAJOR COMPONENTS



STEP 1: WS5 UNIT ASSEMBLY

STEP 1a

APPLY SEALANT TO FRAMING MEMBERS

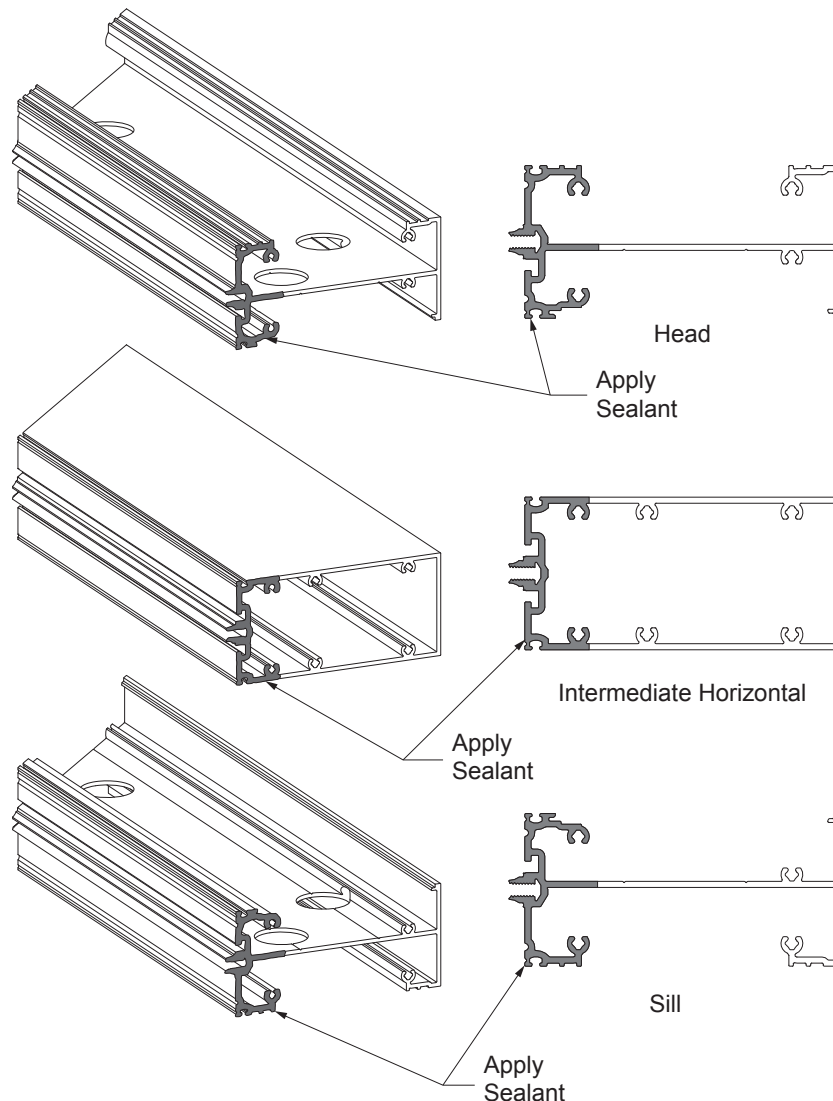
-Clean, prime and apply sealant to both ends of horizontals and tops of verticals per typical unit detail and approved shop drawings.

See **Detail 5-1**.

Stacking Tray: seal at the front wall and bottom wall back to 1st screw spline.

Intermediate Horizontals: seal at the front of tube back to 1st screw spline.

Stacking Sill: seal at the front leg, 1" back along top of sill.



Detail 5-1

STEP 1: WS5 UNIT ASSEMBLY

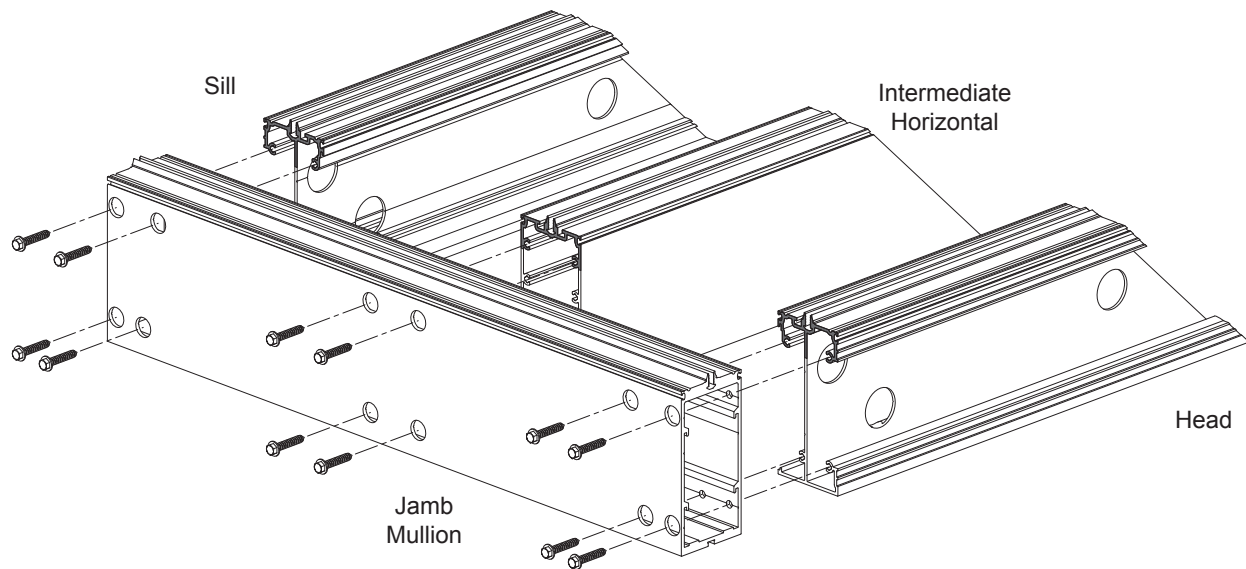
STEP 1b

ATTACH VERTICAL MULLIONS TO HORIZONTALS

-Position horizontal members aligning splines with screw holes in the jamb mullion and assemble with HC-1220-SS fasteners as shown in **Detail 5-2**. Wipe off excess sealant.

Note: Take care to keep sealant from getting into gasket raceways, setting block chair pockets and around stems.

-Tool all excess sealant flush.



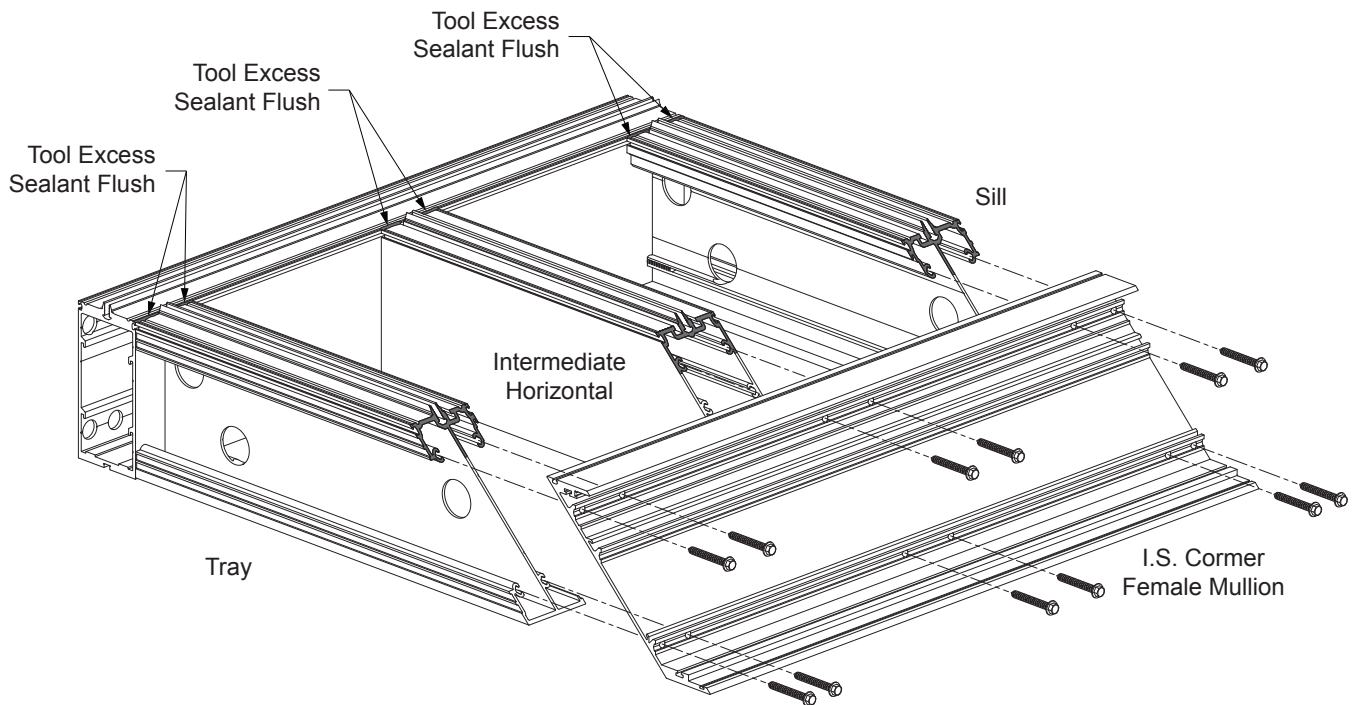
Detail 5-2

STEP 1: WS5 UNIT ASSEMBLY**STEP 1b (Continued)****ATTACH VERTICAL MULLIONS TO HORIZONTALS**

-Position horizontal members aligning splines with screw holes in the inside corner female mullion and assemble with HC-1228-SS fasteners as shown in **Detail 5-3**. Wipe off excess sealant.

Note: Take care to keep sealant from getting into gasket raceways, setting block chair pockets and around stems.

-Tool all excess sealant flush.

**Detail 5-3**

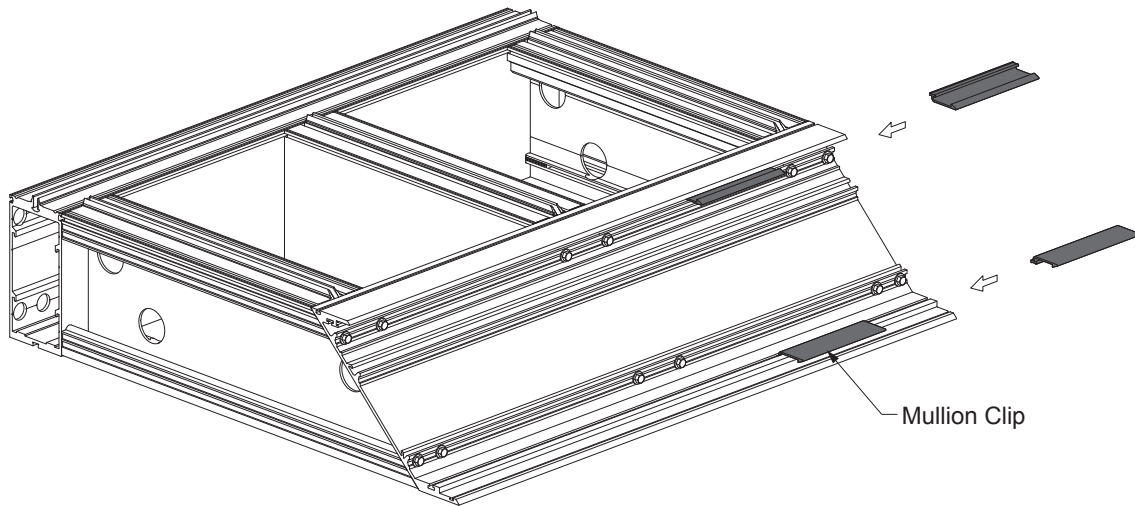
STEP 2: WS5 PARTS INSTALLATION

STEP 2a INSTALL MULLION INTERLOCKING CLIPS

Mullion interlock clips are required. Refer to approved shop drawings / engineering calculations for location and quantity.

-Install mullion interlock clips into the inside corner female mullion and secure the clips in place with tape and sealant.

See **Detail 5-4** and **Detail 5-5**.

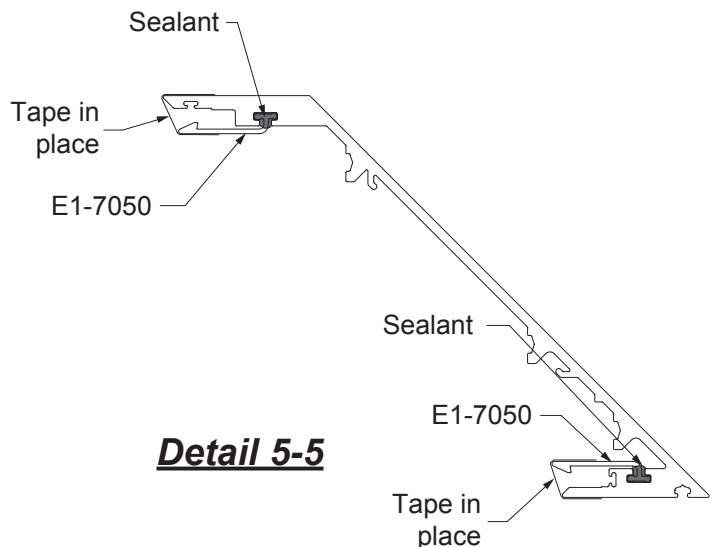


Detail 5-4

NOTE: If clip location coincides with an anchor lug or horizontal location, secure clips in place with sealant and tape just above or below to allow for tapping bar or screw installation.

****REVIEW WITH PROJECT ENGINEER TO MAKE SURE IF ADDITIONAL INTERLOCKING CLIPS ARE REQUIRED.

If steel is being installed in mullion, mullion interlock clips will have to be installed with steel after bay assembly to allow access to fasten horizontal mullions.

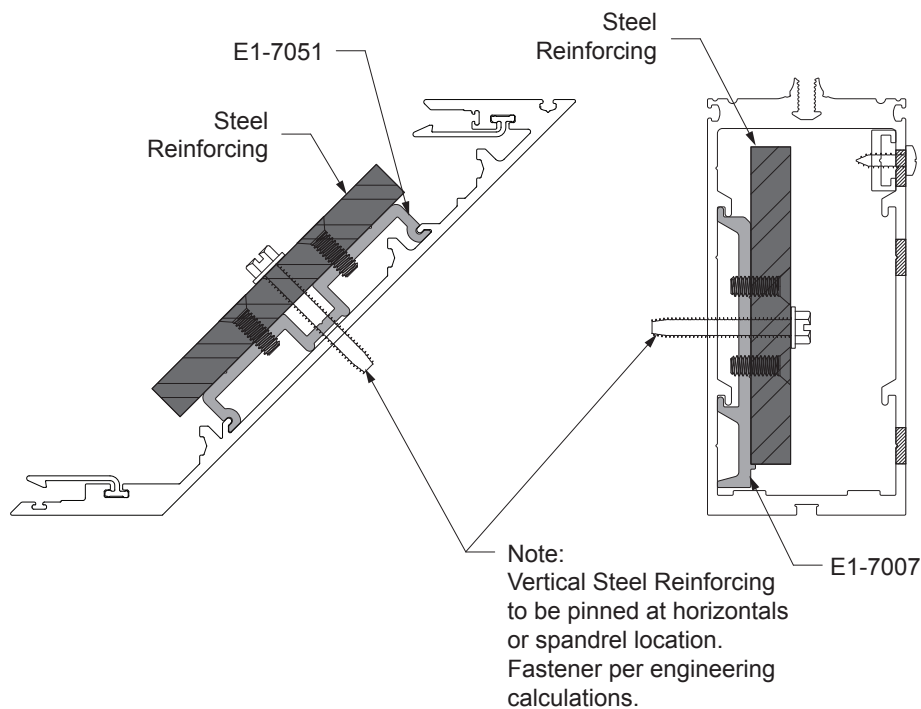


Detail 5-5

STEP 2: WS5 PARTS INSTALLATION**STEP 2b****INSTALL STEEL REINFORCING (If Required)**

-Install steel or aluminum reinforcing as required to the mullions per approved shop drawings. Shim and fasten as required. Coordinate installation of steel with anchor lug backup.

See **Detail 5-6**.



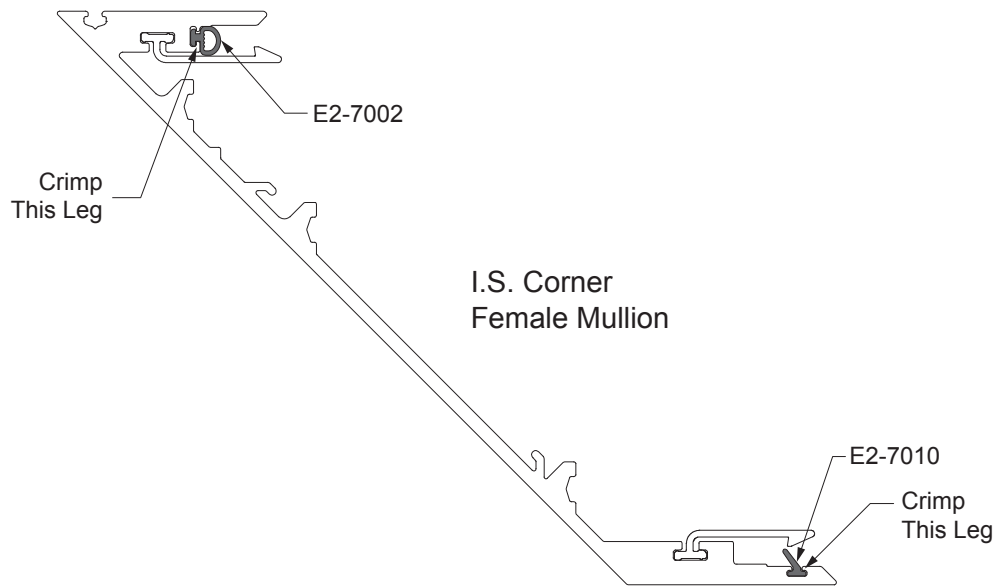
Detail 5-6

STEP 3: WS5 GASKET INSTALLATION

**STEP 3a
INSTALL WEATHER SEAL GASKETS**

- Slide in the air water seal gasket at the outer leg gasket raceway of the inside corner female mullion as shown in **Detail 5-7**.
- Crimp raceway at both ends of mullion by deforming the retaining leg of the gasket raceway in order to keep the gasket from sliding out during unit installation. Gaskets to run full length of mullion.

Note: Weather seal gasket is handed. Install gasket in the orientation as shown below.



Detail 5-7

**STEP 3b
SEAL HORIZONTAL INTERSECTIONS**

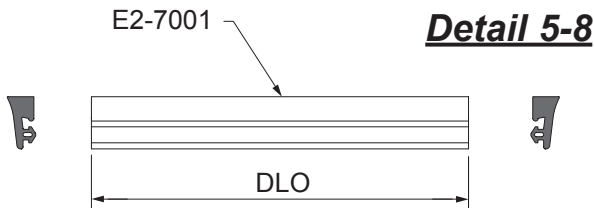
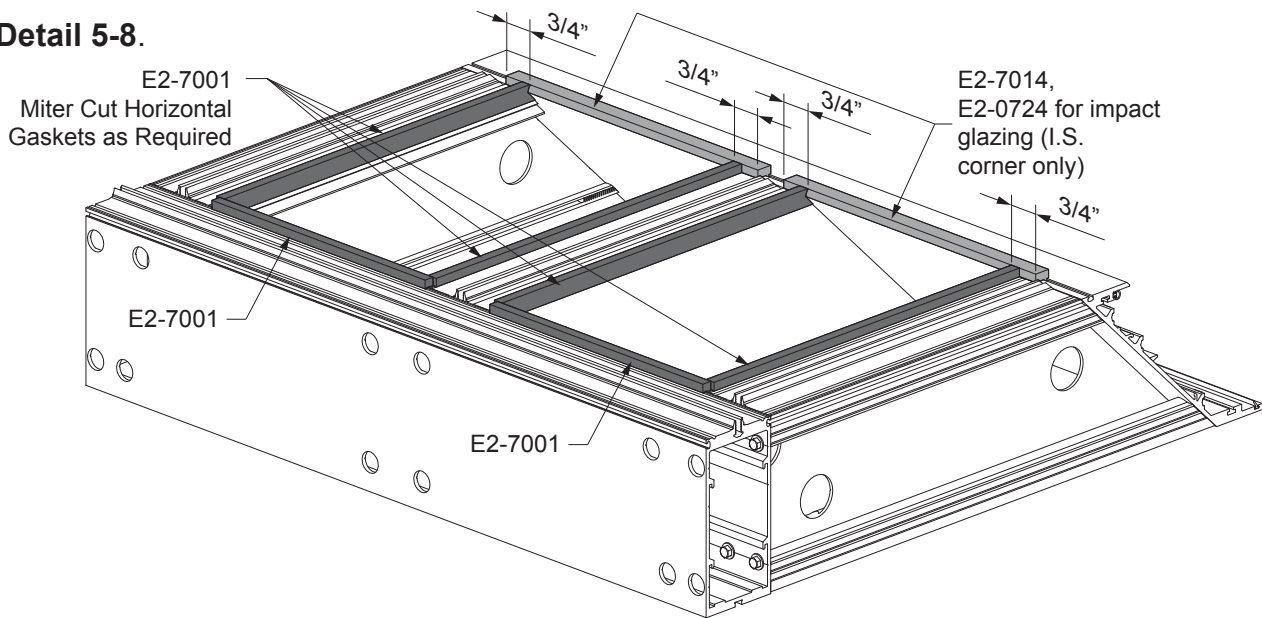
- Refer to **WS1 Gasket Installation, Step 3b** on **Page 8**.

STEP 3: WS5 GASKET INSTALLATION

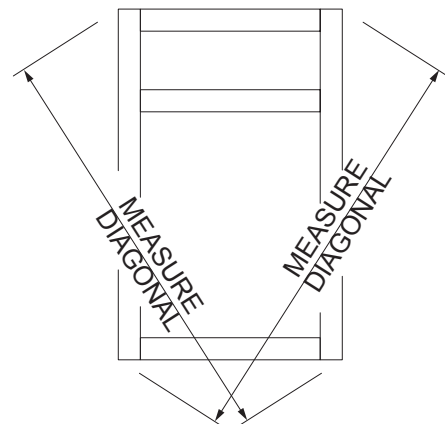
**STEP 3c
INSTALL INTERIOR GLAZING GASKETS**

- Secure the assembled unit to a flat surface with the exterior facing up. Table must be flat and level, and must support frame at all locations. A unit glazed with any mullion deflection will cause installation problems. Additional bracing under the glass may be required with large glass lites to prevent glass deflection.
- Clean and prepare glass and aluminum surfaces in strict conformity with sealant manufacturer's specifications and requirements.
- Install E2-7001 interior gasket on all horizontals and the jamb mullion. Install E2-7014 spacer on the inside corner female mullion (except for impact systems where E2-0724 is used on the inside corner male mullion). Horizontal gaskets are to be cut to D.L.O. Corner spacer is to be cut to D.L.O. + 1-1/2". Vertical gaskets are to be installed first, followed by the horizontal gaskets.

See **Detail 5-8**.



Note:
Before installing the glass, double-check squareness of frame by measuring diagonals. The maximum difference between diagonals is 1/16". Sight down mullions to make sure unit is not bowed. A unit glazed in a "out of square" or "bowed" position will cause installation problems.

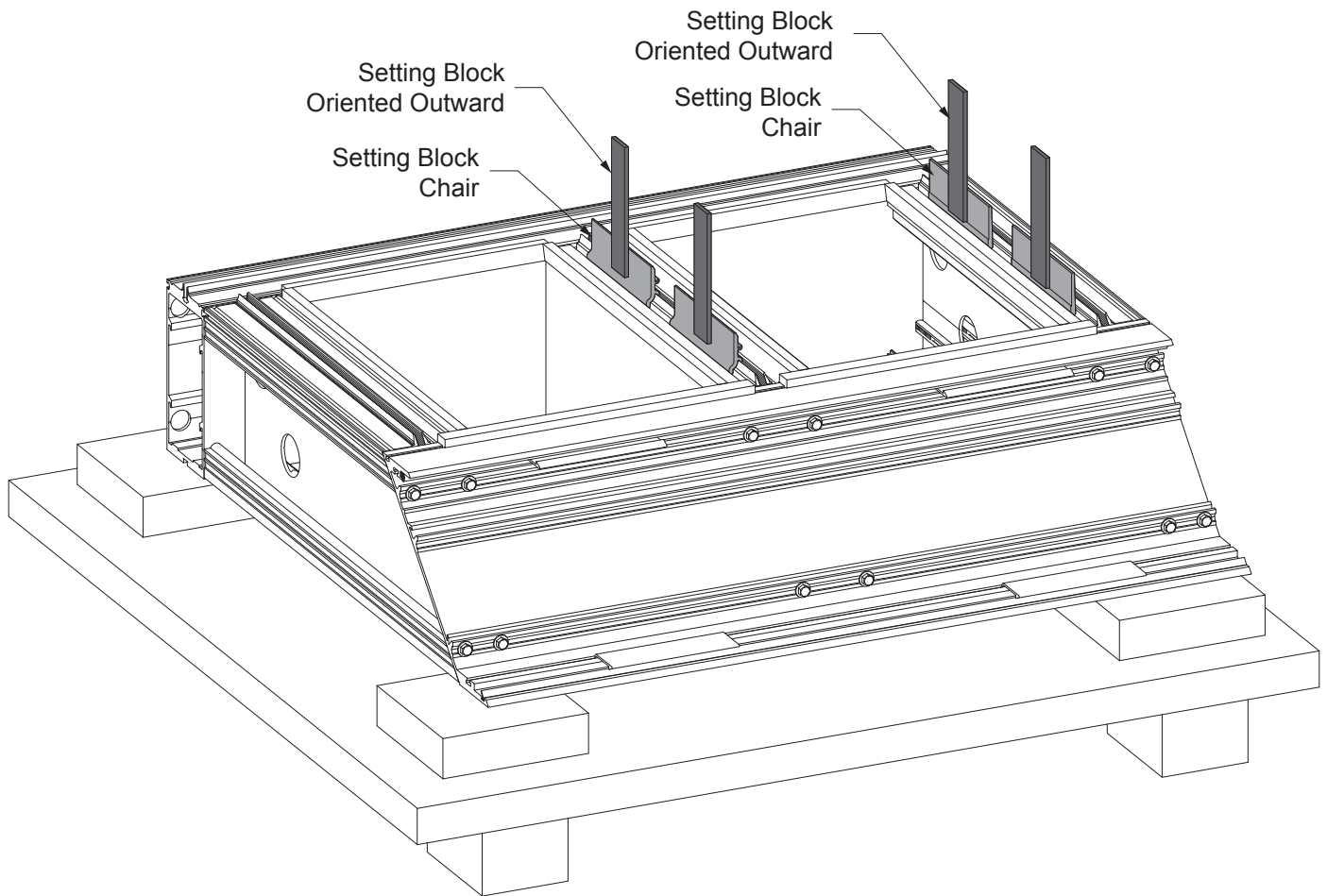


STEP 4: WS5 GLASS INSTALLATION

STEP 4a

INSTALL SETTING BLOCK CHAIRS AND SETTING BLOCKS

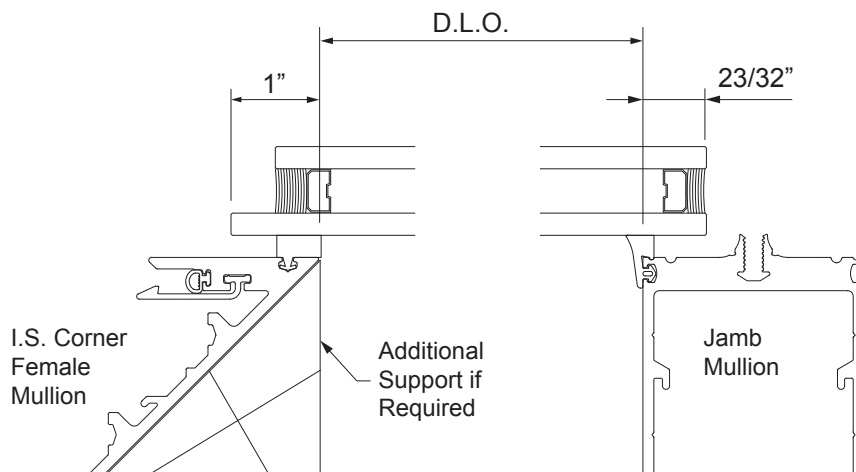
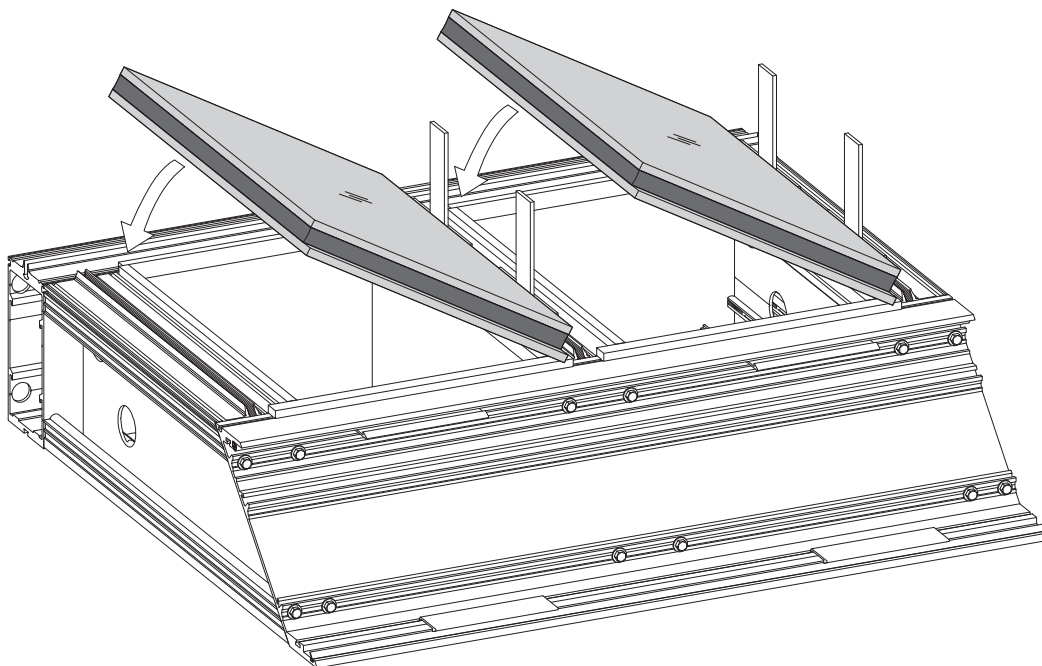
-Apply setting block chairs and temporarily apply setting blocks oriented outward on setting block chairs placed at 1/4 points of horizontals as shown in **Detail 5-9**.



Detail 5-9

STEP 4: WS5 GLASS INSTALLATION**STEP 4b
INSTALL GLASS**

- Position the glass laterally in the D.L.O. as shown in Detail 5-10.
- Install glass by placing bottom edge against both setting blocks and lower into place.
- When glass is properly positioned, remove setting blocks. Take caution to not move glass during setting block removal. Large units may require additional support at the corner mullion to prevent distortion under the weight of the glass.
- Reference shop details and glazing details for non typical conditions.

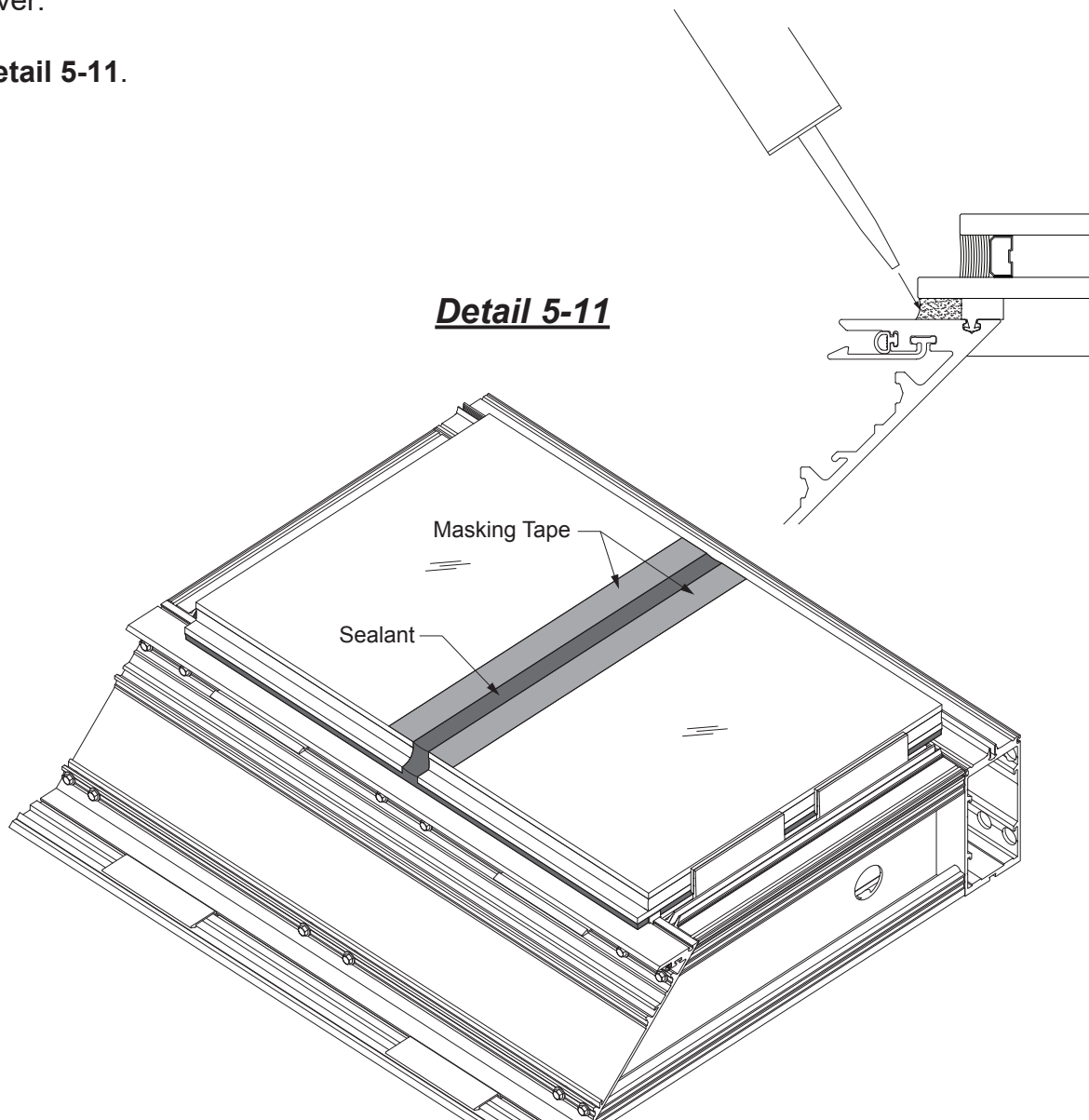
**Detail 5-10**

STEP 4: WS5 GLASS INSTALLATION

STEP 4b (Continued) INSTALL GLASS

- Ensure that the glass and metal surfaces are clean and prepared per sealant manufacturer's specifications and recommendations.
- Apply structural silicone sealant completely filling the space between the glass and the mullion. (Slide setting block chairs out of the way temporarily while sealing units.)
- Tool sealant. Clean out any excess sealant in horizontal groove and engagement areas.
- Also, fill any horizontal SSG joints with sealant. Apply masking tape to the face of the glass at the horizontal joint between the glass lites. Insert a backer rod into the joint between the lites. Apply and tool sealant to fill the joint. Immediately remove the masking tape. Do not allow the sealant to skin over.

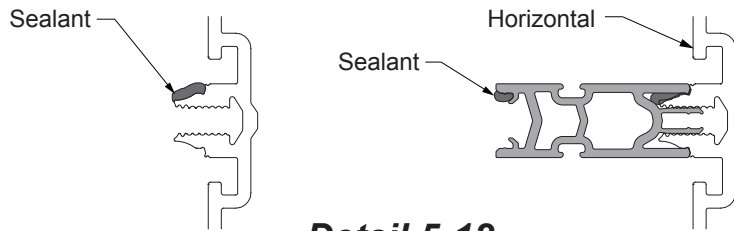
See **Detail 5-11**.



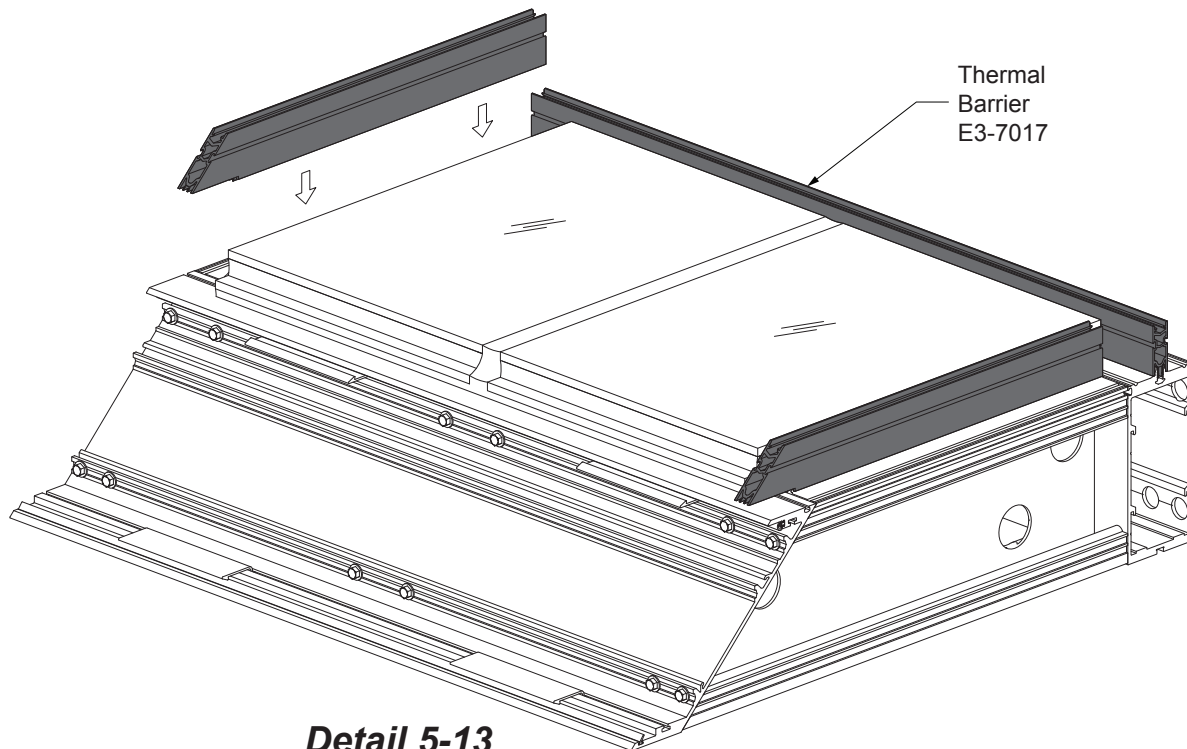
STEP 5: WS5 THERMAL BARRIER & COVER INSTALLATION

**STEP 5a
INSTALL HORIZONTAL THERMAL BARRIERS**

- Slide setting block chairs back into proper position (1/4 points or as specified in approved shop drawings) and insert setting blocks.
- Snap in corner thermal barrier first.
- Horizontal thermal barriers (E3-7017) will require a continuous cap bead the length of the horizontal as shown in **Detail 5-12** prior to installation.
- Before sealant cures, snap in thermal barriers as shown in **Detail 5-13**. Tool the sealant between the intermediate horizontal thermal barrier and the corner thermal barrier.



Detail 5-12



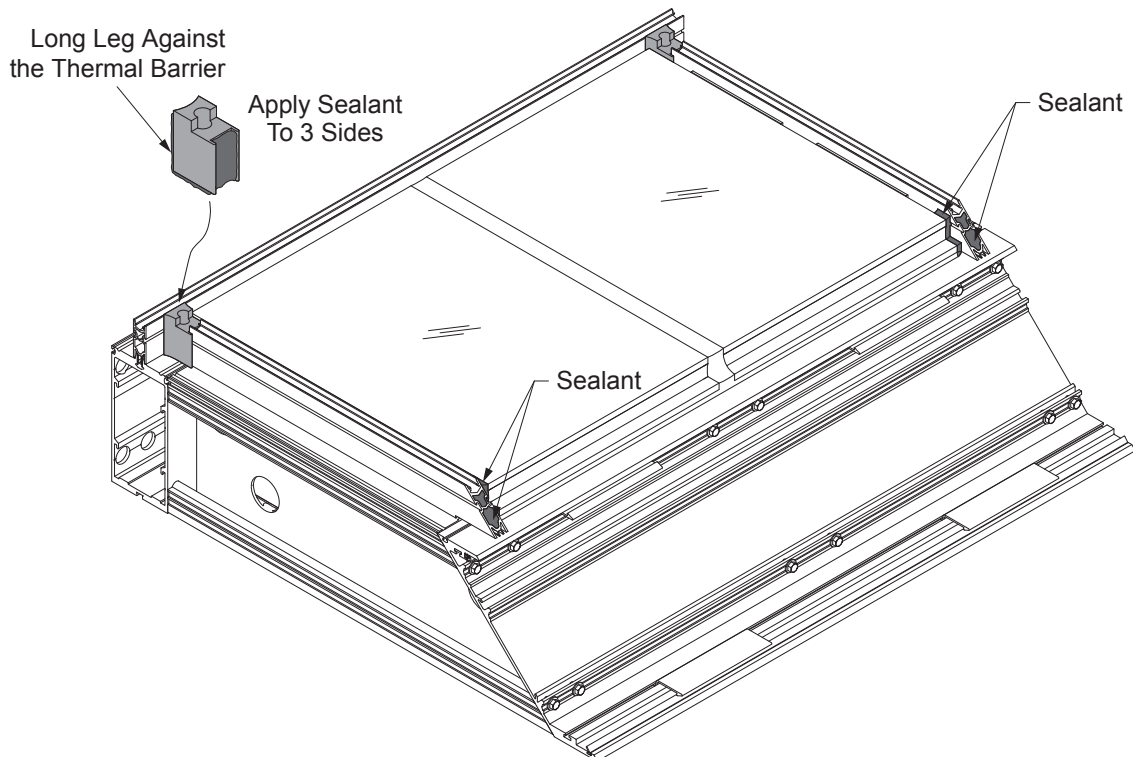
Detail 5-13

STEP 5: WS5 THERMAL BARRIER & COVER INSTALLATION

STEP 5b INSTALL JOINT PLUGS

- Joint plugs are to be installed at all horizontals at the jamb.
 - Clean the area around the thermal barrier ends with an approved cleaner.
 - Apply and tool sealant to the void where the joint plug will be installed, including at the thermal barrier ends.
 - 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 thermal barrier.
 - Press the joint plug firmly against the face of the mullion.
 - Tool the sealant to ensure a complete seal.
-
- Thermal barrier ends at the inside ssg corner are to be sealed at all head and sill.
 - Clean the area around the thermal barrier ends with an approved cleaner.
 - Apply and tool sealant, filling the end cavities of the thermal barrier.

See **Detail 5-14**.



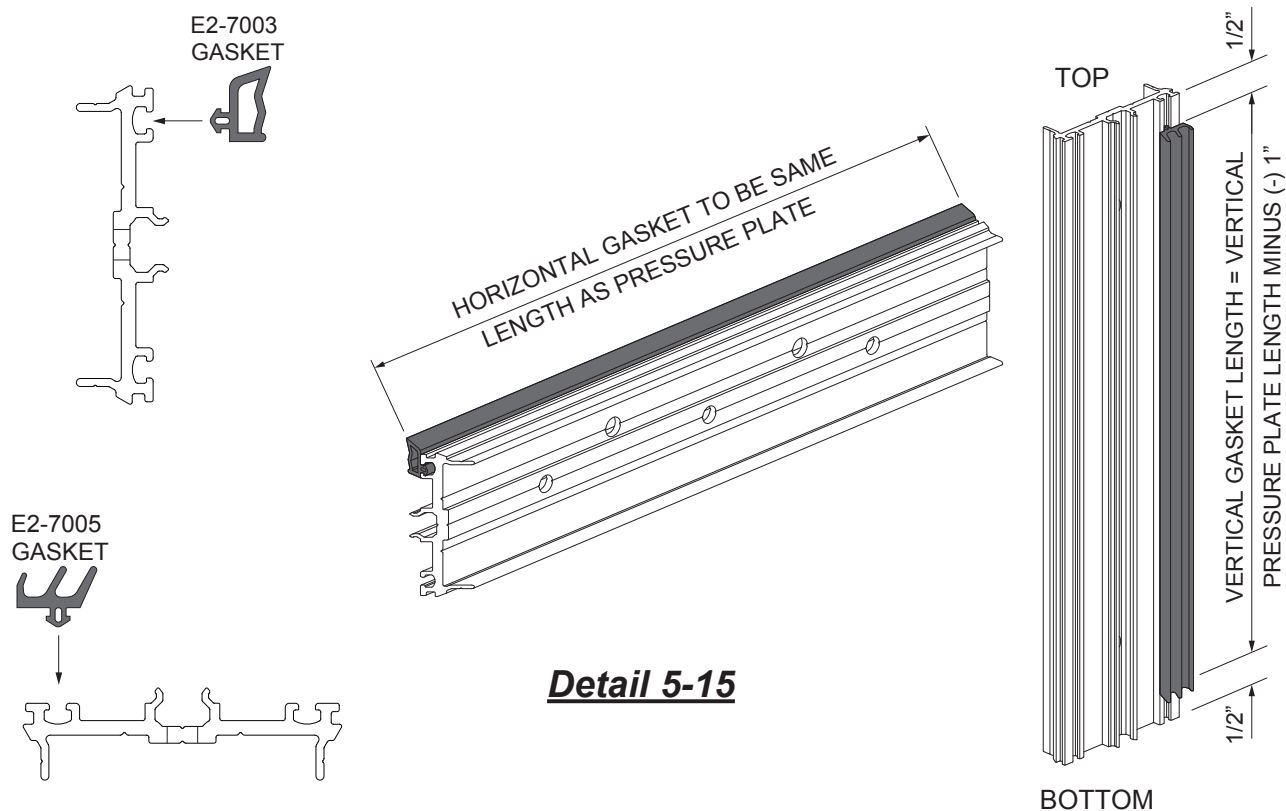
Detail 5-14

STEP 5: WS5 THERMAL BARRIER & COVER INSTALLATION

**STEP 5c
PRESSURE PLATE ASSEMBLY**

- Gasket material, gasket grooves and pockets should be clean.
- Gaskets can become somewhat deformed during storage in cartons. They should be removed from cartons several hours prior to glazing and laid flat or hung to allow recovery of correct shape.
- Horizontal gaskets are to be the length of their corresponding pressure plates. Gaskets should never be “stretched to fit.”
- Vertical gasket is to be the length of the pressure plate minus (-) 1”, centered on the pressure plate. This will allow clearance for the perimeter pocket fillers at the head and sill.
- Push in E2-7003 gasket into horizontal pressure plate reglets. Seal or crimp in place.
- Push in E2-7005 gasket into vertical pressure plate reglets.
- Gaskets should be flush with edge of pressure plate. Trim off any excess gasket to prevent interference with the end cap.

See **Detail 5-15**.



Detail 5-15

STEP 5: WS5 THERMAL BARRIER & COVER INSTALLATION

STEP 5d

INDEX PRESSURE PLATES / DRILL THERMAL BARRIERS

-Refer to **WS1 Thermal Barrier & Cover Installation, Step 5e** on **Page 17**.

STEP 5e

INSTALL JAMB PRESSURE PLATES

-Refer to **WS1 Thermal Barrier & Cover Installation, Step 5f** on **Page 18**.

STEP 5f

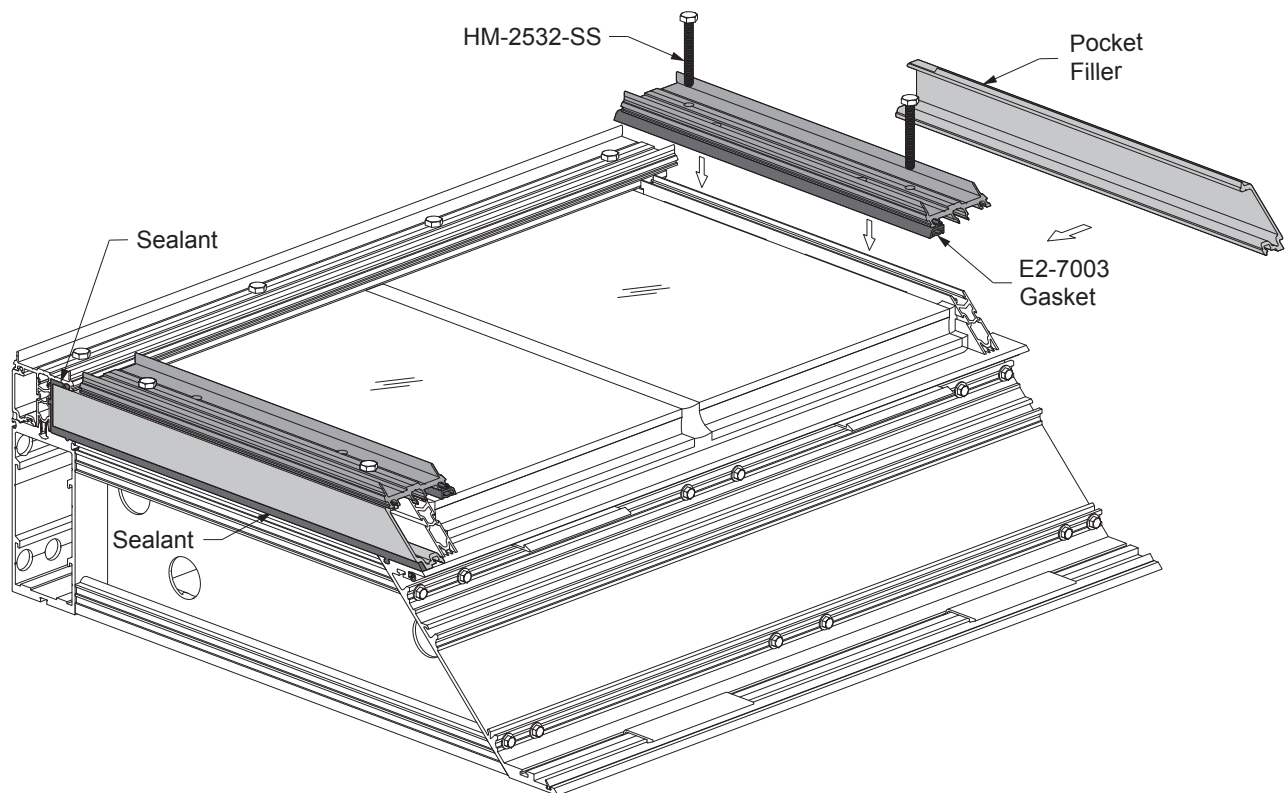
INSTALL JAMB POCKET FILLER

-Refer to **WS1 Thermal Barrier & Cover Installation, Step 5g** on **Page 18**.

STEP 5: WS5 THERMAL BARRIER & COVER INSTALLATION

**STEP 5g
INSTALL HORIZONTAL PRESSURE PLATES**

- Properly index all horizontal pressure plates at exterior face of horizontal mullions.
- If the pressure plates are already pre-drilled, drill Ø9/32" clear holes into the thermal barriers through the existing holes on the pressure plates, using a stepped drill bit as indicated on **Page 17, Detail 1-17**.
- Otherwise, clear drill Ø9/32" holes into the pressure plates and thermal barriers at 9" maximum on center, unless otherwise noted, using a stepped drill bit.
- At all intermediate horizontals, apply sealant to snap area to maintain a watertight barrier.
- Using HM-2532-SS fasteners, install horizontal pressure plate, with the square-cut end 1/8" inside the D.L.O.
- Snap in the pocket filler into the head and sill. Apply and tool sealant into the cavities as shown in **Detail 5-16**.



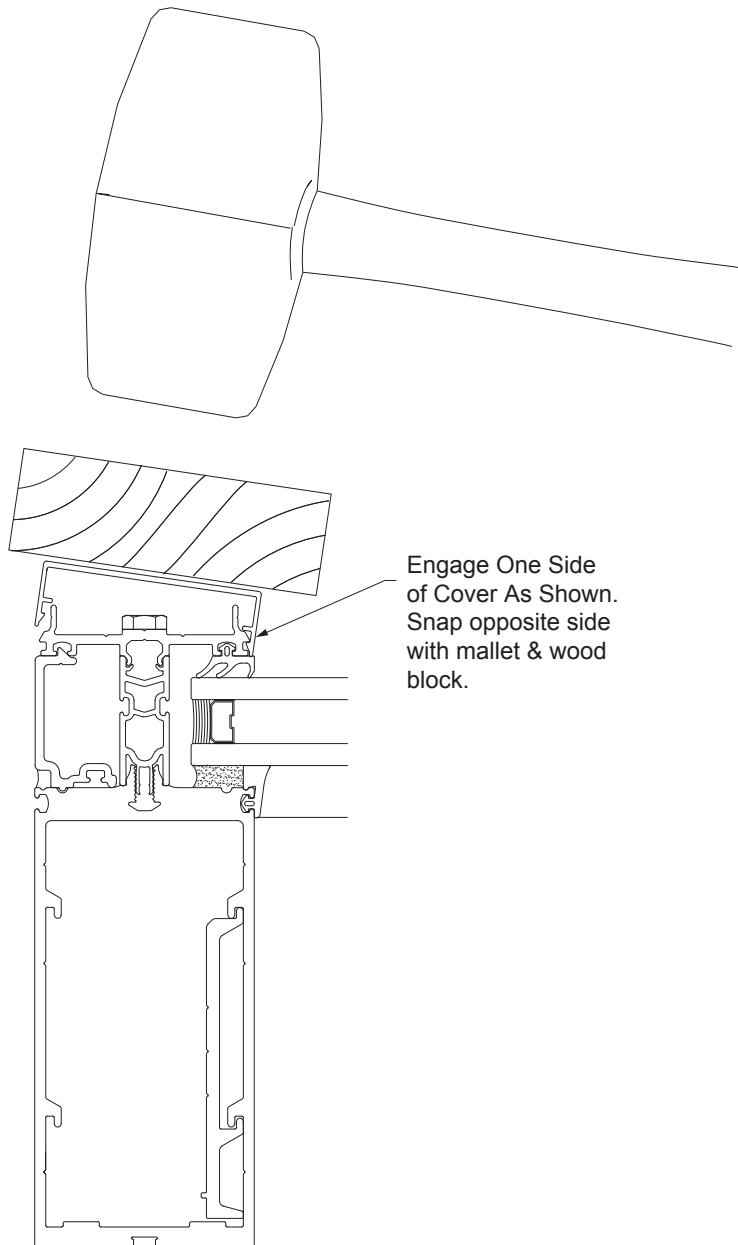
Detail 5-16

STEP 5: WS5 THERMAL BARRIER & COVER INSTALLATION

**STEP 5h
INSTALL FACE COVERS**

- Install E9-1206 vertical cover at the jamb mullion first.
- Care must be taken to avoid damage to covers during installation. Use a block of wood along with a hammer or mallet to seat the cover.

See **Detail 5-17**.

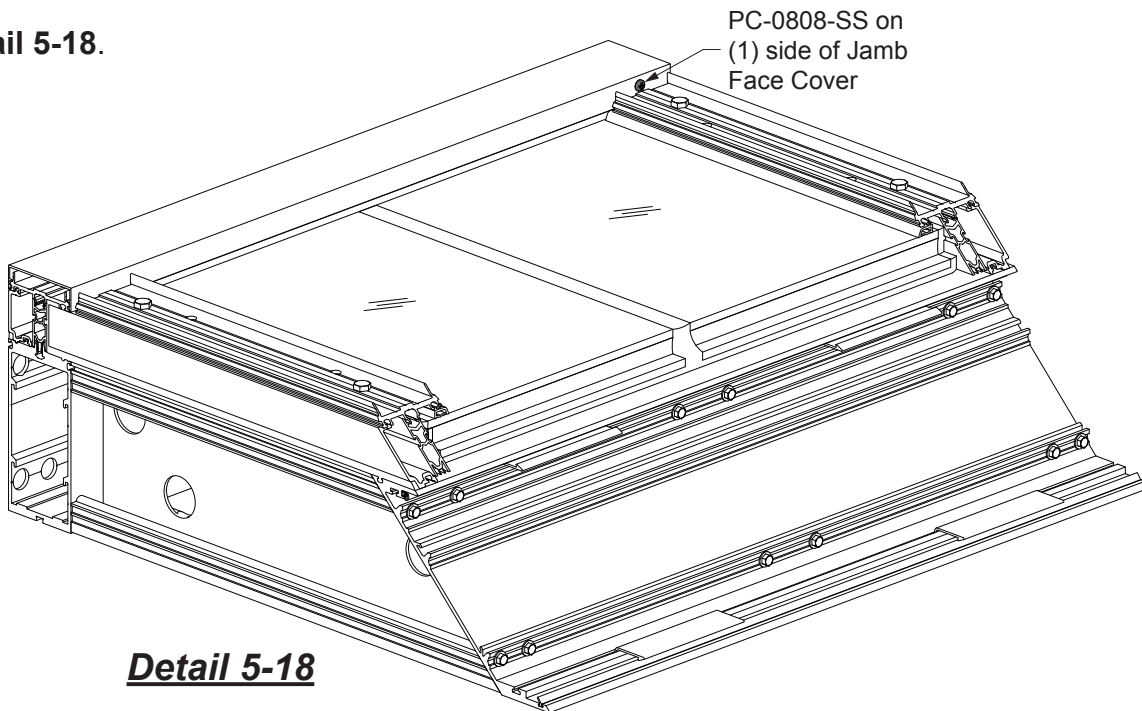


Detail 5-17

STEP 5: WS5 THERMAL BARRIER & COVER INSTALLATION**STEP 5h (Continued)
INSTALL FACE COVERS**

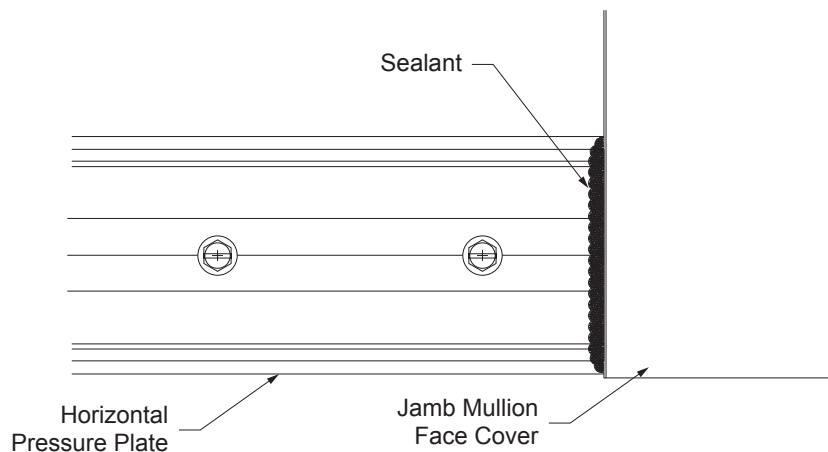
-Secure the the jamb face cover to the pressure plates by installing a PC-0808-SS fastener on one side of the cover at the captured sill. This fastener will be concealed once the horizontal face covers are installed.

See **Detail 5-18**.



-Clean joint between end of horizontal pressure plate and jamb face cover per sealant manufacturer's recommendations. Apply and tool sealant.

See **Detail 5-19**.

**Detail 5-19**

STEP 5: WS5 THERMAL BARRIER & COVER INSTALLATION

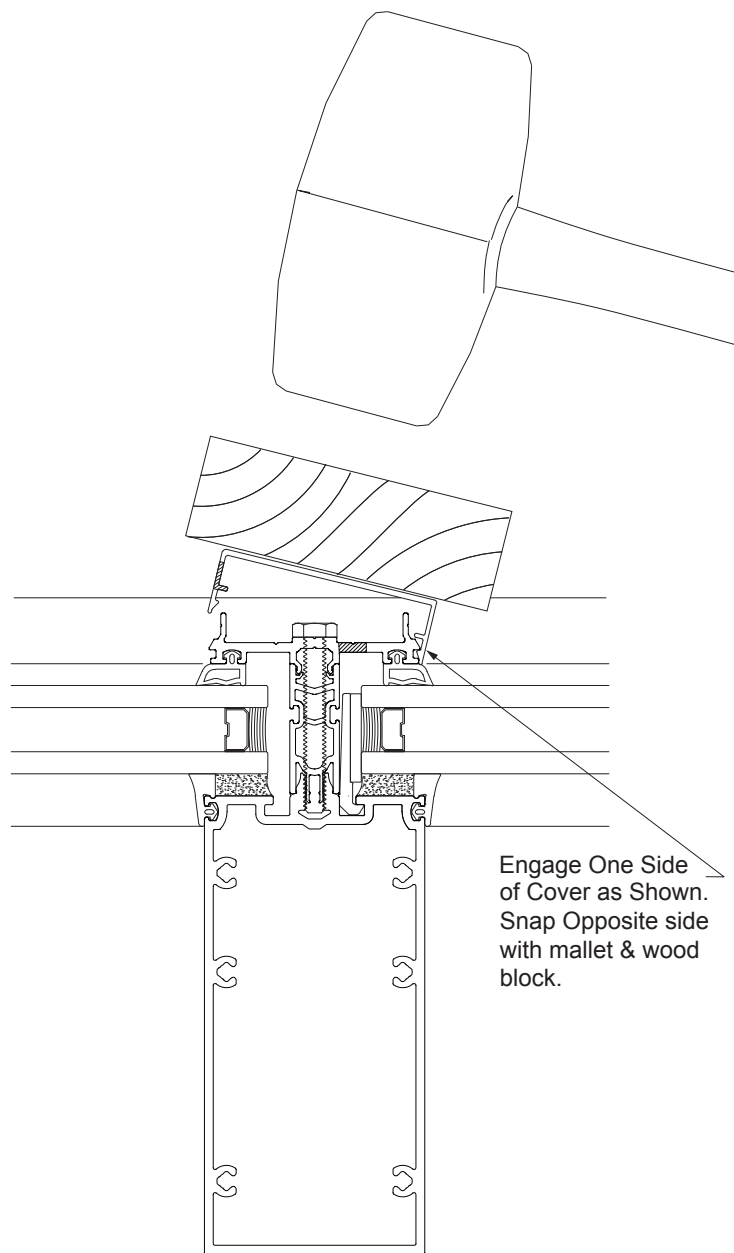
STEP 5h (Continued)

INSTALL VERTICAL FACE COVERS

-Horizontal cover length = D.L.O. + 3/8"

-Care must be taken to avoid damage to covers during installation. Use a block of wood along with a hammer or mallet to seat the cover.

See **Detail 5-20**.

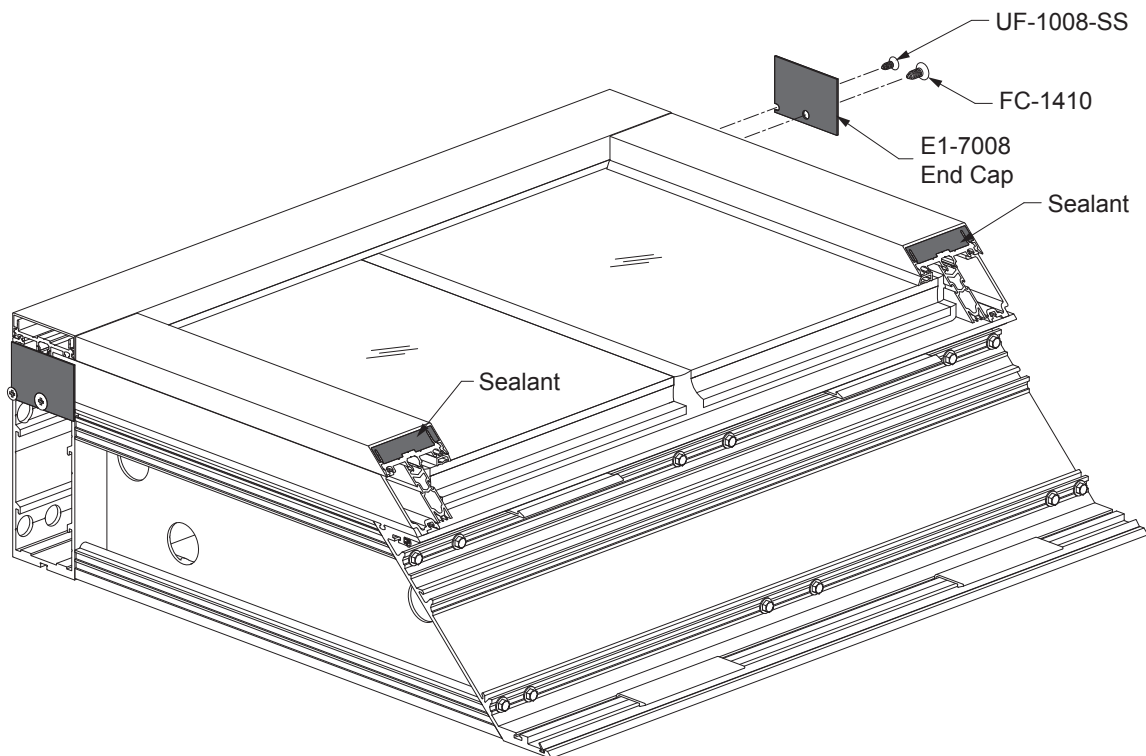


Detail 5-20

STEP 5: WS5 THERMAL BARRIER & COVER INSTALLATION**STEP 5j
INSTALL END CAPS**

- After glass installation, prepare mullion end caps, E1-7008, for installation at the top and bottom of the mullions with FC-1410 fastener at the tongue adaptor, and UF-1008-SS at the mullion glazing reglet.
- Clean all contact surfaces as recommended by sealant manufacturer.
- “Butter” ends of verticals with sealant prior to installing end cap E1-7008.
- Apply sealant into the screw raceway and along the front edge of the mullion at each end.
- Fasten and seal all screw heads with sealant.
- Seal the mitered end of the horizontal face covers.

See **Detail 5-21**.



Detail 5-21

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