

**GENERAL IMPACT INSTALLATION INSTRUCTIONS; FOR JOB SPECIFIC APPLICATION, PLEASE CONTACT FACTORY TO VERIFY THAT SYSTEM MEETS APPLICABLE CODES.**

**HANDLING, STORING, AND PROTECTION OF ALUMINUM**

The material must be protected against damage. The following precautions are recommended to assure early acceptance of your products and workmanship.

**A. HANDLE CAREFULLY** - Don't drop from the truck. Stack with adequate separation so material will not rub together. Store off the ground. Protect against elements and other construction trades. Wear hand protection to prevent injury due to sharp edges of cut extrusions.

**B. KEEP MATERIAL AWAY FROM WATER, MUD AND SPRAY** - Prevent cement, plaster, or other materials from damaging the finish.

**C. PROTECT THE MATERIALS AFTER ERECTION** - Protect by wrapping with Kraft paper or by erecting Visqueen or canvas splatter screen. Cement, plaster, terrazzo, other alkaline solutions and acid based materials used to clean masonry are very harmful to the finish and should be removed with water and mild soap IMMEDIATELY.

**GENERAL INSTALLATION NOTES**

The following practices are recommended for all installations:

**A. CHECK SHOP DRAWINGS, INSTALLATION INSTRUCTIONS and GLAZING INSTRUCTIONS** to become thoroughly familiar with the project. The SHOP DRAWINGS take precedence and include specific details for the project. The INSTALLATION INSTRUCTIONS are of a general nature and cover most common conditions.

**B. All materials are to be INSTALLED PLUMB, LEVEL, AND TRUE.**

**C. All work should start from bench marks and/or column lines** as established by the ARCHITECTURAL DRAWINGS and the GENERAL CONTRACTOR. Check mullion spacing from both ends of the masonry opening to prevent dimensional buildup of day light opening.

**D. Make certain that construction which will receive your materials is in accordance with the contract documents.** If not, notify the GENERAL CONTRACTOR IN WRITING and resolve differences before proceeding with your work.

**E. Isolate all aluminum to be placed directly in contact with uncured masonry or incompatible materials with a heavy coat of zinc chromate or bituminous paint.**

**F. Check all materials on arrival for quantity and be sure you have everything required to begin installation.**

**G. Sealants must be compatible with all materials with which they have contact, including other sealant surfaces.** Consult with sealant manufacturer for recommendations relative to joint size, shelf life, compatibility, priming, tooling, adhesion, etc.

**H. FASTENING** - "Fastening" means any method of securing one part to another or to adjacent materials. These instructions specify only those fasteners used within the system. Due to varying perimeter conditions and job performance requirements, anchor fasteners are not specified in these instructions. For anchor fastening, refer to the Shop Drawings or consult the fastener supplier.

**I. CHECK OPENINGS** - Make certain that the opening which will receive your materials is in accordance with the contract documents. If not, notify the GENERAL CONTRACTOR IN WRITING and resolve differences before proceeding with your work.

**J. BUILDING CODES** - Glass and glazing codes governing the design and use of products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility for these design considerations. It is the responsibility of the owner, specifier, architect, general contractor and the installer to make these selections in strict conformance with all applicable codes.

**K. EXPANSION JOINTS** - Expansion joints and perimeter seals shown in these instructions and in the shop drawings are shown at normal size. Actual dimensions may vary due to perimeter conditions and /or difference in metal temperature between the time of fabrication and time of installation. For example, a 12 foot unrestrained length of aluminum extrusion can expand or contract 3/32" over a 50° F temperature change. Any movement potential should be accounted for at the time of installation.

**L. FIELD TESTING** - It is recommended that a Water Hose Test be conducted once a sufficient portion of the framing is installed, glazed and caulked to ensure proper installation. The Water Hose Test shall be conducted in accordance with AAMA 501.2. In addition, larger projects should have periodic Water Hose Tests as additional precautionary measures.

**1630 SS IR NOTES**

**THESE INSTRUCTIONS ARE BASED ON LARGE MISSILE IMPACT INSTALLATION.** For small missile impact reference page 12.

1600 SS IR is available in two systems depths 7-13/16" and 8-13/16". Both system depths utilize 7-13/16" horizontal members.

Glass bite is 7/8" at verticals and horizontals. Single corner tubular mullion glass bite is 3/4". Glass sizes must be calculated from approved shop drawings.

Refer to corresponding test drawings for sealant and anchor information. Test may be job specific, so please contact a Kawneer representative for correct test reports and drawings. Unless otherwise specified, it is recommended that silicone sealant be used for all internal seals.

Sealant must be applied per the sealant manufacturer's recommendations and pass all adhesion and compatibility testing. At all joint seals, sealant must adhere to metal, gaskets, thermal separator and joint plug materials. Clean all surfaces prior to application of sealant and prime where necessary to achieve proper adhesion.

Hurricane impact curtain walls require labels to be applied after assembly, glazing and installation. These labels identify that the curtain walls have been assembled and glazed as tested for hurricane impact. Every floor level of each elevation of a curtain wall requires a label. As viewed from the interior, labels shall be placed on the right side bay on the right side underside surface of a low lying horizontal, or in the right upper inside vertical surface close to the corner if there are no intermediate horizontal members. Labels are to be applied by the glazing contractor.

**CHECK OPENINGS**

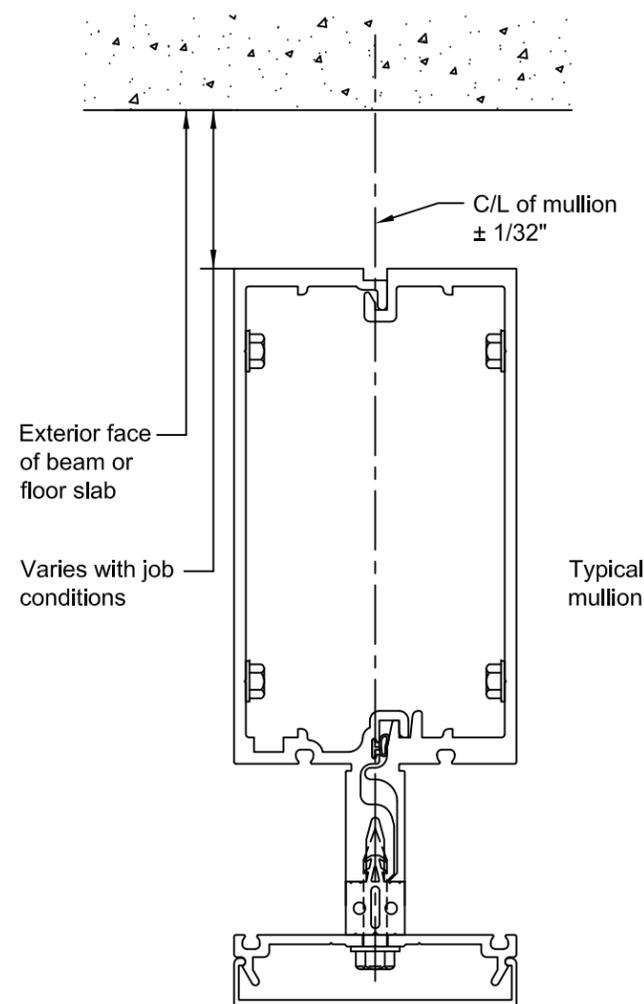
Elevations and slabs must be within adjustment of anchoring system. See approved shop drawings for allowable adjustment.

Anchoring surfaces of perimeter construction must be level and plumb within the adjustment limits of the head, sill and jamb. See approved shop drawings for allowable adjustment.

**LAYOUT ANCHOR AND MULLIONS CENTERLINES**

Use wall lines established by the general contractor. On each floor lay out a reference line to establish in and out wall locations.

Use column center lines established by the general contractor. On each floor lay out mullion center lines and anchor center lines.

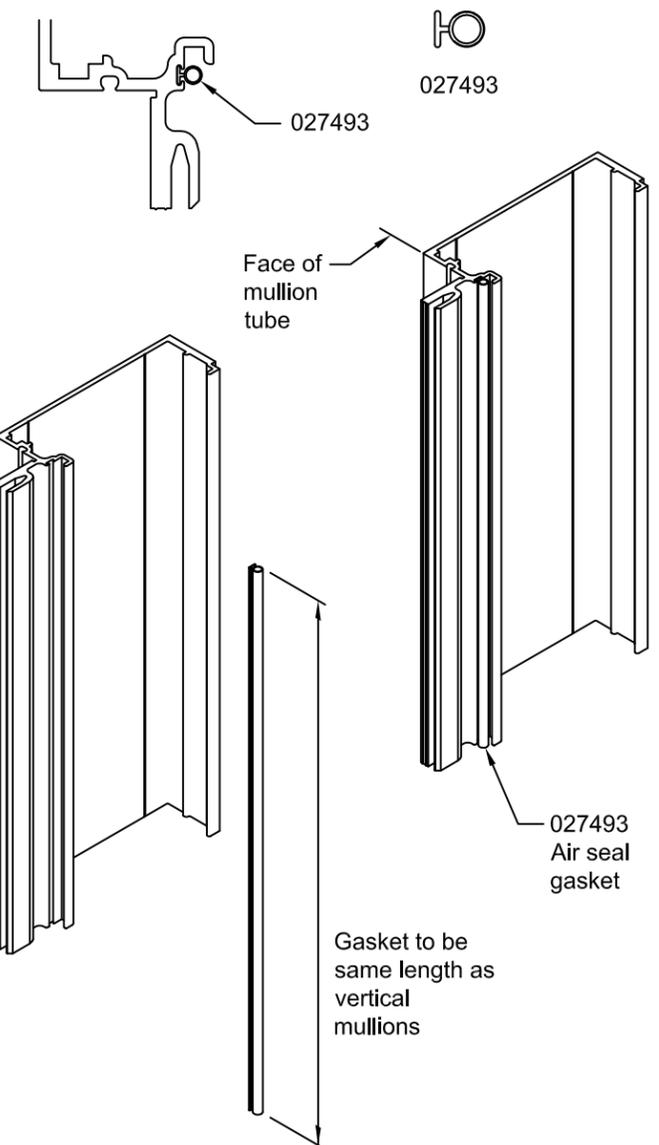


See approved shop drawings for anchor lay outs.

THESE DRAWINGS ARE THE SOLE AND EXCLUSIVE PROPERTY OF KAWNEER AND CONTAIN SENSITIVE, PRIVILEGED OR CONFIDENTIAL INFORMATION WHICH MAY BE USED ONLY FOR ITS BENEFIT. THE DISCLOSURE OF THESE DRAWINGS TO UNAUTHORIZED PERSONS IS STRICTLY PROHIBITED. THIS DOCUMENT AND ALL COPIES MUST BE RETURNED UPON DEMAND. © COPYRIGHT KAWNEER COMPANY, INC., 2012

**INSTALL 027493 VERTICAL AIR SEAL**

Install 027493 air seal into reglet of mullion full length as shown. Stake into reglet after the gasket is centered in the correct position.



1630 SS IR

INSTALLATION INSTRUCTIONS

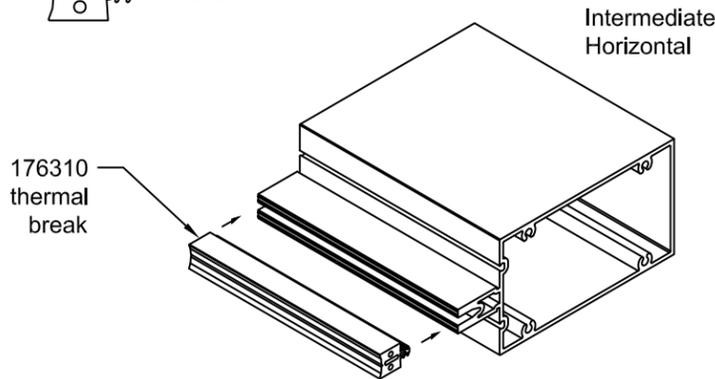
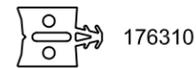
Product Engineering & Development

95519-006  
03/29/13

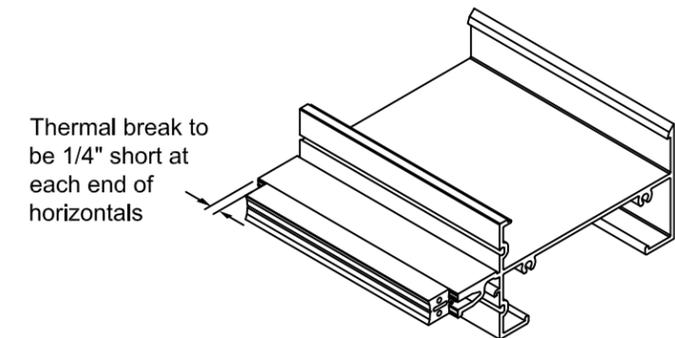
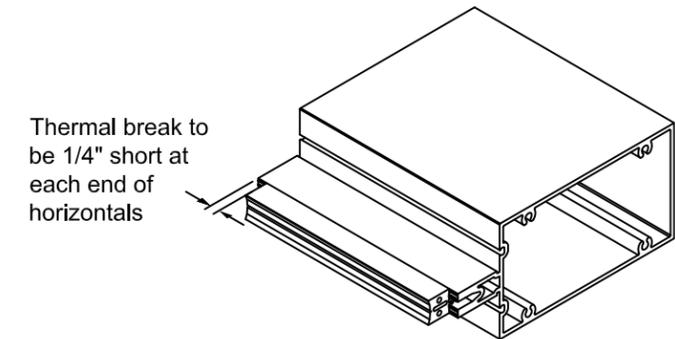
**INSTALL 176310 THERMAL BREAK AT HORIZONTALS**

DO NOT STRETCH WHEN REMOVING FROM COIL, CARTON AND DURING INSTALLATION

Do not install thermal break into verticals at this time.



OPTION TO INSTALL THERMAL BREAK AFTER VERTICALS AND HORIZONTALS ARE ASSEMBLED



Sill horizontal shown  
Head horizontal similar

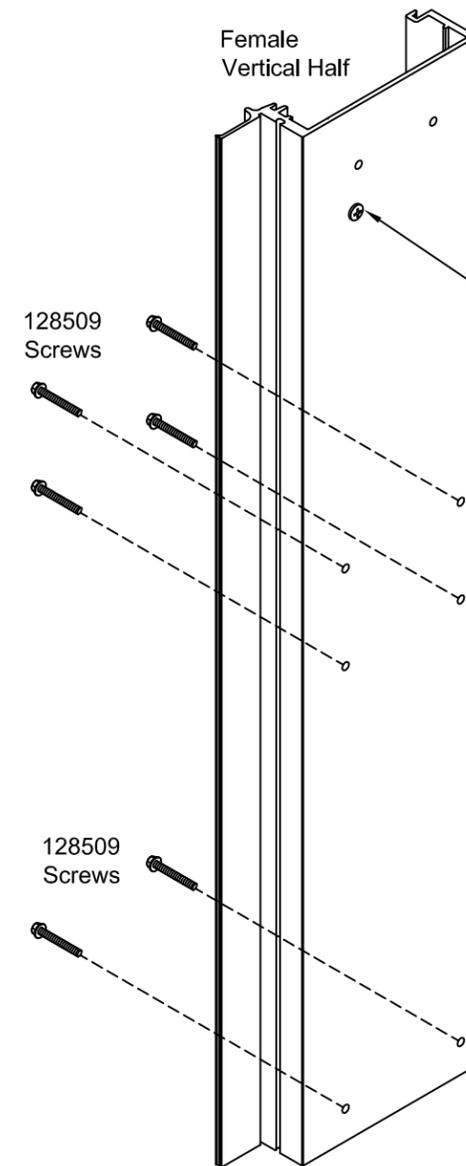
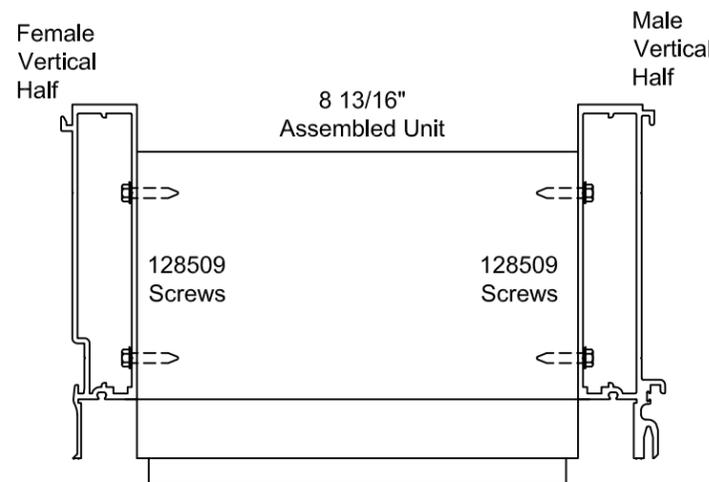
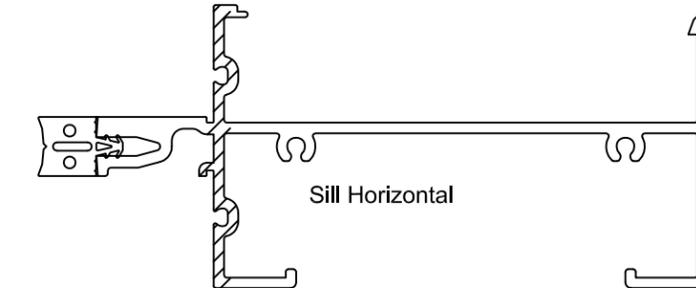
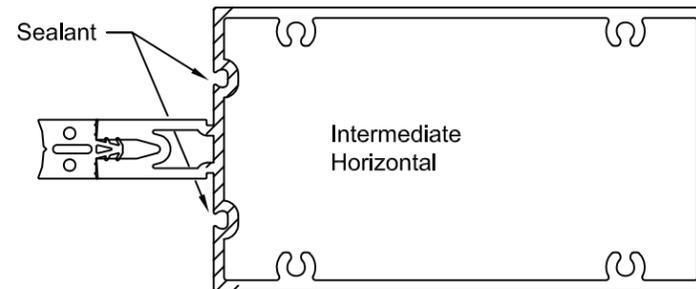
**FRAME ASSEMBLY - Bottom Units**

Assemble verticals to horizontals using 128509 #12 x 1" Hex Washer Head Type AB. Install stop screws as noted.

Frame is shown in the upright position, but may be assembled in any desirable position.

For both horizontal ends apply sealant as shown below and tool sealant after assembly.

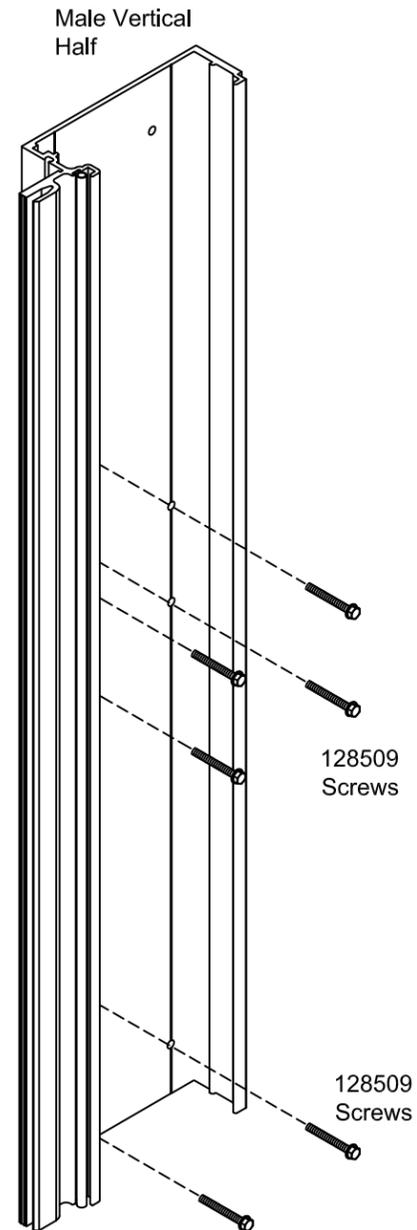
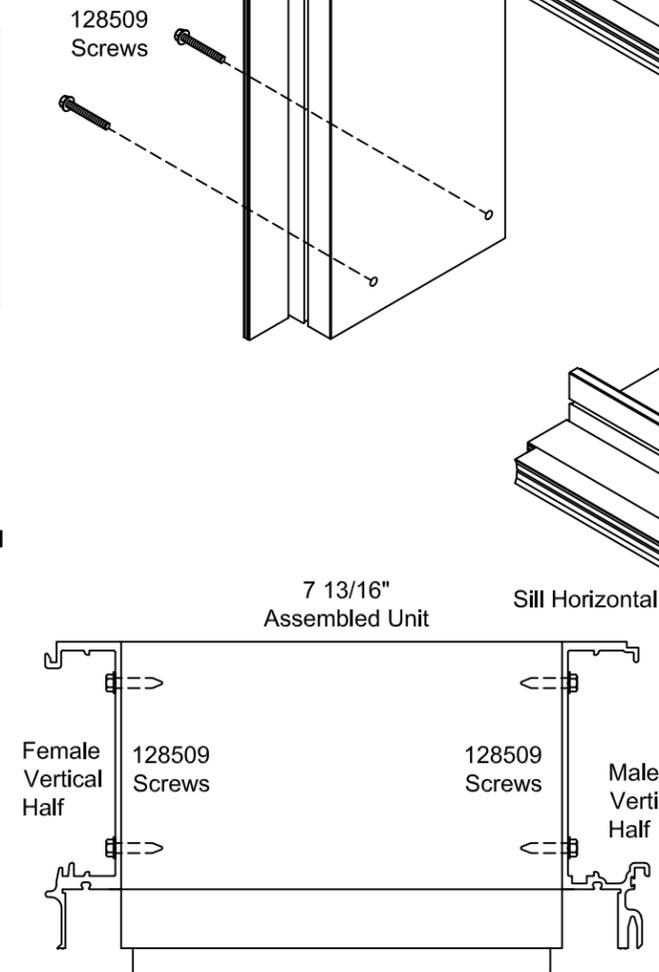
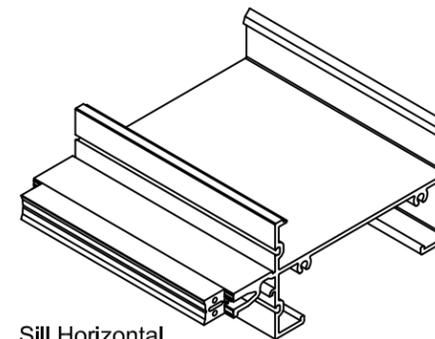
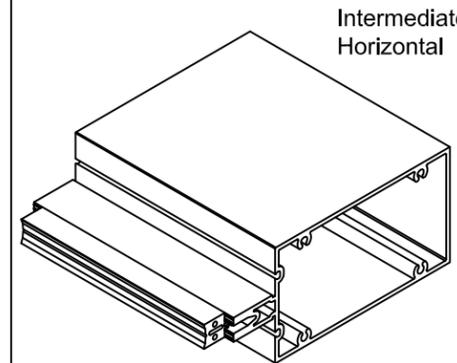
NOTE: FACE SEALING JOINTS AT ALL 4 CORNERS MAY BE DONE IN LIEU OF SEALING HORIZONTAL ENDS PRIOR TO INSTALLING GLAZING GASKETS. REFER TO PAGE 5 OF THE INSTALLATION INSTRUCTIONS.



\*\*Splice prep  
Reference fabrication instructions

Install 128271 sleeve stop screw  
#12 x 5/8" Pan Head Type B

ALIGN FRONT OF HORIZONTAL WITH FRONT OF MULLION PRIOR TO TIGHTENING FRAMING SCREWS



\*\*SINGLE SPAN UNIT NOTE:  
Sleeve prep not required. Skip sheet 3 and go to sheet 4 for head horizontal application.

CONFIDENTIAL AND PROPRIETARY INFORMATION  
KAWNEER COMPANY INC.

THESE DRAWINGS ARE THE SOLE AND EXCLUSIVE PROPERTY OF KAWNEER AND CONTAIN SENSITIVE, PRIVILEGED OR CONFIDENTIAL INFORMATION WHICH MAY BE USED ONLY FOR ITS BENEFIT. THE DISCLOSURE OF THESE DRAWINGS TO UNAUTHORIZED PERSONS IS STRICTLY PROHIBITED. THIS DOCUMENT AND ALL COPIES MUST BE RETURNED UPON DEMAND.  
© COPYRIGHT KAWNEER COMPANY, INC., 2012



1630 SS IR

Product Engineering & Development

INSTALLATION INSTRUCTIONS

95519-006  
03/29/13

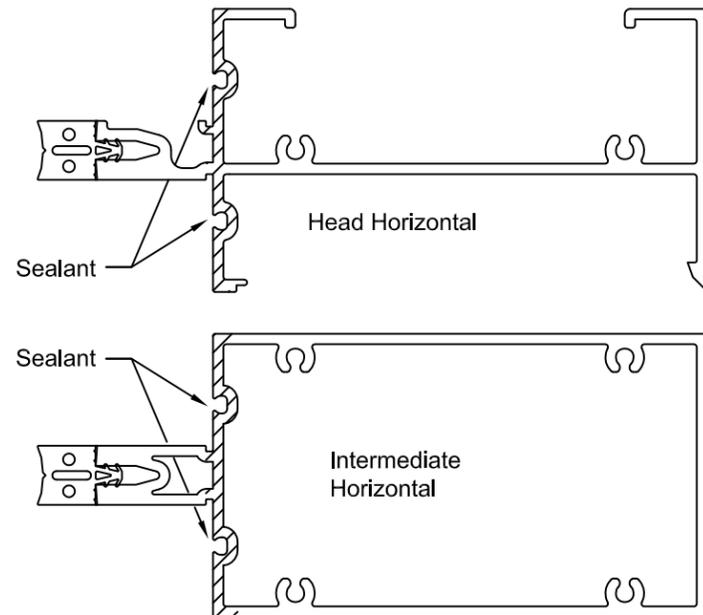
**FRAME ASSEMBLY - Intermediate Units**

Assemble verticals to horizontals using 128509 #12 x 1" Hex Washer Head Type AB. Install splice sleeve at mullion bottom as noted.

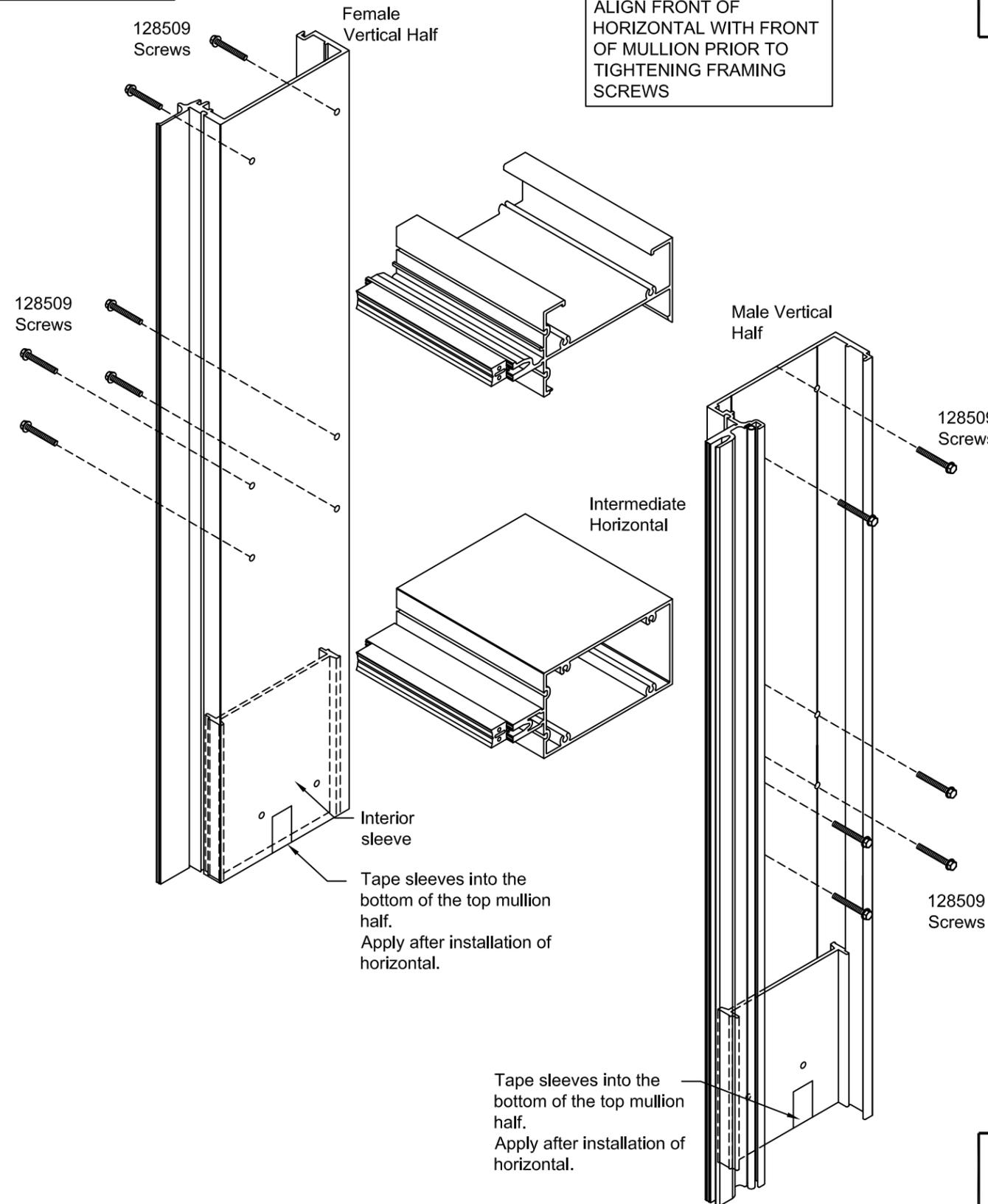
Frame is shown in the upright position, but may be assembled in any desirable position.

For both horizontal ends apply sealant as shown below and tool sealant after assembly.

NOTE: FACE SEALING JOINTS AT ALL 4 CORNERS MAY BE DONE IN LIEU OF SEALING HORIZONTAL ENDS PRIOR TO INSTALLING GLAZING GASKETS. REFER TO PAGE 5 OF THE INSTALLATION INSTRUCTIONS.

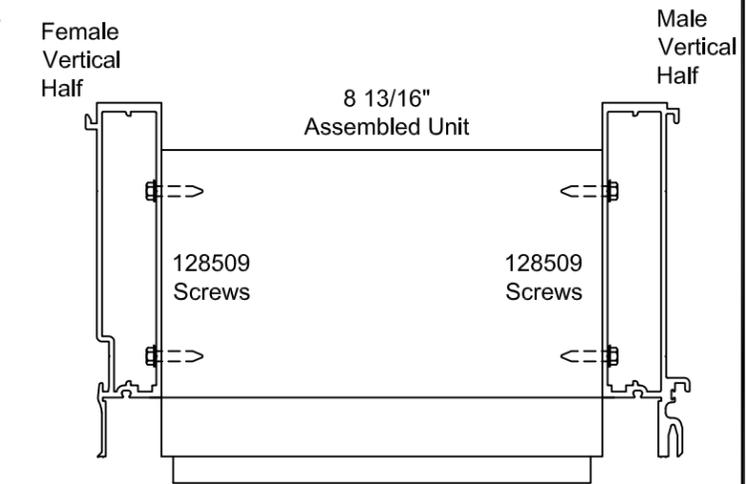
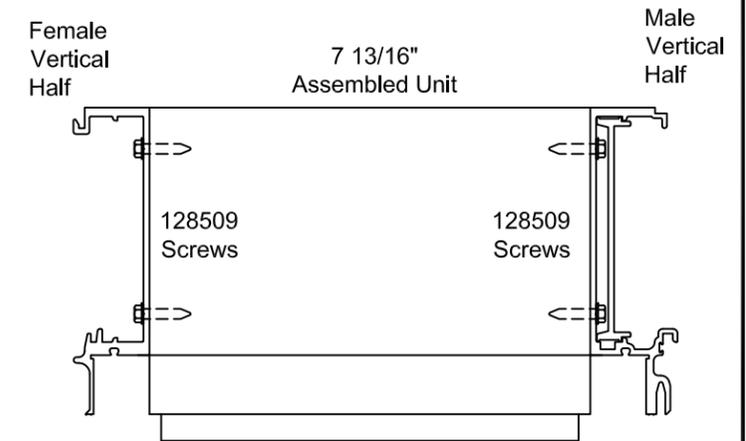


**FRAME ASSEMBLY - Top Units**



CONFIDENTIAL AND PROPRIETARY INFORMATION  
KAWNEER COMPANY INC.

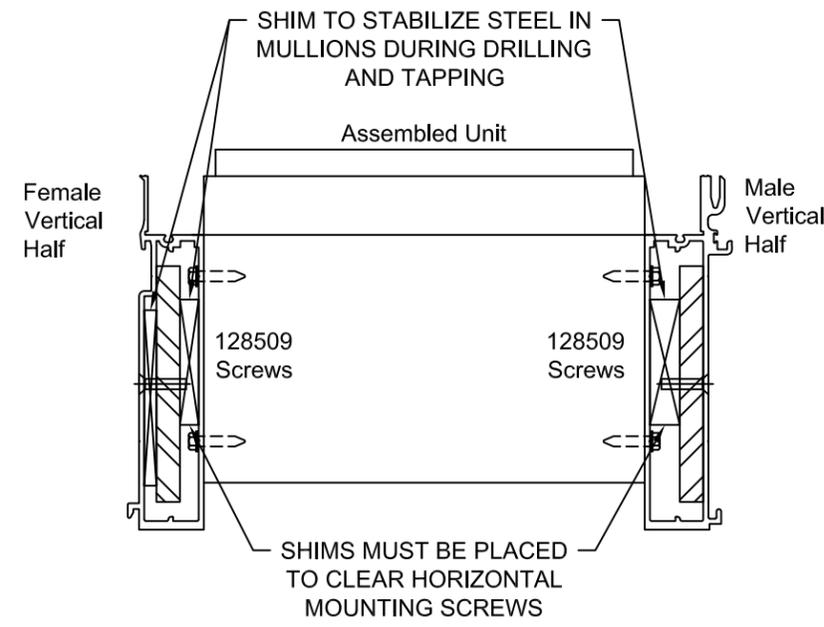
THESE DRAWINGS ARE THE SOLE AND EXCLUSIVE PROPERTY OF KAWNEER AND CONTAIN SENSITIVE, PRIVILEGED OR CONFIDENTIAL INFORMATION WHICH MAY BE USED ONLY FOR ITS BENEFIT. THE DISCLOSURE OF THESE DRAWINGS TO UNAUTHORIZED PERSONS IS STRICTLY PROHIBITED. THIS DOCUMENT AND ALL COPIES MUST BE RETURNED UPON DEMAND.  
© COPYRIGHT KAWNEER COMPANY, INC., 2012



	1630 SS IR
	INSTALLATION INSTRUCTIONS
Product Engineering & Development	
95519-006 03/29/13	176970 (SHT 03 OF 13)

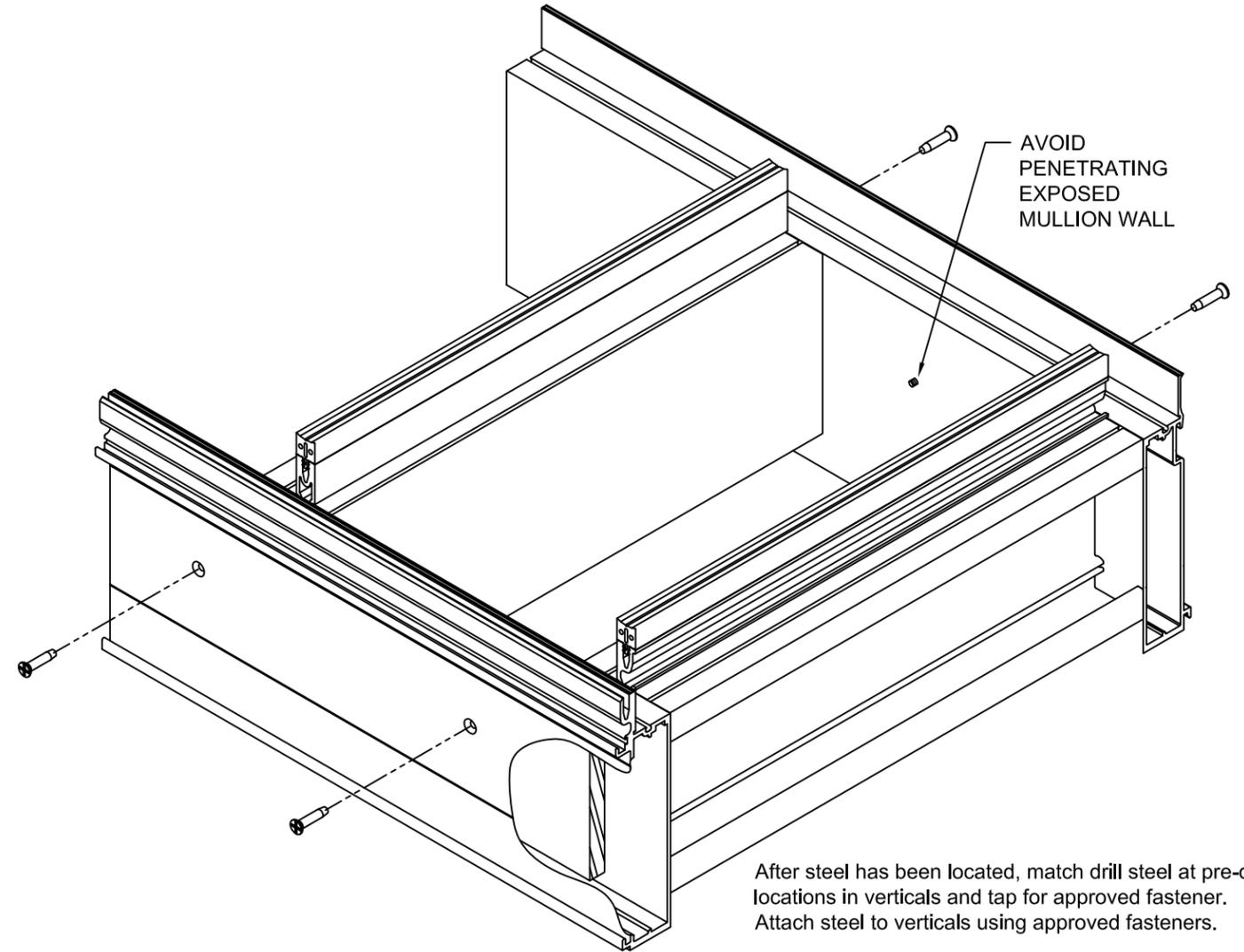
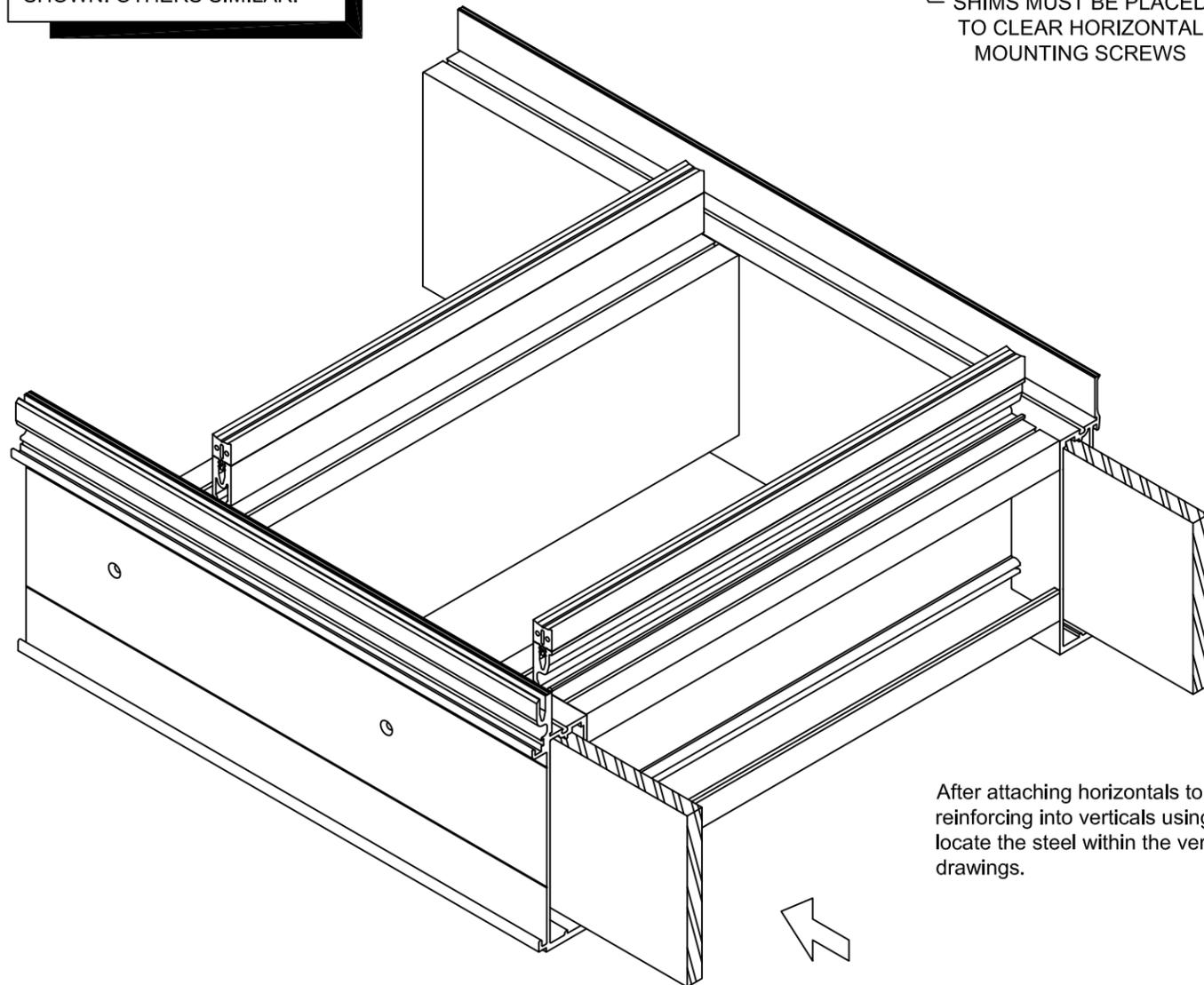
**FRAME ASSEMBLY - Optional Steel Assembly**

Install steel after horizontals have been applied to verticals. Steel to be drilled and tapped according to approved shop details. If steel is drilled and tapped inside vertical mullions, care must be taken to avoid penetrating exposed mullion wall. Install fasteners at specified locations and ensure steel has been secured to the the vertical mullion inner wall.



NOTE:  
FRAMING MEMBERS MUST BE ASSEMBLED PRIOR TO INSTALLING STEEL.

NOTE:  
176229 1/2" x 5" STEEL BAR SHOWN. OTHERS SIMILAR.



1630 SS IR

Product Engineering & Development

INSTALLATION INSTRUCTIONS

95519-006  
03/29/13

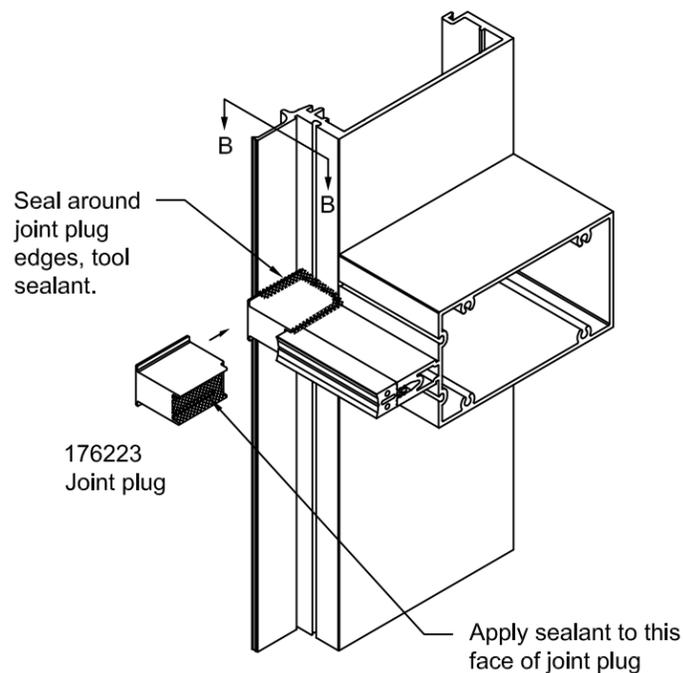
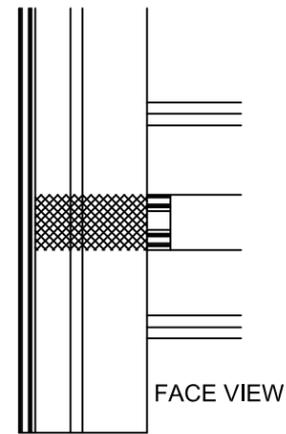
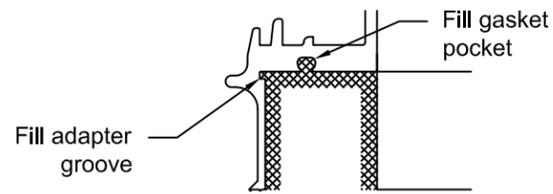
176970 (SHT 04 OF 13)

**INSTALL HEAD, SILL AND INTERMEDIATE JOINT PLUGS**

All surfaces and grooves must be cleaned per the sealant manufacturer's recommendations.

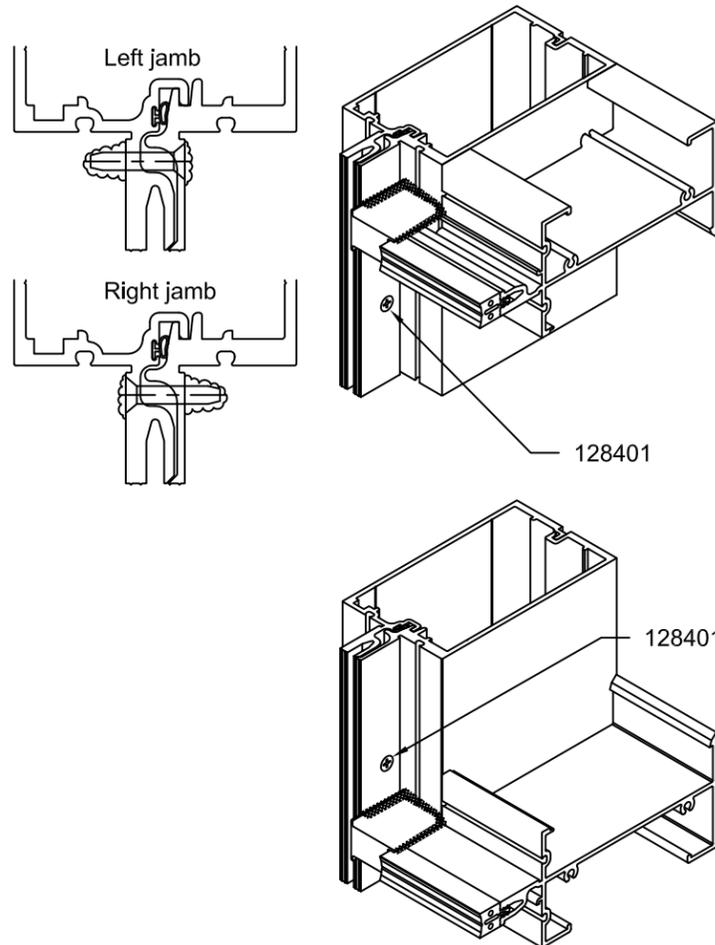
Just before installing joint plugs apply sealant as shown filling gasket pocket and adapter groove.

SECTION A-A



**JAMB UNITS**

At jamb units, mate male and female mullions together. Match drill .154 dia. holes (#23 drill) and fix with 128401 # 10 x 1" flat head fasteners. Fastener locations are 4" from each end and 48" on center. Seal over fastener head and fastener shaft on both sides of the tongue. Tool sealant.



**INSTALL INTERIOR GLAZING GASKETS - DRY GLAZING**

NOTE: IN TEMPERATURES COLDER THAN 50° F, GASKETS SHOULD BE WARMED AND INSTALLED JUST PRIOR TO GLAZING. THIS WILL PREVENT EXCESSIVE GLAZING PRESSURE ON THE GLASS DUE TO COLD, STIFF RUBBER GASKETS.

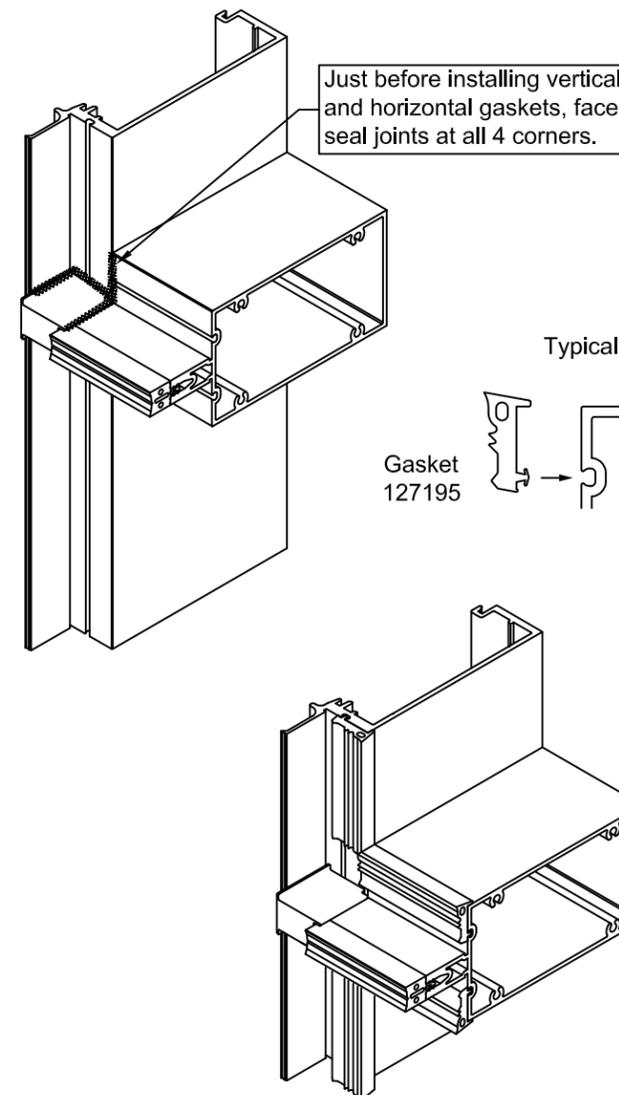
NOTE: IF HORIZONTAL ENDS WERE SEALED DURING FRAME ASSEMBLY, FACE SEALING JOINTS AT ALL 4 CORNERS NOT REQUIRED.

Prior to installing gaskets, make sure all gasket grooves and pockets are clean.

Gaskets can become deformed during storage in cartons. They should be removed from cartons several hours prior to installation and laid flat or hung to allow recovery of correct shape. Temperatures should be at least 50° F to allow this.

Gasket installed length to be daylight opening. Gaskets to be cut long for some "crowd in". Gaskets should never be "stretched to fit".

"Crowd in" to be 1/8" per foot up to 5'-0", 3/16" per foot up to 8'-0", 1/4" per foot over 8'-0".



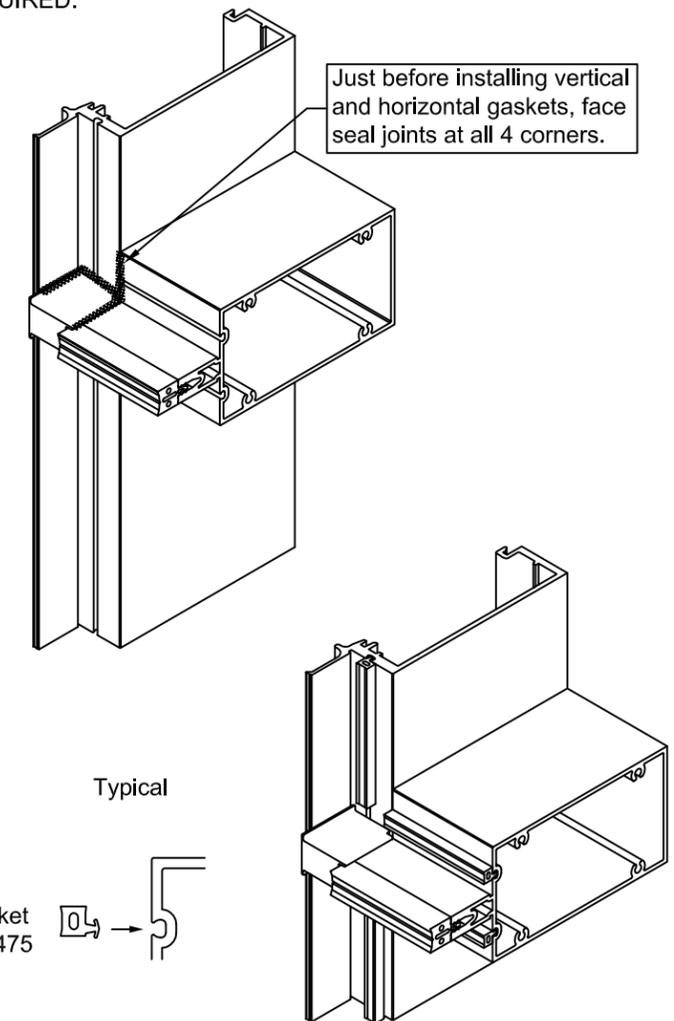
CONFIDENTIAL AND PROPRIETARY INFORMATION  
KAWNEER COMPANY INC.

THESE DRAWINGS ARE THE SOLE AND EXCLUSIVE PROPERTY OF KAWNEER AND CONTAIN SENSITIVE, PRIVILEGED OR CONFIDENTIAL INFORMATION WHICH MAY BE USED ONLY FOR ITS BENEFIT. THE DISCLOSURE OF THESE DRAWINGS TO UNAUTHORIZED PERSONS IS STRICTLY PROHIBITED. THIS DOCUMENT AND ALL COPIES MUST BE RETURNED UPON DEMAND.  
© COPYRIGHT KAWNEER COMPANY, INC., 2012

**INSTALL INTERIOR GLAZING GASKETS - WET GLAZING**

NOTE: IN TEMPERATURES COLDER THAN 50° F, GASKETS SHOULD BE WARMED AND INSTALLED JUST PRIOR TO GLAZING. THIS WILL PREVENT EXCESSIVE GLAZING PRESSURE ON THE GLASS DUE TO COLD, STIFF RUBBER GASKETS.

NOTE: IF HORIZONTAL ENDS WERE SEALED DURING FRAME ASSEMBLY, FACE SEALING JOINTS AT ALL 4 CORNERS NOT REQUIRED.



1630 SS IR

Product Engineering & Development

INSTALLATION  
INSTRUCTIONS

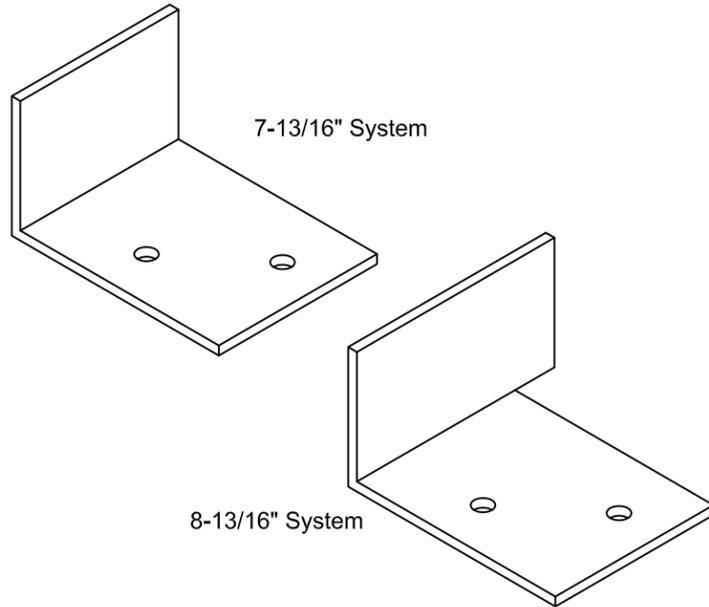
95519-006  
03/29/13

CONFIDENTIAL AND PROPRIETARY INFORMATION  
KAWNEER COMPANY INC.

THESE DRAWINGS ARE THE SOLE AND EXCLUSIVE PROPERTY OF KAWNEER AND CONTAIN SENSITIVE, PRIVILEGED OR CONFIDENTIAL INFORMATION WHICH MAY BE USED ONLY FOR ITS BENEFIT. THE DISCLOSURE OF THESE DRAWINGS TO UNAUTHORIZED PERSONS IS STRICTLY PROHIBITED. THIS DOCUMENT AND ALL COPIES MUST BE RETURNED UPON DEMAND.  
© COPYRIGHT KAWNEER COMPANY, INC., 2012

**ANCHORING OPTIONS**

Where aluminum angle head and sill anchors are required, prep for perimeter fasteners per approved shop drawings.

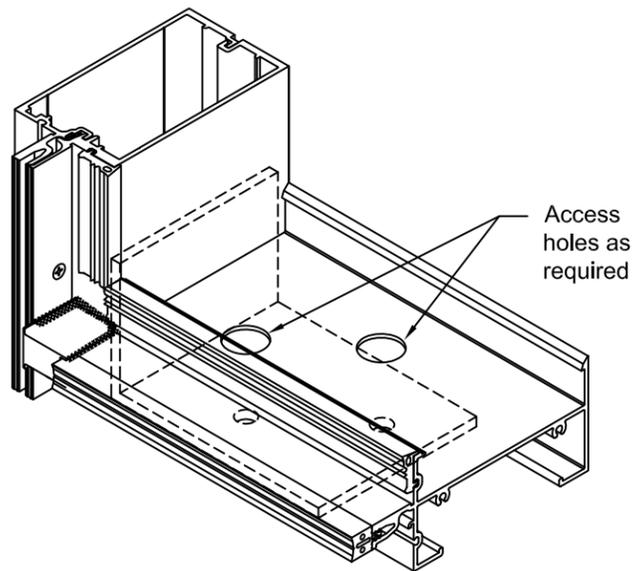


**INSTALL UNITS**

Install assembled frames according to erection drawings. Install anchors into top and bottom of mullions as shown below.

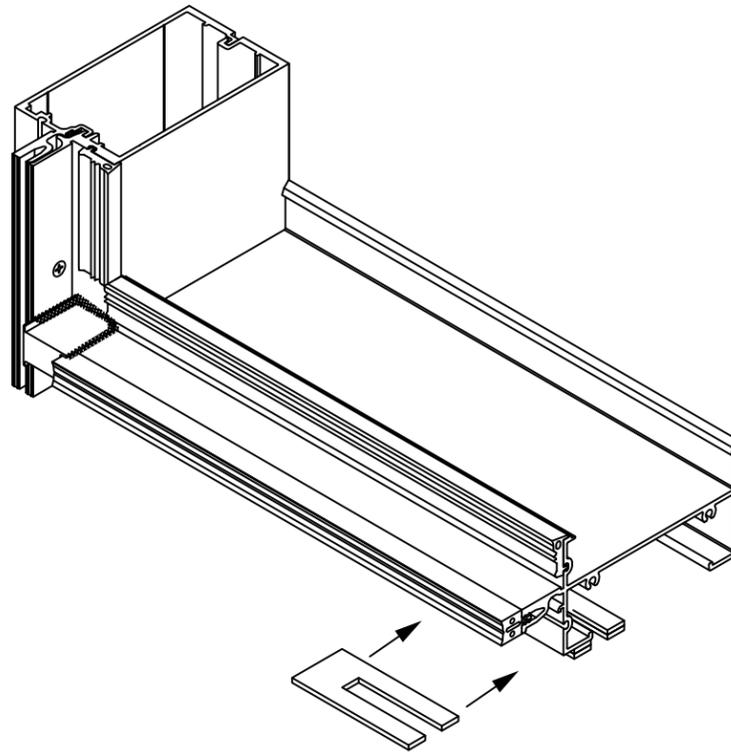
Bring first unit into place and measure opening to make sure you will have a minimum of 1/2" shim space at terminating jamb before anchoring. Shim bottom of mullions and all sill horizontals at setting block locations.

NOTE: Head and sill horizontals will require access holes to install perimeter fasteners.



**SHIM HORIZONTALS**

Shim all sill horizontals at setting block locations per approved shop drawings. Locate shims to allow for sufficient support to the sill horizontal as well as providing adequate space to apply the primary perimeter seal along the shoulder of the mullion.



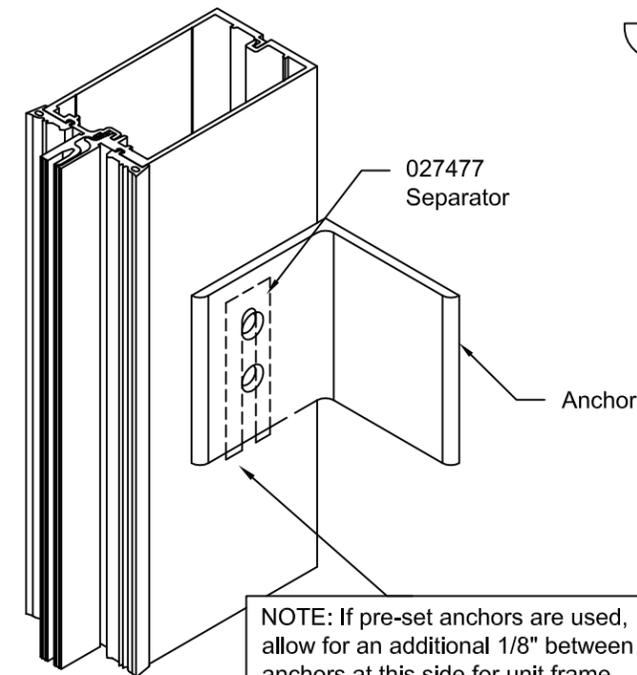
**INSTALL UNITS**

Reference approved shop drawings for anchoring.

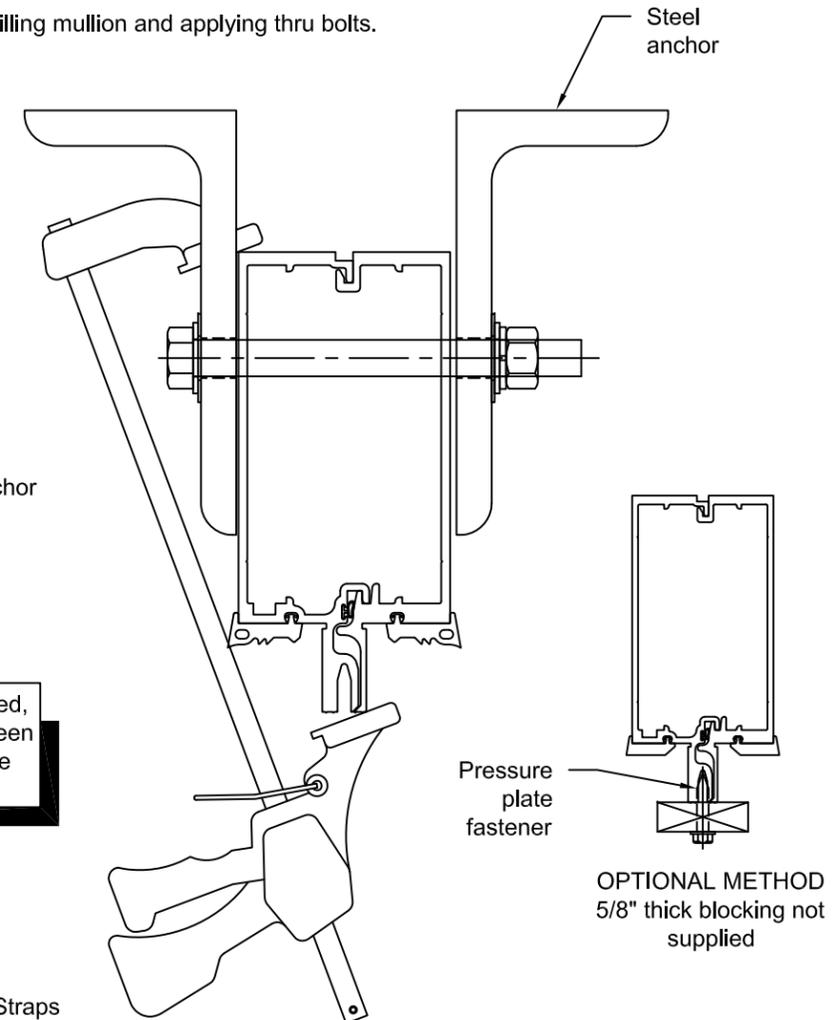
All steel anchors must be separated from aluminum mullions. Use 027477 separators.

Units must be installed level, plumb and square.

Secure frame with clamps. Install next frame prior to match drilling mullion and applying thru bolts.

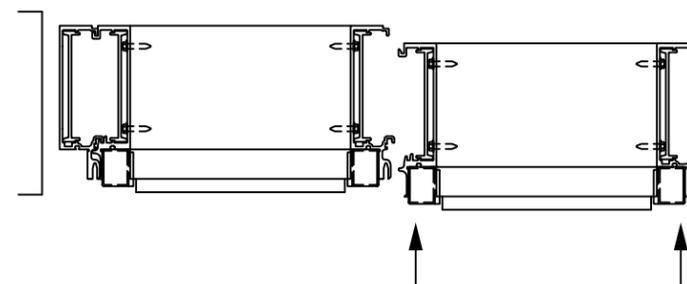


NOTE: If pre-set anchors are used, allow for an additional 1/8" between anchors at this side for unit frame installation. Shim as required.



Install the next unit into place per approved shop drawings. Straps applied to units for hoisting should not interfere with mullion engagement.

NOTE: CHECK OVERALL FRAME DIMENSIONS ABOUT EVERY FIVE UNITS ON LONG RUNS TO AVOID DIMENSIONAL BUILD-UP.



DO NOT OVER TIGHTEN ANCHOR CONNECTIONS. TIGHTEN TO A "SNUG TIGHT" POSITION WITH PARTS BROUGHT INTO GOOD CONTACT. BE SURE ANY SPRING TYPE LOCK WASHERS ARE COMPRESSED. THEN TIGHTEN APPROXIMATELY 1/2 MORE TURN.



1630 SS IR

Product Engineering & Development

INSTALLATION INSTRUCTIONS

95519-006  
03/29/13

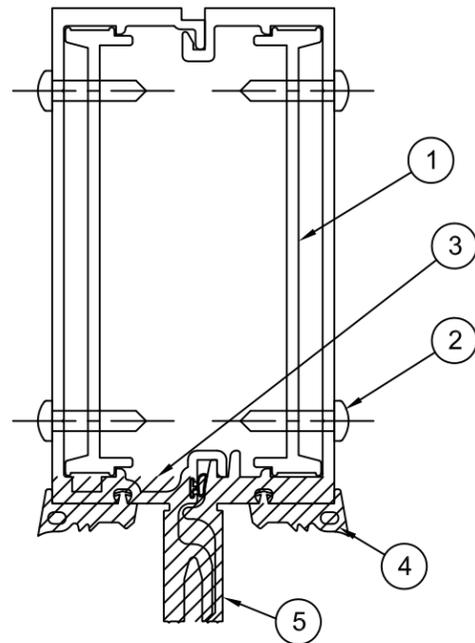
176970 (SHT 06 OF 13)

**SPLICE JOINT SEAL AT EXPANSION JOINT (DRY GLAZED)**

All surfaces and grooves must be cleaned and sealant applied per the sealant manufacturer's recommendations. Tool sealant.

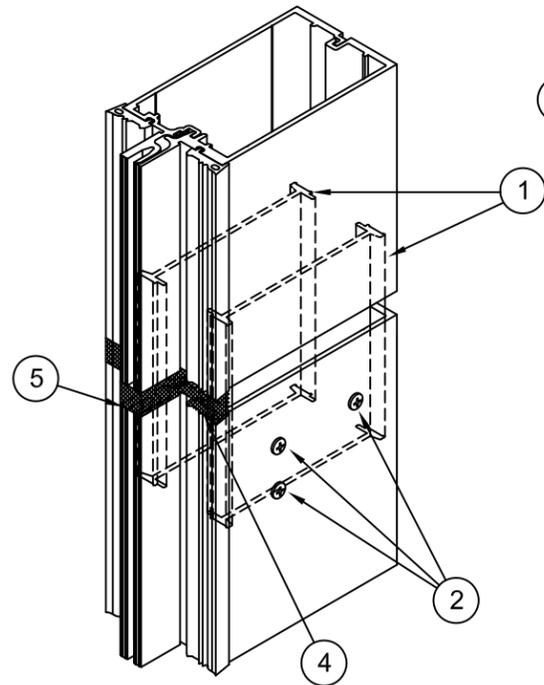
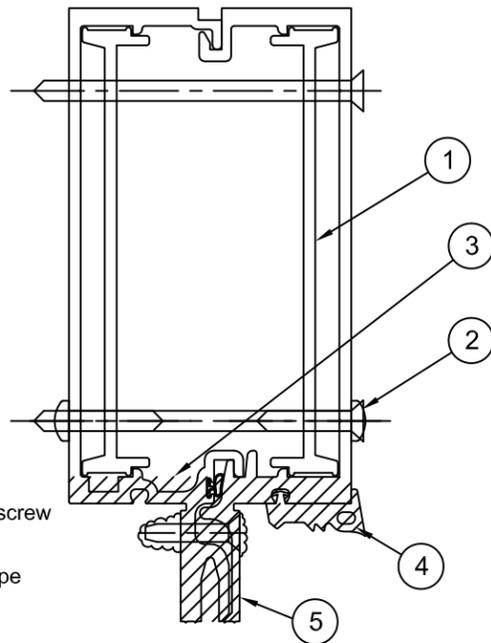
For use with projects not requiring Florida approvals.

**INTERMEDIATE CONDITION**

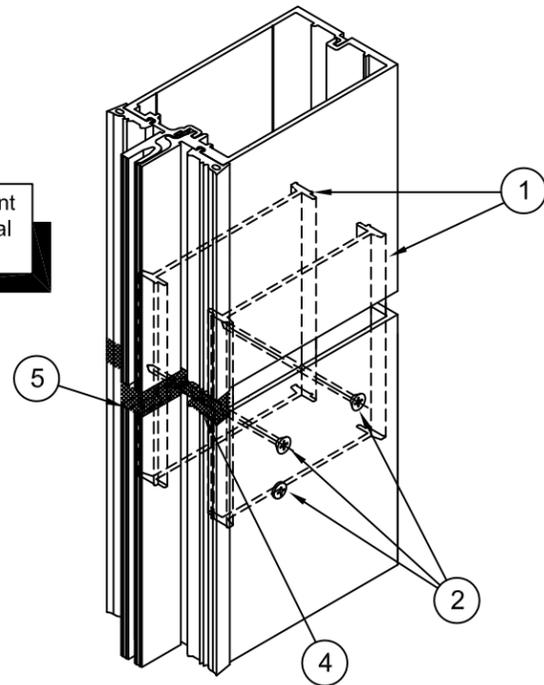


- ① Interior sleeve
- ② Stop screw and fixing screw
- ③ Apply bond breaker tape to sleeves
- ④ Prior to setting unit above, seal between mullions and gaskets as shown
- ⑤ Seal tongue joint

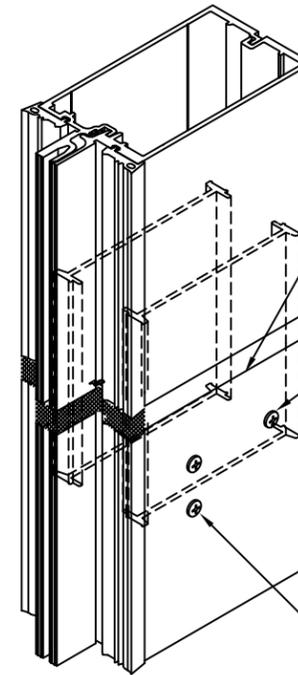
**LEFT JAMB CONDITION SHOWN  
RIGHT JAMB CONDITION SIMILAR**



Tool excess sealant creating a face seal across joint.



**AT MULLION EXPANSION SPLICE JOINT LOCATIONS  
(DRY GLAZED)**



Remove the tape at the interior sleeves and slide down to the pre-applied stop screw

At intermediates, field apply (2) fixing screws 128267 #12 x 1" FHSD to each side of mullion. At jambs, match drill .182 dia. [#14 drill] holes thru all surfaces and apply (2) fixing screws 128563 #12 x 3 1/2" FHTF AB.

Sleeve stop screw, both sides of mullion.



1630 SS IR

Product Engineering & Development

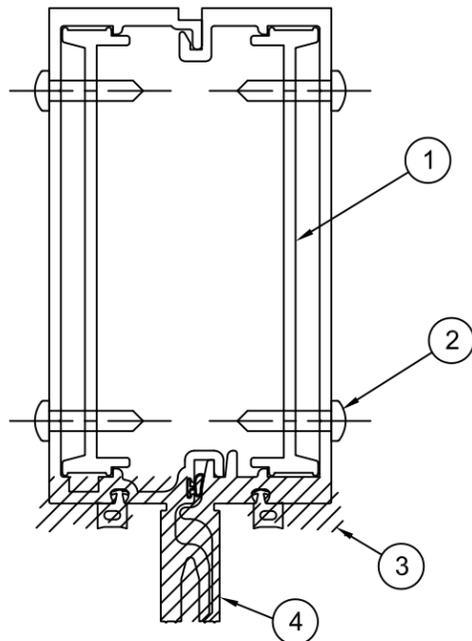
INSTALLATION  
INSTRUCTIONS

95519-006  
03/29/13

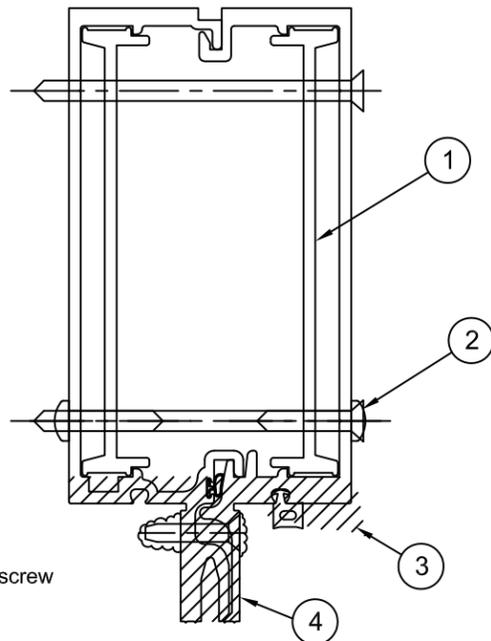
**BUTT SPLICE JOINT SEAL (WET GLAZED)**

All surfaces and grooves must be cleaned and sealant applied per the sealant manufacturer's recommendations. Tool sealant.

**INTERMEDIATE CONDITION**

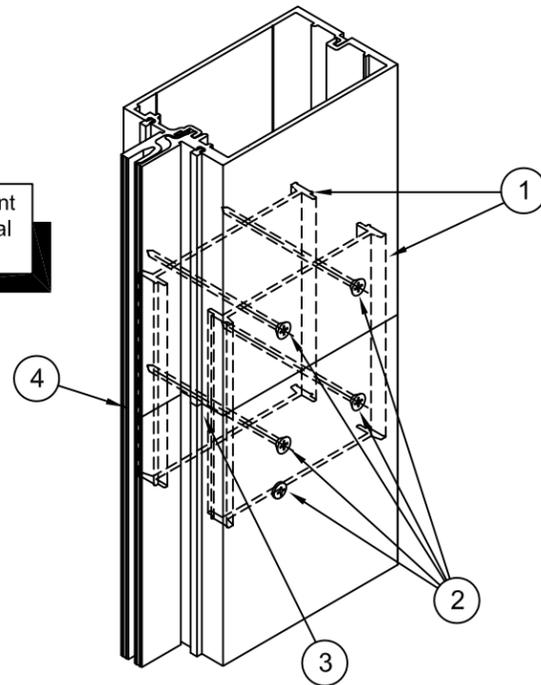
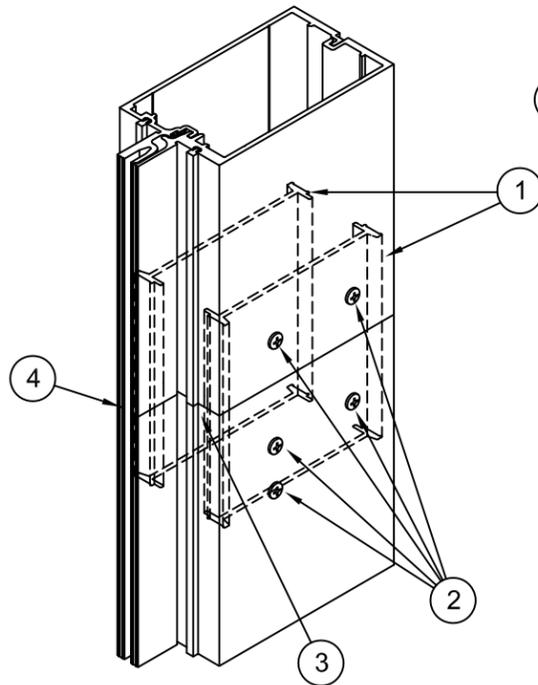


**LEFT JAMB CONDITION SHOWN  
RIGHT JAMB CONDITION SIMILAR**



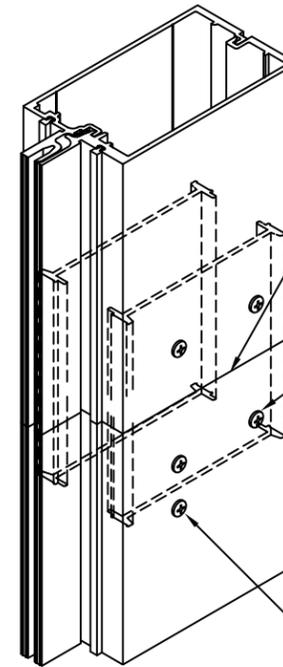
- ① Interior sleeve
- ② Stop screw and fixing screw
- ③ Prior to setting unit above, seal between mullions and gaskets as shown
- ④ Seal tongue joint

Tool excess sealant creating a face seal across joint.



**AT MULLION BUTT SPLICE LOCATIONS (WET GLAZED)**

NOTE: All vertical mullion splices to be butt splices unless otherwise detailed in shop drawings.



Remove the tape at the interior sleeves and slide down to the pre-applied stop screw

At intermediates, field apply (4) fixing screws 128267 #12 x 1" FHSD to each side of mullion. At jamps, match drill .182 dia. [#14 drill] holes thru all surfaces and apply (4) fixing screws 128563 #12 x 3 1/2" FHTF AB.

Sleeve stop screw, both sides of mullion.

**INSTALL 176310 THERMAL BREAK AT VERTICALS**

Do not stretch when removing from coil, carton and during installation.

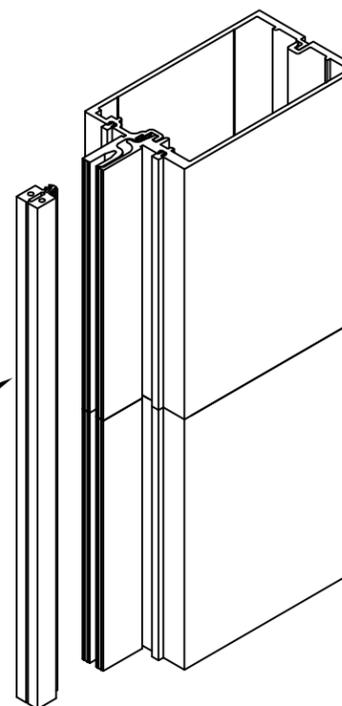
Insert thermal break (176310) along the full length of the vertical mullion tongue and trim flush at top and bottom of part. Gasket should span any splice locations.

Part can be spliced if needed. Seal between ends and tool sealant.



176310

176310 Thermal break to span butt splice locations

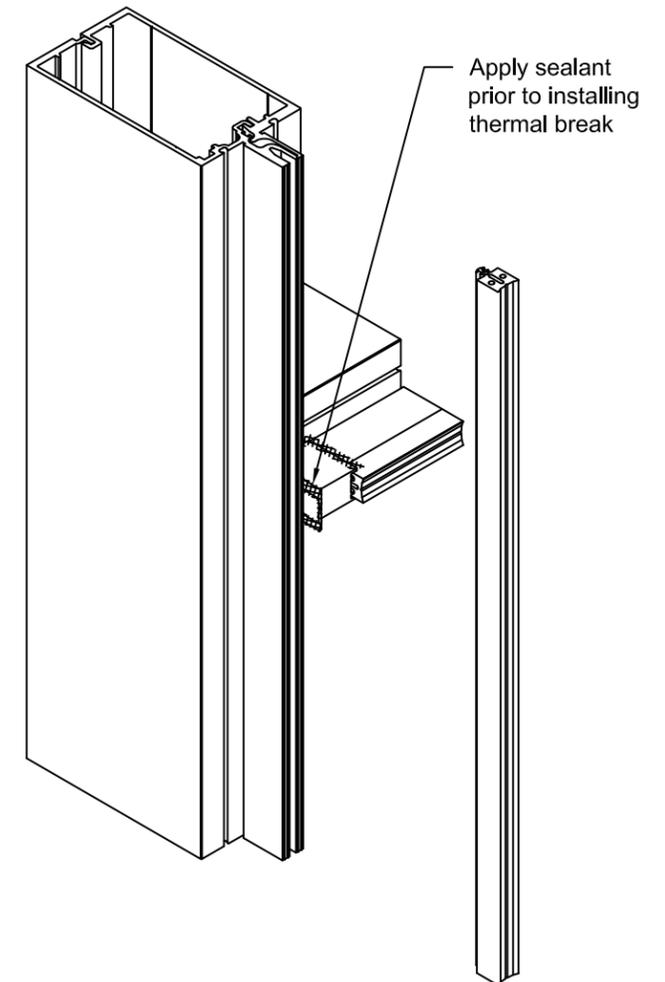


CONFIDENTIAL AND PROPRIETARY INFORMATION  
KAWNEER COMPANY INC.

THESE DRAWINGS ARE THE SOLE AND EXCLUSIVE PROPERTY OF KAWNEER AND CONTAIN SENSITIVE, PRIVILEGED OR CONFIDENTIAL INFORMATION WHICH MAY BE USED ONLY FOR ITS BENEFIT. THE DISCLOSURE OF THESE DRAWINGS TO UNAUTHORIZED PERSONS IS STRICTLY PROHIBITED. THIS DOCUMENT AND ALL COPIES MUST BE RETURNED UPON DEMAND.  
© COPYRIGHT KAWNEER COMPANY, INC., 2012

**INSTALL 176310 THERMAL BREAK AT VERTICALS**

At joint plug locations apply sealant prior to pushing in thermal break. Tool sealant after installation.



1630 SS IR

Product Engineering & Development

INSTALLATION  
INSTRUCTIONS

95519-006  
03/29/13

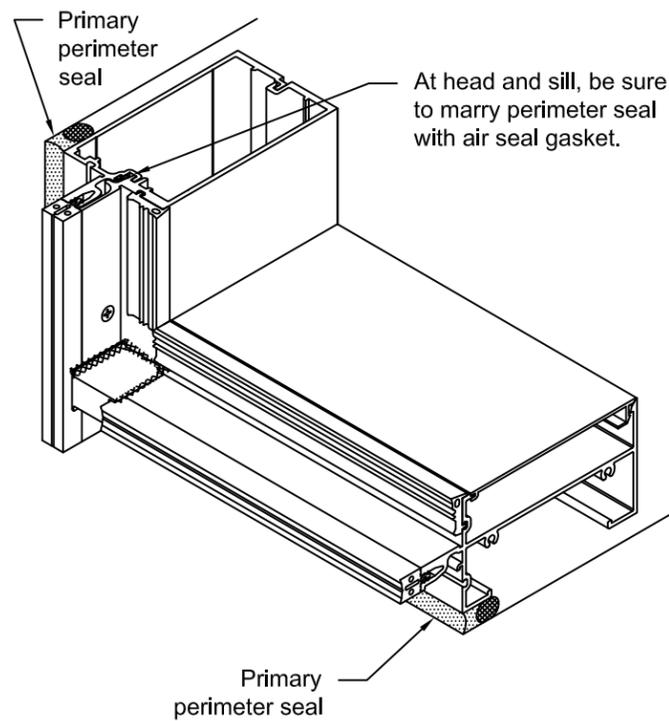
**PERIMETER SEAL AT FACE OF MULLION TUBES**

Apply backer rod and primary perimeter seal as shown where specified. This application requires the 027493 air seal gasket between mullion halves.

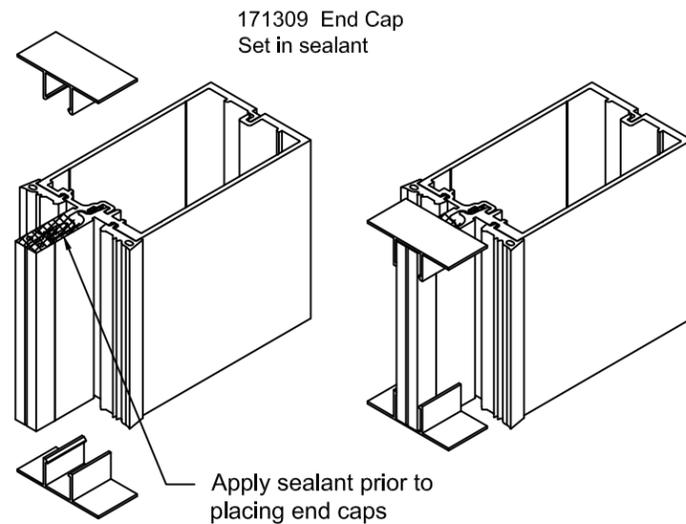
All surfaces and grooves must be cleaned and sealant applied per the sealant manufacturer's recommendations. Tool sealant.

Prior to glazing, inspect all seals and repair any that may be suspect.

Perimeter seals required at pressure plates will be completed on a later step.



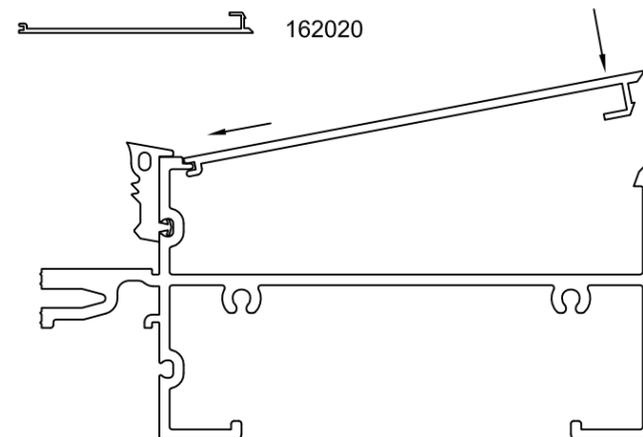
**INSTALL HEAD AND SILL END CAPS WHERE APPLICABLE**



**INSTALL INTERIOR FILLERS WHERE APPLICABLE**

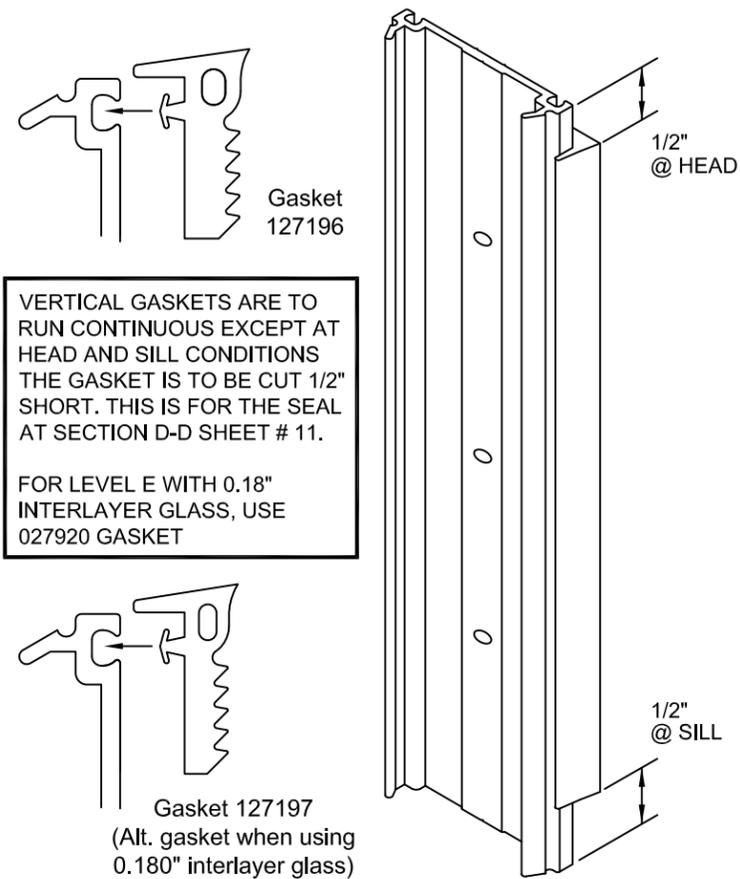
Fillers used at exposed areas only.

Sill shown, head opposite.

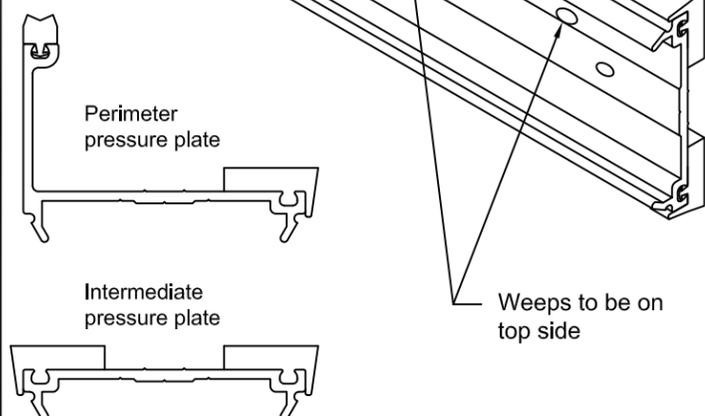


**INSTALL EXTERIOR GASKETS INTO PRESSURE PLATES**

Reference previous gasket notes, same notes apply



GASKET 027-857 AT PERIMETER. DO NOT CUT SHORT.



CONFIDENTIAL AND PROPRIETARY INFORMATION  
KAWNEER COMPANY INC.

THESE DRAWINGS ARE THE SOLE AND EXCLUSIVE PROPERTY OF KAWNEER AND CONTAIN SENSITIVE, PRIVILEGED OR CONFIDENTIAL INFORMATION WHICH MAY BE USED ONLY FOR ITS BENEFIT. THE DISCLOSURE OF THESE DRAWINGS TO UNAUTHORIZED PERSONS IS STRICTLY PROHIBITED. THIS DOCUMENT AND ALL COPIES MUST BE RETURNED UPON DEMAND.  
© COPYRIGHT KAWNEER COMPANY, INC., 2012



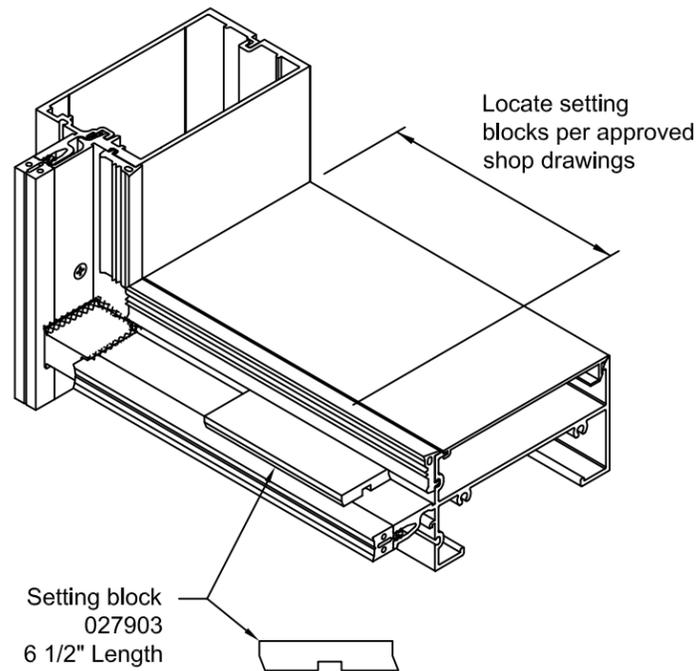
1630 SS IR

Product Engineering & Development

INSTALLATION  
INSTRUCTIONS

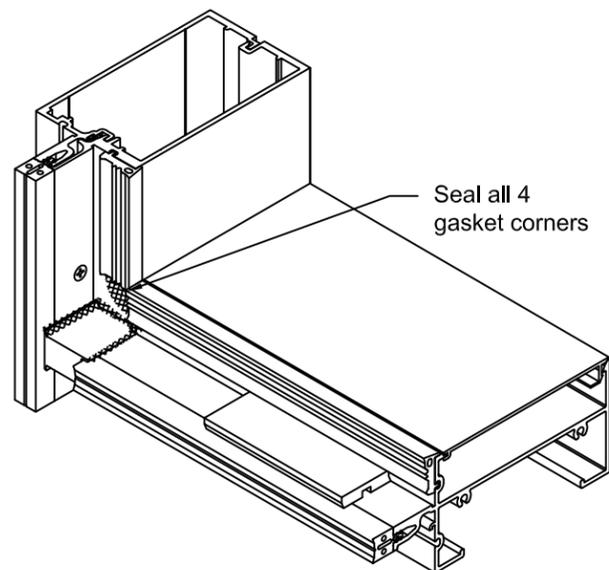
95519-006  
03/29/13

**INSTALL SETTING BLOCKS**



**INSTALL GLASS - DRY GLAZED**

JUST BEFORE INSTALLING GLASS, SEAL ALL 4 GASKET CORNERS.

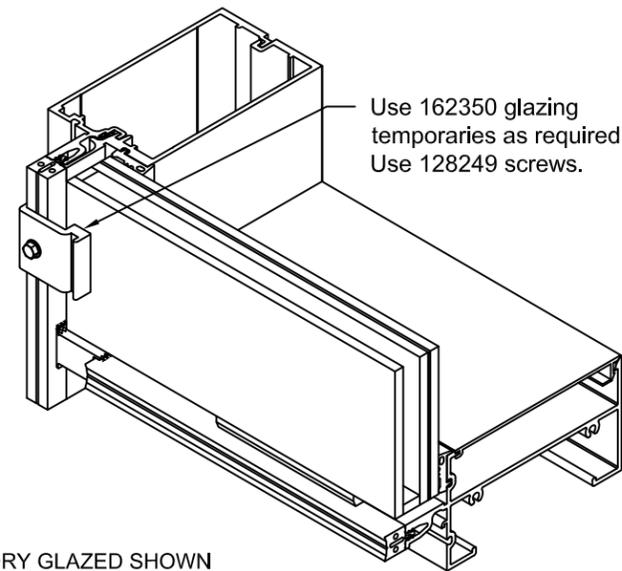


**INSTALL GLASS - WET GLAZED**

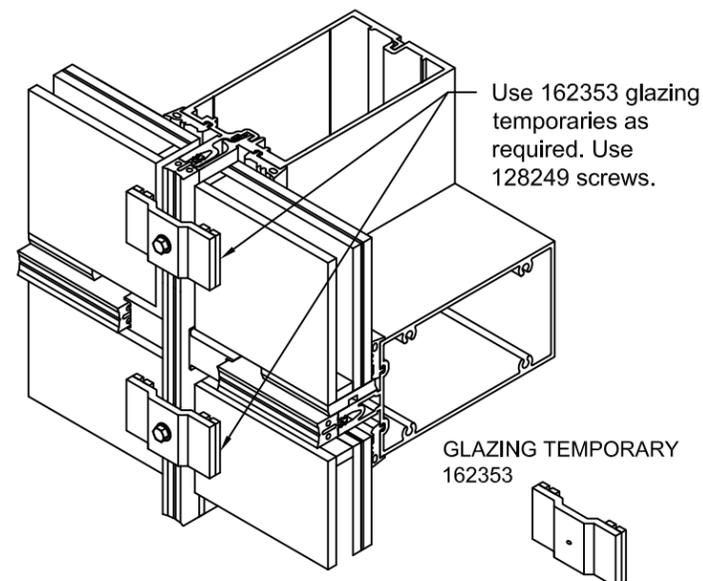
- CLEAN GLASS AND FRAMING AT STRUCTURAL SILICONE CONTACT SURFACES PER SEALANT MANUFACTURER'S RECOMMENDATIONS.
- PRIME FRAMING AS REQUIRED.
- POSITION GLASS ON SETTING BLOCKS MAINTAINING PROPER GLASS BITE PER APPROVED SHOP DRAWINGS. INSURE A 1/4" SPACE BETWEEN THE GLASS AND FACE OF MULLION WHEN SETTING GLASS AND APPLYING TORQUE TO PRESSURE PLATE SCREWS.

**INSTALL GLASS**

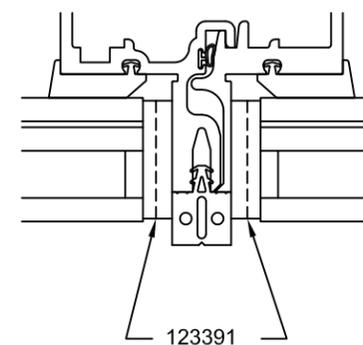
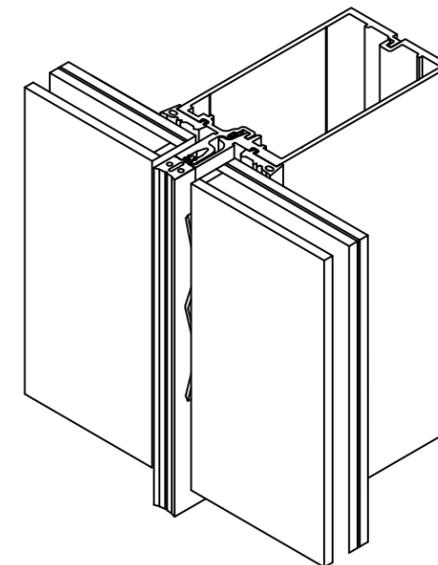
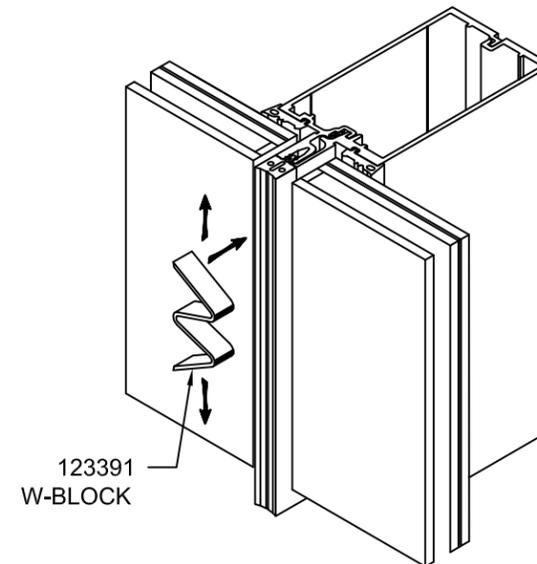
MAXIMUM TEMPORARY SPACING IS 30". IF WINDS GREATER THAN 50 MPH (80KPH) ARE EXPECTED, ADDITIONAL TEMPORARIES MAY BE REQUIRED. CONSULT YOUR SEALANT AND/OR INFILL SUPPLIER FOR SPACING RECOMMENDATIONS. INSTALL PRESSURE PLATES WHERE POSSIBLE.



DRY GLAZED SHOWN  
WET GLAZED SIMILAR



**INSTALL SIDE BLOCKS - DRY GLAZED ONLY**



Install side blocks compressing as shown

CONFIDENTIAL AND PROPRIETARY INFORMATION  
KAWNEER COMPANY INC.

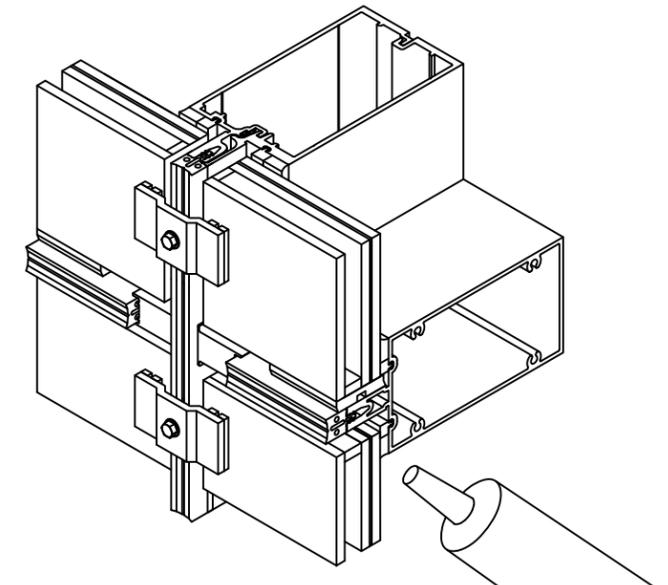
THESE DRAWINGS ARE THE SOLE AND EXCLUSIVE PROPERTY OF KAWNEER AND CONTAIN SENSITIVE, PRIVILEGED OR CONFIDENTIAL INFORMATION WHICH MAY BE USED ONLY FOR ITS BENEFIT. THE DISCLOSURE OF THESE DRAWINGS TO UNAUTHORIZED PERSONS IS STRICTLY PROHIBITED. THIS DOCUMENT AND ALL COPIES MUST BE RETURNED UPON DEMAND.  
© COPYRIGHT KAWNEER COMPANY, INC., 2012

**INSTALL STRUCTURAL SILICONE - WET GLAZED**

IF NECESSARY, APPLY MASKING TAPE AT GLASS AND FRAMING TO AVOID ADDITIONAL CLEAN-UP AFTER APPLICATION OF STRUCTURAL SILICONE.

AT TYPICAL HORIZONTALS AND VERTICALS.

APPLY STRUCTURAL SILICONE SEALANT (DOW CORNING 995 OR TREMCO PROGLAZE SSG) COMPLETELY FILLING JOINTS. TOOL SEALANT.



OPTION: APPLICATION OF STRUCTURAL SILICONE CAN BE PERFORMED AFTER EXTERIOR PRESSURE PLATES HAVE BEEN INSTALLED AND PROPER TORQUE APPLIED TO PRESSURE PLATE SCREWS. SEE NEXT SHEET.



1630 SS IR

Product Engineering & Development

INSTALLATION  
INSTRUCTIONS

95519-006  
03/29/13

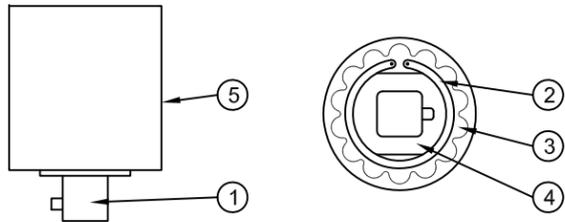
**INSTALL EXTERIOR PRESSURE PLATES**

Recommend using torque limit tool 162399 see note.

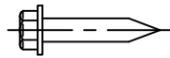


**HOW TO SET TORQUE LIMIT**

1. Attach any calibrated torque indicator to output stub (1) and determine present torque setting while holding the body (5), or vice-versa.
2. Remove snap ring (2) and locking plate (3).
3. Adjust nut (4) with open-end wrench : clockwise to increase torque, counter-clockwise to decrease torque.
4. Obtain new torque reading with the calibrated torque indicator. repeat preceding step if more adjustment is necessary to reach desired limit.
5. Replace locking plate into notches and install snap ring. If locking plate does not "seat", move the adjusting nut slightly until it drops in place. the direction is best determined by whether a minimum torque application or a maximum one is desired.



Install 128249 1/4 x 1 1/4" hex washer head thread forming type AB screws at pressure plates.



Screws are to be located 6" on center. Always locate a screw as close as possible to a horizontal joint. This will provide maximum pressure for the critical joint seals.

Install horizontal pressure plates with the weep holes towards the top of the horizontal.

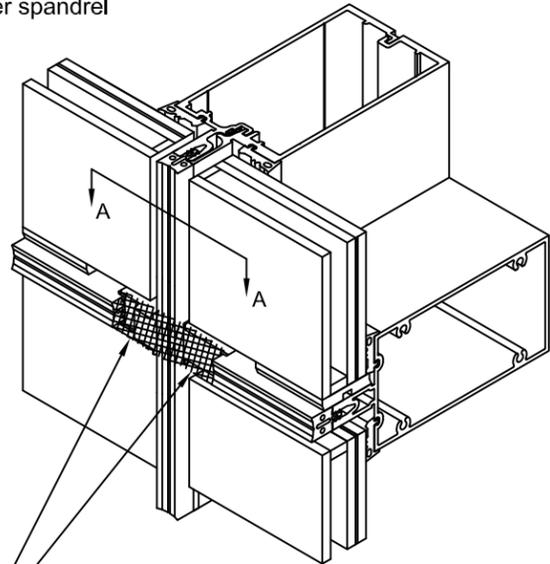
At each horizontal and vertical pressure plate install two screws part way, then install the third screw all the way and then tighten the first two screws. This eliminates lateral walking of the pressure plate position.

Torque all screws to 95 to 100 inch pounds. During cold weather torque screws to 50 inch pounds until all 4 sides have been clamped. Then torque screws to 95 to 100 inch pounds.

**INSTALL EXTERIOR PRESSURE PLATES**

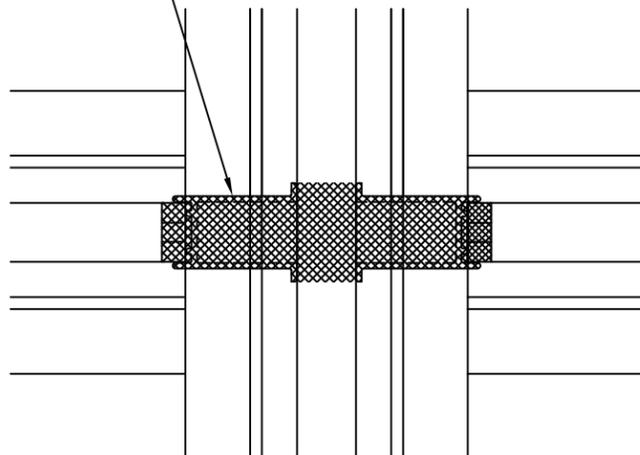
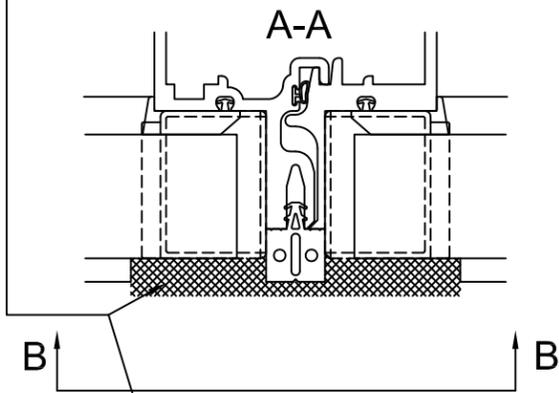
Intermediate horizontal vision over spandrel

Head and sill similar



Just before installing vertical pressure plates apply a generous amount of sealant to the joint plug face filling joints as shown.

CLEAN JOINT PER SEALANT MANUFACTURER'S RECOMMENDATIONS



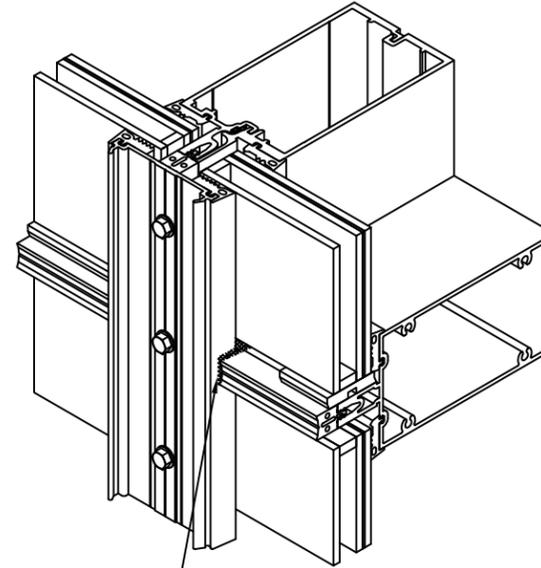
B-B

**INSTALL EXTERIOR PRESSURE PLATES**

Install vertical pressure plates

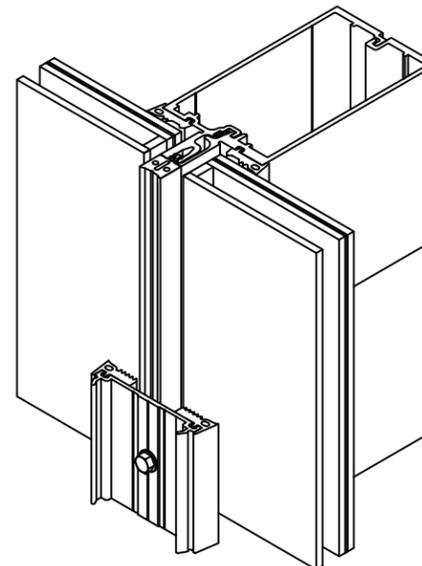
Note - The torque limit tool was designed to be used with a hand driven device. The tool can be adapted to a drill motor if used at a maximum speed of approx. 300 rpm. Higher speeds can cause overheating and affect the accuracy. After approx. 1 hour of tool usage check torque settings with a torque wrench.

Intermediate horizontal vision over spandrel



Tool excess sealant

Intermediate vertical at splice



CONFIDENTIAL AND PROPRIETARY INFORMATION  
KAWNEER COMPANY INC.

THESE DRAWINGS ARE THE SOLE AND EXCLUSIVE PROPERTY OF KAWNEER AND CONTAIN SENSITIVE, PRIVILEGED OR CONFIDENTIAL INFORMATION WHICH MAY BE USED ONLY FOR ITS BENEFIT. THE DISCLOSURE OF THESE DRAWINGS TO UNAUTHORIZED PERSONS IS STRICTLY PROHIBITED. THIS DOCUMENT AND ALL COPIES MUST BE RETURNED UPON DEMAND.  
© COPYRIGHT KAWNEER COMPANY, INC., 2012

**INSTALL EXTERIOR PRESSURE PLATES**

Install vertical pressure plates

Intermediate vertical at splice

At top pressure plate locate screw close to the mullion joint.

Clean joint per sealant manufacturer's recommendations

Completely seal joint. do not let sealant interfere with cover snap. Overlap pressure plate face with sealant.

Jamb vertical at splice

Completely seal joint. do not let sealant interfere with cover snap. Overlap pressure plate face creating a band-aid seal.

Clean joint per sealant manufacturer's recommendations



1630 SS IR

Product Engineering & Development

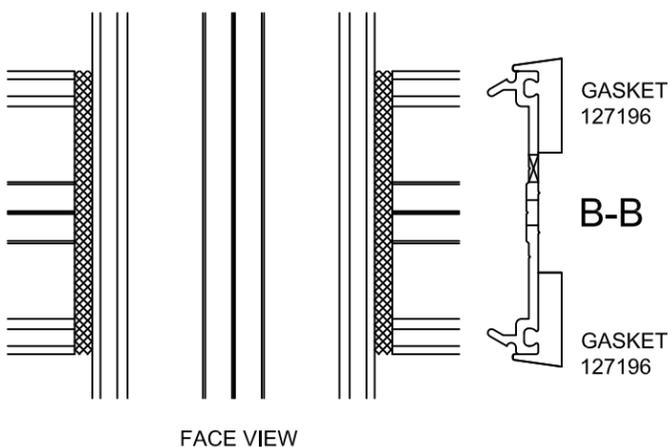
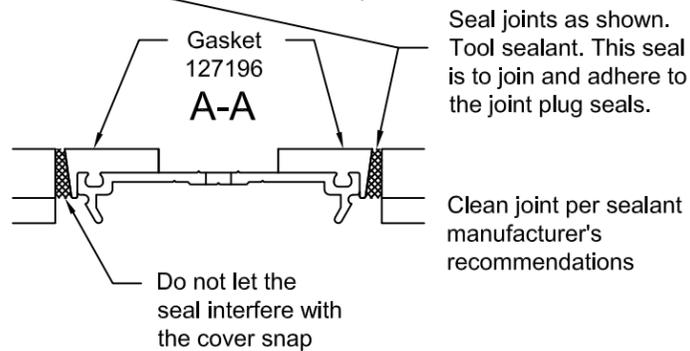
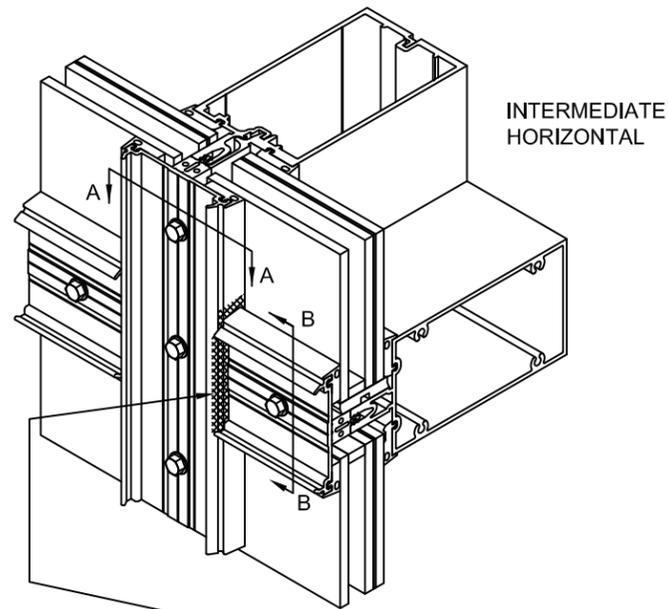
INSTALLATION INSTRUCTIONS

95519-006  
03/29/13

176970 (SHT 11 OF 13)

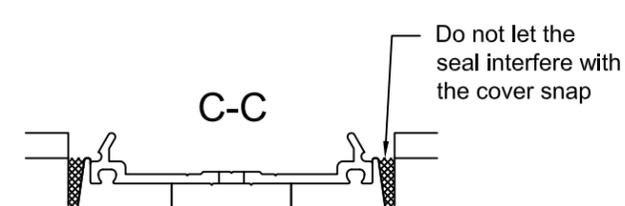
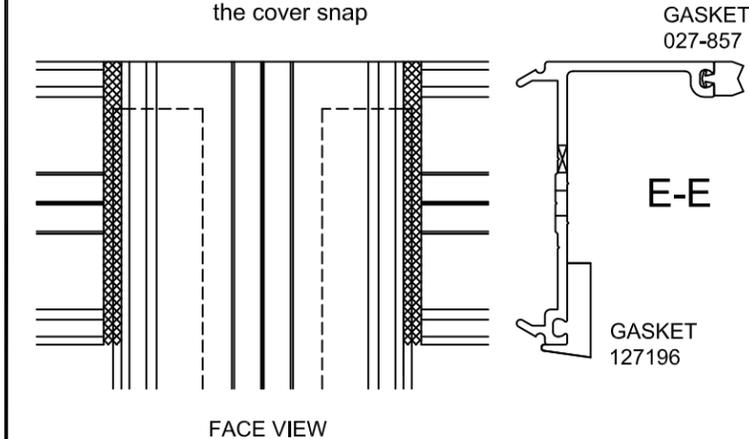
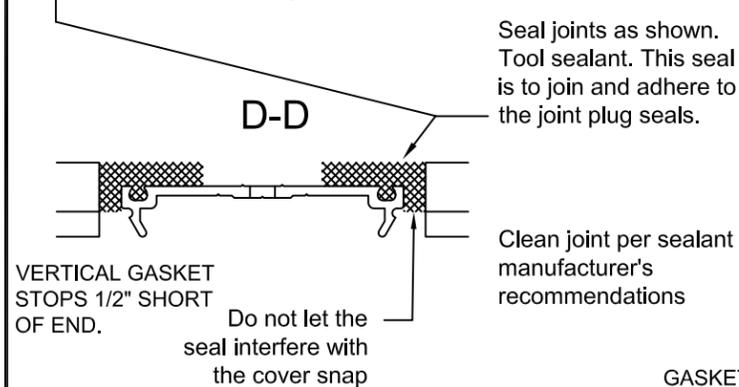
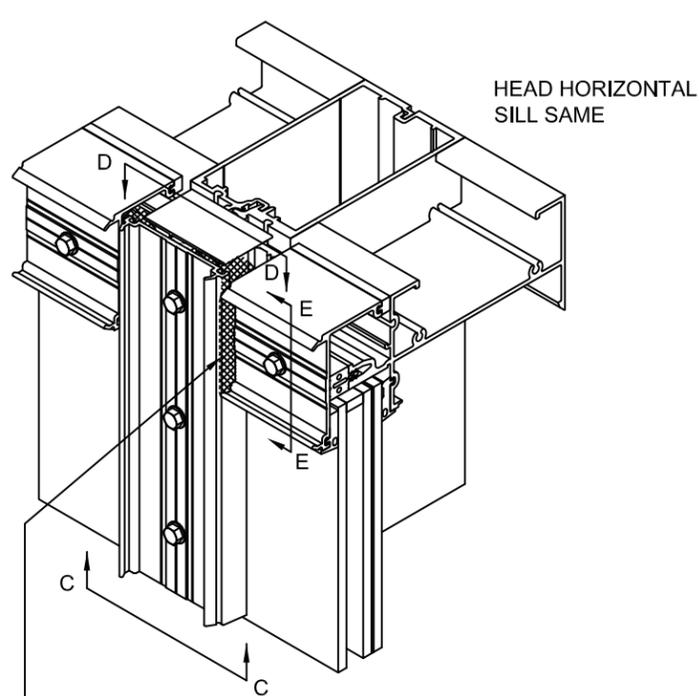
**INSTALL EXTERIOR PRESSURE PLATES**

CENTER HORIZONTAL PRESSURE PLATES SO END GAPS ARE EQUAL.



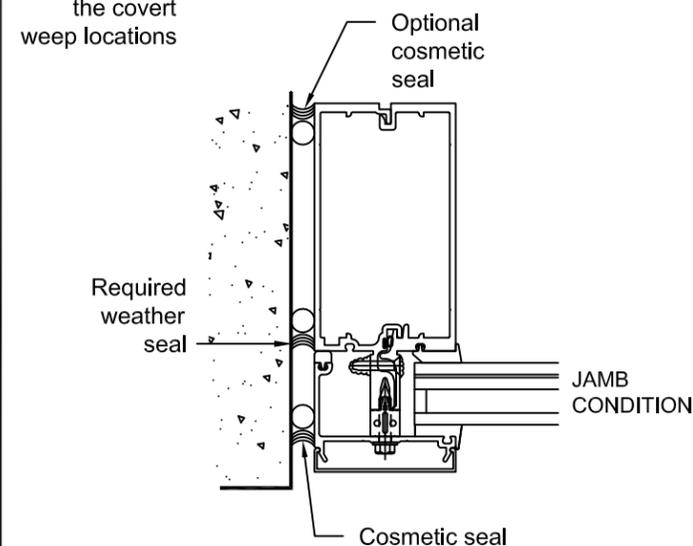
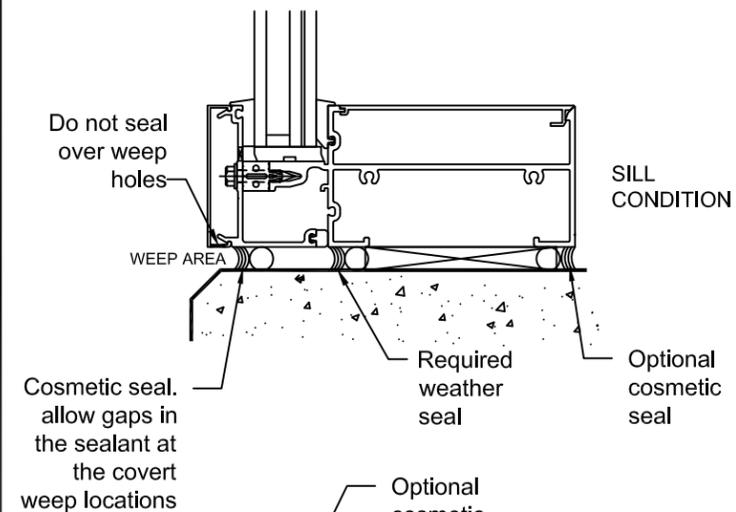
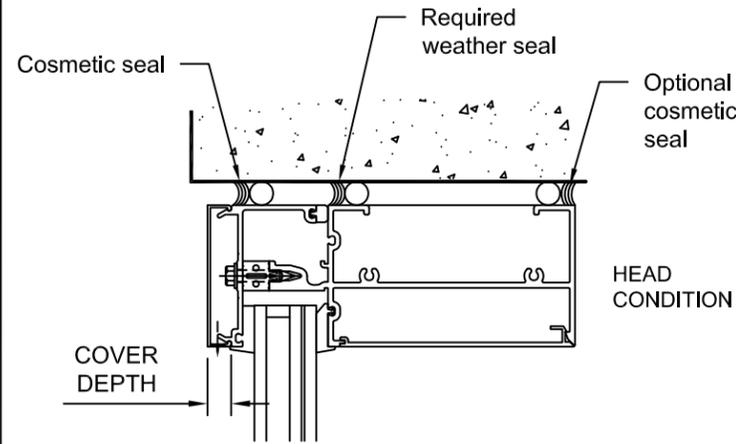
**INSTALL EXTERIOR PRESSURE PLATES**

CENTER HORIZONTAL PRESSURE PLATES SO END GAPS ARE EQUAL.



**INSTALL PERIMETER SEALS AT PRESSURE PLATE**

Perimeter weather seals are installed at the pressure plate location as detailed below. (This seal should be installed before covers are applied when covers deeper than 3/4" are used) Exterior cosmetic seals at the cover may be applied at the head and jambs only. Sill covers must remain open to allow water drainage to the exterior. Apply bond breaker tape at face of angle anchors, at head and sill, to prevent three-sided adhesion of required weather seal.



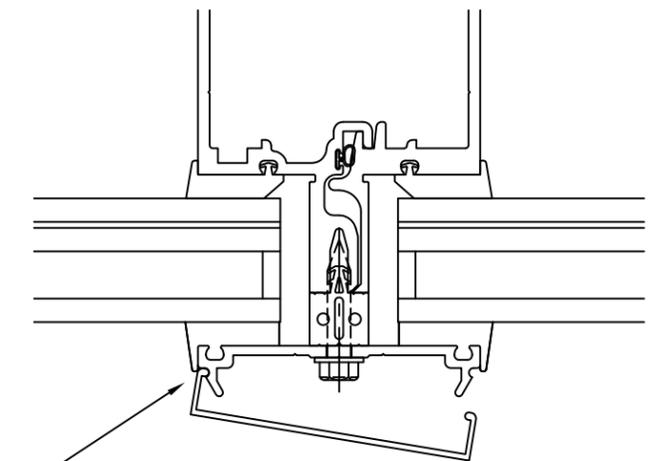
CONFIDENTIAL AND PROPRIETARY INFORMATION

KAWNEER COMPANY INC.

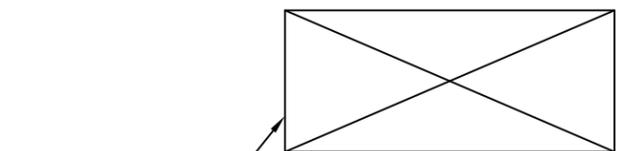
THESE DRAWINGS ARE THE SOLE AND EXCLUSIVE PROPERTY OF KAWNEER AND CONTAIN SENSITIVE, PRIVILEGED OR CONFIDENTIAL INFORMATION WHICH MAY BE USED ONLY FOR ITS BENEFIT. THE DISCLOSURE OF THESE DRAWINGS TO UNAUTHORIZED PERSONS IS STRICTLY PROHIBITED. THIS DOCUMENT AND ALL COPIES MUST BE RETURNED UPON DEMAND. © COPYRIGHT KAWNEER COMPANY, INC., 2012

**INSTALL EXTERIOR COVERS**

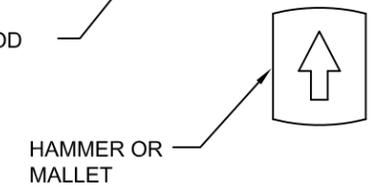
Care must be taken to avoid damage to covers during installation. Use a 18" long piece of 2 x 4 wood along with a hammer or mallet to seat the cover.



ENGAGE ONE SIDE OF COVER AS SHOWN



2 X 4 WOOD 18" LONG



1630 SS IR

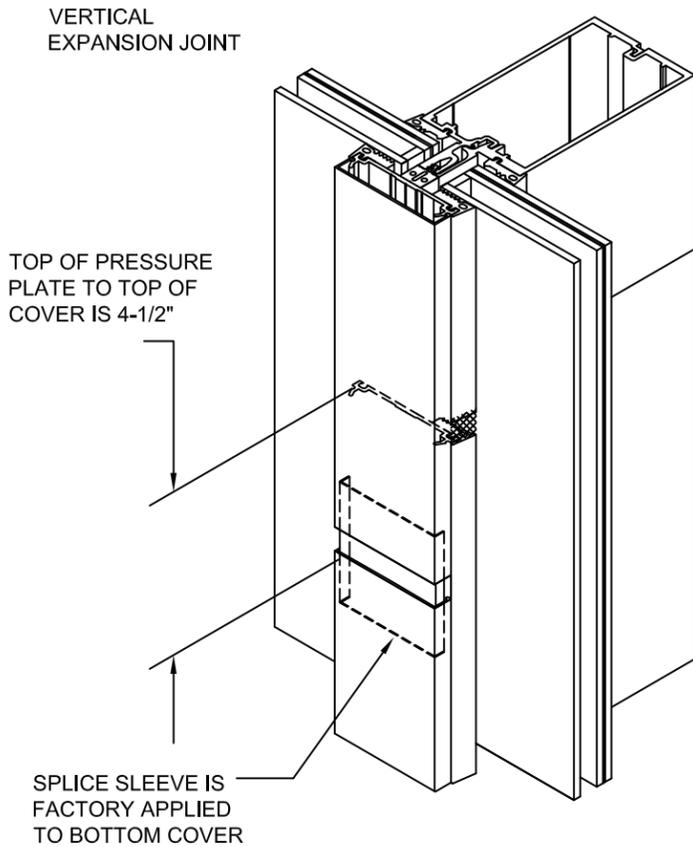
Product Engineering & Development

INSTALLATION INSTRUCTIONS

95519-006  
03/29/13

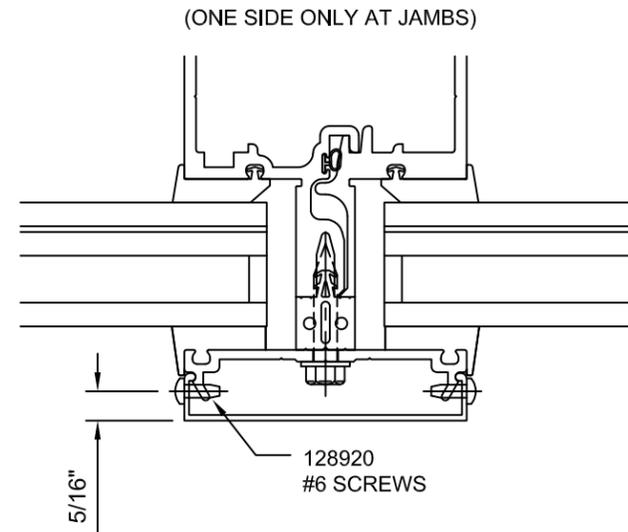
**INSTALL EXTERIOR COVERS**

Care must be taken to avoid damage to covers during installation. Use a 18" long piece of 2 x 4 wood along with a hammer or mallet to seat the cover.

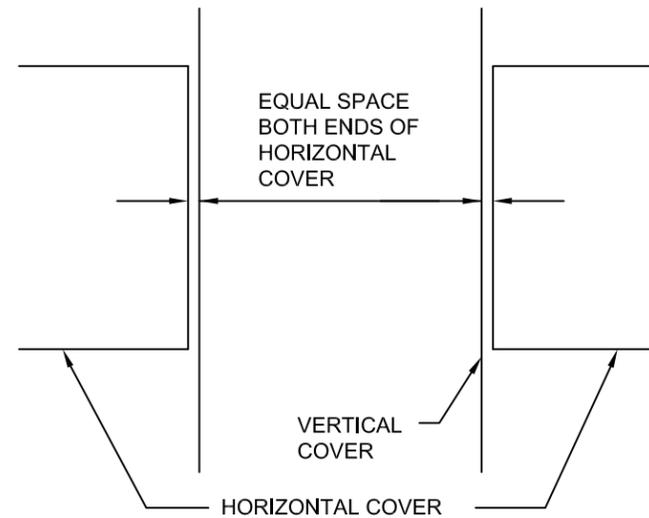


**INSTALL EXTERIOR COVERS**

Pinning of all vertical covers is required for both sides. Drill a .106 dia. hole (#36 drill) and install 128920 screws #6 x 3/8" pan head type b locate pinning at a horizontal closest to the cover height center.



INSTALL HORIZONTAL COVERS WITH THE WEEP HOLES DOWN



**INSTALL MIAMI DADE LABELS**

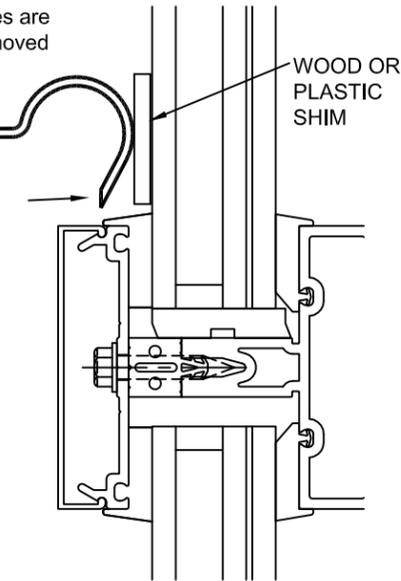
REFERENCE SHEET 1 FOR ADDITIONAL INFORMATION

**REMOVING COVERS**

Covers can be saved if tolerances are not too tight and the cover is removed with extreme care

Pry bar with sharp point and flat this side

Push back the gasket trim lip start at one end to disengage do this in progression for the complete



CONFIDENTIAL AND PROPRIETARY INFORMATION  
KAWNEER COMPANY INC.

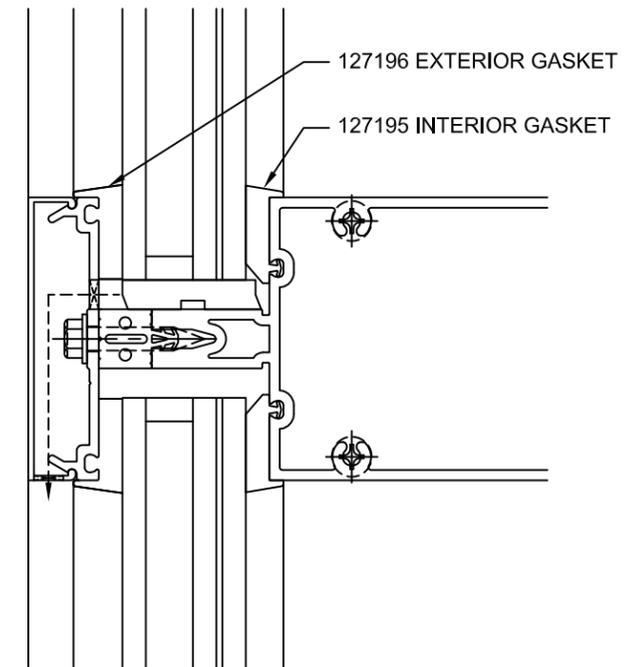
THESE DRAWINGS ARE THE SOLE AND EXCLUSIVE PROPERTY OF KAWNEER AND CONTAIN SENSITIVE, PRIVILEGED OR CONFIDENTIAL INFORMATION WHICH MAY BE USED ONLY FOR ITS BENEFIT. THE DISCLOSURE OF THESE DRAWINGS TO UNAUTHORIZED PERSONS IS STRICTLY PROHIBITED. THIS DOCUMENT AND ALL COPIES MUST BE RETURNED UPON DEMAND.  
© COPYRIGHT KAWNEER COMPANY, INC., 2012

**SMALL MISSILE IMPACT**

INFILL SIZE FORMULA FOR SMALL MISSILE IS  $DLO + 1-3/4"$

FOR INSTALLATION OF SMALL MISSILE IMPACT SYSTEM, USE IMPACT STOCK LENGTH INSTRUCTIONS IN CONJUNCTION WITH INSTALLATION INSTRUCTIONS 176960 & 176970. PRESSURE PLATE FASTENERS ARE LOCATED 6" ON CENTER - REFER TO PAGE 10 OF THESE INSTRUCTIONS FOR PRESSURE PLATE INSTALLATION.

AS WITH LARGE MISSILE IMPACT, REFER TO TEST DRAWINGS AND REPORTS FOR APPROVED SEALANT AND ANCHORING. THIS MAY VARY PER TEST. PLEASE CONTACT THE FACTORY FOR ASSISTANCE.



1630 SS IR

Product Engineering & Development

INSTALLATION INSTRUCTIONS

95519-006  
03/29/13