

SERIES 5600PG PREGLAZABLE CURTAINWALL

Installation Instructions



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Note:
Prior to beginning installation inspect all units to verify that they have been properly assembled per the EFCO 5600PG assembly instructions. Pay special attention to mull plugs and to gaskets at horizontal and vertical stacks.

Minimizing Condensation

Note: Please reference EFCO’s “Understanding Condensation” brochure which can be obtained through your EFCO representative. Condensation will form on any surface when unfavorable conditions (regarding interior temperature, relative humidity and exterior temperature) are present. When the formation of excessive condensation is a concern, it is highly recommended that a design professional is utilized to perform an analysis of the shop drawings to recommend the best possible installation methods. Please contact your EFCO representative for information on EFCO’s Thermal Analysis Services.

Many current installation practices lead to an increase in the possibility of the formation of condensation. Though not all inclusive, the list of examples below illustrates conditions under which condensation is likely to occur:

1. Bridging the system thermal break with non-thermally broken metal flashing or lintels that are exposed to the exterior
2. System exposure to cold air cavities
3. Interior relative humidity levels not maintained at recommended levels, see EFCO’s “Understanding Condensation” brochure
4. Inadequate separation between system and surrounding condition at perimeter
5. Product combinations during the shop drawing stage that result in bridging thermal breaks of one or all products involved

Section 1: General Notes and Guidelines

HANDLING / STORING / PROTECTING ALUMINUM

The following guidelines are recommended to ensure early acceptance of your products and workmanship.

- A. **HANDLE CAREFULLY** - Store with adequate separation between components so the material will not rub together. Store the material off the ground. Protect materials against weather elements and other construction trades.
- B. **KEEP MATERIAL AWAY FROM WATER, MUD, AND SPRAY** - Prevent cement, plaster, and other materials from contacting with and damaging the finish. Do not allow moisture to be trapped between the finished surface and the wrapping material.
- C. **PROTECT MATERIALS AFTER ERECTION** - Wrap or erect screens of plastic sheeting over material. Cement, plaster, terrazzo, and other alkaline materials are very harmful to the finish and are to be immediately removed with soap and water. Under no circumstances should these materials be allowed to dry or permanent staining may occur.

GENERAL GUIDELINES

The following practices are recommended for all installations:

- A. **REVIEW CONTRACT DOCUMENTS** – Become thoroughly familiar with the project. Check shop drawings, installation instructions, architectural drawings and shipping lists. The shop drawings take precedence and include specific details for the project. Shop drawings govern when conflicting information exists in the assembly and installation instructions. Note any **field verified** notes on the shop drawings prior to installing. EFCO assembly and installation instructions are general in nature and cover many typical conditions, but cannot cover all applications that could apply to this system
- B. **INSTALL ALL FRAMING MATERIAL PLUMB, LEVEL, AND TRUE** – Proper alignment and relationships to benchmarks and column centerlines, as established by the architectural drawings and the general contractor, must be maintained.

ERECTION SEQUENCE - The sequence of erection should be coordinated with the project general contractor to prevent delays and minimize the risk of material damage. Note: When preset anchors are required, coordinate and supervise anchor and insert placement with the general contractor including insert layout drawings, where required. Manufacturing, assembly, glazing, and shipment of the preglazed units must be carefully coordinated with the general contractor to ensure a continuous and sustained flow of materials to the appropriate areas of the project to meet the project schedule.

- D. **PERIMETER CONDITIONS** - Verify that all job site conditions and accompanying substrates receiving the installation are in accordance with the contract documents. If deviations occur, notification must be given **in writing** to the general contractor and differences resolved before proceeding further with the installation in the area in question.
- E. **ISOLATION OF ALUMINUM** - Prevent all aluminum from coming in direct contact with masonry or dissimilar materials by means of an appropriate primer. Typical slab anchors may be set directly onto concrete surfaces in a block-out pocket at the edge of the slab. The block-out pocket is later filled in with grout thereby covering the slab anchor. In such cases, a heavy coat of zinc chromate or bituminous paint must be pre-applied to the slab anchor.
- F. **SHIPMENT VERIFICATION** - Verify contents of all material shipments received upon their arrival. Verify quantity and correct finishes. **Notify EFCO immediately of any discrepancies or damage that may have occurred.**

Section 1: General Notes and Guidelines, cont.

- G. **SEALANT** - All sealant must meet [**ASTM C 920, CLASS 50**]. For the purposes of these instructions, sealant is to be defined as the following:
SEALANT - A weather resistant, gunnable liquid filler which when cured provides a resilient, flexible ($\pm 50\%$ movement capability min.) air and water seal between similar and dissimilar materials.

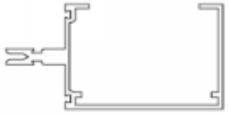


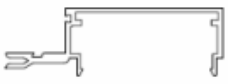





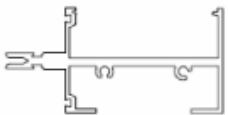


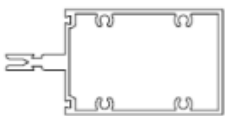
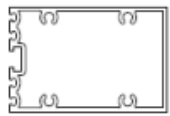

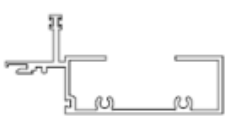
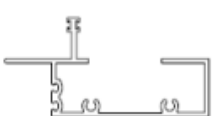

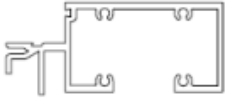
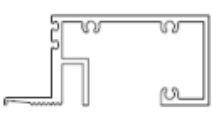


All sealant must be compatible with all surfaces on which adhesion is required, including other sealant surfaces. All frame surfaces should be cleaned with alcohol, dry, dust, and frost free. If a primer is required, it must be applied to clean surfaces. All perimeter substrates shall be clean and properly treated to receive sealant. All sealants and primers must be applied according to the sealant manufacturers instructions and recommendations.

This system is designed and has been tested to utilize silicone sealants at all internal joineries, i.e., joint plugs, gasket intersections, etc.

It is the responsibility of the glazing contractor to submit a statement from the sealant manufacturer indicating that glass and glazing materials have been tested for compatibility, adhesion with glazing sealants, and interpreting test results relative to material performance, including recommendations for primers and substrate preparation required to obtain adhesion. The chemical compatibility of all glazing materials and framing sealants with each other and with like materials used in glass fabrication must be established.

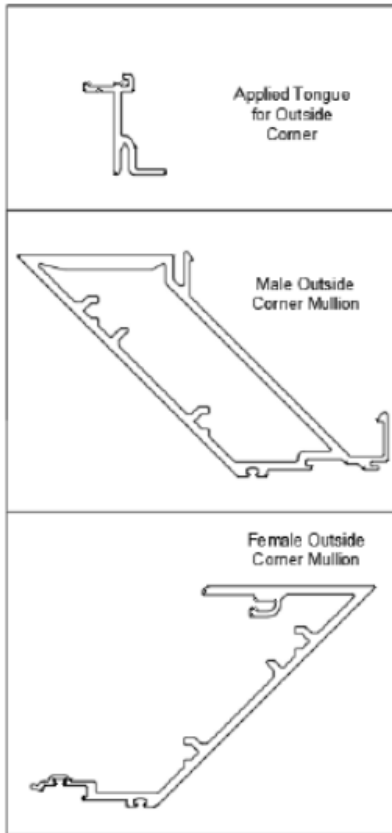
Maintain caulk joints as shown in the approved shop drawings. A 1" minimum joint is required at the head and jamb condition to accommodate installation, building movements, and thermal expansion and contraction.

Section 2: Parts Identification - Profiles and Accessories.

	Captured Jamb		SSG Jamb		Head/Sill Cover
	Captured Male Split Vertical		SSG Male Split Vertical		Splice Bar / Lifting Hanger
	Captured Female Split Vertical		SSG Female Split Vertical		Anti-Buckling Clip
	Captured Head/Sill		SSG Head/Sill		SSG 1/4" Glazing Adaptor
	Captured Intermediate Horizontal		SSG Intermediate Horizontal		Captured 1/4" Glazing Adaptor
	Captured Stack head		SSG Stack Head		Pressure Plate at Horizontal Stack
	Captured Stack Sill		SSG Stack Sill		Cover at Horizontal Stack
					Optional Cover at Horizontal Stack

Note: Parts not to scale

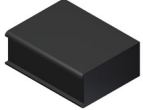



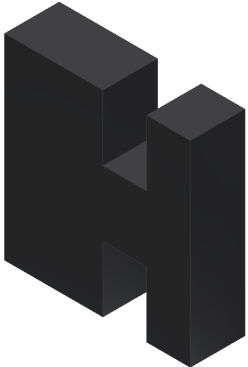
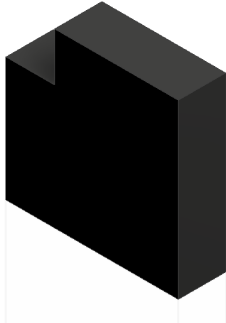
Section 2: Parts Identification - Profiles and Accessories, cont.



Note: Parts not to scale

Section 2: Parts Identification - Small Parts.












Small Parts in Install Instructions:

	<p>Mull Plug for Captured Shallow Pocket</p> <p>WNC1</p>		<p>SSG Stack Rainscreen</p> <p>WV9B</p>
	<p>Mull Plug for Captured Horizontal Stack at Intermediate</p> <p>HN47</p>		<p>Mull Plug for Captured Horizontal Stack at Corner</p> <p>HNG5</p>
	<p>Mull Plug for Captured Horizontal Stack at Jamb</p> <p>HN48</p>		<p>Mull Plug for Captured Horizontal Stack at Corner</p> <p>HNG6</p>

Note: Parts not to scale

Section 2: Parts Identification - Small Parts, cont.

Generic Small Parts Reference Sheet:

	1/2" x 3/4" x 3/8" L-Bracket		1/4" x 1/2" x 1/8" Pin
	1/2" x 3/4" x 3/8" L-Bracket		Washer
	1/4" x 1/2" x 1/8" Pin		Spacer V. = 3/16"
	1/2" x 3/4" x 3/8" L-Bracket		1/4" x 1/2" x 1/8" Spacer V. = 3/16"
	1/2" x 3/4" x 3/8" L-Bracket		
	1/2" x 3/4" x 3/8" L-Bracket		
	1/2" x 3/4" x 3/8" L-Bracket		

Note: Parts not to scale

Section 3: Setting and Anchoring Units

Setting First Unit at Sill

Note: Typically “F” anchors will be used in all locations, however sometimes due to structural requirements a “T” anchor will be required (see shop drawings/contract documents for anchor type, size and hole location).

1. Insert “F” or “T” anchors into both jambs of the unit and temporarily tape in place (Figure 1).
2. At the condition jamb, the leg of the “F” anchor must be placed under the unit.
3. Drill clearance holes in the sill horizontal, at the jamb condition, to access the “F” anchor for anchorage to the substrate (Figure 2).

Note: Clearance holes will also be required at the head horizontal of the top most unit at the jamb condition.

Note: These clearance holes are also required on the head and sill member at both sides of split mullions, if “T” anchors are used.

Note: In some cases it may be possible to place the sill “F” and “T” anchors on the substrate prior to installing the bottom units.

Figure 1

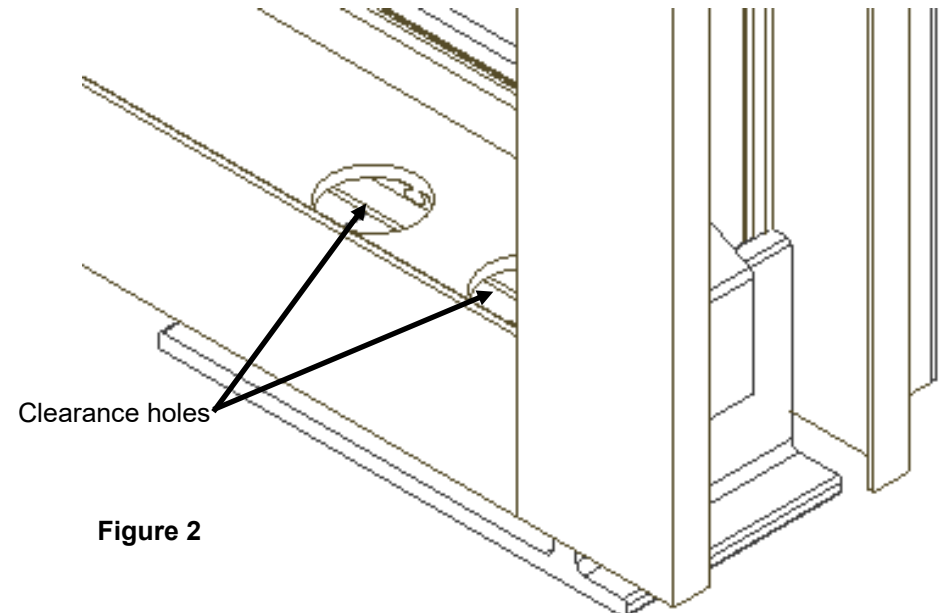
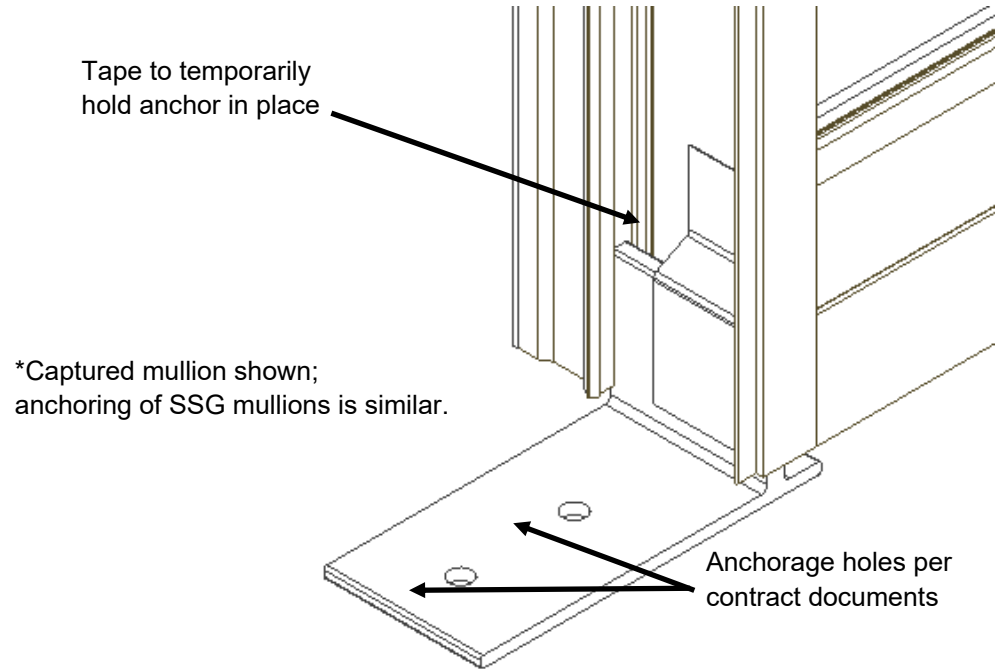


Figure 2

Section 3: Setting and Anchoring Units, cont.

4. Set the first unit in place shimming between the vertical mullions and "F" or "T" anchors ensuring that the unit is set in a level position. Remember to place a separator between the "F" and "T" anchors and the substrate, to separate dissimilar materials.
5. Once the unit is in the proper position, plumb, and level, fasten the "F" or "T" anchors to the substrate per the contract documents (Figures 3 & 4).
6. After the unit is properly anchored, install the cover onto the sill horizontal. (Figure 5).

Note: The process of anchoring the head at the top most unit is similar. For proper system movement, exclude shims between mullion and "F" and "T" anchors at head.

Note: Anchoring of captured mulls and SSG mulls is similar.

Figure 3

Anchors per contract documents

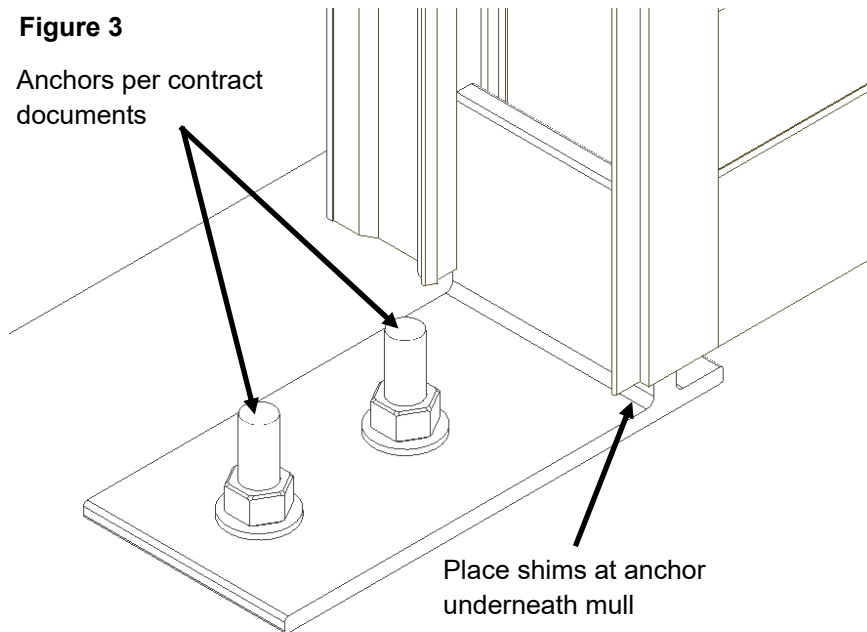


Figure 4

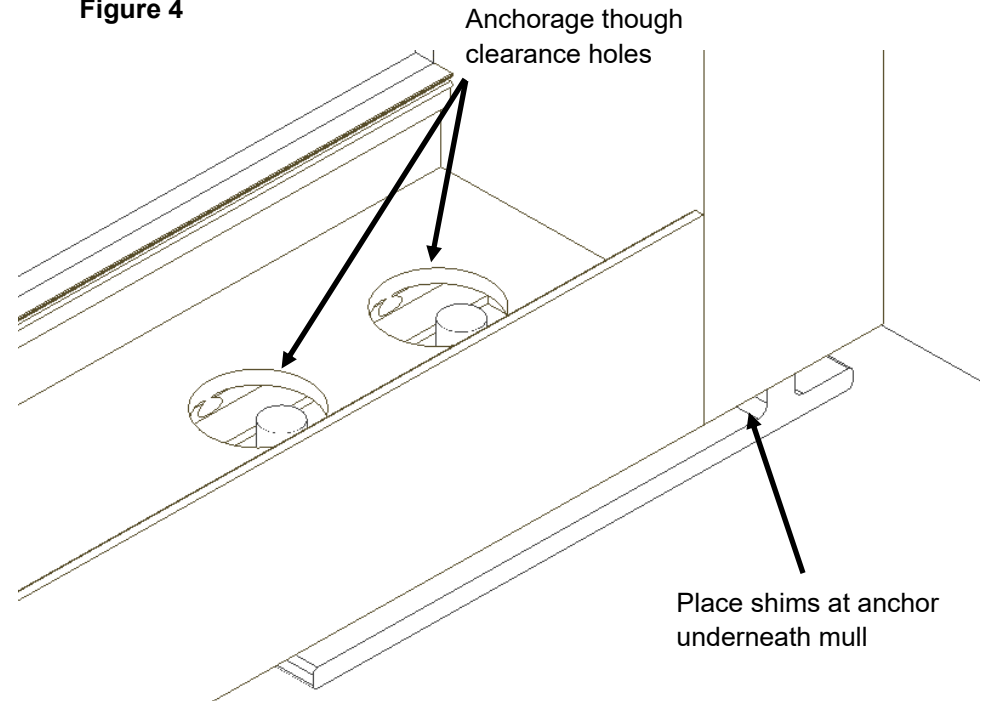
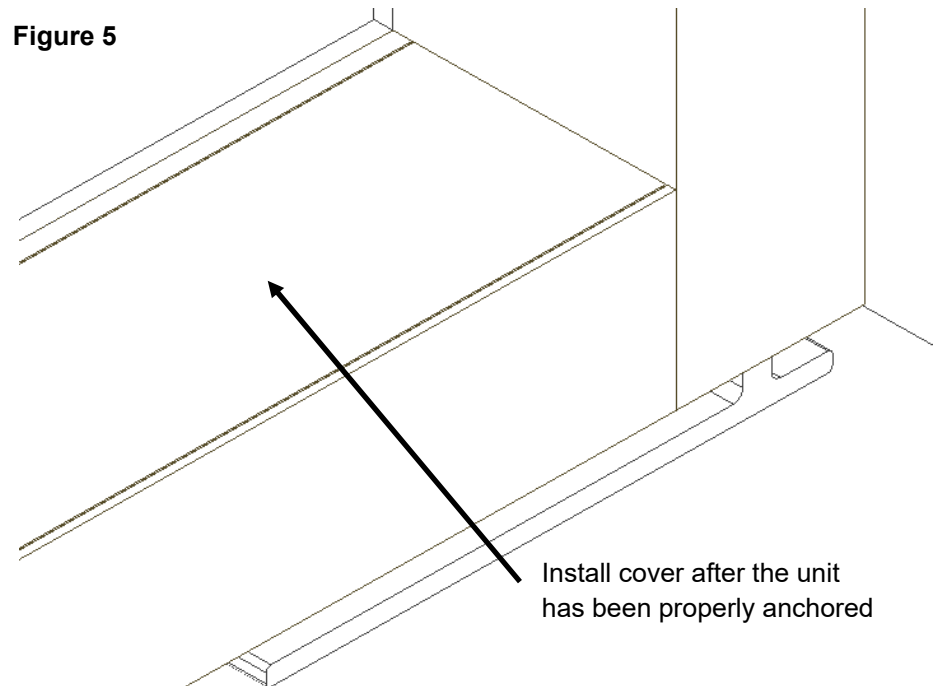


Figure 5



Section 3: Setting and Anchoring Units, cont.

Dead load and wind load anchor installation

1. Attach dead load/wind load anchors to the substrate per contract documents.
2. Leave the anchors to the substrate loose so that they can slide apart via the slots, and slide them as far open as possible to allow clearance for the units coming in. (Slot Detail: Figure 7, next page)
3. Set first unit in place. Once the unit is properly positioned, plumb, and level slide the anchor into position leaving 1/4" between it and the mullion. Do not shim between the anchor and the mullion, leave room for movement. Tighten the anchor to the substrate (Figure 6.1).
4. Match drill through the mullion and start the bolts through the mullion.
5. Ensure that the other mid-span anchor is slid as far away as possible. Install the next unit. Once the unit is properly positioned, plumb, and level slide the anchor into position, leaving 1/4" between it and the mullion; leave room for movement. Tighten the anchor to the substrate (Figure 6.2).
6. Match drill through the second mullion and finish installing bolts through mullion assembly. Place flat washer, lock washer, and nut on the bolts and tighten. Do not over tighten and bend the dead load anchors (Figure 6.3).
7. Continue across the elevation in the same manner.
8. Anchorage of captured mullions shown, SSG mullions are similar.

Note: Substrate anchor bolts in slots need to be drilled at the center line of the slot.

Note: See next page for additional information on dead load anchors.

Figure 6.1

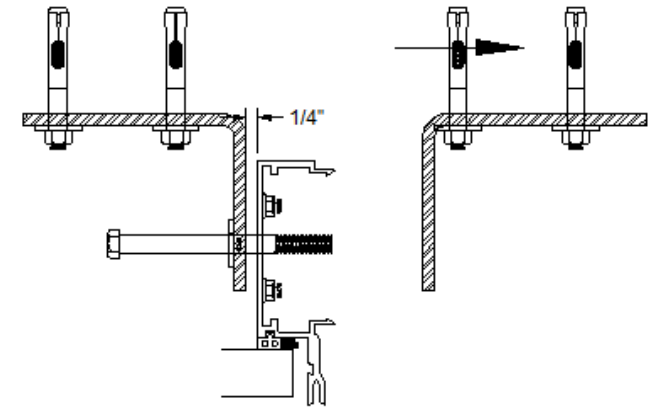


Figure 6.2

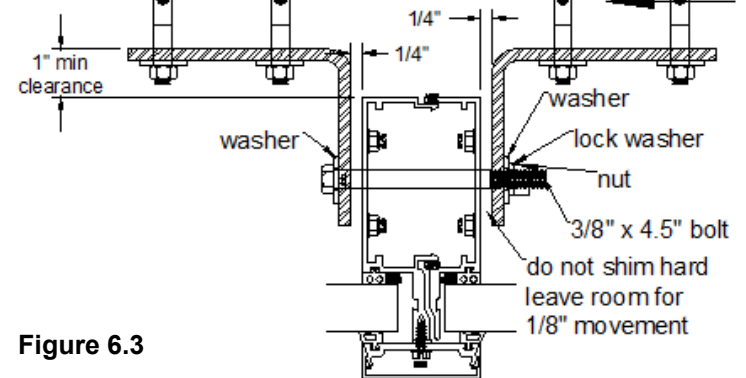
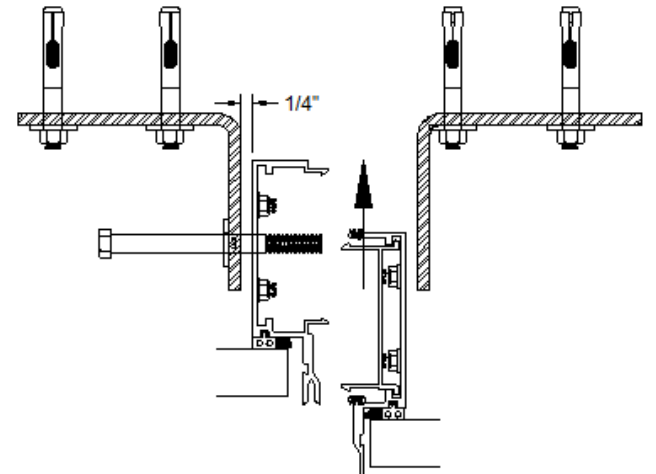


Figure 6.3

Section 3: Setting and Anchoring Units, cont.

Dead load and wind load anchor installation

9. See Figure 7 for anchorage at jamb condition.

Note: Figure 8 shows reference 3D view for dead load anchor.

Note: Figure 9 shows reference 3D view for wind load anchor.

Note: The anchor should be designed and placed in such a manner to allow a minimum of 1" clearance between the mullion and the substrate.

Note: If dead load anchors are welded to a steel substrate, the second anchor must be welded to the substrate after both units are set. Care must be taken to protect the finished product from weld splatter.

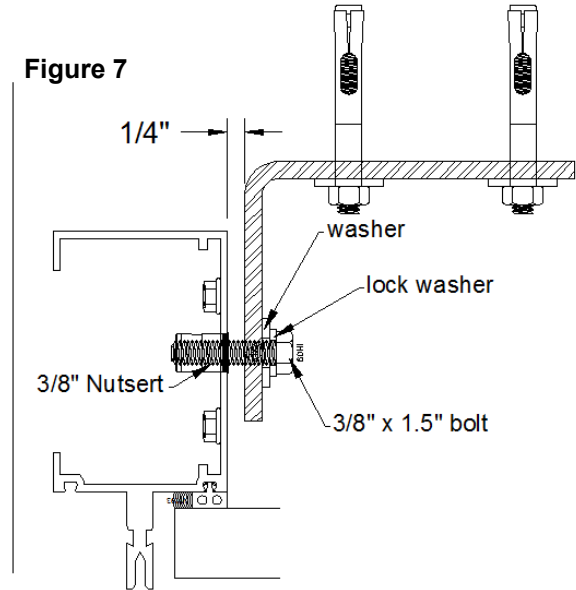
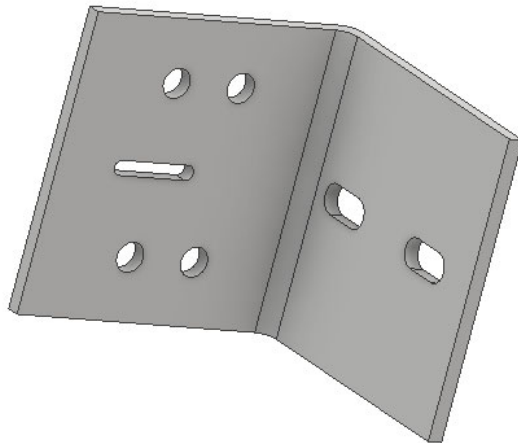
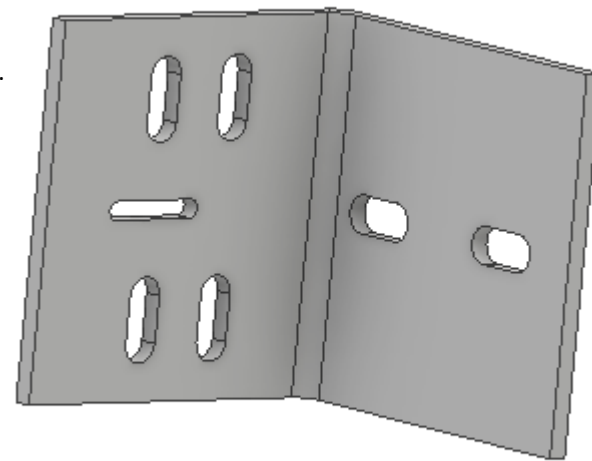


Figure 8 - Dead load anchor



*Slots allow for 3/4" (typical) movement from final location.

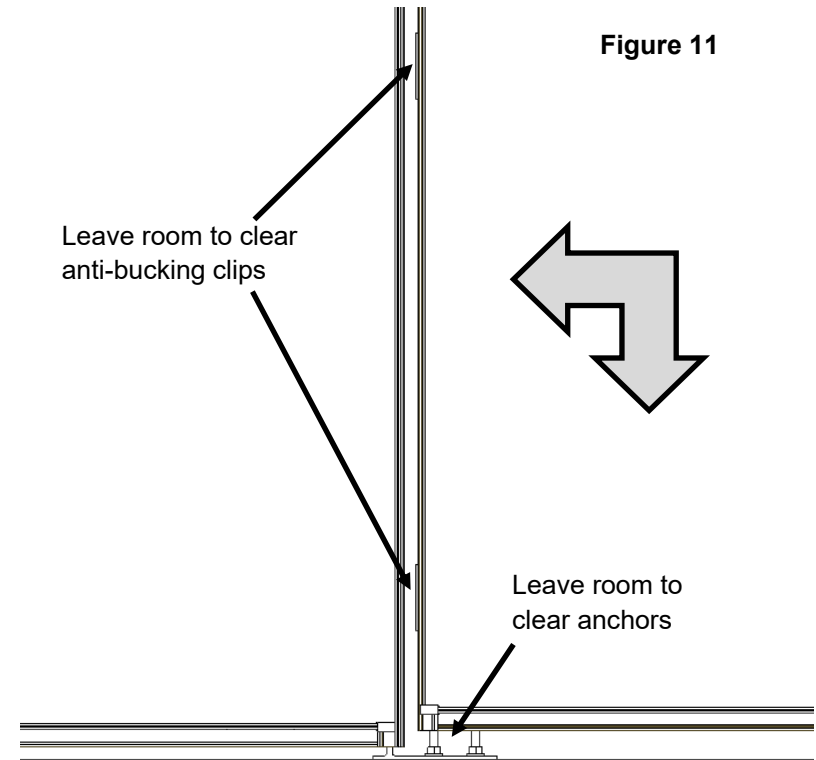
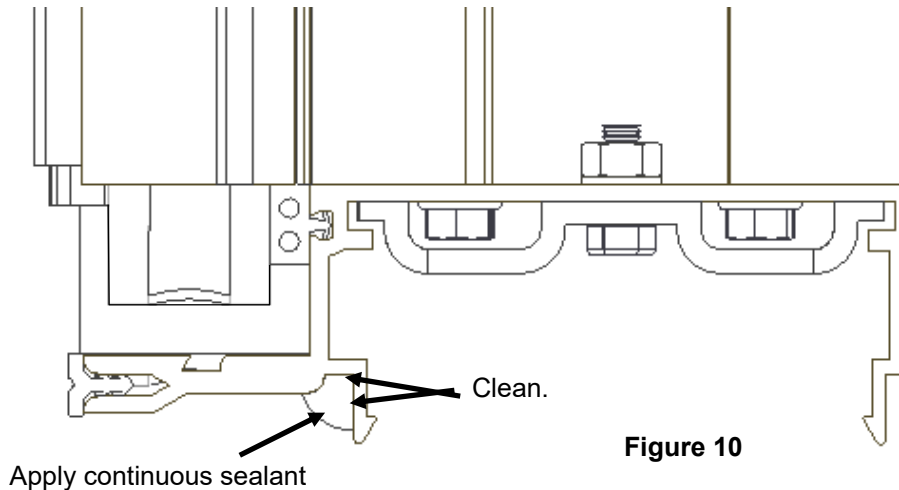
Figure 9 - Wind load anchor



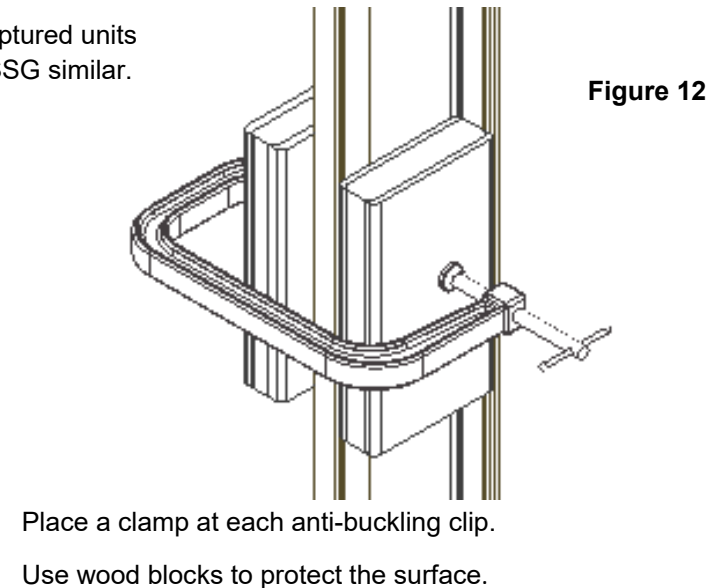
Section 3: Setting and Anchoring Units, cont.

Dead load and wind load anchor installation

11. Prior to installing the next unit, clean the exterior snap leg of the male split jamb to be assembled with alcohol and then apply a continuous bead of sealant (Figure 10).
 12. When installing the units leave room for the snap legs on the male split mullion to clear the legs on the anti-buckling clips on the female split jamb. Leave room at the sill for the bolts in the "F" or "T" anchor to clear the sill. Be aware of dead load or wind load anchor position (Figure 11).
 13. When the glass planes of the units are flush, snap the vertical split mullions together using C-clamps. Use wood blocks to protect the finish of the mullions. Place one C-clamp at each anti-buckling clip location. Beginning at one end of the mullion and proceeding to the other, tighten each clamp a little at a time. Work up and down as many times as necessary until the positive snap is made. (Figure 12).
- Note: After 4 units check for 2.5" nominal mullion width
14. When the positive snap has been made between the two halves of the split mull, drop the unit down into its final location. Shim and anchor the unit similar to the previous unit.
 15. Follow this process until all units in the bottom horizontal run are installed



Note: Captured units shown, SSG similar.



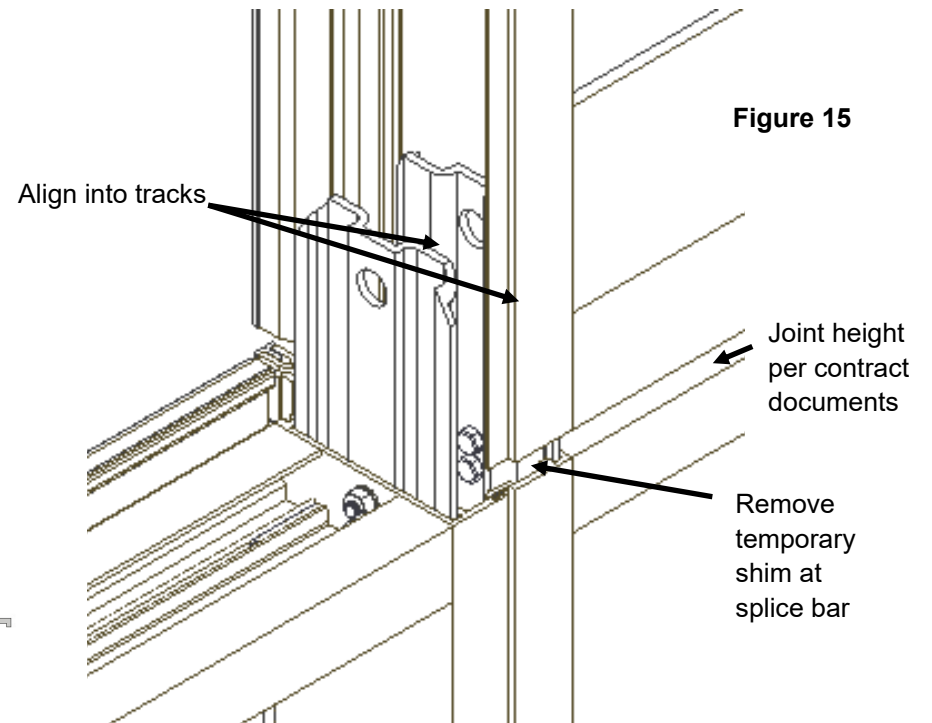
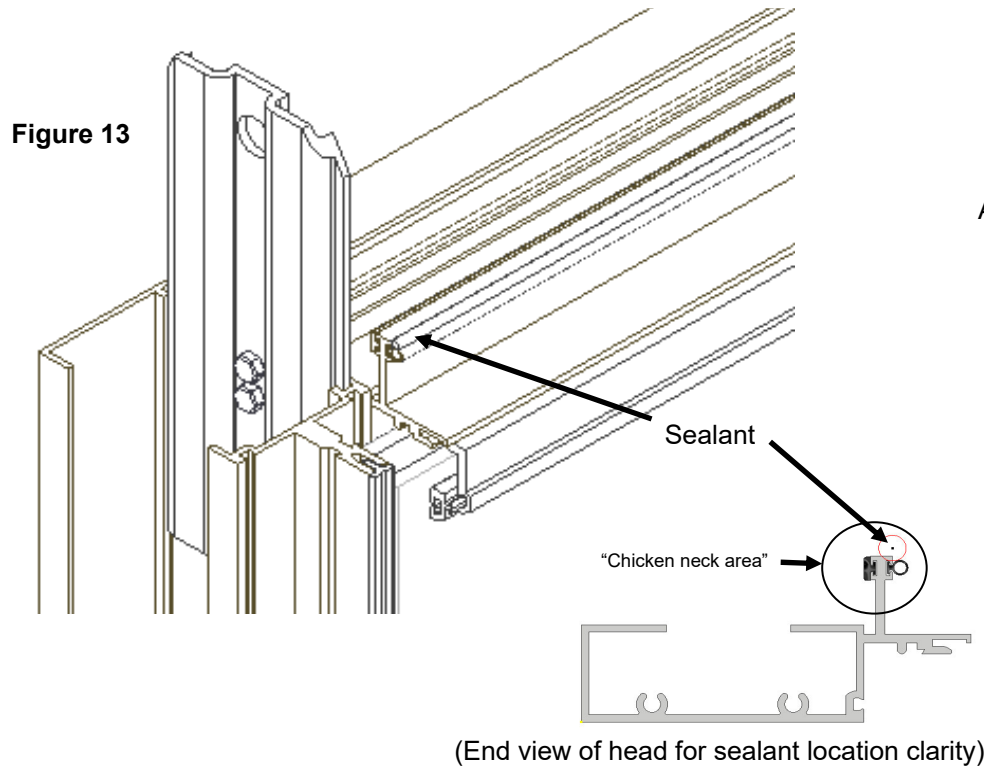
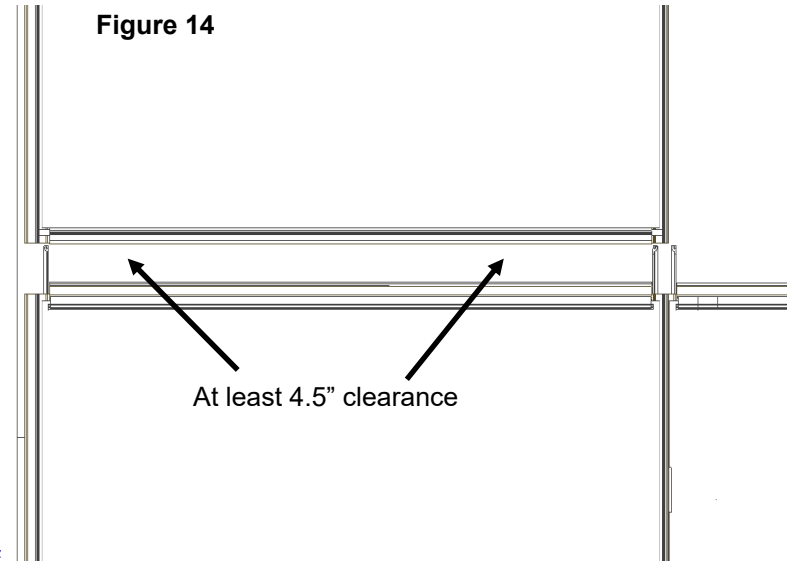
Section 4: Horizontal Stacking of Units - Captured System.

1. Prior to setting the first unit above, clean the top of the chicken neck area with alcohol and apply a continuous 3/16" diameter bead of sealant above the weather strip on the front side of the chicken neck of the unit below (Figure 13).

Note: There must be at least 4.5" of clearance between the stack head and the stack sill to avoid interference with the lifting lug/splice bar as the unit is being installed (Figure 14).

2. Once the glass planes are flush, lower the unit on to the splice bar, taking care to align them into the tracks properly. (Figure 15).
3. Lower the unit into the proper position relative to the unit below to allow thermal expansion and floor movement per the contract documents. (Figure 15).

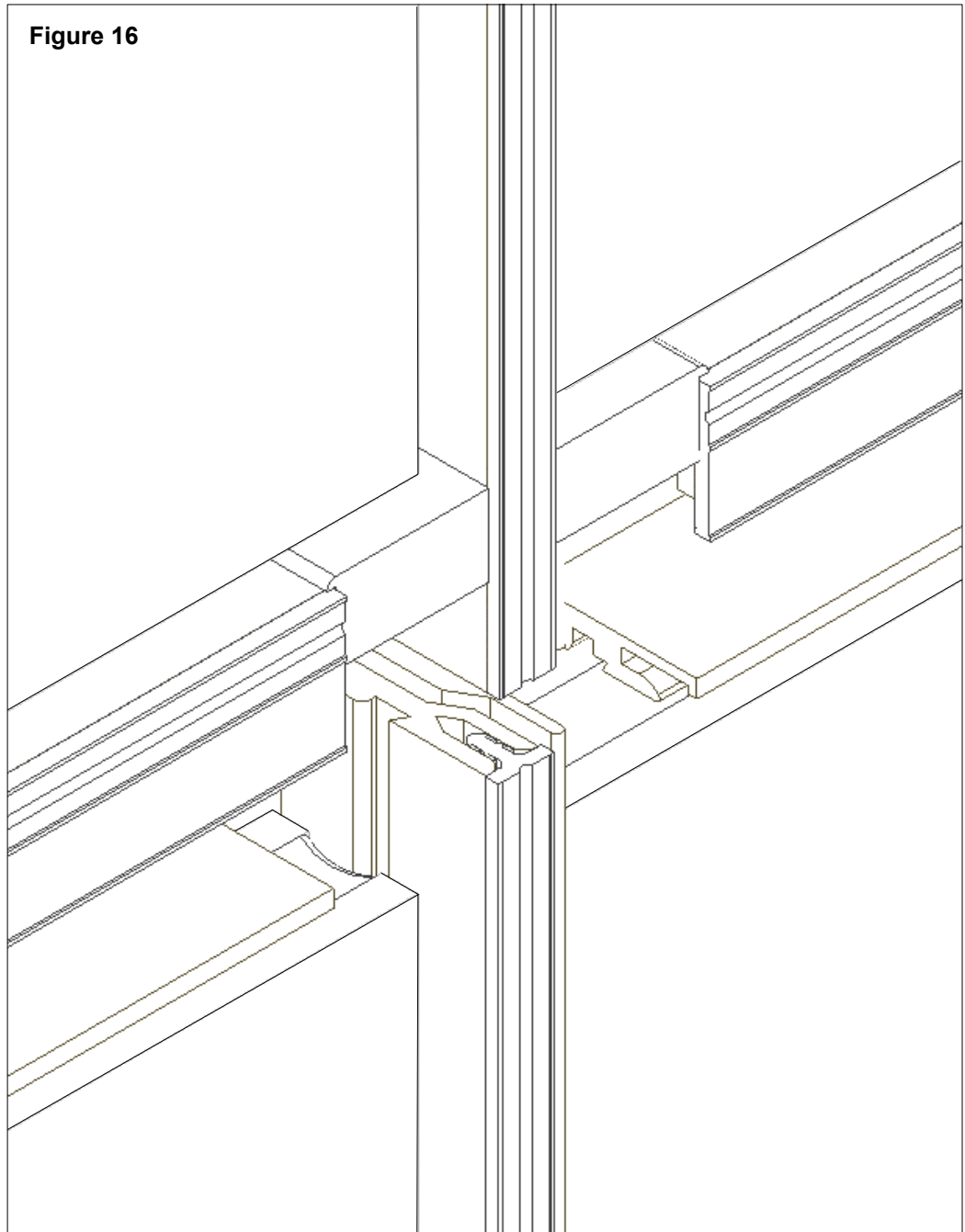
Note: At the proper spacing the unit may be temporarily shimmed hard on the unit below (while the dead load anchors are being fastened.) These shims must be removed when the unit above is securely hung from the dead load anchors.



Section 4: Horizontal Stacking of Units - Captured System, cont.

4. Prior to installing the next unit in the row, clean the exterior snap leg of the male split jamb to be assembled with alcohol and then apply a continuous bead of sealant (Figure 10 page 13) Also, apply a continuous bead of sealant above the weather strip on the front side of the chicken neck of the unit below. (Figure 13 page 14) Figure 16 shows assembled units.
5. Snap units together, lower into position and anchor as described on page 13.

Note: Follow this process on all units for each additional row.

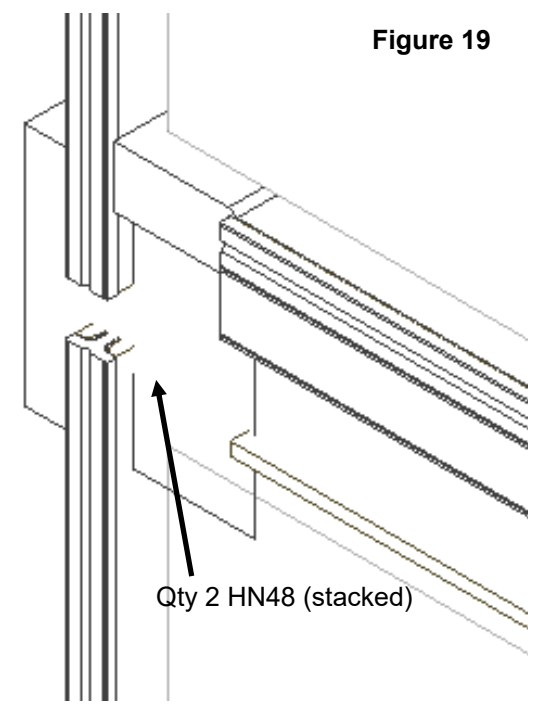
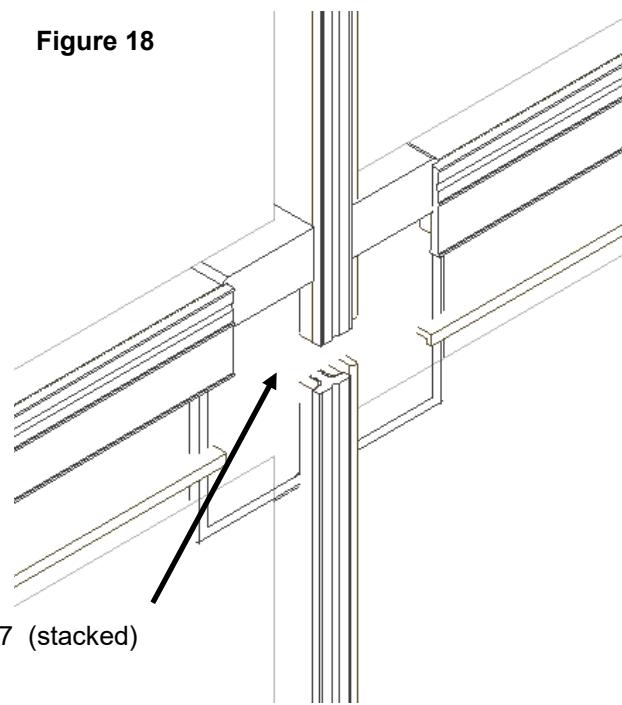
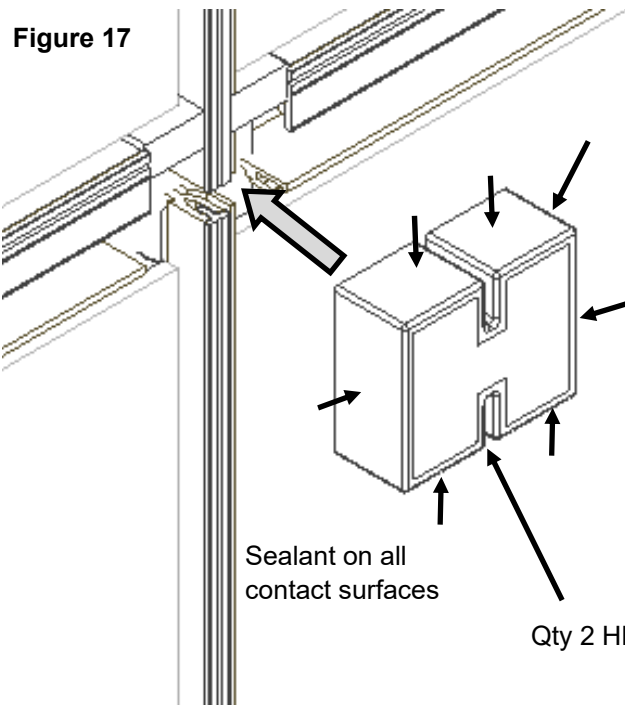
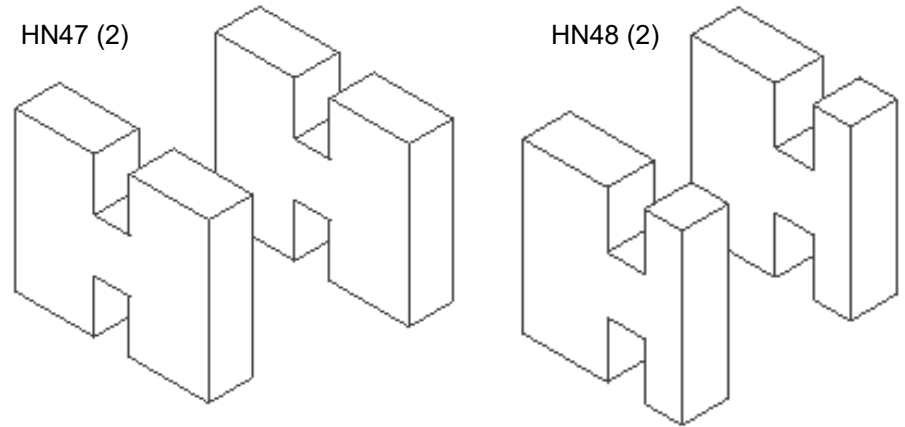


Section 4: Horizontal Stacking of Units - Captured System, cont.

Sealing of intersection of captured stack joints with HN47 and HN48

*Note: At the intersection of four captured units there is a critical joint plug.

1. Clean joint with alcohol before inserting mull plugs.
2. Stack (2) HN47 mull plugs back to back and apply sealant to all surfaces.
3. Insert HN47 stack into the joint of the four intersecting units (Figure 17).
4. After insertion, apply additional sealant and tool to all contact surfaces (Figure 18).
5. A similar situation happens at the condition jamb where two units are horizontally stacked.
6. At this location use (2) HN48 mull plug in the same fashion as above (Figure 19).

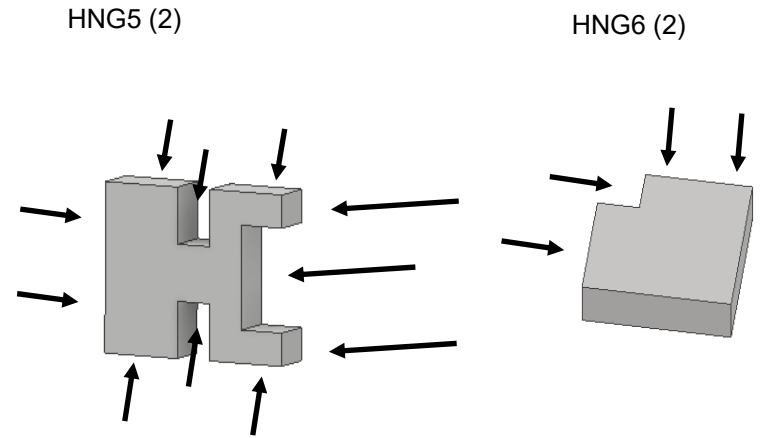


Section 4: Horizontal Stacking of Units - Captured System, cont.

Sealing of intersection of captured stack corner joints with HNG5 & HNG6

*Note: At the intersection of corner units there is a critical joint plug.

1. Clean joint with alcohol before inserting mull plugs.
2. Stack (2) HNG5 mull plugs face to face and apply sealant to all surfaces.
3. Insert HNG5 stack into one side of the corner units (Figure 20).
4. After insertion, apply additional sealant and tool to all contact surfaces (Figure 20).
5. Repeat the same process with (2) HNG5 plugs on the opposite side of the corner. (Figure 20).
6. Apply sealant to HNG6 similar to HNG5. Stack HNG6 similar to HNG5 and insert into remaining cavity (Figure 21)
7. Seal and tool all intersections between plug-to-mullion and plug-to-plug.



Sealant on all contact surfaces
and between stacked plugs

Figure 20

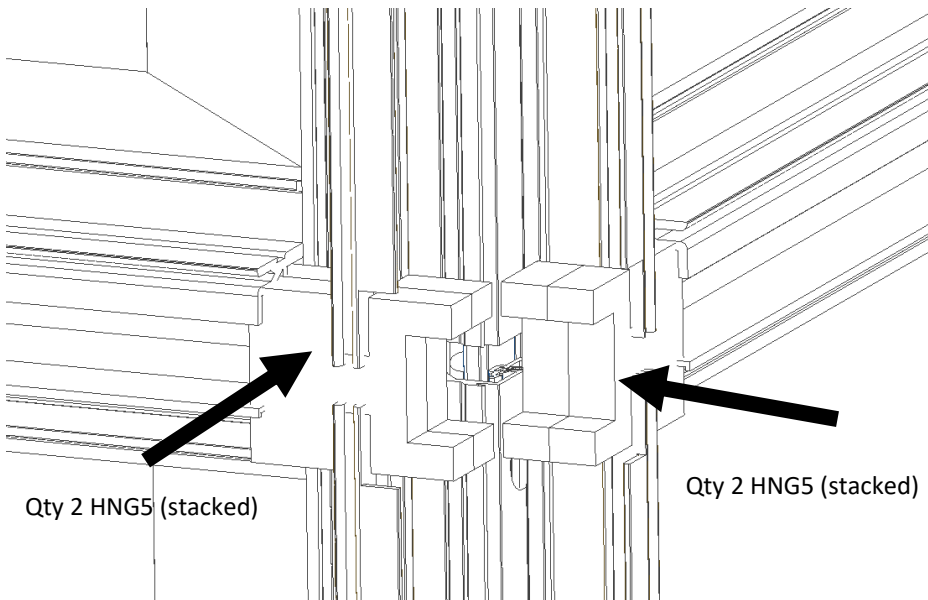
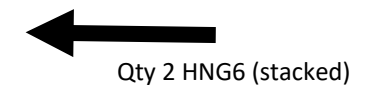


Figure 21



Section 4: Horizontal Stacking of Units - SSG System

Installation of SSG units is similar to the stacking sequence and installation method as the captured units, with the exception of what is shown on this page. Refer to pages 15 and 16 for these instructions.

Prior to setting the unit above, complete the following steps in this order.

1. Clean all joints with alcohol before applying sealant:
2. Seal the joint between the stack head of both units (Figure 22).
3. Apply a bed of sealant on the horizontal leg of the stack head and up the chicken neck (Figure 13) at least 5" long centered on the joint between the units (Figure 23).
4. Center HC19 silicone splice sheet over joint. Start by applying vertically on the chicken neck, below the bulb vinyl, and extending out the horizontal leg of the stack head. (Figure 24).
5. Apply sealant around all edges of the splice sheet and tool smooth (Figure 25).
6. Apply a generous amount of sealant to the gap up the chicken neck and tool to all surfaces, including back seal (Figure 25).
7. Apply a continuous bead of sealant above the weather strip on the front side of the chicken neck of the unit below. Marry this sealant to the sealant at the joints in the chicken neck. (Figure 25)
8. Install the unit above following the same procedures as shown on the pages for captured units.

Figure 22

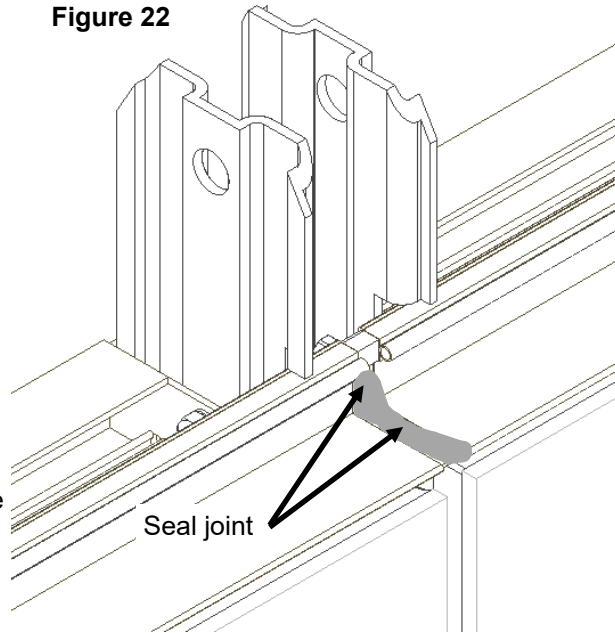


Figure 23

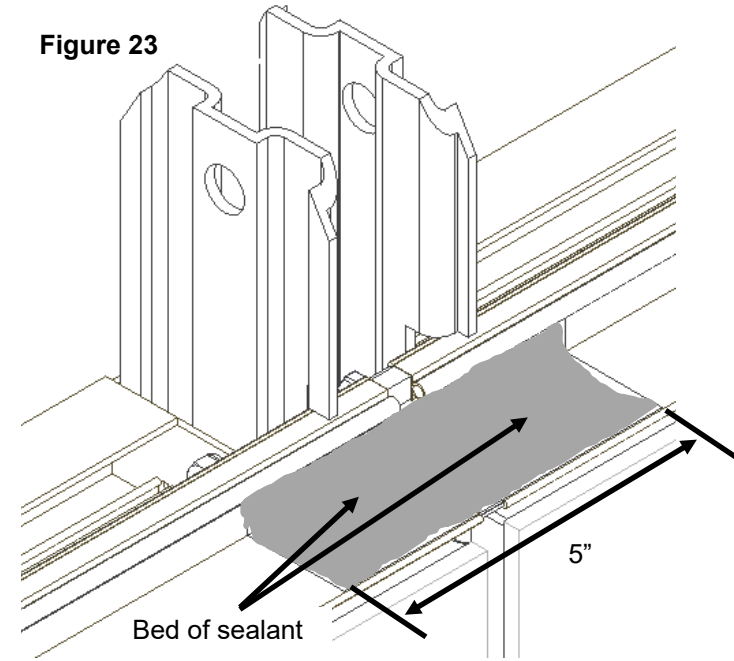


Figure 24

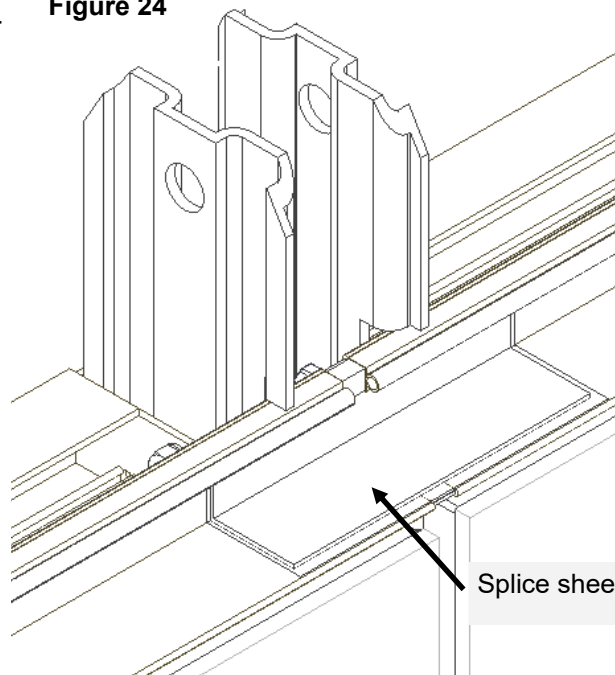
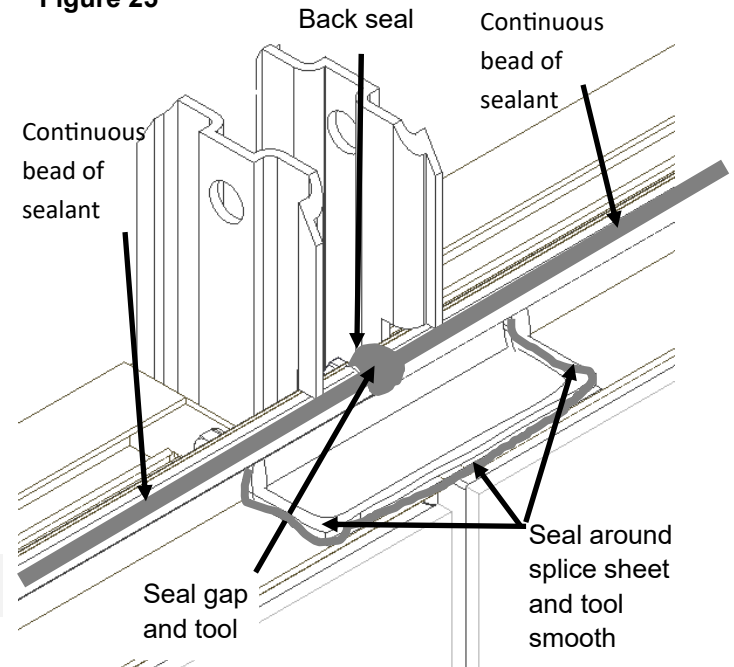


Figure 25



Section 4: Horizontal Stacking of Units - SSG System, cont.

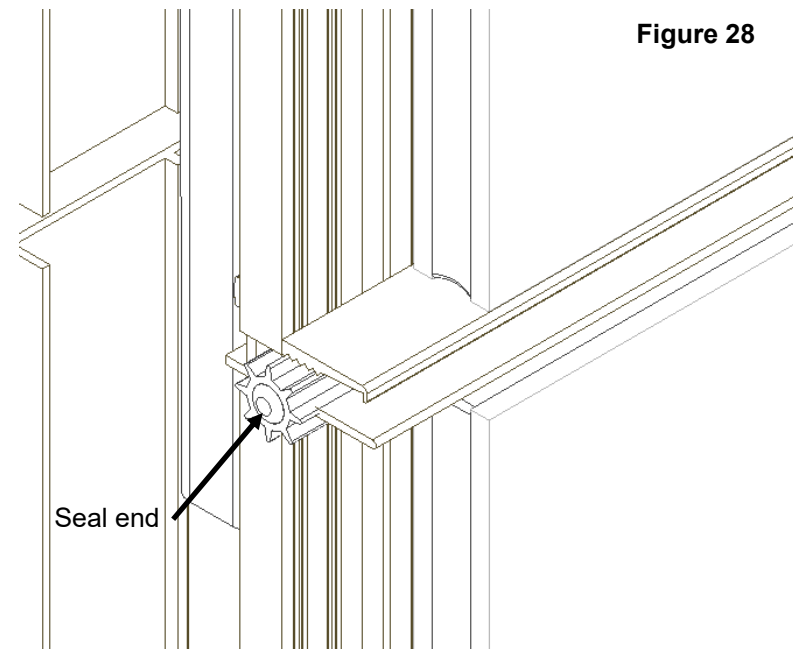
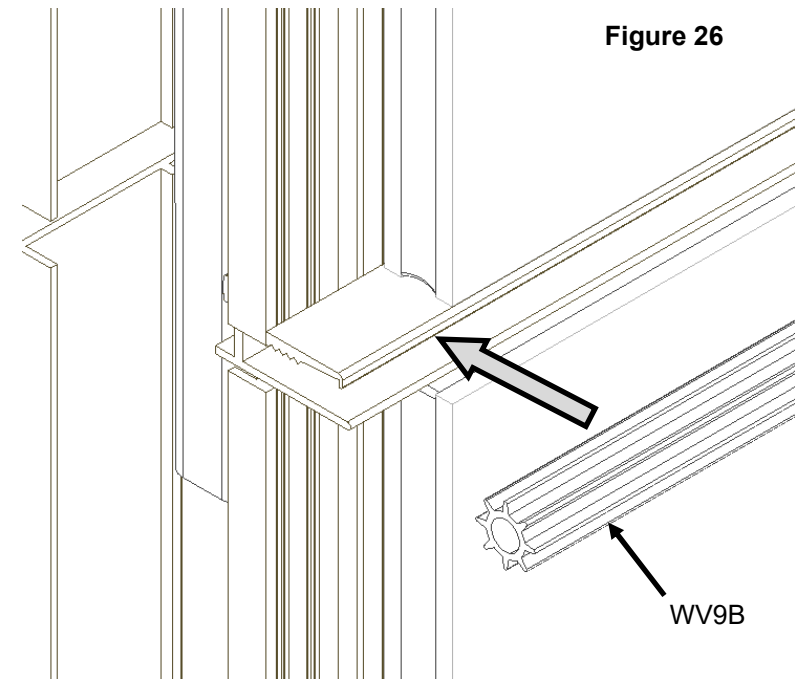
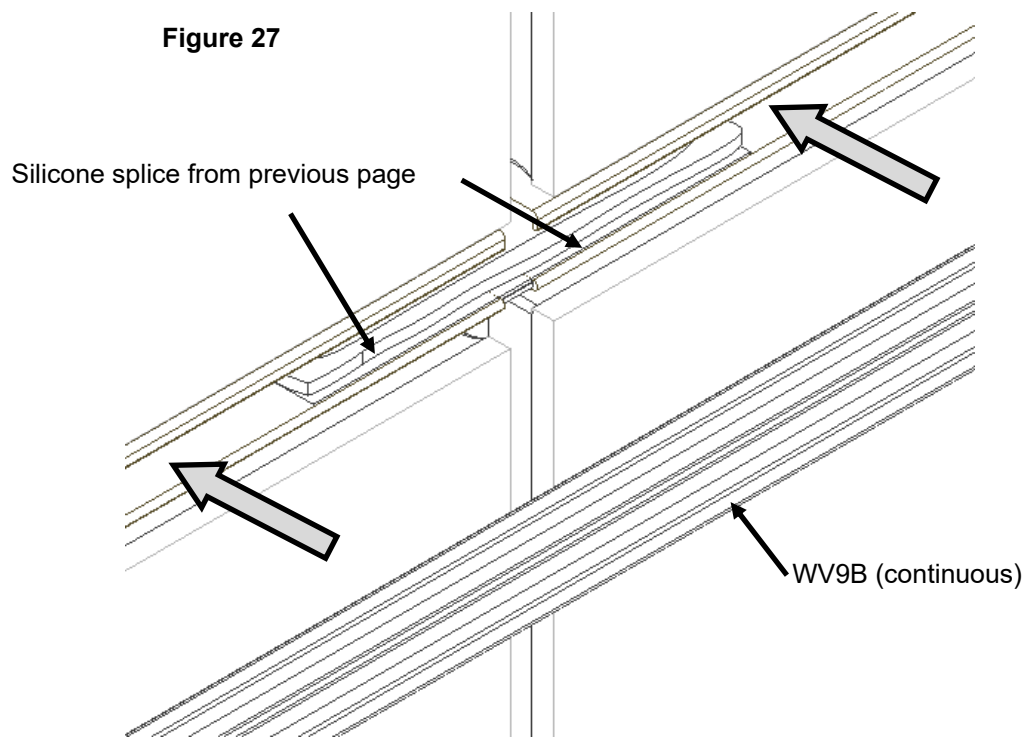
9. Insert WV9B stack rain screen seal into the horizontal stack joints. Minimize splices. If a splice must be made; offset it from a vertical frame joint by a minimum of 12", seal and butt the ends together.

Note: The WV9B should extend past the jamb by a minimum of 1/8".

10. Fill the end with sealant. (Figure 28)

Note: Special care must be taken when installing perimeter sealant at this location. The perimeter seal must marry with the WV9B and be carefully tooled into all contact surfaces at this joint. (See page 24 figure 38.)

(Condition not shown for clarity)



Section 4: Horizontal Stacking of Units - SSG System, cont.

*Note: Lifting hanger/ splice bar not shown in figures for clarity

Installation of SSG units is similar to the stacking sequence and installation method as the captured units, with the exception of what is shown on this page. Refer to pages 15 and 16 for these instructions.

Prior to setting the unit above, complete the following steps in this order.

1. Clean all joints with alcohol before applying sealant:
2. Seal the joint between the stack head of both units (Figure 29).
3. Apply a bed of sealant on the horizontal leg of the stack head and up the chicken neck (Figure 13) at least 6" long centered on the joint between the units (Figure 30).
4. Center the custom silicone splice sheet (Not By EFCO) on the corner joint. Start by applying vertically on the chicken neck, below the bulb vinyl, and extending out the horizontal leg of the stack head. (Figure 31).
5. Apply sealant around all edges of the splice sheet and tool smooth (Figure 32).
6. Apply a generous amount of sealant to the gap up the chicken neck and tool to all surfaces, including back seal. (Figure 32).
7. Apply a continuous bead of sealant above the weather strip on the front side of the chicken neck of the unit below. Marry this sealant to the sealant at the joints in the chicken neck.
8. Install the unit above following the same procedures as shown on the pages for captured units.

Figure 29

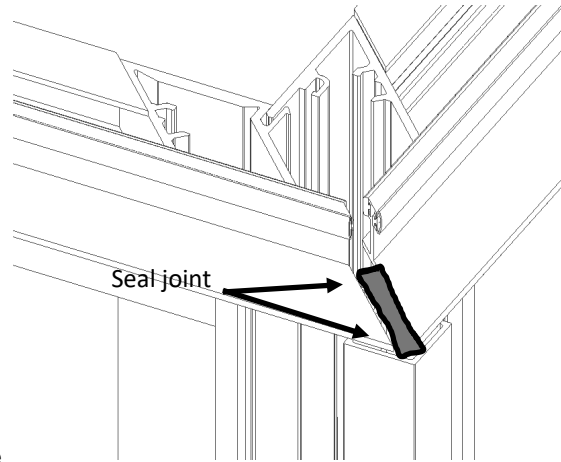


Figure 30

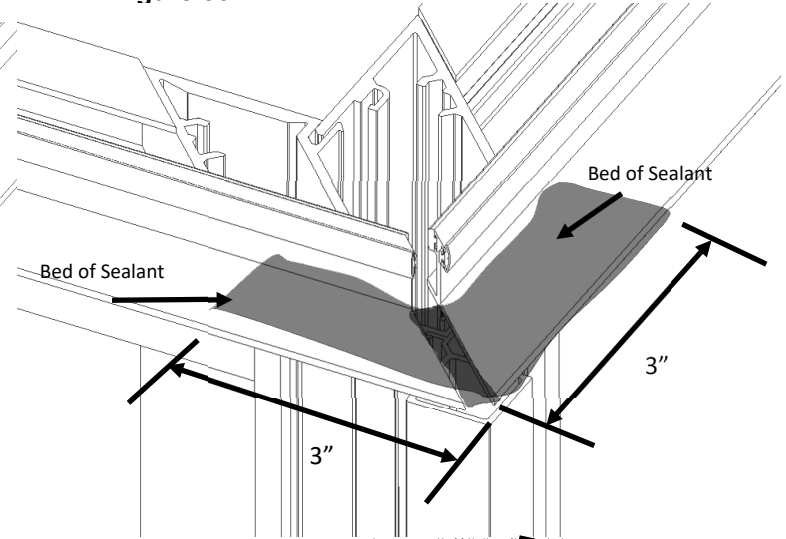


Figure 31

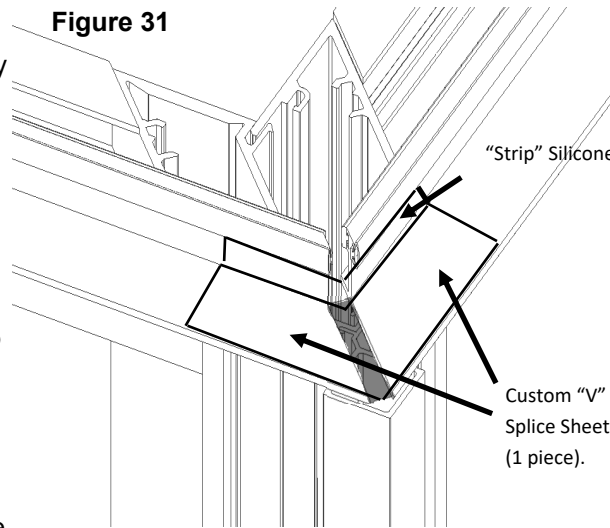
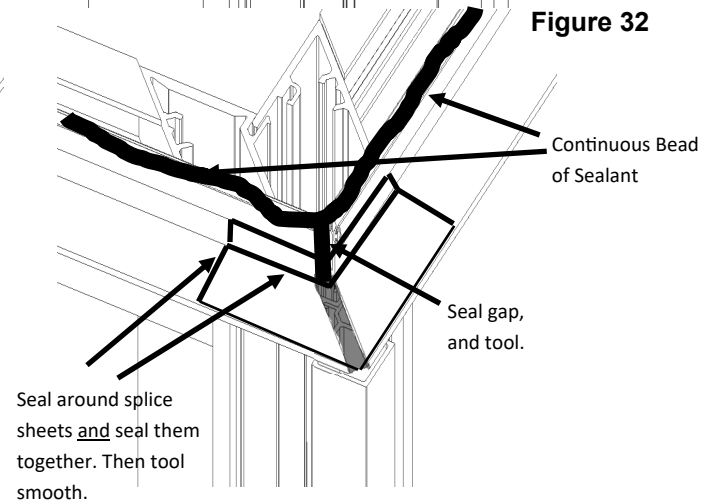


Figure 32

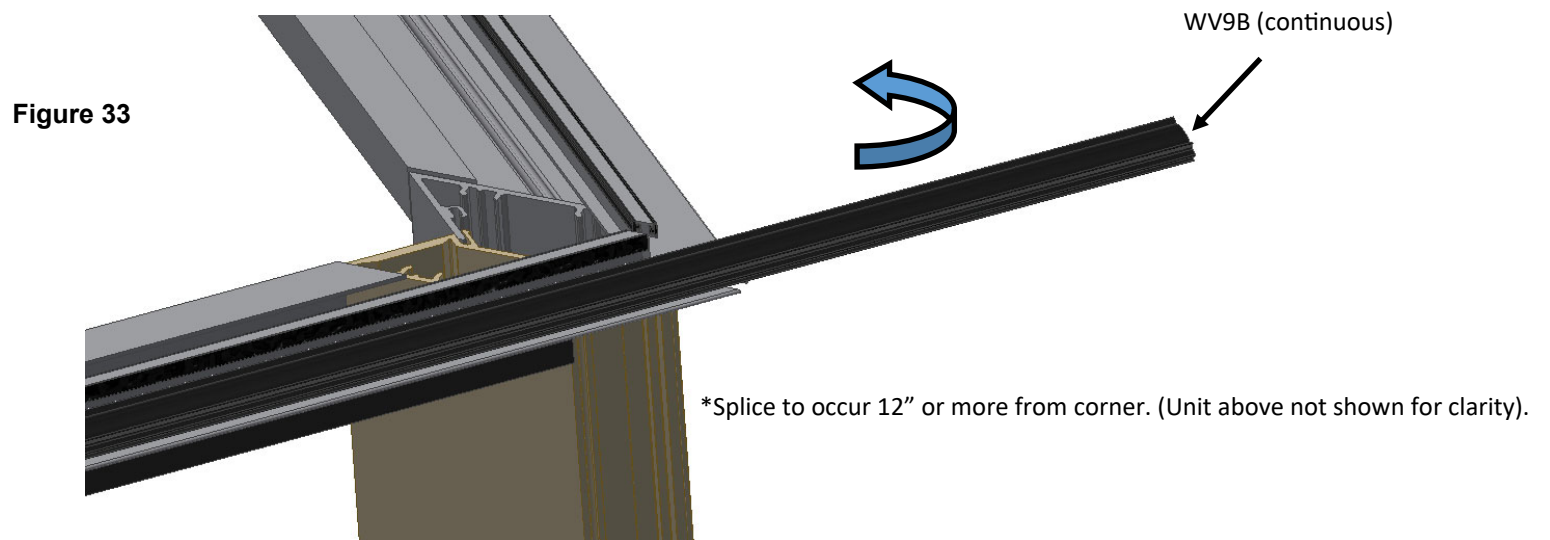


*Note: Lifting hanger/ splice bar not shown in figures for clarity

Section 4: Horizontal Stacking of Units - SSG System, cont.

9. Insert continuous WV9B stack rain screen seal into the horizontal stack joints. Minimize splices. If a splice must be made; offset it from a vertical frame joint by a minimum of 12", seal and butt the ends together.
10. WV9B should extend past the corner and "wrap" onto the next unit. (Figure 33)

Note: Splice to occur 12" or more from corner stack joint

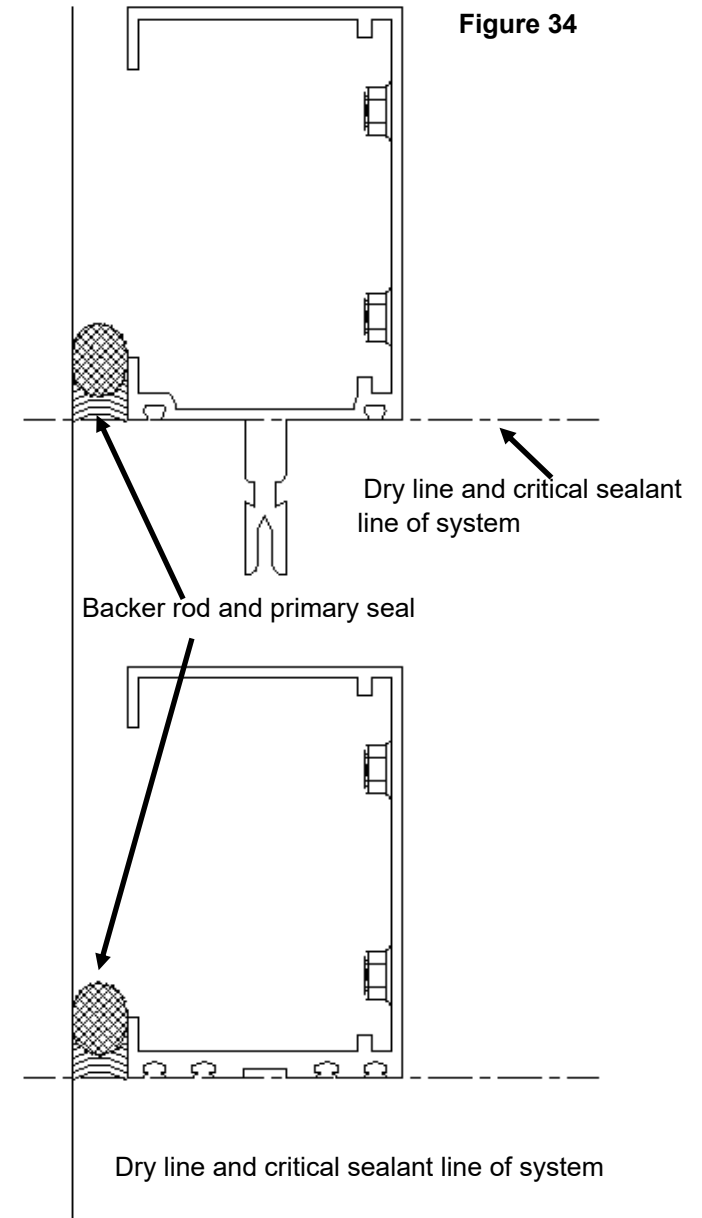
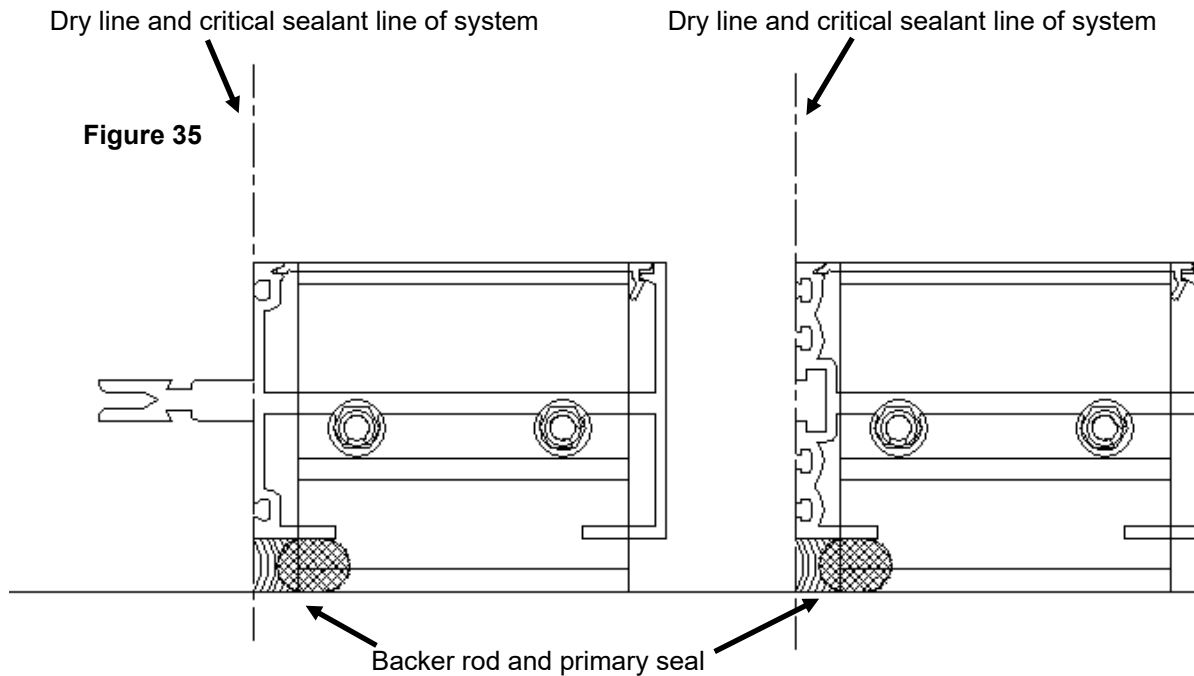


Section 5: Recommended Perimeter Sealing

1. Placement at typical captured and SSG jambs (Figure 34).
2. Placement at typical captured and SSG sills (Figure 35), head condition similar.

Note: It is recommended to perform perimeter sealing prior to installation of perimeter pressure plates.

Note: Sealant type and joint width per contract documents. See sealant manufacturer instructions for surface preparation and installation guidelines.

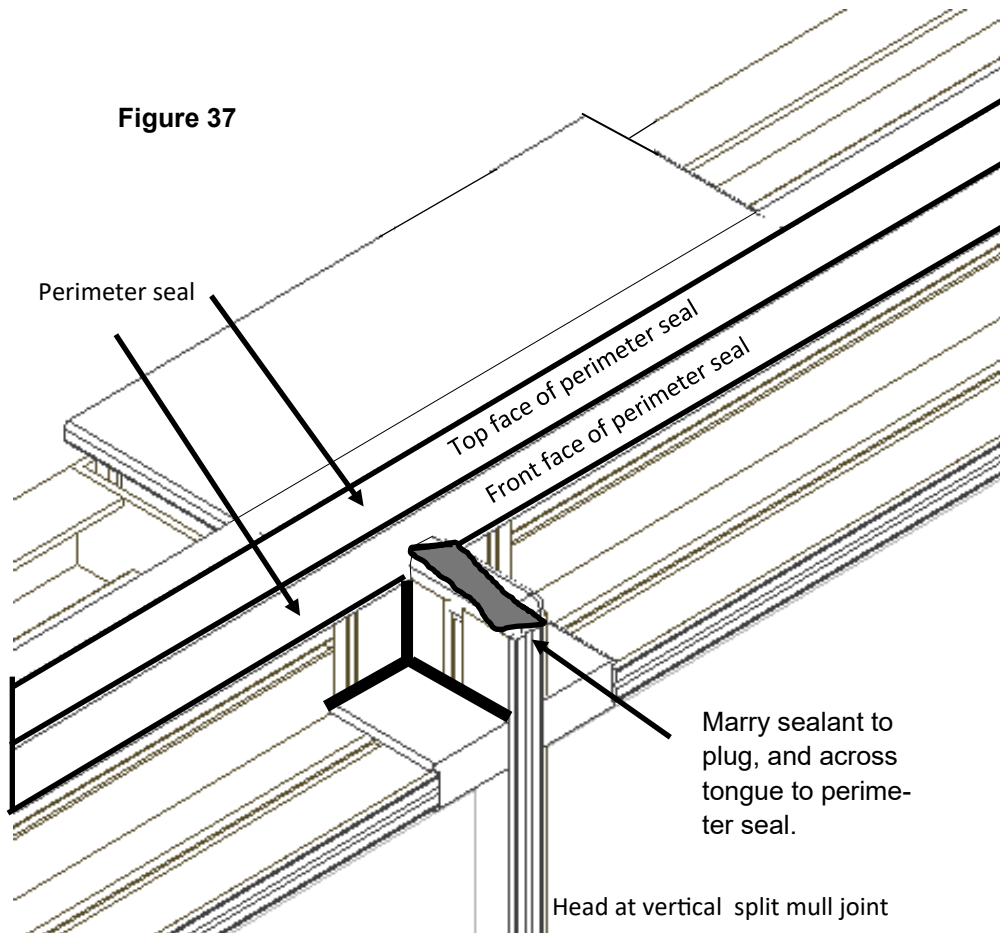


Section 5: Recommended Perimeter Sealing - Critical Conditions at Captured System

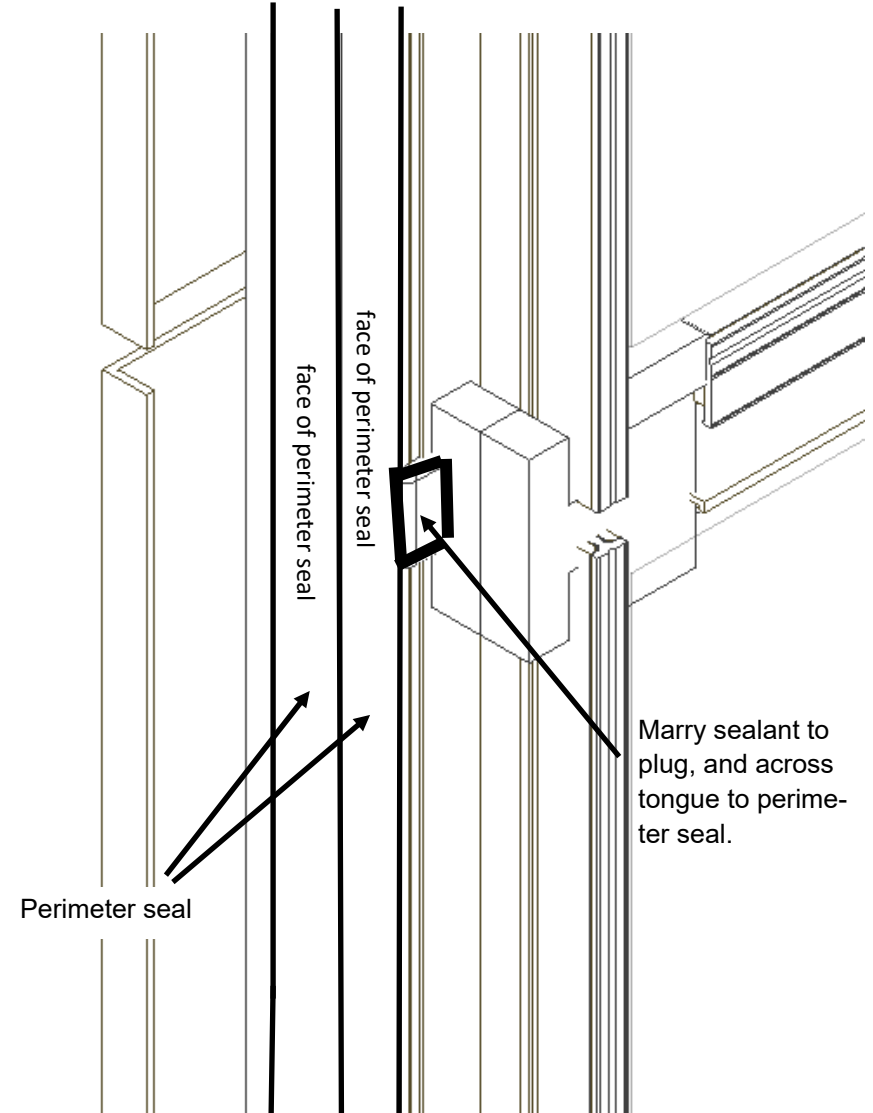
1. Seal across the open joint that is left at the stack horizontals, adjacent to the mull plug condition. Marry this sealant to the perimeter sealant; tool it to the mullions and the joint plug (Figure 36).
2. Seal across the top of the tongues of the split mulls at the head and marry to the perimeter sealant. Take special care to force the sealant into the gap between the tongues (Figure 37).

Note: (Building condition not shown for clarity.)

Figure 36



Jamb condition at horizontal stack joint
(Left jamb shown, right jamb opposite)



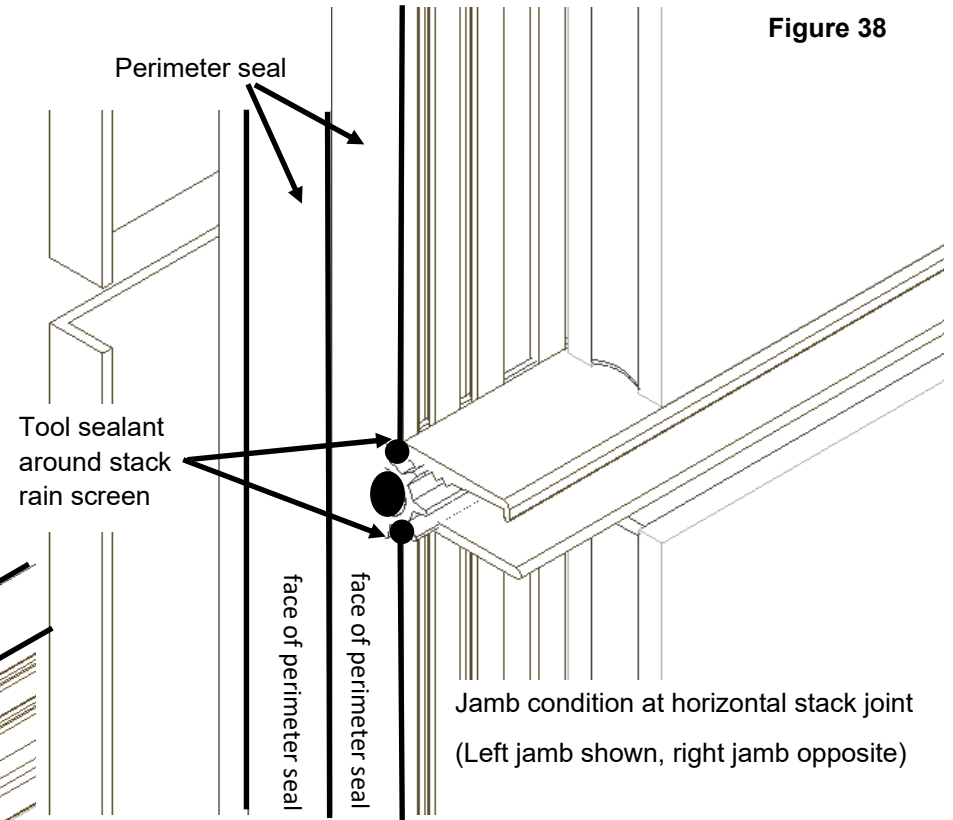
Section 5: Recommended Perimeter Sealing - Critical Conditions at SSG System

1. When applying the perimeter seal at the jamb, clean and prep surfaces per sealant manufacturers instructions. Tool sealant around the SSG stack rain screen. Ensure that the WV9B rain screen seal is embedded into the perimeter seal. Take special care to ensure that no pinholes are left. **This joint is critical** (Figure 38).
2. When applying the perimeter seal at the head and sill, clean and prep surfaces per sealant manufacturers instructions. Tool sealant into all the vertical grooves located in the vertical mullion. Pay special attention to the joint where the male and female split mulls come together. (Figure 39).

Note: Head conditions at split vertical is shown, sill condition at split vertical and head and sill condition at jamb verticals are similar (Figure 39).

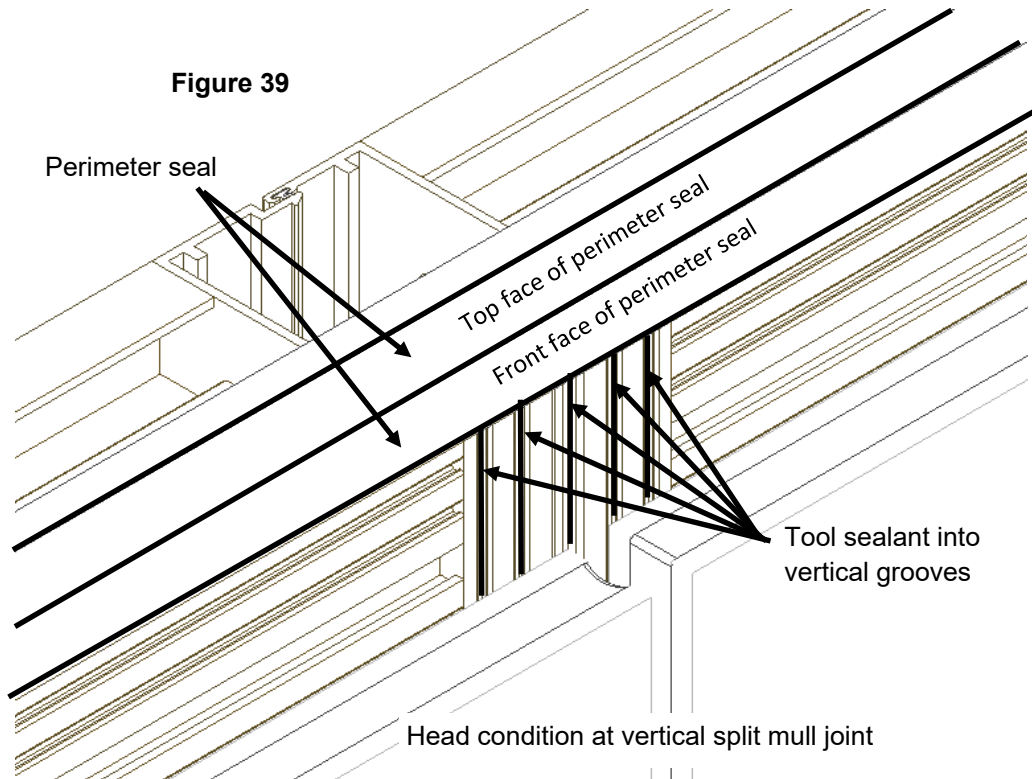
Note: (Building condition not shown for clarity.)

Figure 38



Jamb condition at horizontal stack joint
(Left jamb shown, right jamb opposite)

Figure 39



Section 6: Captured System Pressure Plates

1. Remove the exterior gasket from the reel and allow it to relax and decompress.
2. Apply the gaskets to the pressure plates.

Note: Gaskets must be cut flush at both ends of the vertical pressure plate except at horizontal stack applications, where the gaskets are to extend 1" beyond the top and be 1/2" short at the bottom.

Vertical pressure plates

1. Before installing vertical pressure plates, apply a generous amount of sealant to exterior faces of the mull plugs. (Figure 40).

Note: The previously installed gaskets (Installed in step 2 above) run through at this area, so all voids must be filled.

Horizontal pressure plates

Note: Horizontal pressure plates are cut 1/4" shorter than DLO, and this difference must be split on both ends (1/8" per end) of the horizontal.

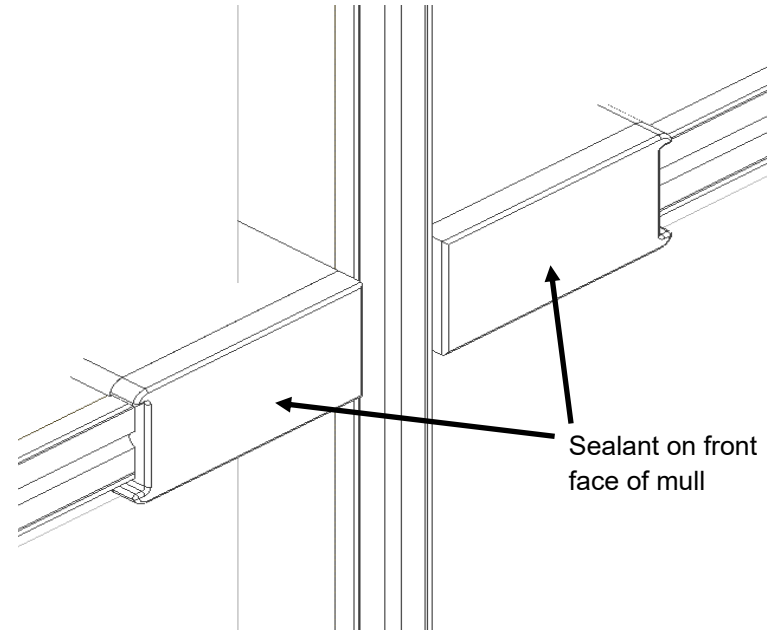
1. Cut the gasket 1/2" longer than the pressure plate length and apply the gasket so that 1/4" extends beyond each end of the pressure plate.

Note: There must be a 3/16" x 1" weep slot centered 4" from each end of all horizontal pressure plates, including head and sill pressure plate.

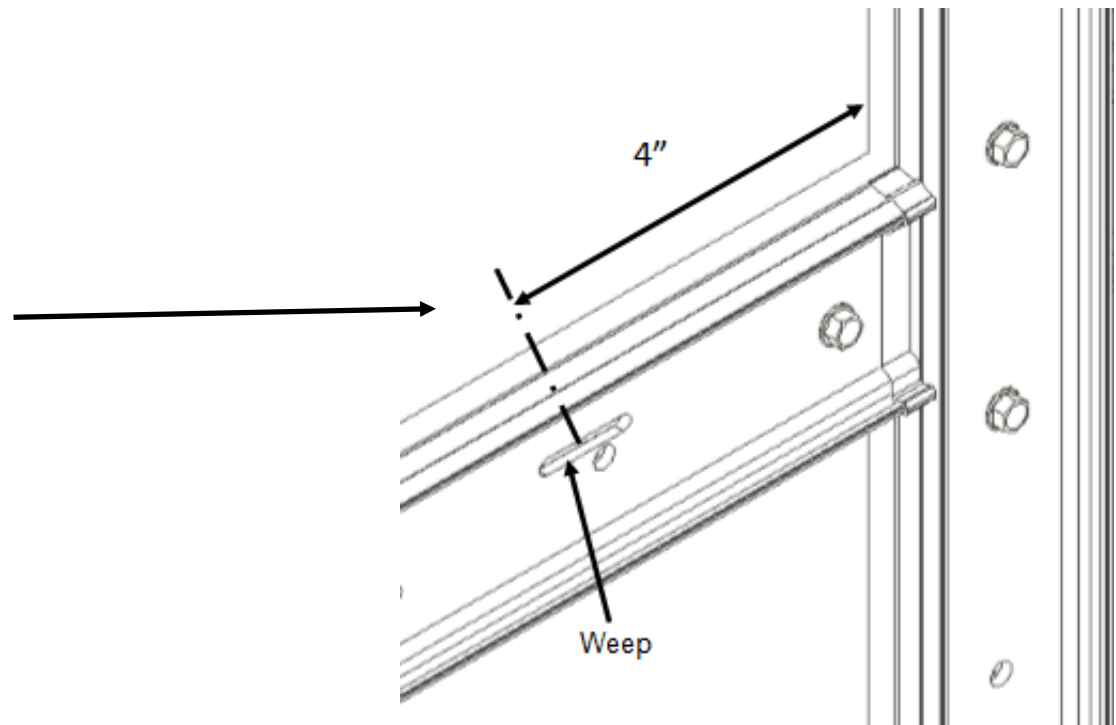
Optional weep holes: Drill qty (3), 5/16" diameter weep holes side by side centered 4" from each end of the pressure plate. Locate the centerline of the holes 5/32" above the top of the tongue.



*Generic pressure plate and gaskets shown.



Sealant on front face of mull



Section 6: Captured System Pressure Plates, cont.

Note: Clean surface with alcohol prior to applying sealant.

1. Install the vertical pressure plates prior to the horizontal pressure plates using #12 S.S. hex washer head sheet metal screws. When using LD20, screws will have washer under head.
2. Locate screws 6" O.C. (4.5" O.C for polyamide pressure plates) and at a maximum of 3" from the end of each pressure plate.

Note: A screw should always be placed in the vertical pressure plate directly across from each horizontal. This is necessary to create maximum control of pressure on the mullion plugs, which provides the critical sealing function.

3. Torque screws to 40 in-lbs. Once all sides of a lite have been clamped down, torque all screws to 80 in-lbs. When using polyamide pressure plates, recheck this torque prior to installing covers

Note: Work from the center outward on the horizontal pressure plates, and from the sill up on the vertical pressure plates.

4. Seal all joints between vertical and horizontal pressure plates. This should be done just prior to installing the covers so that the sealant doesn't cure and make the cover difficult to snap on (Figure 41).
5. Take special care to seal the pressure plate gaskets together at the corners, where they meet.

Note: In applications where there are horizontal pressure plates only, the horizontal pressure plates cannot span across a vertical split mullion without leaving a 1/8" gap to allow movement at each vertical.

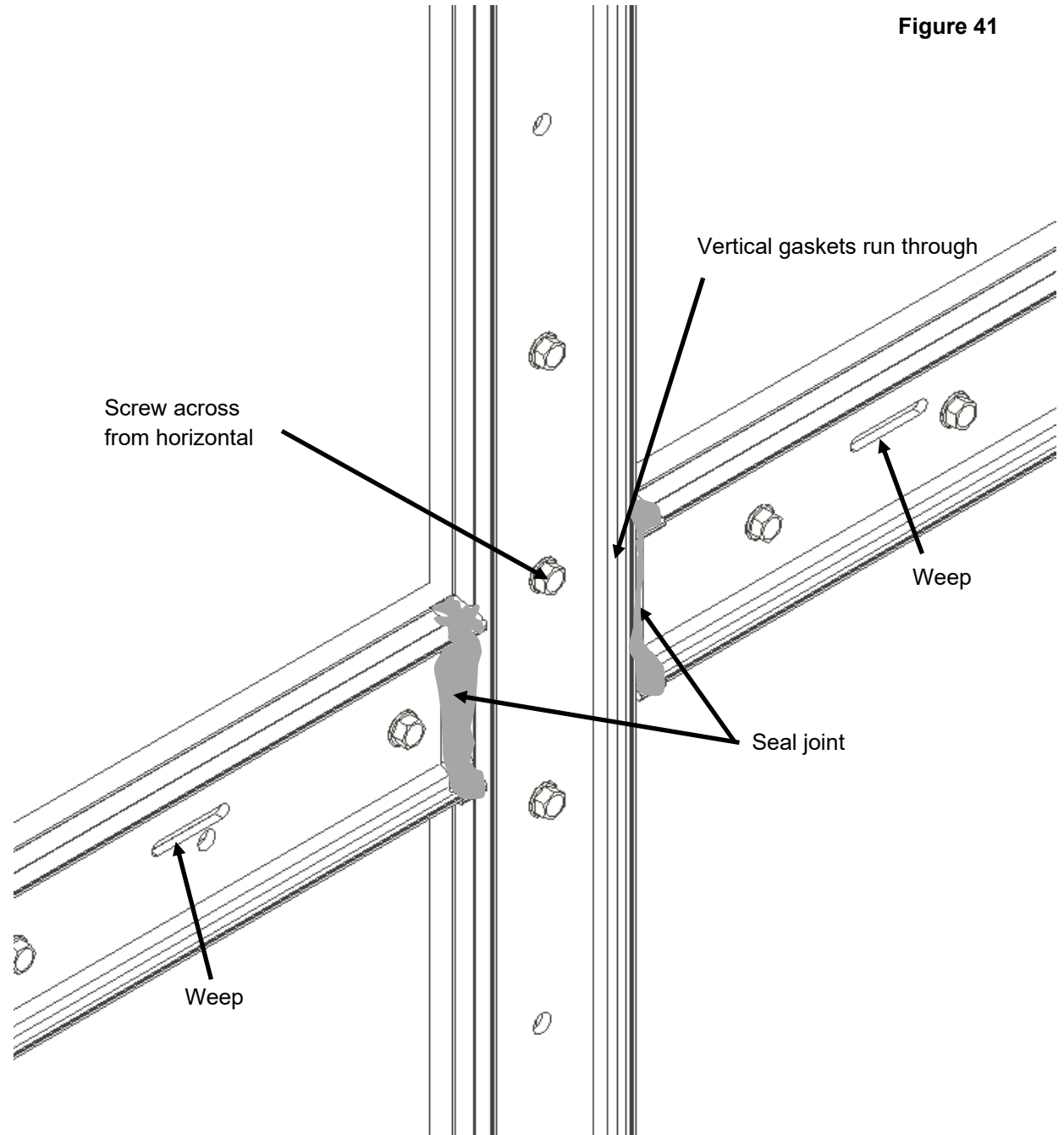


Figure 41

Section 6: Captured System Pressure Plates, cont.

(Special conditions at the horizontal stack)

Note: Clean surface with alcohol prior to applying sealant.

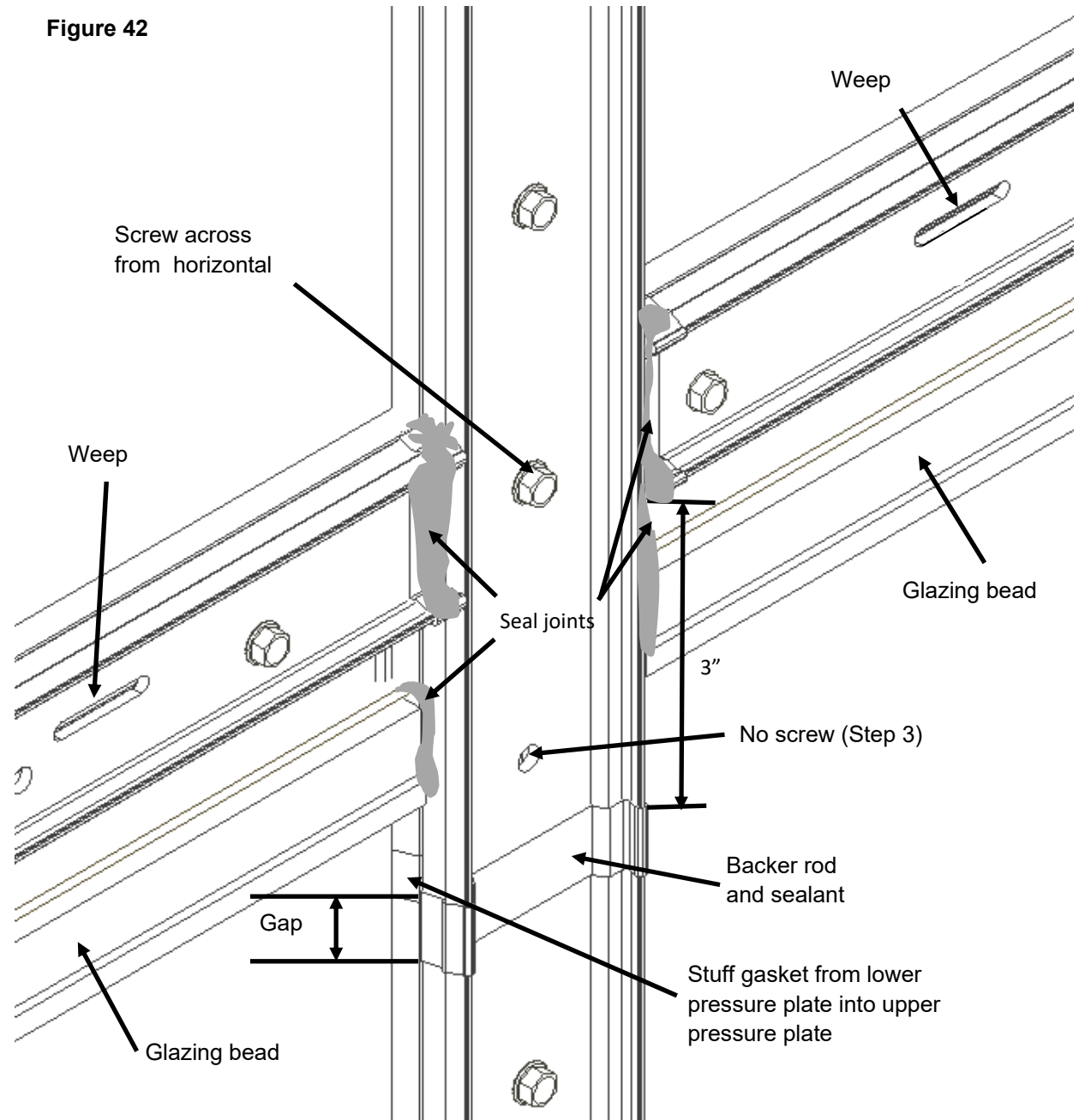
Note: 4-way intersection shown, corners similar.

1. The pressure plate on the upper units should extend 3" below the sill of the units.
2. There should be gap between the upper and lower pressure plate. This gap should match the gap between the stack head and stack sill, per contract documents or 1/2" if not specified.
3. Do not place a screw through the upper pressure plate into the lower units as this will prohibit or hamper movement from drift and expansion. (Noted in figure 42)
4. The pressure plate gasket on the lower pressure plate should extend 1" above the top of the pressure plate. Press this into the gasket reglet of the upper pressure plate and seal the ends of the gaskets together.
5. Place backer rod and sealant into the gap between the vertical pressure plates.
6. Seal the horizontal pressure plates to the verticals (Figure 42).

Stack head glazing bead:

1. Install the gasket following the same procedure as the pressure plate.
2. Install the glazing bead into the stack head and seal ends to the vertical pressure plate in the same manner as the pressure plate.

Figure 42



Section 7: Captured System Perimeter Pressure Plates

Note: Clean surface with alcohol prior to applying sealant.

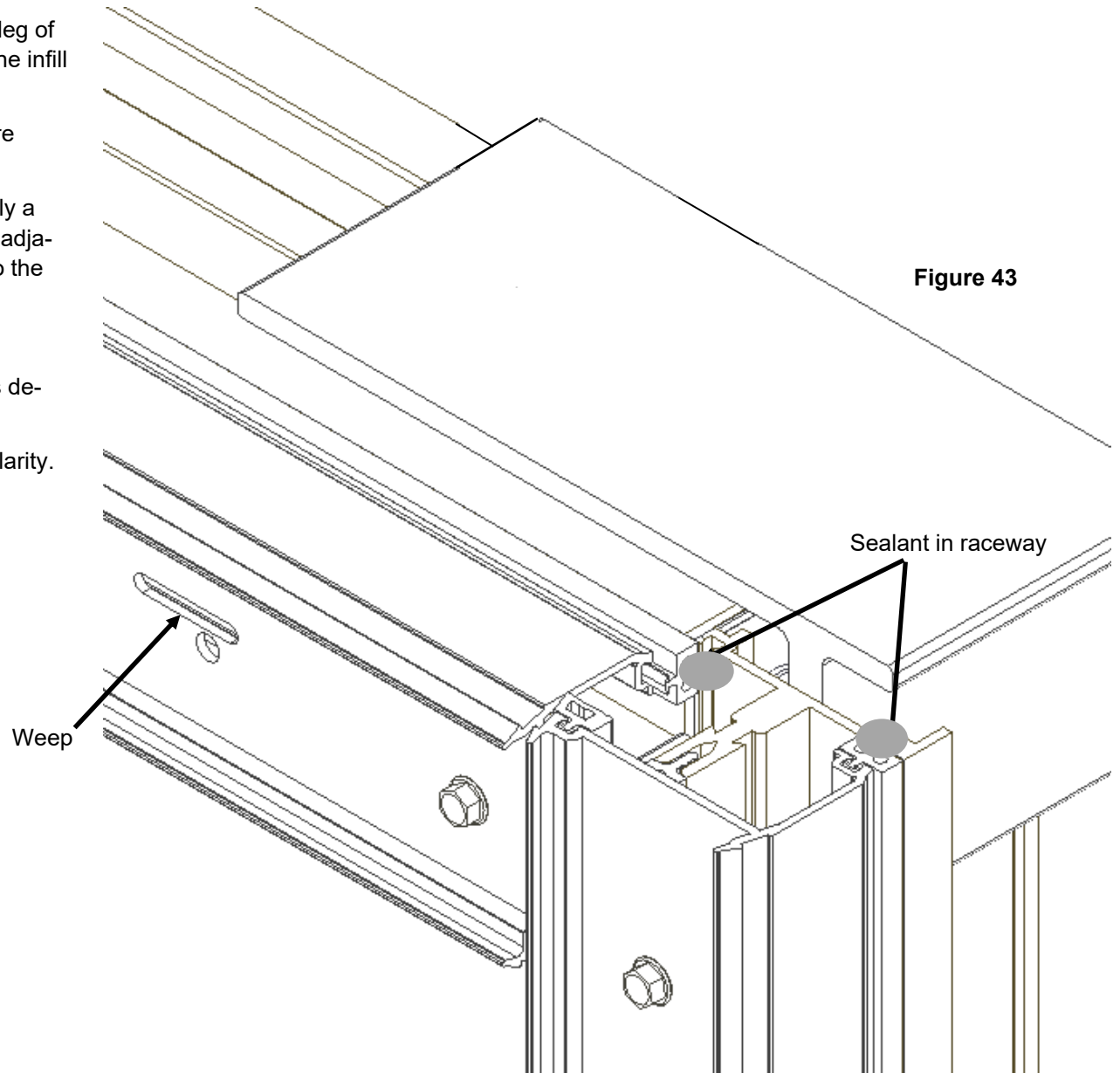
Note: A different gasket may be required in the return leg of the perimeter pressure plate than the gasket used at the infill side of the perimeter pressure plate.

Note: Preparation and installation of perimeter pressure plates is similar to intermediate pressure plates.

1. Before installing the perimeter pressure plate, apply a continuous bead of sealant in the gasket raceway adjacent to the building condition, and marry sealant to the perimeter sealant. (Figure 43)

Note: Head and sill pressure plate must be weeped as described on page 26.

Note: Condition and perimeter sealant not shown for clarity.



Section 8: Captured System Covers

Cover Prep and installation

Note: Clean surface with alcohol prior to applying sealant.

1. Each horizontal cover must have a 5/16" weep hole 2" from each daylight opening. This weep hole is typically located on the bottom side of the cover.
2. Install vertical covers first, then apply horizontal covers.
3. Once the vertical covers are installed, tool sealant from horizontal pressure plates to vertical covers.
4. Horizontal covers are to be cut 1/8" less than the DLO and the difference split on both ends (1/16" per end).
5. To install the covers, first engage one side, then use a wood block (to protect the cover from damage) and mallet to engage the opposite side.

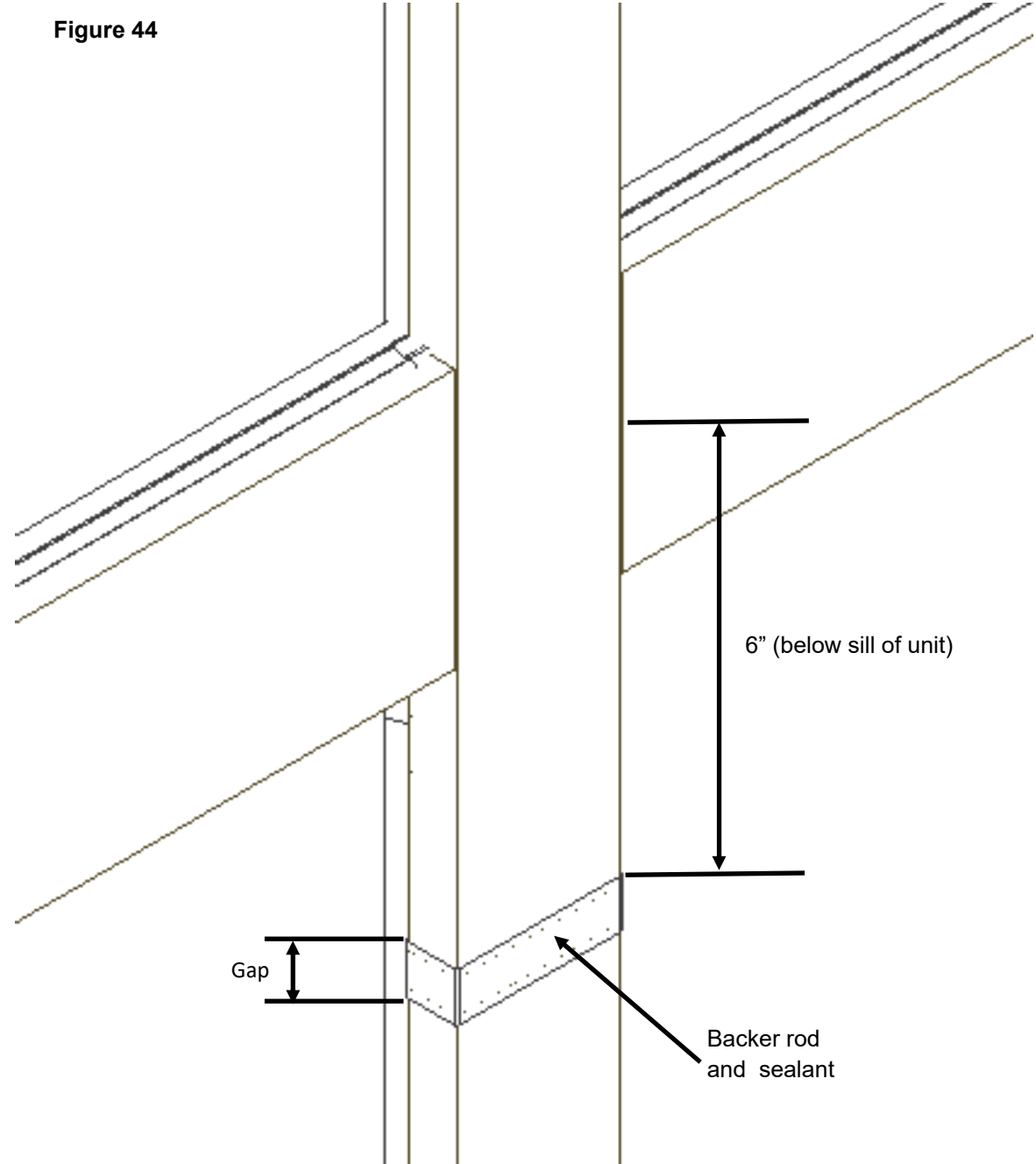
Special condition at horizontal stacks

1. The upper cover should extend 3" below the bottom of the pressure plate joint, 6" below the sill of the upper unit (Figure 44).
2. There should be a gap between the upper and lower cover. This gap should match the gap between the stack head and stack sill, per contract documents or 1/2" if not specified (Figure 44).
3. Fill the gap with backer rod, seal and tool smooth (Figure 44).

Note: If horizontal covers run continuously across the elevation, the sum of the movement in each unit must equal the allowance between covers for movement. (i.e. If a horizontal crosses 4 units with 1/8" per unit then the cover splice joint should be 1/2").

Note: Splice joints in covers should be offset from splices in pressure plates.

Figure 44



Section 9: SSG System Perimeter Adapters

Note: Clean surface with alcohol prior to applying sealant.

1. Drill .180" diameter holes into the adapter body along the center-line (0.468" in Figure 45) starting 1" from the end and 9" O.C..

Note: Typically, vertical perimeter adapters will run through and horizontals will terminate into them.

2. Prior to attaching the perimeter adapters, install a continuous bead of sealant into the gasket raceways at any place that will be covered by an adapter.
 - At the perimeter jambs, head, and sill there will be a continuous line of sealant through the length of the raceways.
 - Face seal anywhere that an adapter intersects a mullion (See Figure 46, and figure 42 on page 28).

Note: At split jambs, this will be where the adapter intersects the split mull.

3. Place the adapters in the proper location and attach them with a #8 sheet metal screw.

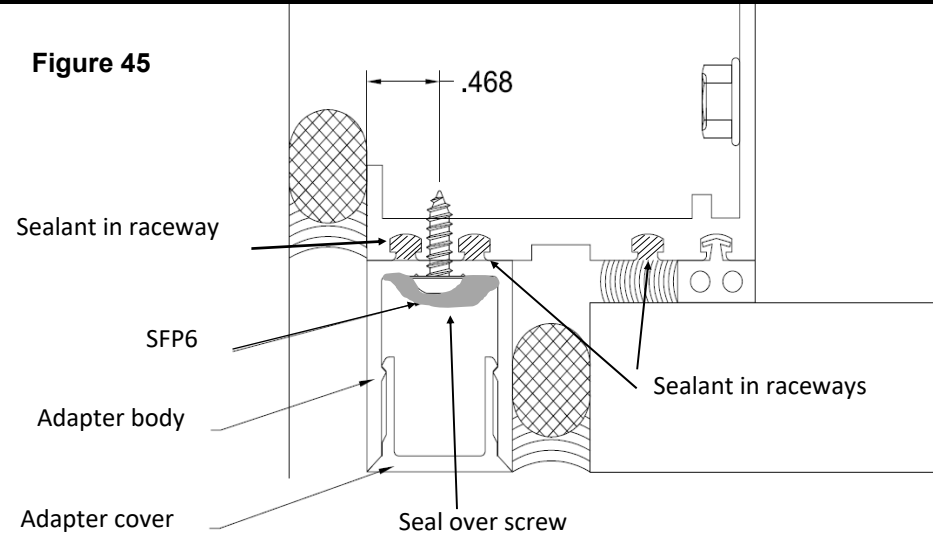
Note: It will be required to match drill .140" diameter holes into the mullion to properly attach the adapter to the mullion.

4. Cover all screw heads with sealant and tool to the face of the adapter. (Figure 45)
5. After the adapter body is attached, plug all open ends with backer rod and sealant before snapping on the adapter cover. (Figure 45)
6. At vertical and horizontal joints, butt seal and tool as required. (Figure 46)

(condition and perimeter seals not shown for clarity)

(continued on next page)

Figure 45



Sealant in gasket raceways and across face of verticals between raceways

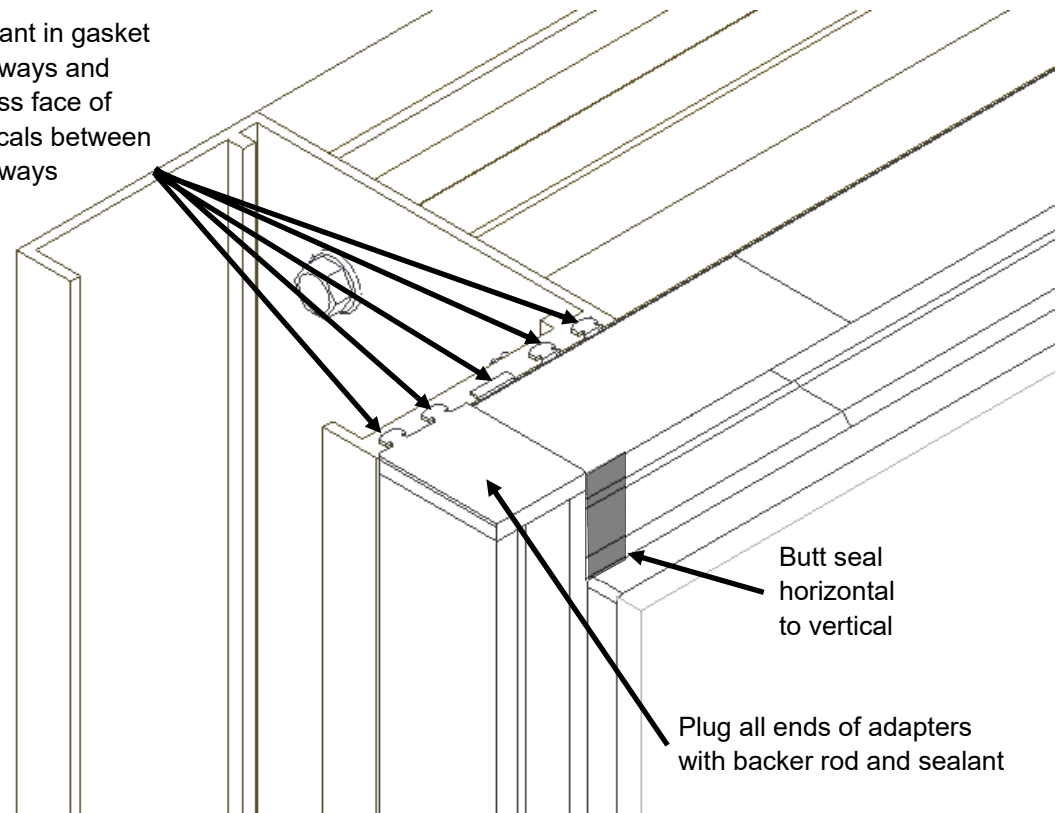


Figure 46

Section 9: SSG System Perimeter Adapters, cont.

(continued from previous page)

Note: Clean surface with alcohol prior to applying sealant.

7. At horizontal stacks, the perimeter adapter will die into the stack sill and the stack head. Seal the adapter to the tongue of the stack head and stack sill (Figure 47).
8. At the joints of the vertical split mull, a minimum of 1/8" must be left between the perimeter adapters. Apply sealant into gasket raceways and the joint between the split mulls. Face seal the adapter to the split mull (Figure 48) (head condition shown, sill is similar).
9. After perimeter adapter bodies are properly attached and sealed per previous page, apply a bead of sealant to both legs of the adapter covers and install them. (Figure 49)

Note: Condition and perimeter seals not shown for clarity.

Figure 47

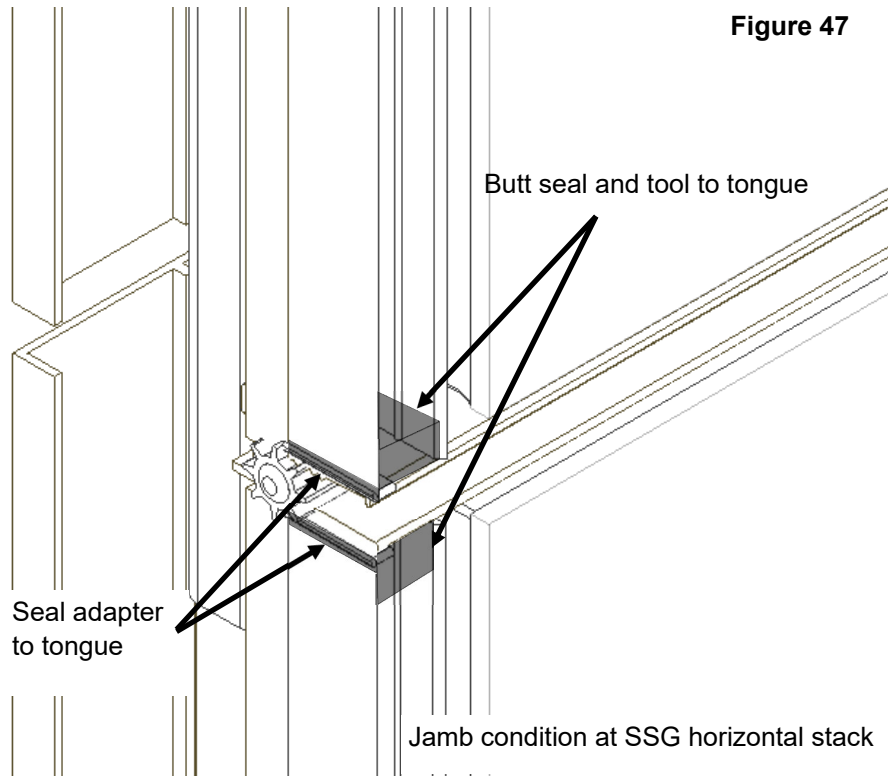


Figure 48

Head condition at SSG vertical split mulls

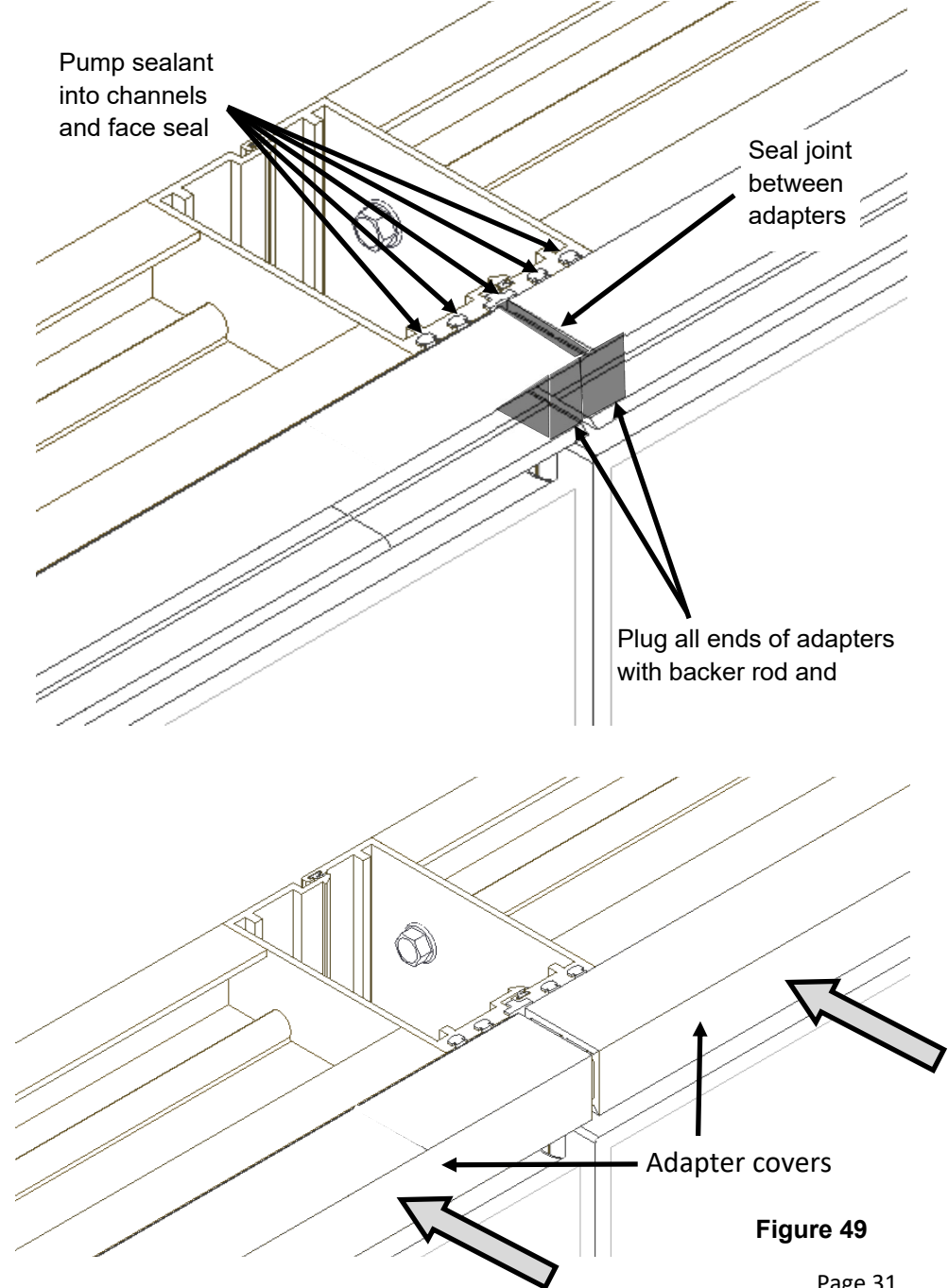


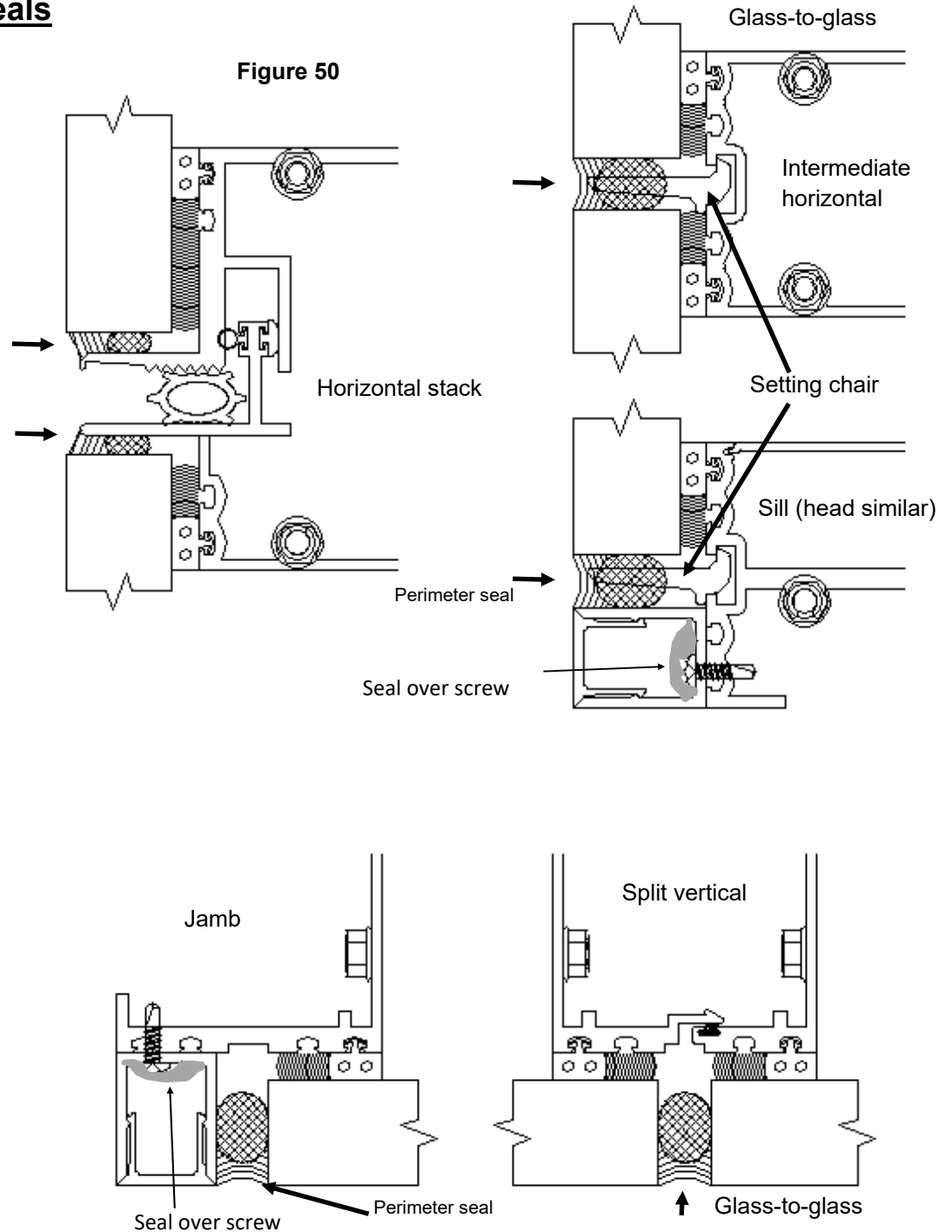
Figure 49

Section 10: SSG System Exterior Weather Seals

SSG exterior weather seals:

1. At all glass to glass joints, insert backer rod between the two lites of glass. (Figure 50, Intermediate horizontal and split vertical)
2. Insert backer rod between the lite and the perimeter adapter at perimeter jamb, head, and sill locations. (Jamb and sill shown.)
3. Insert backer rod between the lite and the tongue of the mullion at horizontal stack head and sill members .

Note: Apply the exterior weather seals as recommended by the sealant manufacturer.



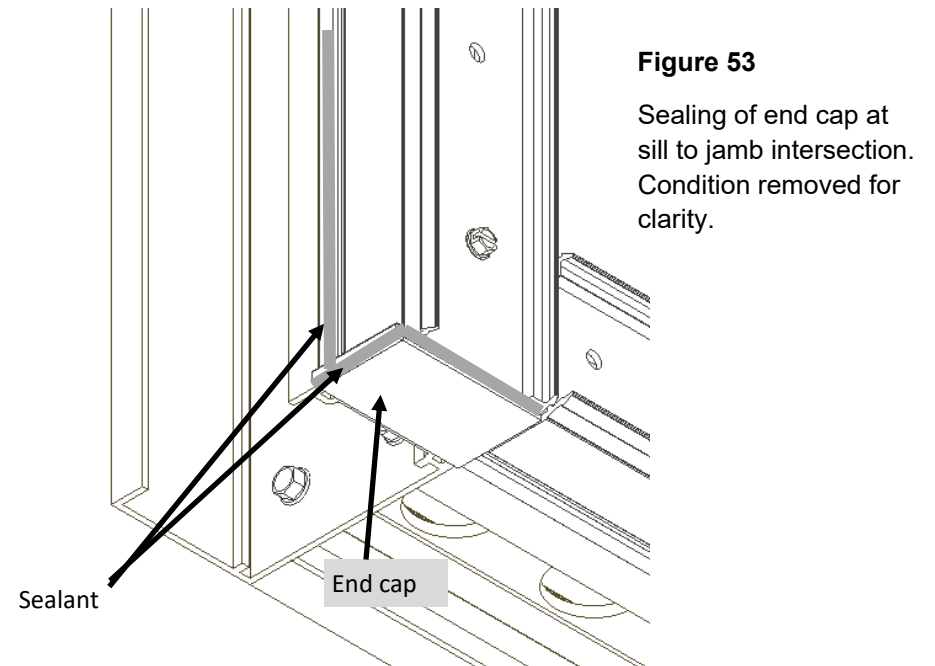
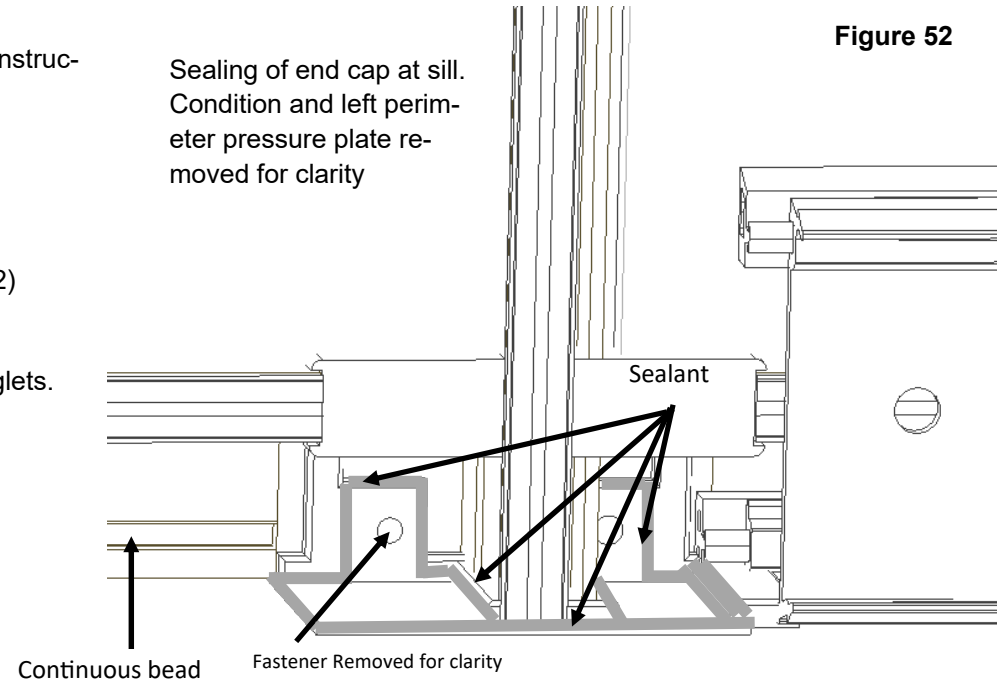
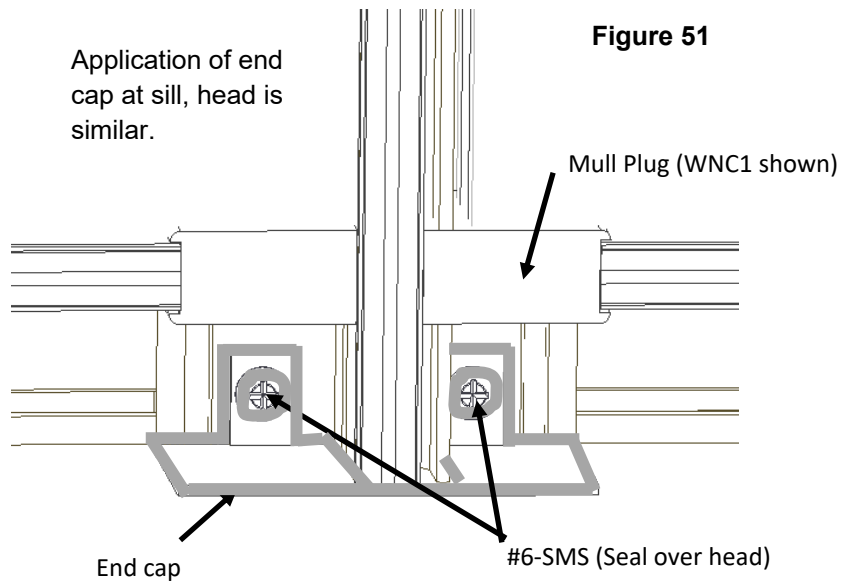
Section 11: Optional Perimeter Sealing

Note: these steps are done in addition to the steps listed in the rest of these instructions.

Note: Clean surfaces with alcohol prior to applying sealant.

1. Apply end cap at head and sill end of all vertical mullions using #6 SMS. (Figure 51)
2. Seal over the screw head and around the tabs on the end cap. (Figure 52)
3. Apply sealant into the gasket reglets of the mullion. (Figure 52)
4. Apply a continuous bead of sealant down all perimeter mullion gasket reglets.
5. Seal the mullion faces and tongues to the end cap.
6. Apply horizontal perimeter pressure plates.
7. Seal the perimeter pressure plates to the end cap. (Figure 52)
8. Install vertical pressure plates.
9. Seal the leg of the jamb pressure plate to the end cap. (Figure 53)

(continued on next page)



Section 11: Optional Perimeter Sealing, cont.

(continued from previous page)

Note: These steps are done in addition to the steps listed in the rest of these instructions

Note: End cap shown in Figure 54 (Custom Part).

10. Placement of end cap at typical captured sill is shown in Figure 56, head condition is similar.

11. Placement of sealant line shown in Figure 55.

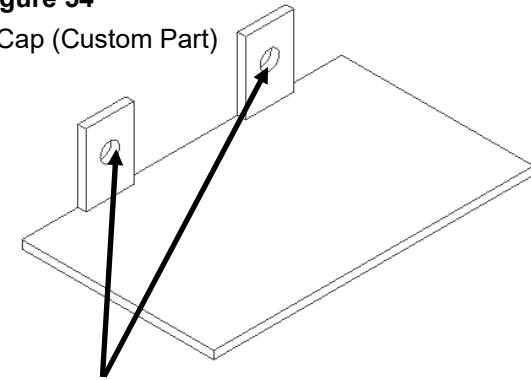
12. Sealant type and joint width per contract documents.

13. See sealant manufactures instructions for surface preparation.

Note: Take care not to cover weeps if perimeter sealing in this way.

Figure 54

End Cap (Custom Part)



Holes must be slotted or oversized to allow for 1/16" movement left and right.

Figure 55

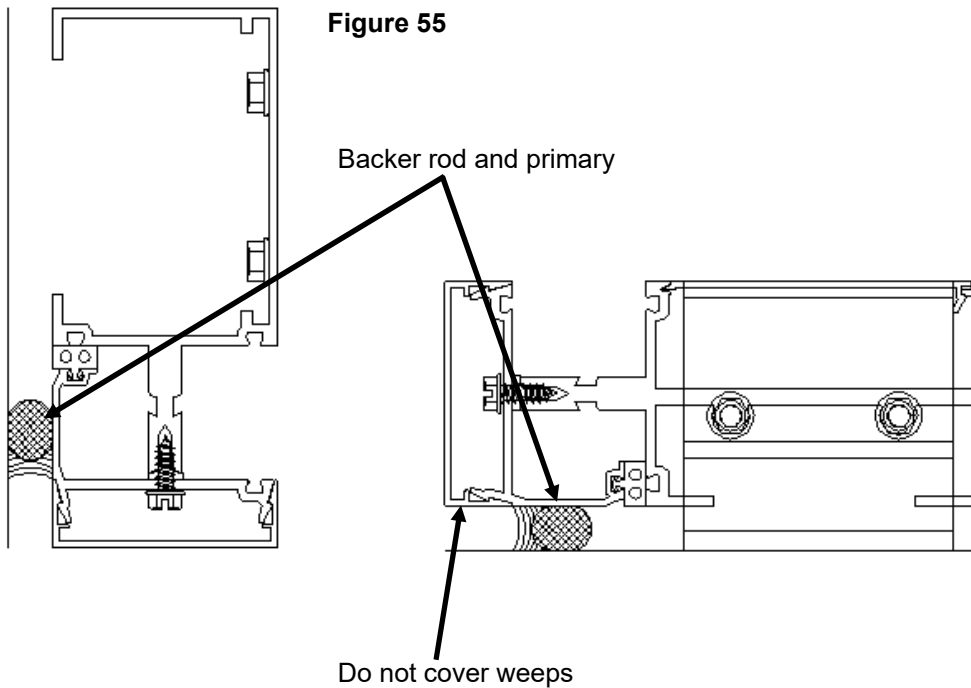


Figure 56

