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.

SSI SILICONE AND SSIT TAPE GLAZING NOTE

The SSI system requires a interface to be applied with structural silicone. The SSIT system requires a interface to be applied with 3M VHB SSG tape (B23F). The structural silicone or SSG tape should be applied in a controlled environment to preserve the condition of the structural silicone or tape contact surfaces once they've been cleaned and prepared per sealant manufacturer's or 3M's (tape) recommendations.

For the SSI system, the glazing installer is responsible for selecting and contacting the silicone manufacturer to determine which type of silicone is to be used and what samples are required to be submitted for adhesion and compatibility testing. For the SSIT system, the glazing installer is responsible for contacting 3M, the tape manufacturer, to determine what samples are required to be submitted for adhesion and compatibility testing. The silicone sealant nor tape shall be applied to Kawneer products without the approval of the silicone manufacturer or 3M (tape) and until all required testing is completed and detailed application instructions have been delivered to the installer. If you find that silicone manufacturer's or 3M tape installation instructions are not in accordance with Kawneer's installation instructions, it is your responsibility to notify Kawneer of the conflict *prior to glazing*.

Your glass supplier must be made aware that their glass will be used in an SSG or SSG tape application. The application must be approved by the glass supplier *prior to glazing*.

For any structural silicone glazed or SSG tape product applications that is not shown in Kawneer's standard literature, the application must be approved.

For SSIT applications, 3M's VHB Structural Glazing Tape Technical Guide contains a Customer Warranty Request Form for the tape application and must be used to initiate the Initial Project Assessment and certification.

CLEARWALL™ SS / SSI / SSIT NOTES

Clearwall is available with 1" framing members only. Clearwall SS requires Viracon glass with a black recessed air spacer sealed with structural silicone. Please contact Viracon for glass limitations, sightlines and coating edge deletions. Clearwall SSI or SSIT can utilize a standard structural silicone glazed infill but requires the glass to be structurally siliconed or SSG taped to an interface. Clearwall SSIT was tested using 3M VHB SSG Tape (B23F).

Glass bite is 15/16" at all verticals and horizontals. Glass sizes must be calculated from approved shop drawings.

Unless otherwise specified, it is recommended that silicone sealant be used for all internal seals.

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

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.
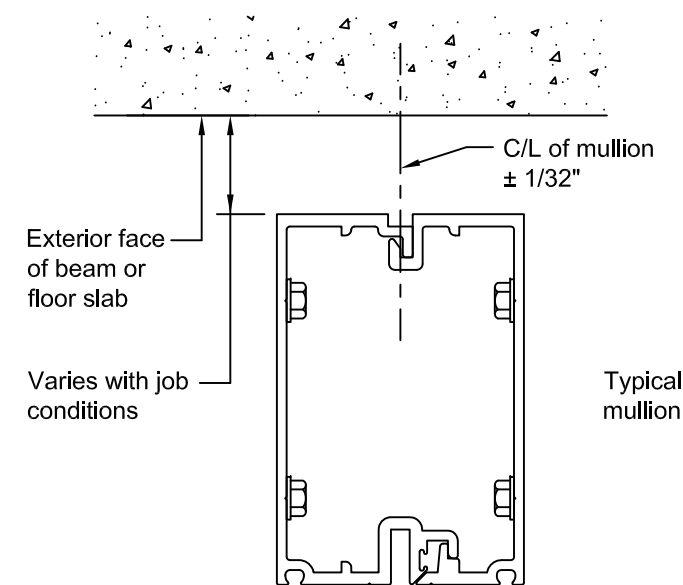

See approved shop drawings for anchor lay outs.

These instructions show the shallow system. The deeper system is similar.

INSTALL 027493 VERTICAL AIR SEAL

Install 027493 air seal into reglet of mullion full length as shown. Spray water on gasket and pull plastic base with pliers to facilitate installation if needed. Stake into reglet after the gasket is centered in the correct position.
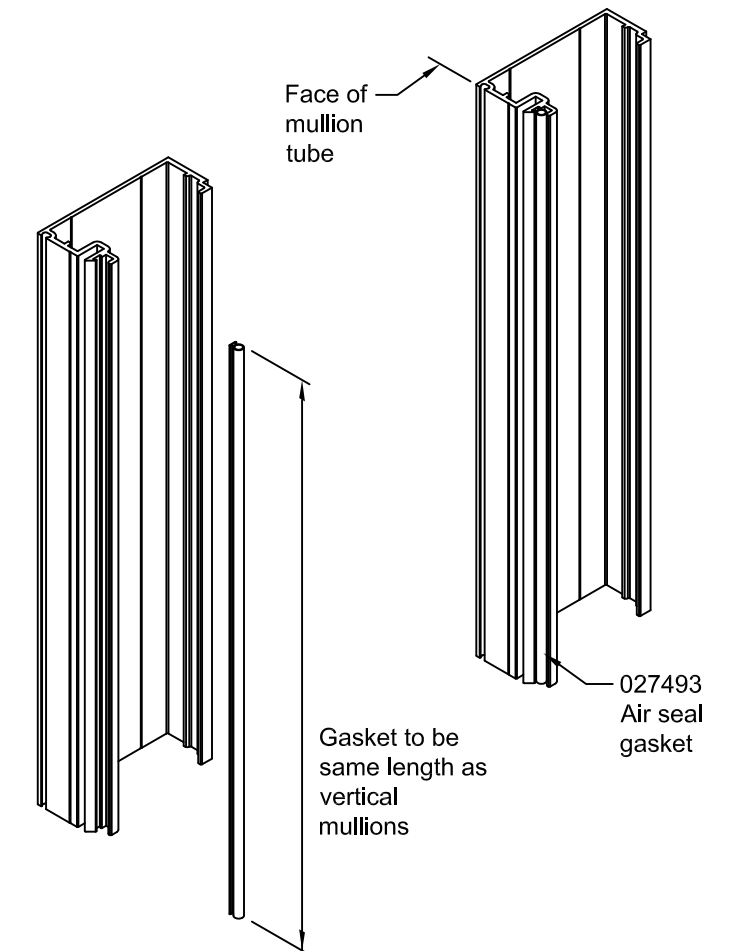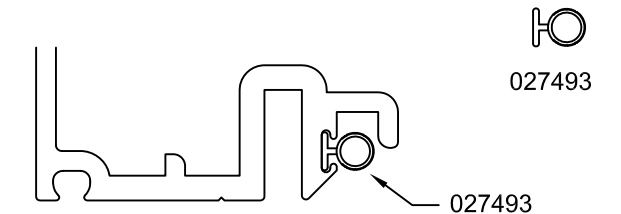
KAWNEER AN ARCONIC COMPANY	CLEARWALL™ SS / SSI / SSIT INSTALLATION INSTRUCTIONS
Product Engineering & Development	
95514-022 09/08/17	172970 SHEET 01 OF 12

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.

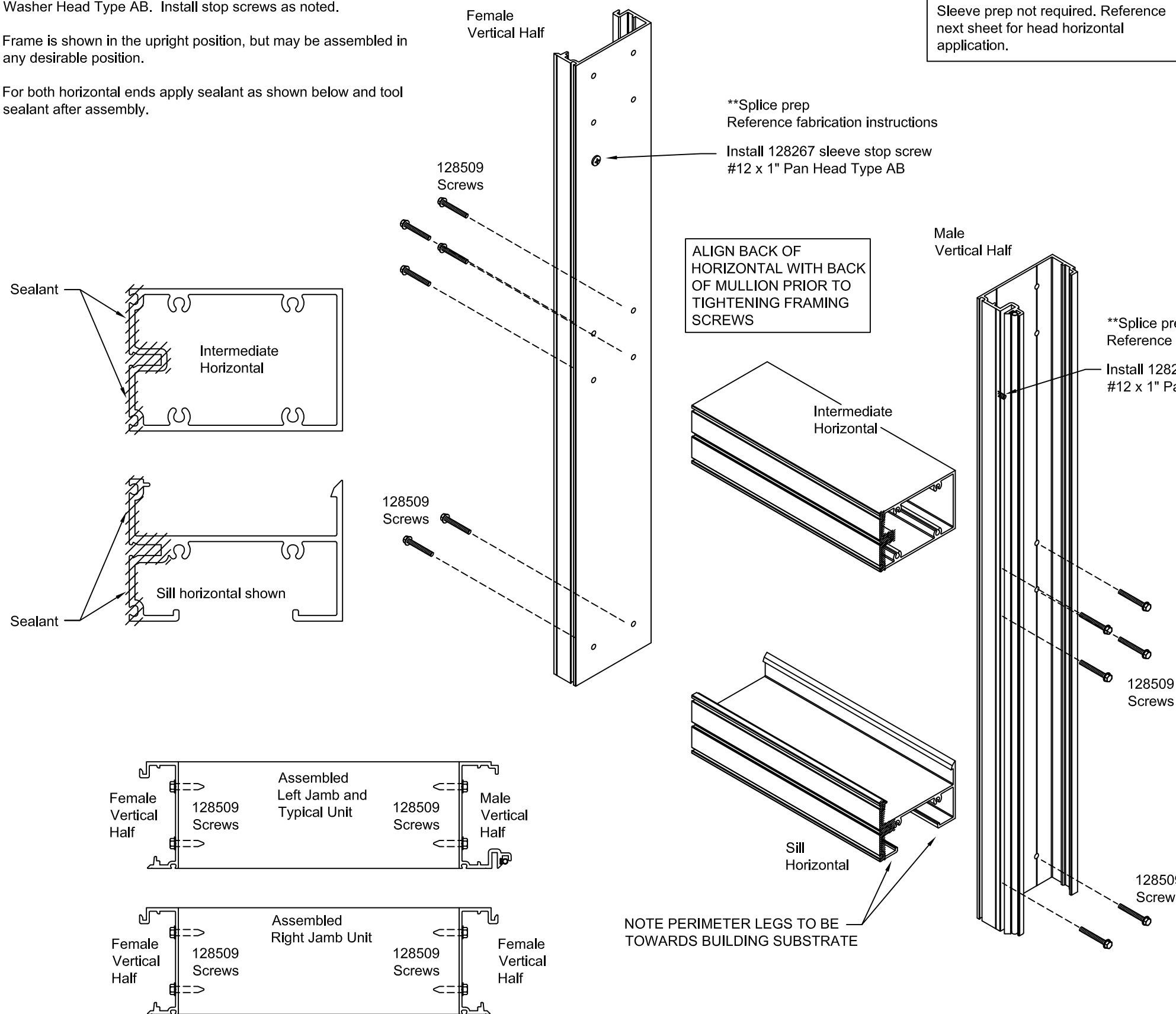For both horizontal ends apply sealant as shown below and tool sealant after assembly.

Sealant

Intermediate Horizontal

Sill horizontal shown

Sealant

Female Vertical Half | 128509 Screws | Assembled Left Jamb and Typical Unit | 128509 Screws | Male Vertical Half

Female Vertical Half | 128509 Screws | Assembled Right Jamb Unit | 128509 Screws | Female Vertical Half

128509 Screws

Female Vertical Half

**Splice prep
Reference fabrication instructions

Install 128267 sleeve stop screw
#12 x 1" Pan Head Type AB

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

128509 Screws

Intermediate Horizontal

Sill Horizontal

NOTE PERIMETER LEGS TO BE TOWARDS BUILDING SUBSTRATE

**SINGLE SPAN UNIT NOTE:
Sleeve prep not required. Reference next sheet for head horizontal application.

Male Vertical Half

**Splice prep
Reference fabrication instructions

Install 128267 sleeve stop screw
#12 x 1" Pan Head Type AB

128509 Screws

128509 Screws

INSTALL INTERIOR GLAZING GASKETS

Prior to installing gaskets, make sure all gasket grooves and pockets should be 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 daylite 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".

Clearwall SS

Gasket 127161

Clearwall SSI
Clearwall SSIT

Gasket 127167
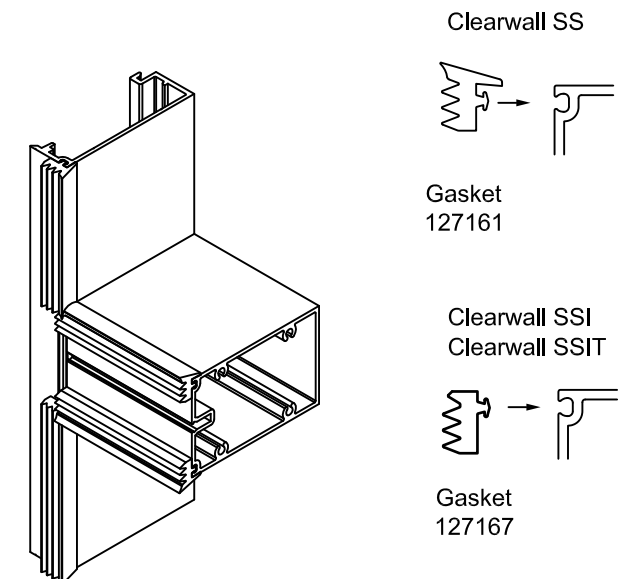
At a vertical splice, the vertical gasket will need to be applied in the field.

Do not apply tape or gasket at head, jambs and sill where perimeter trim is to be applied. This tape or gasket material will be applied in the field after the perimeter seal is installed.

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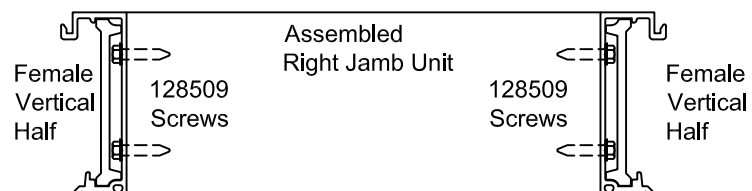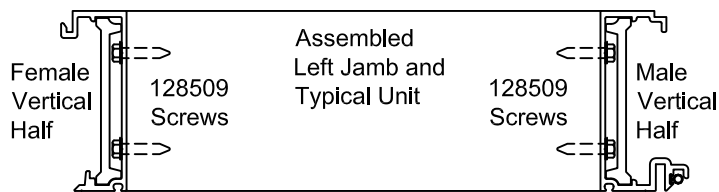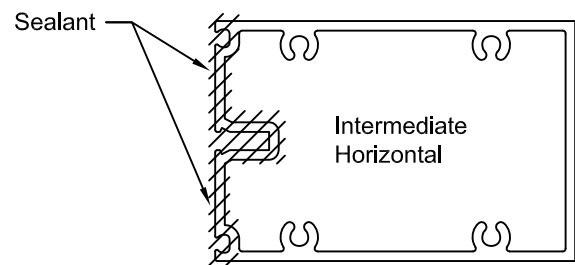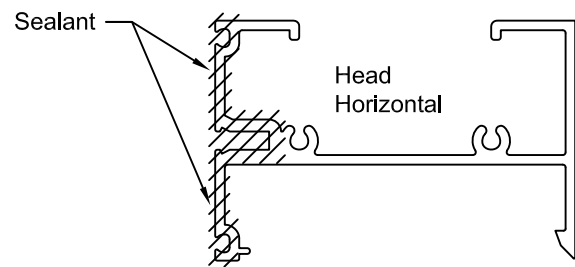**CLEARWALL™ SS / SSI / SSIT INSTALLATION INSTRUCTIONS**

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FRAME ASSEMBLY - Top 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.
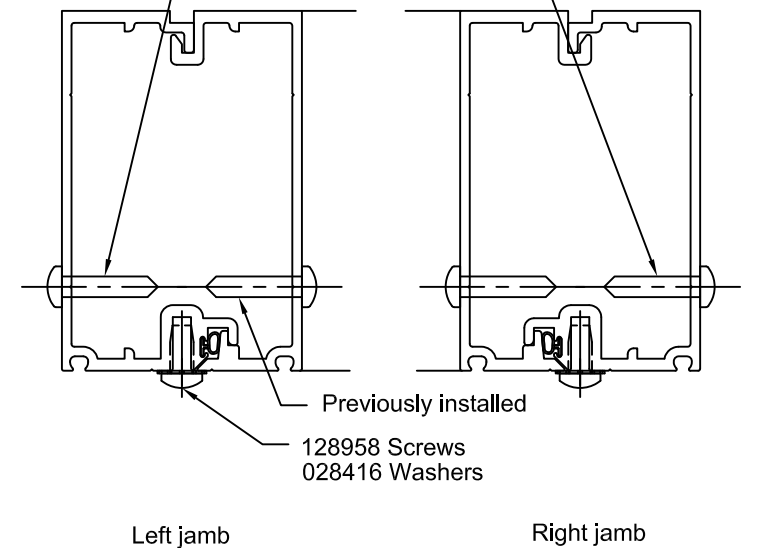
Apply interior gaskets as noted in previous step.

Sealant

Head Horizontal

Sealant

Intermediate Horizontal

Female Vertical Half — 128509 Screws — Assembled Left Jamb and Typical Unit — 128509 Screws — Male Vertical Half

Female Vertical Half — 128509 Screws — Assembled Right Jamb Unit — 128509 Screws — Female Vertical Half

128509 Screws

Female Vertical Half

NOTE PERIMETER LEGS TO BE TOWARDS BUILDING SUBSTRATE

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

Head Horizontal

128509 Screws

Intermediate Horizontal

128509 Screws

Male Vertical Half

128509 Screws

Intermediate Horizontal

128509 Screws

Interior sleeve

Tape sleeves into the bottom of the top mullion half.
Apply after installation of horizontals.

128509 Screws

Tape sleeves into the bottom of the top mullion half.
Apply after installation of horizontals.

Interior sleeve

JAMB UNITS

At jamb units, mate male and female mullions together. Apply 128958 1/4 x 1/2" square recess pan head fastener with 028-416 external tooth washer @ 36" on center to lock mullion halves together. Install screw using a R3 square recess head driver.

NOTE: Pre-apply lug and bolt when using the back anchor application. See back anchor section in this set.

At splices at top of jamb mating mullion half, install the 128267 stop screw where required. Similar to previous instruction. (Ref. Sheet 2 & 3)

Previously installed

128958 Screws
028416 Washers

Left jamb

Right jamb

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SSI APPLICATIONS ONLY
ASSEMBLE INTERFACE FRAME

Clean ends of all interfaces with isopropyl alcohol.
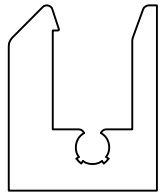
172021

Apply a 127162 tape square to the top and bottom of the vertical interfaces. Tape aligns on the sides but should be off the base by 1/16".

127162 tape

TOP

0.063

Join vertical interface to horizontal interface and fix together with a 977104 thread cutting screw. Attach all four corners together in a similar manner to make a square or rectangular frame.

977104
#10-24 x 7/8" D PHMS

SECTION B-B

A

B   TOP RAIL   B

A

SECTION A-A
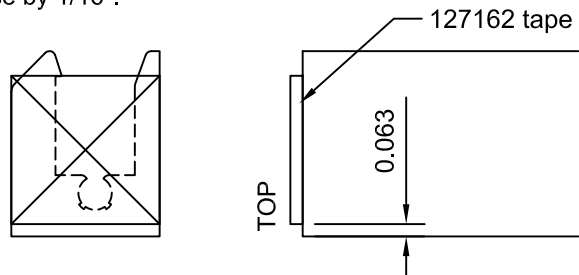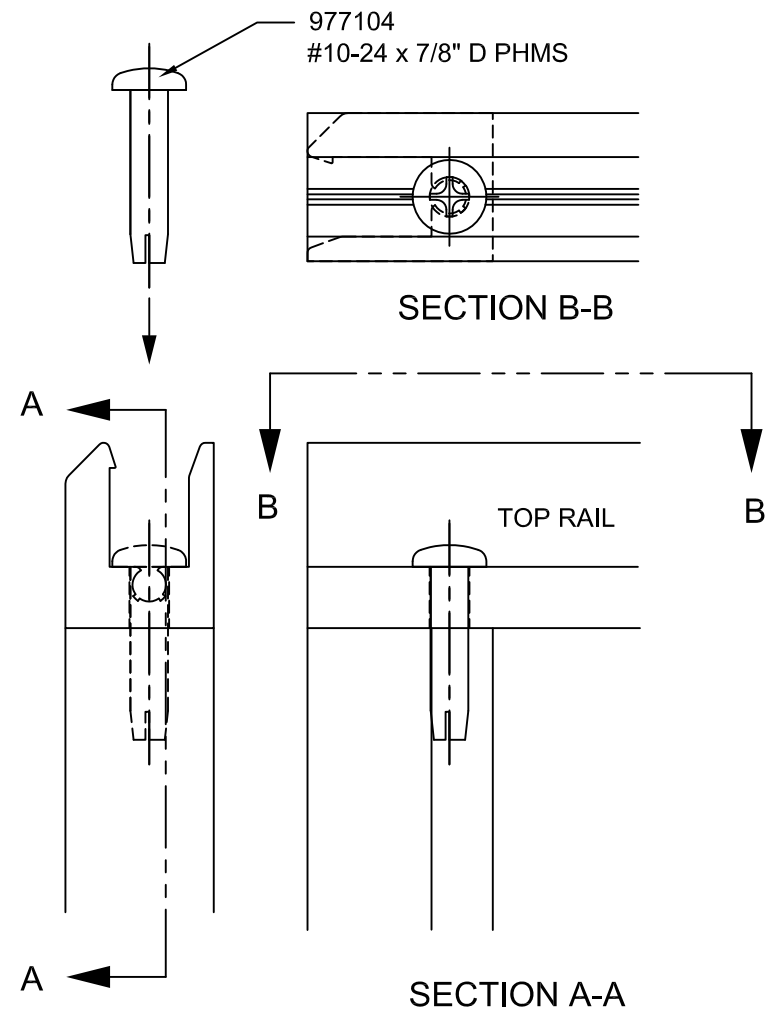
SSI APPLICATION ONLY
APPLY SSG TAPE TO INTERFACE FRAME

Lay interface frame on a flat table with the face up. Clean interface surface, where tape is to be applied, completely and apply 127095 1/4" X 1/4" structural glazing tape as shown. Leave the liner intact on opposite side. Press firmly into place along the entire length.

liner

127095
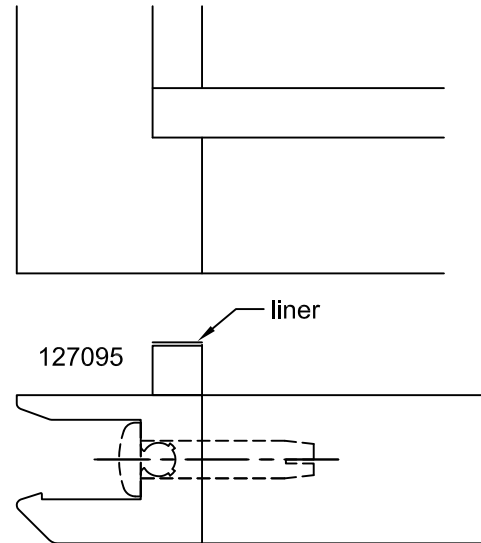
APPLICATION OF INTERFACE FRAME TO GLASS AND PREPARATION FOR STRUCTURAL SILICONE APPLICATION

Prepare tables which are absolutely flat with supports under table to keep tables from sagging or deflecting from the dead weight of the glass and aluminum. This is critical to insure glass flatness during structural silicone cure time.

- Lay glass on flat table with interior side up.
- Clean glass per sealant manufacturers recommendations at the structural silicone contact surfaces.
- Apply primer to the structural silicone contact surfaces of the interfaces if recommended per sealant manufacturer.
- Peel back liner of structural glazing tape approximately 2" (50mm) at each corner just prior to setting interface onto glass. Align interface frame with the edge of glass at bottom and left side.
  Note: If interface extends beyond edge of glass, this may cause interference issues during the installation of toggles.
- Check interface squarness. Measure diagonally from corner to corner to verify the dimensions are equal. Make adjustments as needed. Sight down interface from end to make sure frame is not bowed. A frame glazed in a "out of square" or bowed position may cause installation problems.
- Press down corners of interface frame and peel liner from tape. Press interface against glass to insure tape adhesion to glass.

exterior glass face
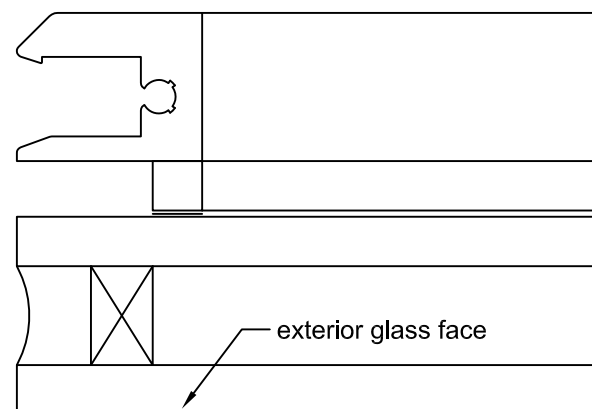
SSI APPLICATION ONLY
STRUCTURAL SILICONE APPLICATION

- Inspect sealant adhesion surfaces on glass and aluminum. If contamination is found, clean and prime as recommended by sealant manufacturer.
- After clean joints are secured, install and tool structural seals per sealant manufacturer's recommendations. Cure time related to handling of units is to be determined from sealant manufacturer's recommendations.
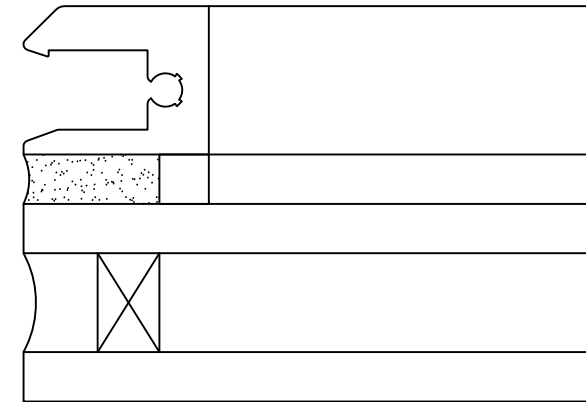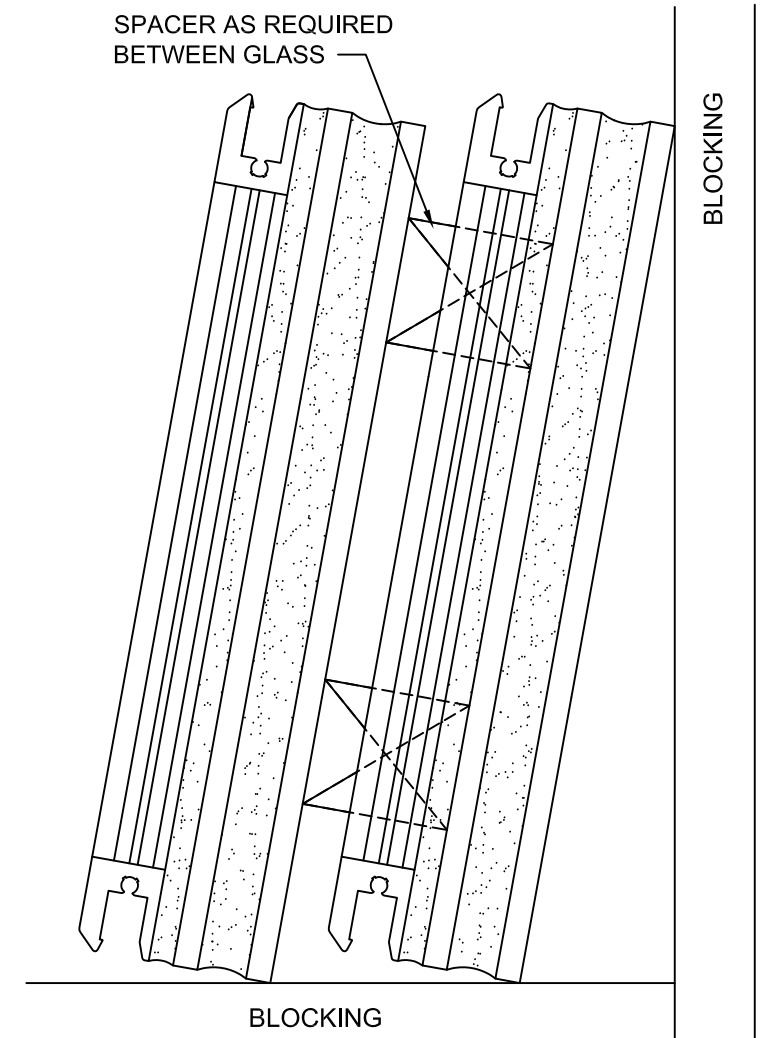
SSI APPLICATION ONLY
STACKING GLASS UNITS

After sealant manufacturer's cure time for handling, units may be stacked on edge as illustrated below. Spacers must be placed between glass lites to keep the glass completely flat. Do not stack glass on glazing channel interfaces. No bowing, sagging, or deflecting under the units' own weight or units stacked against units can be allowed. Spacer thickness is to be of a precise dimension. Keep glass absolutely flat until the structural silicone has fully cured. Stack lites of same size only.

SPACER AS REQUIRED
BETWEEN GLASS

BLOCKING

BLOCKING

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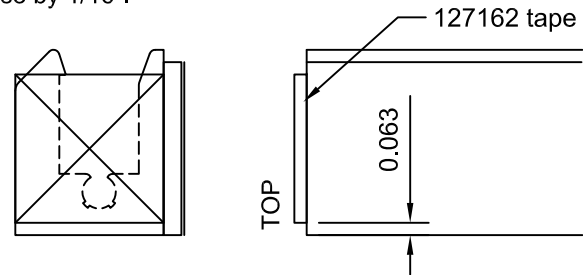INSTALLATION
INSTRUCTIONS

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SSIT APPLICATIONS ONLY
ASSEMBLE INTERFACE FRAME

Whether materials are in stock lengths or fabricated, apply 3M VHB SGT (part B23F or G23F, .090" X 7/8") to the interface per 3M's VHB Structural Glazing Tape Technical Guide and 3M training.
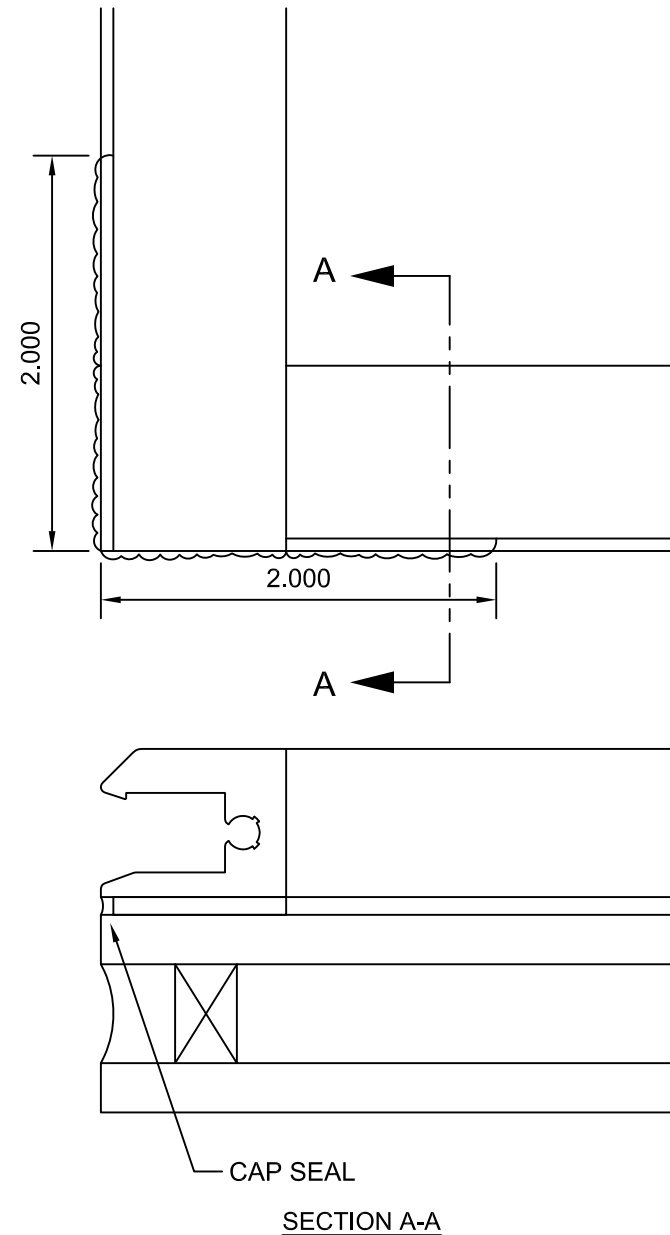
172021 — 3M VHB tape — liner
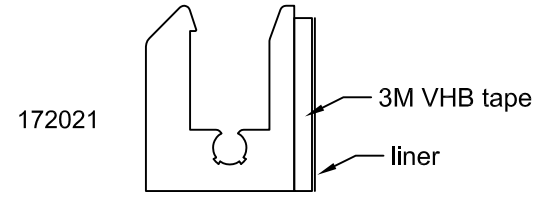
Fabricate interface as needed . Remove any metal shavings from tape edge. Clean ends of all interfaces with isopropyl alcohol.

Apply a 127162 tape square to the top and bottom of the vertical interfaces. Tape aligns on the sides but should be off the base by 1/16".

127162 tape
0.063
TOP

Join vertical interface to horizontal interface and fix together with a 977104 thread cutting screw. Attach all four corners together in a similar manner to make a square or rectangular frame.

977104
#10-24 x 7/8" D PHMS

SECTION B-B

TOP RAIL

B   B

A   A

SECTION A-A
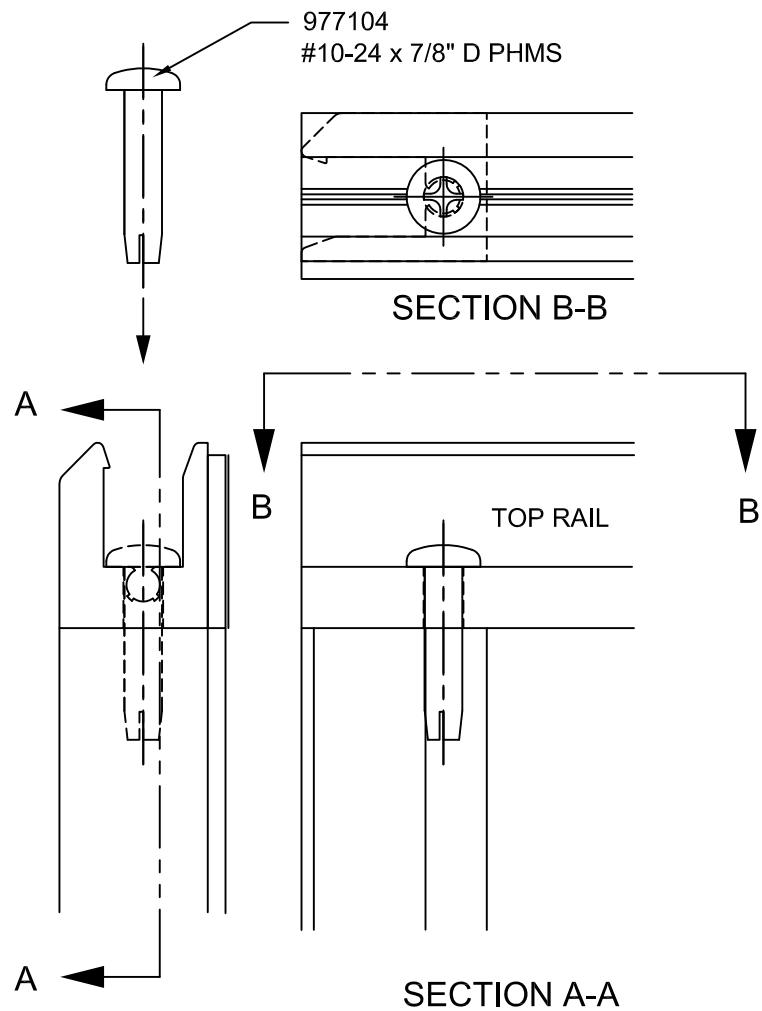
SSIT APPLICATIONS ONLY
APPLICATION OF INTERFACE FRAME TO GLASS

For cleaning, priming and required pressures, follow 3M's VHB Structural Glazing Tape Technical Guide for all applicable information.

Prepare tables which are absolutely flat with supports under table to keep tables from sagging or deflecting from the dead weight of the glass and aluminum. This is critical to insure glass flatness and tape adhesion during assembly.

NOTE:
- If interface extends beyond edge of glass, this may cause interference issues during the installation of toggles.
- Check interface squareness. Measure diagonally from corner to corner to verify the dimensions are equal. Make adjustments as needed. Sight down interface from end to make sure frame is not bowed. A frame glazed in a "out of square" or bowed position may cause installation problems.

exterior glass face
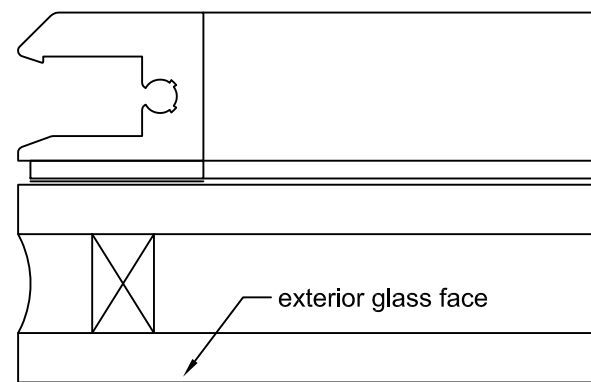
SSIT APPLICATION ONLY
CAP SEAL CORNERS

Apply cap seal between the interface and glass at all four corners, as shown, to seal gap between the end and edge of the tape.

A
2.000
2.000
A

CAP SEAL

SECTION A-A

SSIT APPLICATION ONLY
STACKING GLASS UNITS

After assembly, units may be stacked on edge as illustrated below. Spacers must be placed between glass lites to keep the glass flat. Do not stack glass on glazing channel interfaces. Stack lites of same size only.
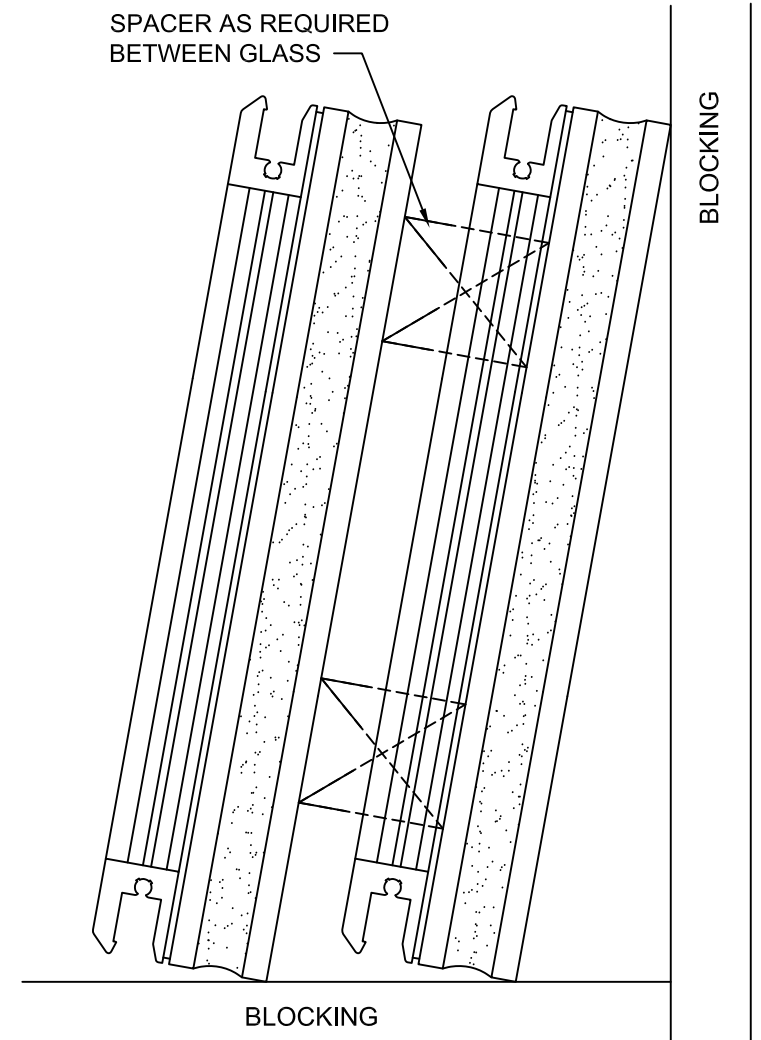
SPACER AS REQUIRED BETWEEN GLASS

BLOCKING

BLOCKING

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CONFIDENTIAL AND PROPRIETARY INFORMATION
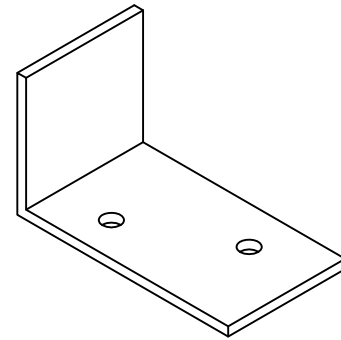**KAWNEER COMPANY INC.**

BACK PAN APPLICATION IF REQUIRED

Back pans at spandrel areas can be applied to the frame prior to frame installation where required. Reference approved shop drawings for back pan requirements.
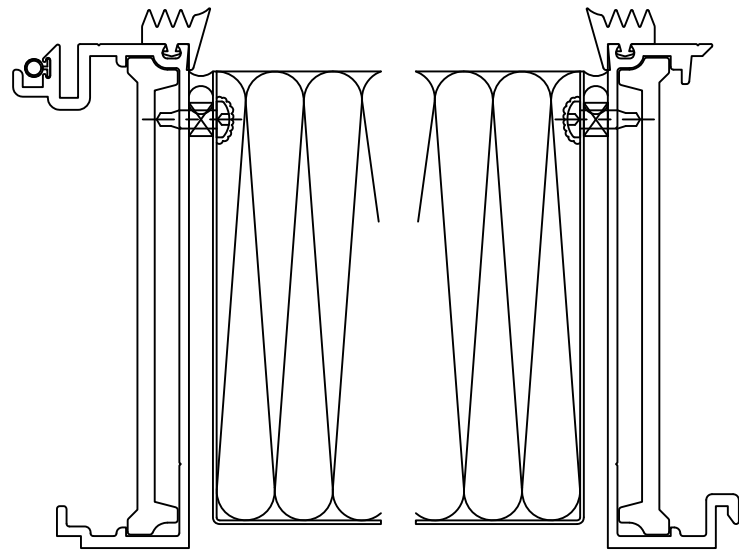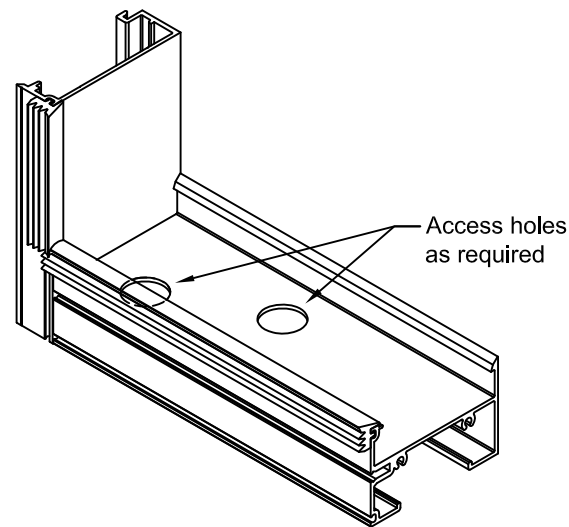

ANCHORING OPTIONS

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

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

Access holes as required

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.
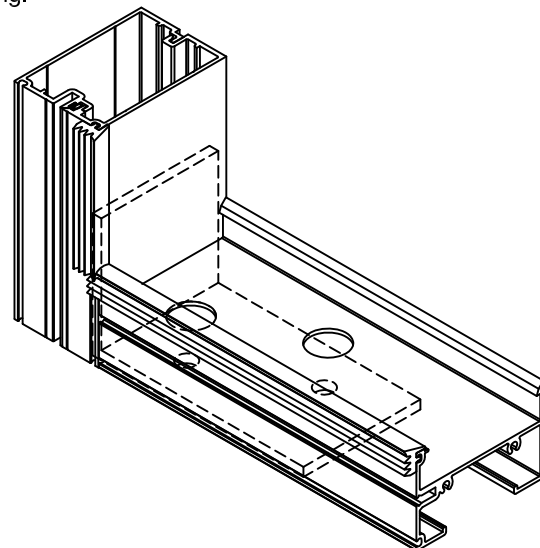
INSTALL UNITS

Reference approved shop drawings for anchoring and shimming of framed unit.

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

Units must be installed level, plumb and square.

Secure frame with clamps and apply 128402 1/4 - 14 x 1" HWHTCSD to temporarily fix frame in place. Install next frame prior to match drilling mullion and applying thru bolts.

Note: Temporary fastener must be removed after thru bolting mullions at all wind load anchors.

027477 Separator

Wind Load Anchor typical

128402
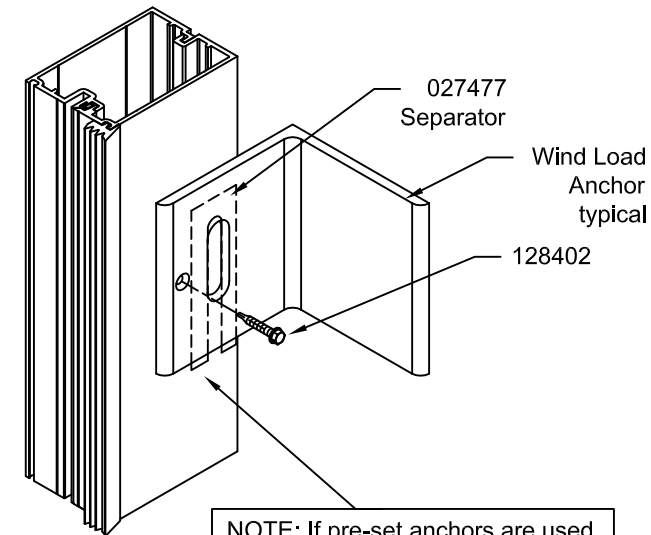
NOTE: If pre-set anchors are used, allow for an additional 1/8" between anchors at this side for unit frame installation. Shim as required.

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.
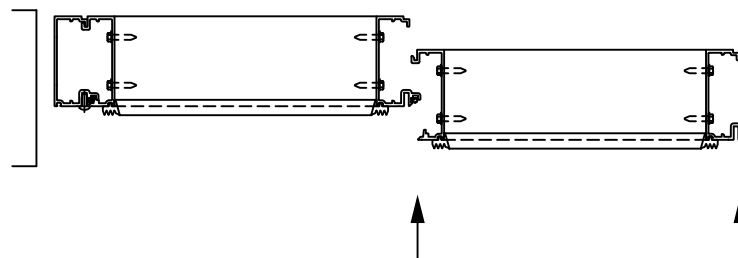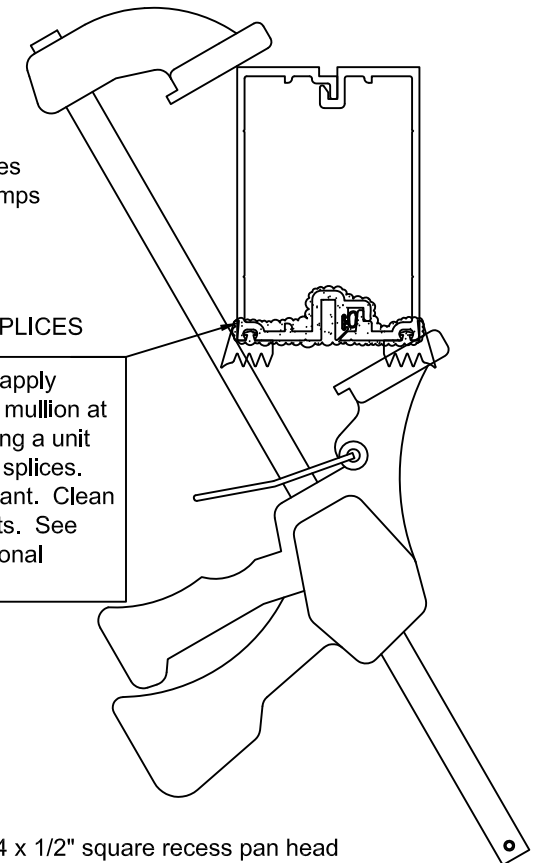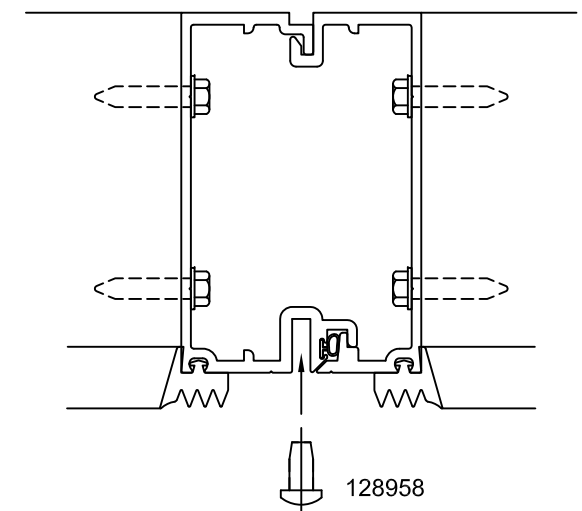

INSTALL UNITS

Secure unit frames together with clamps if needed.

AT VERTICAL SPLICES

Note: Clean and apply sealant on top of mullion at face prior to setting a unit on top at vertical splices. Tool excess sealant. Clean out glazing reglets. See sheet 8 for additional information.

Apply 128958 1/4 x 1/2" square recess pan head fasteners @ 36" on center to lock mullion halves together. Use a R3 square recess driver for screw installation.
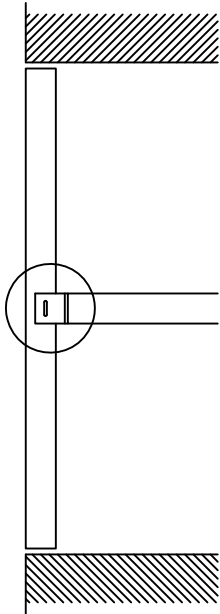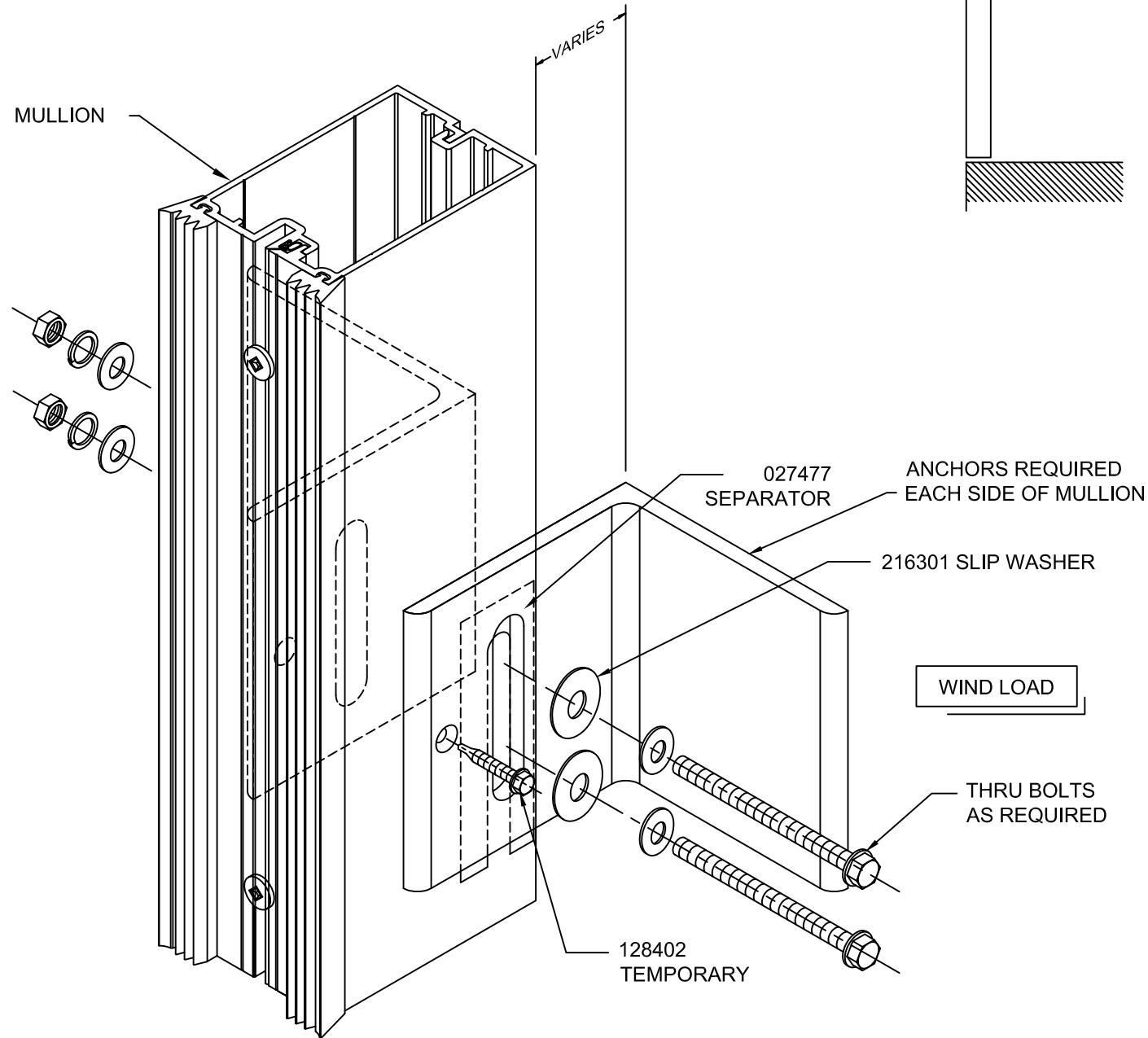

128958

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INSTALLATION
Product Engineering & Development | INSTRUCTIONS

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INSTALL UNITS

After frame has been secured with clamps, 128958 screws and 128402 screws at anchor, match drill mullions for anchor thru bolts.

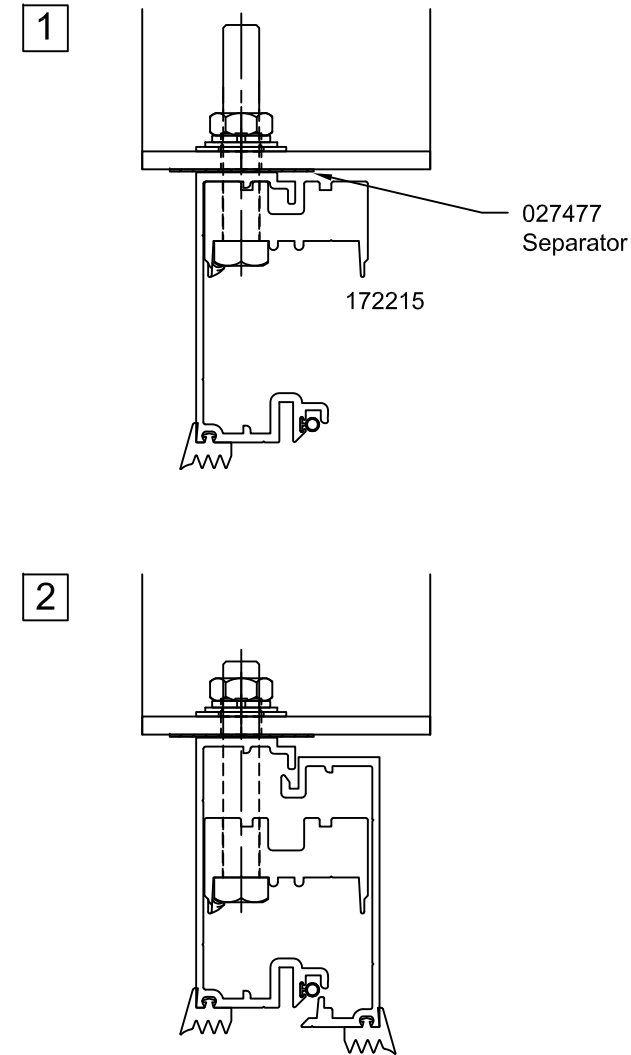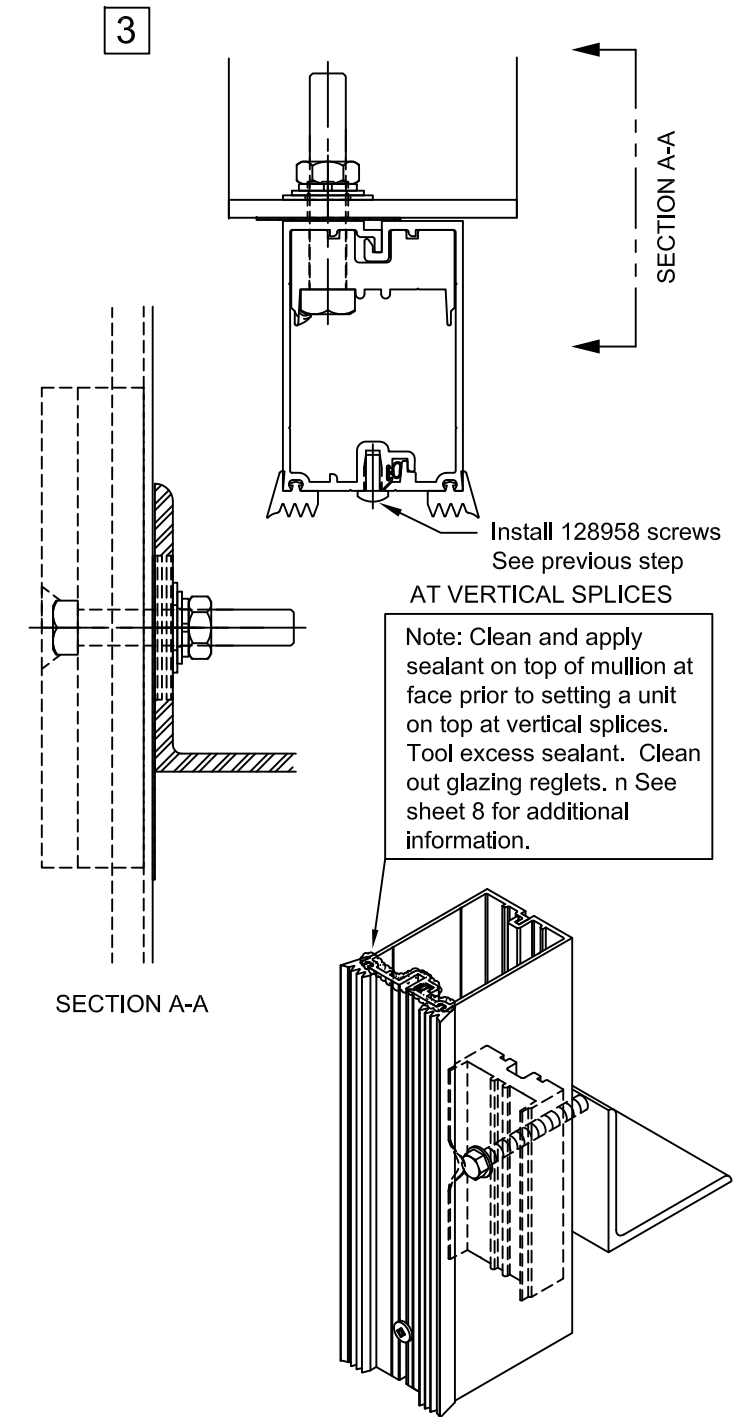Remove 128402 screws at wind load anchors.

VARIES

MULLION

027477 SEPARATOR

ANCHORS REQUIRED EACH SIDE OF MULLION

216301 SLIP WASHER

WIND LOAD

THRU BOLTS AS REQUIRED

128402 TEMPORARY

INSTALL UNITS USING BACK ANCHORS

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.

Apply 128935 1/2-13 x 3" Grade 5 HHMS to 172215 back anchor lug and crimp into place.

1. Install unit into place. Apply 172215 back anchor lug inside mullion half and fasten back to anchor per approved shop drawings.
2. When next unit is being installed, secure installed unit and loosen back anchor lug enough to engage next unit as shown. Notch in next unit should align with back anchor lug.
3. Tighten back anchor lug securing both units in place.

1

027477 Separator

172215

2

3

SECTION A-A

Install 128958 screws
See previous step

AT VERTICAL SPLICES

Note: Clean and apply sealant on top of mullion at face prior to setting a unit on top at vertical splices. Tool excess sealant. Clean out glazing reglets. n See sheet 8 for additional information.

SECTION A-A

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CLEARWALL™
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INSTALLATION
INSTRUCTIONS

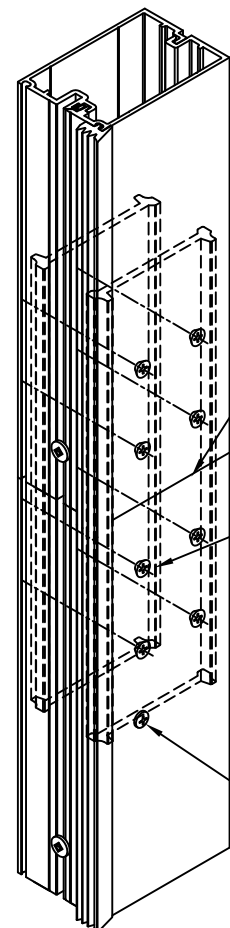95514-018
12/20/16

172970 SHEET 07 OF 12

AT MULLION SPLICE LOCATIONS

JAMBS

Note: Clean and apply sealant on top of mullion at face prior to setting a unit on top at vertical splices. Tool excess sealant. Clean out glazing reglets.

After applying fixing screws, face seal across the mullion splice and apply vertical gaskets per previous steps.
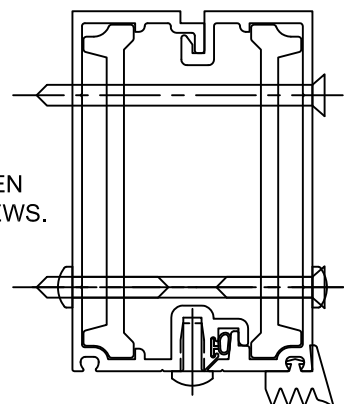
DO NOT OVERTIGHTEN FIXING SCREWS.

Just prior to lowering upper unit into place, remove the tape at the interior sleeves and slide sleeves down to the pre-applied stop screw

Field apply fixing screws. Match drill .182 dia. (#14 drill) holes in sleeves and drill through the opposite mullion half. Fix with 128388 #12 x 3" FHTF AB.

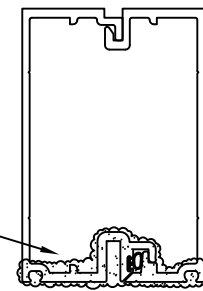Sleeve stop screw, pre-applied 128267 #12 x 1" PHTF AB at both sides of mullion.
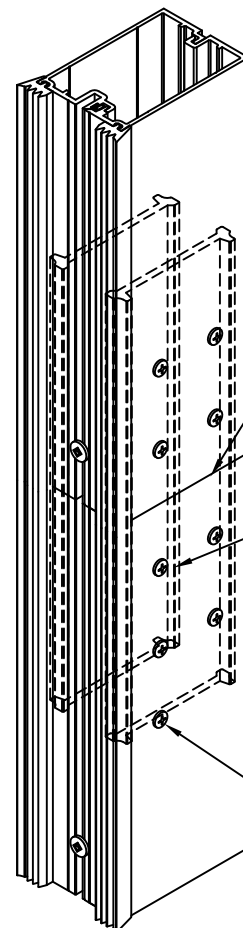
DO NOT OVERTIGHTEN FIXING SCREWS.

AT MULLION SPLICE LOCATIONS

INTERMEDIATES

Note: Clean and apply sealant on top of mullion at face prior to setting a unit on top at vertical splices. Tool excess sealant. Clean out glazing reglets.

After applying fixing screws, face seal across the mullion splice and apply vertical gaskets per previous steps.

DO NOT OVERTIGHTEN FIXING SCREWS.

Just prior to lowering upper unit into place, remove the tape at the interior sleeves and slide sleeves down to the pre-applied stop screw

Field apply fixing screws. Match drill .182 dia. (#14 drill) holes in sleeve and fix with 128267 #12 x 1" PHTF AB at both sides of mullion.

Sleeve stop screw, pre-applied 128267 #12 x 1" PHTF AB at both sides of mullion.
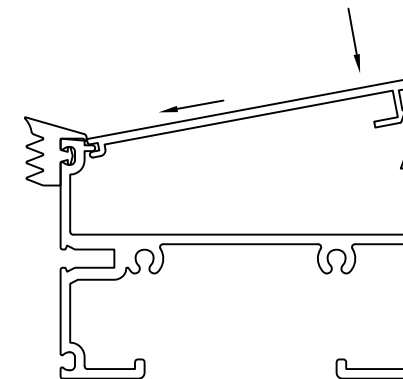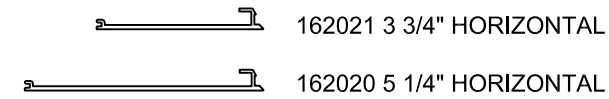
DO NOT OVERTIGHTEN FIXING SCREWS.
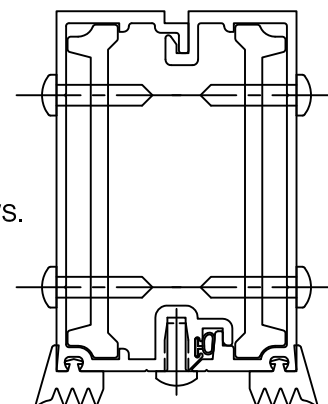
INSTALL INTERIOR FILLERS WHERE APPLICABLE

Fillers used at exposed areas only.

Sill shown, head opposite.

Perimeter horizontal shown, other similar.
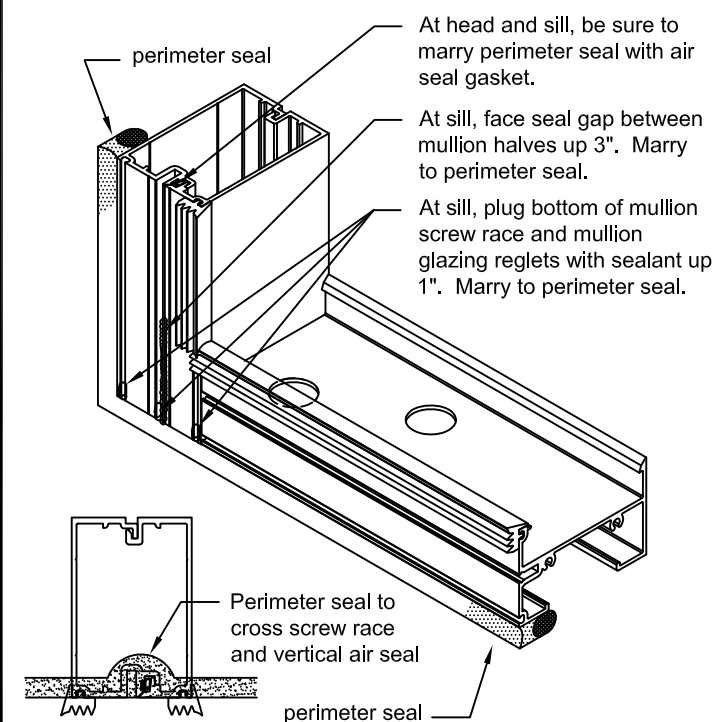
162021 3 3/4" HORIZONTAL

162020 5 1/4" HORIZONTAL

PRIMARY PERIMETER SEAL AT FACE OF MULLION TUBES

Apply backer rod and primary perimeter seal as shown where specified. Primary perimeter seal must marry with the 027493 air seal gasket between mullion halves at head and sill. Also be sure the top and bottom of the mullion screw boss is plugged.

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.
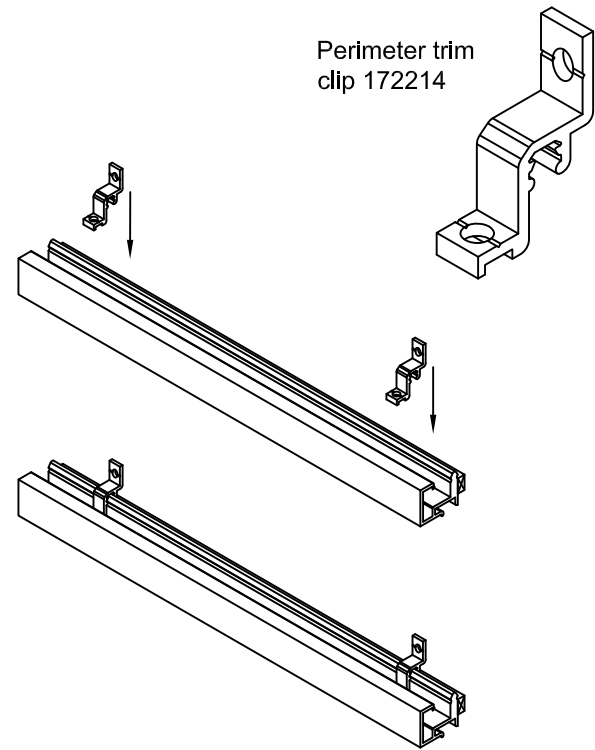
perimeter seal

At head and sill, be sure to marry perimeter seal with air seal gasket.

At sill, face seal gap between mullion halves up 3". Marry to perimeter seal.

At sill, plug bottom of mullion screw race and mullion glazing reglets with sealant up 1". Marry to perimeter seal.

Perimeter seal to cross screw race and vertical air seal

perimeter seal

PREPARE PERIMETER TRIM

Clean all surfaces and grooves per the sealant manufacturer's recommendations. At a vertical trim member where a splice occurs, apply 172203 sleeve in bottom of the upper member and tape into place. At the top of the lower member, deform edge of part at 1" from the top as shown. The indentation will provide a stop for the sleeve when the trim is installed. At horizontal trim members, tape a sleeve into the right end of each member. After installation the sleeve will be slid over to engage next trim member.

172012 Shown
172017 Similar

172203

DEFORM LEG

Unless otherwise shown in approved shop drawings, apply spacer tape at location shown along the full length of the perimeter trim. Do not cover the perimeter trip clip snap location. Leave the liner intact on the opposite side. Press firmly into place along the entire length.

liner

liner

Trip clip snap

172012
Clearwall SS

172017
Clearwall SSI
Clearwall SSIT

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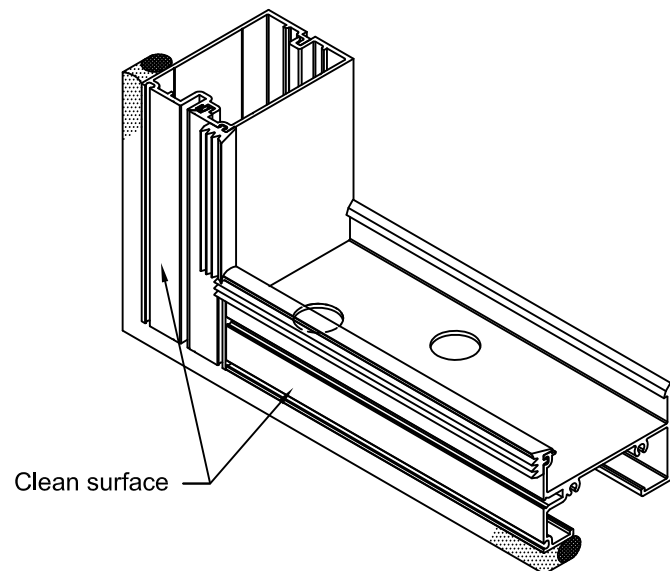
PREPARE PERIMETER TRIM

Snap-on 172214 Perimeter Trim Clip as shown. At horizontal perimeter trim members, locate clips at approximate vertical centerlines. At vertical perimeter trim members, locate clips at approximate horizontal centerlines. These clips will help to align the perimeter trim in place. After perimeter trim has been installed, clips can be slid to their final location or applied during perimeter trim installation.

Perimeter trim clip 172214

CLEAN FRAMING AT PERIMETER TRIM LOCATION

Clean framing along the mullion face where tape adhesion is required.

Clean surface

INSTALL PERIMETER TRIM

Partially peel back liner from tape of sill perimeter trim a couple inches from the ends. Pull liner towards the perimeter substrate side, fold liner and stick end of liner to the face of the perimeter trim with masking tape. Liner must be accessible after perimeter trim has been installed. Lay down shims along sill to align part with the sill horizontal. Locate left end with left side of left jamb mullion. Press trim into place.
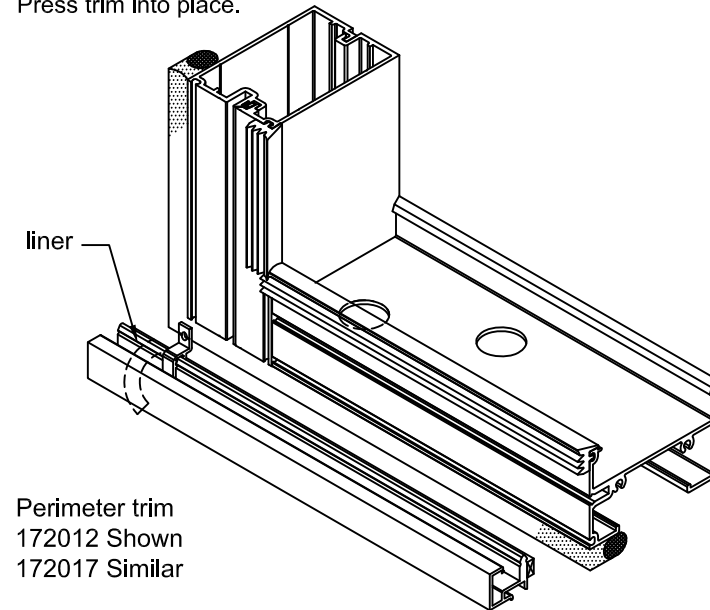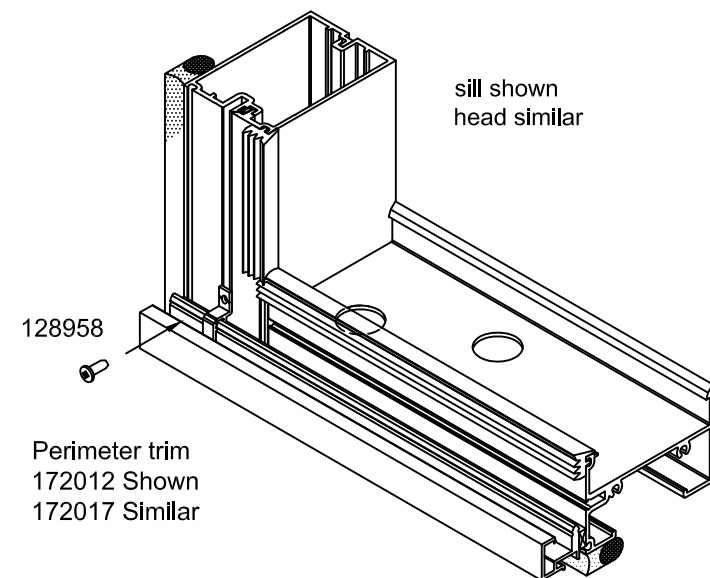
liner

Perimeter trim
172012 Shown
172017 Similar

Slide the trim clips to the vertical centerlines and apply with 128958 fasteners. Remove remaining tape liner. Press perimeter trim firmly into place along the entire length.
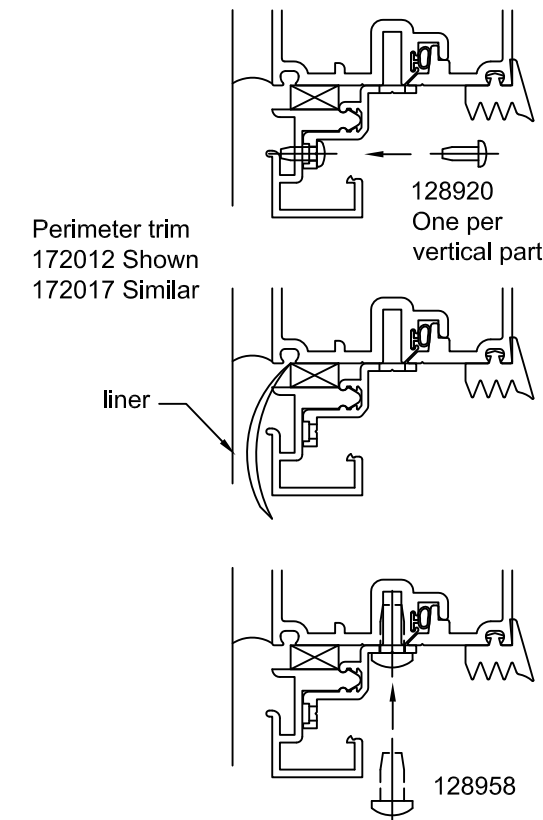
128958

liner

sill shown
head similar

128958
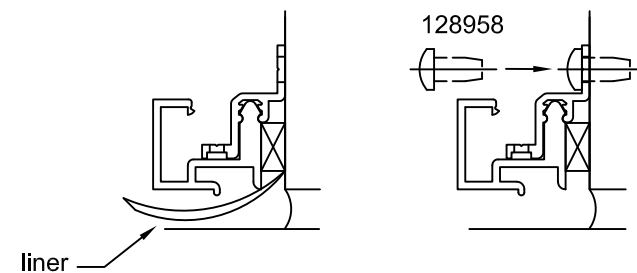
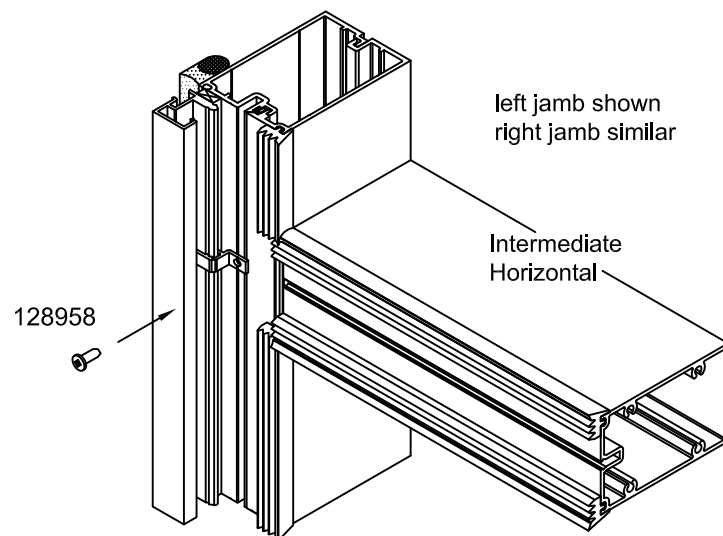Perimeter trim
172012 Shown
172017 Similar

INSTALL PERIMETER TRIM

Install head perimeter trim next. Follow the sill application similar.

At vertical perimeter trim members, trim clips will be located at horizontal centerlines. Locate all parts per approved shop drawings. At the trim clip closest to the midpoint of the perimeter trim length, match drill one .110 dia. [35 drill] hole at this location only. Attach trim clip with a 128920 #6 pan head screw. The vertical trim installation will then follow similar to the sill application. When applying the vertical perimeter trim clips at elevation head and sill, move trim clips just off of the horizontal trim clips previously installed.
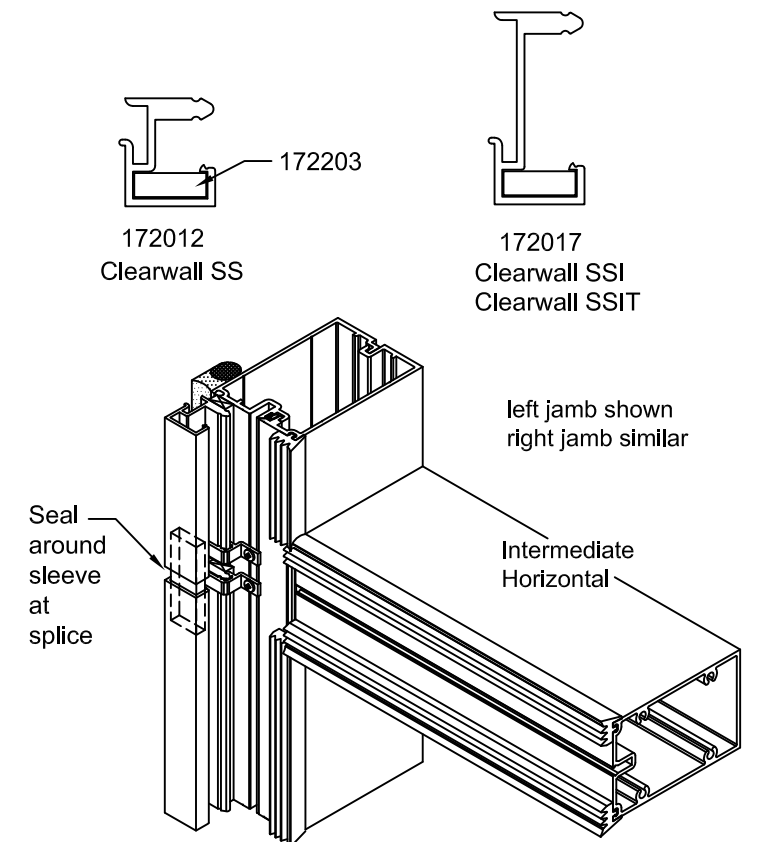
Perimeter trim
172012 Shown
172017 Similar

128920
One per
vertical part

liner

128958

128958

left jamb shown
right jamb similar

Intermediate
Horizontal

INSTALL PERIMETER TRIM

At splices, remove tape from bottom of upper member and drop the splice sleeve down to engage the lower member. The sleeve will stop at the leg that was deformed in the previous step. Clean splice sleeve area per sealant manufacturer's recommendations. Apply bond breaker tape around sleeve. Seal around splice and tool. Complete similar operation at horizontal splices.

172203

172012
Clearwall SS

172017
Clearwall SSI
Clearwall SSIT

left jamb shown
right jamb similar

Seal
around
sleeve
at
splice

Intermediate
Horizontal

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INSTALL SETTING BLOCK CHAIRS

Slide in setting block chair as shown and locate per approved shop drawings. When toggle spacing is required at 6" on center, chair may be located at 8 1/2 or 14 1/2" from the side of each mullion at the dimension closest to the quarter points of the daylight opening. When toggle spacing is required at 9" on center, chair location will have to be determined where it will not interfere with a toggle. Use a dimension closest to the quarter points of the daylight opening.

Sill Shown Intermediate Similar

172200 SS
172210 SSI
172216 SSIT
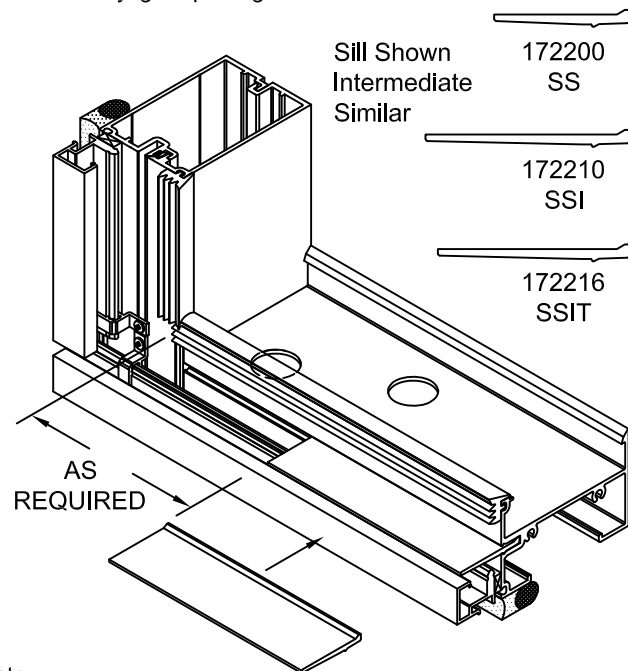
AS REQUIRED

* Note:
45 sq/ft is the allowable maximum glass size limit for a 4-1/2 long glass chair. Glass sizes above this require the glass chair and setting block to be doubled up (side by side) at points required.

INSTALL SETTING BLOCKS

Remove liner from bottom of setting block. Insert nub at back edge into space between the horizontal screw boss and top of setting block chair at the face of the horizontal. Rotate setting block down into place and press firmly.

127158 SS
NUB
127166 SSI
127163 SSIT

Sill Shown Intermediate Similar

Remove liner from bottom
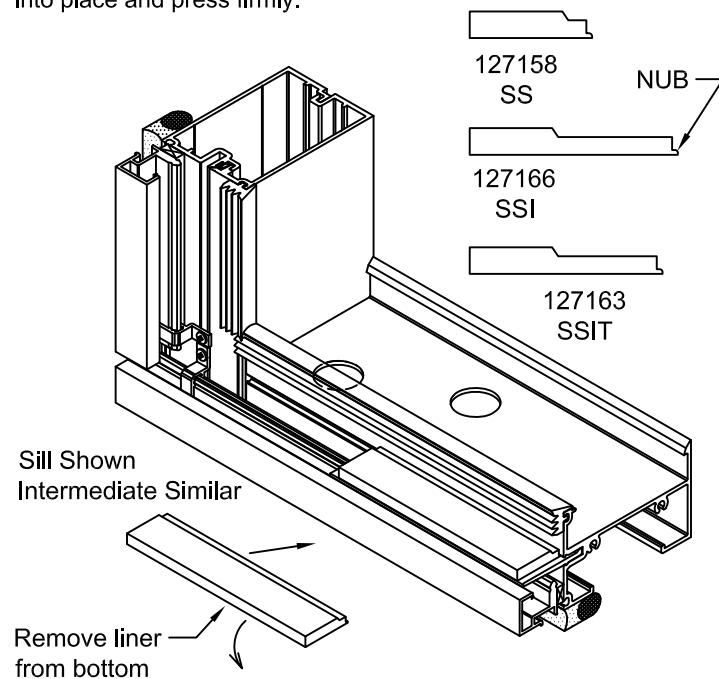
INSTALL GLASS - 1ST GLASS UNIT

Starting at the lower left of the elevation, apply a bead of sealant at the interior gasket corners at the face. Install the first glass unit onto setting blocks and center glass. Edge of glass should align with the "v" groove at the face of the mullion. See below. Space between glass or between glass and perimeter trim is 5/8". Shims between glass can be used to center glass. The toggle is 1/2" wide to allow for some glass setting tolerances. Please check every few lites to ensure alignment of glass for toggle installation. At SSI and SSIT applications, check alignment of interfaces with the interior gasket and side of mullion from the building interior.

JUST BEFORE INSTALLING GLASS, SEAL ALL 4 GASKET CORNERS.

Align glass edge with "v" groove typical

SEAL ALL 4 GASKET CORNERS
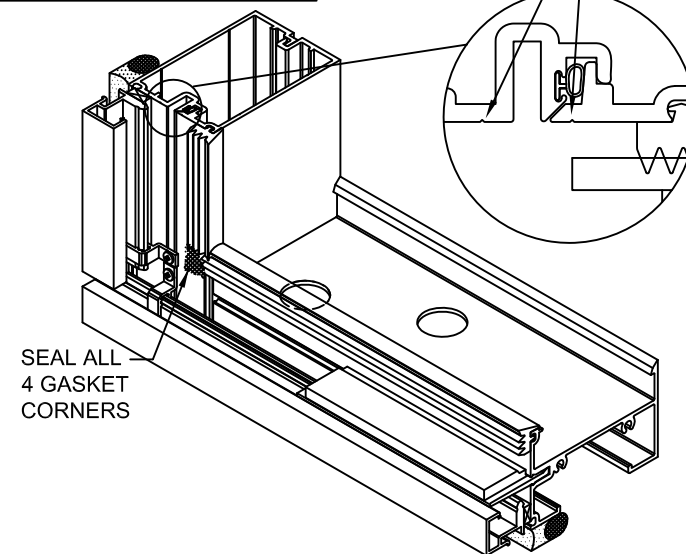
Apply glazing temporary to right side and head of glass unit. Apply temporary with two 128958 PH fasteners. Use a 3" long piece of 027851 wedge gasket to secure glass.

172204 SS
172211 SSI
172218 SSIT

027851
128958
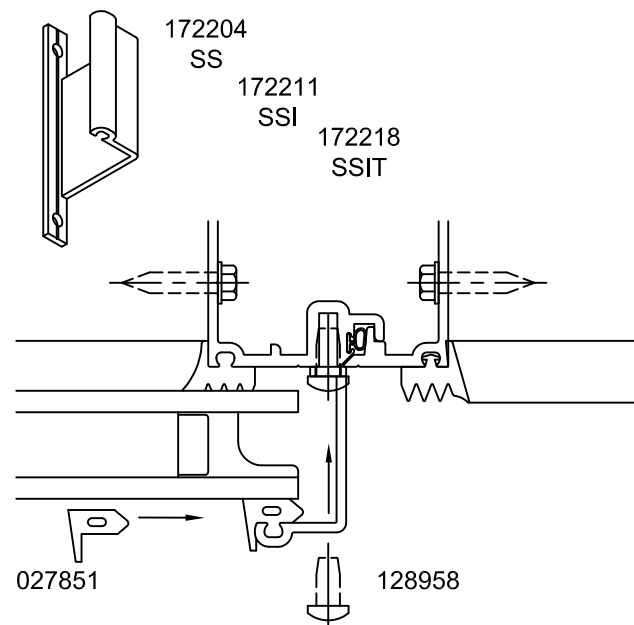
MAXIMUM TEMPORARY SPACING IS 24". IF WINDS GREATER THAN 50 MPH (80KPH) ARE EXPECTED, ADDITIONAL TEMPORARIES MAY BE REQUIRED.
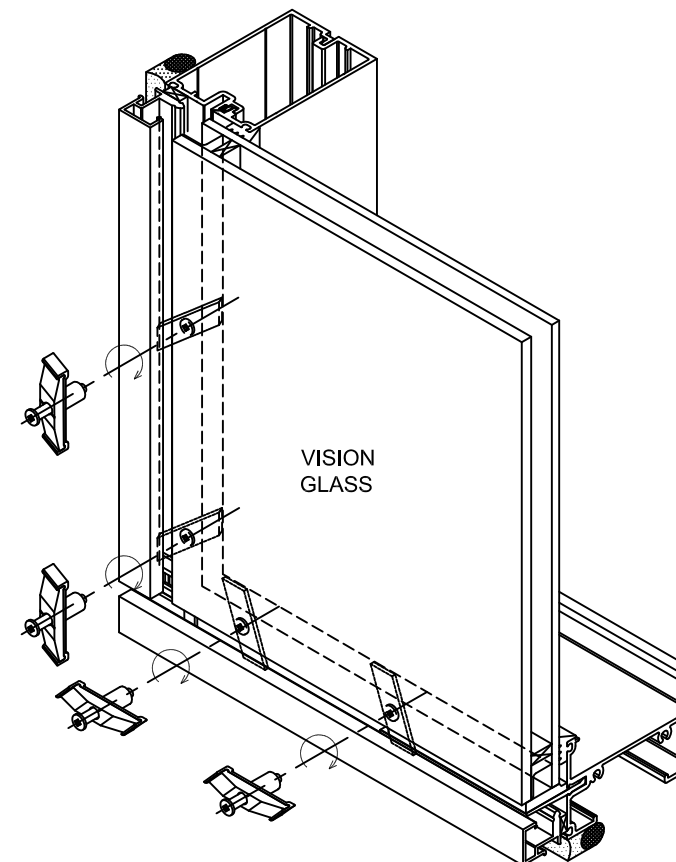
INSTALL GLASS - 1ST GLASS UNIT

172213 toggle assemblies can be applied along the sill and left jamb. Mark glass as needed using toggle assembly locations and spacing as required per approved shop drawings.

Typically the toggle spacing is at 9" on center. For Clearwall SS only, toggles may be required at a maximum of 6" on center if the smallest dimension of the glass size (ft) is greater than 267 divided by psf where psf is the higher of the positive or negative design wind load. Start and end toggle locations at 2" - 3" from the corners of the glass.

The toggle assembly screws have square recessed heads. Use a R3 square recess head driver long enough to extend back into joint to tighten toggle.

Apply pressure to the face of the glass during toggle installation. Insert toggle between glass and perimeter trim and begin to rotate toggle assembly into position at recessed space at the glass edge. Keep screw gun level and plumb. Take precautions not to contact the edge of the glass with screw gun. Torque all screws to 85 in-lbs so the toggle base contacts the face of the mullion.

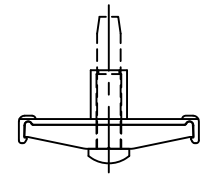CLEARWALL™ SS APPLICATION SHOWN
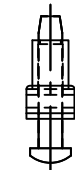SSI AND SSIT APPLICATIONS SIMILAR

VISION GLASS
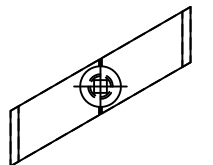
INSTALL GLASS - 1ST GLASS UNIT
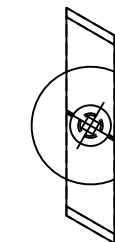
172213 TOGGLE ASSEMBLY

STARTING POSITION AT VERTICAL
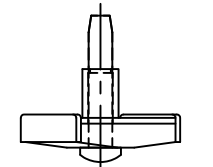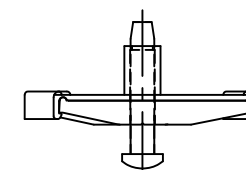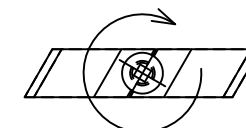FINISH POSITION AT VERTICAL

TOP VIEW
TOP VIEW

FRONT VIEW
FRONT VIEW

STARTING POSITION AT HORIZONTAL
FINISH POSITION AT HORIZONTAL

TOP VIEW
TOP VIEW

FRONT VIEW
FRONT VIEW

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INSTALL GLASS

Install next glass unit above or to the right of the first installed glass unit. Apply a bead of sealant at the interior gasket corners at the face and install the glass unit similar to the application of the first glass unit. Please check every few lites to ensure alignment of glass for toggle installation. At SSI and SSIT applications, check alignment of interfaces with the interior gasket and side of mullion from the building interior. After a few toggles have been applied between the glass units, temporaries can be removed and re-used at the installation of the next lite.

Continue glass installation up and to the right for remaining glass units. Last glass unit installed will be at the top right of the elevation. Glass installation sequence as noted is optional but reduces the amount of temporaries required to be applied.

If glass setting tolerances become too tight to install toggles, toggles can be slid in from the top or side of lite. Another option would be to shift glass lite, install toggle loosely and shift lite back into position.

JUST BEFORE INSTALLING GLASS, SEAL ALL 4 GASKET CORNERS.

CLEARWALL™ SS APPLICATION SHOWN
SSI AND SSIT APPLICATIONS SIMILAR

INSTALL GLASS UNIT

128958

GLASS UNIT INSTALLED

GLASS UNIT INSTALLED
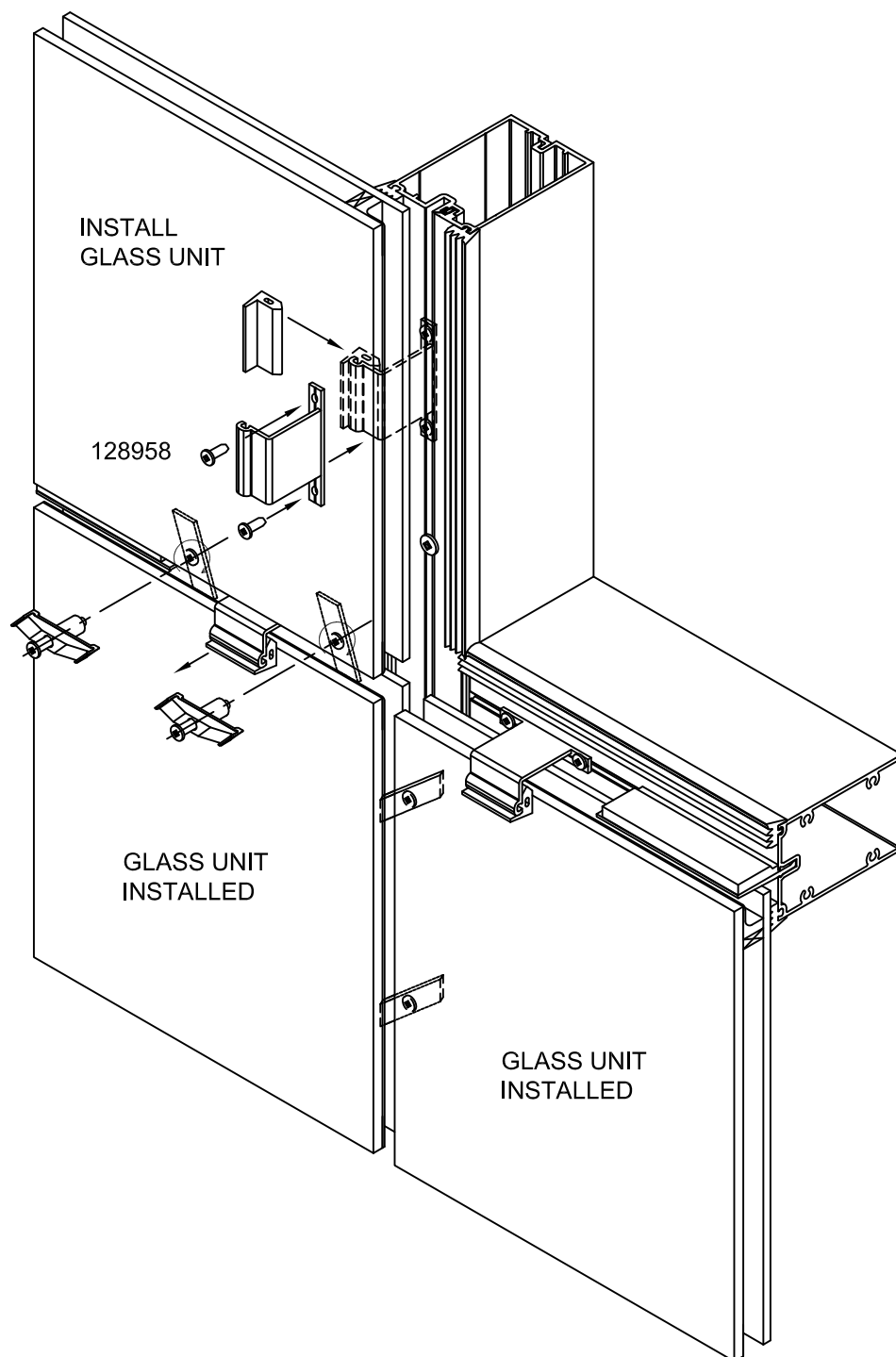
INSTALL BACKER ROD

At Clearwall SS, install 172205 backer between glass units. Fold part as shown below and slide into place. The part can be adjusted after installation with a flat head screw driver at notch in front. Backer can be cut to fit and butt spliced as needed. Below setting block chairs and other special areas, standard backer can be used.

At Clearwall SSI and SSIT, standard 1" dia. backer can be used and ran continuously between the glass units.

Standard backer rod can be applied at this time around the perimeter joints for all system types.

FOLDED POSITION

172205 BACKER PROFILE
BOND BREAKER BETWEEN BACKER AND
SILICONE IS NOT REQUIRED

INSTALL WEATHER SEALS

Kawneer does not supply sealant. Use sealant as recommended by the sealant manufacturer. Infill and metal to be cleaned per the sealant manufacturer's recommendations.

Apply weather seal as shown.

Weather seal

CLEARWALL™ SS

Weather seal

CLEARWALL™ SSI

Weather seal

CLEARWALL™ SSIT

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INSTALL PERIMETER RAINSCREEN SEALS
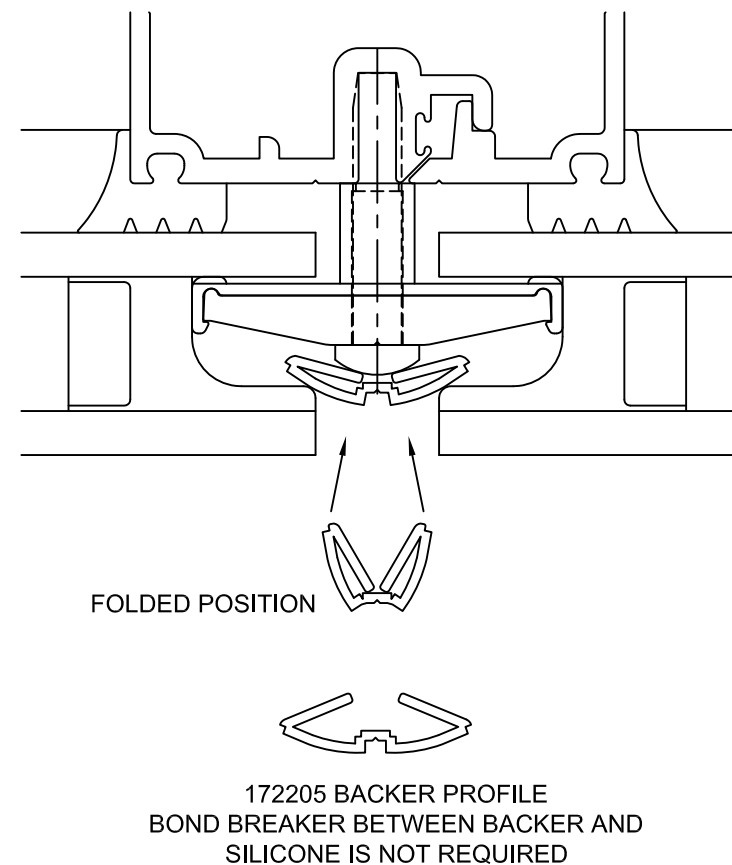
Install backer rod and perimeter rainscreen seals as detailed below. Apply 5/16" dia. weep tubes at sill (by others), 2 per DLO at 1/4 points to allow any water, due to condensation, to weep to the exterior.
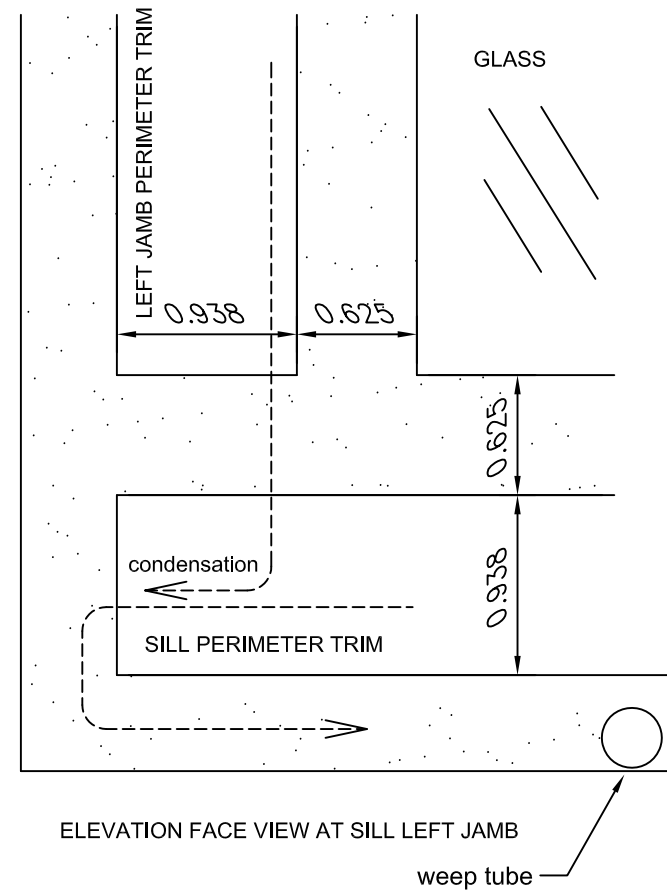
Clearwall SS shown, Clearwall SSI and SSIT similar.

RAINSCREEN SEAL

REQUIRED WEATHER SEAL

OPTIONAL COSMETIC SEAL

HEAD CONDITION

SILL CONDITION

WEEP TUBE

RAINSCREEN SEAL

REQUIRED WEATHER SEAL

OPTIONAL COSMETIC SEAL

OPTIONAL COSMETIC SEAL

JAMB CONDITION

REQUIRED WEATHER SEAL
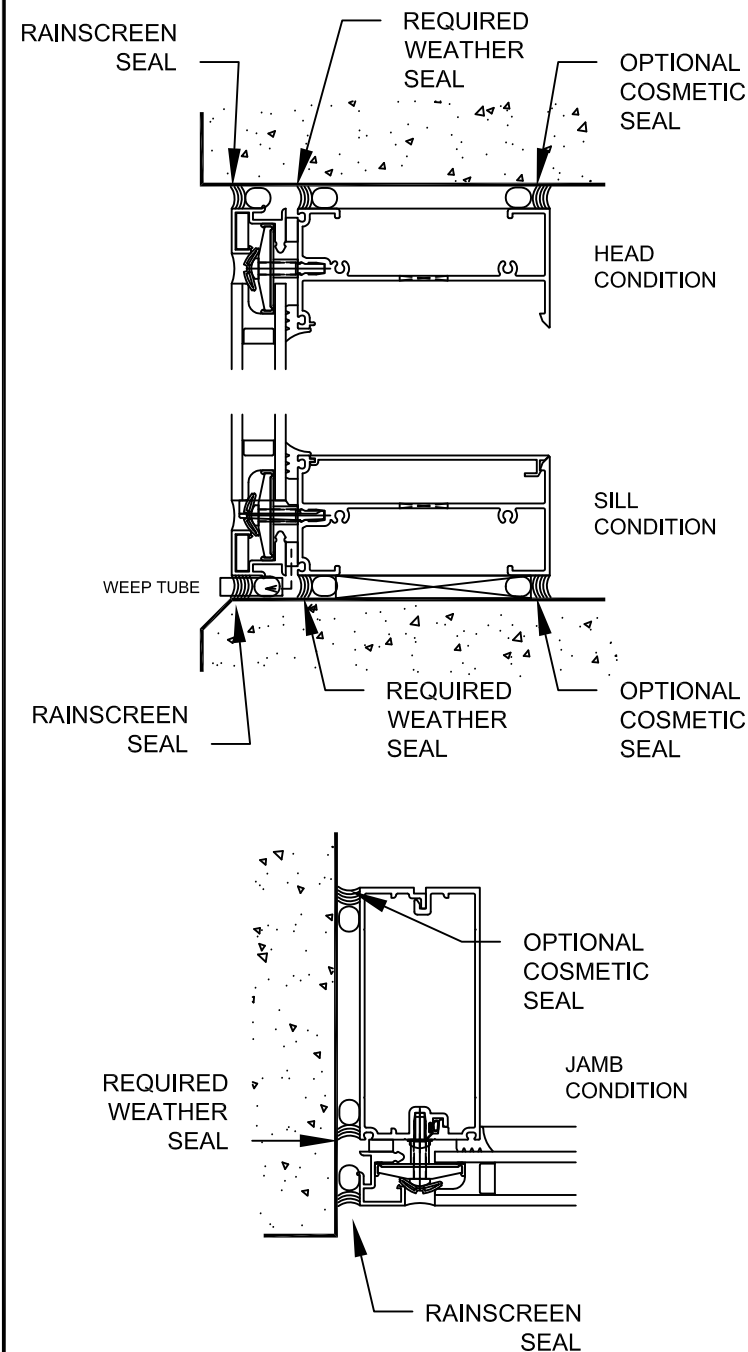
RAINSCREEN SEAL

INSTALL PERIMETER RAINSCREEN SEALS

Apply backer rod and continue weather seal between the face of the vertical and horizontal perimeter trim members. Do not seal the area between the perimeter trim members behind the rainscreen/weather seal. This will allow any drainage required to run off the end of the perimeter trim and make it's way to the weep tubes at the sill.

LEFT JAMB PERIMETER TRIM

GLASS

0.938

0.625

0.625

0.938

condensation

SILL PERIMETER TRIM

ELEVATION FACE VIEW AT SILL LEFT JAMB

weep tube

REGLAZING

To reglaze glass, remove weather seal around glass, secure glass, remove toggles and remove glass. Apply temporaries at edge of adjacent glass units as required. Reinstall glass per standard installation instruction.

For Clearwall SSI and SSIT, the interface will be removed as well. Reapply interfaces in the shop and reinstall glass unit per standard installation instructions.

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