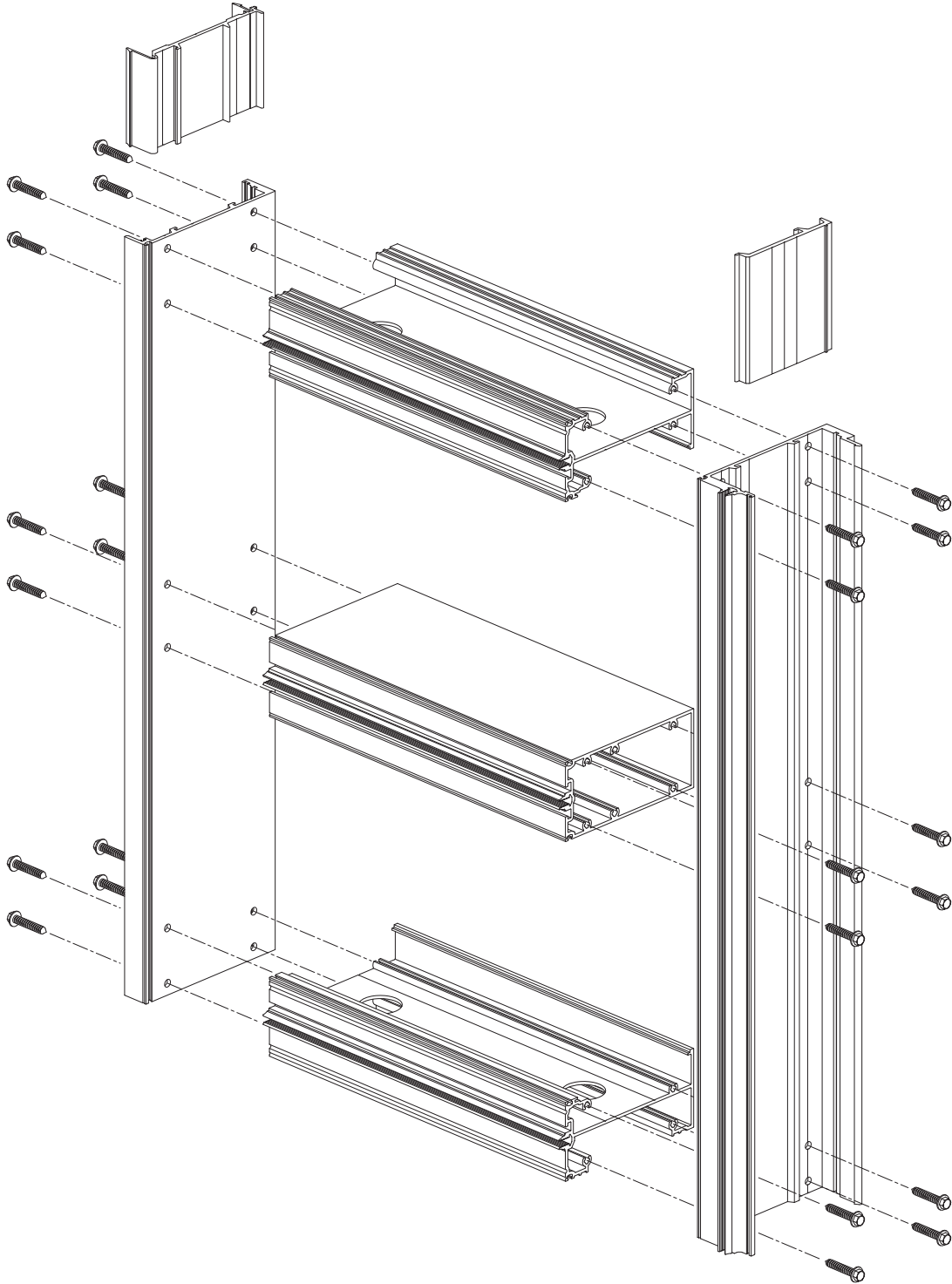


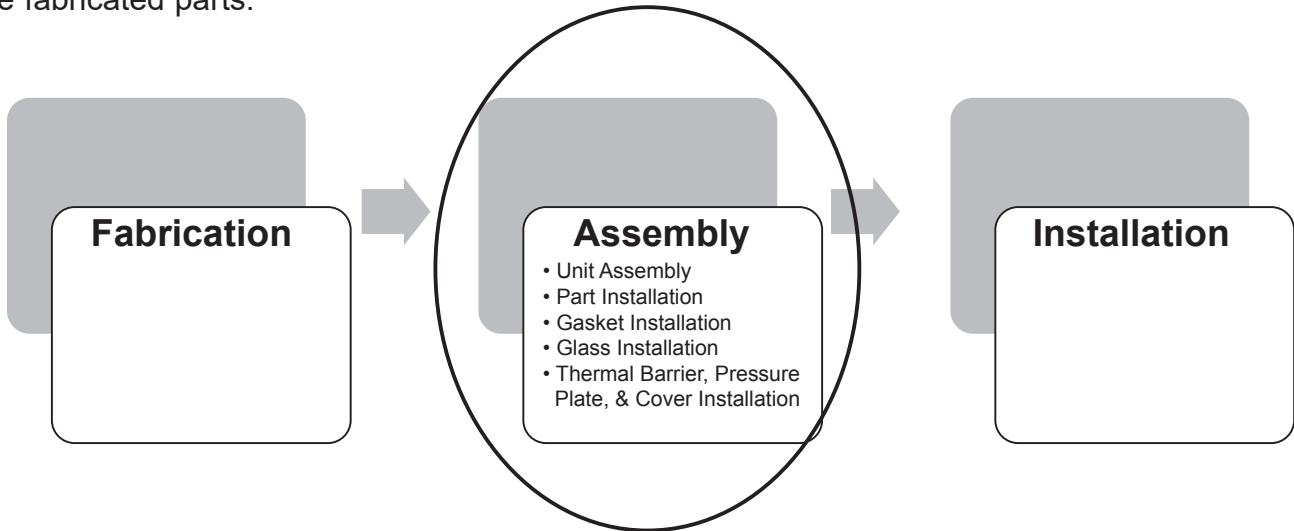
**YUW 750 XT
4 Side Captured - Window Wall**



Assembly Manual

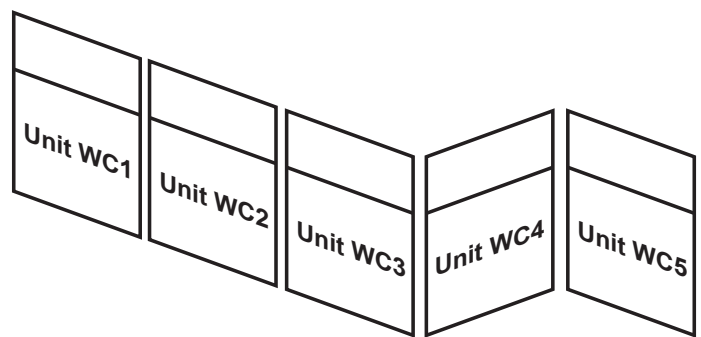
INTRODUCTION

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 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.

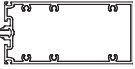

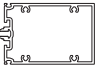


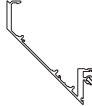
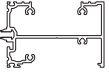
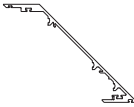



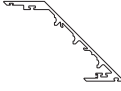




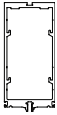


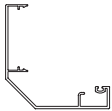
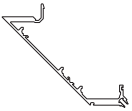
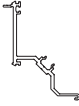
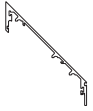
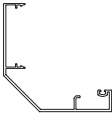
Subject to project specific design pressures, requirements, and/or specifications, the structural sealant that is used between the glass and framing system must be capable of withstanding tensile and shear stresses imposed by the curtain wall without failing adhesively or cohesively.

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.





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 |
|  | Male Mullion Half For 6" System | E9-7061 |  | * Inside Corner Female Mullion For 6" System | E9-7071 |
|  | Female Mullion Half For 7-1/2" System | E9-7002 |  | Pressure Plate For 1-5/16" Glazing | AS-7057 |
|  | Female Mullion Half For 6" System | E9-7062 |  | Face Cover | E9-1206 |
|  | Jamb Mullion For 7-1/2" System | E9-7098 |  | Outside Corner Pressure Plate For 1" Glazing | AS-7055 |
|  | Jamb Mullion For 6" System | E9-7063 |  | Outside Corner Face Cover For 1" Glazing | E9-7056 |
|  | Outside Corner Male Mullion For 7-1/2" System | E9-7045 |  | Outside Corner Pressure Plate For 1-5/16" Glazing | AS-7081 |
|  | Outside Corner Female Mullion For 7-1/2" System | E9-7046 |  | Outside Corner Face Cover For 1-5/16" Glazing | E9-7080 |






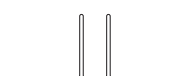


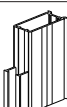
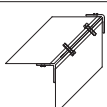

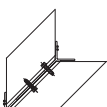

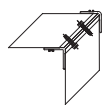

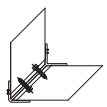

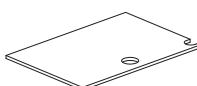
* Inside corners are available only in SSG.

4 Side Captured

FRAMING MEMBERS













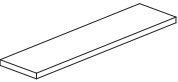

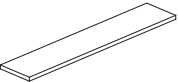











| | | | | | |
|---|---|----------------|---|--|----------------|
|  | Flush Filler Use with E9-7043 | E9-7044 |  | Pressure Plate For 1" Glazing | AS-7054 |
|  | Flush Filler Use with E9-7065 | E9-7066 |  | 1/4" Adaptor For 1-5/16" Glazing | E9-7749 |

ACCESSORIES

| | | | | | |
|---|---|----------------|--|--|----------------|
|  | End Dam | E1-7002 |  | Mullion Anchor For 6" System | E1-7004 |
|  | Interlocking Mullion Clip For 7-1/2" system Use with E9-7002 | E1-7003 |  | Jamb Anchor For 6" System | E1-7005 |
|  | Interlocking Mullion Clip For 6" system Use with E9-7062 | E1-7072 |  | Mullion Anchor For 7-1/2" System | E1-7024 |
|  | Corner Mullion Clip Use with E9-7046 & E9-7069 | E1-7050 |  | Jamb Anchor For 7-1/2" System | E1-7025 |
|  | Mullion Anchor Sleeve For 7-1/2" system | E1-7006 |  | * 90° I.S. Corner Anchor For 7-1/2" System | E1-7088 |
|  | Mullion Reinforcement Clip For 7-1/2" system | E1-7007 |  | 90° O.S. Corner Anchor For 7-1/2" System | E1-7089 |
|  | Mullion Reinforcement Clip For 6" system | E1-7046 |  | * 90° I.S. Corner Anchor For 6" System | E1-7090 |
|  | Setting Block Chair For 1" Glazing | E1-7009 |  | 90° O.S. Corner Anchor For 6" System | E1-7091 |
|  | Setting Block Chair For 1-5/16" Glazing | E1-7010 |  | End Cap | E1-7008 |

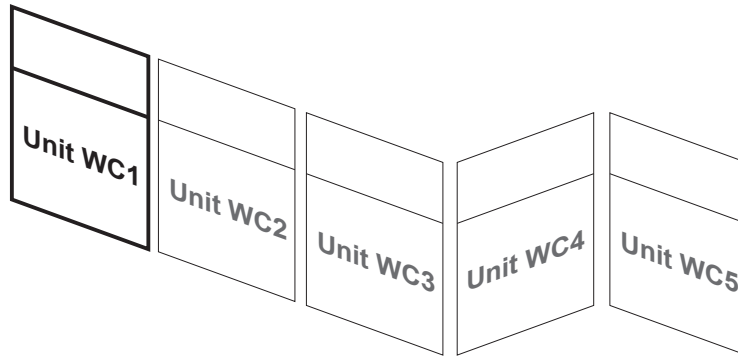
* Inside corners are available only in SSG.

ACCESSORIES

| | | | | | |
|---|---|----------------|--|---|-------------------|
|  | Exterior Gasket | E2-7005 |  | Captured Tongue Adaptor | E3-7017 |
|  | SSG Wiper Gasket * | E2-7009 |  | Perimeter Spacer For 1" Glazing | E3-7008 |
|  | Interior Gasket | E2-7001 |  | Perimeter Spacer For 1-5/16" Glazing | E3-7015 |
|  | SSG Inside Corner Spacer Tape * | E2-0724 |  | 1/4" x 5/8" FHMS Type AB, Zinc Plated Steel, For Attachment of End Cap to Tongue adaptor | FC-1410 |
|  | Air Water Seal Gasket | E2-7002 |  | 1/4" x 3/4" FHMS Type AB, Stainless Steel | FC-1410-SS |
|  | Horizontal Gasket | E2-7003 |  | 1/4" x 3/4" FHMS Stainless Steel | FM-2512-SS |
|  | Setting Block For 1" Glazing | E2-7006 |  | #12 x 1-1/4" HWHS Stainless Steel, For Screw Spline Attachment | HC-1220-SS |
|  | Setting Block For 1-5/16" Glazing | E2-7018 |  | #12 x 1-3/4" HWHSMS Stainless Steel, For Screw Spline Attachment at Corner | HC-1228-SS |
|  | Sill Horizontal Weather Seal | E2-7016 |  | 1/4"-20 x 2" HHMS Stainless Steel, For Pressure Plate Attachment | HM-2532-SS |
|  | Weather Seal Gasket | E2-7010 |  | 1/4 - 20 x 1" HWHMS Type CA, Zinc Plated Steel | HD-2516-W3 |
|  | Captured Joint Plug | E2-0102 |  | #10 x 5/8" PHSMS Type AB, Stainless Steel, For Attachment of End Dam to Sill Starter | PC-1010-SS |
|  | SSG Corner Spacer | E2-7014 |  | #10-24 x 1/2" FHUCMS Stainless Steel, For Attachment of End Cap to Vertical Mullion | UF-1008-SS |
|  | SSG Corner Tongue Adaptor * | E3-7011 |  | #8 x 3/4" PHSMS Type AB, Stainless Steel For Attachment of Face Cover to Press. Plate | PC-0812-SS |

* Inside corners are available only in SSG.

WC1 TABLE OF CONTENTS



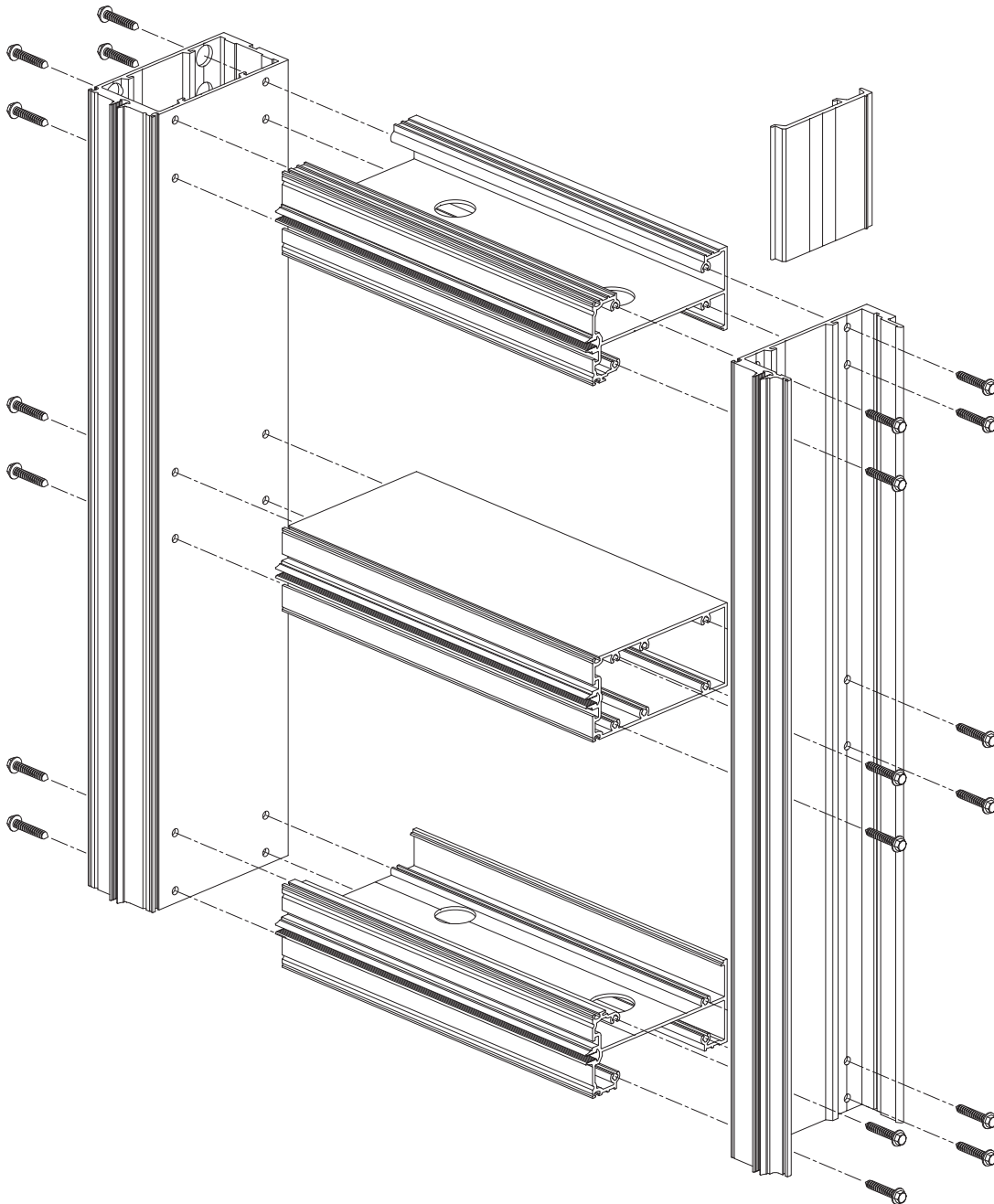
The following is intended for use as a guide for assembly of **Unit WC1** of the **YUW 750 XT 4-Sided Captured Window Wall System**. It is organized into five steps which will take you from assembly of parts to completed units.

| | |
|--|----------------|
| Step 1: WC1 Unit Assembly | Pages 2 to 5 |
| Step 2: WC1 Parts Installation | Page 6 |
| Step 3: WC1 Gasket Installation | Pages 7 to 9 |
| Step 4: WC1 Glass Installation | Pages 10 to 12 |
| Step 5: WC1 Thermal Barrier & Cover Installation | Pages 13 to 22 |

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: WC1 UNIT ASSEMBLY

MAJOR COMPONENTS



STEP 1: WC1 UNIT ASSEMBLY

STEP 1a

APPLY SEALANT TO FRAMING MEMBERS

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

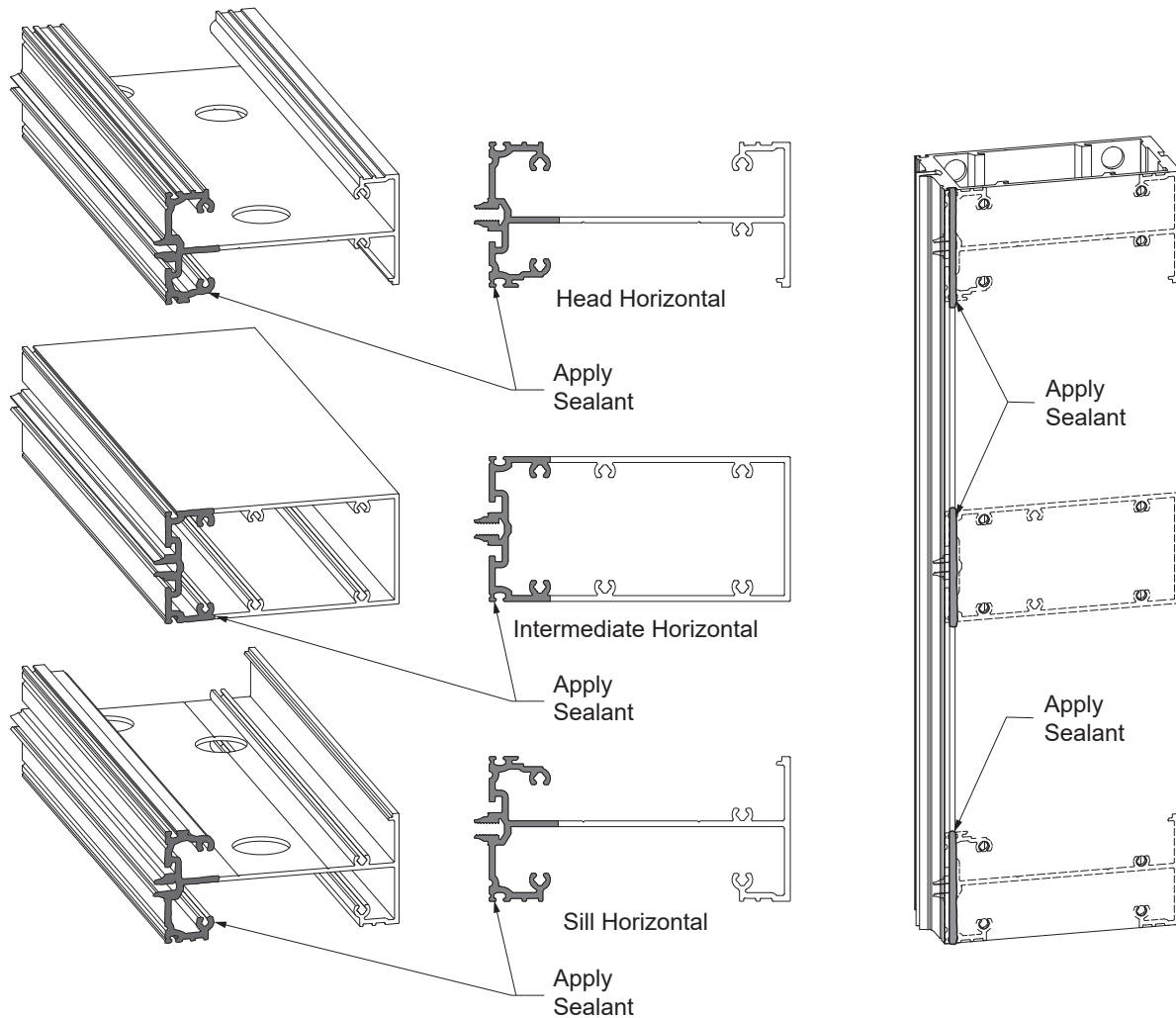
See **Detail 1-1**.

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

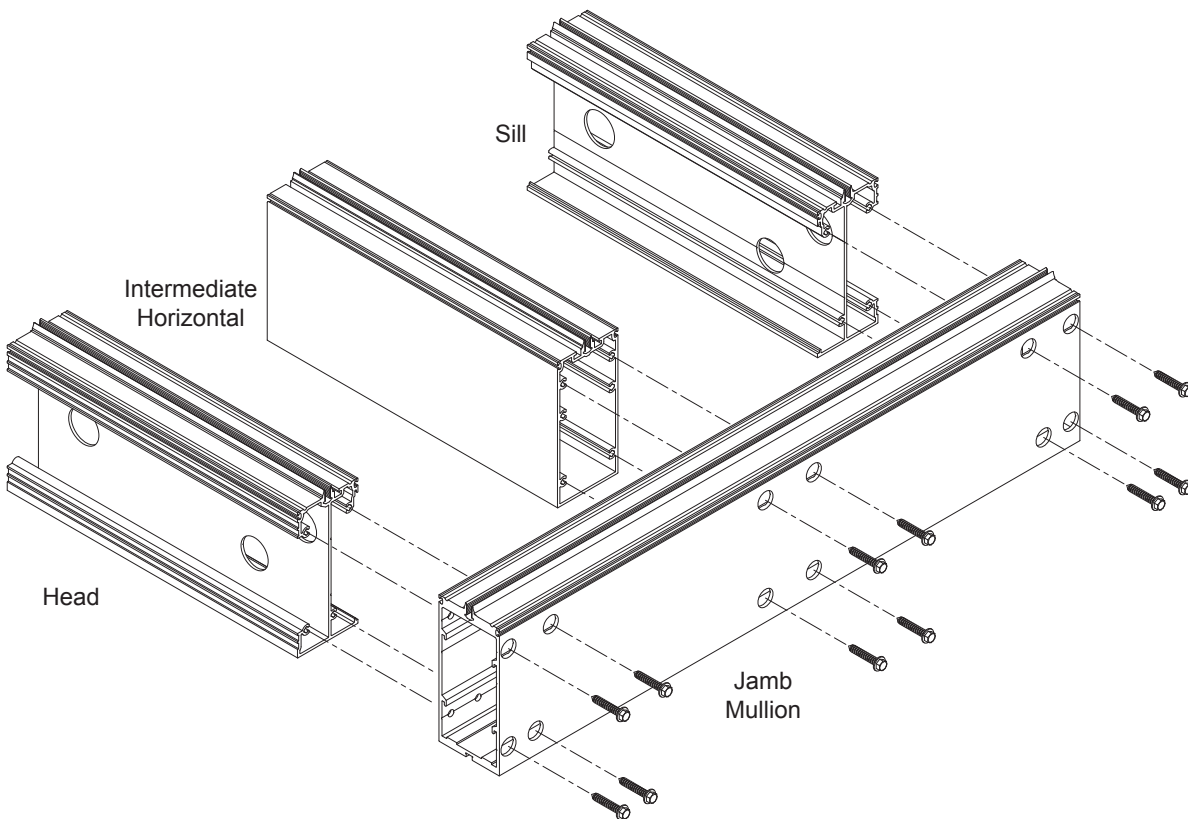
Unit WC1 shown,
Unit WC2 similar

STEP 1: WC1 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: WC1 UNIT ASSEMBLY

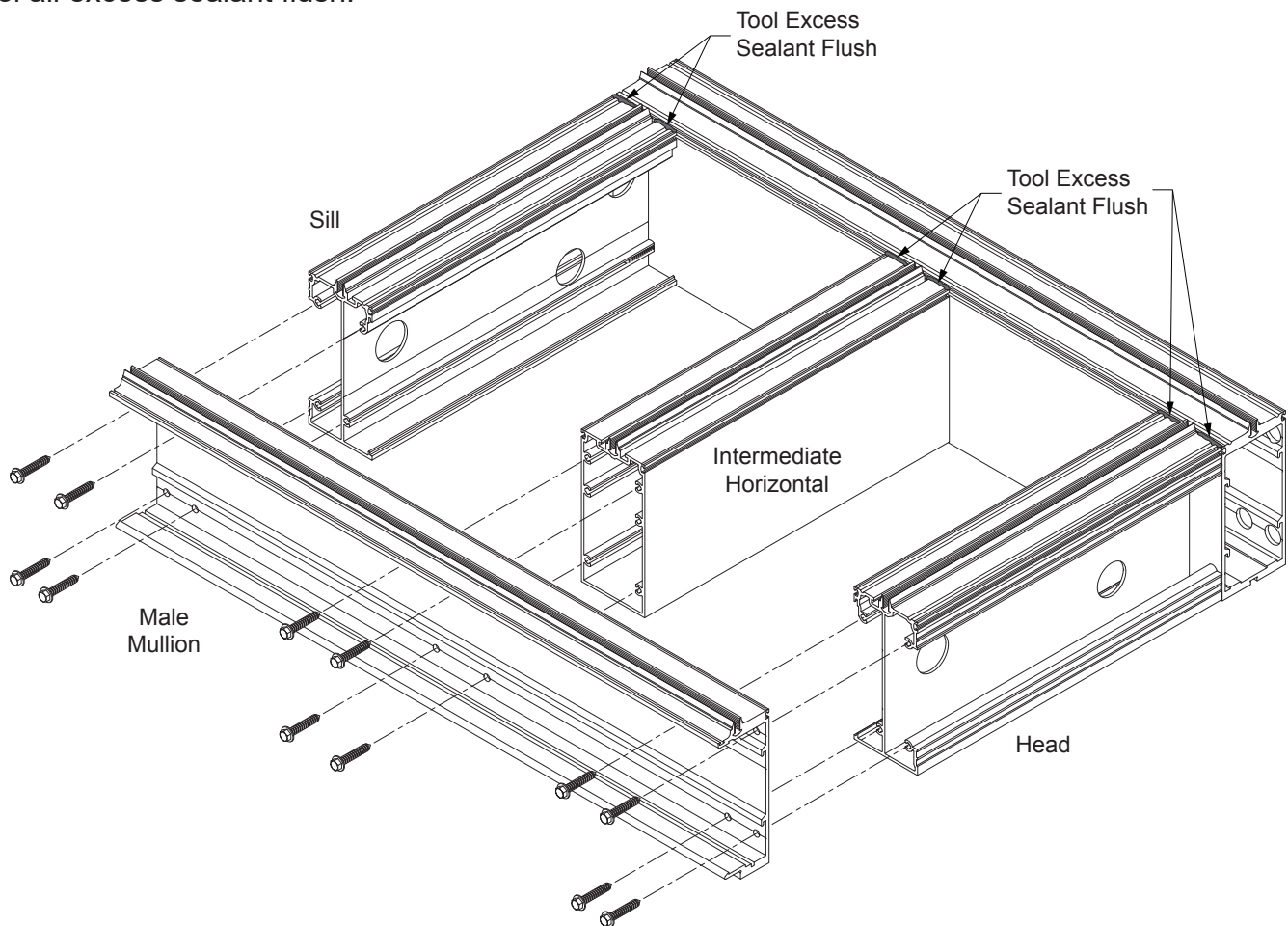
STEP 1b (Continued)

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.

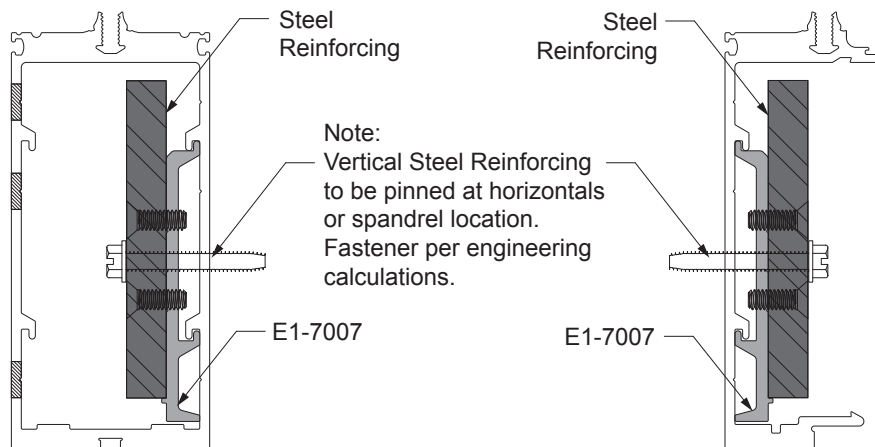


Detail 1-3

STEP 2: WC1 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: WC1 GASKET INSTALLATION

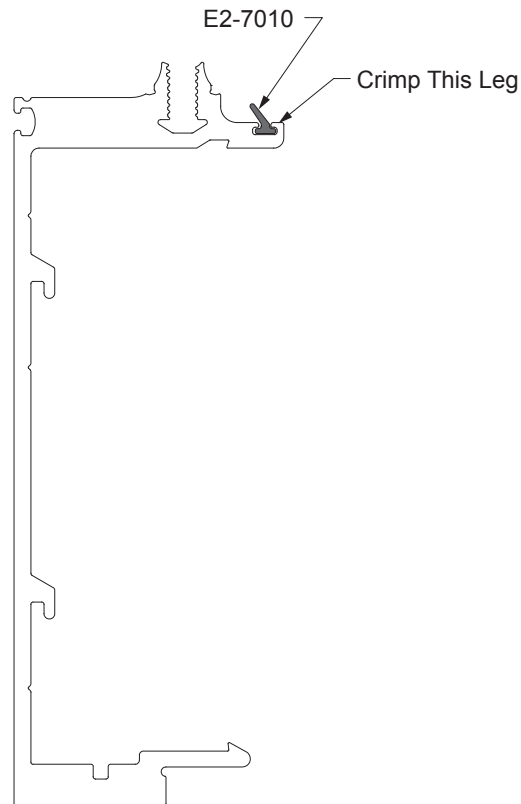
STEP 3a

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.



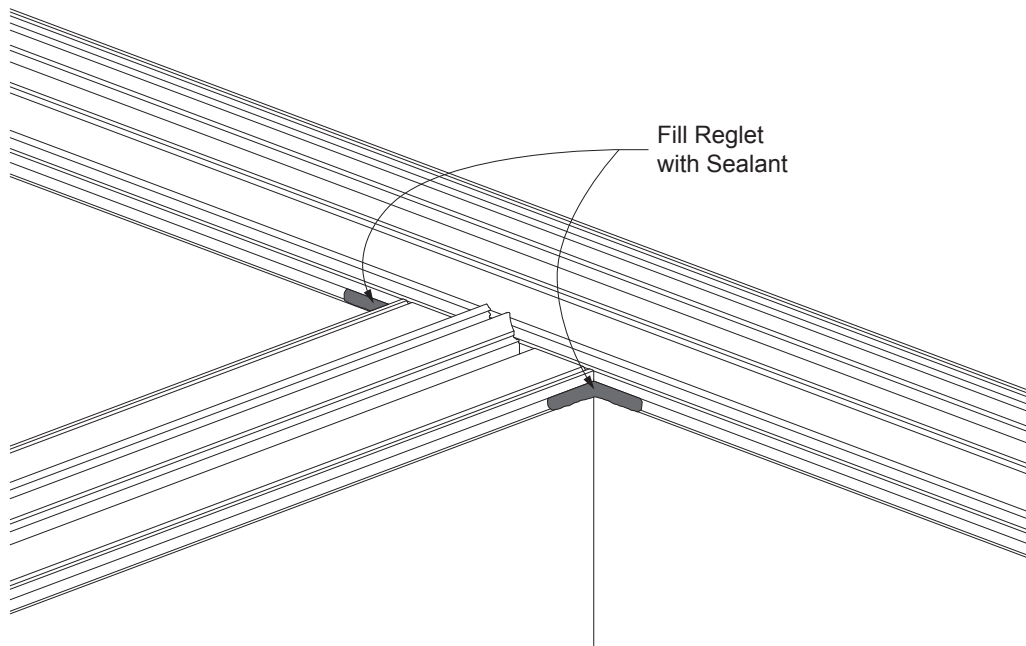
Detail 1-5

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: WC1 GASKET INSTALLATION

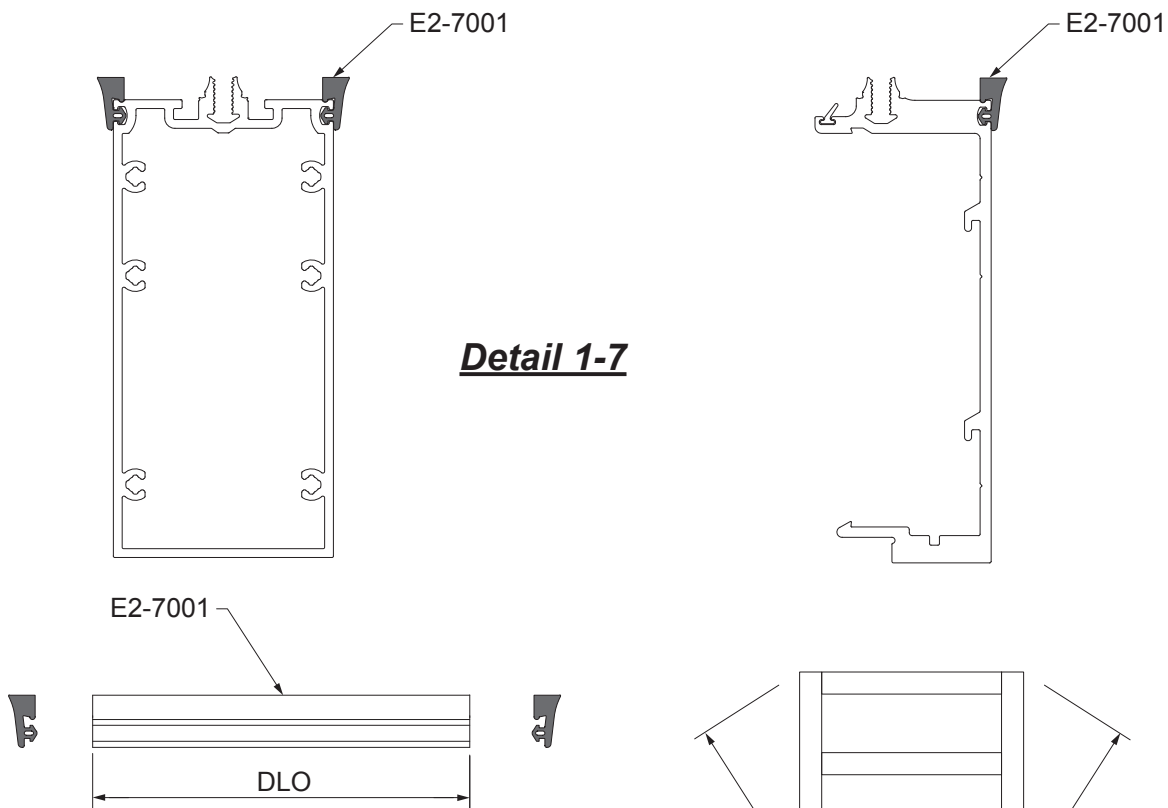
**STEP 3c
INSTALL INTERIOR GLAZING GASKETS**

-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.

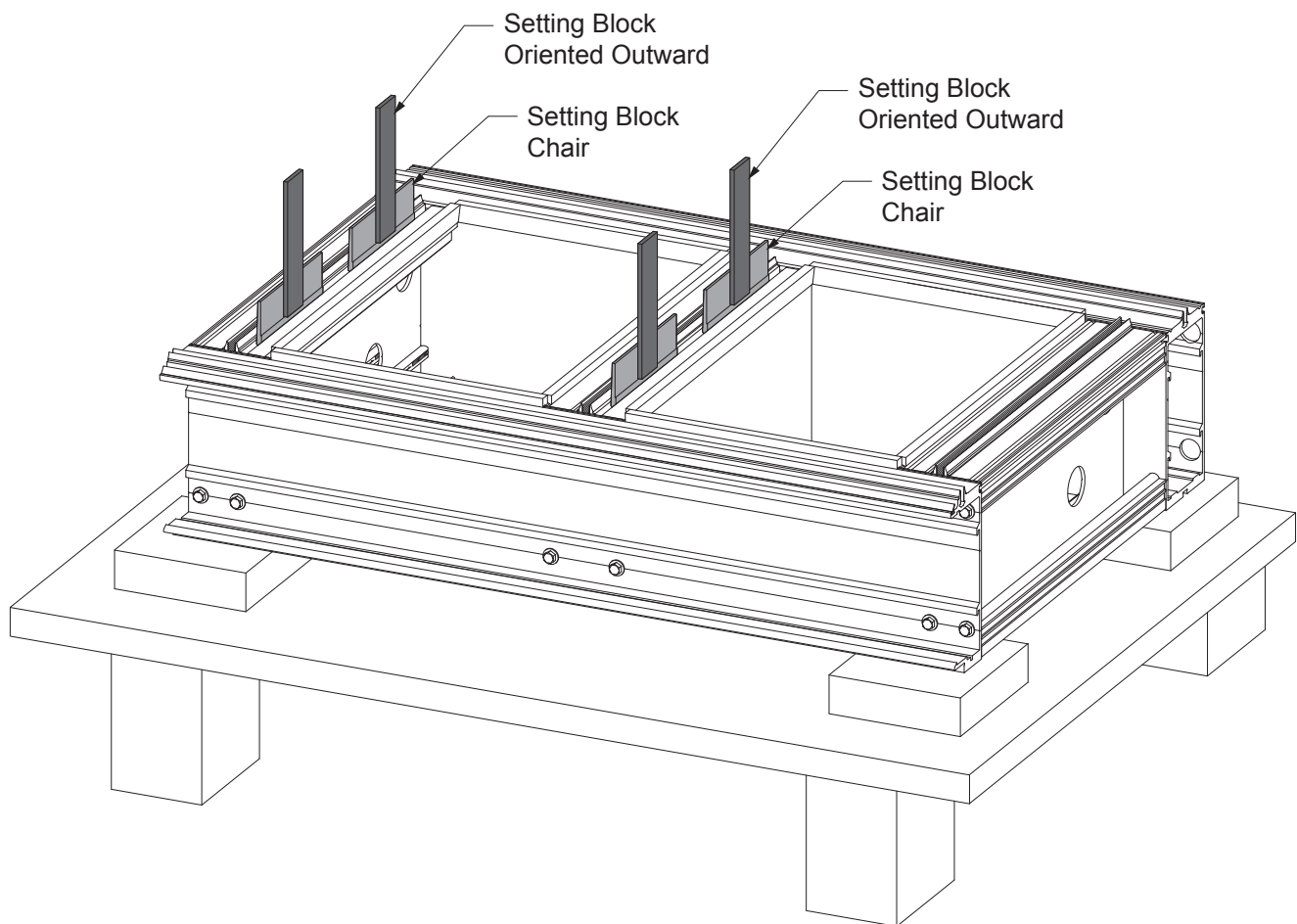
See **Detail 1-7**.



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: WC1 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**

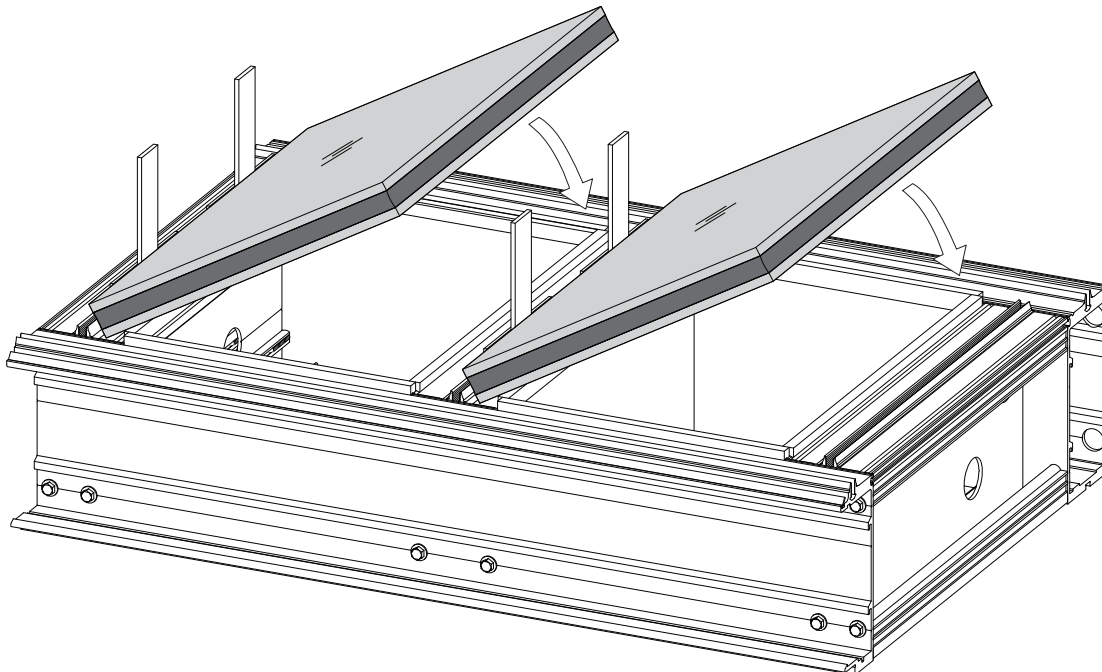
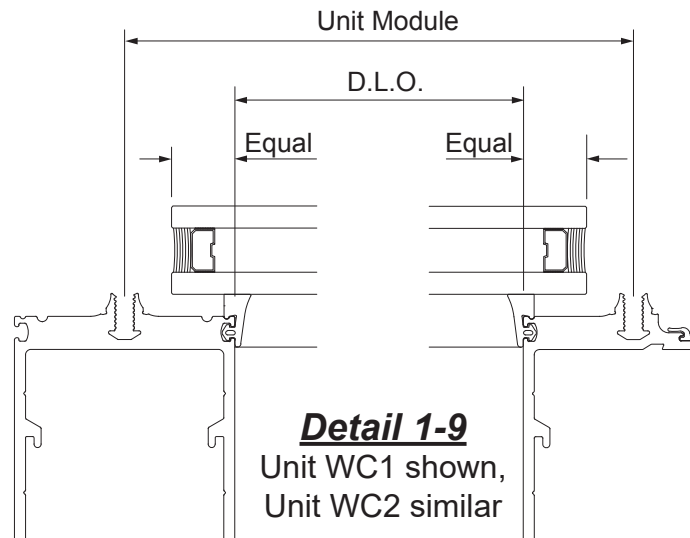
Unit WC1 shown,
Unit WC2 similar

STEP 4: WC1 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.

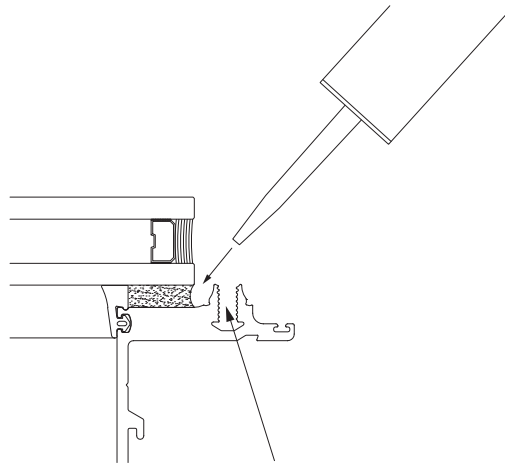
See **Detail 1-9**.



STEP 4: WC1 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.

See **Detail 1-10**.



Thermal barrier fits here.
Keep this area clean for
proper fit.

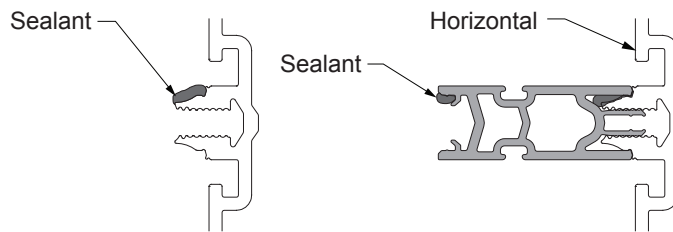
Detail 1-10

STEP 5: WC1 THERMAL BARRIER & COVER INSTALLATION

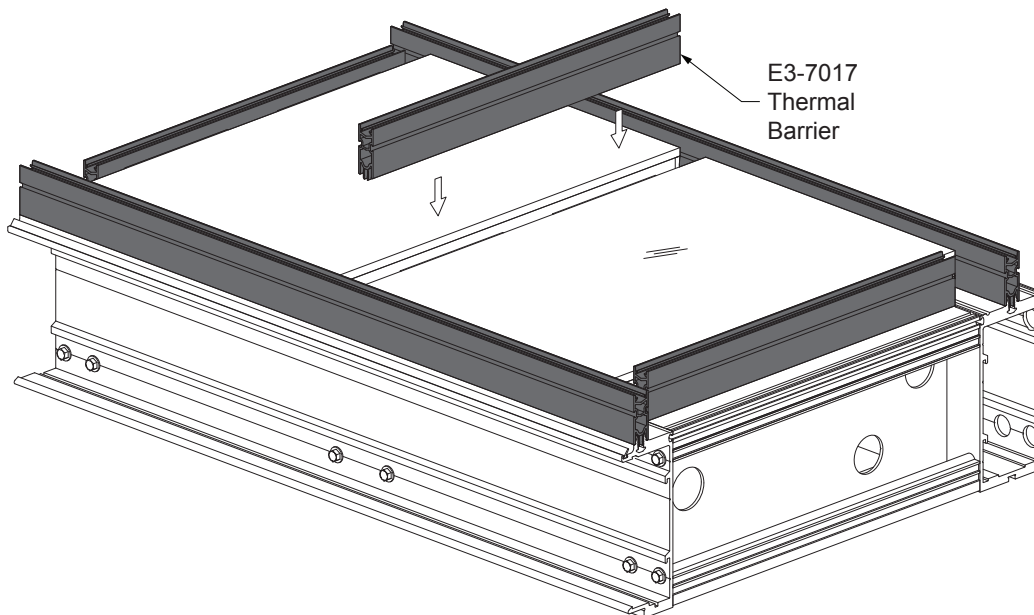
STEP 5a

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.
- 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

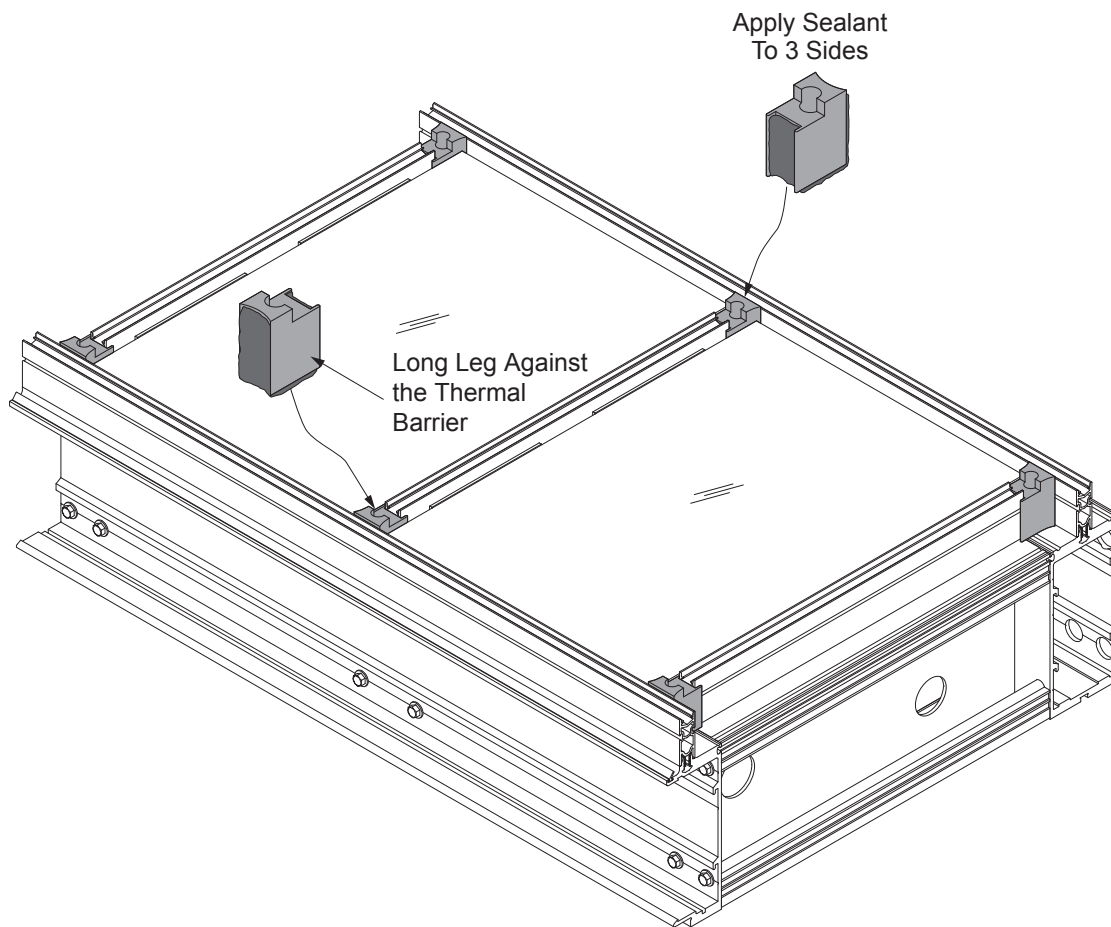


Detail 1-12

STEP 5: WC1 THERMAL BARRIER & COVER INSTALLATION**STEP 5b
INSTALL JOINT PLUGS**

- Joint plugs are to be installed at the head, sills, and intermediate horizontals.
- 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.

See **Detail 1-13**.



Detail 1-13

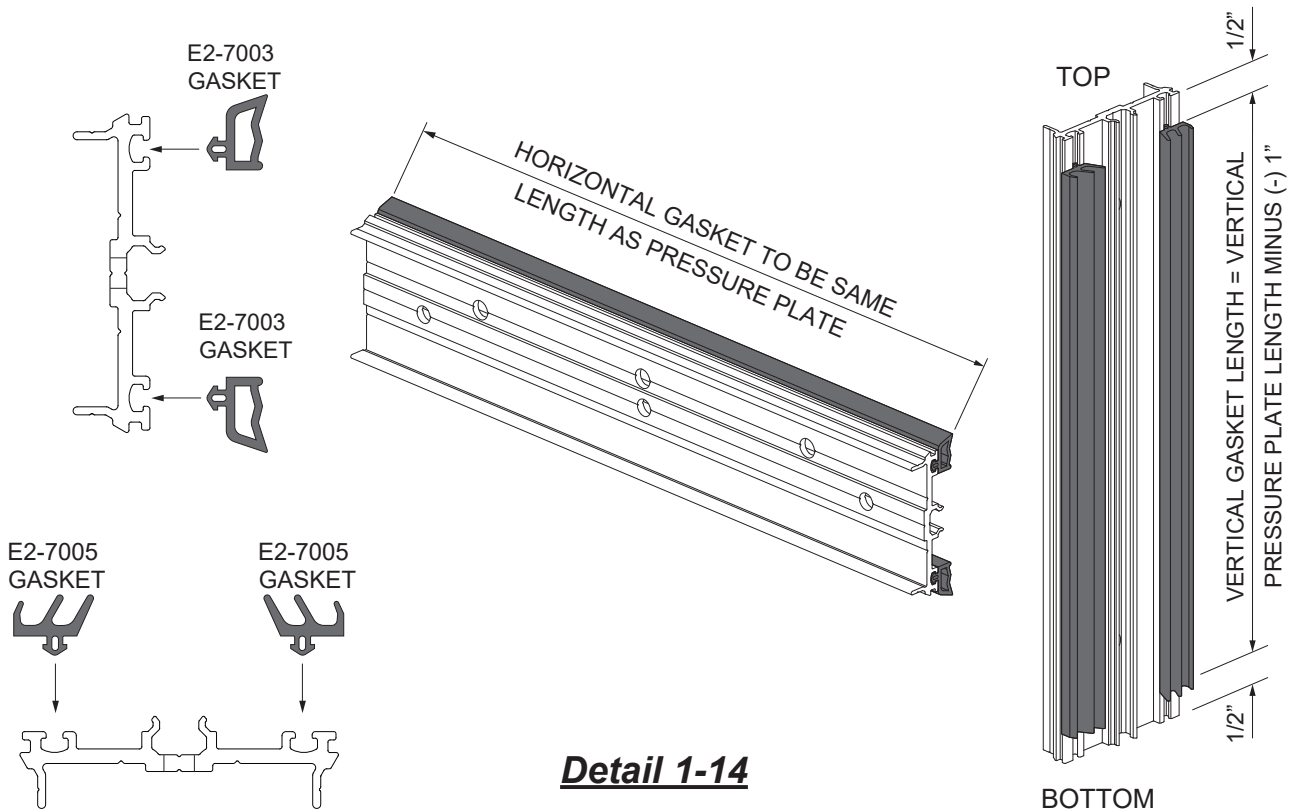
STEP 5: WC1 THERMAL BARRIER & COVER INSTALLATION

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.
- 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 1-14**.



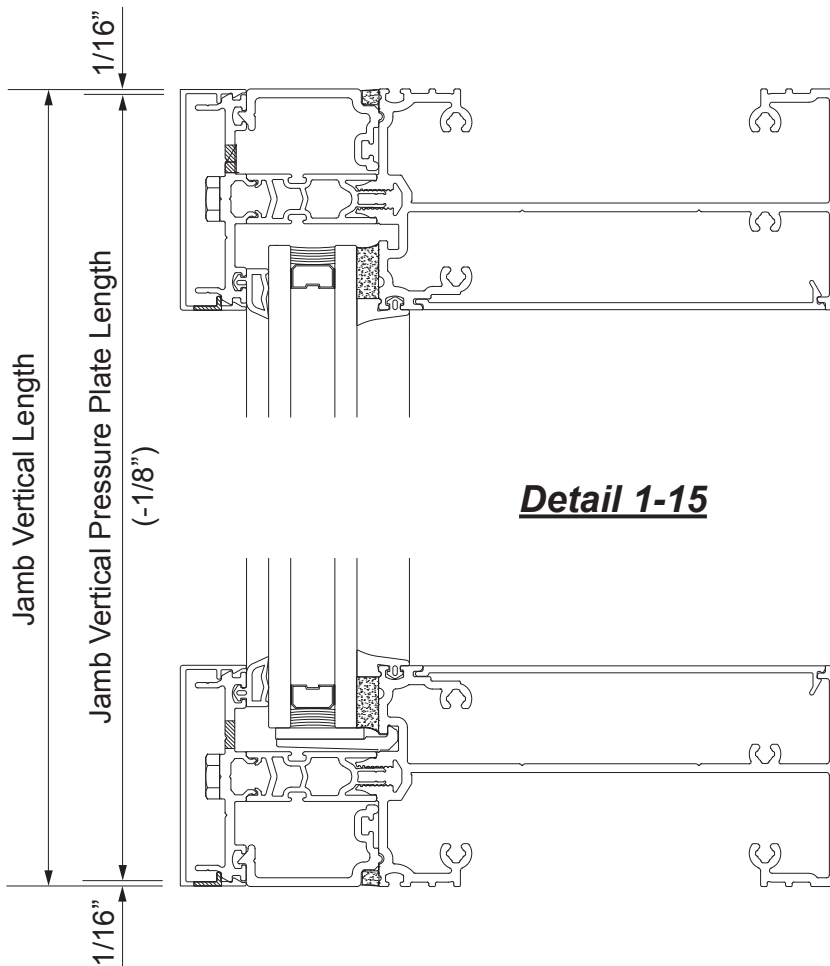
Detail 1-14

STEP 5: WC1 THERMAL BARRIER & COVER INSTALLATION

STEP 5d
INSTALL VERTICAL PRESSURE PLATES

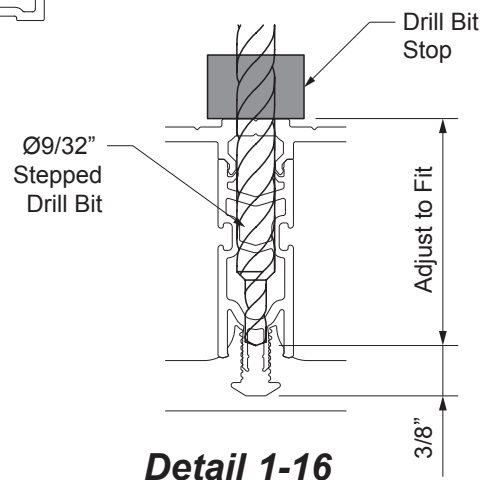
-Properly index all vertical pressure plates at exterior face of vertical mullion half.

See **Detail 1-15**.



-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.



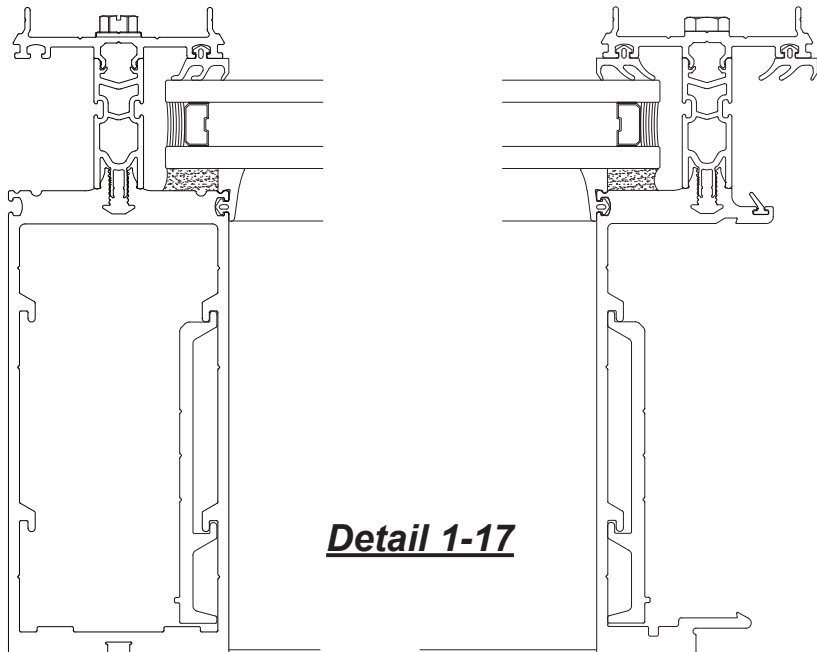
See **Detail 1-16**.

STEP 5: WC1 THERMAL BARRIER & COVER INSTALLATION

STEP 5e INSTALL VERTICAL PRESSURE PLATES

- Snap in pressure plates into the thermal barriers.
- Attach the pressure plates using HM-2532-SS fasteners, torquing them to approximately 45 to 50 inch-lbs. Do not over-torque.

See **Detail 1-17**.

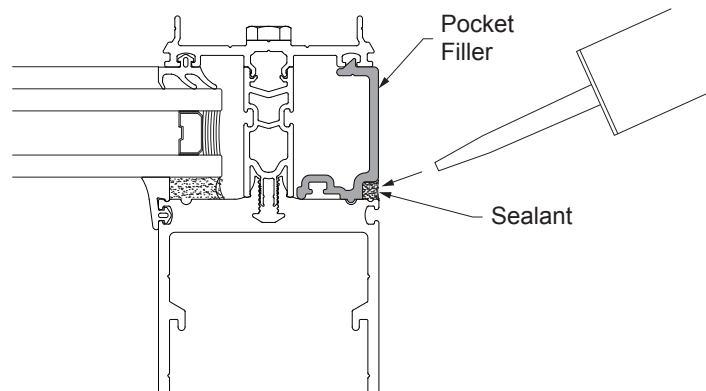


Detail 1-17

STEP 5f 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 1-18**.

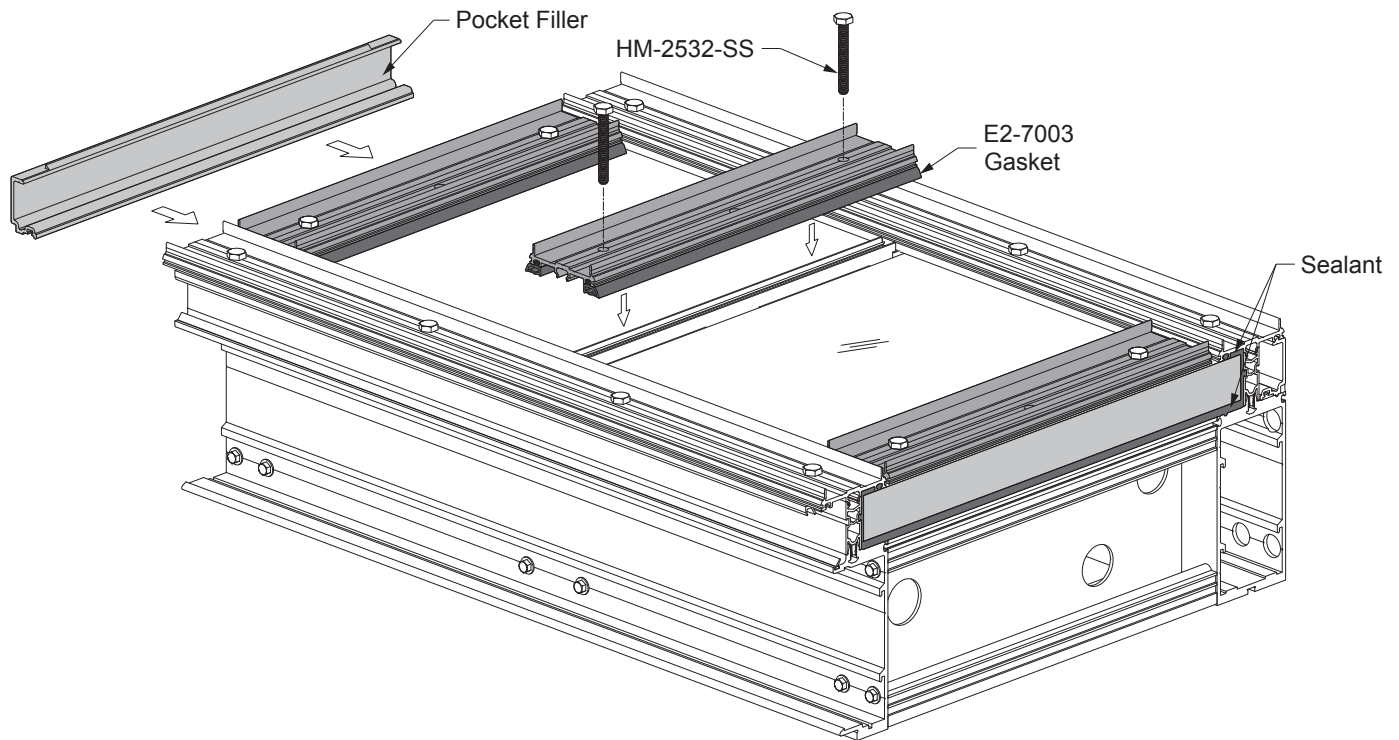


Detail 1-18

STEP 5: WC1 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 15, Detail 1-15**.
- 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. Also apply sealant to the face of the joint plugs installed at the verticals.
- Install horizontal pressure plate, centered on the D.L.O, using HM-2532-SS fasteners, torquing them to approximately 45 to 50 inch-lbs
- Snap in the pocket filler into the head and sill. Apply and tool sealant into the cavities as shown in **Detail 1-19**.



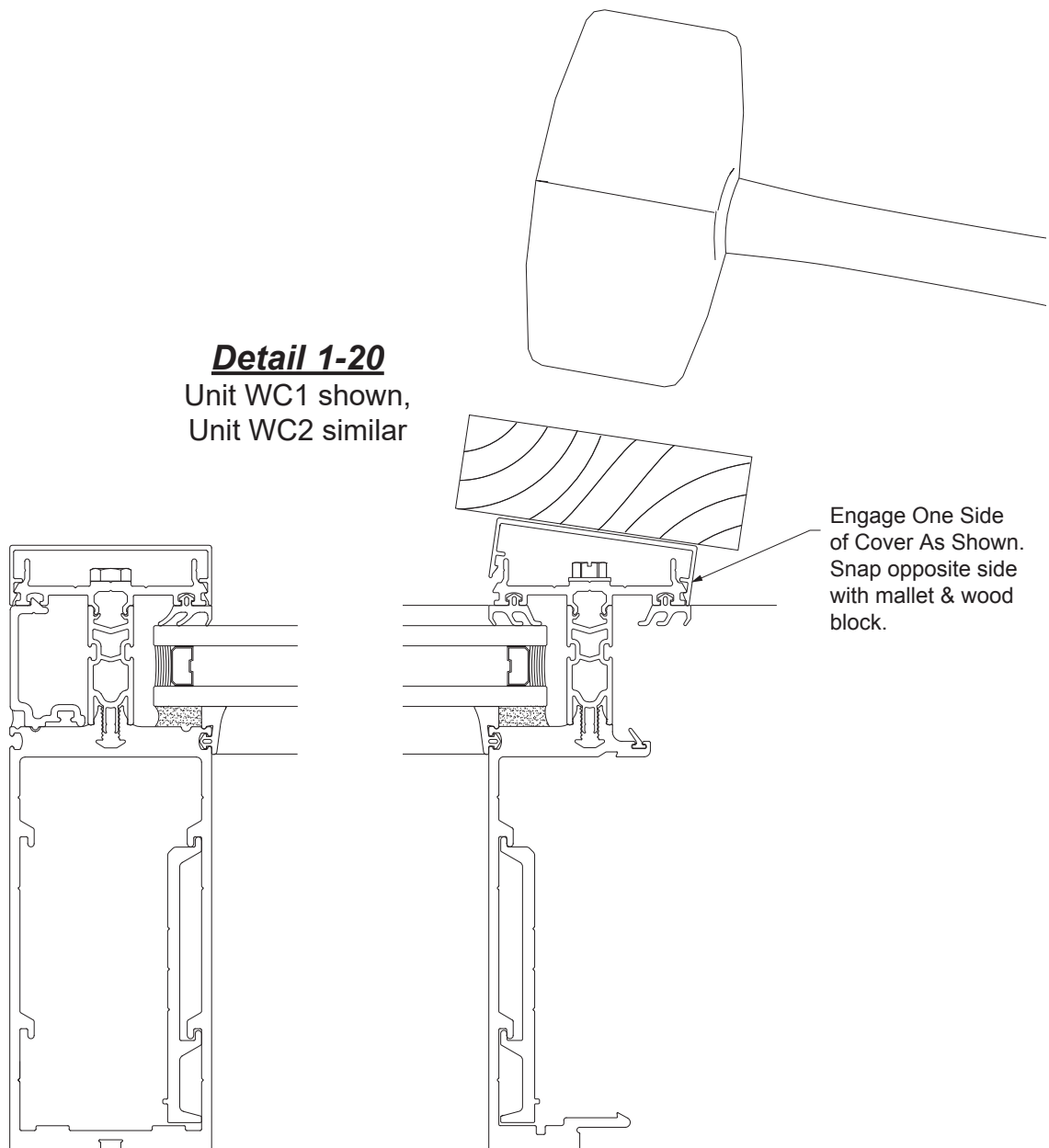
Detail 1-19

STEP 5: WC1 THERMAL BARRIER & COVER INSTALLATION

**STEP 5h
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 1-20**.

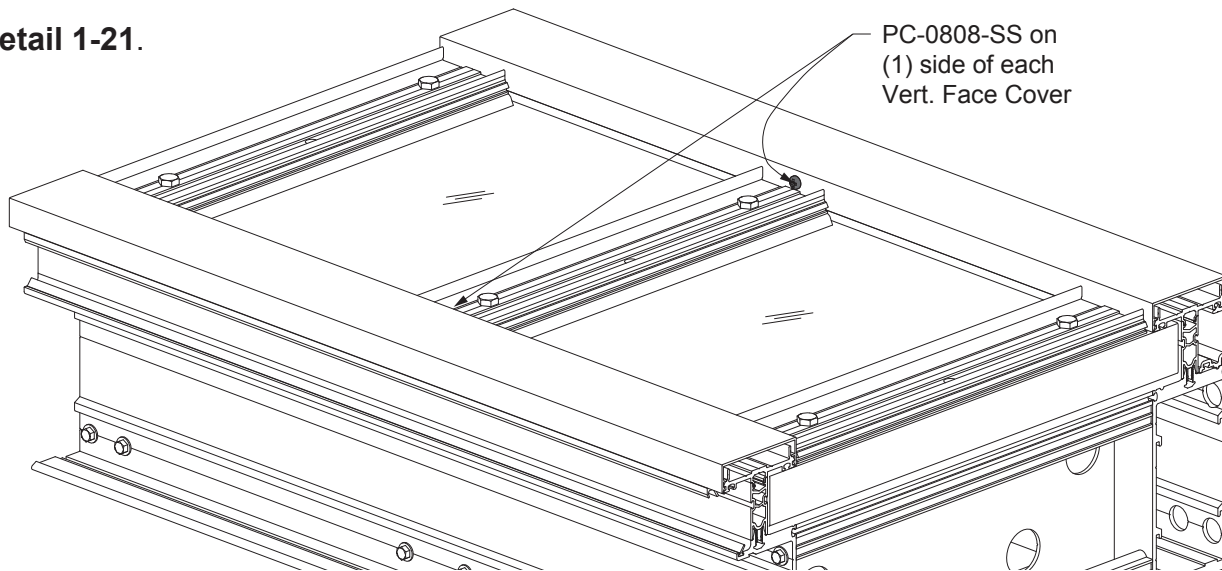


STEP 5: WC1 THERMAL BARRIER & COVER INSTALLATION

**STEP 5h (Continued)
INSTALL FACE COVERS**

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

See **Detail 1-21**.

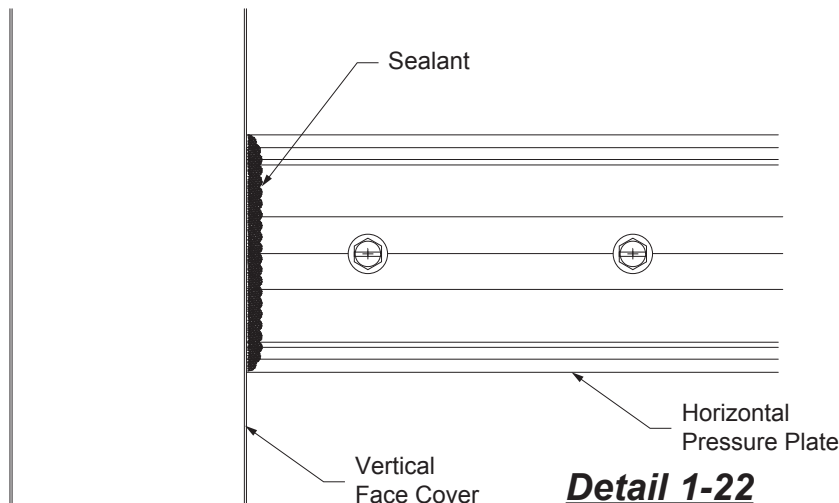


Detail 1-21

Unit WC1 shown,
Unit WC2 similar

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

See **Detail 1-22**.



Detail 1-22

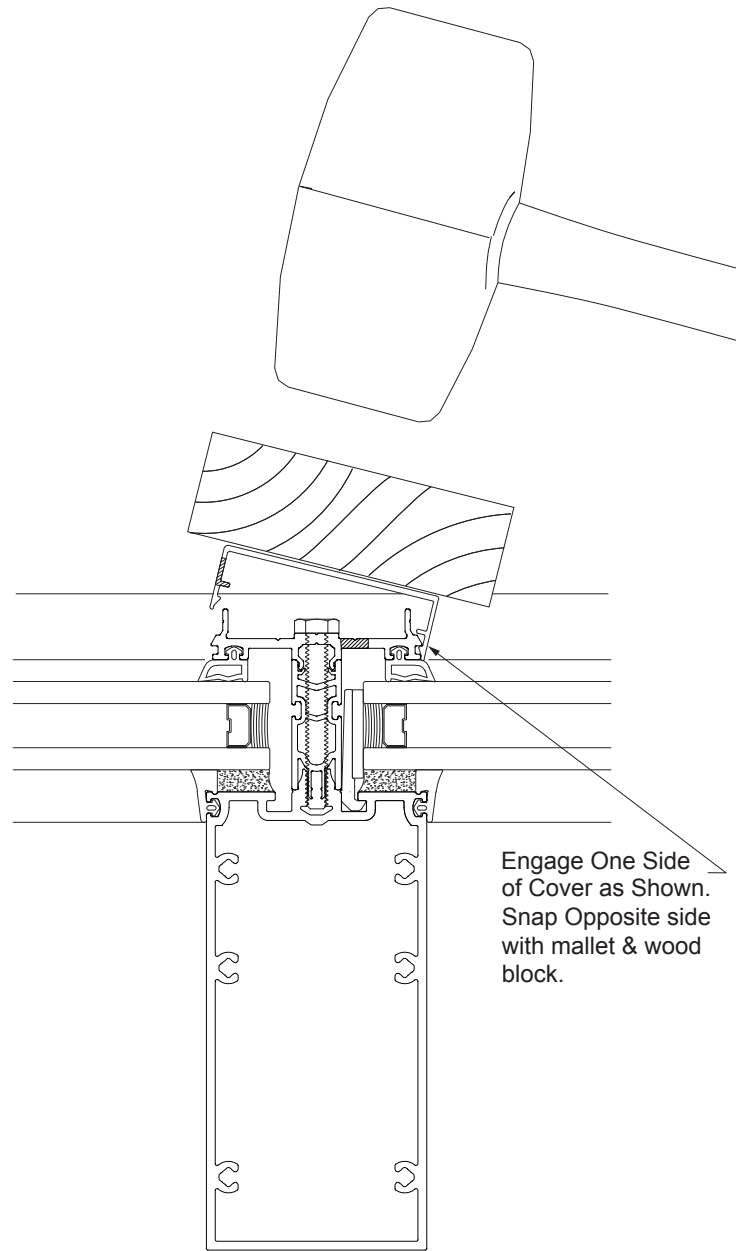
Unit WC1 shown,
Unit WC2 similar

STEP 5: WC1 THERMAL BARRIER & COVER INSTALLATION

**STEP 5h (Continued)
INSTALL FACE COVERS**

- Horizontal cover length = D.L.O. - 1/8"
- 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 1-23**.

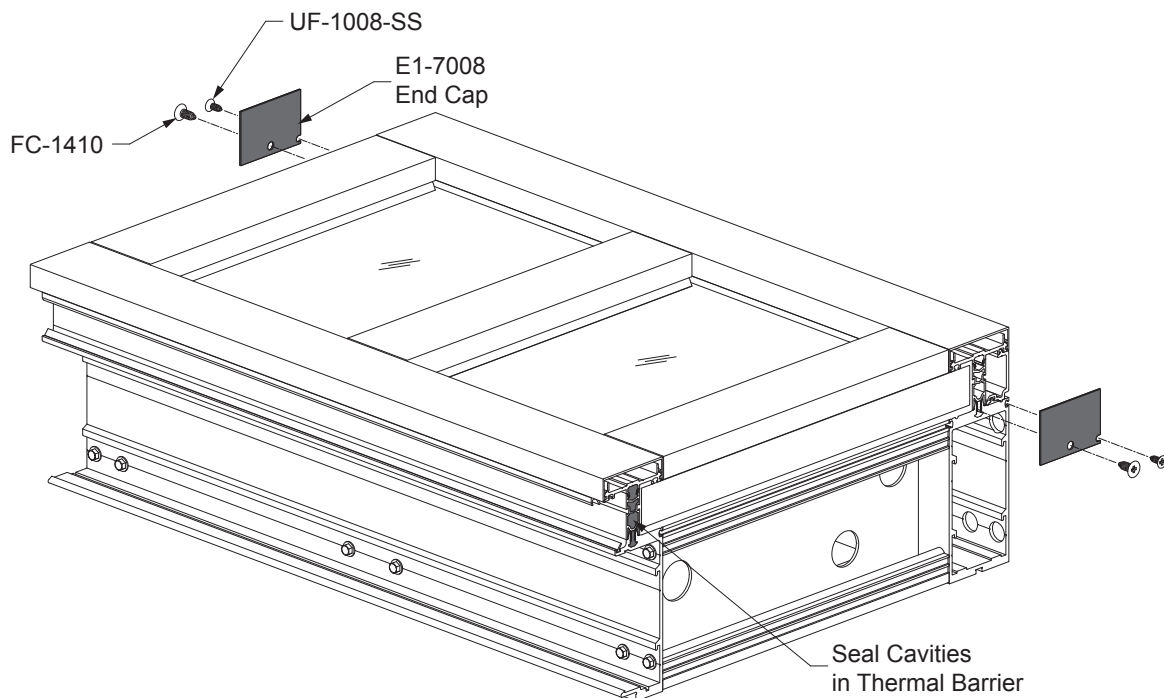


Detail 1-23

STEP 5: WC1 THERMAL BARRIER & COVER INSTALLATION**STEP 5j
INSTALL END CAPS**

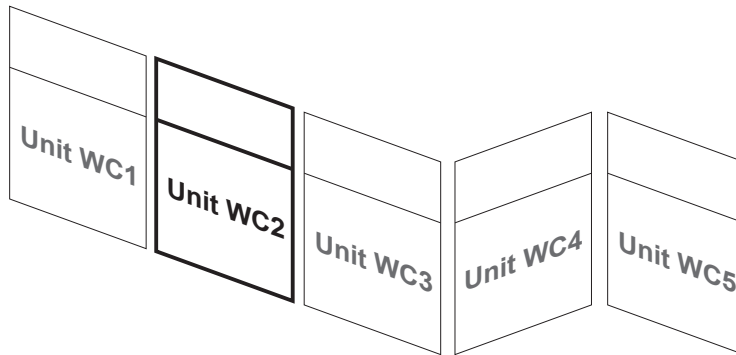
- After glass installation, prepare mullion end caps, E1-7008, for installation at the top and bottom of the mullions with FC-1410 fastener at the tongue adaptor, and UF-1008-SS at the mullion glazing reglet.
- Clean all contact surfaces as recommended by sealant manufacturer.
- “Butter” ends of verticals 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.

See **Detail 1-24**.

**Detail 1-24**

Unit WC1 shown,
Unit WC2 similar

WC2 TABLE OF CONTENTS



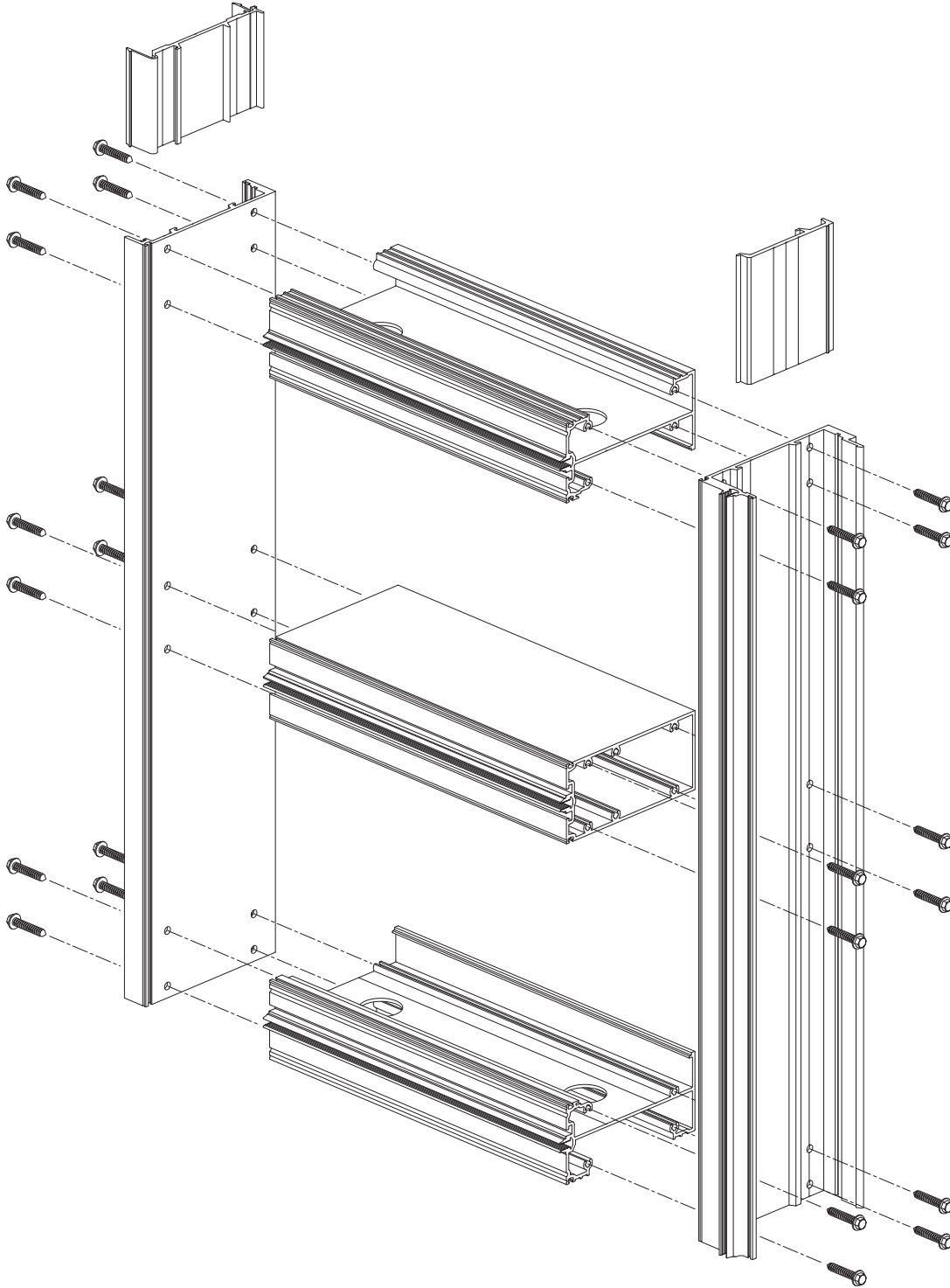
The following is intended for use as a guide for assembly of **Unit WC2** of the **YUW 750 XT 4-Sided Captured Window Wall System**. It is organized into five steps which will take you from assembly of parts to completed units.

| | |
|--|----------------|
| Step 1: WC2 Unit Assembly | Pages 23 to 25 |
| Step 2: WC2 Parts Installation | Pages 26 & 27 |
| Step 3: WC2 Gasket Installation | Page 28 |
| Step 4: WC2 Glass Installation | Page 29 |
| Step 5: WC2 Thermal Barrier & Cover Installation | Pages 30 & 31 |

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: WC2 UNIT ASSEMBLY

MAJOR COMPONENTS



STEP 1: WC2 UNIT ASSEMBLY

STEP 1a

APPLY SEALANT TO HORIZONTALS

-Refer to **WC1 Unit Assembly, Step 1a** on **Page 3**.

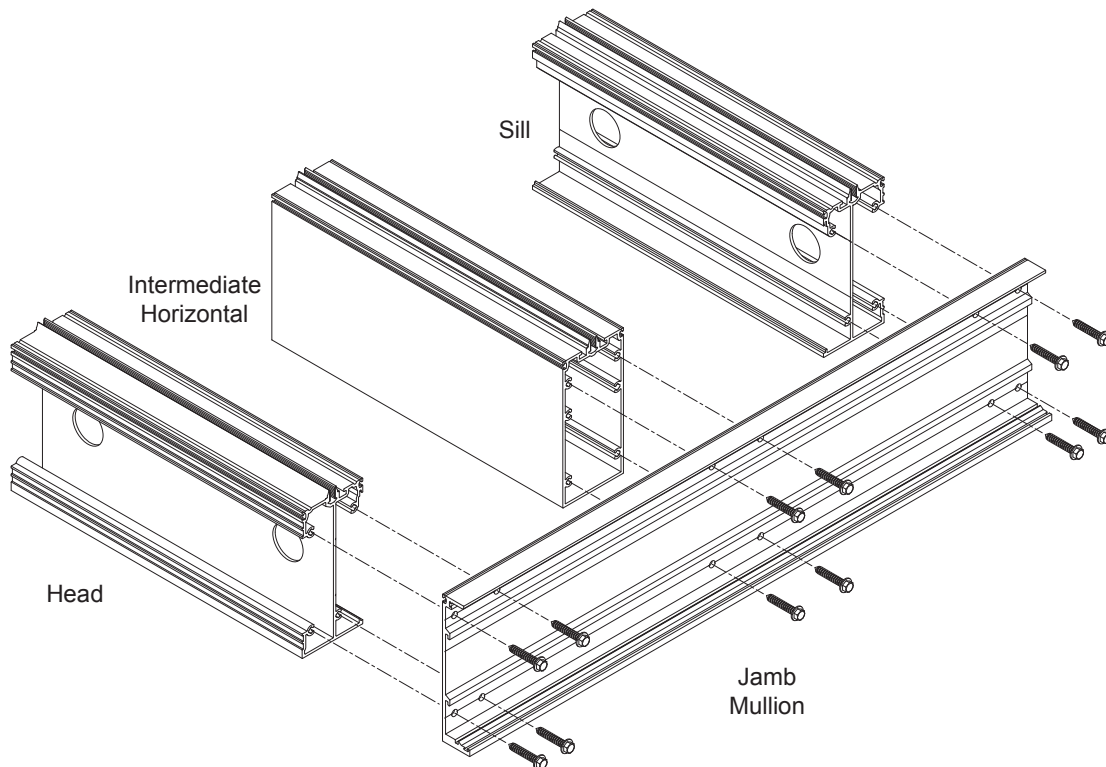
STEP 1b

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: WC2 UNIT ASSEMBLY

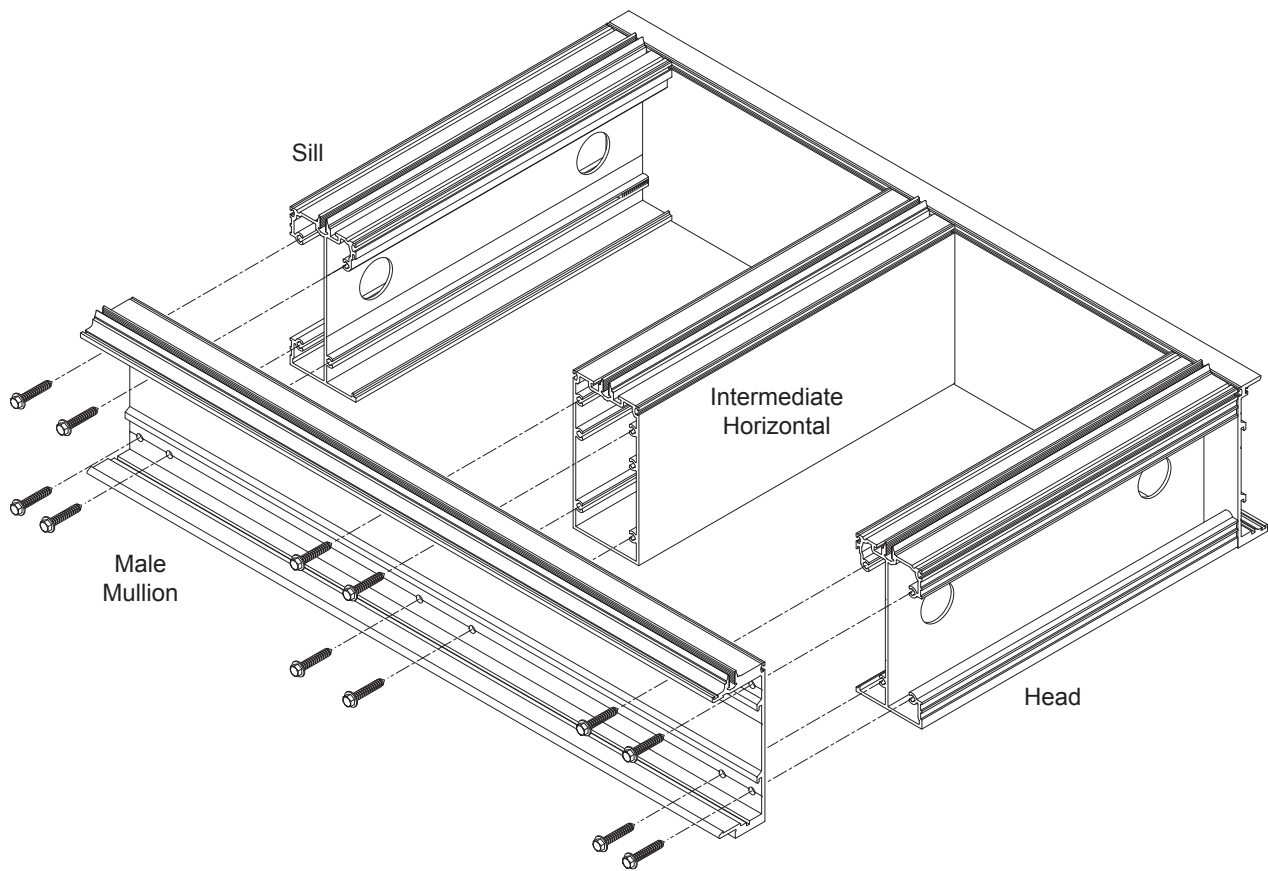
STEP 1b (Continued)

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.



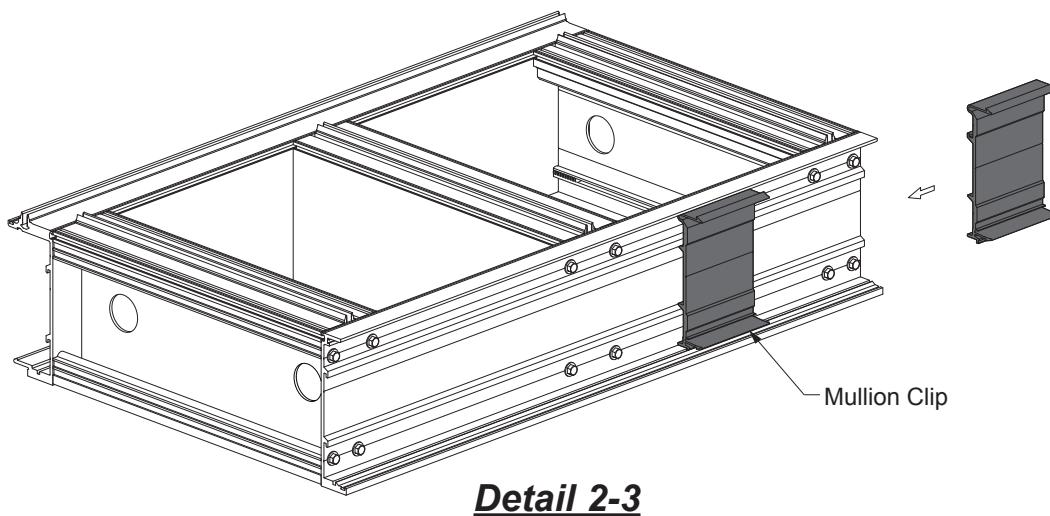
Detail 2-2

STEP 2: WC2 PARTS INSTALLATION

STEP 2a INSTALL MULLION INTERLOCKING CLIPS

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

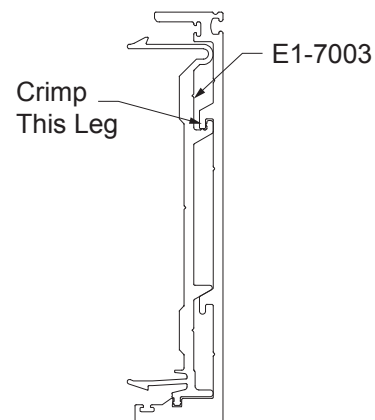
-Install mullion interlock clips into the female mullion half and crimp in place.
See **Detail 2-3** and **Detail 2-4**.



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.

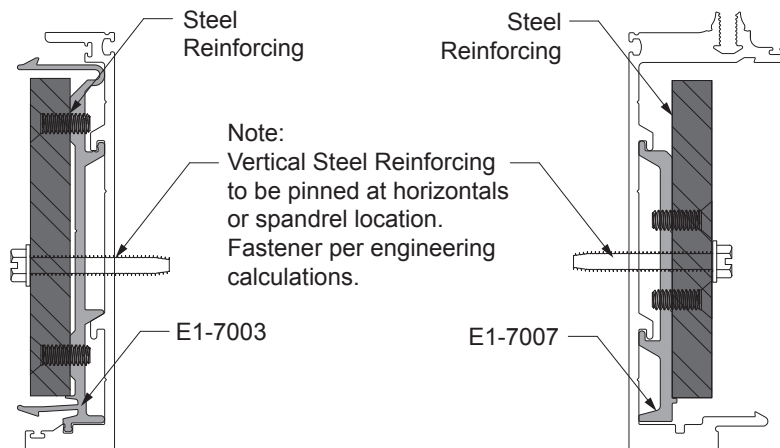
If steel is being installed in mullion, mullion interlock clips will have to be installed with steel after bay assembly to allow access to fasten horizontal mullions.



STEP 2: WC2 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**.



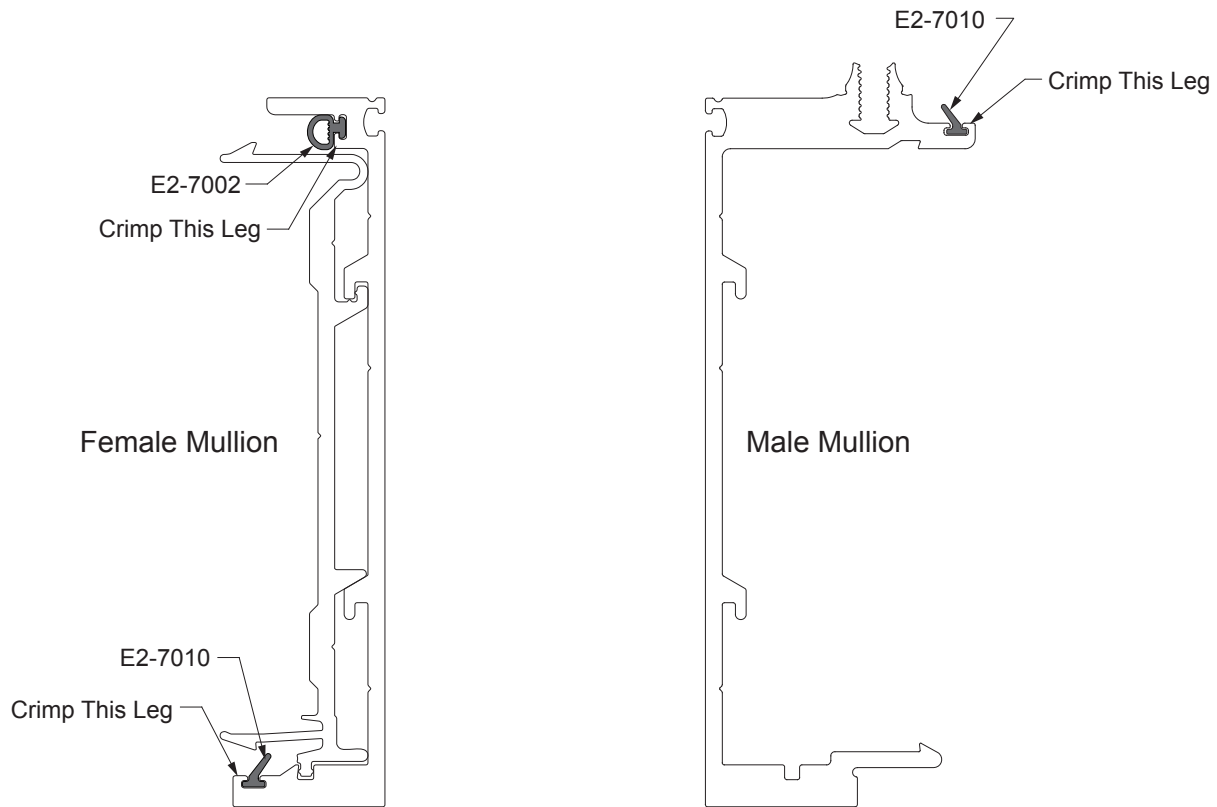
Detail 2-5

STEP 3: WC2 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.



Detail 2-6

**STEP 3b
SEAL HORIZONTAL INTERSECTIONS**

-Refer to **WC1 Gasket Installation, Step 3b** on **Page 8**.

**STEP 3c
INSTALL INTERIOR GLAZING GASKETS**

-Refer to **WC1 Gasket Installation, Step 3c** on **Page 9**.

STEP 4: WC2 GLASS INSTALLATION**STEP 4a****INSTALL SETTING BLOCK CHAIRS AND SETTING BLOCKS**

-Refer to **WC1 Glass Installation, Step 4a** on **Page 10**.

STEP 4b**INSTALL GLASS**

-Refer to **WC1 Glass Installation, Step 4b** on **Page 11**.

STEP 5: WC2 THERMAL BARRIER & COVER INSTALLATION

STEP 5a

INSTALL THERMAL BARRIERS

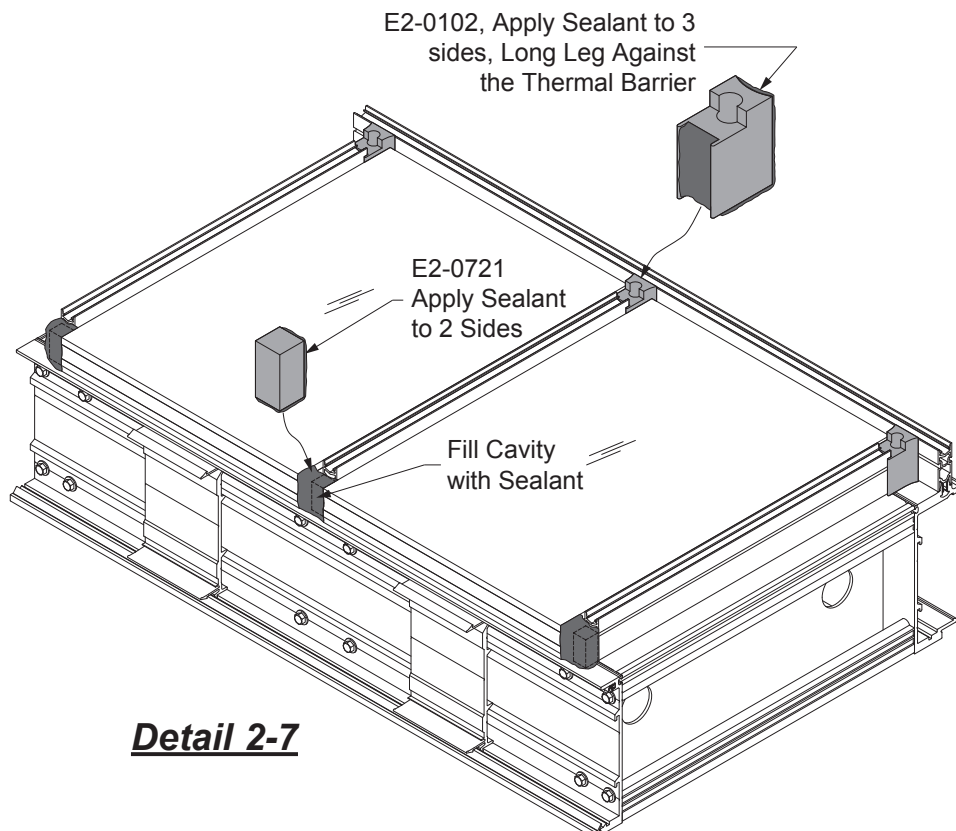
-Refer to **WC1 Thermal Barrier & Cover Installation, Step 5a** on **Page 13**.

STEP 5b

INSTALL JOINT PLUGS

- Joint plugs are to be installed at the head, sills, and intermediate horizontals.
- 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 E2-0102 joint plug.
- Install joint plugs at the male mullion 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.
- Apply sealant to the two contact sides of the E2-0721 joint plug.
- Install joint plugs at the female mullion as shown. Press the joint plug firmly against the face of the mullion.
- Fill the cavity around the joint plug with sealant. Tool the sealant to ensure a complete sea.

See **Detail 2-7**.



STEP 5: WC2 THERMAL BARRIER & COVER INSTALLATION**STEP 5c
PRESSURE PLATE ASSEMBLY**

-Refer to **WC1 Thermal Barrier & Cover Installation, Step 5c on Page 15.**

**STEP 5d
INDEX PRESSURE PLATES / DRILL THERMAL BARRIERS**

-Refer to **WC1 Thermal Barrier & Cover Installation, Step 5d on Page 16.**

**STEP 5e
INSTALL VERTICAL PRESSURE PLATES**

-Refer to **WC1 Thermal Barrier & Cover Installation, Step 5e on Page 17.**

**STEP 5f
INSTALL POCKET FILLER**

-Refer to **WC1 Thermal Barrier & Cover Installation, Step 5f on Page 17.**

**STEP 5g
INSTALL HORIZONTAL PRESSURE PLATES**

-Refer to **WC1 Thermal Barrier & Cover Installation, Step 5g on Page 18.**

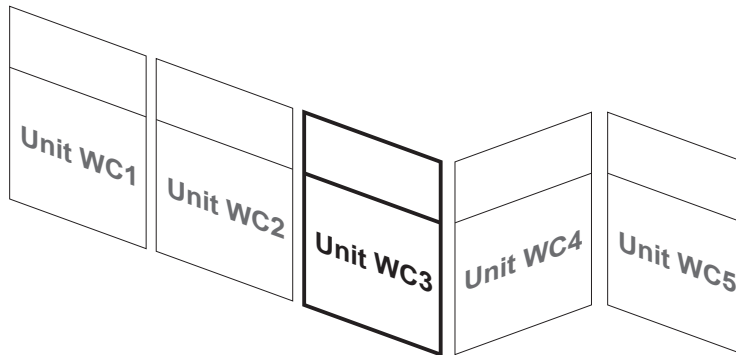
**STEP 5h
INSTALL FACE COVERS**

-Refer to **WC1 Thermal Barrier & Cover Installation, Step 5h on Pages 19 to 21.**

**STEP 5j
INSTALL END CAPS**

-Refer to **WC1 Thermal Barrier & Cover Installation, Step 5j on Page 22.**

WC3 TABLE OF CONTENTS



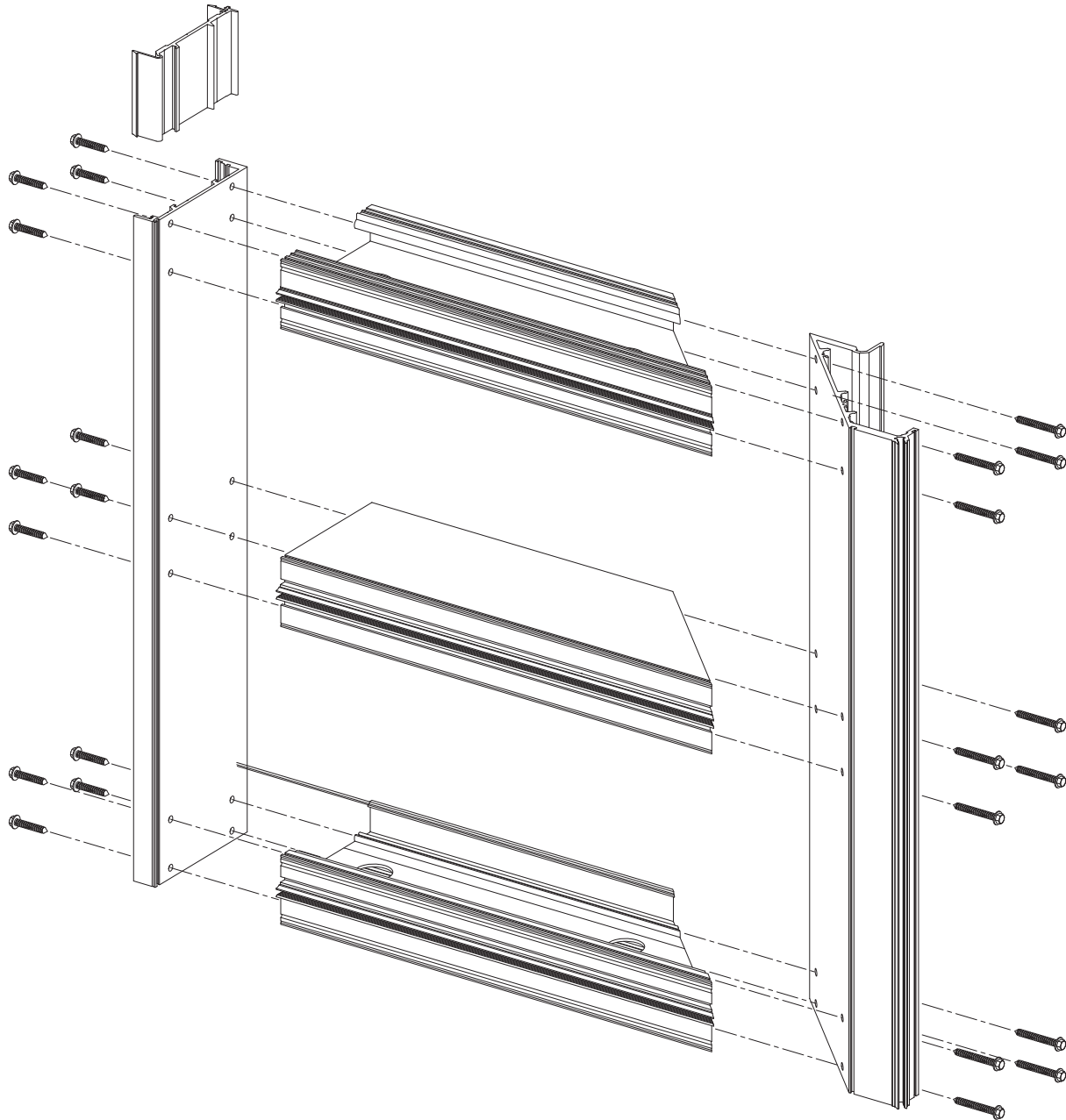
The following is intended for use as a guide for assembly of **Unit WC3** of the **YUW 750 XT 4-Sided Captured Window Wall System**. It is organized into five steps which will take you from assembly of parts to completed units.

| | |
|--|----------------|
| Step 1: WC3 Unit Assembly | Pages 34 to 37 |
| Step 2: WC3 Parts Installation | Page 38 |
| Step 3: WC3 Gasket Installation | Pages 39 & 40 |
| Step 4: WC3 Glass Installation | Pages 41 to 43 |
| Step 5: WC3 Thermal Barrier & Cover Installation | Pages 44 to 53 |

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: WC3 UNIT ASSEMBLY

MAJOR COMPONENTS



STEP 1: WC3 UNIT ASSEMBLY

STEP 1a

APPLY SEALANT TO FRAMING MEMBERS

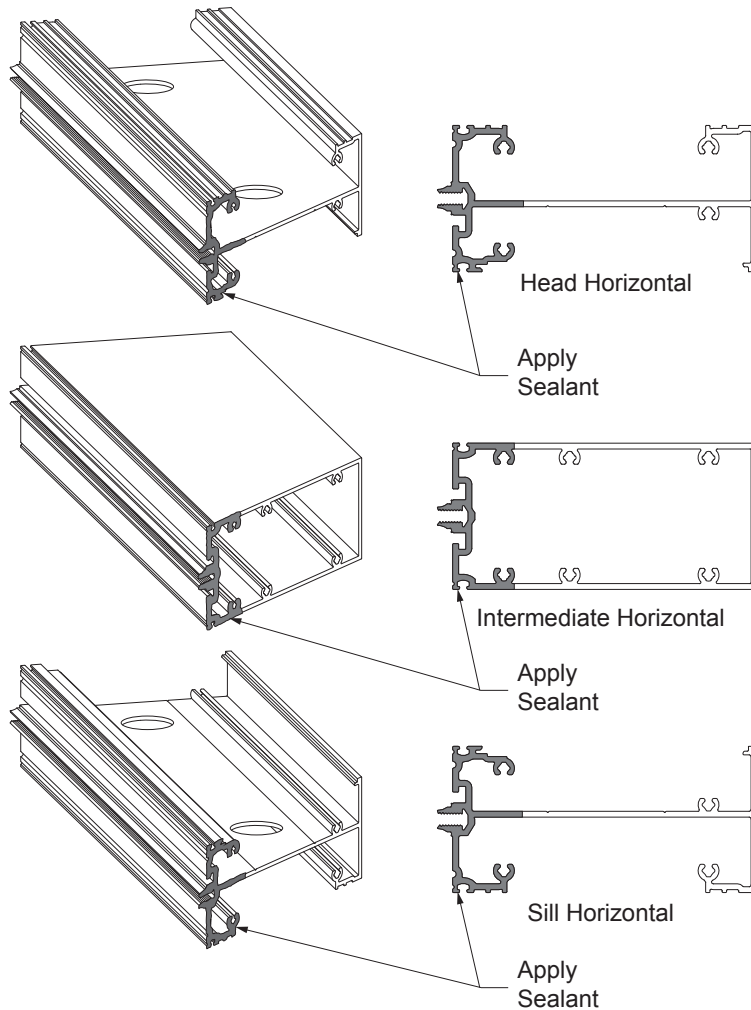
-Clean, prime and apply sealant to both ends of horizontals and tops of verticals per typical unit detail and approved shop drawings.

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.



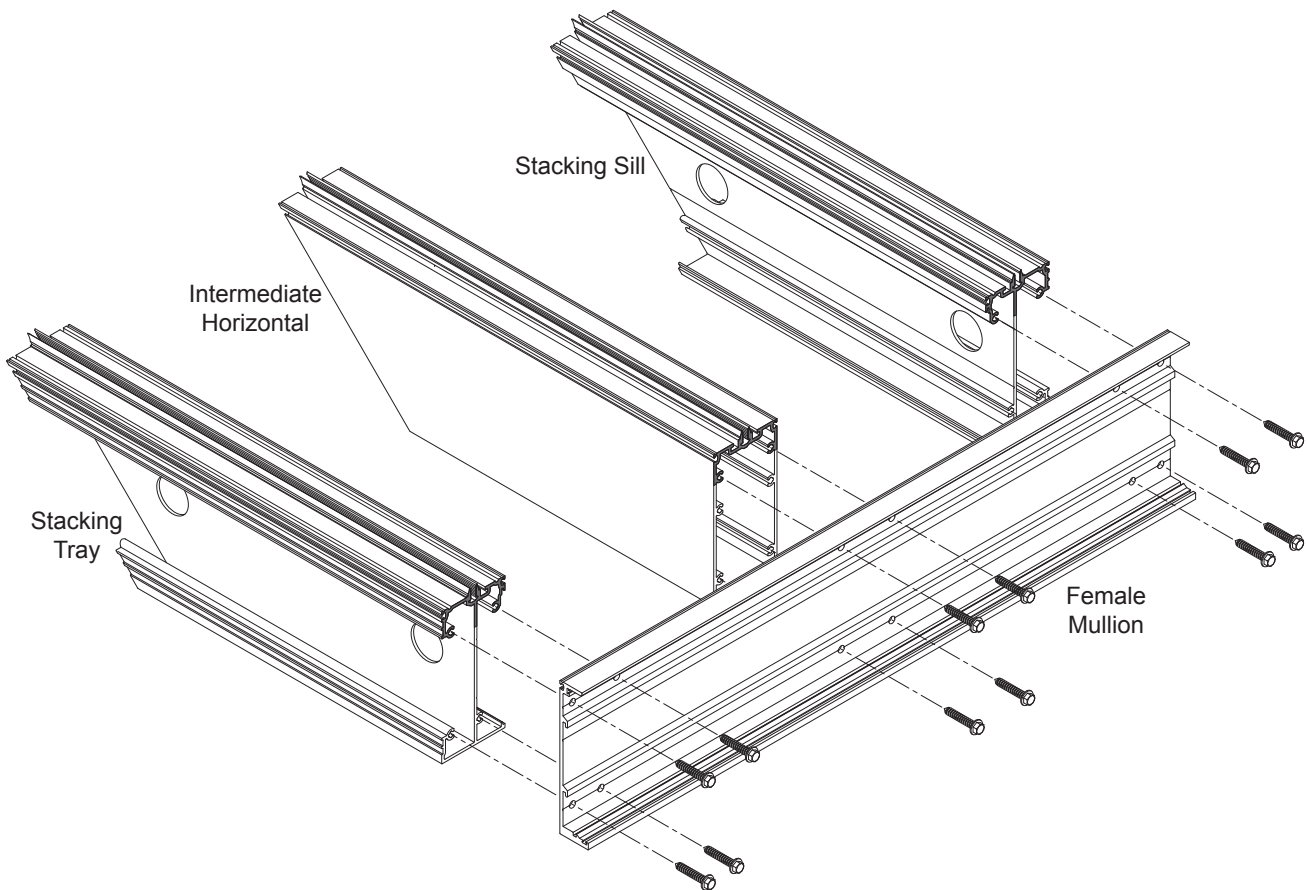
Detail 3-1

STEP 1: WC3 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: WC3 UNIT ASSEMBLY

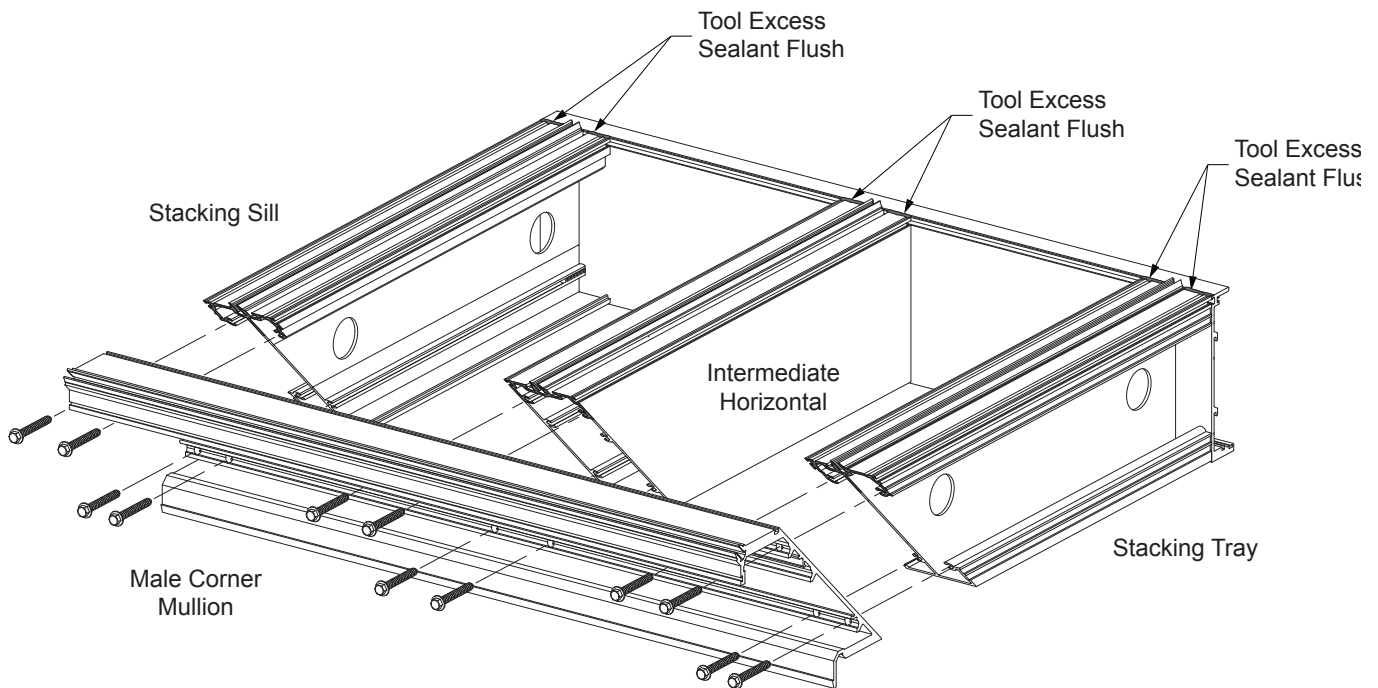
STEP 1b (Continued)

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

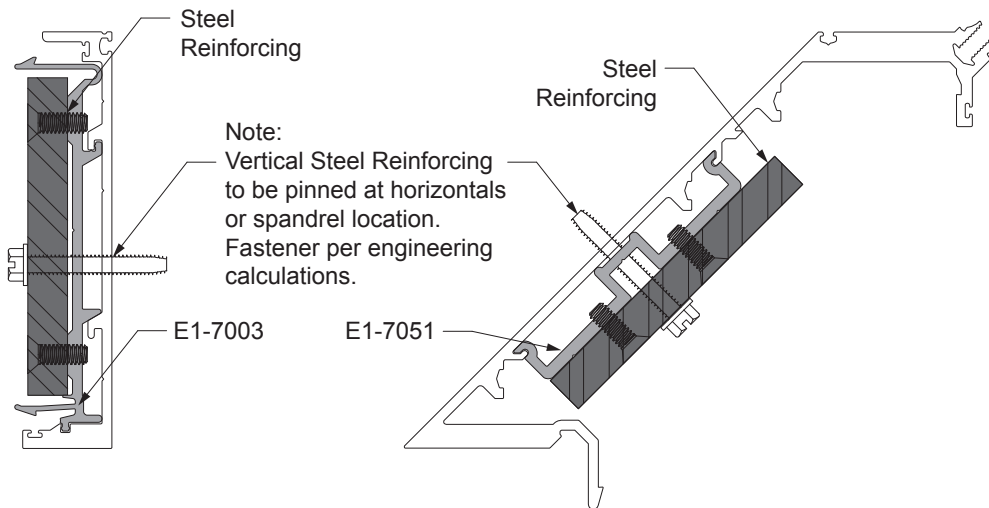
STEP 2: WC3 PARTS INSTALLATION**STEP 2a****INSTALL MULLION INTERLOCKING CLIPS**

-Refer to **WC2 Parts Installation, Step 2a** on **Page 27**.

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 3-9**.



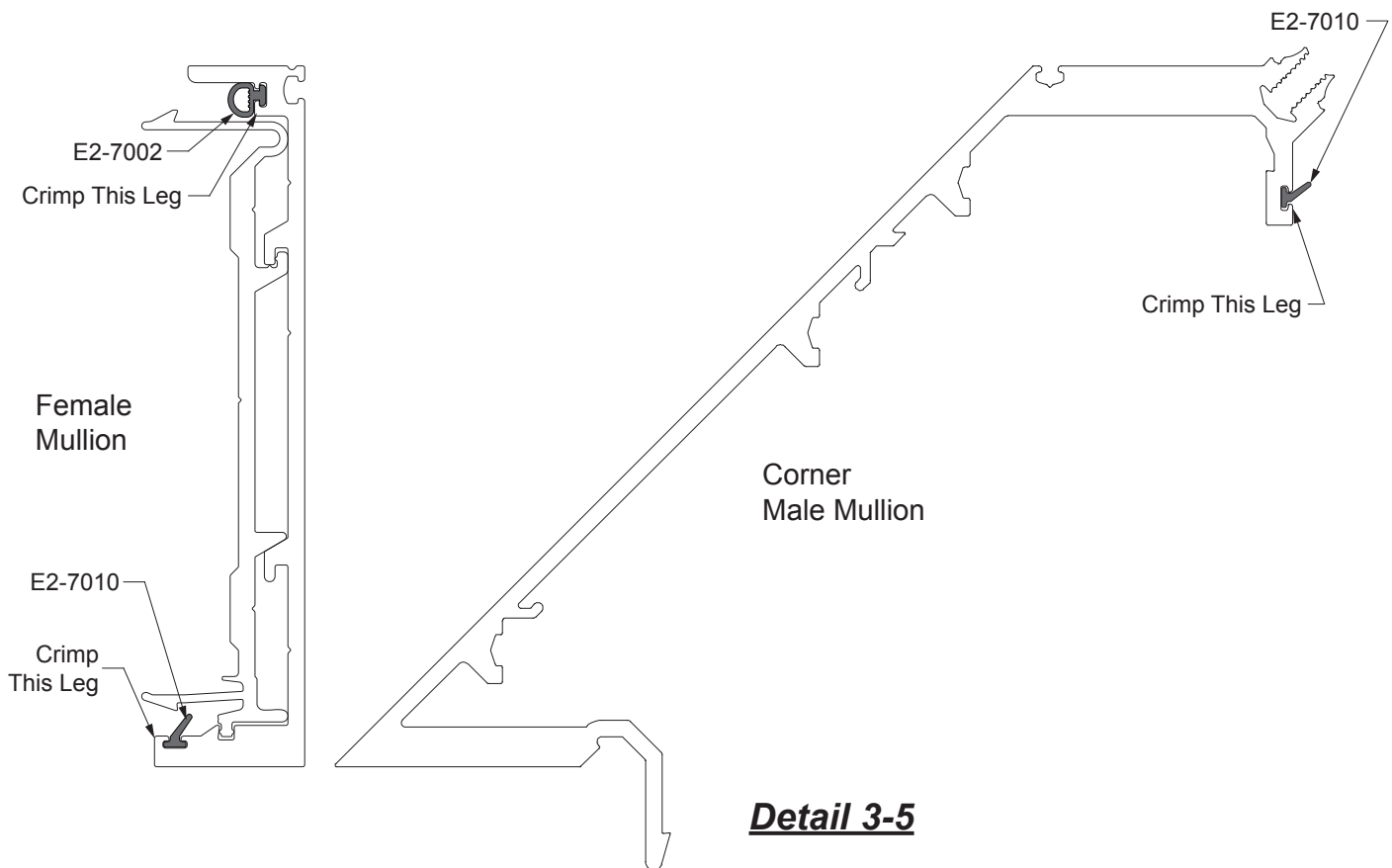
Detail 3-4

STEP 3: WC3 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 **WC1 Gasket Installation, Step 3b** on **Page 9**.

STEP 3: WC3 GASKET INSTALLATION

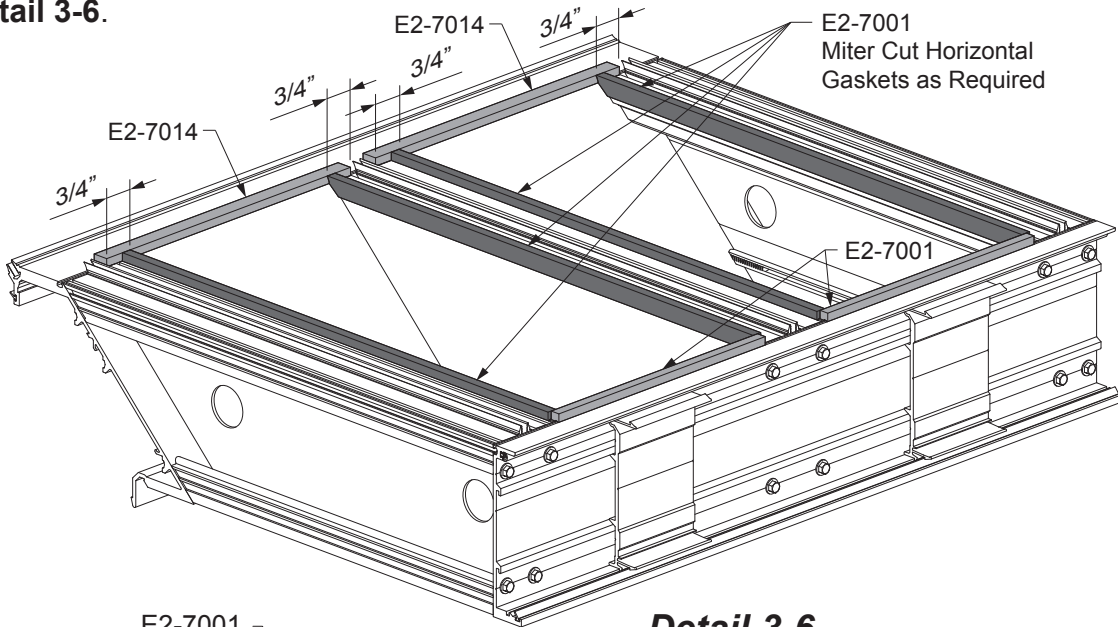
**STEP 3c
INSTALL INTERIOR GLAZING GASKETS**

-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.

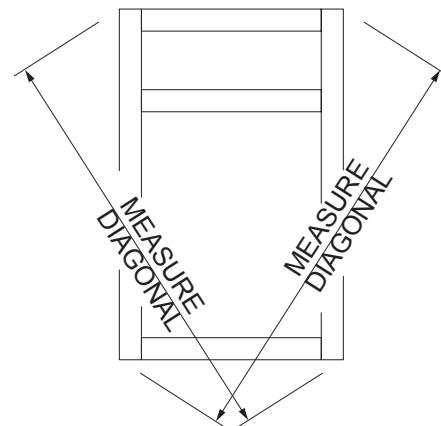
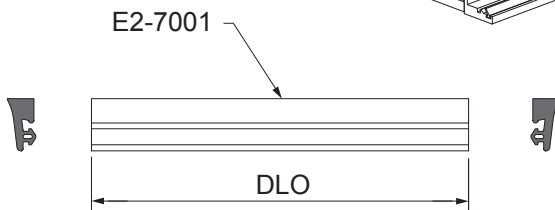
-Clean and prepare glass and aluminum surfaces in strict conformity with sealant manufacturer's specifications and requirements.

-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



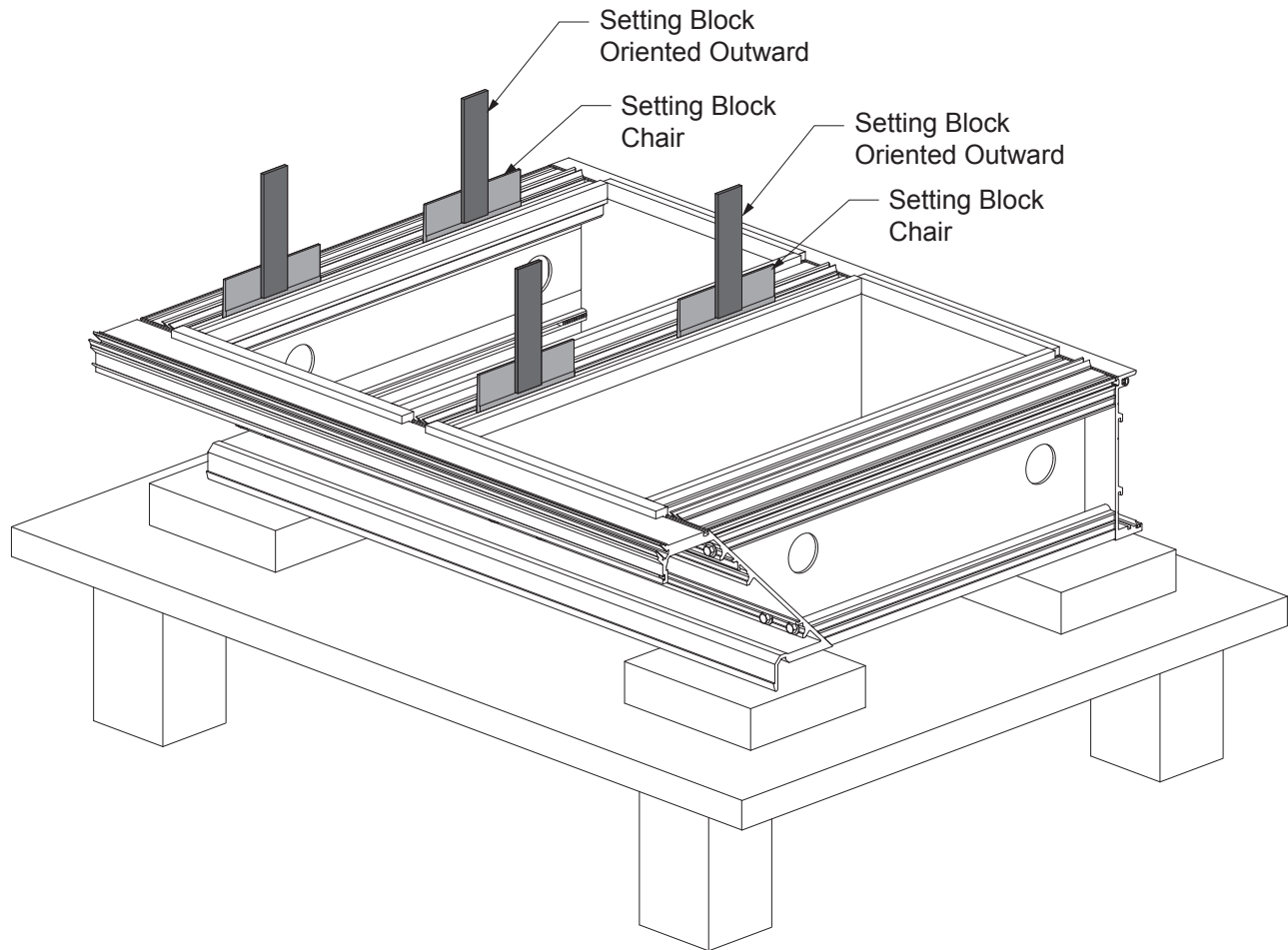
Note:
Before installing the glass, double-check squareness of frame by measuring diagonals. The maximum difference between diagonals is 1/16". Sight down mullions to make sure unit is not bowed. A unit glazed in a "out of square" or "bowed" position will cause installation problems.

STEP 4: WC3 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**.

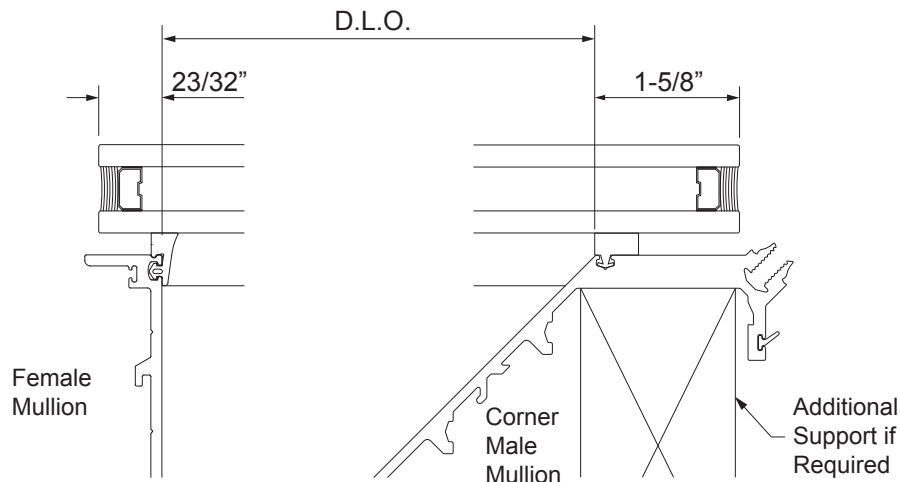


Detail 3-7

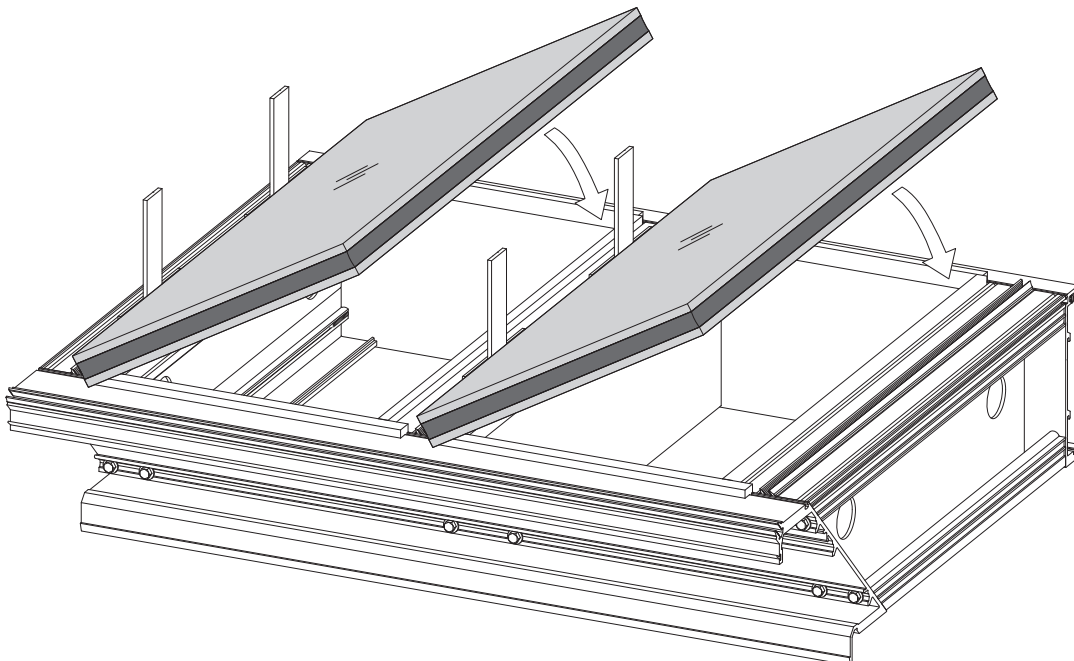
STEP 4: WC3 GLASS INSTALLATION

**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

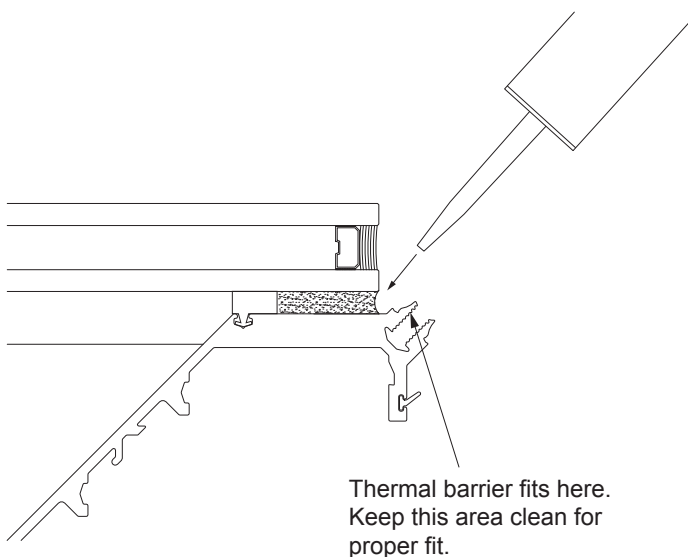


STEP 4: WC3 GLASS INSTALLATION

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.

See **Detail 3-9**.

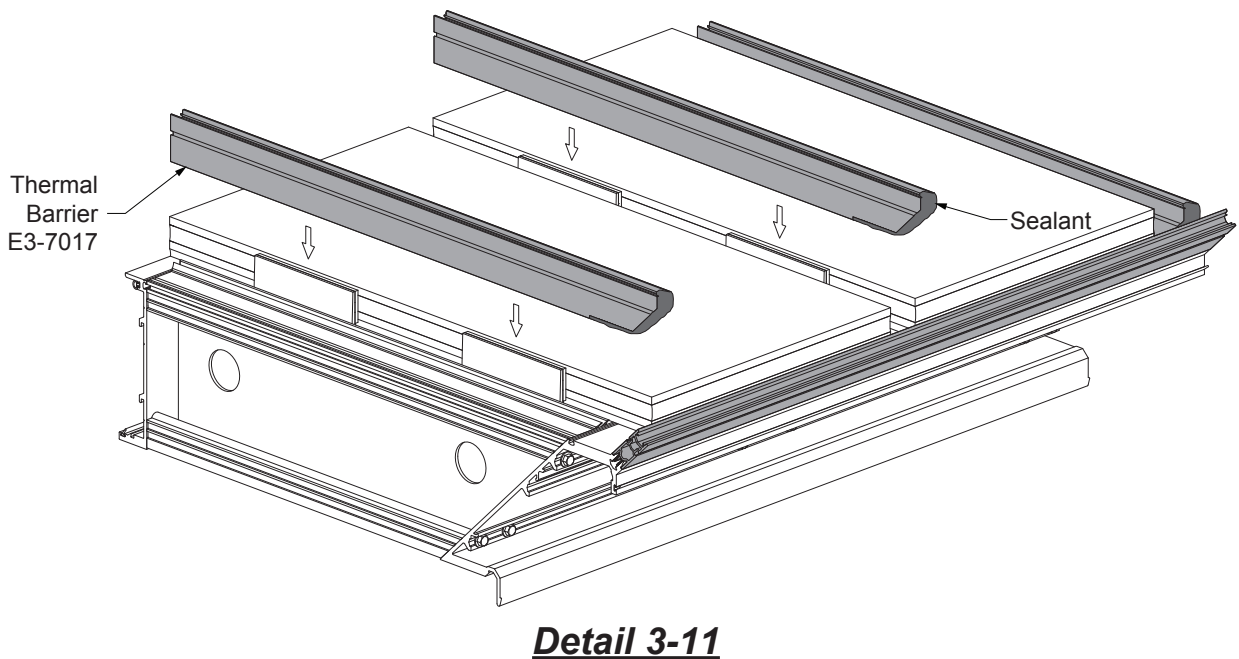
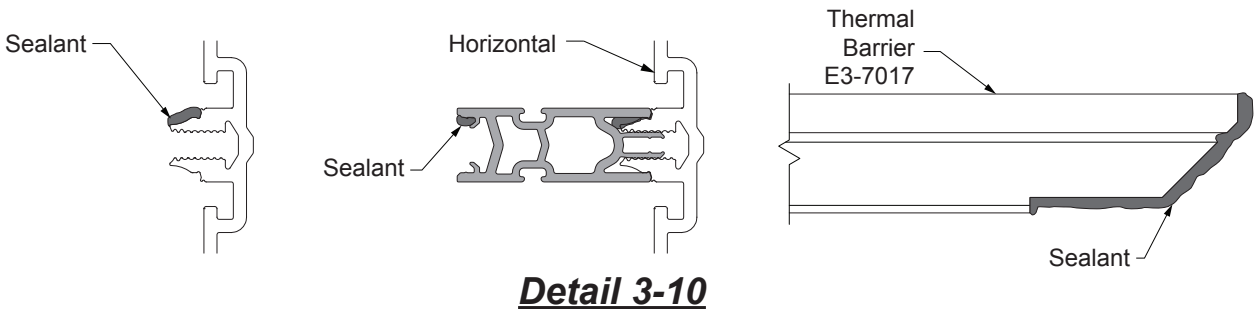


Detail 3-9

STEP 5: WC3 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 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.



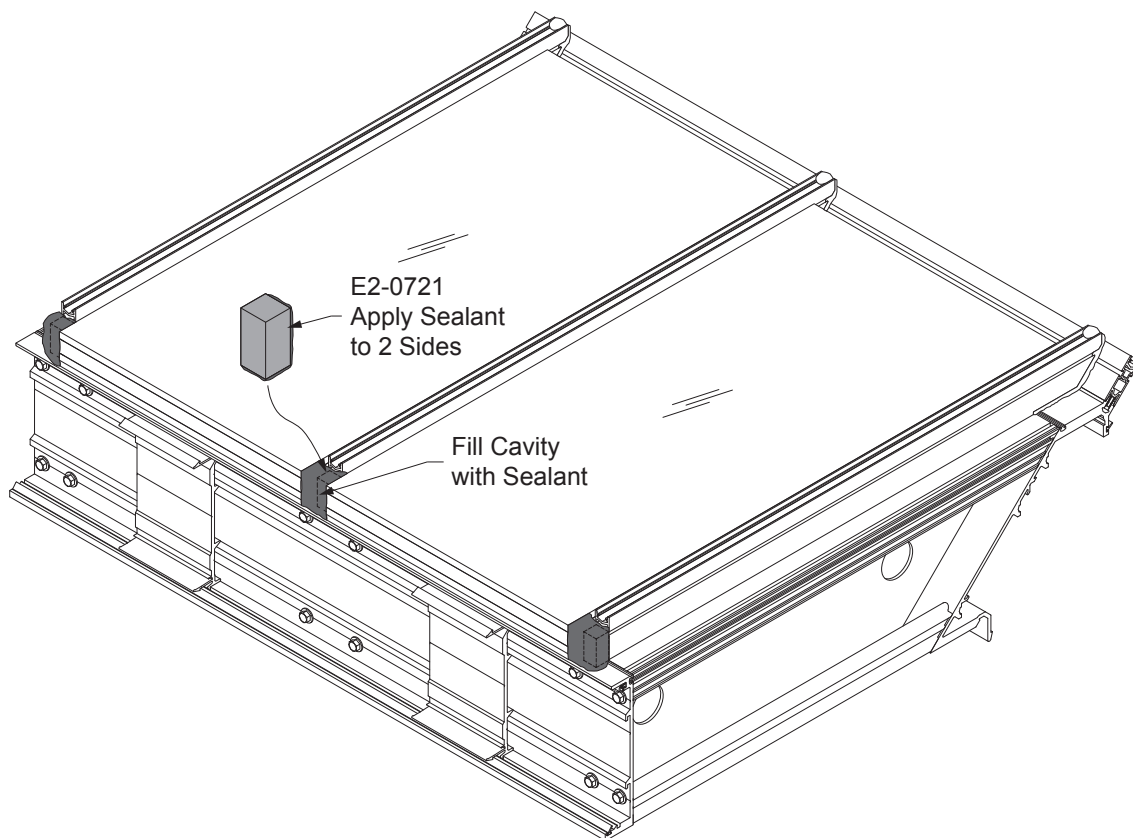
STEP 5: WC3 THERMAL BARRIER & COVER INSTALLATION

STEP 5b

INSTALL JOINT PLUGS

- Joint plugs are to be installed at the head, sill, and intermediate horizontals.
- 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 end.
- Apply sealant to the two contact sides of the E2-0721 joint plug.
- Install joint plug at the female mullion as shown. Press the joint plug firmly against the face of the mullion.
- Fill the cavity around the joint plug with sealant. Tool the sealant to ensure a complete seal.

See **Detail 3-12**.



Detail 3-12

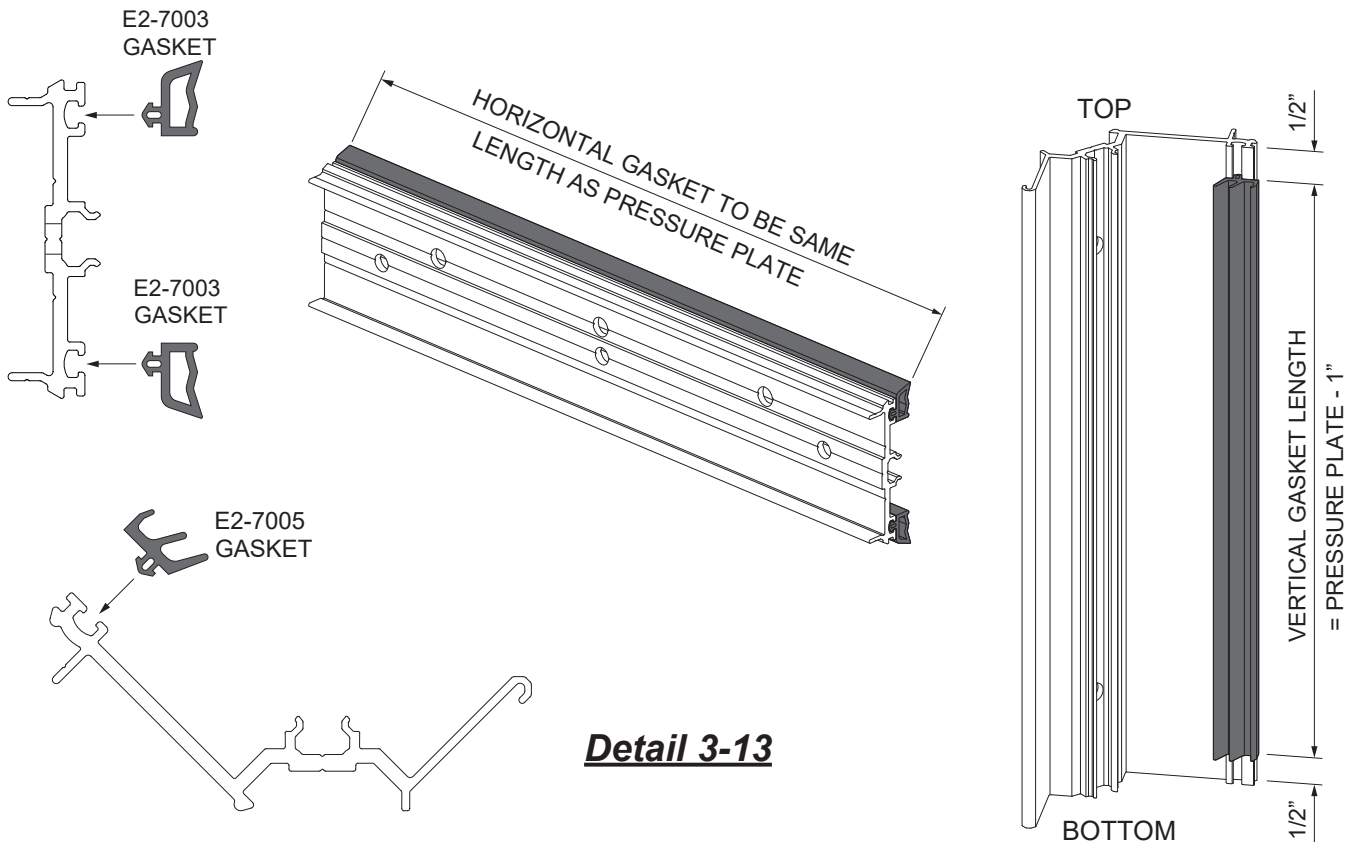
STEP 5: WC3 THERMAL BARRIER & COVER INSTALLATION

STEP 5e

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 and gaskets are to be the length of their corresponding pressure plates. Gaskets should never be “stretched to fit.”
- Vertical gasket at corner 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 the corner pressure plate reglet.
- Gaskets should be flush with edge of pressure plate. Trim off any excess gasket to prevent interference with the end cap.

See **Detail 3-13**.



Detail 3-13

STEP 5: WC3 THERMAL BARRIER & COVER INSTALLATION

STEP 5f

INDEX PRESSURE PLATES / DRILL THERMAL BARRIERS

-Refer to **CC1 Parts Installation, Step 5d** on **Page 17**.

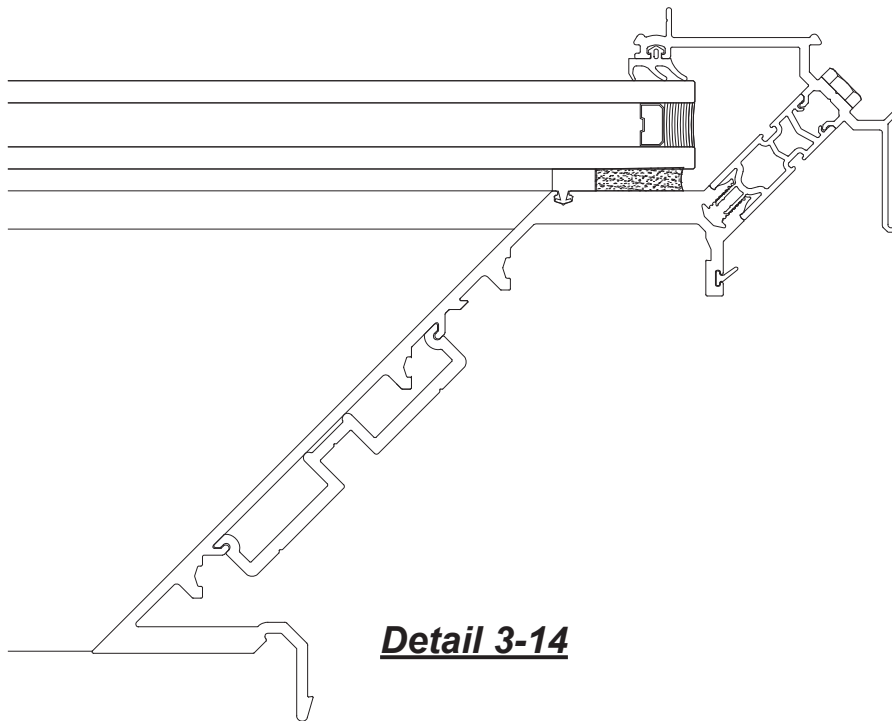
STEP 5g

INSTALL VERTICAL CORNER PRESSURE PLATES

-Snap in pressure plates into the thermal barriers.

-Attach the pressure plates using HM-2532-SS fasteners, torquing them to approximately 45 to 50 inch-lbs. Do not over-torque.

See **Detail 3-14**.

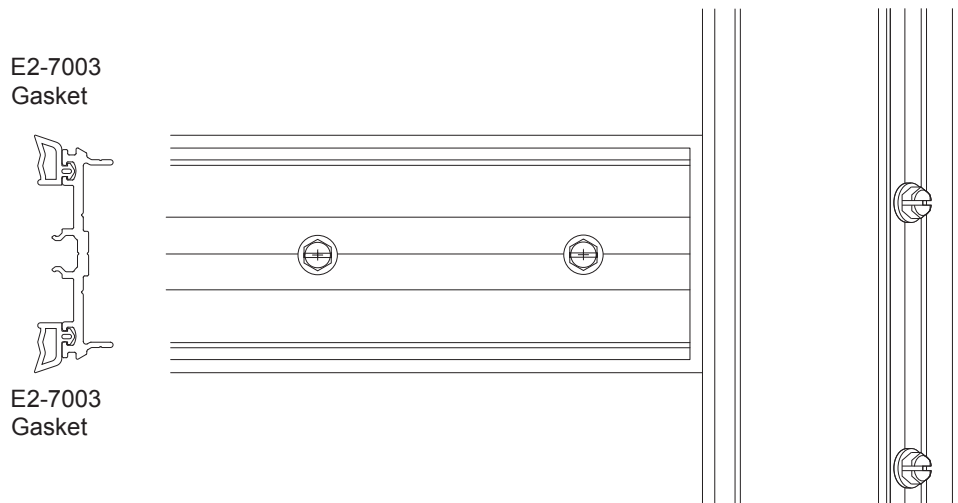


STEP 5: WC3 THERMAL BARRIER & COVER INSTALLATION

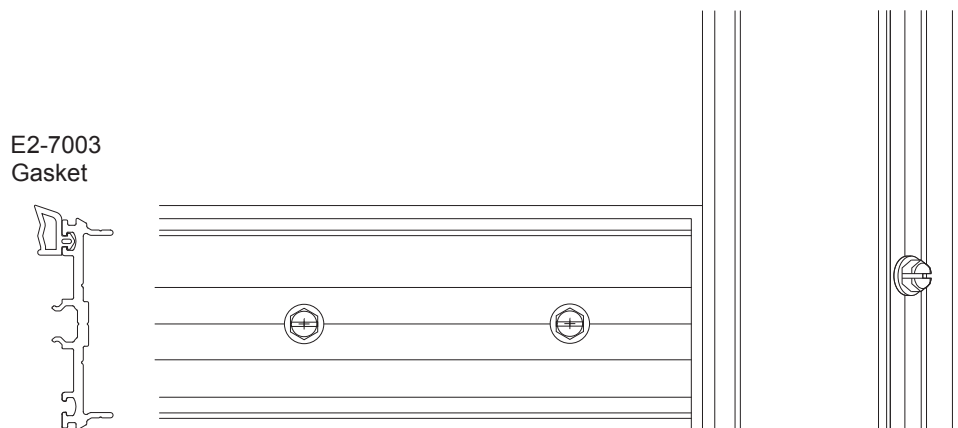
**STEP 5h
INSTALL HORIZONTAL PRESSURE PLATES**

- 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 15, Detail 1-15**.
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. Also apply sealant to the face of the joint plugs installed at the verticals.
- Install horizontal pressure plate, centered on the D.L.O, using HM-2532-SS fasteners, torquing them to approximately 45 to 50 inch-lbs.

See **Detail 3-15**.



Detail 3-15

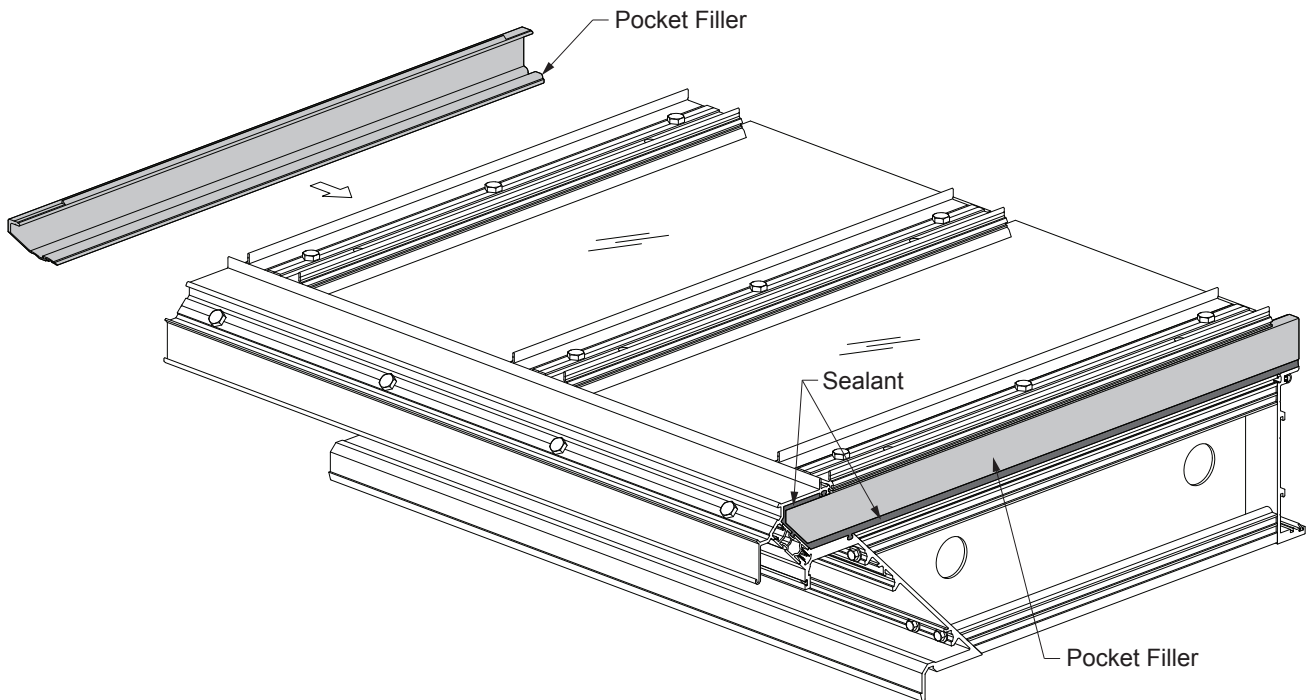


STEP 5: WC3 THERMAL BARRIER & COVER INSTALLATION

STEP 5j INSTALL PERIMETER POCKET FILLERS

- At head and sill locations, the pocket filler will have to be miter cut to serve as an end cap at the outside corner mullion. The nubs in the pocket filler may also have to be notched to avoid interference with the corner mullion and its pressure plate.
- Snap in pocket filler.
- Apply sealant along interface between pocket filler and head or sill. Also apply sealant at the corner to fill the void between the pocket filler and the corner vertical members.

See **Detail 3-16**.

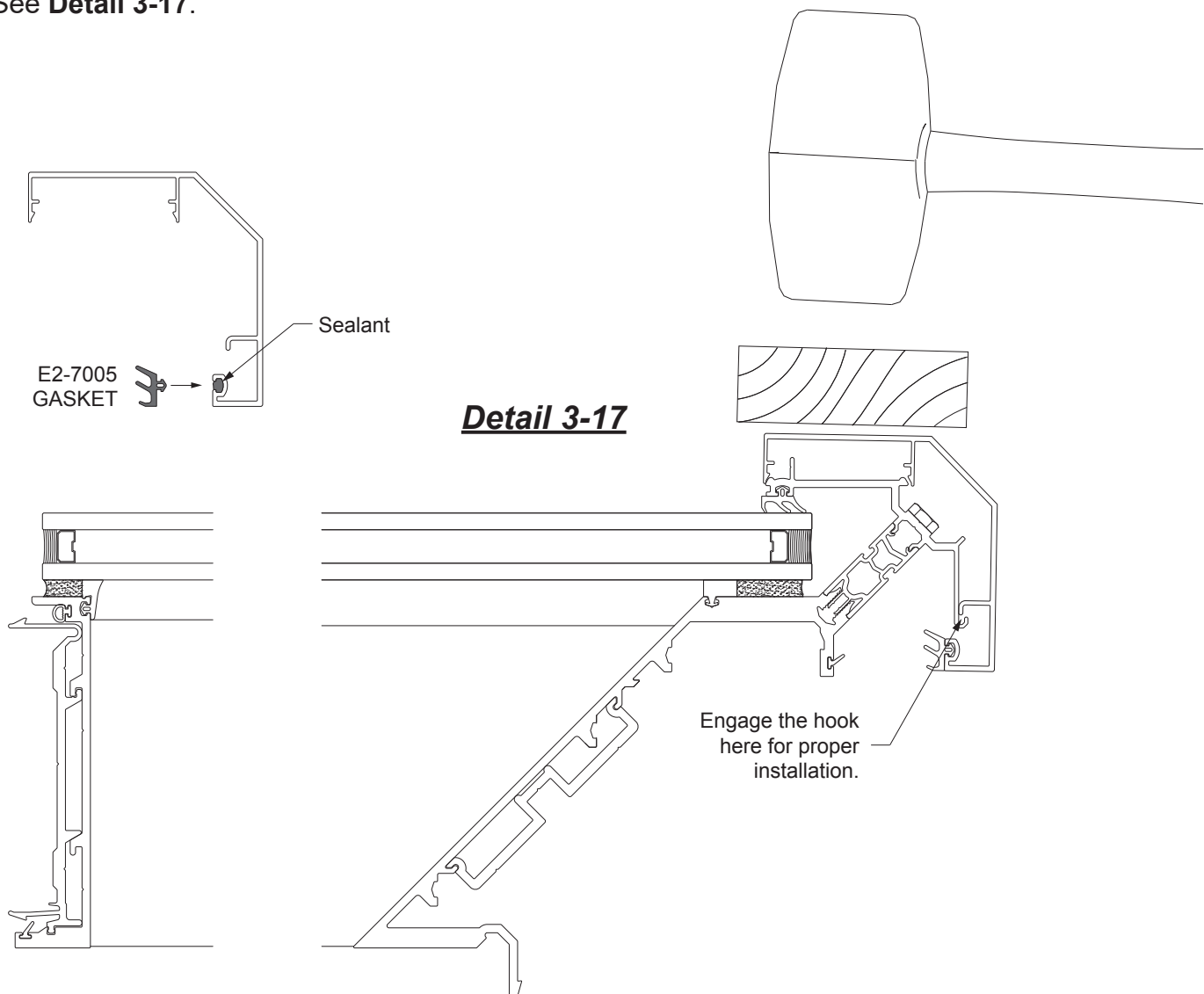


Detail 3-16

STEP 5: WC3 THERMAL BARRIER & COVER INSTALLATION**STEP 5k
INSTALL FACE COVERS**

- Install E9-7056 corner mullion face cover first.
- The gasket reglet in the face cover should be clean. Apply a few dabs of sealant into the gasket reglet.
- The E2-7005 gasket is to be cut to corner face cover length minus (-) 1". Insert the E2-7005 gasket centered vertically into the reglet in the corner cover.
- 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**.

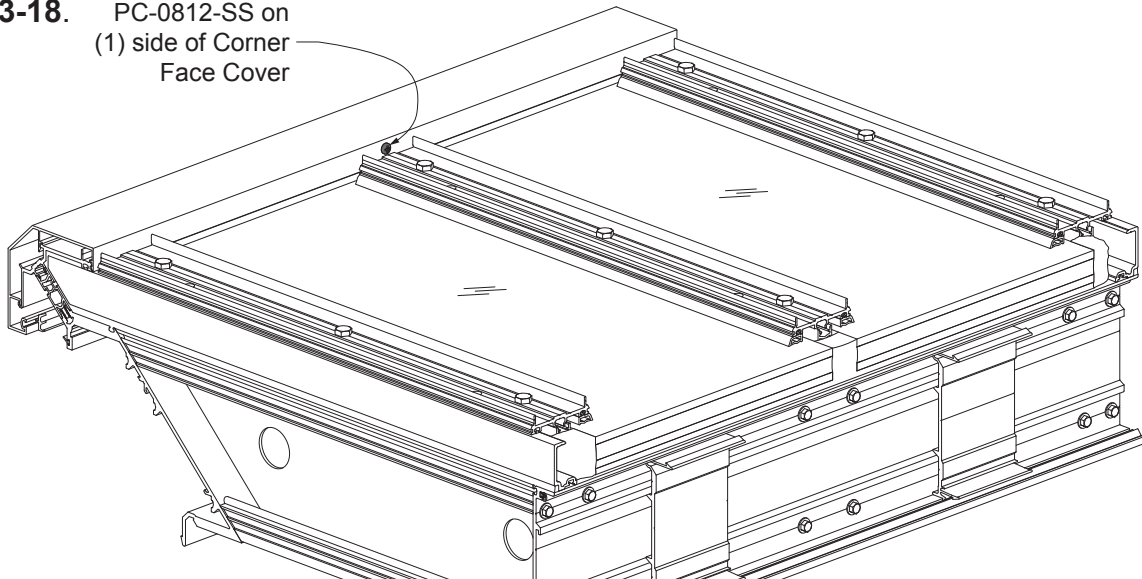


STEP 5: WC3 THERMAL BARRIER & COVER INSTALLATION

STEP 5k (Continued) INSTALL FACE COVERS

-Secure the corner mullion face cover to the pressure plates by installing a PC-0812-SS fastener on one side of the cover at one intermediate horizontal. These fasteners will be concealed once the horizontal face covers are installed.

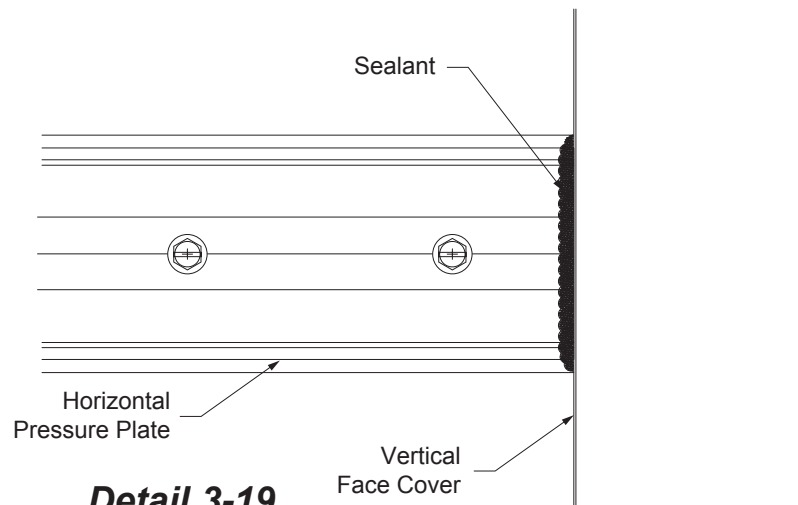
See **Detail 3-18**. PC-0812-SS on
(1) side of Corner
Face Cover



Detail 3-18

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

See **Detail 3-19**.

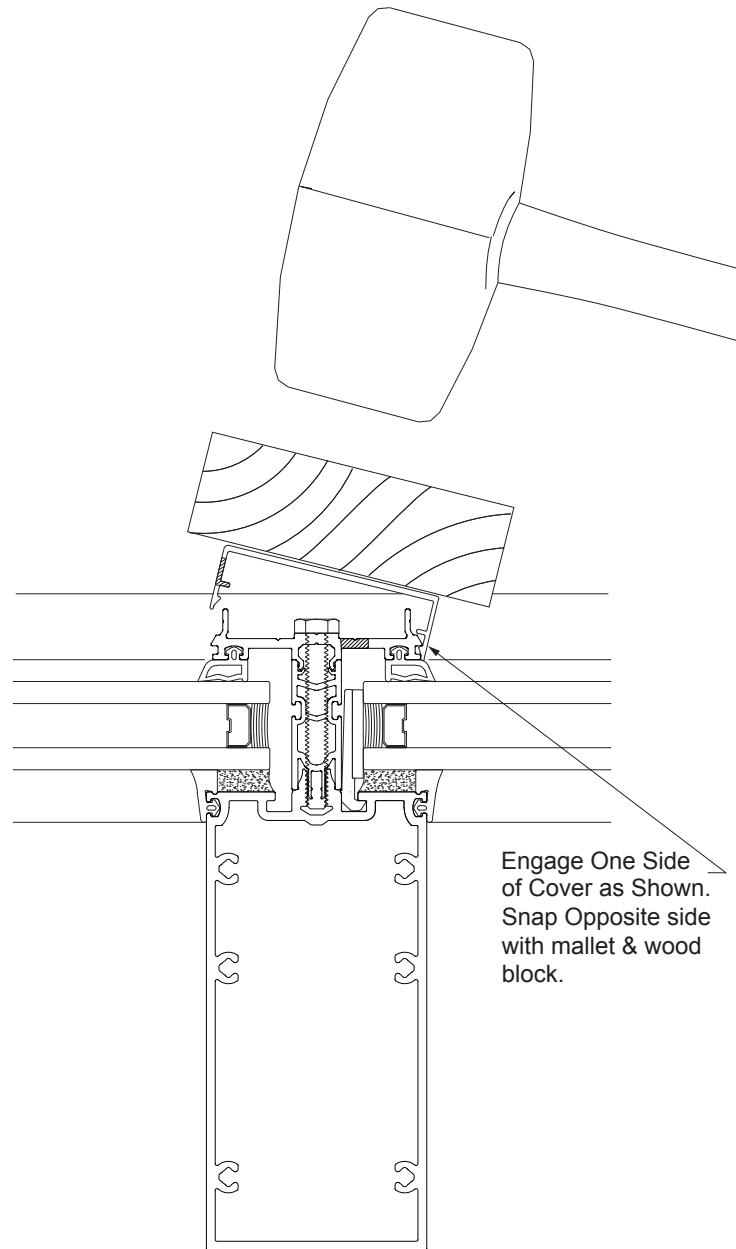


Detail 3-19

STEP 5: WC3 THERMAL BARRIER & COVER INSTALLATION**STEP 5k (Continued)
INSTALL FACE COVERS**

- Horizontal cover length = D.L.O. - 1/8"
- 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 3-20**.

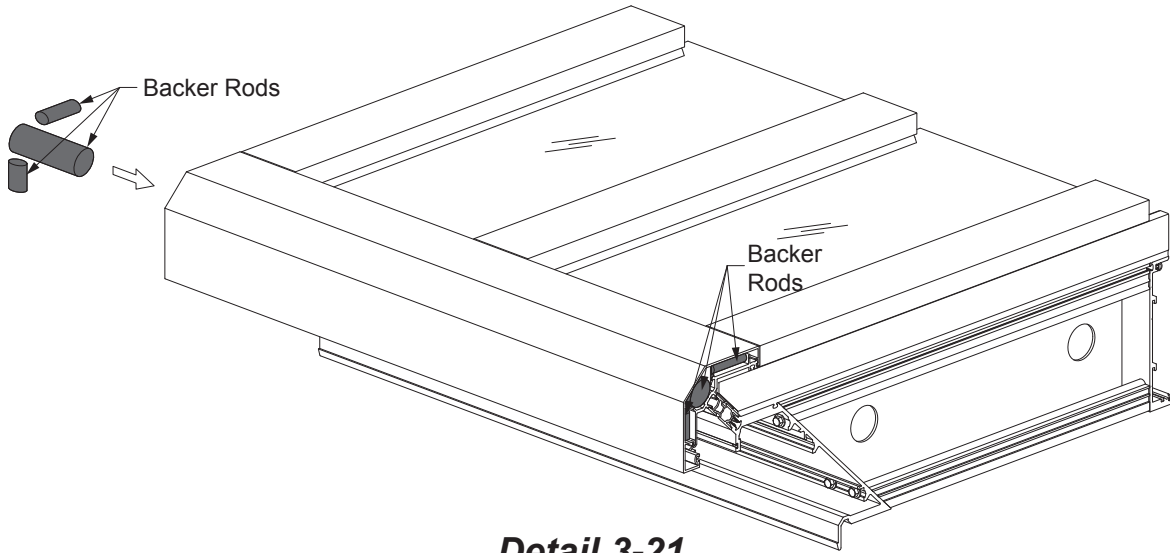


Detail 3-20

STEP 5: WC3 THERMAL BARRIER & COVER INSTALLATION

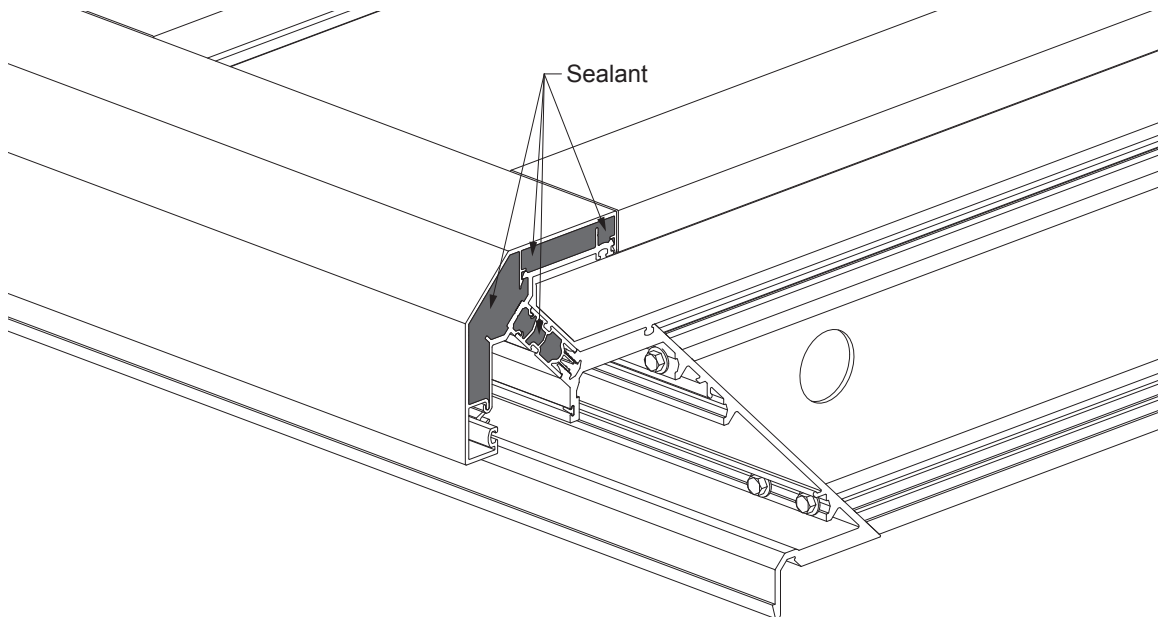
**STEP 5m
INSTALL END CAPS**

-Insert backer rods in the cavities of both ends of the face cover as shown in **Detail 3-21**.



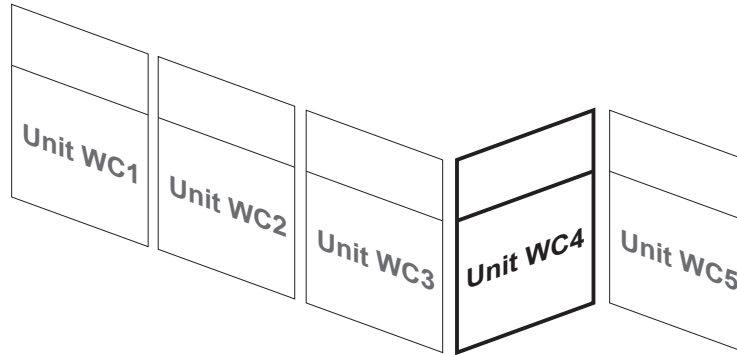
Detail 3-21

-Apply and tool sealant to the cavities of both ends of the face cover as shown in **Detail 3-22**.



Detail 3-22

WC4 TABLE OF CONTENTS



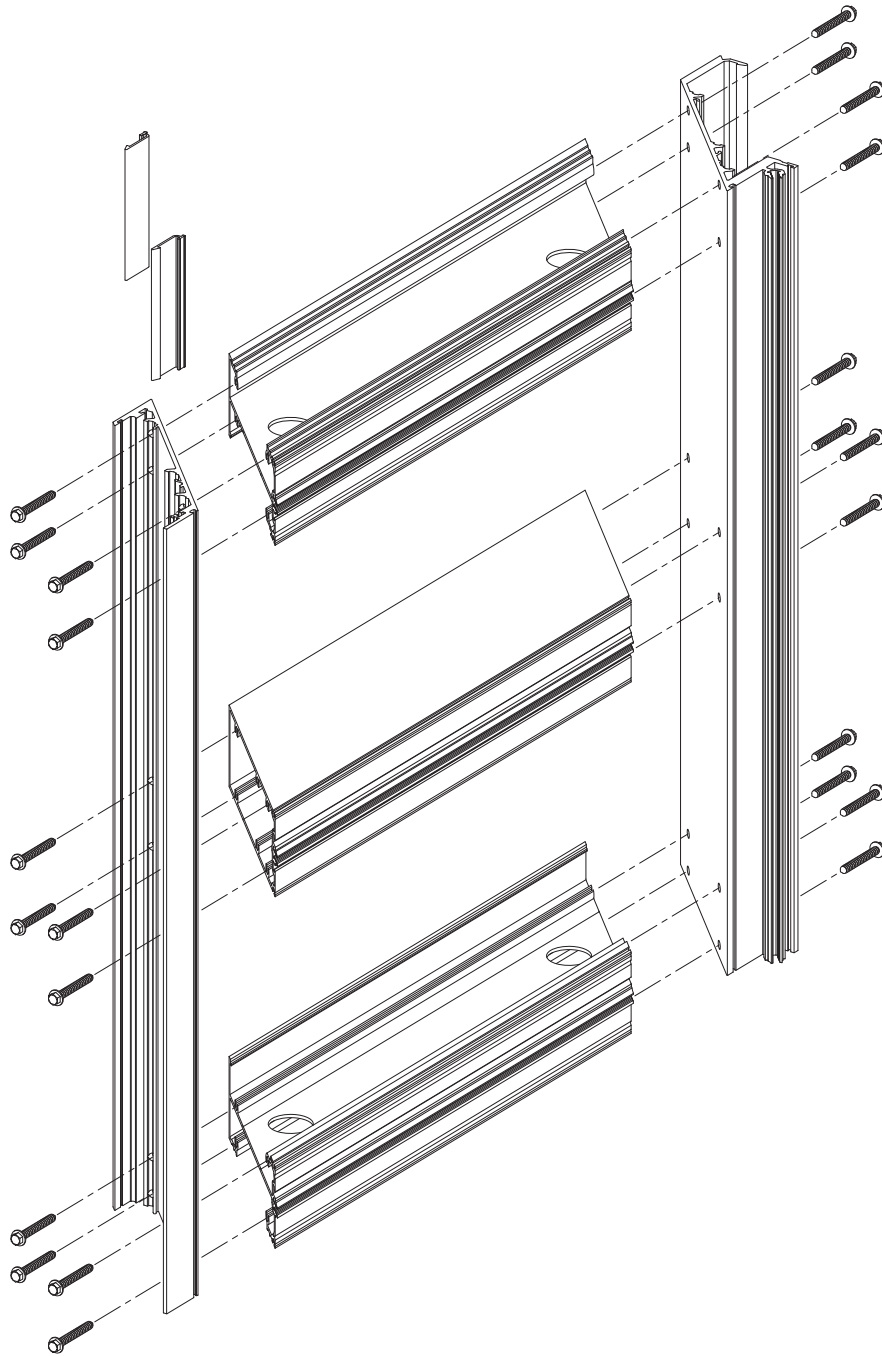
The following is intended for use as a guide for assembly of **Unit WC4** of the **YUW 750 XT 4-Sided Captured Window Wall System**. It is organized into five steps which will take you from assembly of parts to completed units.

| | |
|--|----------------|
| Step 1: WC4 Unit Assembly | Pages 55 to 58 |
| Step 2: WC4 Parts Installation | Pages 59 & 60 |
| Step 3: WC4 Gasket Installation | Pages 61 & 62 |
| Step 4: WC4 Glass Installation | Pages 63 to 65 |
| Step 5: WC4 Thermal Barrier & Cover Installation | Pages 66 to 71 |

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: WC4 UNIT ASSEMBLY

MAJOR COMPONENTS



STEP 1: WC4 UNIT ASSEMBLY

STEP 1a

APPLY SEALANT TO FRAMING MEMBERS

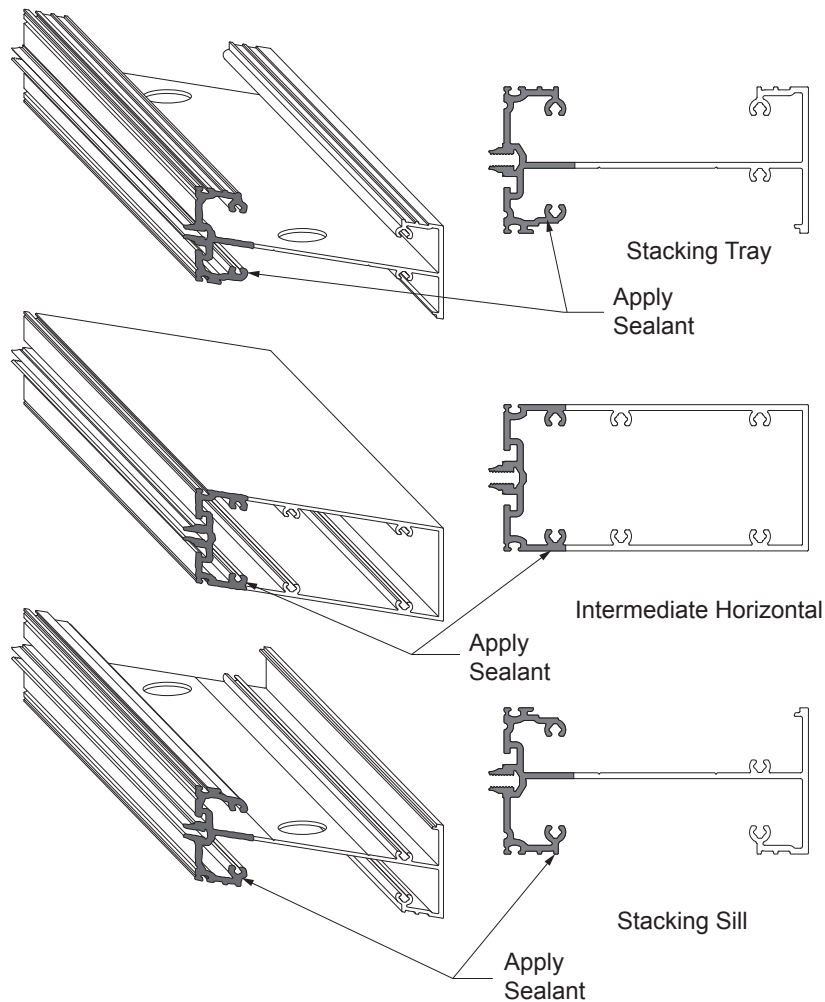
-Clean, prime and apply sealant to both ends of horizontals and tops of verticals per typical unit detail and approved shop drawings.

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: WC4 UNIT ASSEMBLY

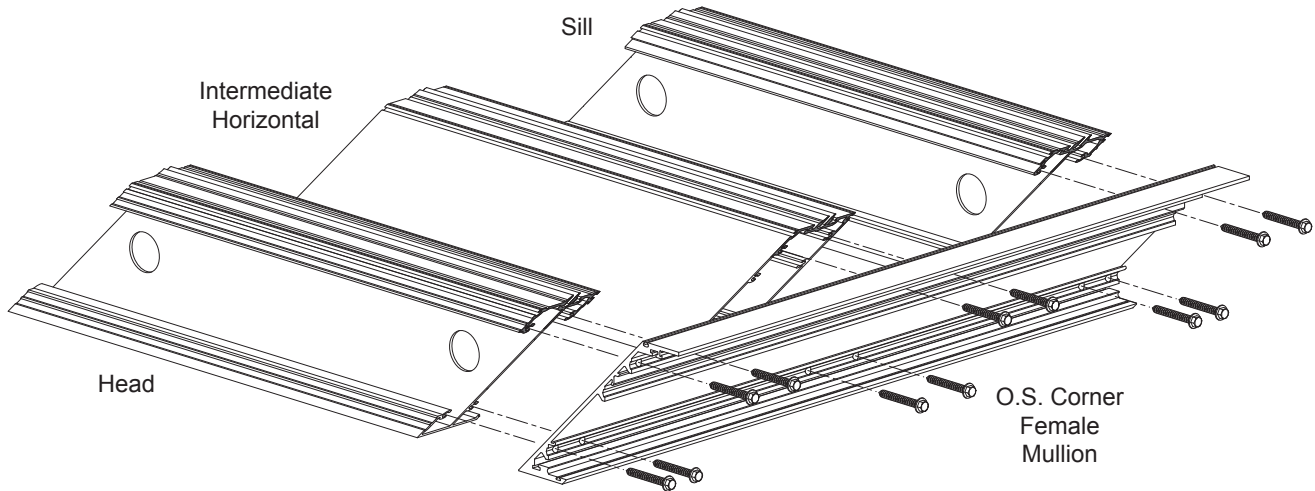
STEP 1b

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: WC4 UNIT ASSEMBLY

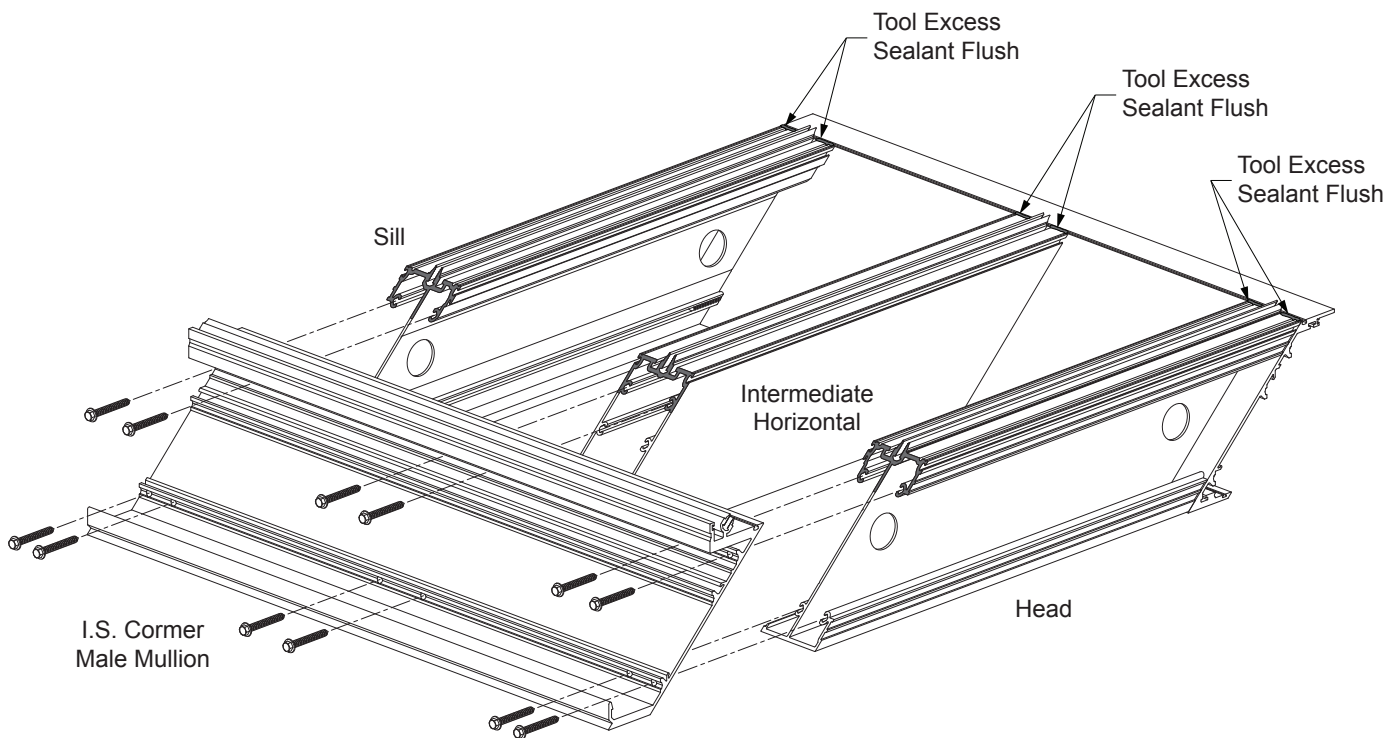
STEP 1b (Continued)

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

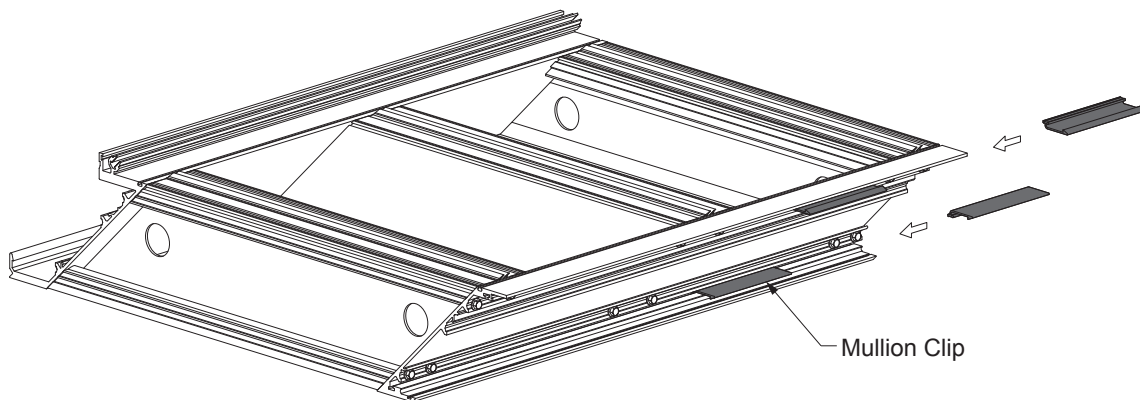
STEP 2: WC4 PARTS INSTALLATION

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**.

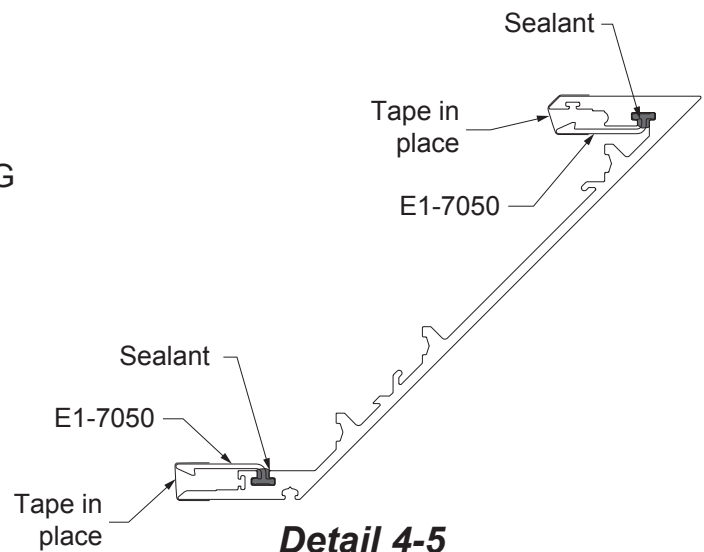


Detail 4-4

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.

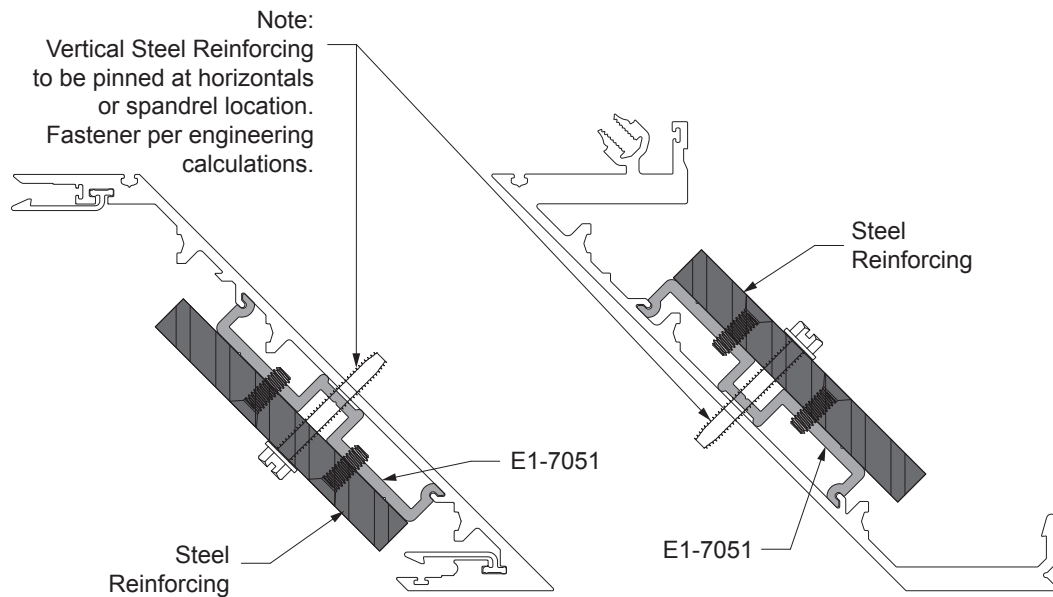


Detail 4-5

STEP 2: WC4 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**.



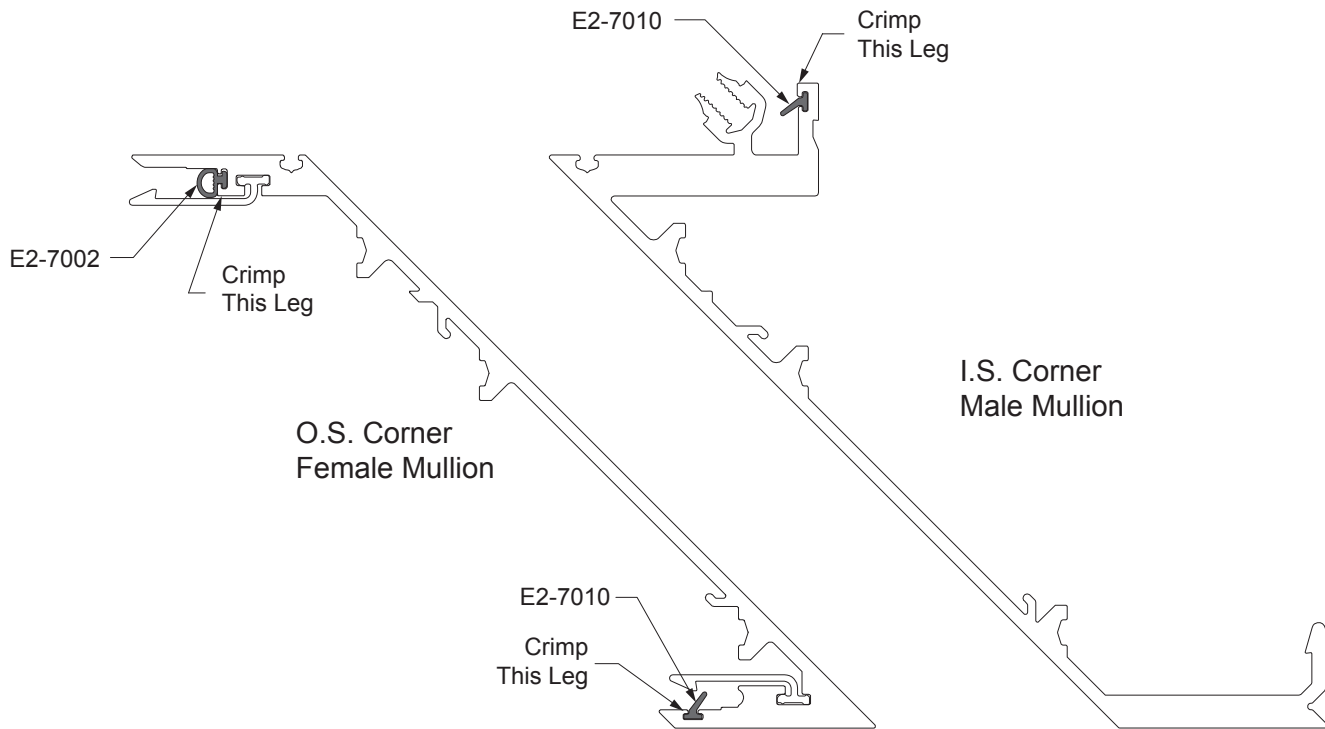
Detail 4-6

STEP 3: WC4 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

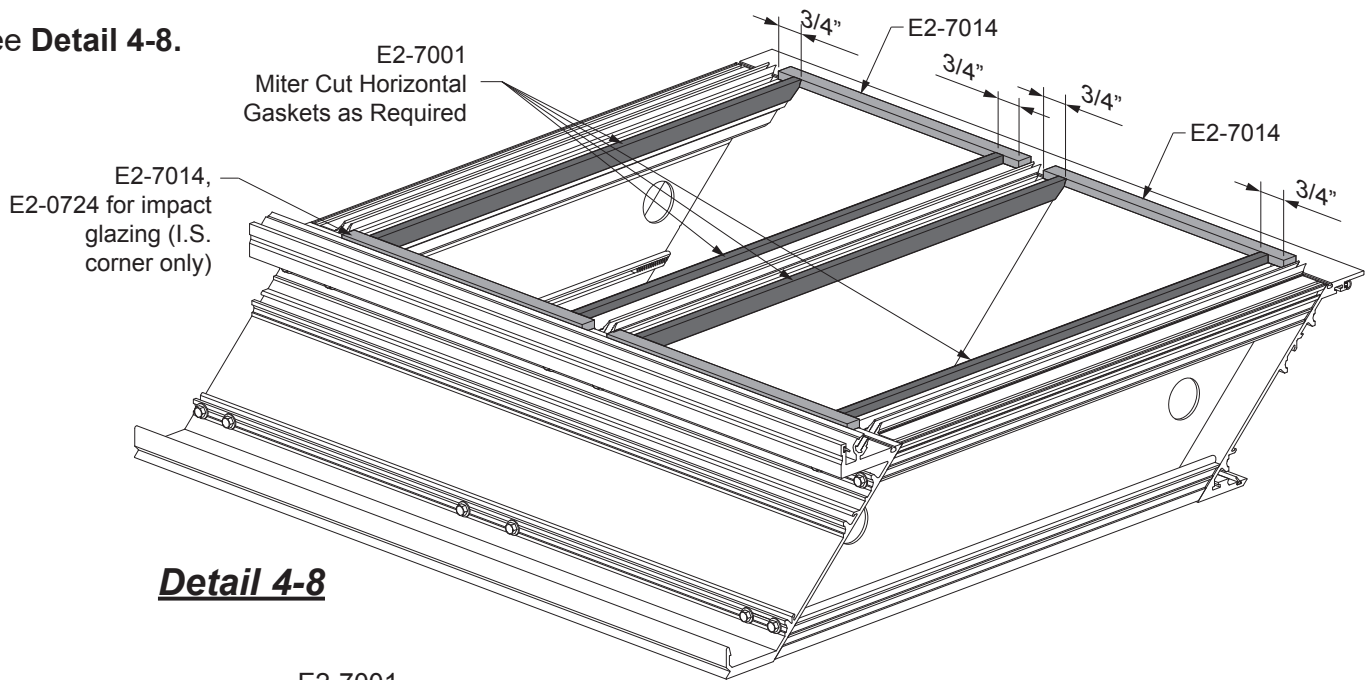
STEP 3: WC4 GASKET INSTALLATION

STEP 3b

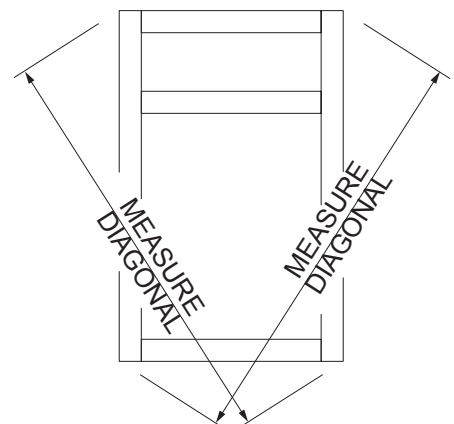
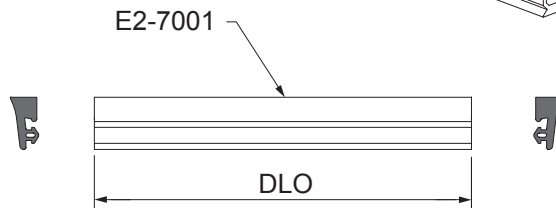
INSTALL INTERIOR GLAZING GASKETS

- 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:

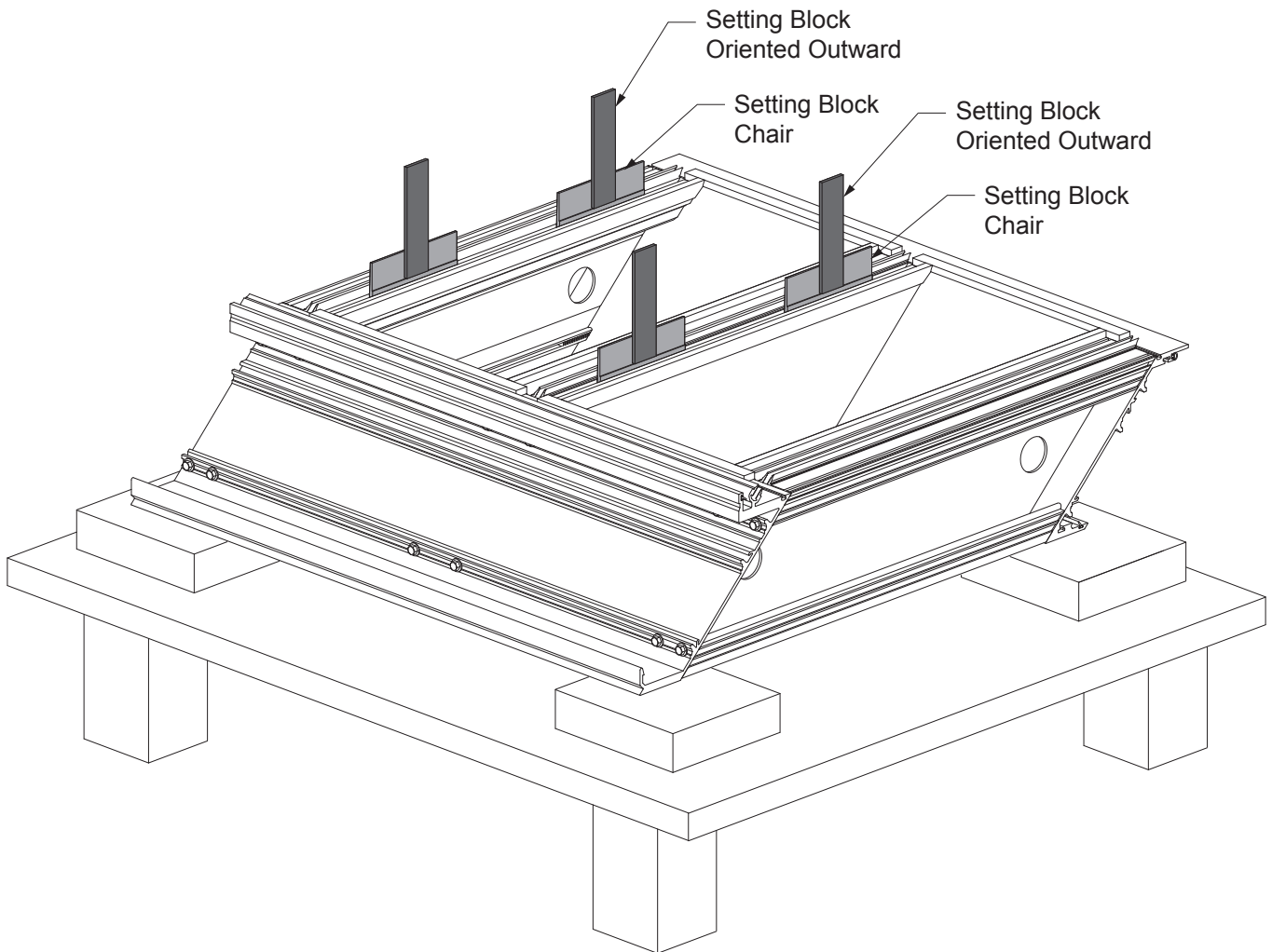
Before installing the glass, double-check squareness of frame by measuring diagonals. The maximum difference between diagonals is 1/16". Sight down mullions to make sure unit is not bowed. A unit glazed in a "out of square" or "bowed" position will cause installation problems.

STEP 4: WC4 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**.

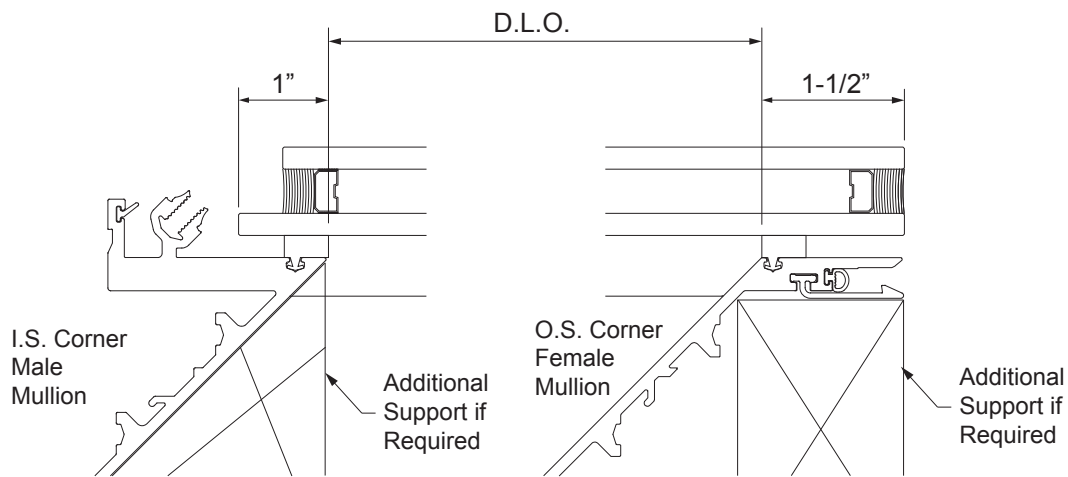


Detail 4-9

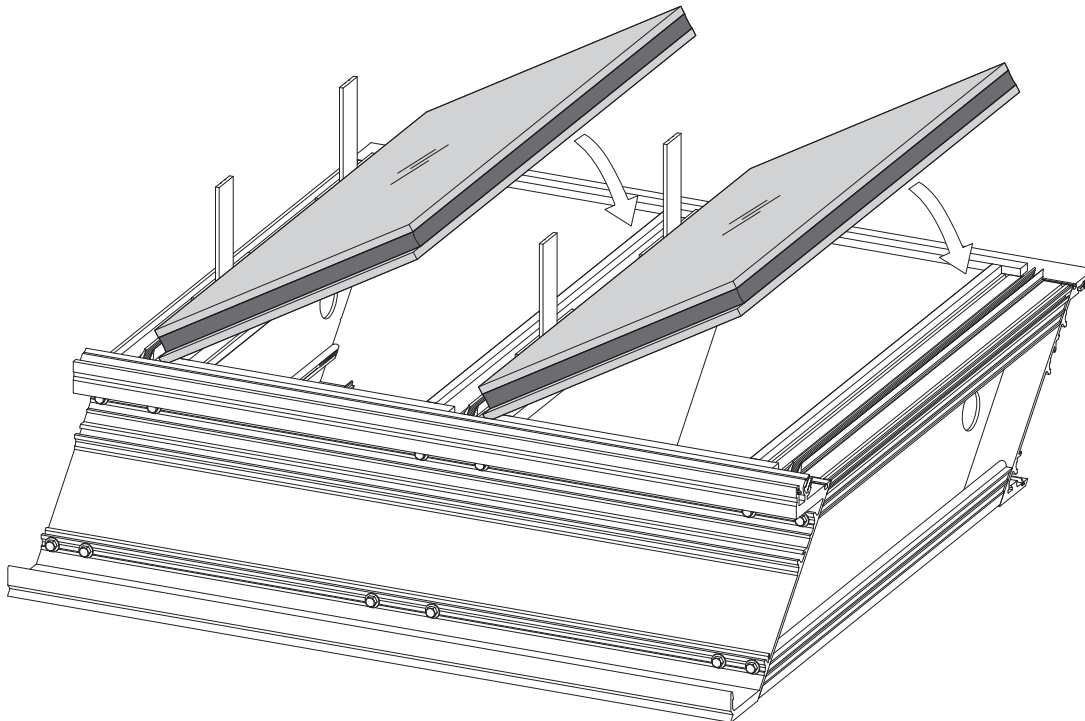
STEP 4: WC4 GLASS INSTALLATION

**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

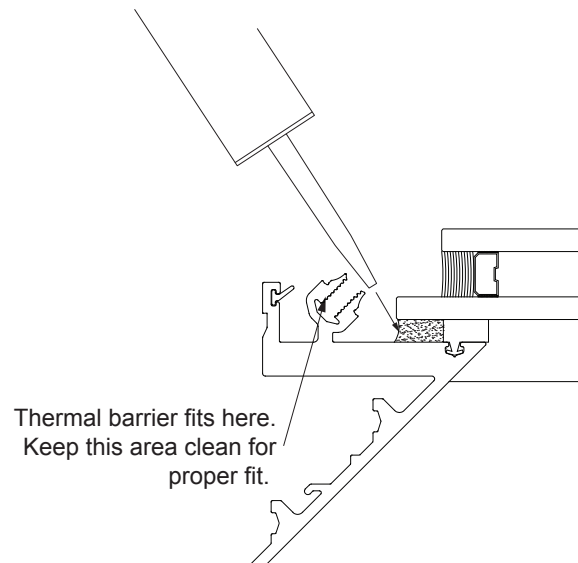


STEP 4: WC4 GLASS INSTALLATION

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.

See **Detail 4-11**.

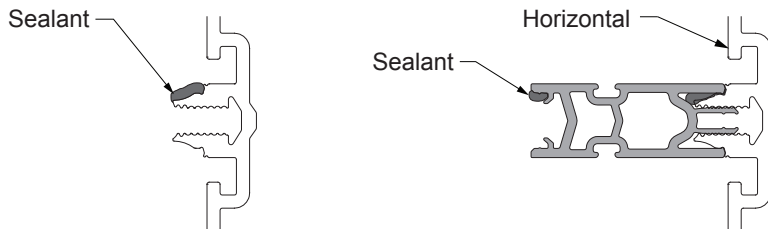


Detail 4-11

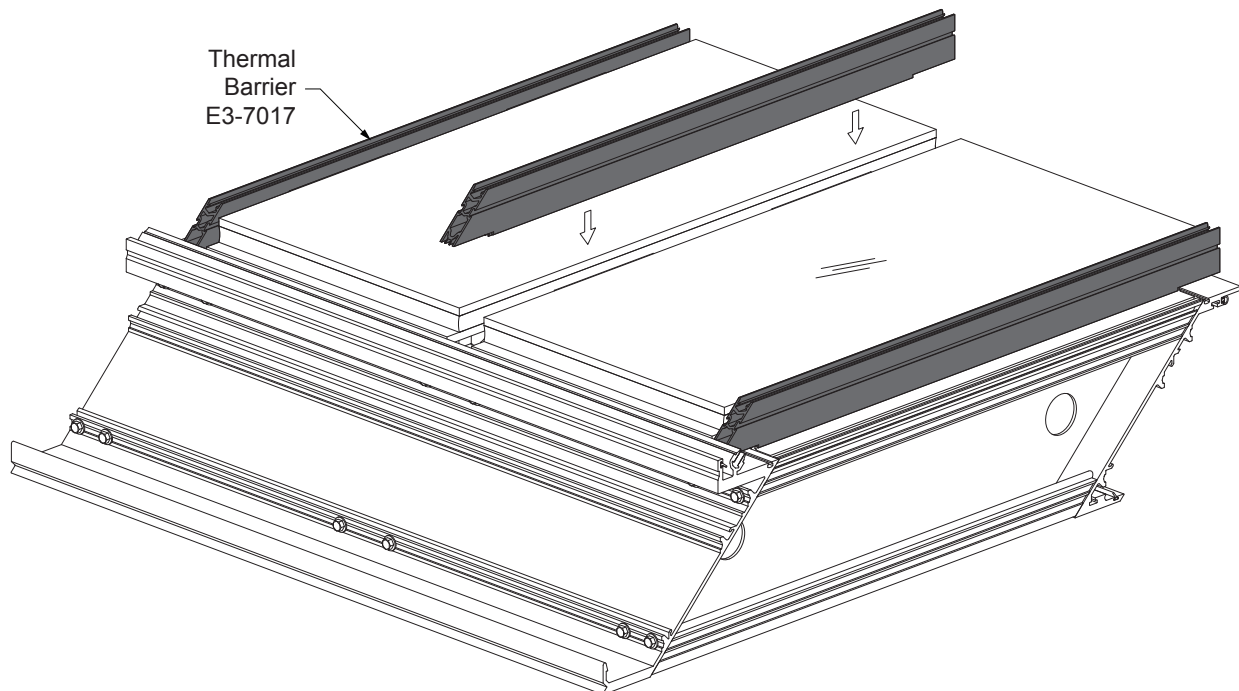
STEP 5: WC4 THERMAL BARRIER & COVER INSTALLATION

**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.
- 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

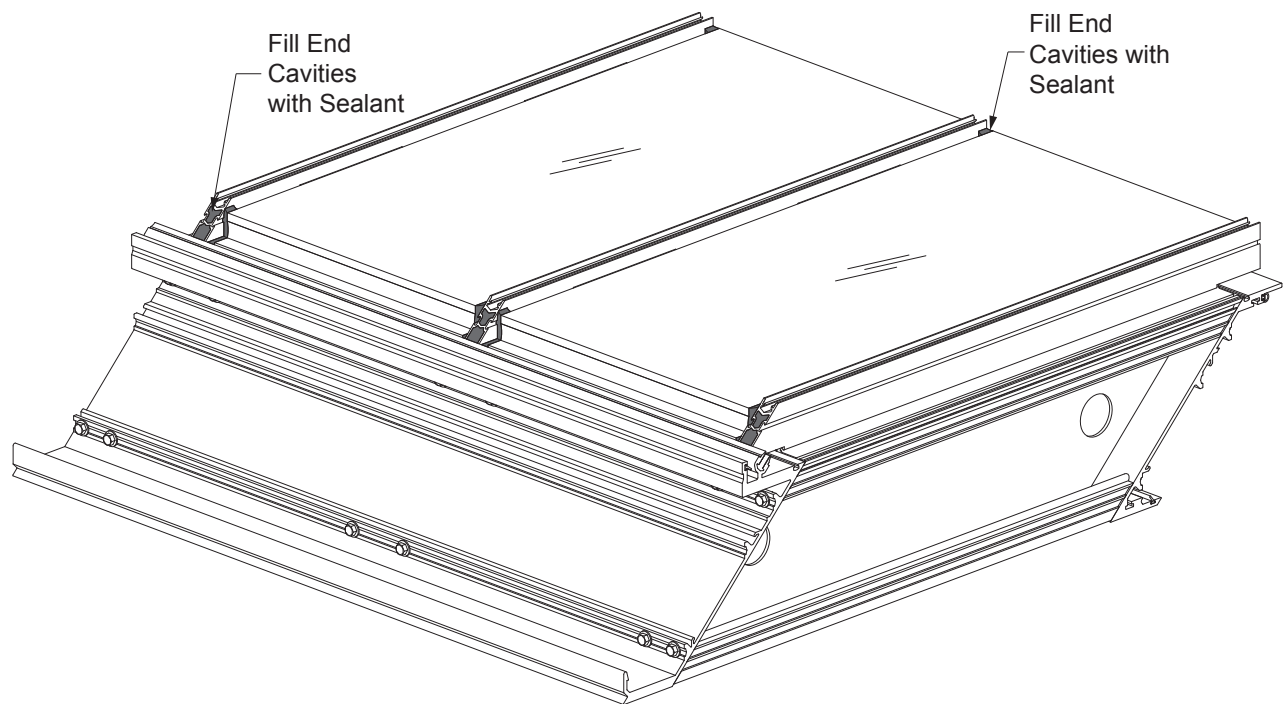
STEP 5: WC4 THERMAL BARRIER & COVER INSTALLATION

STEP 5b

SEAL ENDS OF THERMAL BARRIERS

- Thermal barrier ends are to be sealed at the intermediate horizontals only.
- 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 4-14**.



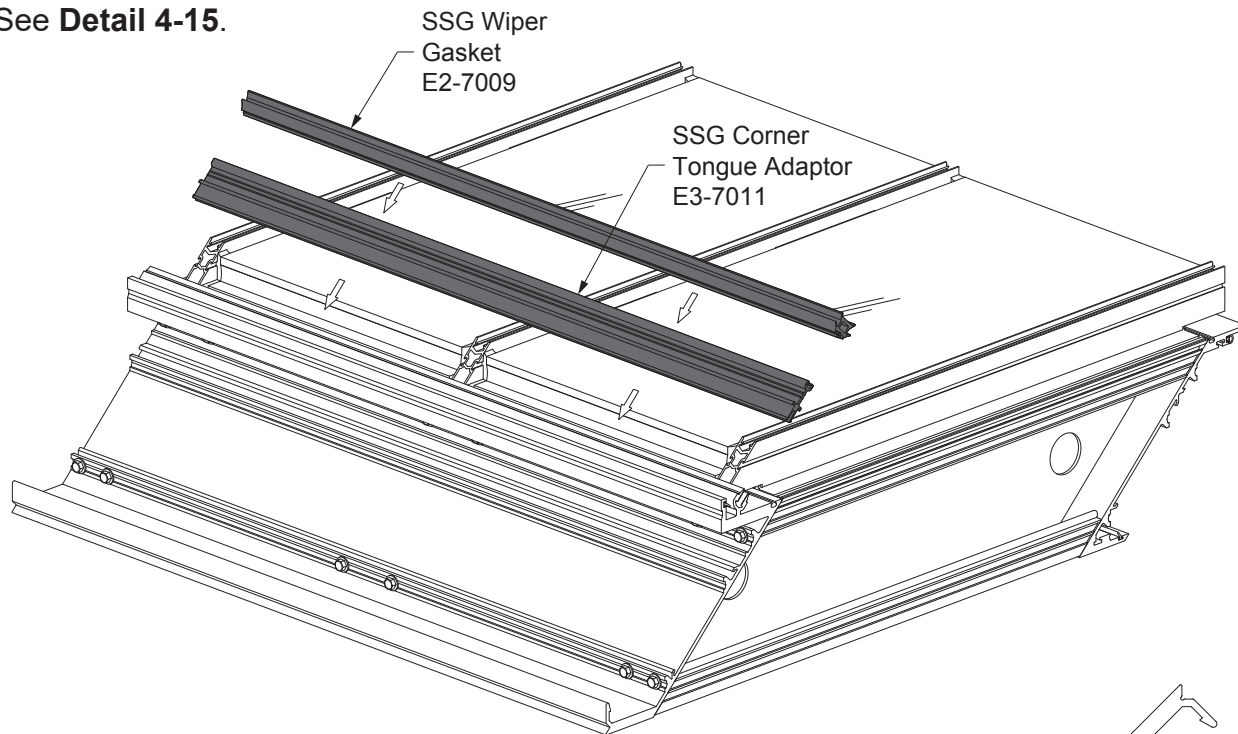
Detail 4-14

STEP 5: WC4 THERMAL BARRIER & COVER INSTALLATION**STEP 5c****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.

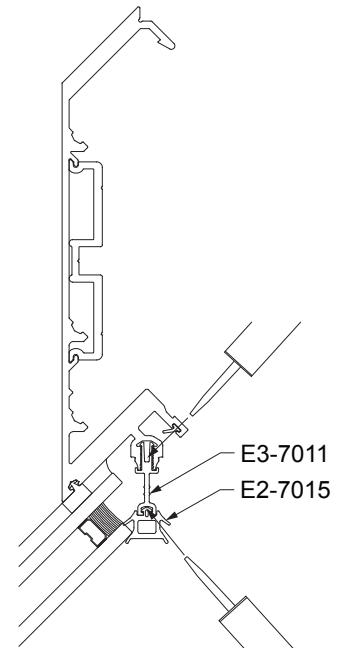
See **Detail 4-15**.



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

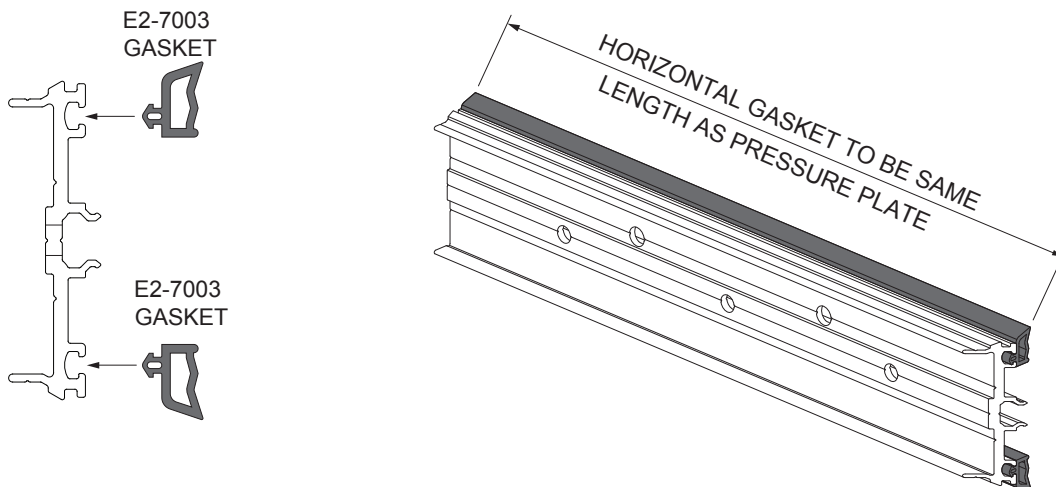
STEP 5: WC4 THERMAL BARRIER & COVER INSTALLATION

STEP 5d

PRESSURE PLATE ASSEMBLY

- Since the inside corner must be SSG, only the horizontals will have pressure plates for this unit.
- 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. Trim off any excess gasket to prevent interference with the end cap.

See **Detail 4-17**.



Detail 4-17

STEP 5e

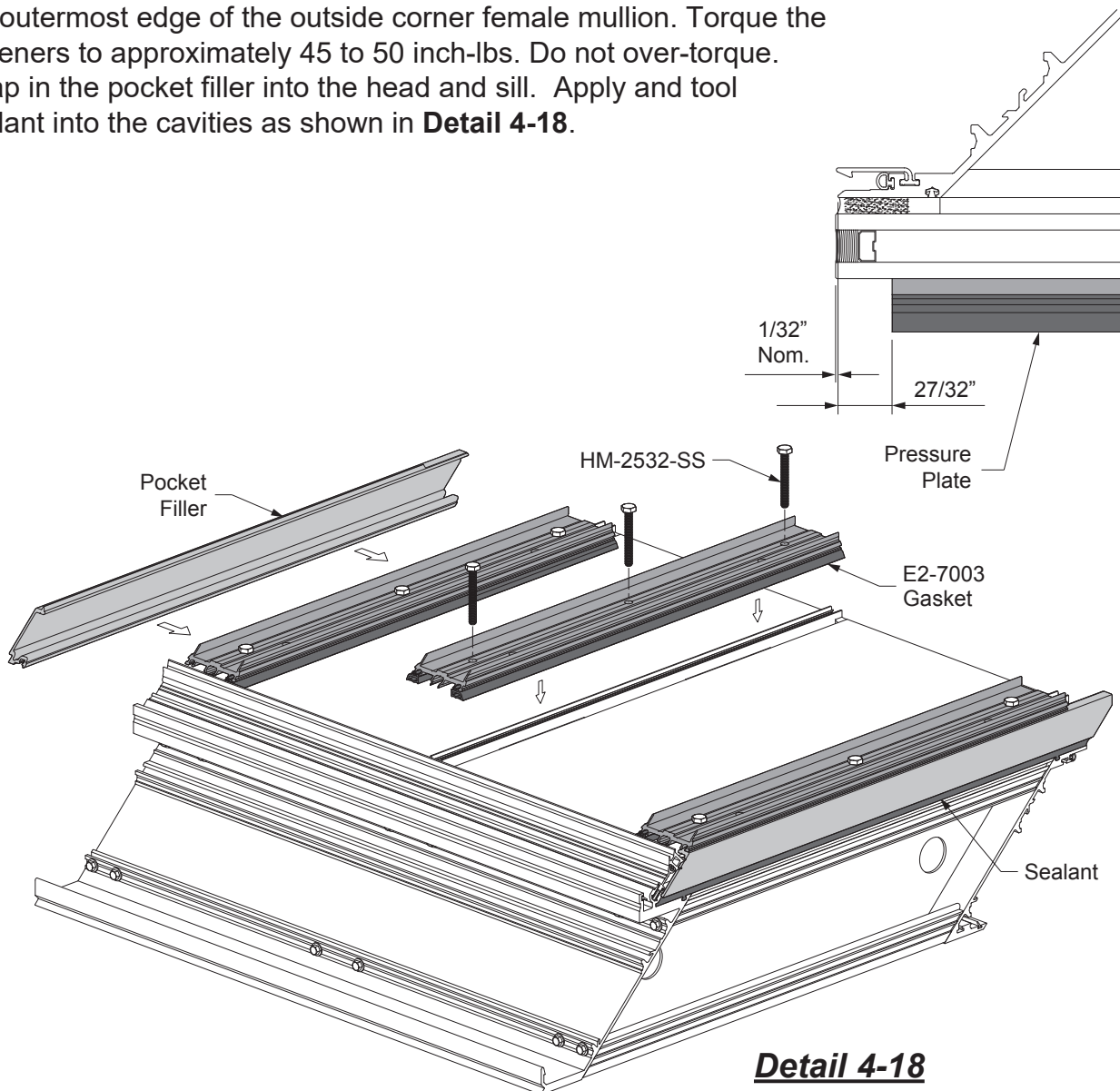
INDEX HORIZONTAL PRESSURE PLATES / DRILL THERMAL BARRIERS

- Refer to **WC1 Parts Installation, Step 5d on Page 16**.

STEP 5: WC4 THERMAL BARRIER & COVER INSTALLATION

**STEP 5f
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 16, Detail 1-16**.
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 27/32" from the outermost edge of the outside corner female mullion. Torque the fasteners to approximately 45 to 50 inch-lbs. Do not over-torque.
- Snap in the pocket filler into the head and sill. Apply and tool sealant into the cavities as shown in **Detail 4-18**.



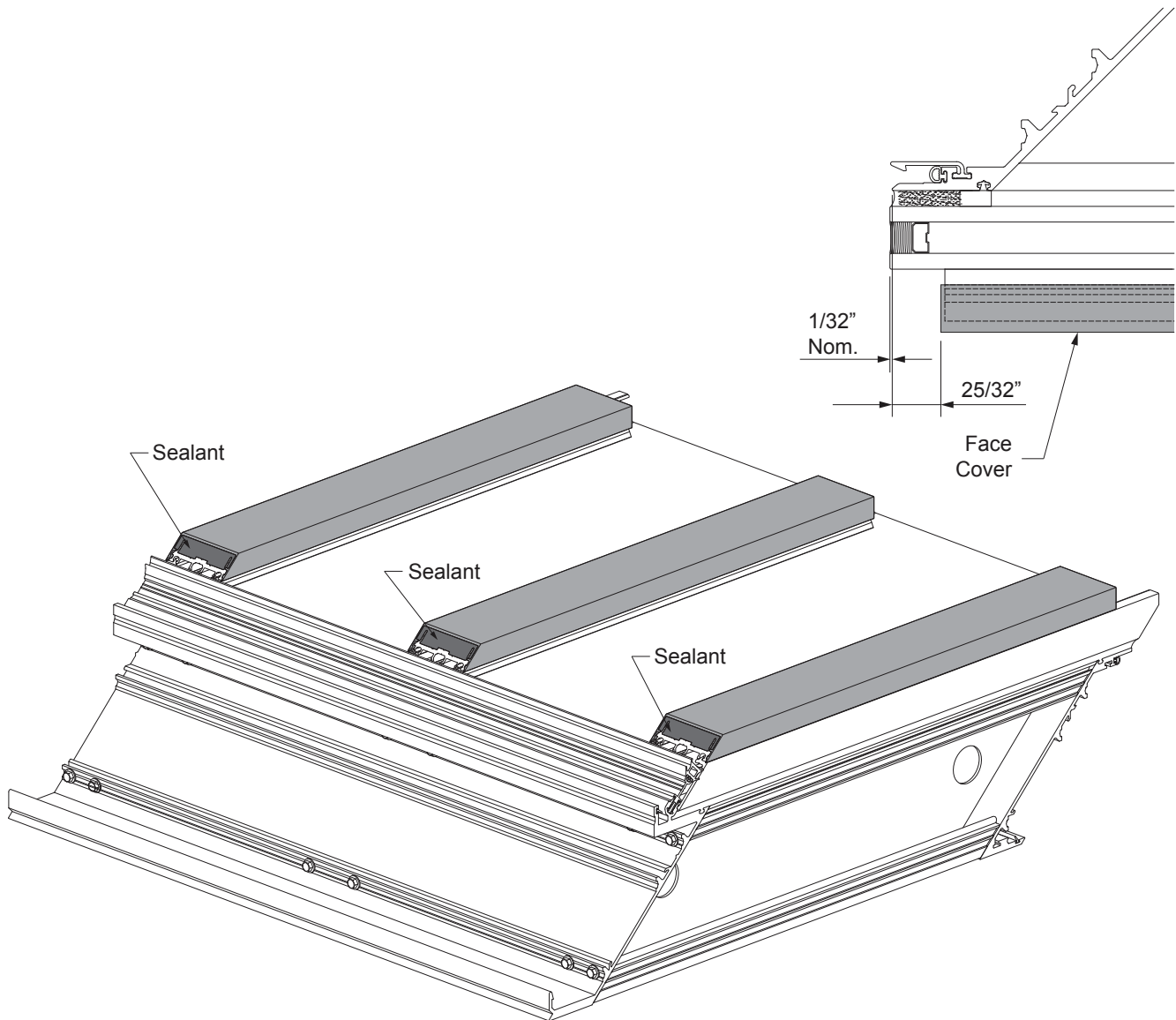
Detail 4-18

STEP 5: WC4 THERMAL BARRIER & COVER INSTALLATION

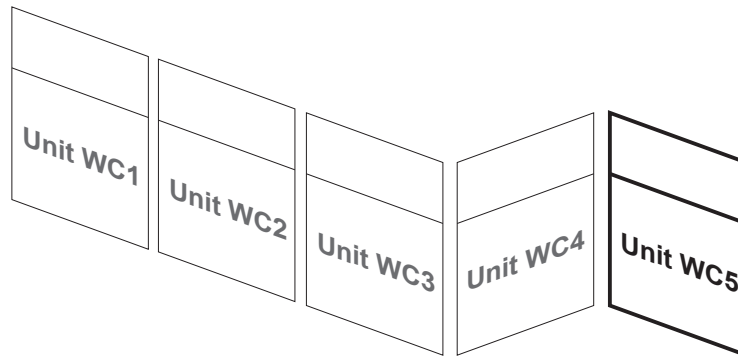
STEP 5g INSTALL FACE COVERS

- Horizontal face covers are to be positioned $25/32$ " from the outermost edge of the outside corner female 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.
- Seal the mitered end of the face covers.

See **Detail 4-19**.



Detail 4-19

WC5 TABLE OF CONTENTS

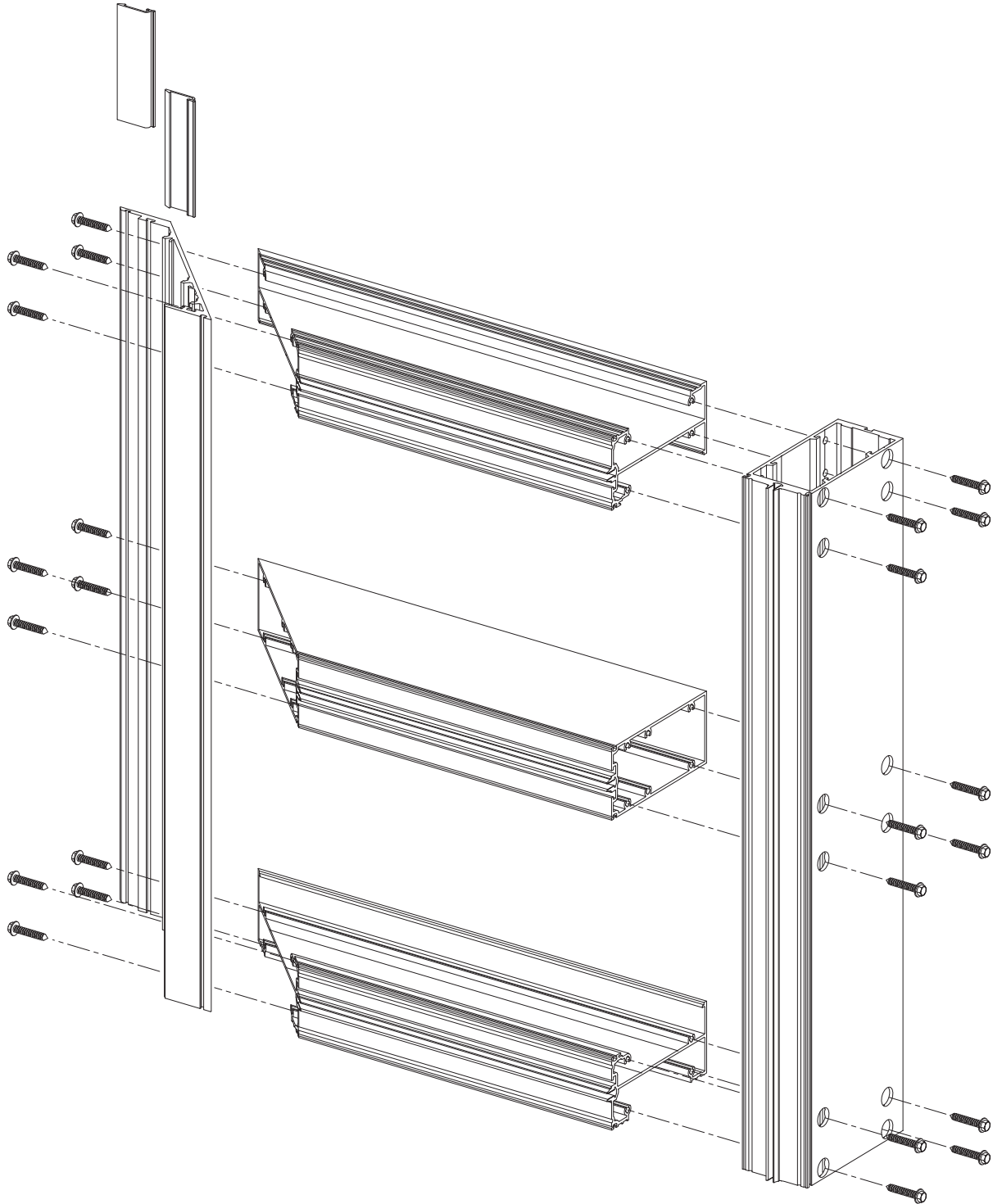
The following is intended for use as a guide for assembly of **Unit WC5** of the **YUW 750 XT 4-Sided Captured Curtain Wall System**. It is organized into five steps which will take you from assembly of parts to completed units. Note that the inside corner of Unit WC5 is SSG only.

| | |
|--|----------------|
| Step 1: WC5 Unit Assembly | Pages 73 to 76 |
| Step 2: WC5 Parts Installation | Pages 77 & 78 |
| Step 3: WC5 Gasket Installation | Pages 79 & 80 |
| Step 4: WC5 Glass Installation | Pages 81 to 83 |
| Step 5: WC5 Thermal Barrier & Cover Installation | Pages 84 to 92 |

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: WC5 UNIT ASSEMBLY

MAJOR COMPONENTS



STEP 1: WC5 UNIT ASSEMBLY**STEP 1a****APPLY SEALANT TO FRAMING MEMBERS**

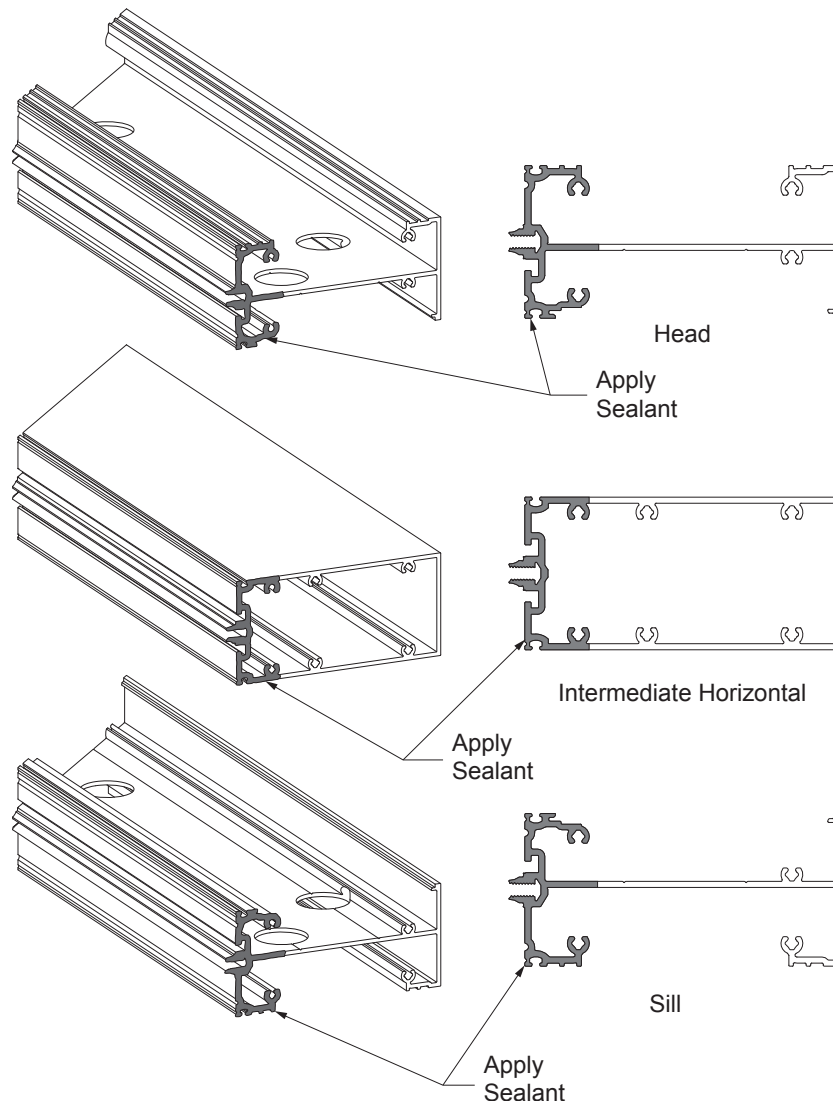
-Clean, prime and apply sealant to both ends of horizontals and tops of verticals per typical unit detail and approved shop drawings.

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: WC5 UNIT ASSEMBLY

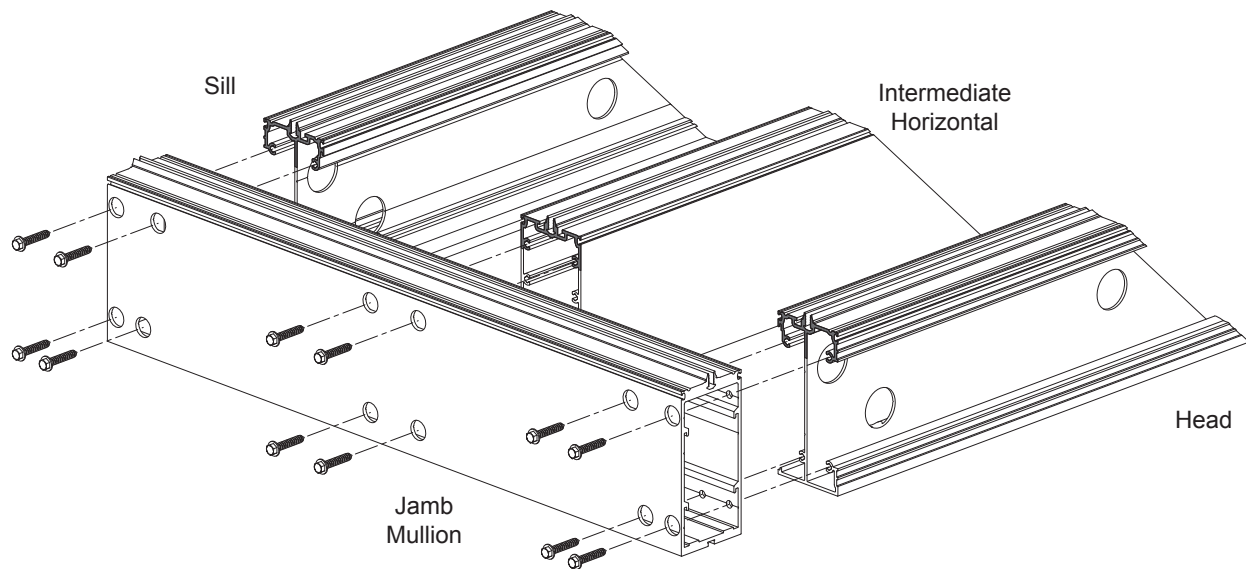
STEP 1b

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: WC5 UNIT ASSEMBLY

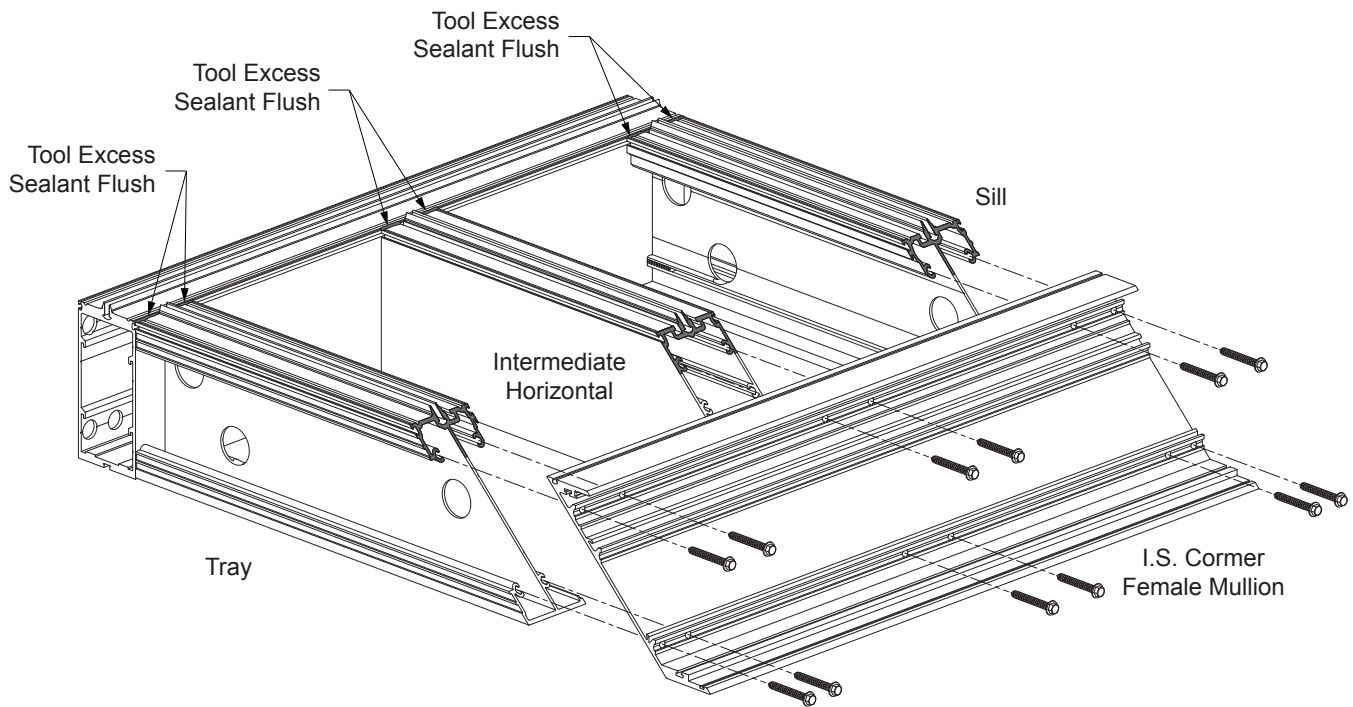
STEP 1b (Continued)

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

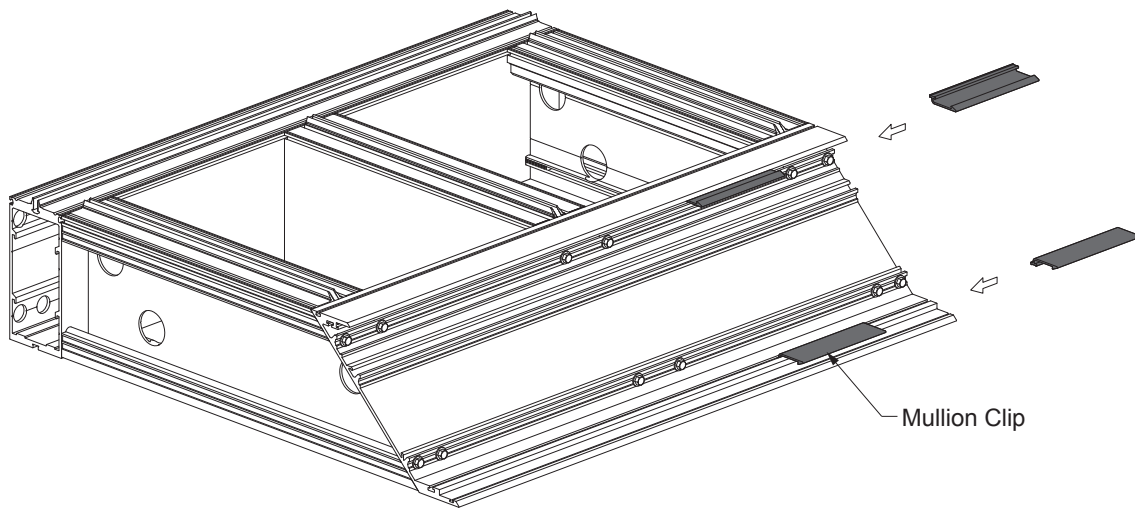
STEP 2: WC5 PARTS INSTALLATION

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**.

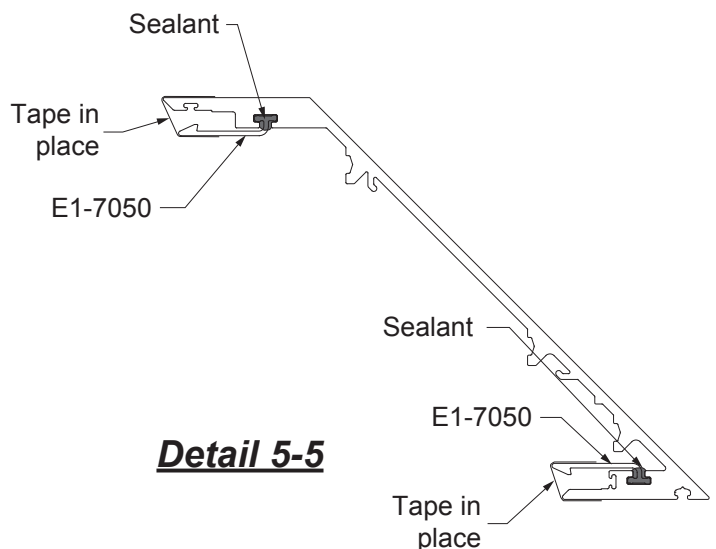


Detail 5-4

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.

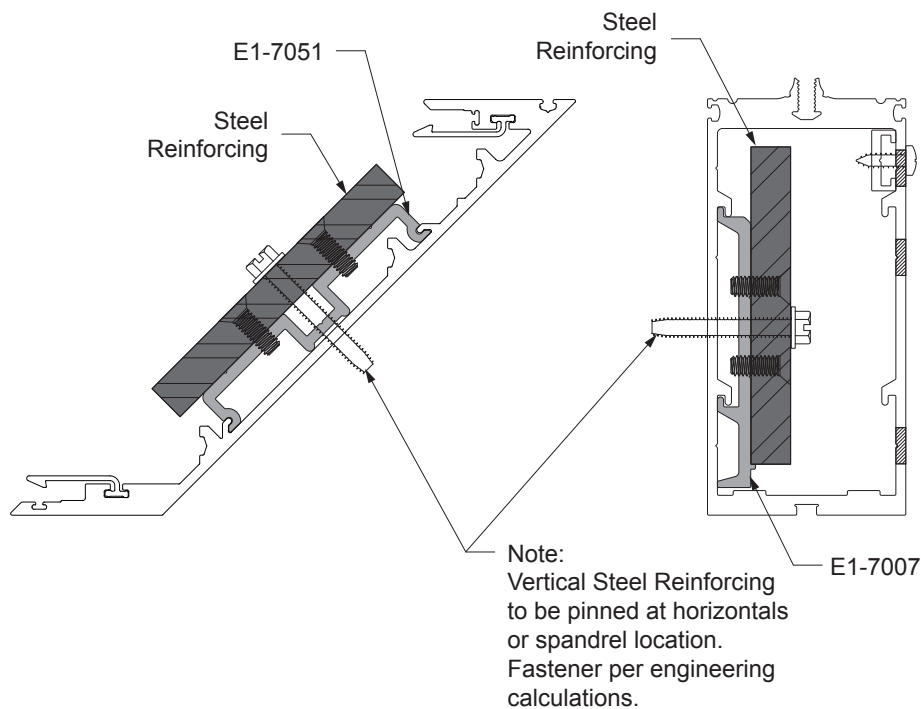


Detail 5-5

STEP 2: WC5 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**.

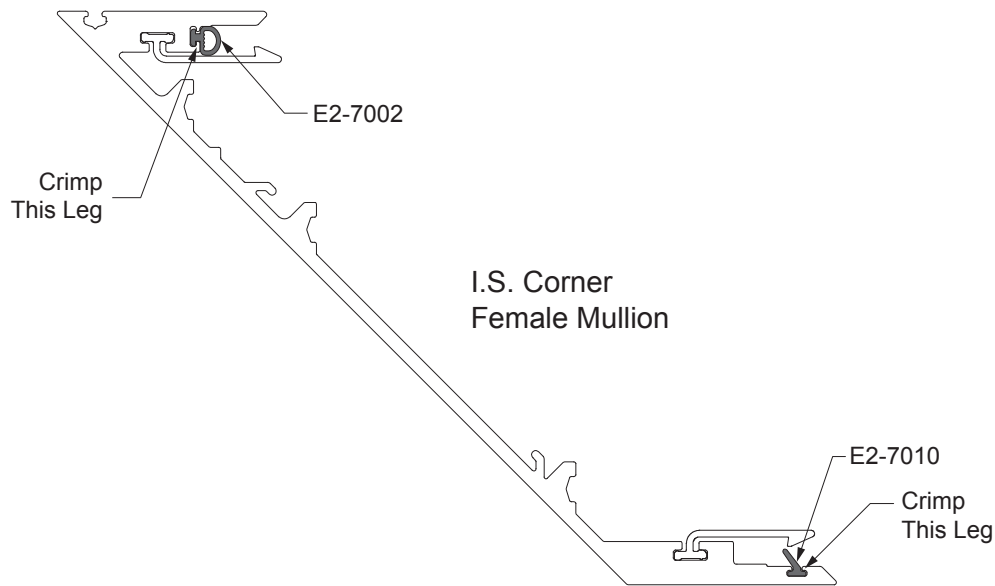
**Detail 5-6**

STEP 3: WC5 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**

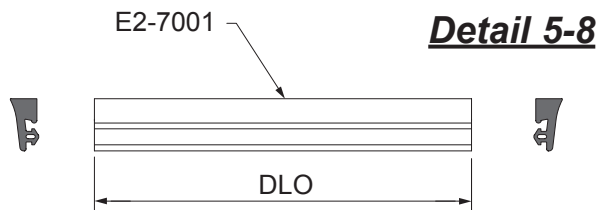
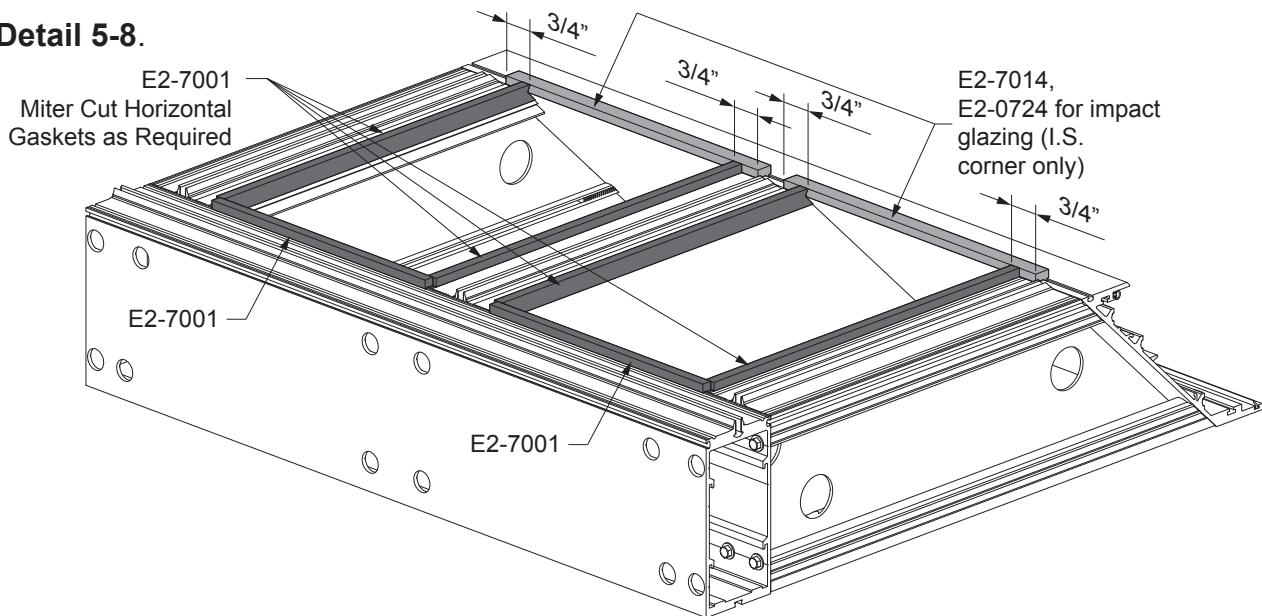
- Refer to **WC1 Gasket Installation, Step 3b** on **Page 8**.

STEP 3: WC5 GASKET INSTALLATION

**STEP 3c
INSTALL INTERIOR GLAZING GASKETS**

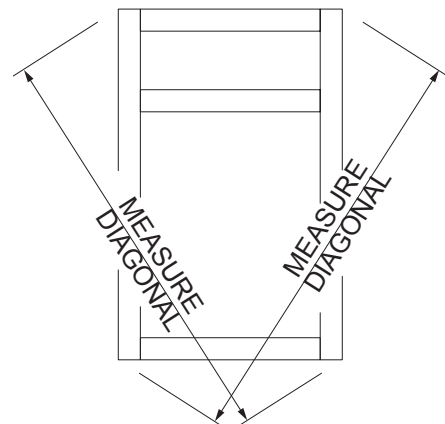
- Secure the assembled unit to a flat surface with the exterior facing up. Table must be flat and level, and must support frame at all locations. A unit glazed with any mullion deflection will cause installation problems. Additional bracing under the glass may be required with large glass lites to prevent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

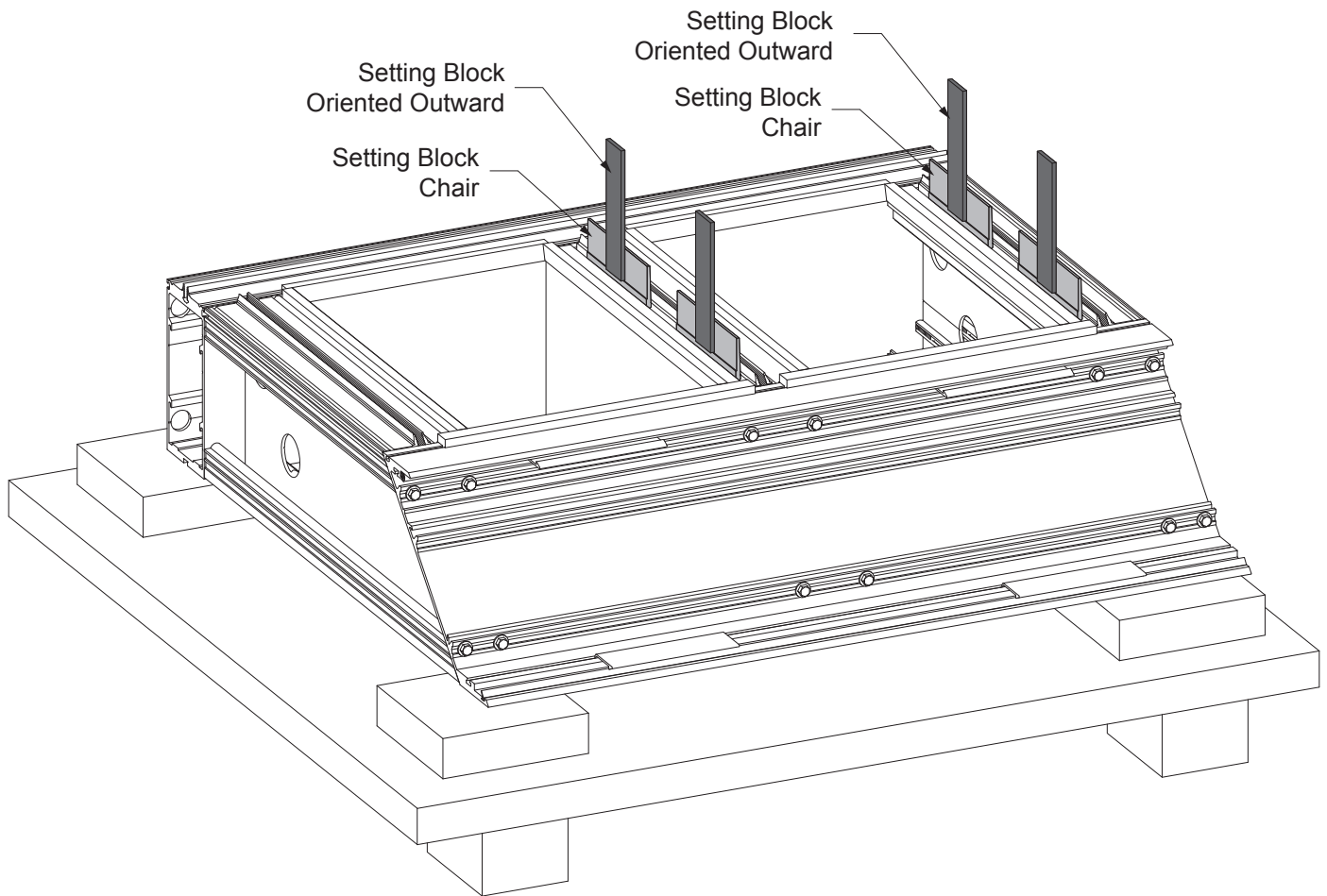


STEP 4: WC5 GLASS INSTALLATION

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 5-12**.

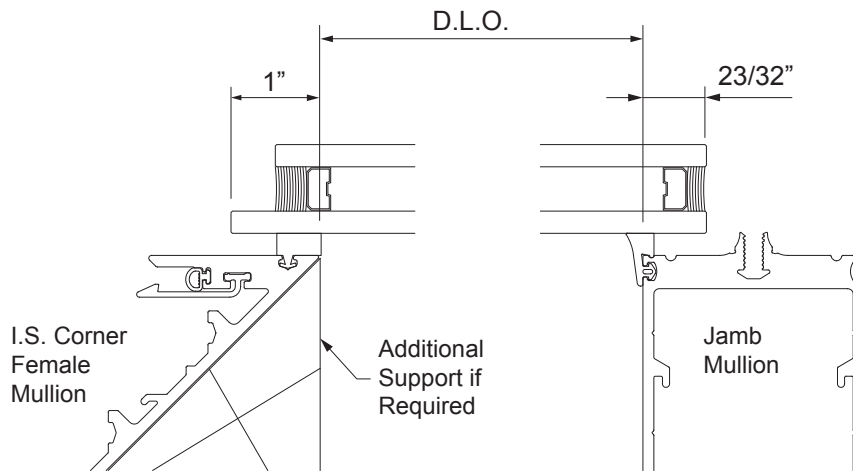


Detail 5-9

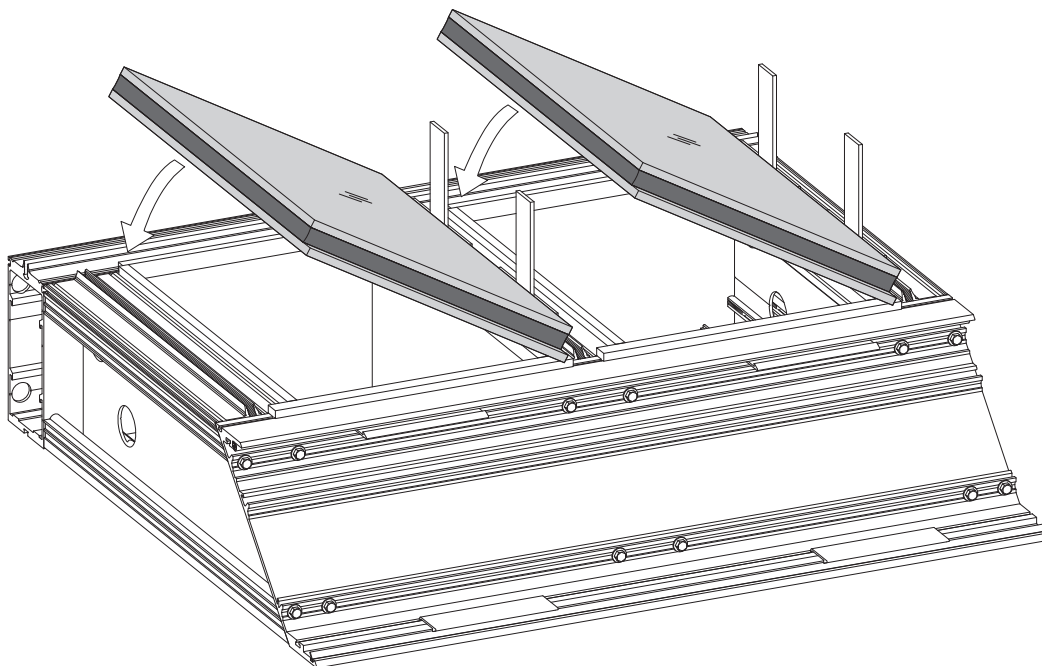
STEP 4: WC5 GLASS INSTALLATION

**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

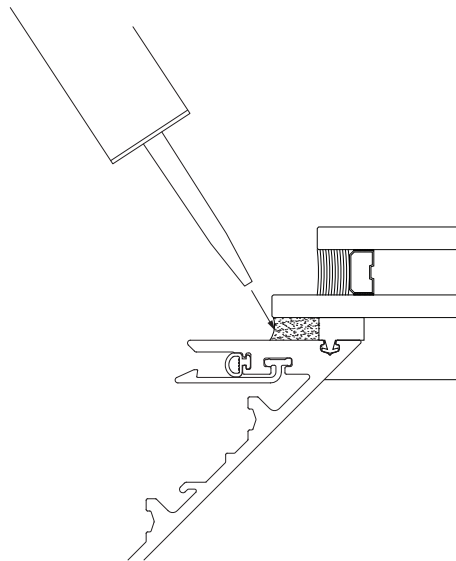


STEP 4: WC5 GLASS INSTALLATION

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.

See **Detail 5-11**.

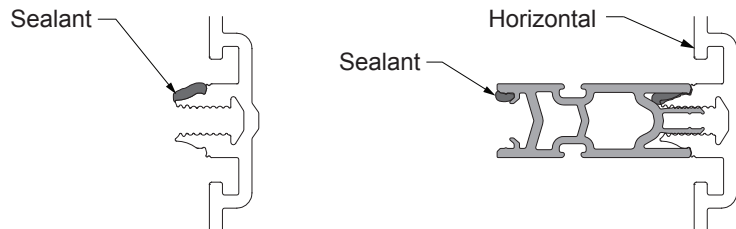


Detail 5-11

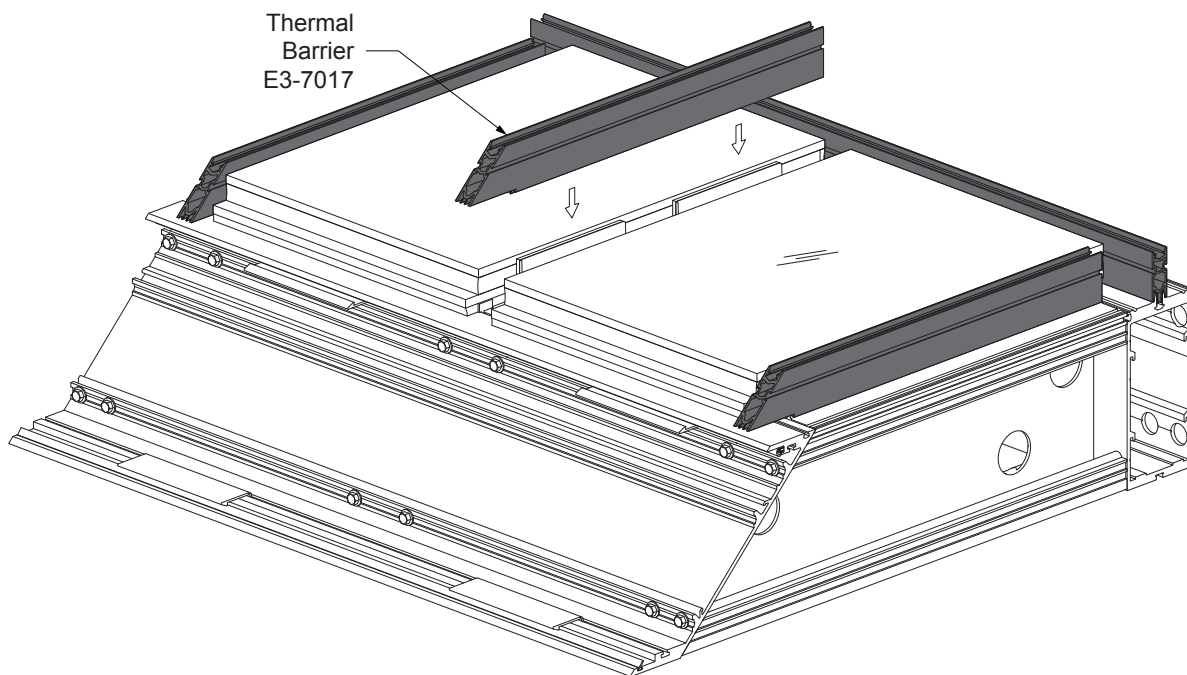
STEP 5: WC5 THERMAL BARRIER & COVER INSTALLATION

**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



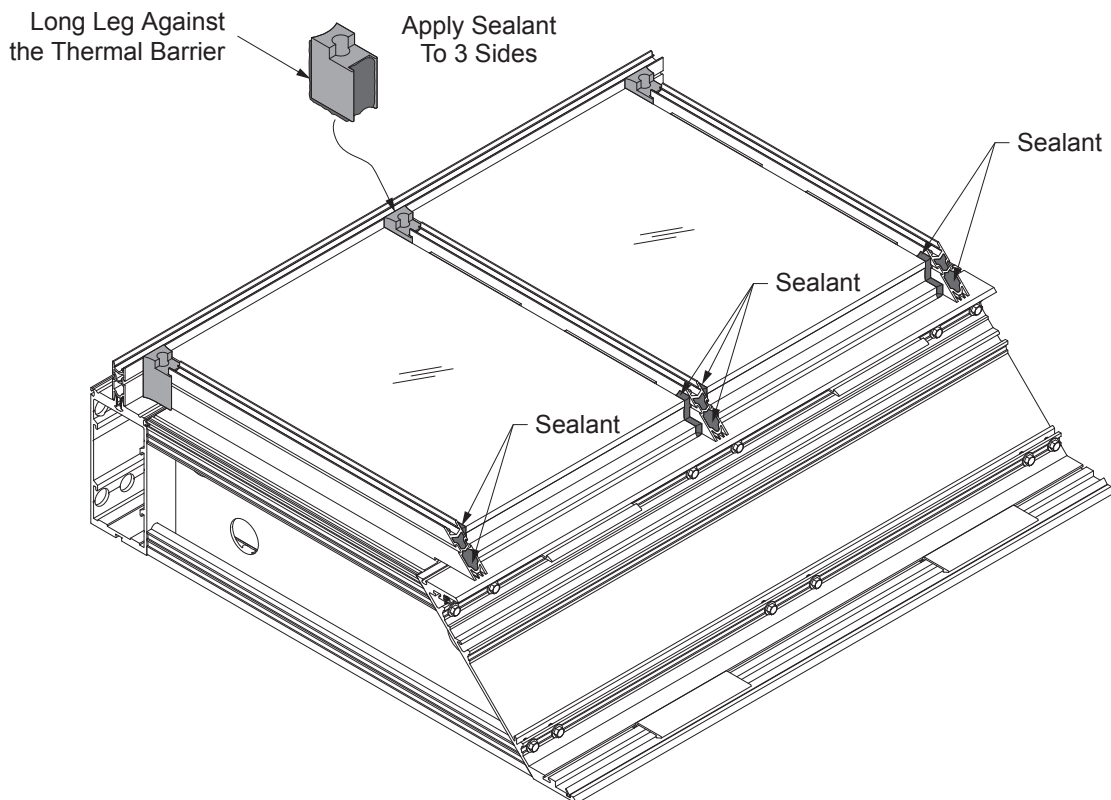
Detail 5-13

STEP 5: WC5 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 horizontals.
 - 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**.



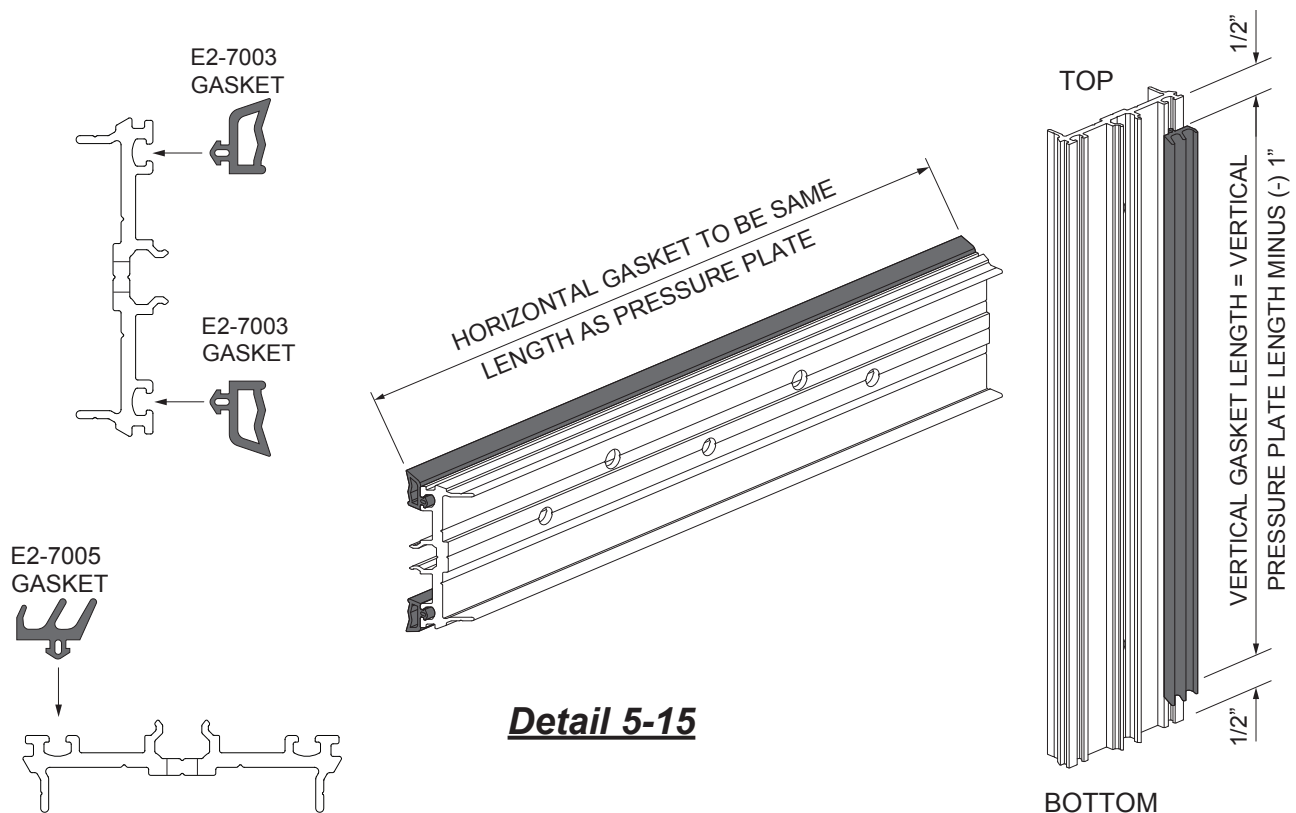
Detail 5-14

STEP 5: WC5 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: WC5 THERMAL BARRIER & COVER INSTALLATION

STEP 5d

INDEX PRESSURE PLATES / DRILL THERMAL BARRIERS

-Refer to **WC1 Thermal Barrier & Cover Installation, Step 5d** on **Page 16**.

STEP 5e

INSTALL VERTICAL PRESSURE PLATES

-Refer to **WC1 Thermal Barrier & Cover Installation, Step 5e** on **Page 17**.

STEP 5f

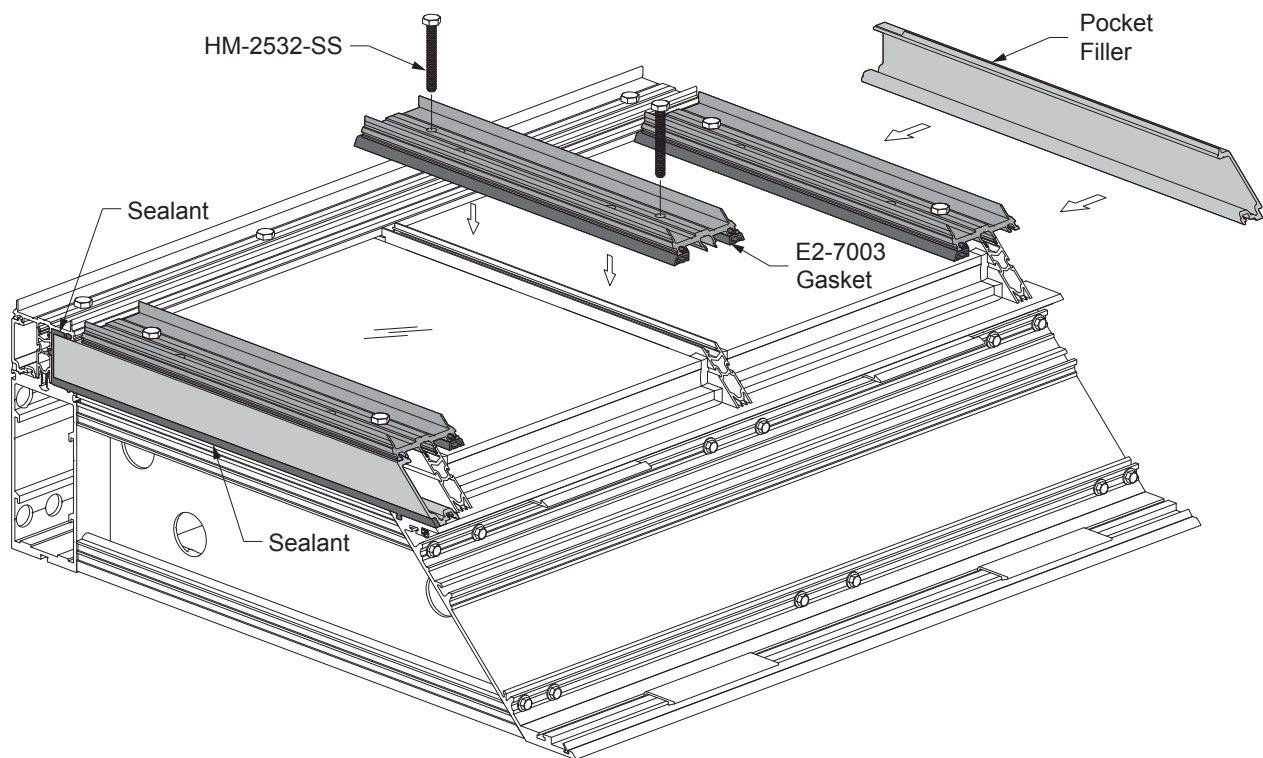
INSTALL VERTICAL POCKET FILLER

-Refer to **WC1 Thermal Barrier & Cover Installation, Step 5f** on **Page 17**.

STEP 5: WC5 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 16, Detail 1-16**.
- 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. Also apply sealant to the face of the joint plugs installed at the verticals.
- Using HM-2532-SS fasteners, install horizontal pressure plate, with the square-cut end 1/8" inside the D.L.O. Torque the fasteners to approximately 45 to 50 inch-lbs. Do not over-torque.
- Snap in the pocket filler into the head and sill. Apply and tool sealant into the cavities as shown in **Detail 5-16**.



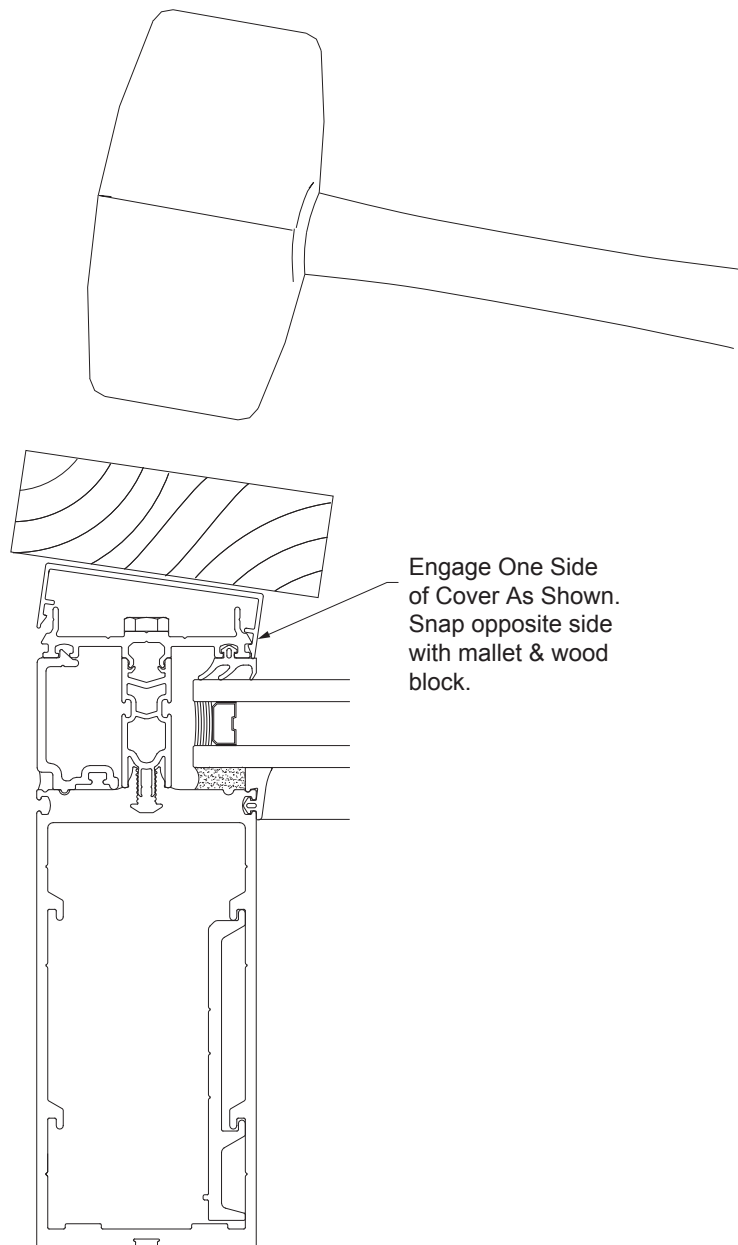
Detail 5-16

STEP 5: WC5 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**.



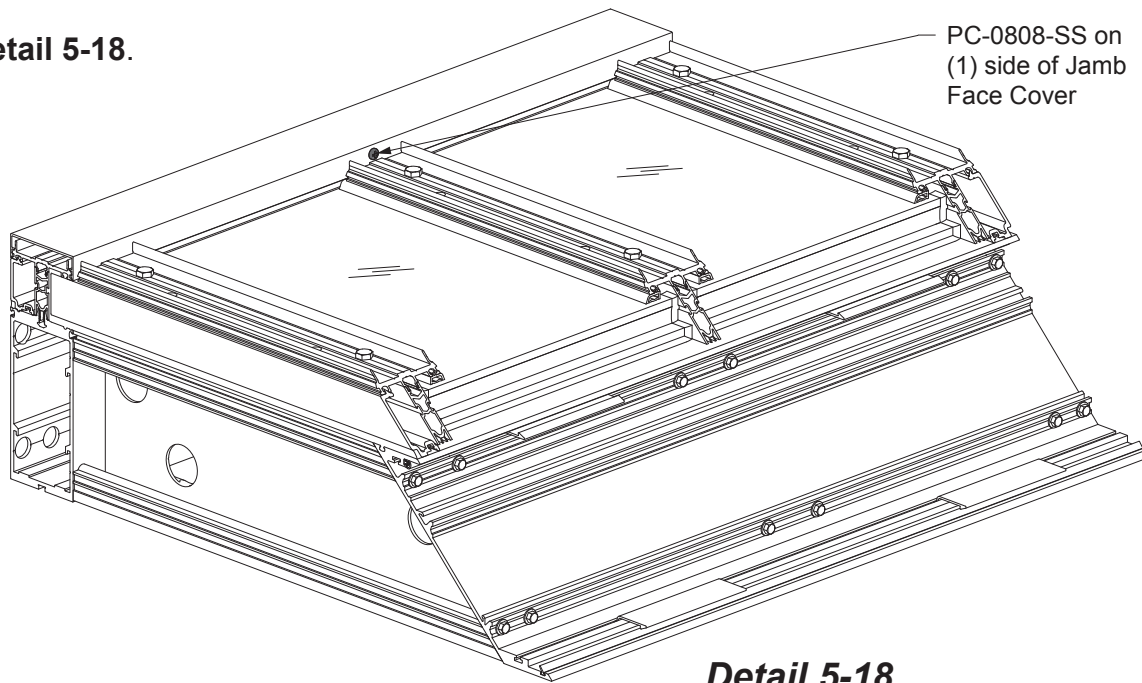
Detail 5-17

STEP 5: WC5 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 one intermediate horizontal. These fasteners will be concealed once the horizontal face covers are installed.

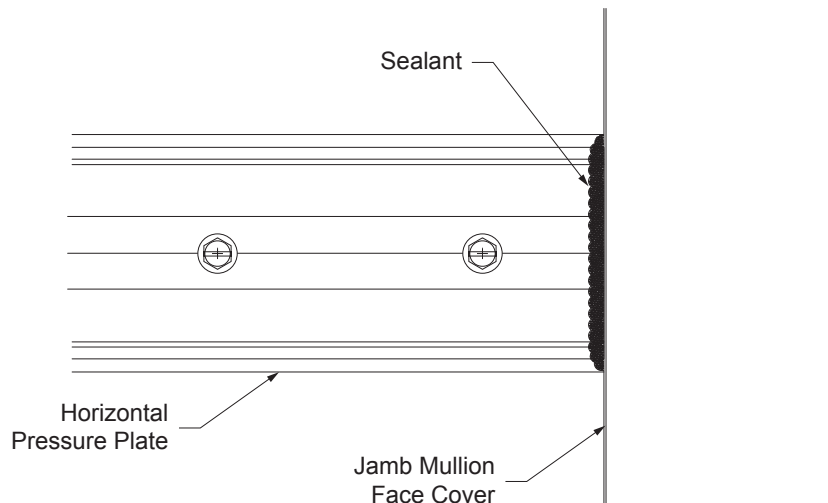
See **Detail 5-18**.



Detail 5-18

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

See **Detail 5-19**.



Detail 5-19

STEP 5: WC5 THERMAL BARRIER & COVER INSTALLATION

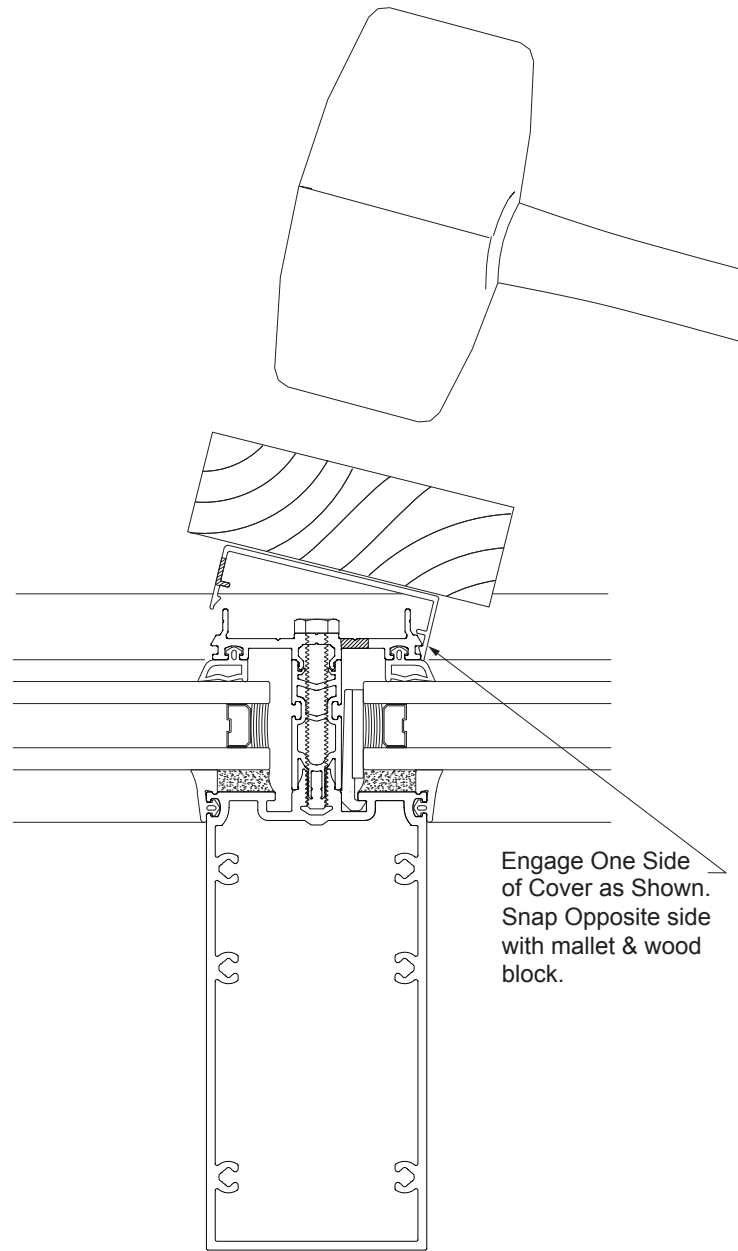
STEP 5h (Continued)

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**.



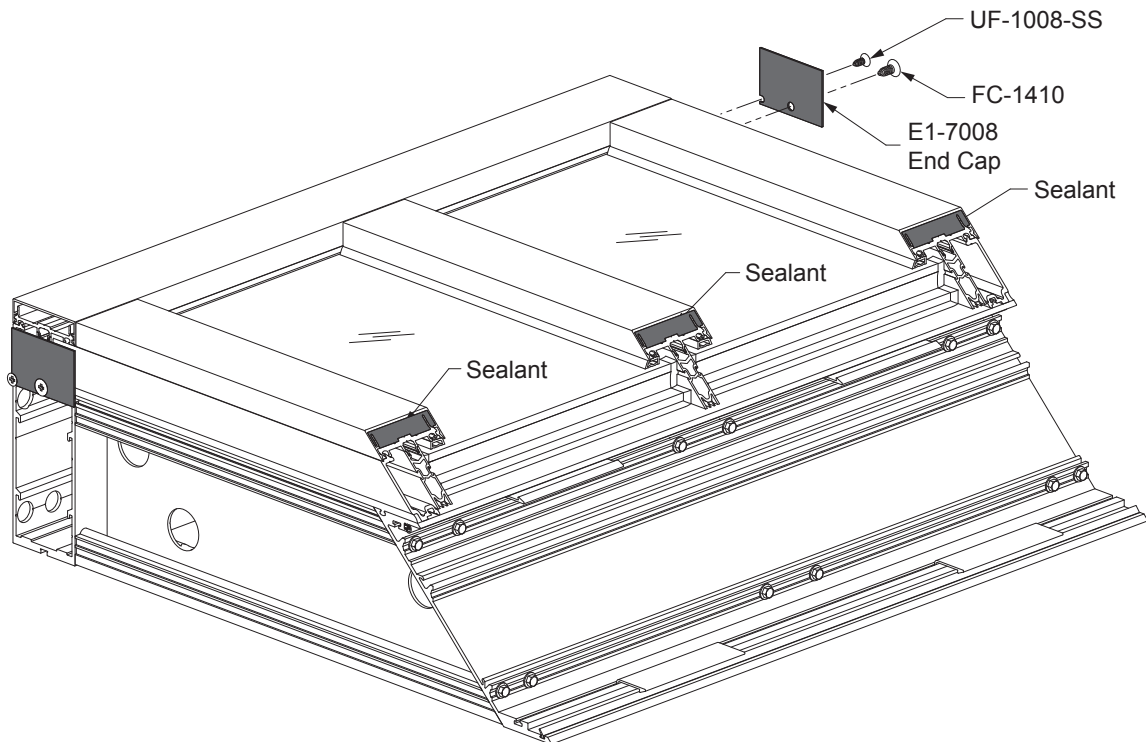
Detail 5-20

STEP 5: WC5 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 face covers.

See **Detail 5-21**.



Detail 5-21

 **YKK AP America Inc.**

101 Marietta Street NW

Suite 2100

Atlanta, Georgia 30303

www.ykkap.com