

Oldcastle BuildingEnvelope®

*RELIANCE™ WINDOW WALL
ASSEMBLY & GLAZING INSTRUCTIONS*

NOTE:

THE ASSEMBLY DETAILS FOUND IN THIS PACKAGE ARE GENERIC AND ARE FOR REPRESENTATION ONLY WITH THE INTENT OF GIVING THE ASSEMBLY TEAM A VISUAL REPRESENTATION AS TO HOW THE ASSEMBLIES TYPICALLY ASSEMBLE. THE SHOP SUBMISSION DRAWINGS AND DETAILS ARE THE GOVERNING DOCUMENTS AND AS SUCH THIS PACKAGE IS TO BE USED ONLY AS A RESOURCE.

FOLLOW SEALANT & TAPE MANUFACTURERS RECOMMENDATIONS FOR USE AND APPLICATION OF STRUCTURAL GLAZING TAPE AND WEATHER SEAL SILICONE SEALANT.

NOTE: CUSTOMER / PROJECT QUALITY ASSURANCE PROCEDURES ARE SEPARATE DOCUMENTS AND ARE TO BE FOLLOWED IN CONJUNCTION WITH THIS MANUAL.

RELIANCE™ WINDOW WALL - ASSEMBLY AND SEALING INSTRUCTIONS

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RELIANCE™ WINDOW WALL - ASSEMBLY AND SEALING INSTRUCTIONS

GENERAL INFORMATION

PRODUCT USE

The Reliance Window Wall system is intended for assembly and installation by glazing professionals with appropriate experience. Subcontractors must be qualified to provide field instruction and project management.

Oldcastle BuildingEnvelope® does not control the application of its product configurations, sealant, tape or glazing material and assumes no responsibility for the application. It is the responsibility of the owner, architect and installer to make these selections in strict compliance with applicable laws and building codes.

It is critical to involve 3M™ at the earliest stage of the project as possible. Building loads and glass sizes may be restricted based on structural capabilities of the tape used on project. Supplier must review shop drawings and make recommendations prior to ordering of materials.

When using 3M™ VHB™ SGT you must involve 3M's™ technical services to obtain approval, and have SOP written for project specific materials, order materials and schedule training prior to assembling any window frames. (3M VHB NOT by O.B.E., purchased directly from distributor)

The air and water performance of the Reliance Window Wall is directly related to the completeness and integrity of the assembly and installation process both the seal installed at the horizontal to vertical connections and the glazing tape installed at the interior side of the glass.

1. Surface to be cleaned with isopropyl alcohol or solvent and dried as recommended by tape/sealant manufacturer to remove dirt and cutting oils. No gap should be visible in the sealant. Exposed surfaces should be cleaned of excess sealant after installing the horizontal. Inspect joint for complete sealant contact, especially where the horizontal meets the face of the vertical member.

2. The glazing tape should be installed so as to avoid stretching, buckles or tears. Cut the tape at corners (As shown on sheet 13).

Variations on details shown may occur, but are not the responsibility of Oldcastle BuildingEnvelope®.

PROTECTION AND STORAGE

Handle all material carefully. Do not drop from the truck. Stack with adequate separation so the material will not rub together. Store material off the ground, protecting against the elements and other construction hazards by using a well ventilated covering. Remove material from package if wet or located in a damp area. For further guidelines consult AAMA publication "Care And Handling of Architectural Aluminum From Shop To Site".

GENERAL INFORMATION

RELIANCE™ WINDOW WALL - ASSEMBLY AND SEALING INSTRUCTIONS

CHECK MATERIAL

Check glass dimensions for overall size as well as thickness. Oldcastle BuildingEnvelope® cannot be held responsible for gaskets that are not water tight due to extreme glass tolerances. The unitized curtain wall system is designed to accommodate glass or panels measuring 1" in thickness (+/- 1/32").

Check all material upon arrival at job site for quality and to determine any shipping damage. Using the contract documents, completely check the surrounding conditions that will receive your materials. Notify the general contractor by letter of any discrepancies before proceeding with the work. Failure to do so constitutes acceptance of work by other trades.

Check shop drawings, installation instructions, architectural drawings and shipping lists to become familiar with the project. The shop drawings take precedence and include specific details for the project. The assembly and installation instructions are of a general nature and cover the most common conditions.

Due to varying job conditions all sealant must be approved by the sealant manufacturer to ensure it will perform per conditions shown on the instructions and shop drawings. The sealant must be compatible with all surfaces in which adhesion is required, including other sealant surfaces. Use primers where directed by sealant manufacturer. Properly store sealant at the recommended temperatures and check sealant for expiration date and shelf life before using.

FIELD CONDITIONS

All material to be installed plumb, level and true. Aluminum to be placed in direct contact with masonry or incompatible material should be isolated with a heavy coat of zinc rich, bituminous paint or non-metallic material unless otherwise specified. After sealant is set and a representative amount of the wall has been glazed (250 sq. ft. or more), perform a water hose test in accordance with AAMA 501.2 "Field Check of Metal Storefront, Curtain Wall and Slope Glazing Systems for Water Leakage". On large projects the hose test must be repeated during the glazing operation. Review anchors or embeds in structure as early as possible to confirm that 'as built' building structure can accommodate anticipated anchor tolerances.

CLEANING MATERIALS

Cement, plaster terrazzo, alkaline and acid based materials used to clean masonry are very harmful to finishes. Any residue should be removed with water and mild soap immediately or permanent staining will occur. A spot test is recommended before any cleaning agent is used. Refer to the architectural finish guide in the detail catalogue.

EXPANSION JOINTS

Expansion Joints and perimeter joints shown in these instructions and in the shop drawings are shown at nominal size. Actual dimensions may vary due to perimeter conditions and/or differences in metal temperature between the time of fabrication and the time of assembly/installation. For example, a 12' unrestrained length of aluminum can expand or contract 3/32" over a temperature change of 50 degrees F. Any movement potential should be accounted for at the time of fabrication, assembly, and installation.

GENERAL INFORMATION

RELIANCE™ WINDOW WALL - ASSEMBLY AND SEALING INSTRUCTIONS

MEASURING & CUTTING MATERIAL

Unless otherwise noted, the details shown in these instructions reflect 1" glazing, and are representative of typical non-corner conditions.

- 1.1 Measure ROUGH OPENING to determine FRAME WIDTH and FRAME HEIGHT dimensions. Allow 1" minimum clearance vertically, and a 1/2" at horizontal starter sill and head can.

Frame Members

Jamb
Male Mull
Female Mull

Vertical Members

Frame Size minus 2 5/8" (See Sheet 7 for fab)
Frame Size minus 2 5/8" (See Sheet 8 for fab)
Frame Size minus 2 5/8" (See Sheet 9 for fab)

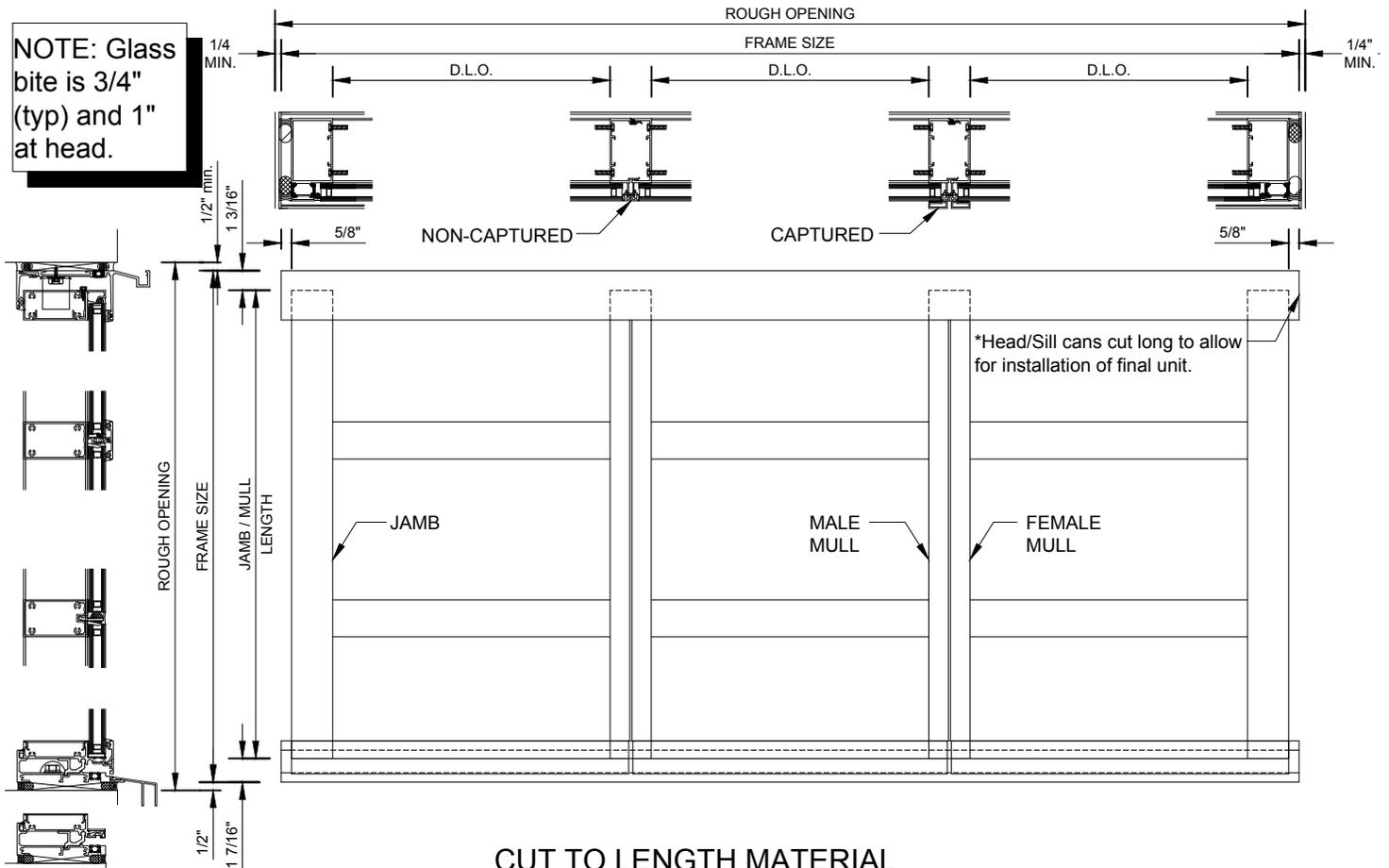
Horizontal Members

Head Horizontal
Int. Horizontal
Sill Horizontal (Non-captured)
Sill Horizontal (Captured)

D.L.O.
D.L.O.
D.L.O.
D.L.O. + 1 1/8" per Mullion and/or 2 1/2" per Jamb
(See Sheet 6 for fab)

Exterior Sill Glazing Bead
Jamb Filler Trim @ Head
Head Trim
Head Can
Sill Can (Same if captured or non-captured)

D.L.O. + 1 1/8" per Mullion and/or 2 1/2" per
D.L.O. minus 1/16"
D.L.O. + 1 1/2" (See Sheet 6 for fab)
Frame Size
Frame Size



RELIANCE™ WINDOW WALL - ASSEMBLY AND SEALING INSTRUCTIONS

MEASURING & CUTTING MATERIAL

Vertical Face Caps

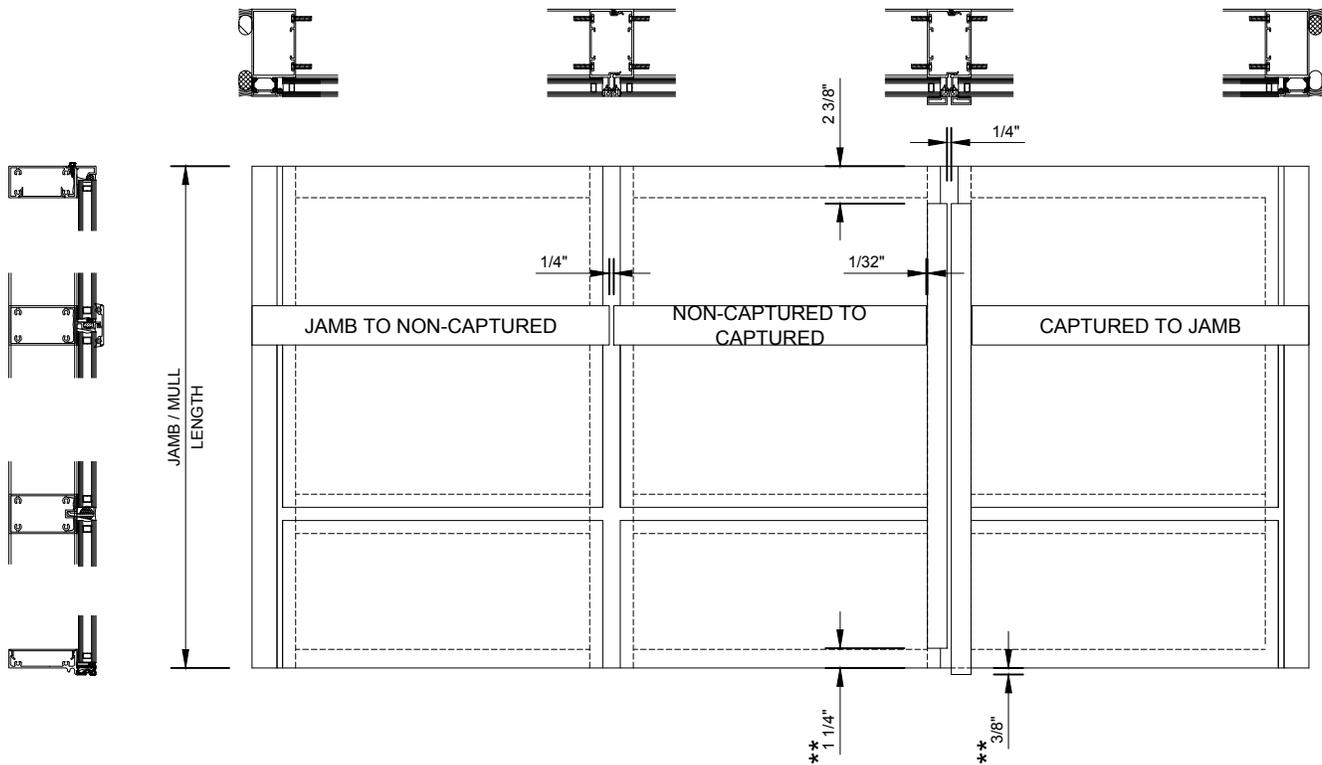
Captured Sill
Non-Captured Sill

Mullion Length minus 3 5/8"
Mullion Length minus 2"

Horizontal Face Caps

Jamb to Captured
Jamb to Non-Captured
Jamb to Jamb
Non-Captured to Captured
Captured to Captured
Non-Captured to Non-Captured

D.L.O. + 2 15/32" (See Sheet 6 for fab)
D.L.O. + 3 5/8" (See Sheet 6 for fab)
D.L.O. + 5" (See Sheet 6 for fab)
D.L.O. + 1 3/32" (See Sheet 6 for fab)
D.L.O. minus 1/16"
D.L.O. + 2 1/4"

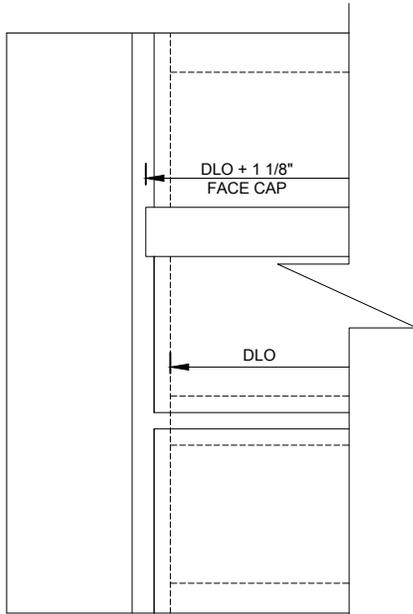
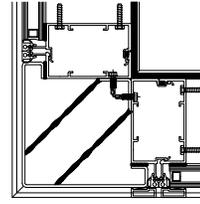
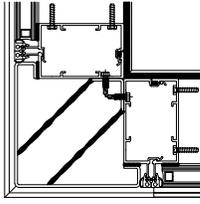


NOTE: VERTICAL CAP CUT SHORT OF FRAME TO ALLOW CLEARANCE FOR MOVEMENT AT HEAD CAN.

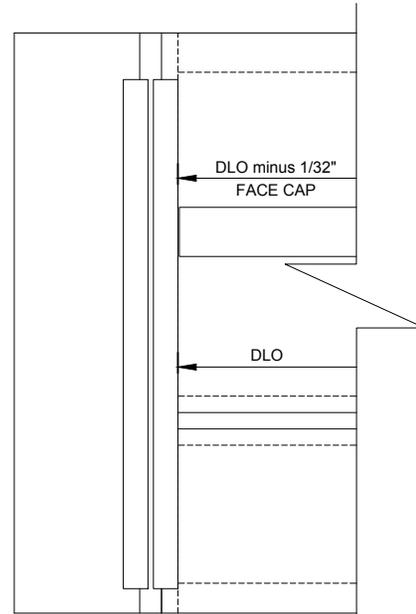
** (SEE SHEET 15 FOR REFERENCE)

GRID AND FACE CAP LAYOUT

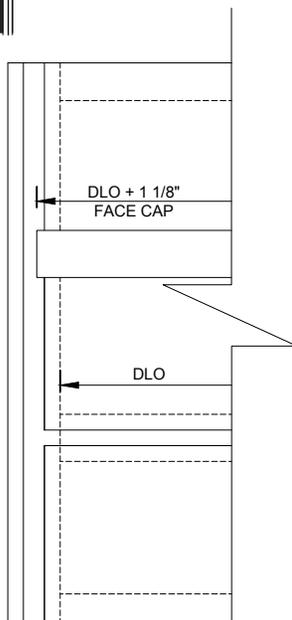
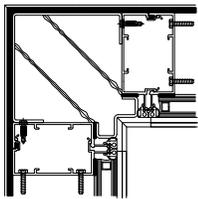
RELIANCE™ WINDOW WALL - ASSEMBLY AND SEALING INSTRUCTIONS



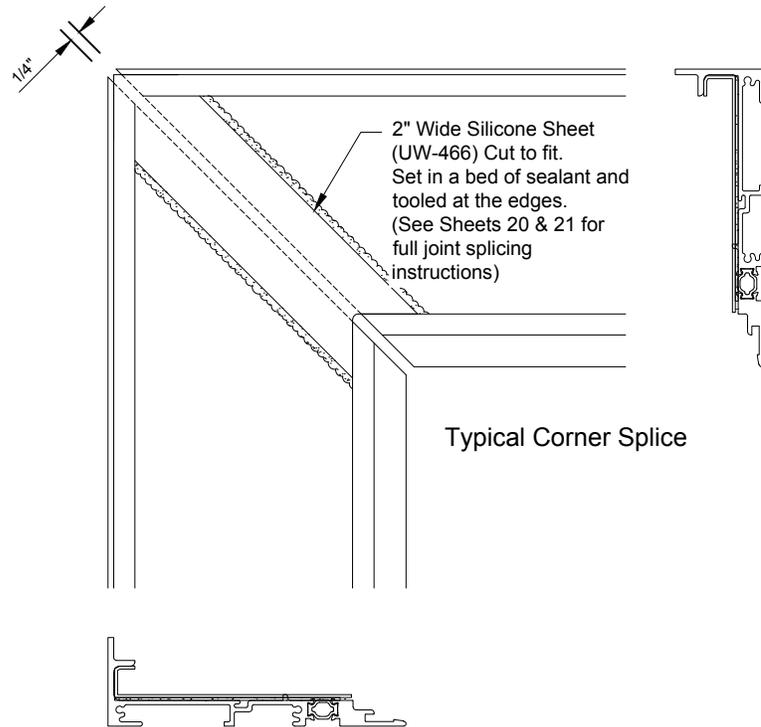
Horiz. FC @ Non-Cap. Vert.
O.S. Corner



Horiz. FC @ Cap. Vert.
O.S. Corner

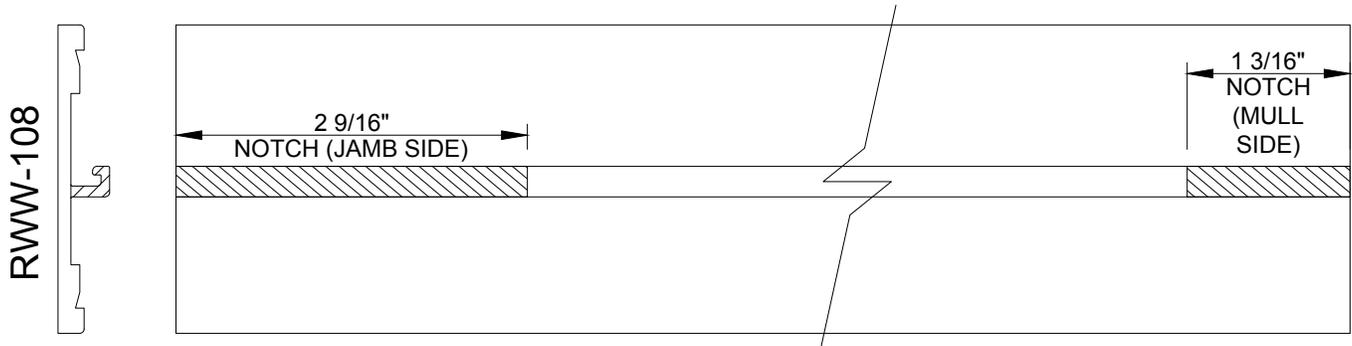
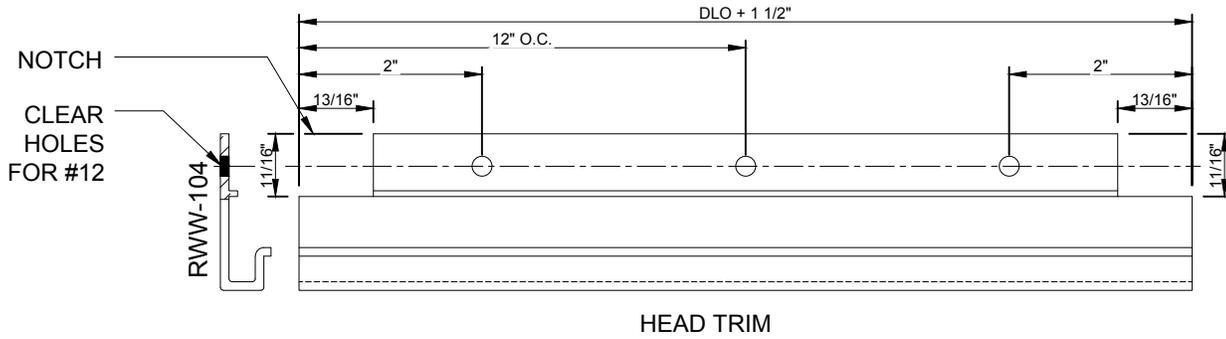


Horiz. FC @ I.S. Corner

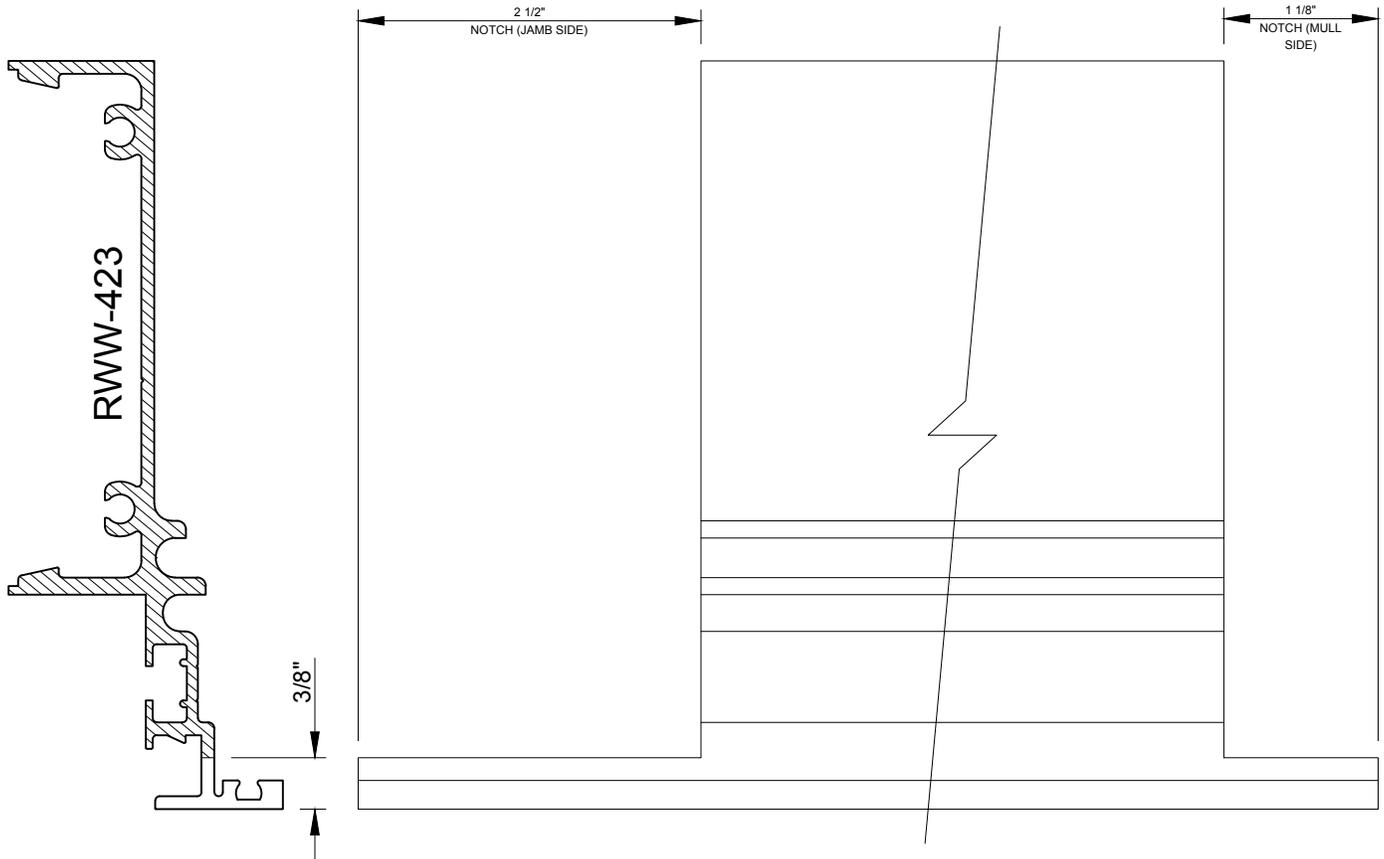


CORNER CONFIGURATIONS

RELIANCE™ WINDOW WALL - ASSEMBLY AND SEALING INSTRUCTIONS



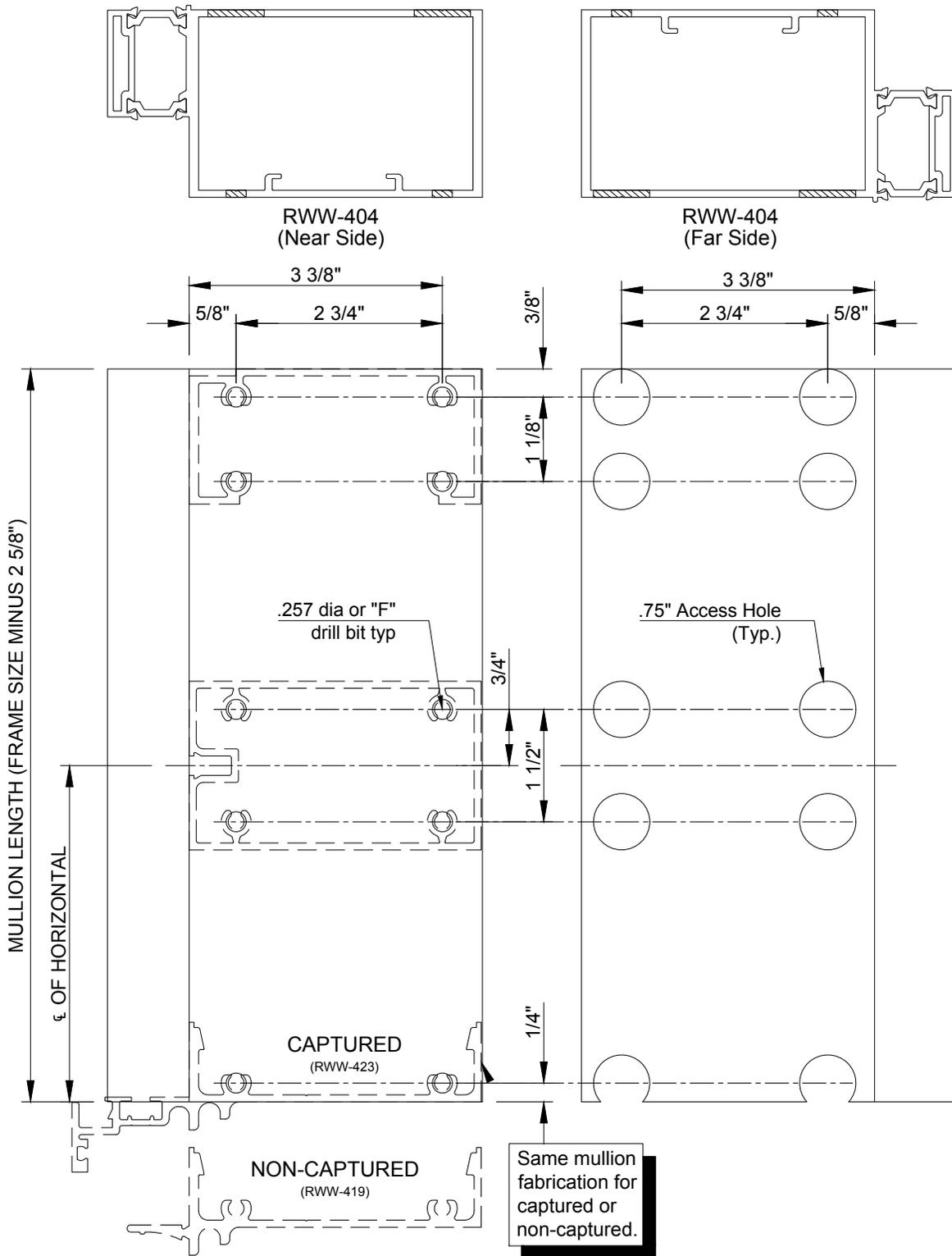
FACE CAP NOTCH AT JAMB AND NON CAPTURED MULLION CONDITION



CAPTURED SILL NOTCH AT NON-CAPTURED MULLION CONDITION

HEAD TRIM, FACE CAP & CAPTURED SILL FABRICATION

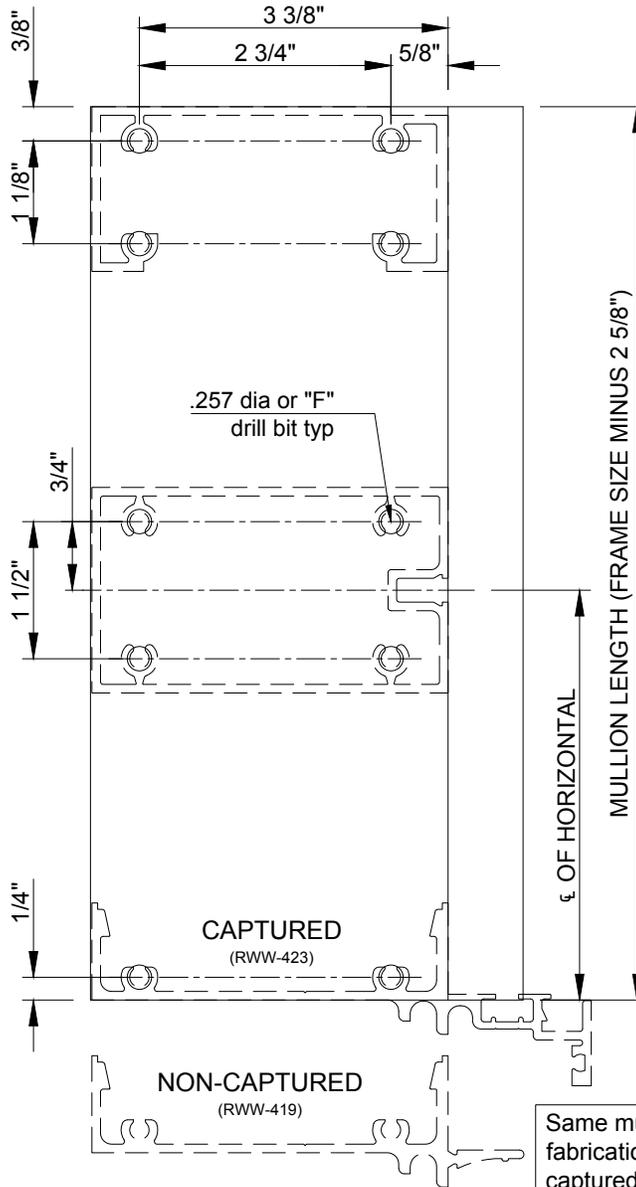
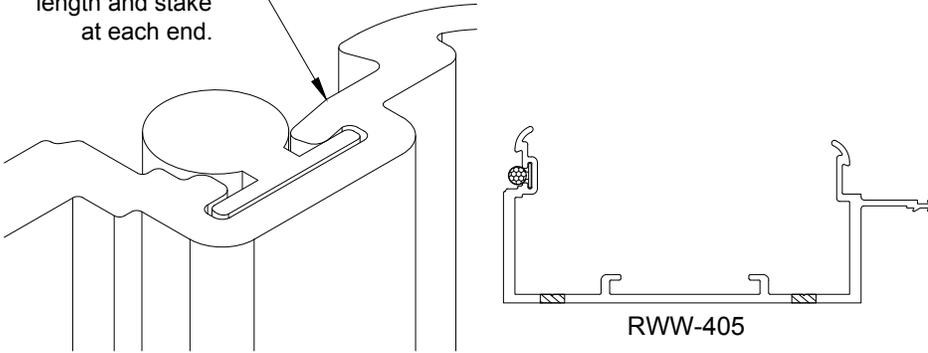
RELIANCE™ WINDOW WALL - ASSEMBLY AND SEALING INSTRUCTIONS



VERTICAL REFERENCE INFORMATION

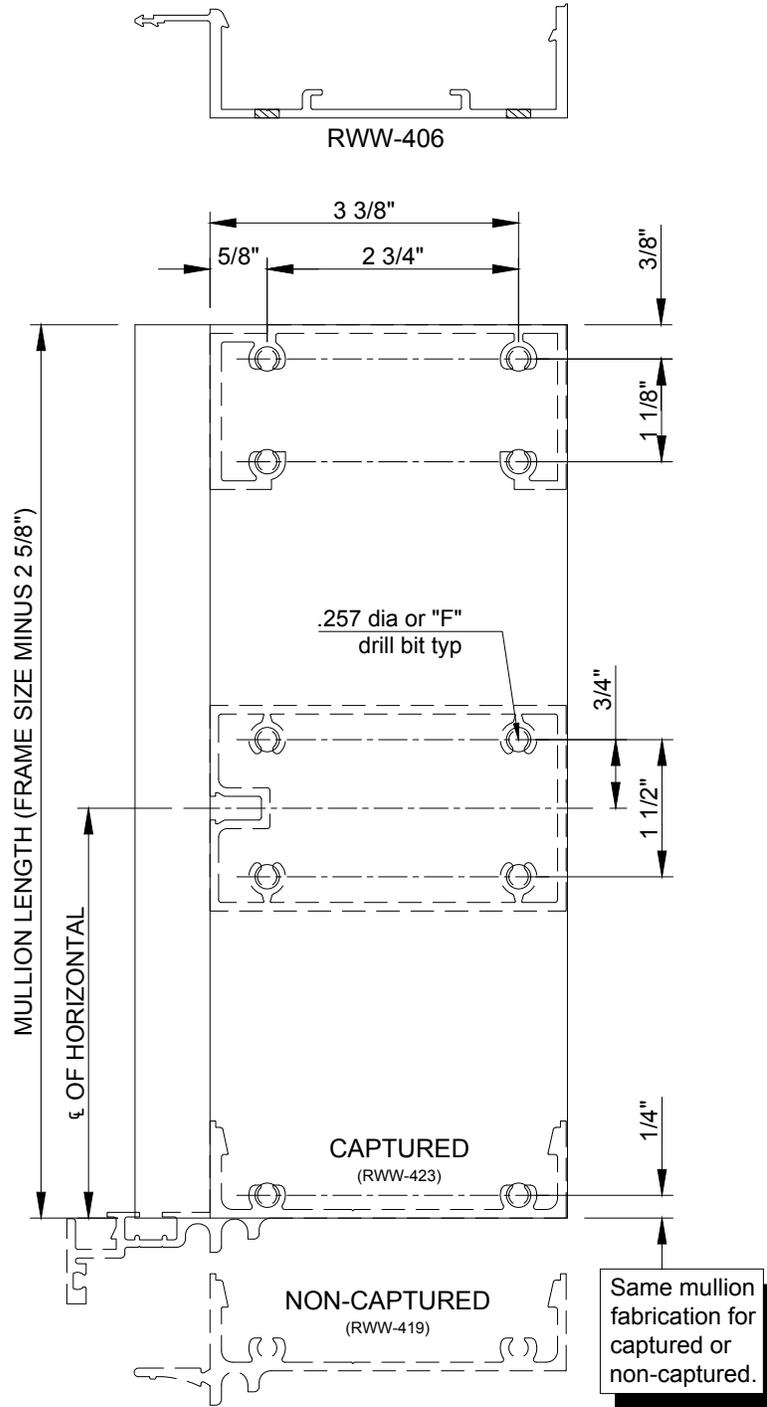
RELIANCE™ WINDOW WALL - ASSEMBLY AND SEALING INSTRUCTIONS

Install CW-998 full length and stake at each end.



VERTICAL REFERENCE INFORMATION

RELIANCE™ WINDOW WALL - ASSEMBLY AND SEALING INSTRUCTIONS



VERTICAL REFERENCE INFORMATION

RELIANCE™ WINDOW WALL - ASSEMBLY AND SEALING INSTRUCTIONS

FRAME ASSEMBLY

1. LAYOUT PARTS

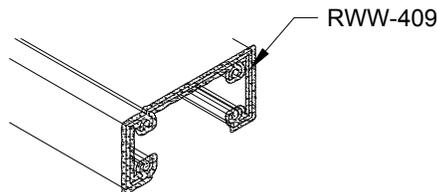
Typically units are to be assembled with Female Mullion Half on the left of the unit and with the Male Mullion Half on the right of the unit (viewed from exterior of the unit). Please refer to shop drawings for proper mullion half required at left and right jamb units.

Check that all preps have been applied and located in the proper position per approved shop drawings.

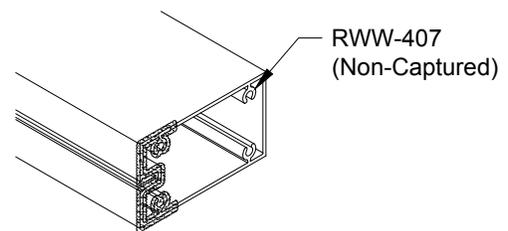
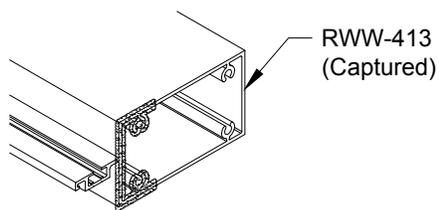
2. APPLY SILICONE SEALANT - See Below

NOTE: ALL ASSEMBLY WORK MUST BE COMPLETED IMMEDIATELY AFTER SEALANT APPLICATION; BEFORE SEALANT SKINS.

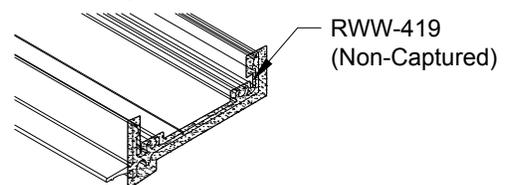
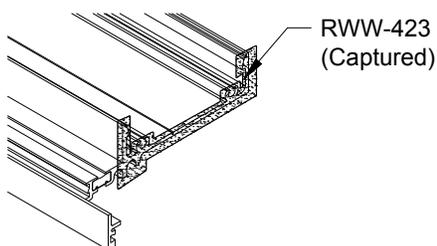
Butter both ends of the head horizontal from the front leg continuously around the perimeter. Ensure sealant is in screw chase.



Butter both ends of the intermediate horizontal from the lower screw chase inboards to the upper screw chase.



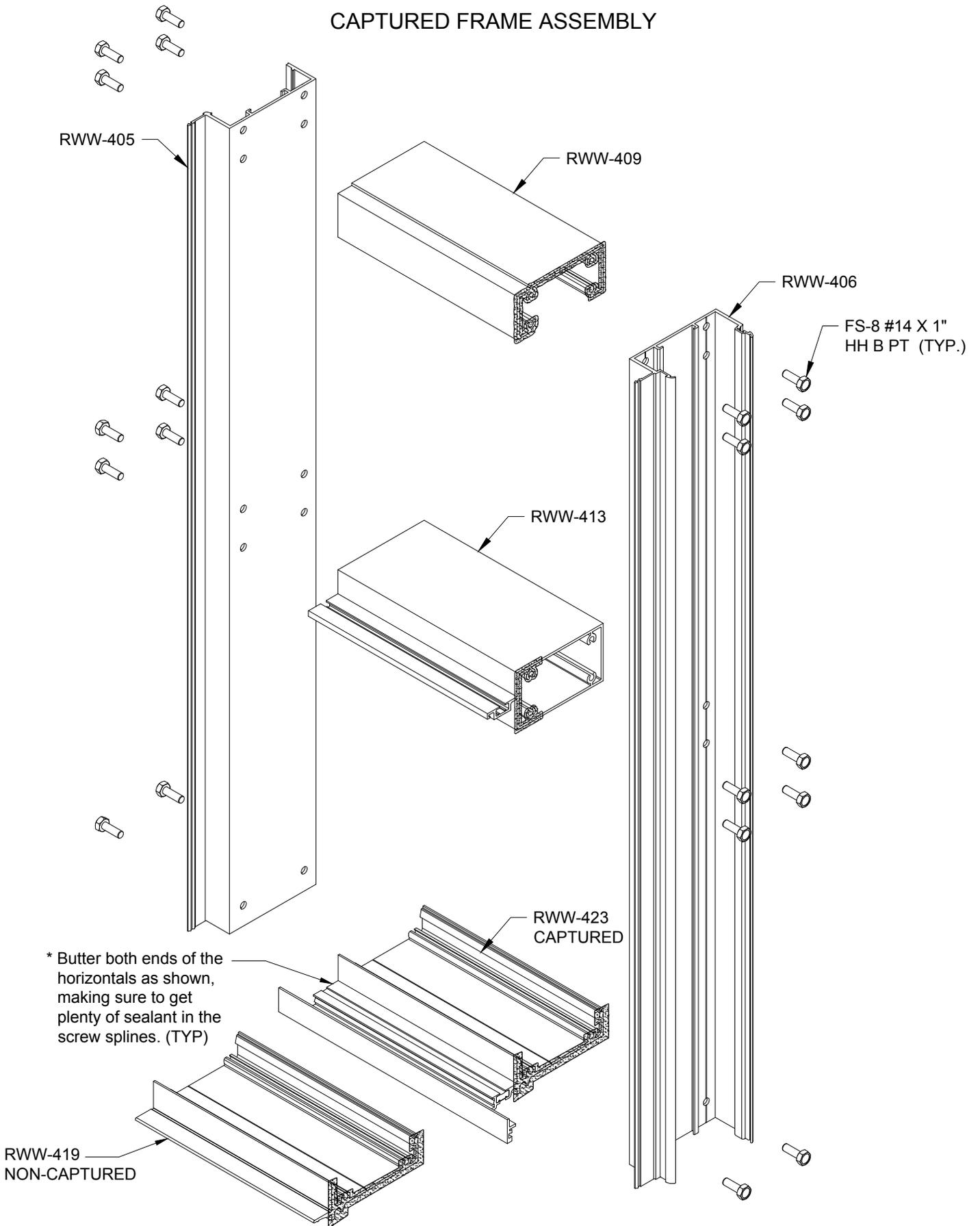
Butter both ends of the sill member from the front wall continuously around the perimeter.



FRAME SUB-ASSEMBLY INSTRUCTIONS

RELIANCE™ WINDOW WALL - ASSEMBLY AND SEALING INSTRUCTIONS

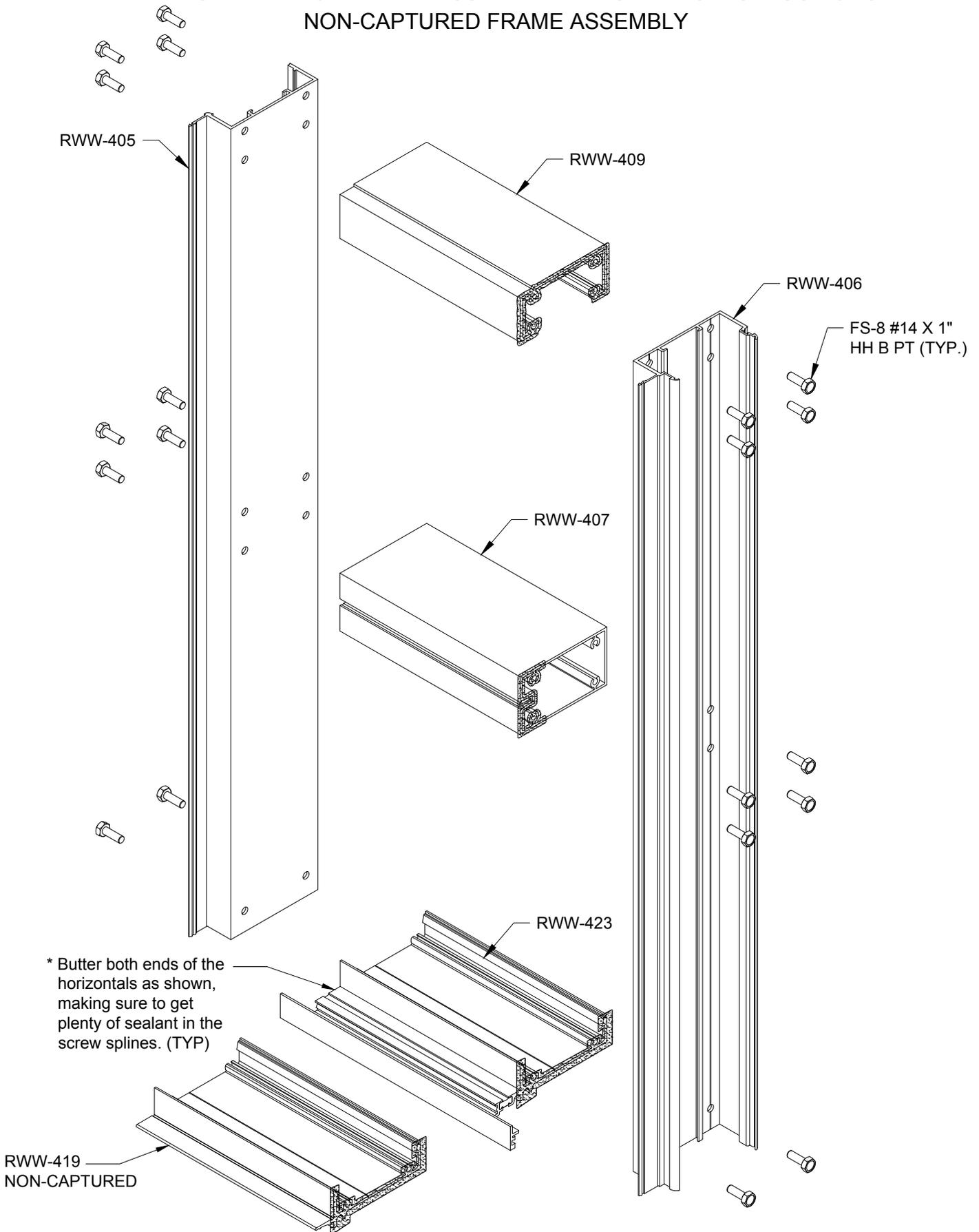
CAPTURED FRAME ASSEMBLY



FRAME ASSEMBLY INSTRUCTIONS

RELIANCE™ WINDOW WALL - ASSEMBLY AND SEALING INSTRUCTIONS

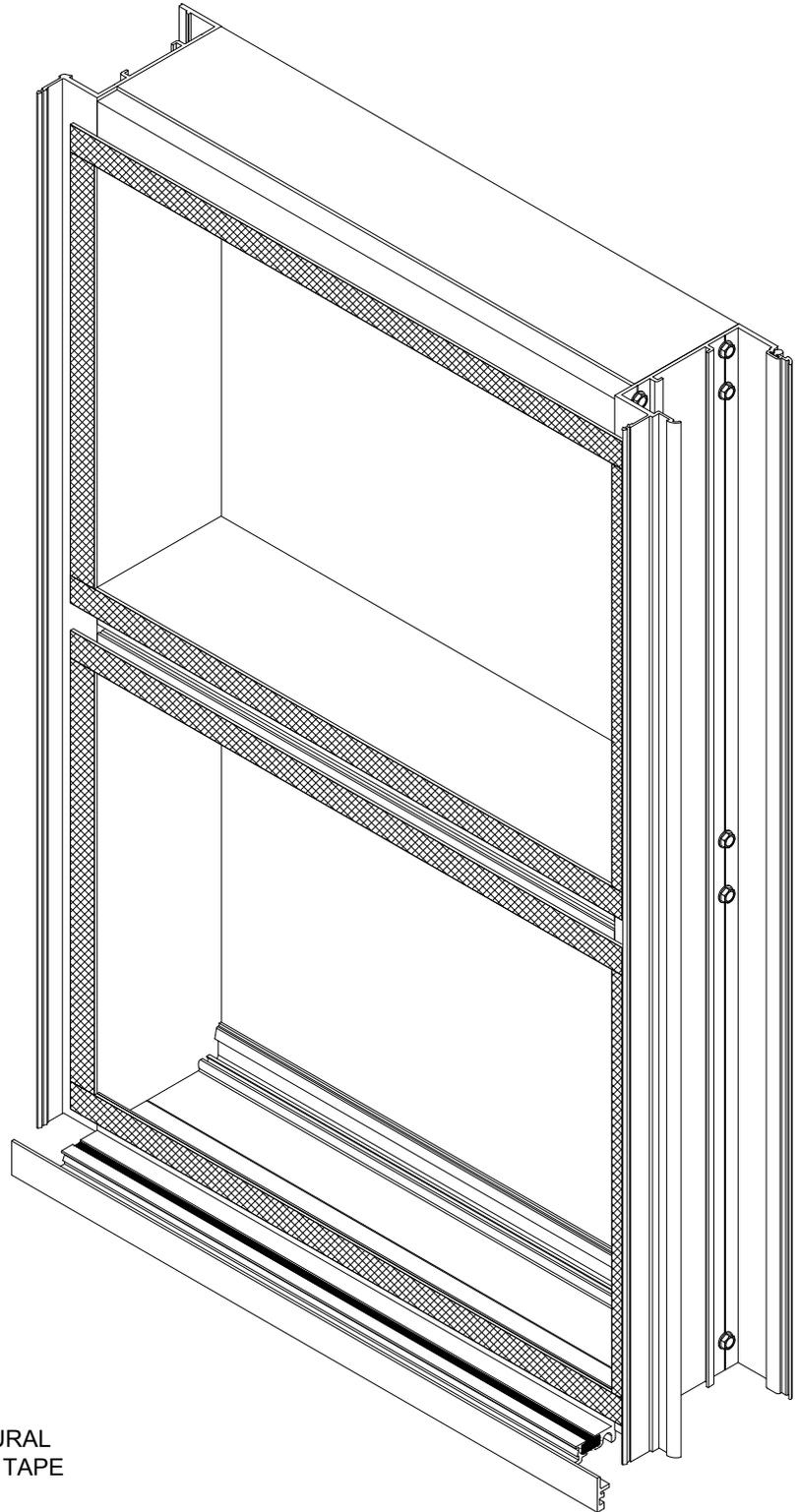
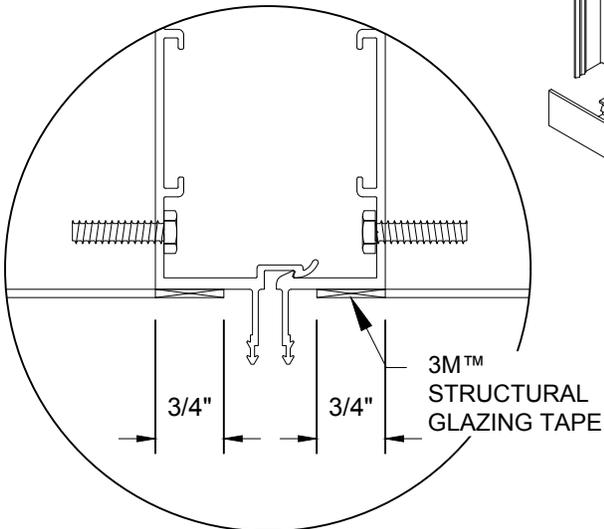
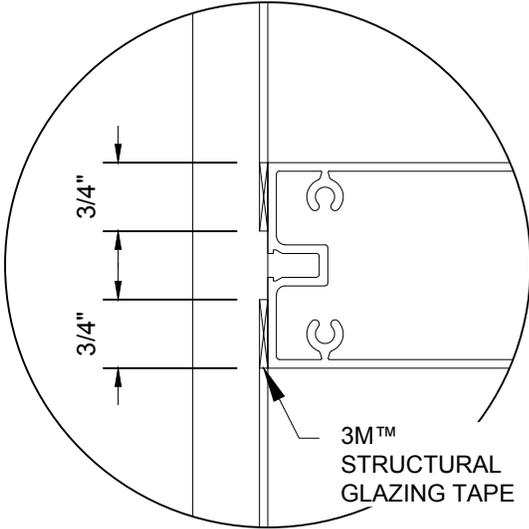
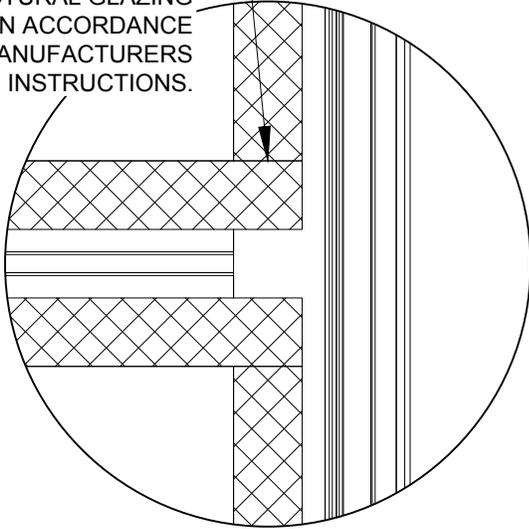
NON-CAPTURED FRAME ASSEMBLY



FRAME ASSEMBLY INSTRUCTIONS

RELIANCE™ WINDOW WALL - ASSEMBLY AND SEALING INSTRUCTIONS

APPLY 3M™
STRUCTURAL
GLAZING
TAPE IN ACCORDANCE
WITH MANUFACTURERS
INSTRUCTIONS.

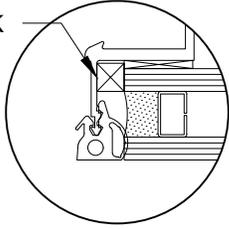


TAPE APPLICATION

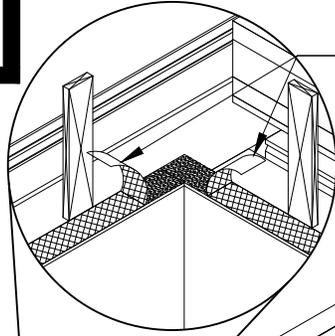
RELIANCE™ WINDOW WALL - ASSEMBLY AND SEALING INSTRUCTIONS

*MODIFIED HP-17 (1/4" X 1/4") - SIDE BLOCK FOR TRANSIT USE AND LONG TERM STORAGE.

*SIDE BLOCK

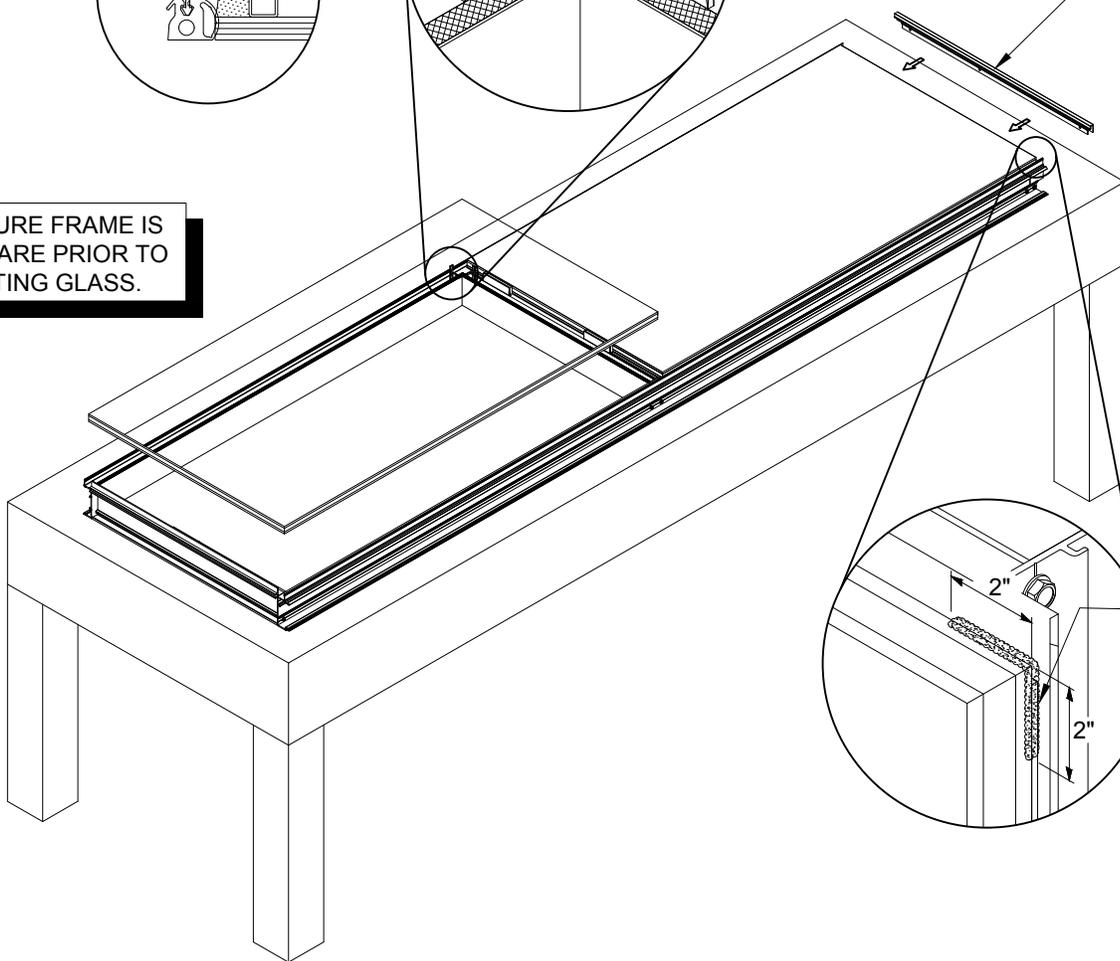


PEEL TAPE JUST PRIOR TO SETTING OF GLASS (TYP.)

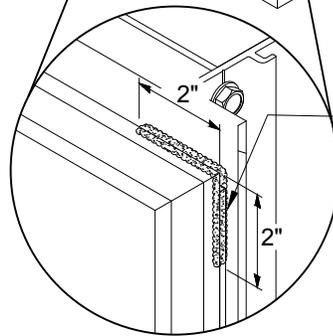


ATTACH RWW-104 w/ FS-327 @ 12" O.C. & 2" FROM EACH END. ALIGN WITH OUTSIDE EDGES OF GLASS.

ENSURE FRAME IS SQUARE PRIOR TO SETTING GLASS.

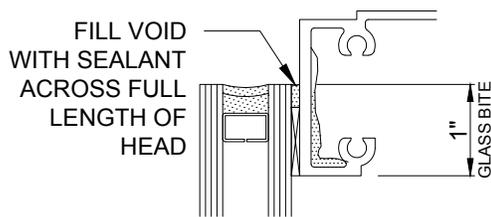


CAP / BEAD SEAL 3M TAPE AT ALL CORNERS.

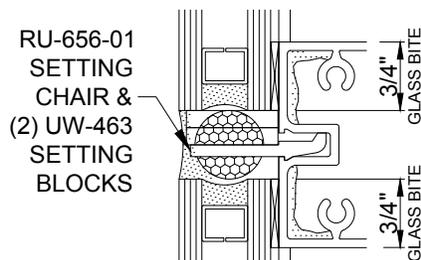


NOTE: ONCE GLASS IS IN PLACE, APPLY PRESSURE PER 3M™ RECOMMENDATION TO FULLY ADHERE GLASS TO FRAME.

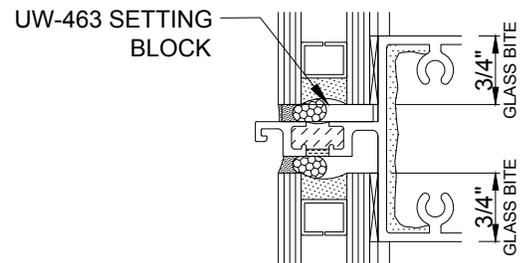
HEAD HORIZONTAL



INT. HORIZONTAL NON-CAPTURED

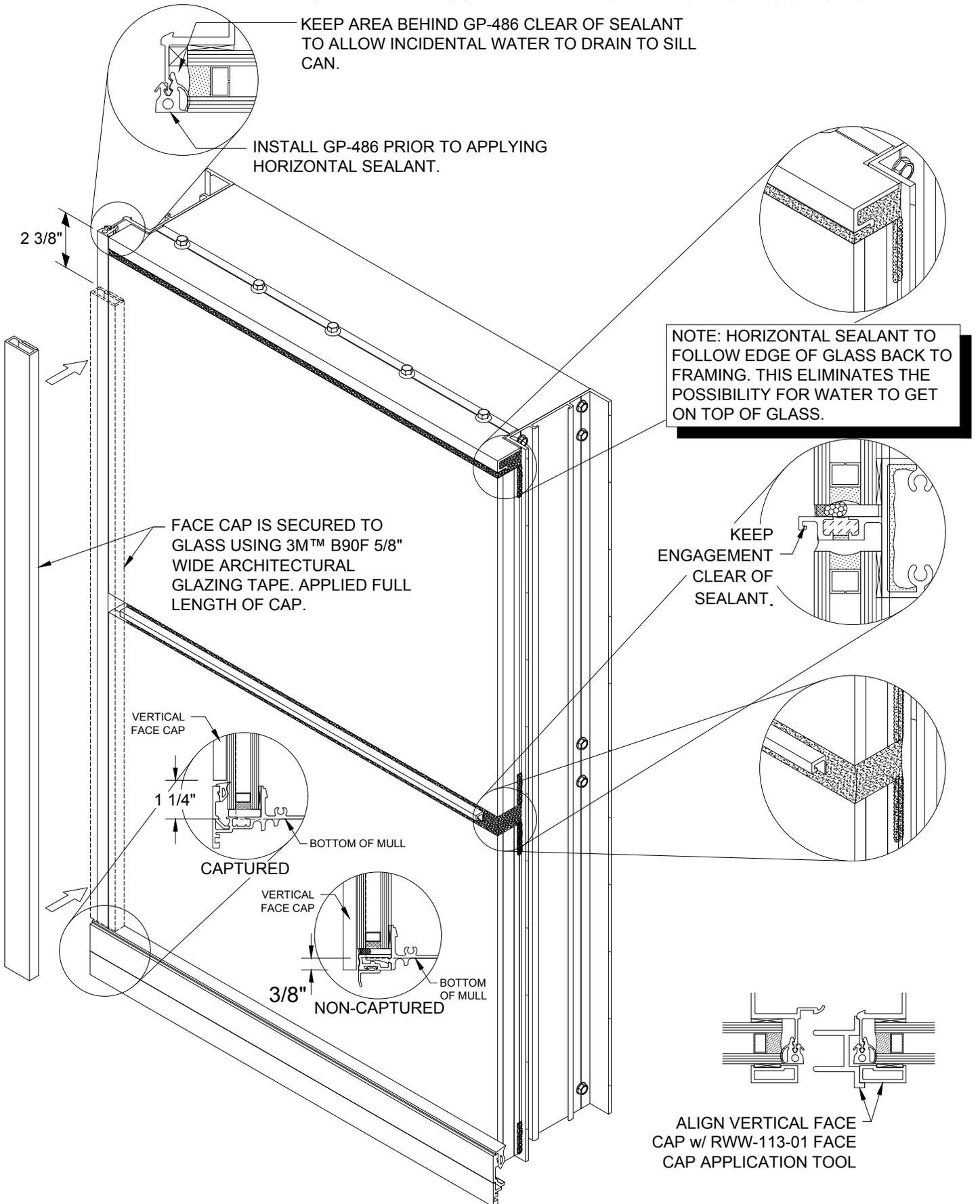


INT. HORIZONTAL CAPTURED



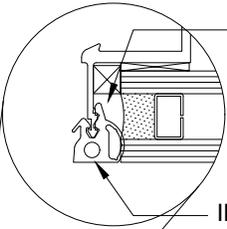
GLASS INSTALLATION

RELIANCE™ WINDOW WALL - ASSEMBLY AND SEALING INSTRUCTIONS



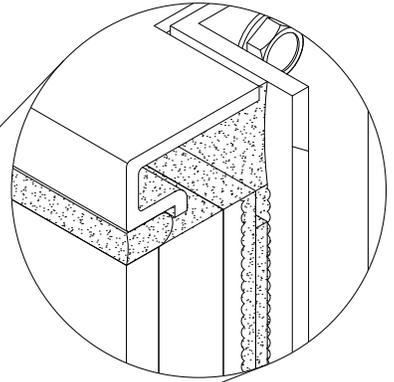
FRAME ASSEMBLY INSTRUCTIONS (CAPTURED)

RELIANCE™ WINDOW WALL - ASSEMBLY AND SEALING INSTRUCTIONS

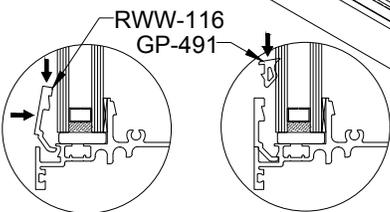
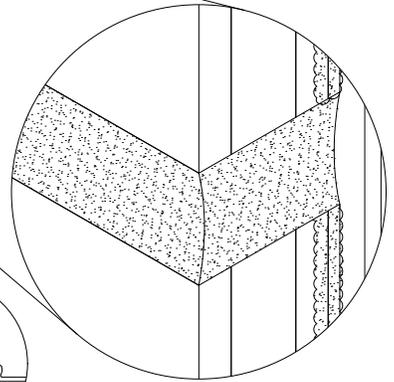
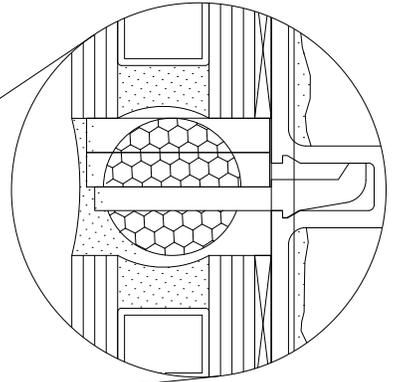


KEEP AREA BEHIND GP-486 CLEAR OF SEALANT TO ALLOW INCIDENTAL WATER TO DRAIN TO SILL CAN.

INSTALL GP-486 PRIOR TO APPLYING HORIZONTAL SEALANT.

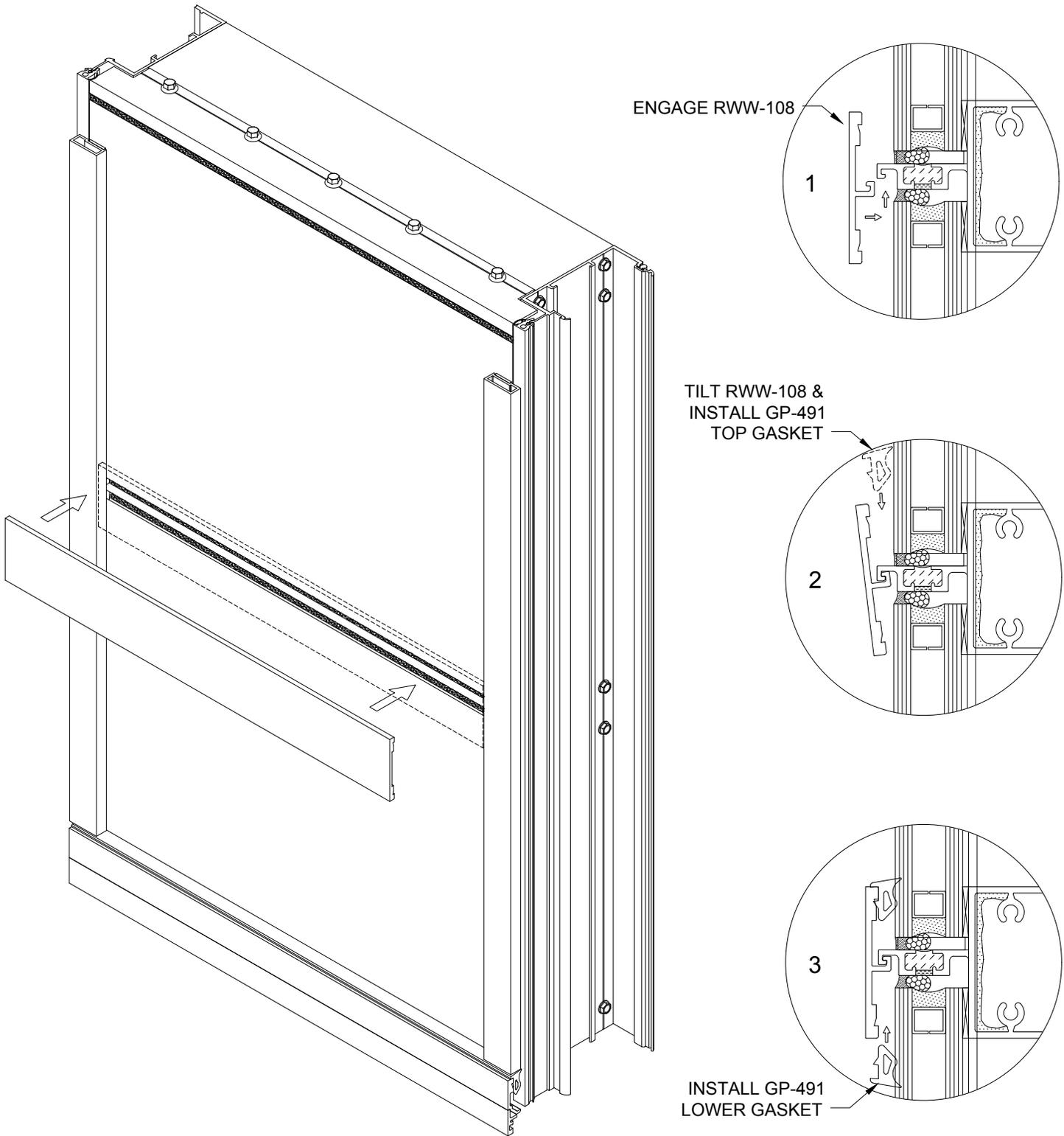


NOTE: HORIZONTAL SEALANT TO FOLLOW EDGE OF GLASS BACK TO FRAMING. THIS ELIMINATES THE POSSIBILITY FOR WATER TO GET ON TOP OF GLASS.



FRAME ASSEMBLY INSTRUCTIONS (NON CAPTURED)

RELIANCE™ WINDOW WALL - ASSEMBLY AND SEALING INSTRUCTIONS



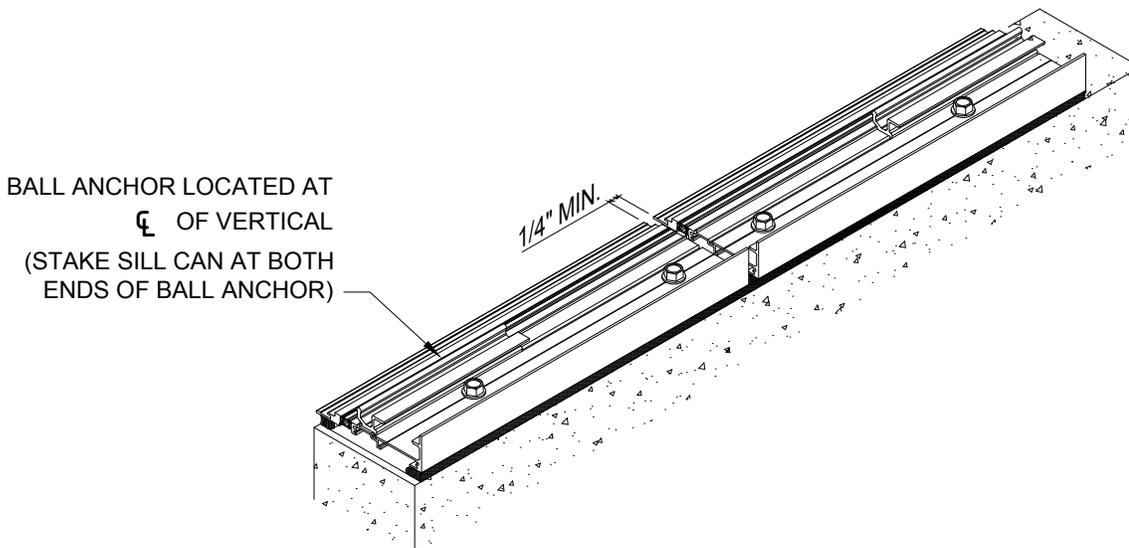
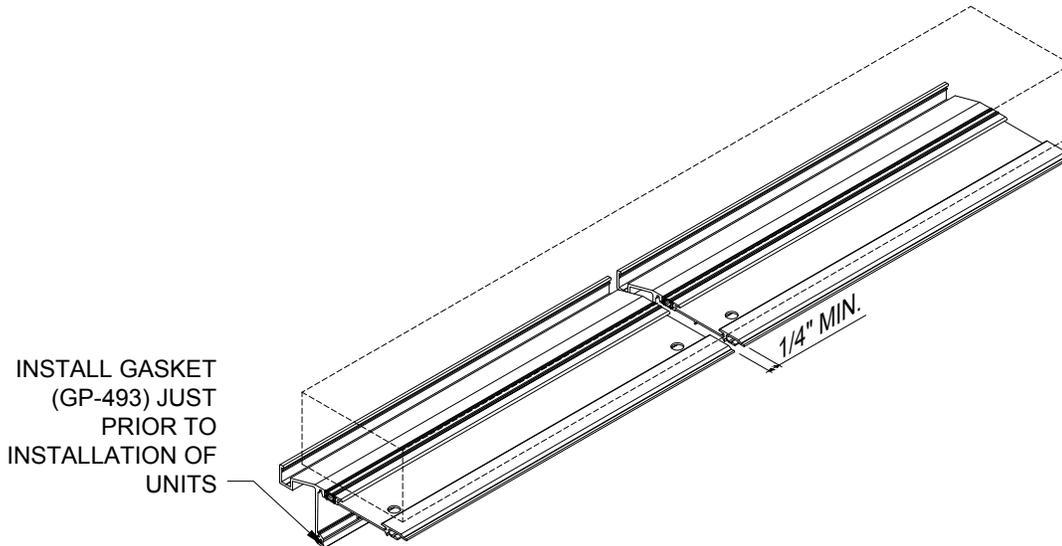
FACE CAP INSTALLATION & LOCATION

RELIANCE™ WINDOW WALL - ASSEMBLY AND SEALING INSTRUCTIONS

1. INSTALL STARTER SILL

Locate sill/head cans per approved shop drawings. The sill/head cans must be level and straight, and should run continuously across elevation, whenever splicing is necessary, a min. 1/4" gap should be left for proper seal in-between.

Install sill/head can fasteners. Ensure fastener heads will not interfere with frame sill/head horizontals. Install ball anchor in sill can as required at each mullion location.

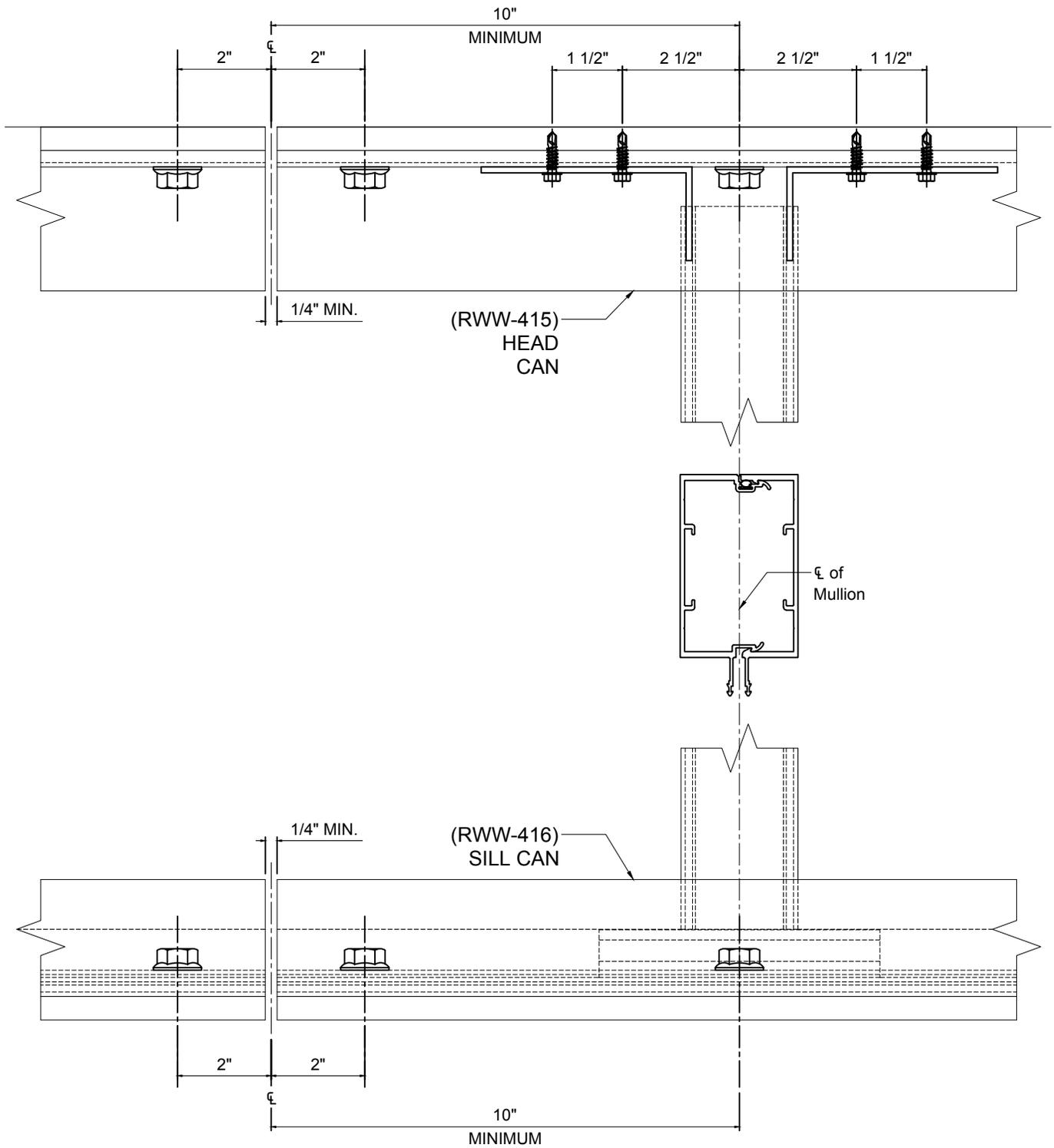


2. PROPER SEAL AT SILL/HEAD CANS

Clean and prepare substrates for sealing per sealant manufacturer's recommendations. Apply backer rod at head and sill can perimeters, and apply and tool sealant.

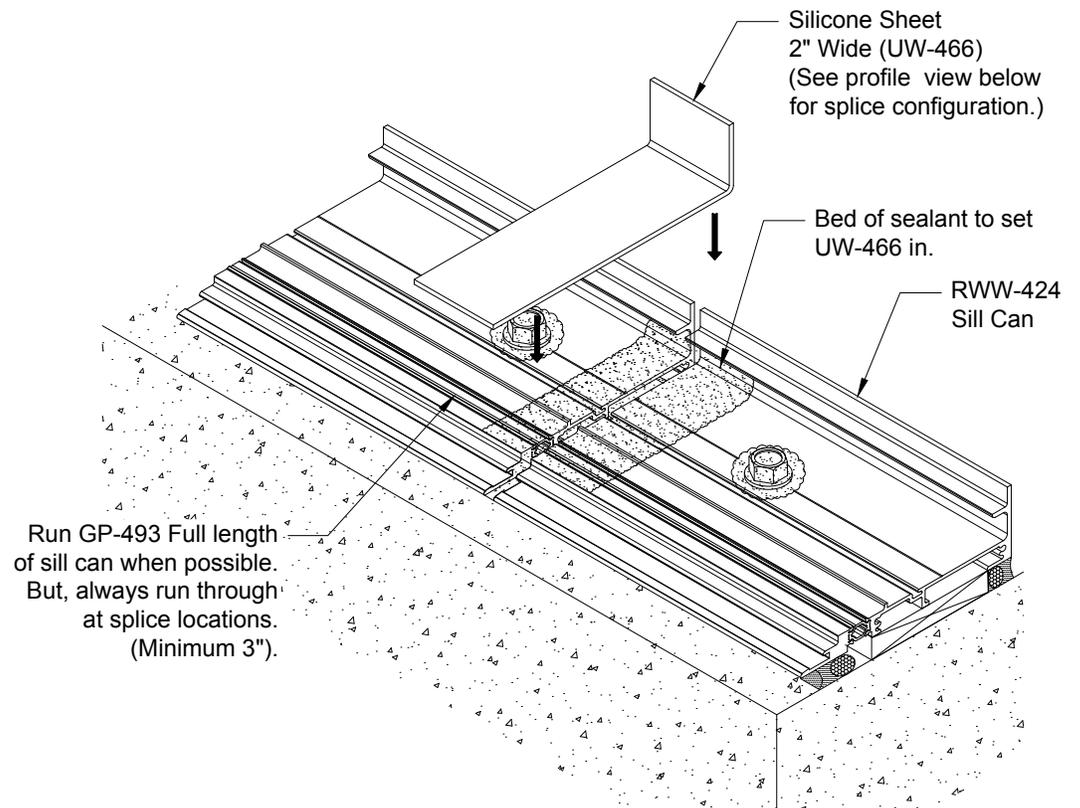
SILL / HEAD CAN INSTALLATION

RELIANCE™ WINDOW WALL - ASSEMBLY AND SEALING INSTRUCTIONS



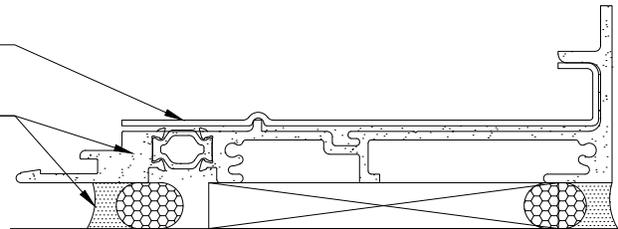
TYP. SILL / HEAD CAN @ SPLICE JOINT

RELIANCE™ WINDOW WALL - ASSEMBLY AND SEALING INSTRUCTIONS

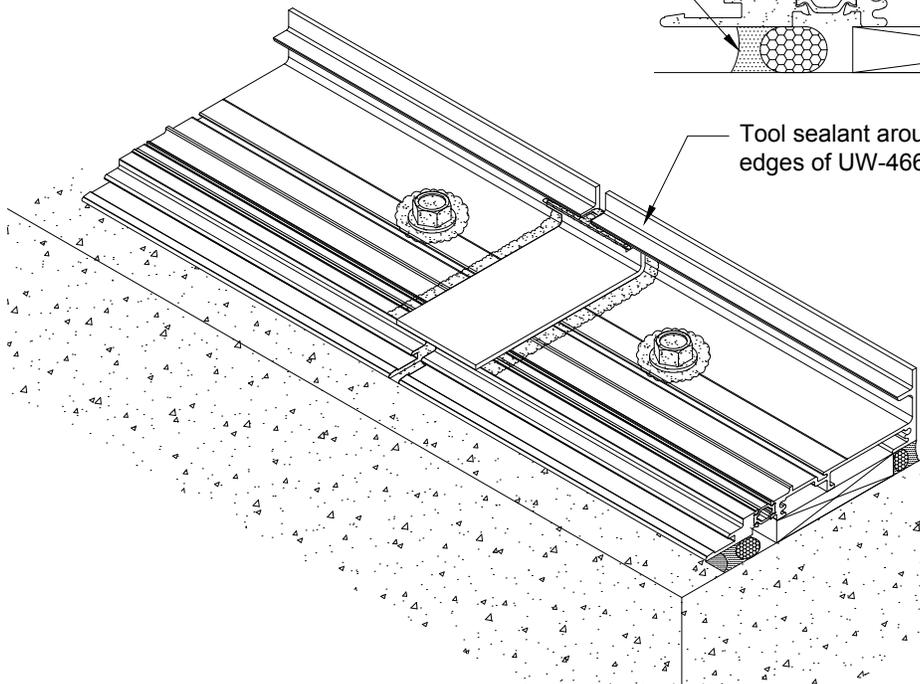


UW-466
SILICONE SPLICE

Tie splice joint into
perimeter seal.

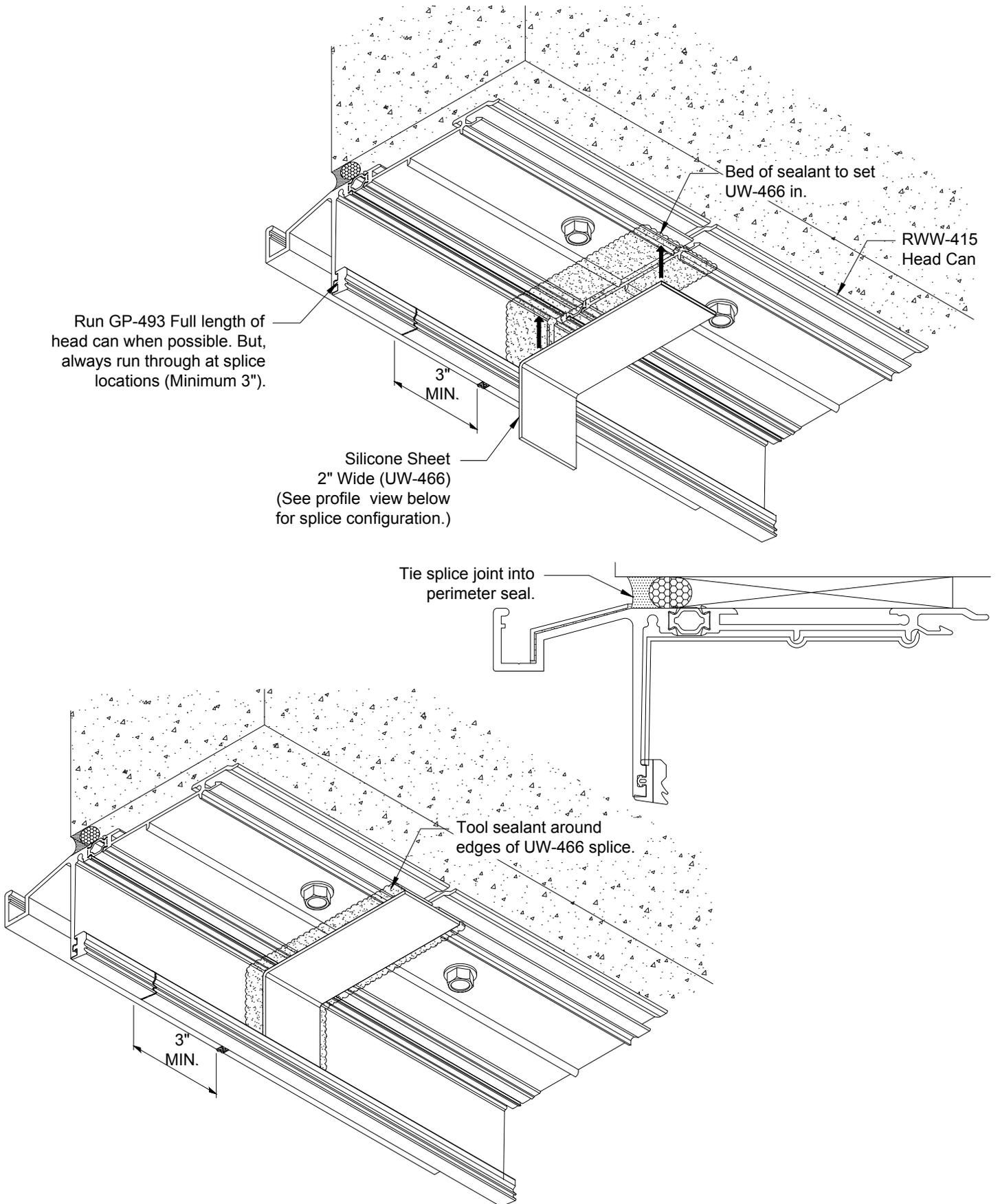


Tool sealant around
edges of UW-466 splice.



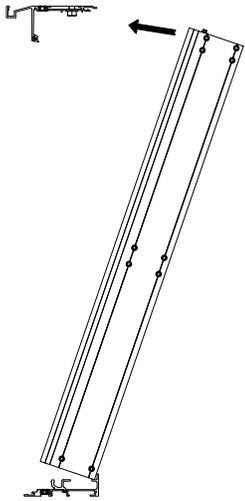
SILL CAN SPLICE JOINT

RELIANCE™ WINDOW WALL - ASSEMBLY AND SEALING INSTRUCTIONS

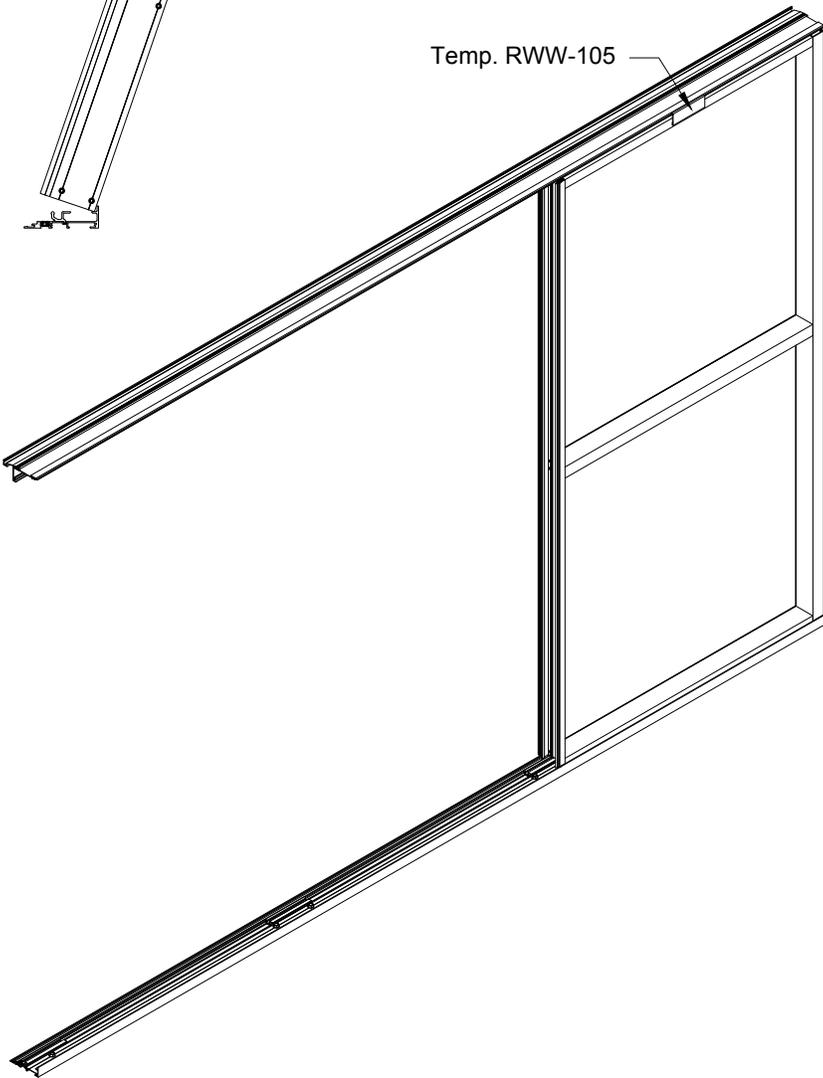


HEAD CAN SPLICE JOINT

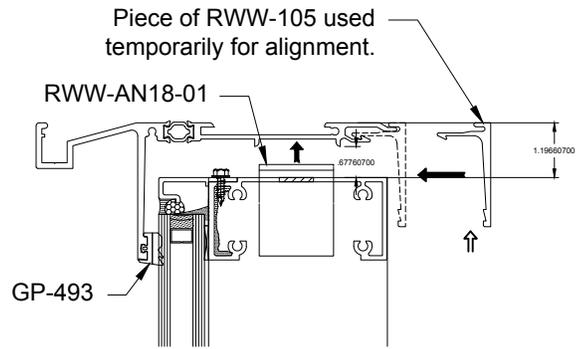
RELIANCE™ WINDOW WALL - ASSEMBLY AND SEALING INSTRUCTIONS



Install first unit, placing the bottom of the unit into the sill can and rotating up and into place. Use temp RWW-105 for alignment prior to anchoring.



Temp. RWW-105

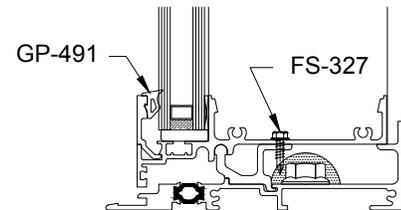
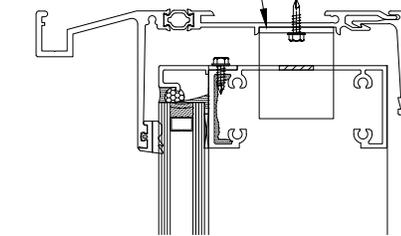


Piece of RWW-105 used temporarily for alignment.

RWW-AN18-01

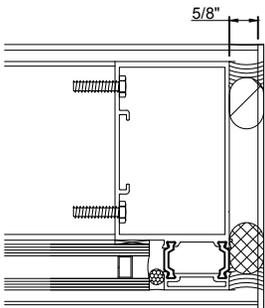
GP-493

RWW-AN18-01
Attached w/ (2)
FS-327



GP-491

FS-327



5/8"

Prior to anchoring the first unit in place. Ensure the proper edge distance exists between the frame and head/sill can edges.

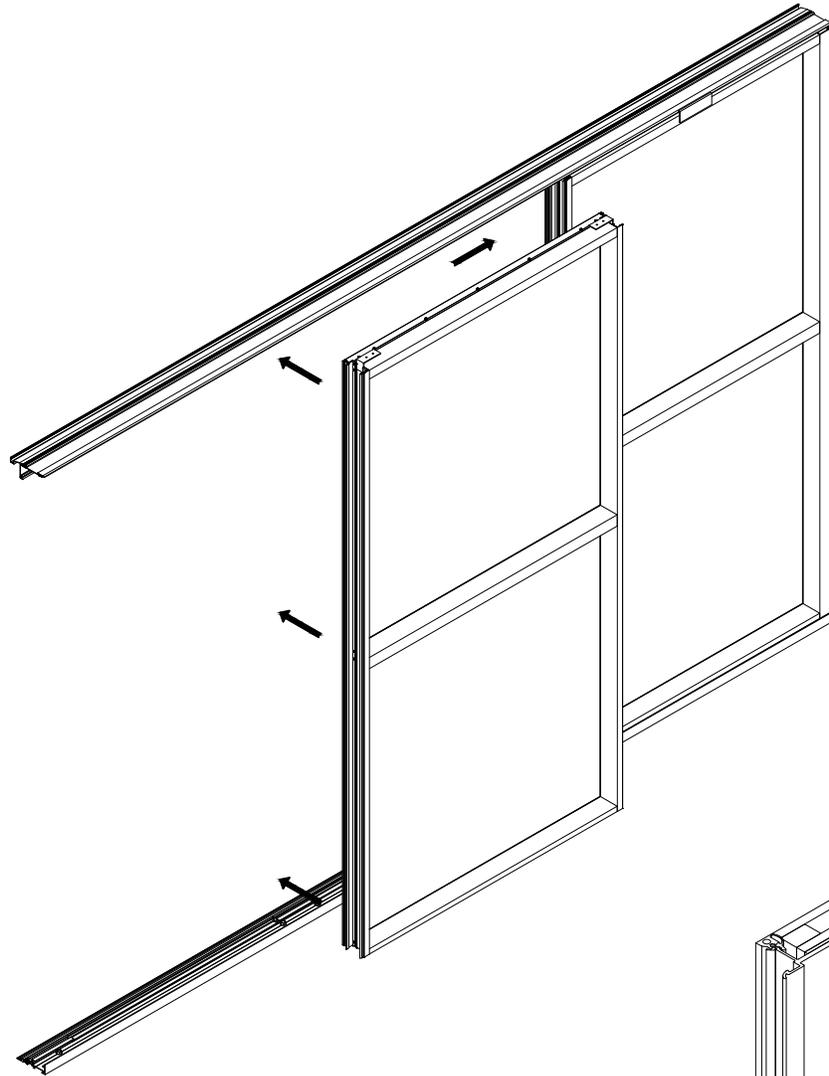
INSTALL INSTRUCTIONS

RELIANCE™ WINDOW WALL - ASSEMBLY AND SEALING INSTRUCTIONS

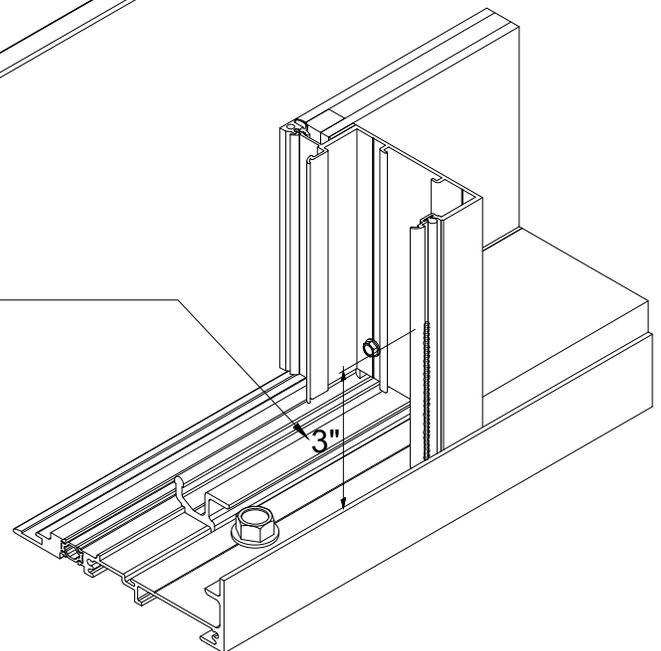
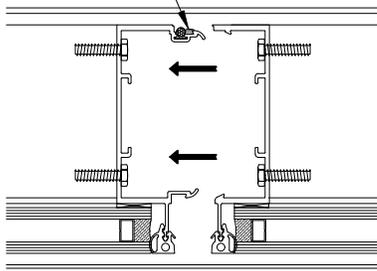
Before installing the next unit, seal 3" up the male mullion as illustrated below

Rotate the next frame in place (see page 22 for procedure) and slide over to adjoining unit and engage verticals.

Once verticals have been engaged, slide the temporary RWW-105 from the previous unit over to temporarily hold the current unit in place while anchors are being installed. Continue process until entire elevation is complete.



Run a small bead of sealant 3" up from bottom of mull.

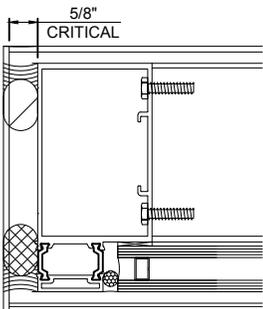
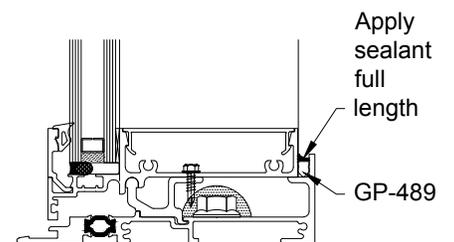
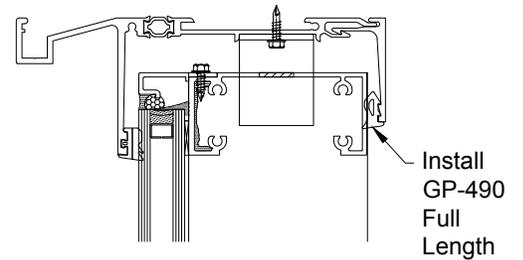
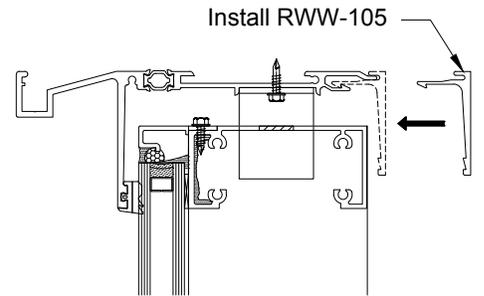
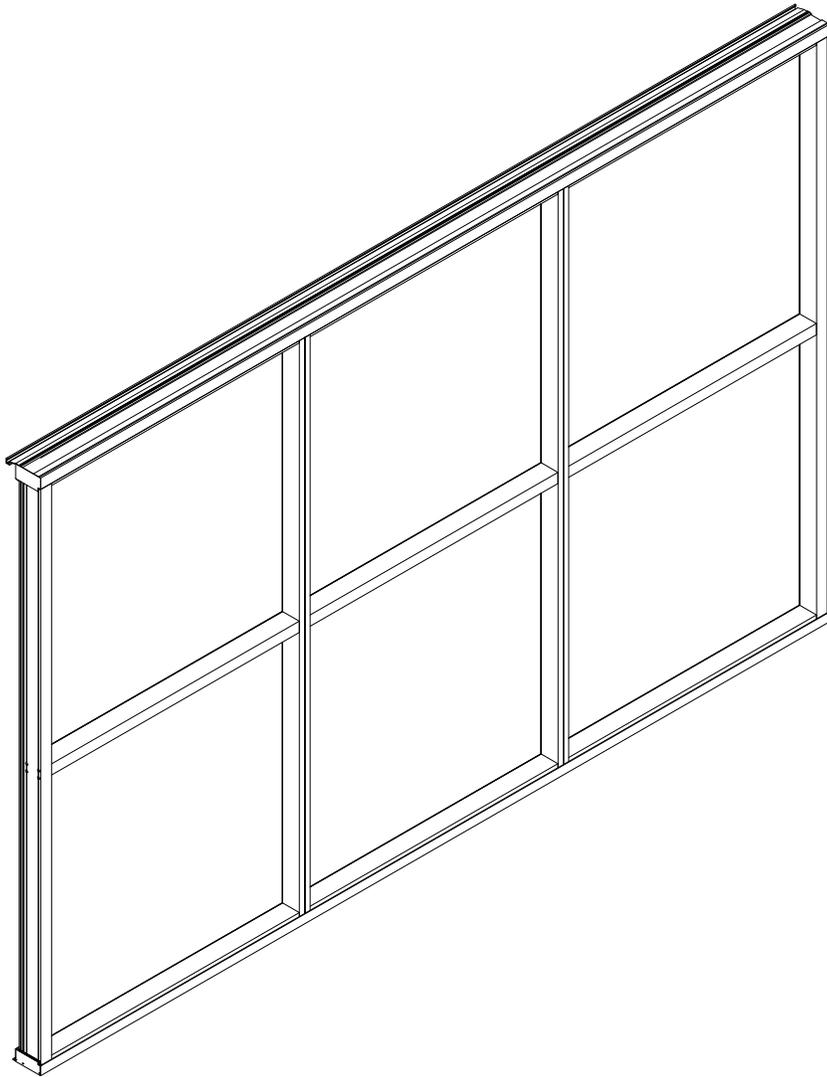


INSTALL INSTRUCTIONS

RELIANCE™ WINDOW WALL - ASSEMBLY AND SEALING INSTRUCTIONS

Upon installation and anchoring of final unit, install RWW-105 full length of head can, splicing as necessary.

Once RWW-105 is in place, install GP-490 at head can, and GP-489 at sill can full length. Apply and tool bead of sealant over GP-489 at sill. (as shown below)



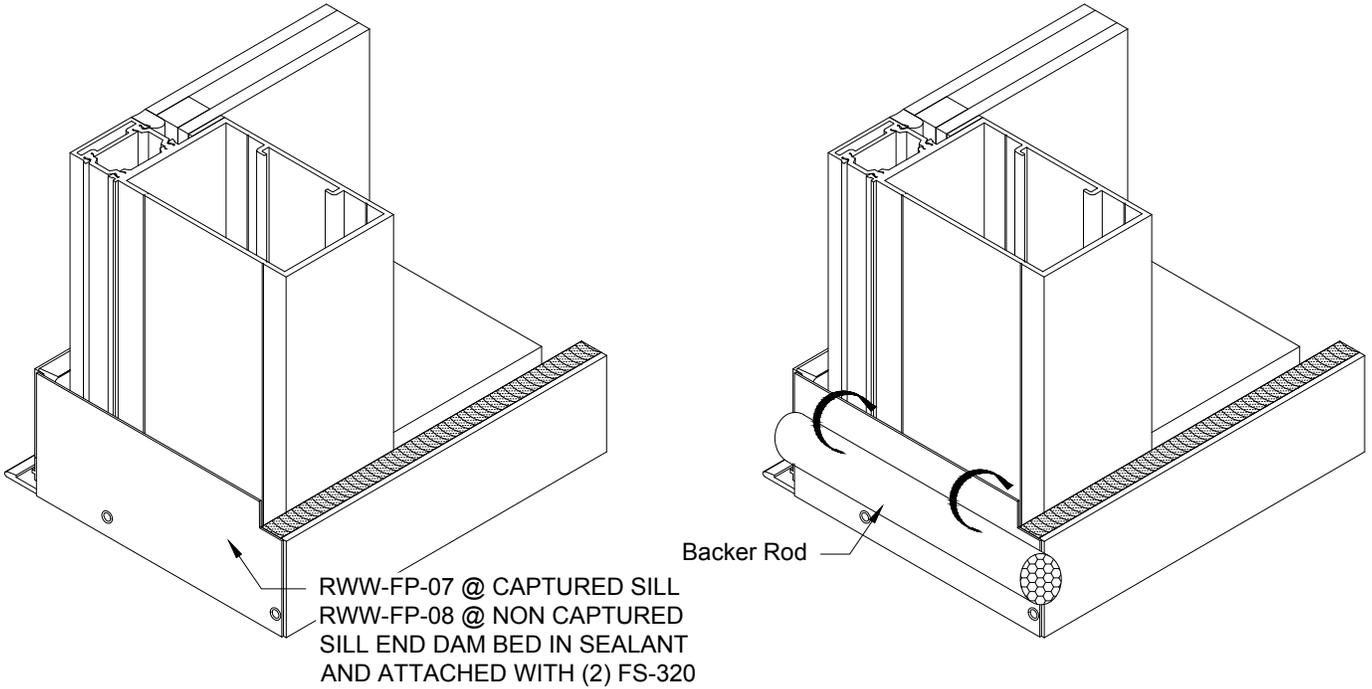
INSTALL INSTRUCTIONS

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AUGUST 2017

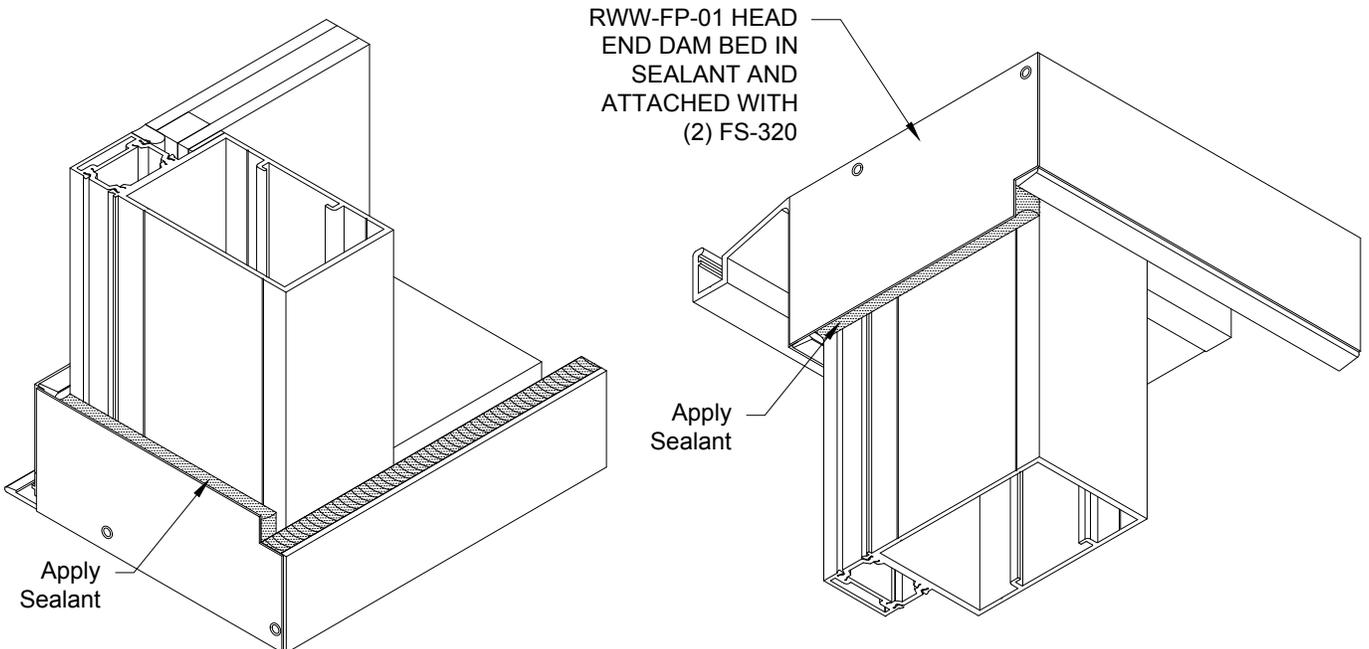
Phone: 1-866-OLDCASTLE (653-2278)
Web Address: www.OBE.com

RELIANCE™ WINDOW WALL - ASSEMBLY AND SEALING INSTRUCTIONS



Once head and sill can gaskets are in place install backer rod between head and sill end dams and jamb members. Apply sealant between jamb and head/sill can end dams as shown.

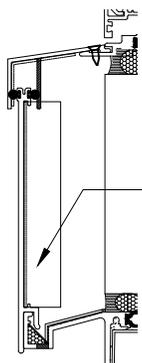
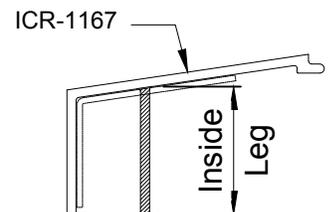
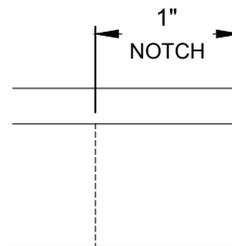
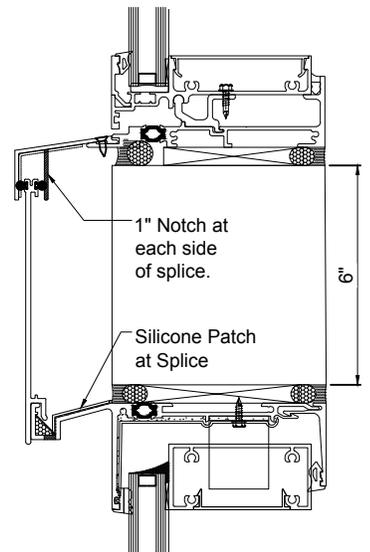
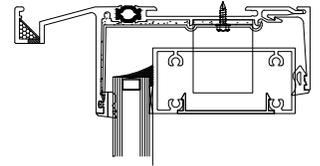
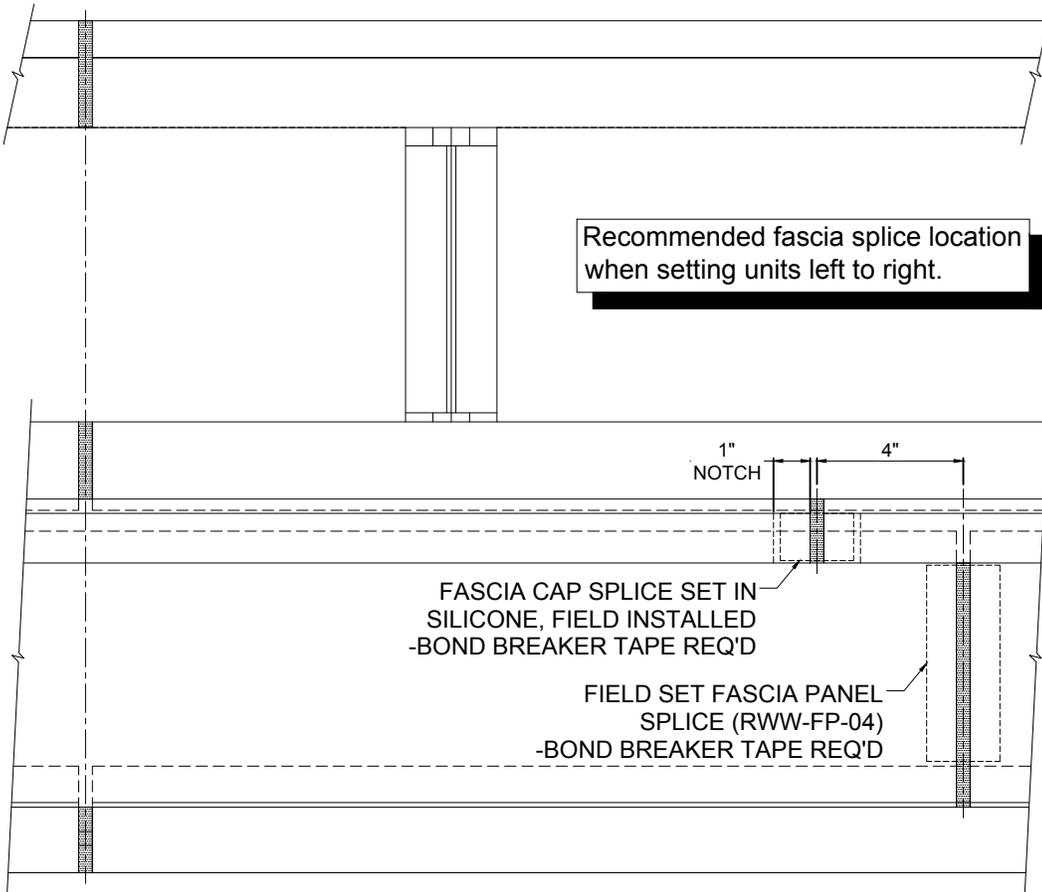
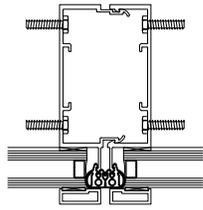
Note: Sealant must be tied into interior and exterior gaskets as shown to ensure proper seal.



INSTALL INSTRUCTIONS

RELIANCE™ WINDOW WALL - ASSEMBLY AND SEALING INSTRUCTIONS

When a slab edge cover is used, splices should be configured as shown below. Note the notching of the fascia cap below as well, which allows for the proper application of the splicing material at joints, and caulk stop at jambs.

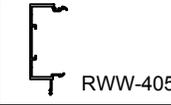
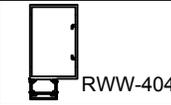
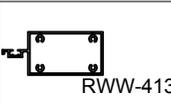
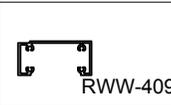
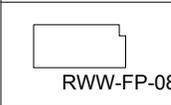
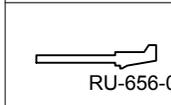
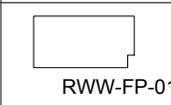
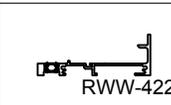
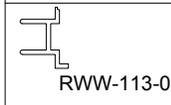
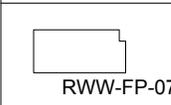
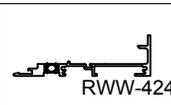
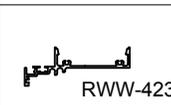
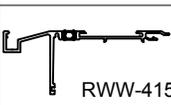
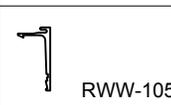
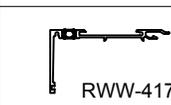


Slab Edge Cover at Jamb Condition

Field apply RWW-FP-05 1" x 1" x 5 5/8" formed aluminum at jambs (mill finish) for caulk stop. Set in silicone sealant.
*Field Apply RWW-FP-06 end cap when necessary.

EXTERIOR SPLICING INSTRUCTIONS

RELIANCE™ WINDOW WALL - ASSEMBLY AND SEALING INSTRUCTIONS

	Male Mullion 1" Infill		6" Slab Edge Cover		Head Can Anchor
	Female Mullion 1" Infill		Sill Can Slab Edge Trim		Splice for ICR-1167
	Jamb 1" Infill		Head Trim		Splice for RWW-102
	Standard Horizontal Flush Glazed 1" Infill		2 1/4" Face Cap @ Captured Horizontal 1" Infill, Captured		Slab Edge Cover Support
	Standard Horizontal Captured 1" Infill		Vertical 1 1/8" Face Cap		Slab Edge Cover Plate
	Head Horizontal 1" Infill		Sill Can Anchor		Sill End Dam (Non Captured)
	Filler Trim for Head Horizontal		Setting Chair		Head End Dam
	Sill Can		Vertical Face Cap Alignment Tool		Sill End Dam (Captured)
	Sill Can with FS Cover				
	Sill 1" Infill (Non Captured)				
	Sill 1" Infill (Captured)				
	Head Can with FS Cover				
	Head Can Trim				
	Head Can				
	Exterior Sill Glazing Bead				

PARTS LIST

