

**Oldcastle** BuildingEnvelope®

## *RELIANCE UNIT WALL INSTALLATION MANUAL*

**NOTE:**

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

FOLLOW STRUCTURAL GLAZING TAPE AND SEALANT MANUFACTURER'S RECOMMENDATIONS FOR USE AND APPLICATION OF THE STRUCTURAL GLAZING TAPE AND WEATHER SEAL.

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

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## GENERAL INFORMATION

### PRODUCT USE

The **Reliance™ Unit Wall** system is intended for fabrication, assembly, sealing, installation and glazing by professionals with appropriate knowledge and experience of the system(s) and their incorporation into various building conditions.

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 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 must be purchased directly from distributor and is NOT provided by or sold through Oldcastle BuildingEnvelope).

**Consult sealant manufacturer for review and recommendation of sealant application. Follow sealant manufacturer's recommendations and literature for proper installation.**

The fabrication and installation of a structural silicone-glazed (SSG) or wet glazed system requires more technical knowledge and experience than is required for a conventional pressure-glazed or dry glazed system. The glazing contractor should take all steps as outlined and required by the structural silicone sealant manufacturer, glass fabricator, framing manufacturer, and the project professional engineer of record as well as follow local building code requirements and industry best practices to ensure the proper installation and safe performance of the SSG system.

The glazing contractor for each project needs to ensure compliance with each step, including, but not limited to, design reviews, formal adhesion testing, formal compatibility testing, project specification compliance, validating procedures, field testing, and quality control validation of installed product and surrounding conditions.

Testing of component materials for use in a SSG or wet glazed system is mandatory to fulfill project specifications and warranty requirements and must be submitted by the glazing contractor to the structural silicone manufacturer. All materials that comprise the structural silicone joint, such as the framing system (with the job-specific finish) and job-specific glass must be tested by the structural silicone manufacturer for compatibility and adhesion. All other accessory materials in contact with the structural silicone, such as setting blocks, spacers, gaskets, sweeps, air seals and expansion joints, must also be submitted to the silicone sealant manufacturer for compatibility testing.

To ensure that nothing has changed in formulation or chemistry since the initial tests, subsequent testing during periodic time frames of the project is to be conducted to confirm continued acceptance of the material for use on the project. To ensure the structural performance and integrity of the insulating glass unit (IGU), the glazing contractor must submit the project shop drawings to the glass fabricator to obtain approval for use of their product(s) in any 2, 3 or 4-sided SSG applications.

Quality control procedures for field glazing are to be increased beyond those required for shop glazing. Job conditions will normally have dust, dirt, and other construction debris on the surfaces where structural silicone is to be applied. Great care should be exercised in cleaning and preparing these surfaces for silicone application. The recommendations of the silicone

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sealant manufacturer are to be strictly enforced and followed. The fabrication and installation of the SSG system and its components, whether shop or field glazed, should be governed by a quality control program, and all steps, procedures, and test reports should be documented throughout the project.

Prior to installation of any SSG system, refer to industry documents (e.g., AAMA Curtain Wall Design Guide Manual, ASTM C1401-14, and AAMA SSGDG-17) for detailed instructions and recommendations.

**THE GLAZING CONTRACTOR ASSUMES FULL RESPONSIBILITY FOR ENSURING COMPLIANCE WITH THE ABOVE AND ASSUMES FULL LIABILITY FOR ANY ISSUES ARISING FROM NONCOMPLIANCE.**

## GLAZING PRACTICES

The air and water performance of the **Reliance™ Unit Wall** system is directly related to the completeness and integrity of the installation process, including but not limited to the assembly seals of the framing joinery, the installed glazing gaskets, and the alignment of the framing joinery glazing plane. Before glazing, verify the glazing pocket width and glazing infill thickness, as both must be in tolerance to assure adequate edge pressure and to achieve the desired air and water performance levels. (In general, framing systems utilizing 1" insulating glass are designed to accommodate a thickness variance of +/- 1/32"). Note: Excessive pressure can cause glass breakage and/or IGU failure. Consult the glass manufacturer for their recommended edge pressure per lineal inch. To achieve the designed and tested air and water performance, best practices include:

1. Surface to be sealed should 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. Glazing gaskets should be cut 1/4" longer per foot, and lay flat, preferably for 24 hours.
3. Gaskets should be cut as single monolithic pieces and "crowded" during their installation to avoid corner gaps caused by post-installation relaxation.
4. The interior glazing gasket should be installed so as to avoid stretching, buckles, or tears.
5. Corners must be cut square, and at a slight angle when required to conform to the bevel on the intersecting gasket; sealed and butted together.
6. Gasket corner joinery must also be crowded, and sealant applied onto the gasket contact frame surface and into gasket reglet raceway where applicable.
7. Gasket corner seals are to be done just prior to installing glass, while the sealant is still wet and uncured, and ensure exterior gaskets are installed so as to place the glass into it's final in-service condition and allow the sealant to conform to optimum configuration. Note: If the sealant cures prior to glazing, the cured sealant could create excessive edge pressure onto the glass and has the potential to cause glass breakage.
8. The glass must be checked for squareness, size dimension, and thickness along the edges paying attention to any variances from center edge to corner edge.
9. Check the placement of the installed glass and verify there is proper edge bite into the pocket, and proper edge clearance from framing elements.

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10. After sealant has set and a representative amount of the wall has been installed and glazed (250 square feet or more) run a water hose test in accordance with AAMA 501.2 specifications to check installation. On large projects the hose test should be repeated during the glazing operation. Consult and follow NGA's GANA Manual and FGMA Glazing Manual for proper glazing technique and procedure.

Vertical movement of mullion at intermediate floors requires special expansion joints and glazing materials. The system permits maximum +/-3/4" movement. For designs and applications that may require greater movement or special considerations, please contact your local Oldcastle BuildingEnvelope facility.

Variations on the details shown are inevitable and are not the responsibility of Oldcastle BuildingEnvelope when drawn by others. Oldcastle BuildingEnvelope strongly encourages its customers to utilize Oldcastle BuildingEnvelope® supplied calculations and shop drawings.

## **BUILDING CODES**

Oldcastle BuildingEnvelope® does not control the application nor selection of its product configurations, sealant, or glazing materials, and assumes no responsibility thereof. It is the responsibility of the owner, architect, and installer to make these selections in strict compliance with applicable laws and building codes.

## **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 CW-10 "Care and Handling of Architectural Aluminum From Shop to Site."

## **CHECK MATERIAL**

Check glass dimensions for overall size as well as thickness. Oldcastle BuildingEnvelope cannot be held responsible for gaskets that are not watertight 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 installation instructions are of a general nature and cover the most common conditions. Due to varying job conditions all sealant used must be approved by the sealant manufacturer to ensure it will perform per the 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 remainder of shelf life before using.

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## FIELD CONDITIONS

All material to be installed must be 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 chromate, 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 Walls 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 Catalog.

## 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-foot 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 the assembly and installation.

# RELIANCE™ UNIT WALL - INSTALLATION MANUAL

## GENERAL NOTE:

FRAMES ARE INTENDED TO BE INSTALLED FROM LEFT TO RIGHT WHEN VIEWED FROM EXTERIOR.

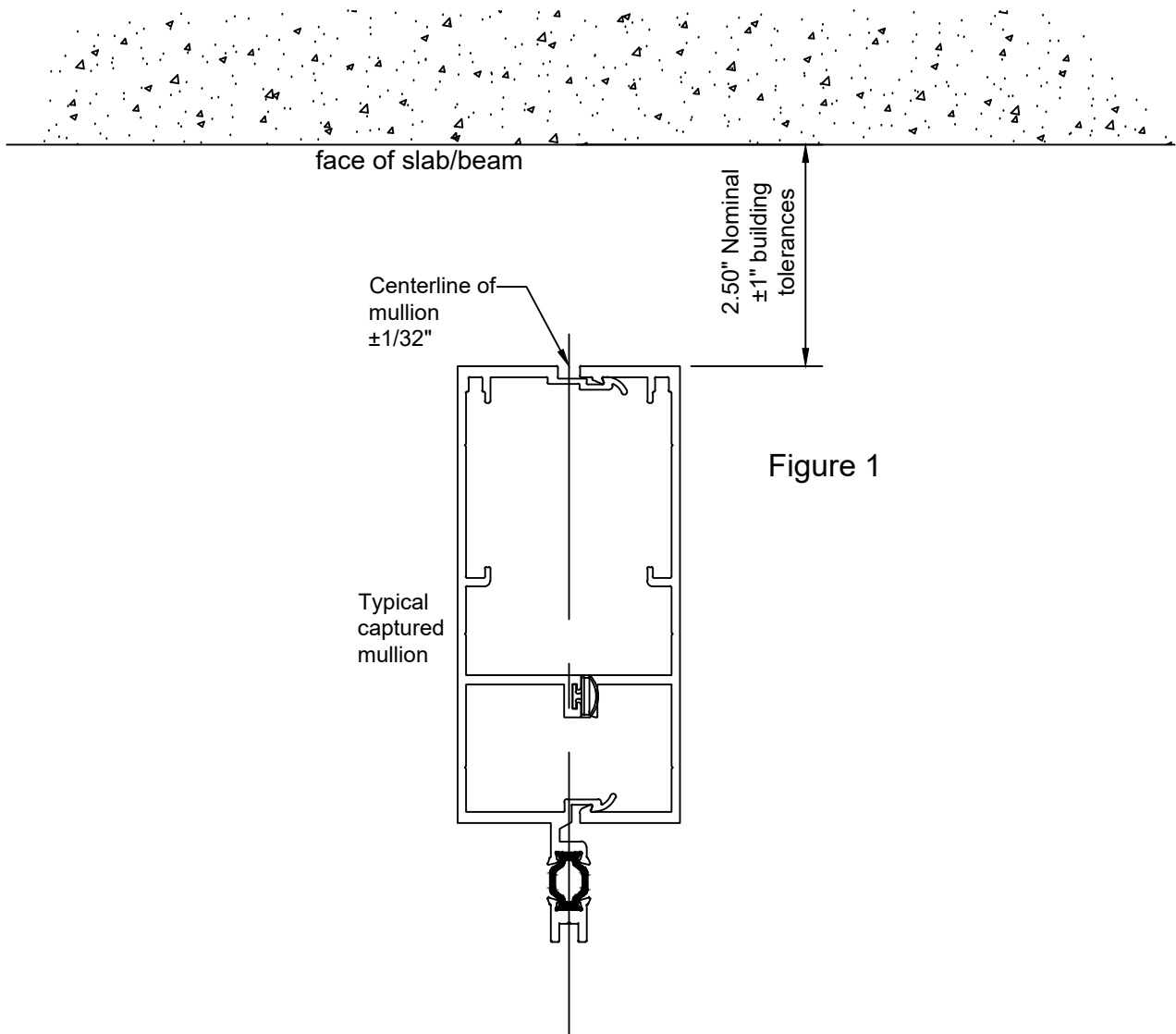
DETAILING IN THIS INSTALLATION MANUAL MAY VARY FOR SPECIFIC PROJECTS.

### 1. CHECK STRUCTURAL OPENING

Slab or beam elevation must be within adjustment of anchoring system.

Structural surfaces to receive anchoring system must be level and plumb within the adjustment limits at head, sill and jamb. See approved shop drawings for allowable adjustment.

### 2. LAYOUT MULLION CENTERLINES



LAYOUT MULLION CENTERLINES

05

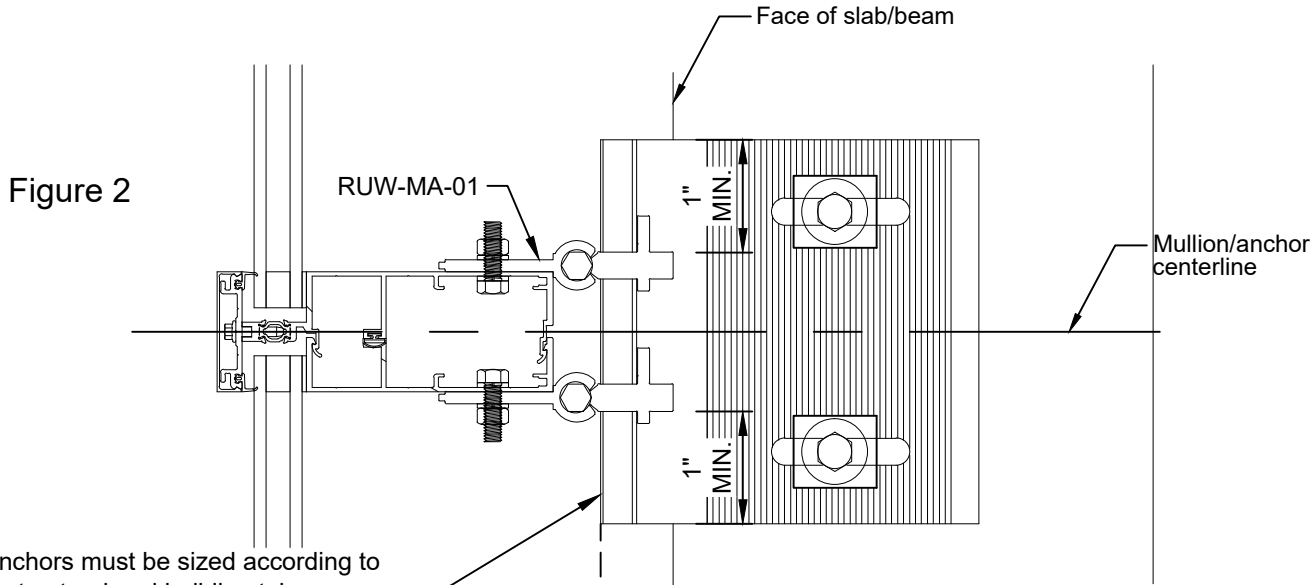
# RELIANCE™ UNIT WALL - INSTALLATION MANUAL

## 1. LOCATE AND INSTALL ANCHORS

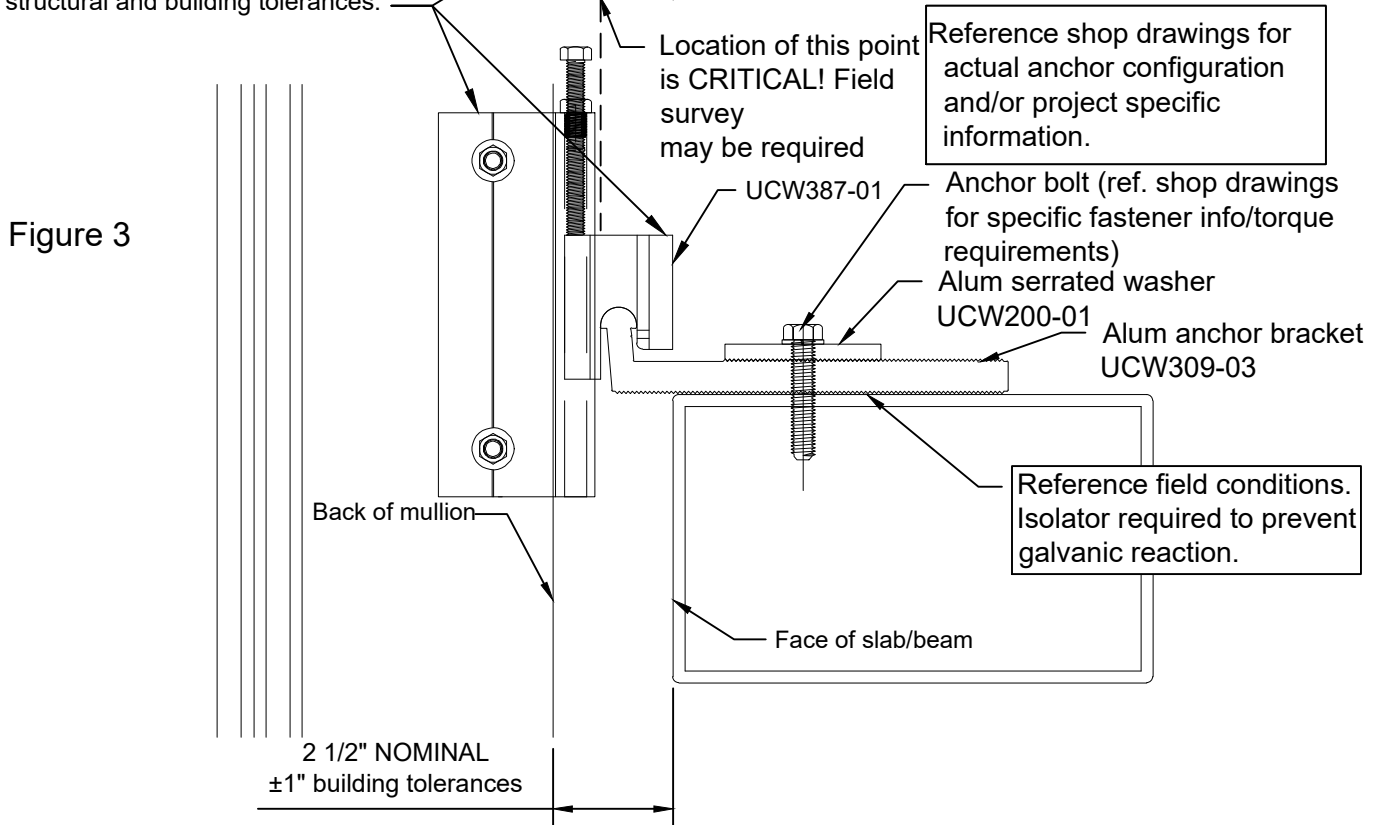
See approved shop drawings for anchor types and locations.

Locate centerline of aluminum anchor at the mark for centerline of mullion.

Adjust aluminum anchor bracket for in and out. Apply aluminum serrated washers. Make final in and out adjustment prior to tightening the anchor bolt in place.



Anchors must be sized according to structural and building tolerances.



LOCATE / INSTALL ANCHORS

# RELIANCE™ UNIT WALL - INSTALLATION MANUAL

## 1. INSTALL ANCHOR HOOKS

Back off set screw at the top of the anchor bracket, slide in the anchor hook.

Tighten up set screw, the screw is to prevent anchor hook from sliding out of the anchor bracket during frame installation.

Figure 4

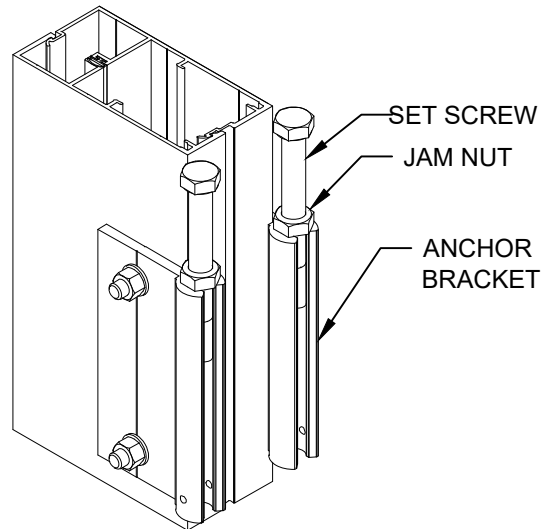


Figure 5

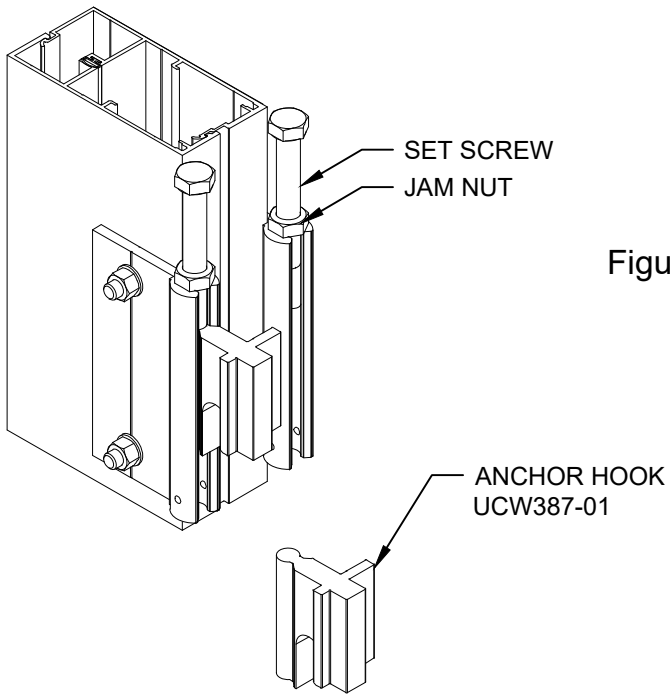
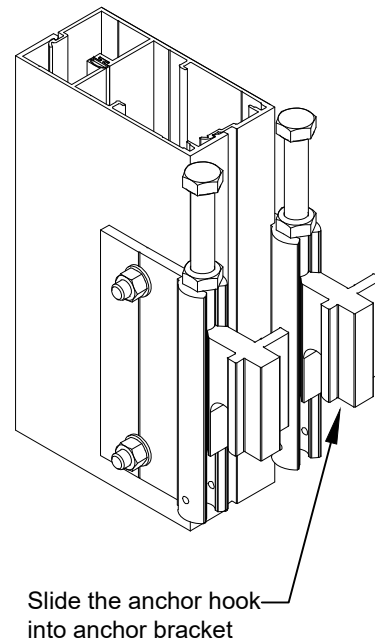


Figure 6



INSTALL ANCHOR HOOKS

07

# RELIANCE™ UNIT WALL - INSTALLATION MANUAL

## 1. INSTALL STARTER SILL

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

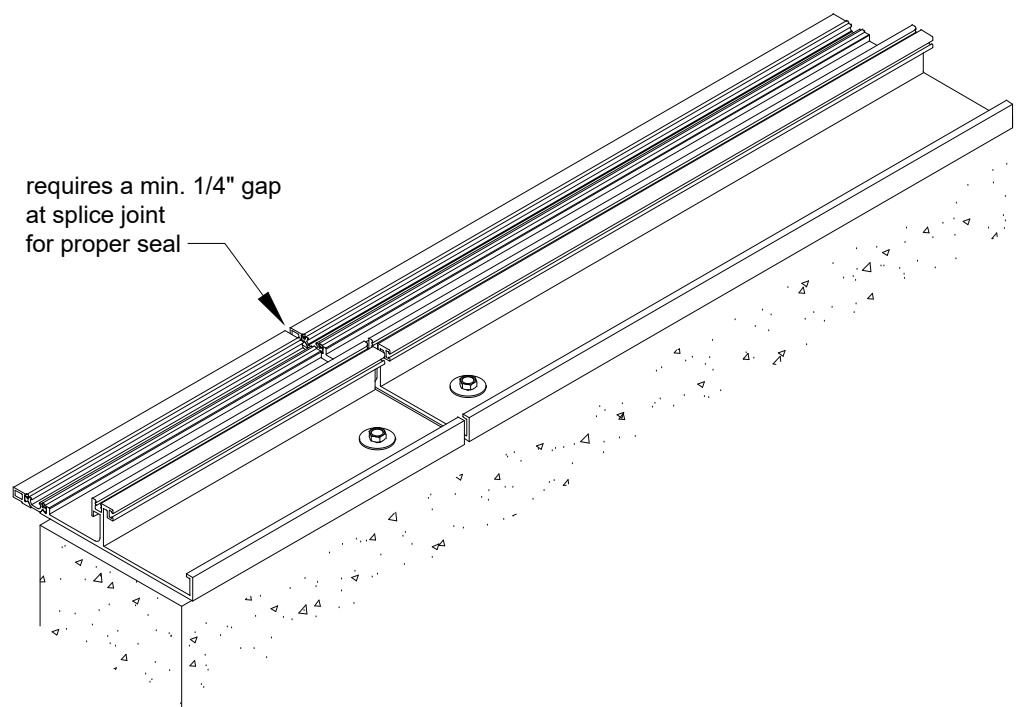


Figure 7

## 2. PROPER SEAL AT STARTER SILL

Clean and prepare substrates for sealing per sealant manufacturer's recommendations. Apply backer rod and perimeter seals under starter sill. Tool sealant. Apply sealant at splice joints. All splice joints should be sealed from front of the starter sill to the top of the upturned leg. Connect sealant at underside of starter sill with sealant at splice joint.

Apply sealant at outer surface for approximately 3/4" on each side of the joint as shown; set 2" wide (UW-466) silicone sheet on top of the silicone sealant. As shown in figure 8 Page 9.

# RELIANCE™ UNIT WALL - INSTALLATION MANUAL

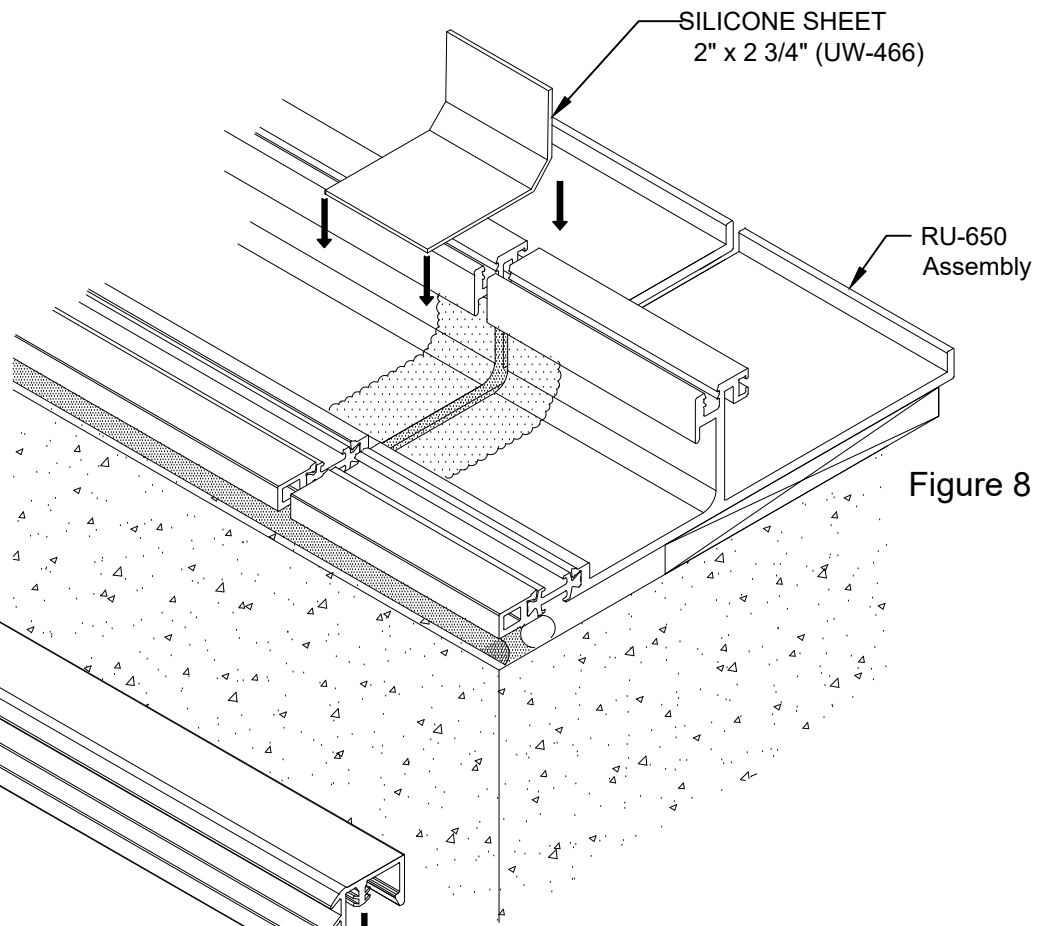


Figure 8

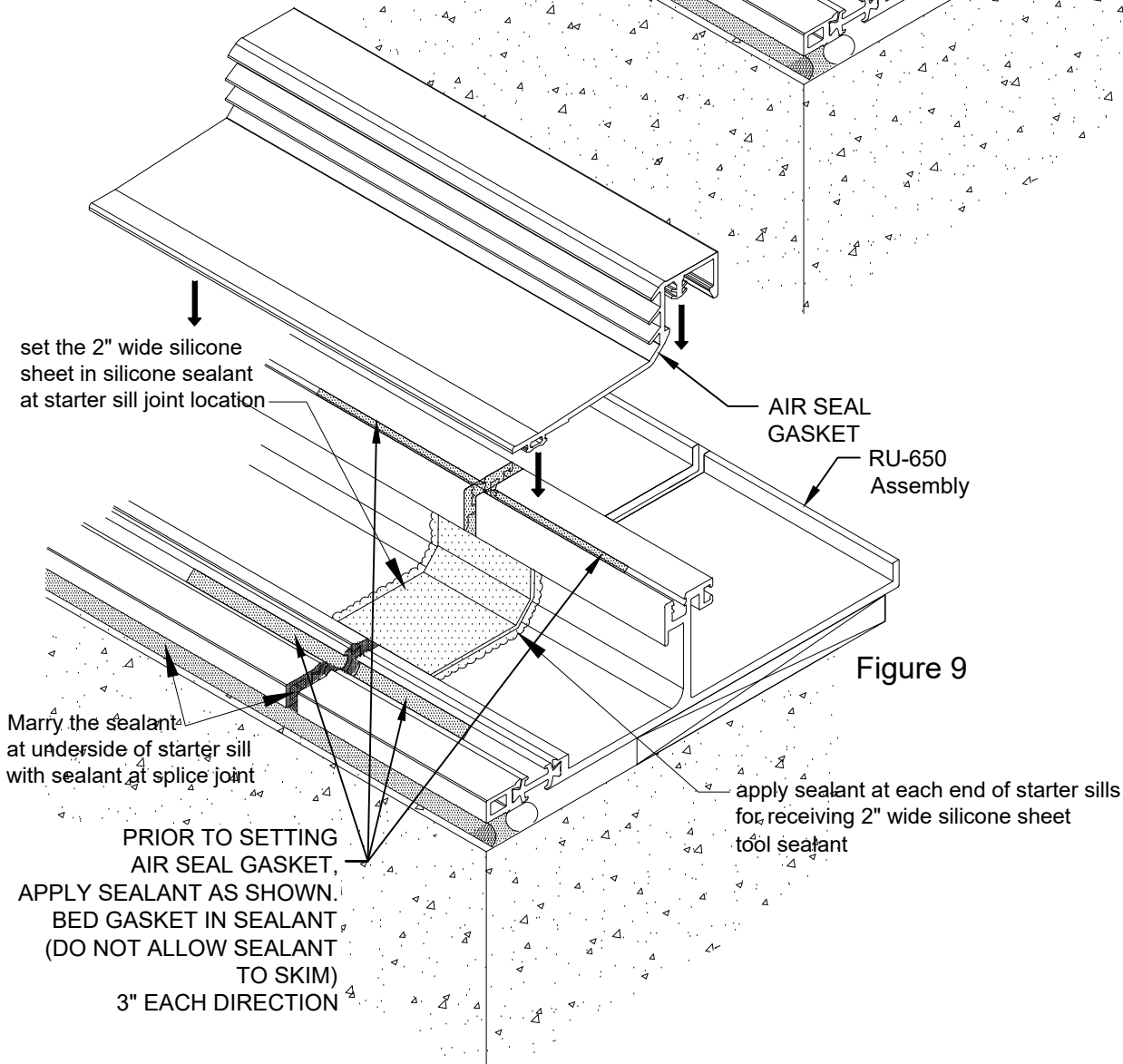


Figure 9

SEAL STARTER SILL

09

# RELIANCE™ UNIT WALL - INSTALLATION MANUAL

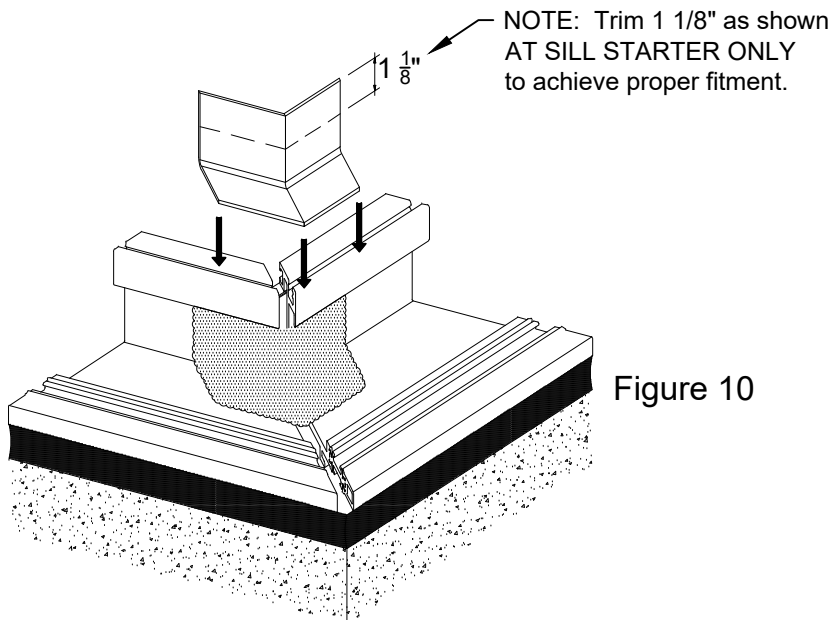


Figure 10

GP-492 to be used at 90°  
outside corners at both the stack  
and starter sill conditions.

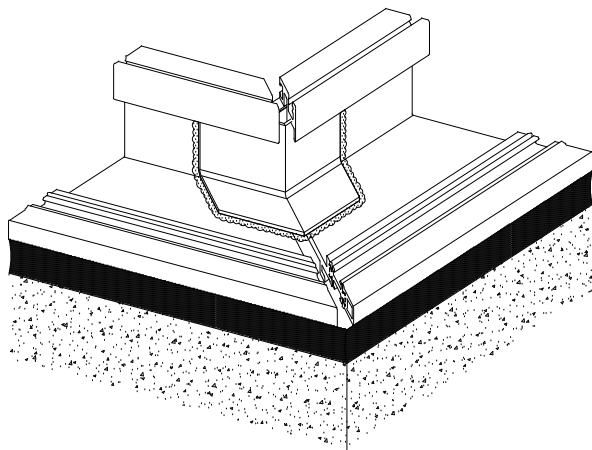


Figure 11

GP-492 is to be installed using  
the same procedure illustrated  
on page 9, figures 8 and 9.

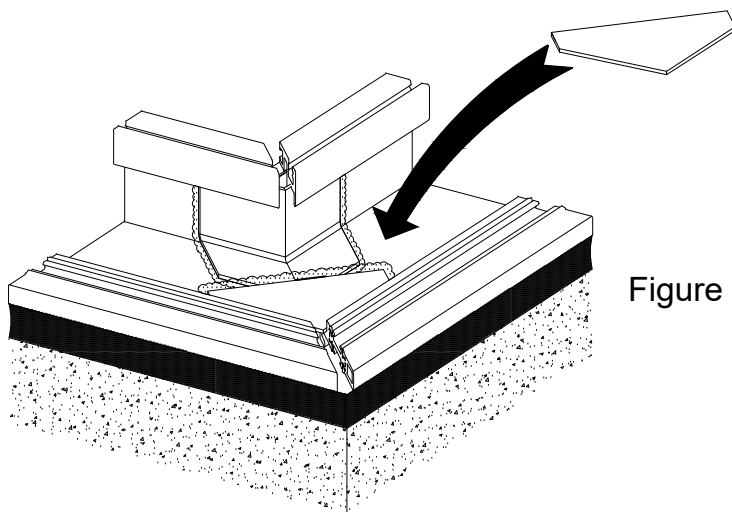


Figure 12

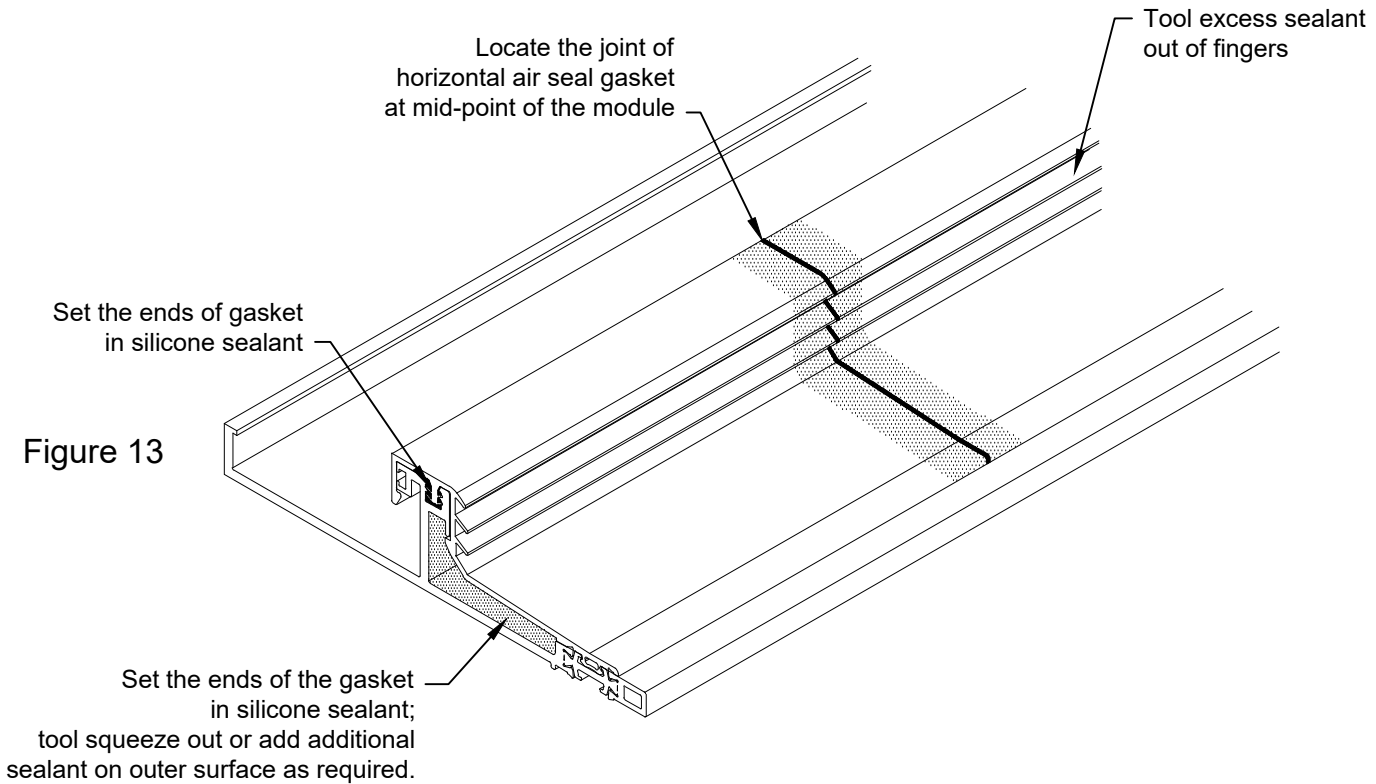
At the starter sill only, in addition  
to the GP-492 you will need to  
cut a piece of silicone sheet to  
fit, and install per the instructions  
for applying a splice on page 9,  
figures 8 and 9.

# RELIANCE™ UNIT WALL - INSTALLATION MANUAL

## 4. INSTALL HORIZONTAL AIR SEAL GASKET

Clean areas to receive sealant as per sealant manufacturer's recommendations. Install horizontal air seal gasket GP-186 into starter sills continuously across elevation. Where splicing is necessary, locate the joint at mid-point of the module, apply bead of sealant to set the ends of gasket in place. Tool squeeze out sealant.

Note silicone sealant must adhere to gasket. Submit samples of the air barrier gasket to your sealant manufacturer for sealant adhesion and compatibility testing. Ensure fingers of horizontal air seal gaskets are not filled with silicone as this will hamper frame installation.



# RELIANCE™ UNIT WALL - INSTALLATION MANUAL

SAFETY PROCEDURES ARE THE SOLE RESPONSIBILITY OF THE INSTALLER. OLDCASTLE BUILDINGENVELOPE® ASSUMES NO RESPONSIBILITY FOR PROJECT SAFETY PROCEDURES.

## 1. HOISTING FRAMES

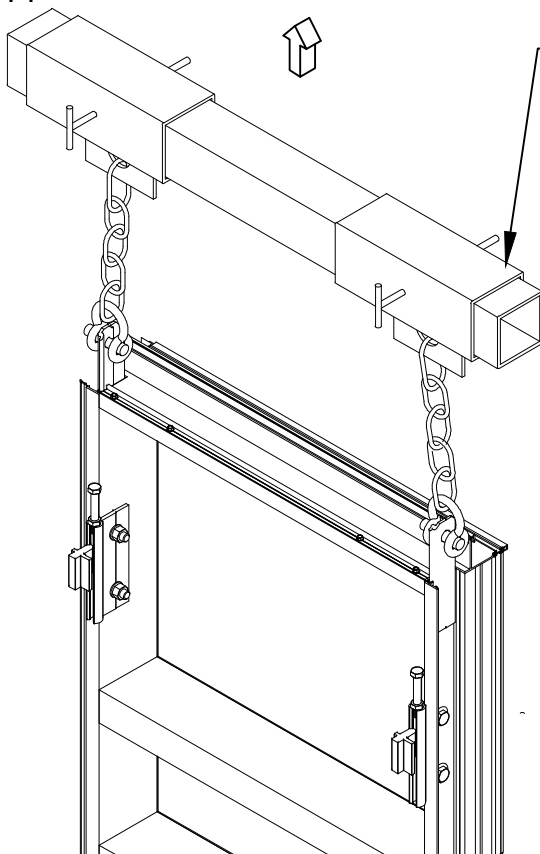
Frames can be hoisted either through anchor lugs (shear angle, non-typical) installed in frame head horizontals or through shear sleeves / lifting lugs typical attached to the mullion halves.

Inspect frames prior to hoisting. For illustration purposes only, a spreader bar is shown as a hoisting device. Other lifting devices can be used. Means & methods are the sole responsibility of the installer. The spreader bar chains should be spaced the same distance as the distance between hoisting holes in head horizontal or hoisting holes on sleeves. Maximum frame weight to be 1500 pounds.

Handle frame to hoist smoothly and in a controlled manner. No swinging or spinning allowed during hoisting. Avoid shock loads. Do not lift the frame sideways (such as to rotate the frame) when using shear sleeves, as this could bend the sleeves and hamper installation of next level stacking unit, which must sleeve down onto shear sleeves. Always rotate the frame upright from lay down position by lifting perpendicular to the unit width.

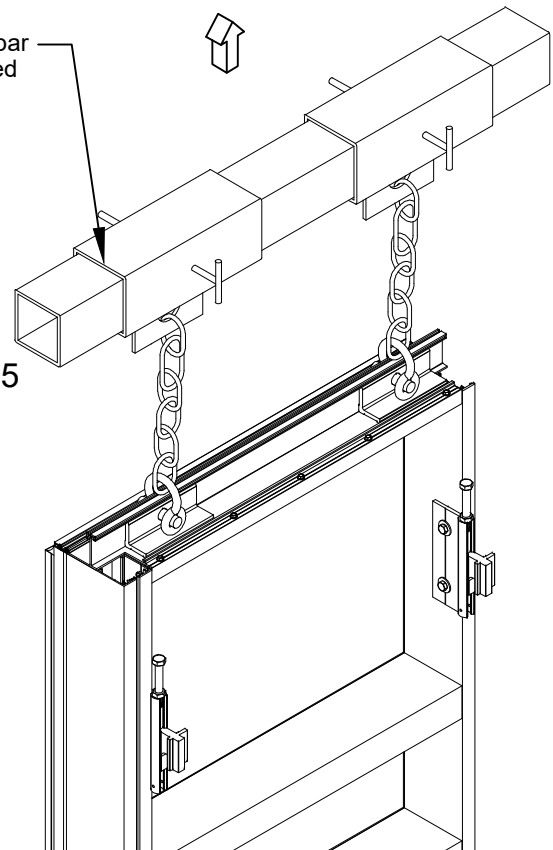
Spreader bar should indicate hoisting configuration depending on frame weight. Ensure hoisting bar is rated for frame weight configuration as required.

Figure 14



Adjust the spreader bar to have chains spaced the same distance as the hoisting holes

Figure 15



# RELIANCE™ UNIT WALL - INSTALLATION MANUAL

Frames are to be installed from left to right as viewed from the exterior, and from bottom to top.

Before proceeding to install the first frame, check all starter sill joints to make sure they are properly sealed and horizontal air seal gaskets have been applied.

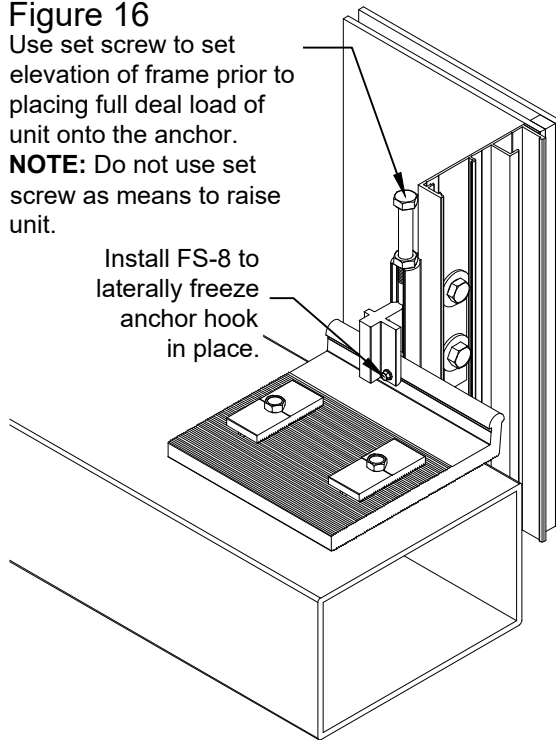
Apply 3" at intermediate mullion to 6" at jamb mullion long silicone sealant towards exterior portion of the horizontal air seal gasket on top of starter sill at each end. Do not allow sealant to skin before installing frame.

Install the first frame by lifting the frame over starter sill and lower the frame down and rest the anchor hook on pre-set alum anchor at slab/beam.

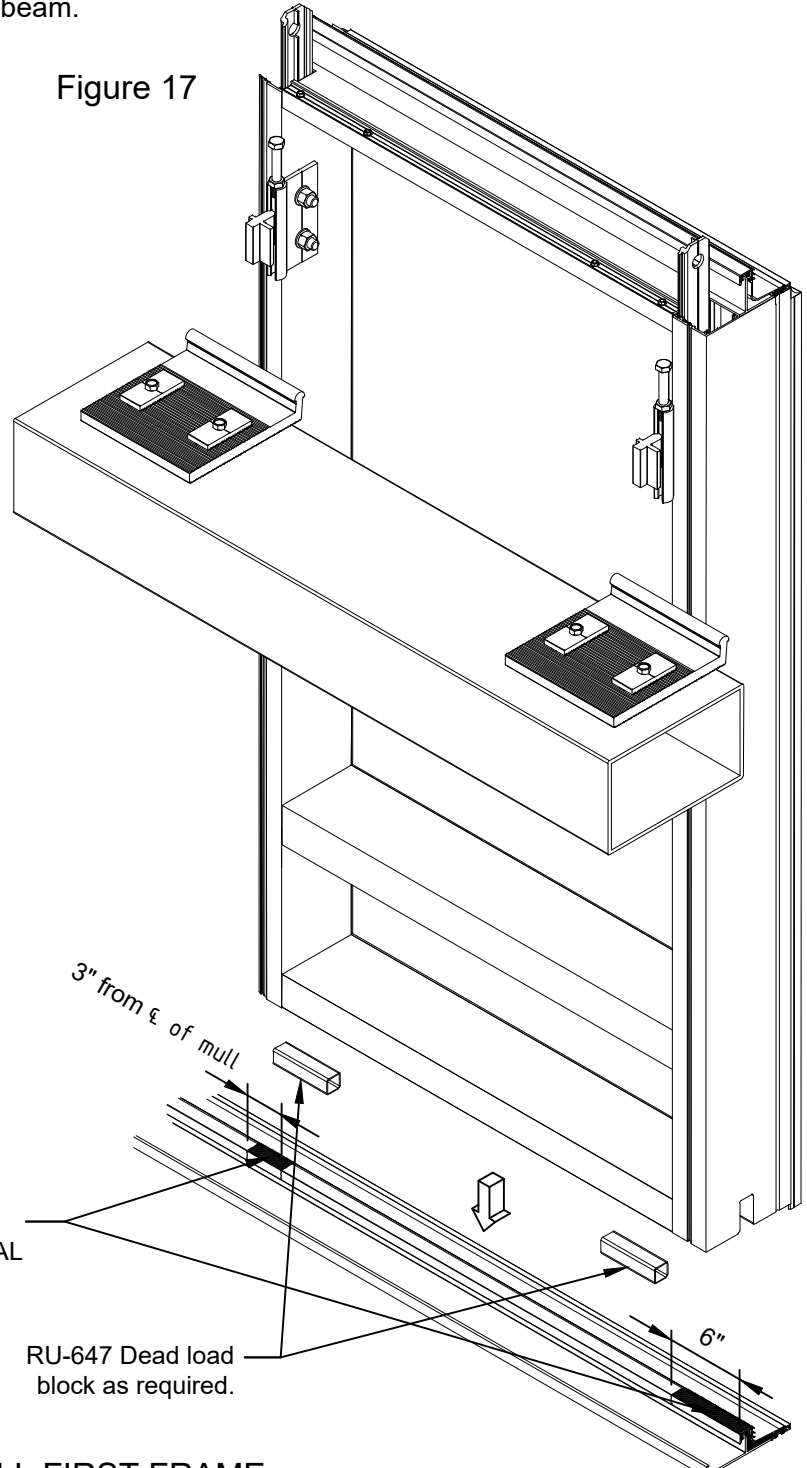
**Figure 16**

Use set screw to set elevation of frame prior to placing full dead load of unit onto the anchor.  
**NOTE:** Do not use set screw as means to raise unit.

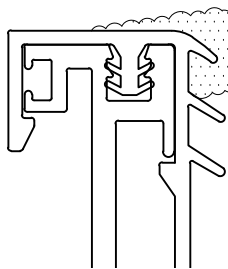
Install FS-8 to laterally freeze anchor hook in place.



**Figure 17**



Use the set screw on anchor bracket to adjust the elevation of the frame. Adjust the elevation of the frame to make sure the frame is level, plumb and at the correct height. After adjustment, freeze the anchor hook for lateral movement by installing FS-8 1/4" by 1" hex head screw. Use metal shims if necessary to temporarily maintain the nominal distance between bottom of the mullion and top of the starter sill. Remove shims after adjustment for slip anchor condition at ground floor.



SEALANT @ TOP OF AIR SEAL GASKET

FRONT OF SYSTEM

INSTALL FIRST FRAME

13

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

# RELIANCE™ UNIT WALL - INSTALLATION MANUAL

## 2. INSTALL ADJACENT FRAMES AT GROUND FLOOR

Just prior to installing the next frame, apply sealant at the bottom of the first frame up vertical air seal gasket GP-483 for approximately 4" long above horizontal air seal gasket. (Figure 18) Connect the vertical seal with the horizontal seal which was previously applied on top of the starter sill. (Figure 19) Do not allow sealant to skin before installing next frame.

Figure 18

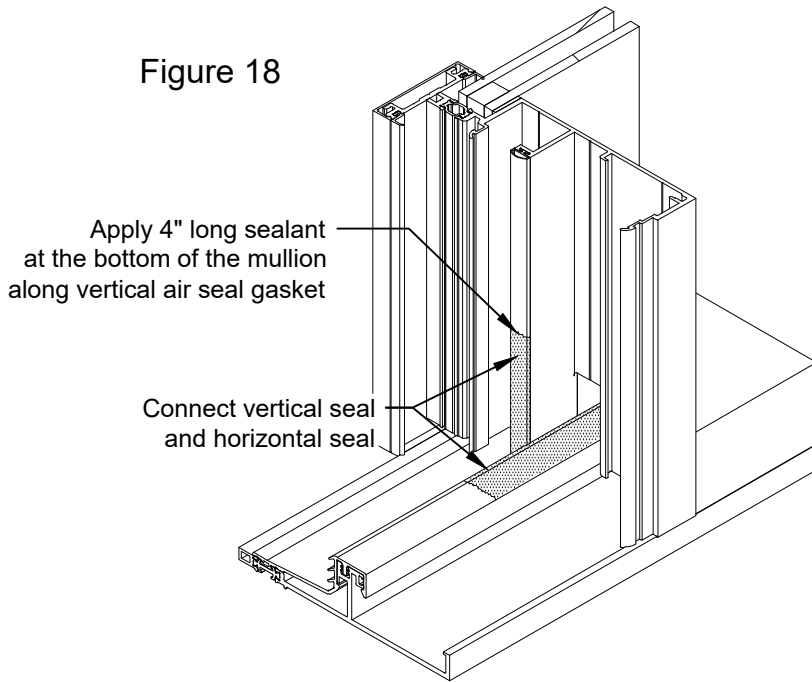
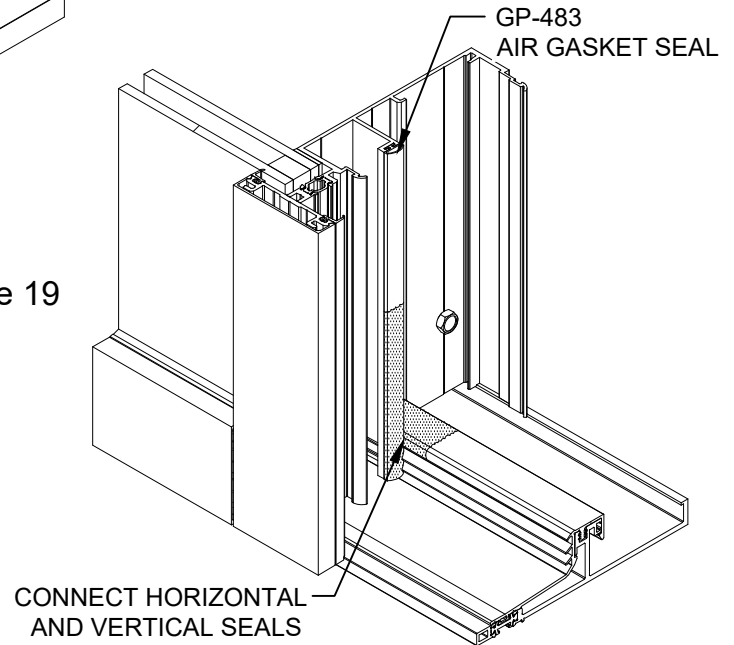


Figure 19



Install the next frame by lifting the frame up to clear the starter sill. Move the next frame to the left to engage the mullion hooks (see detail pg. 15); once snapped, slide the next frame down to engage horizontal air seal at stack joint.

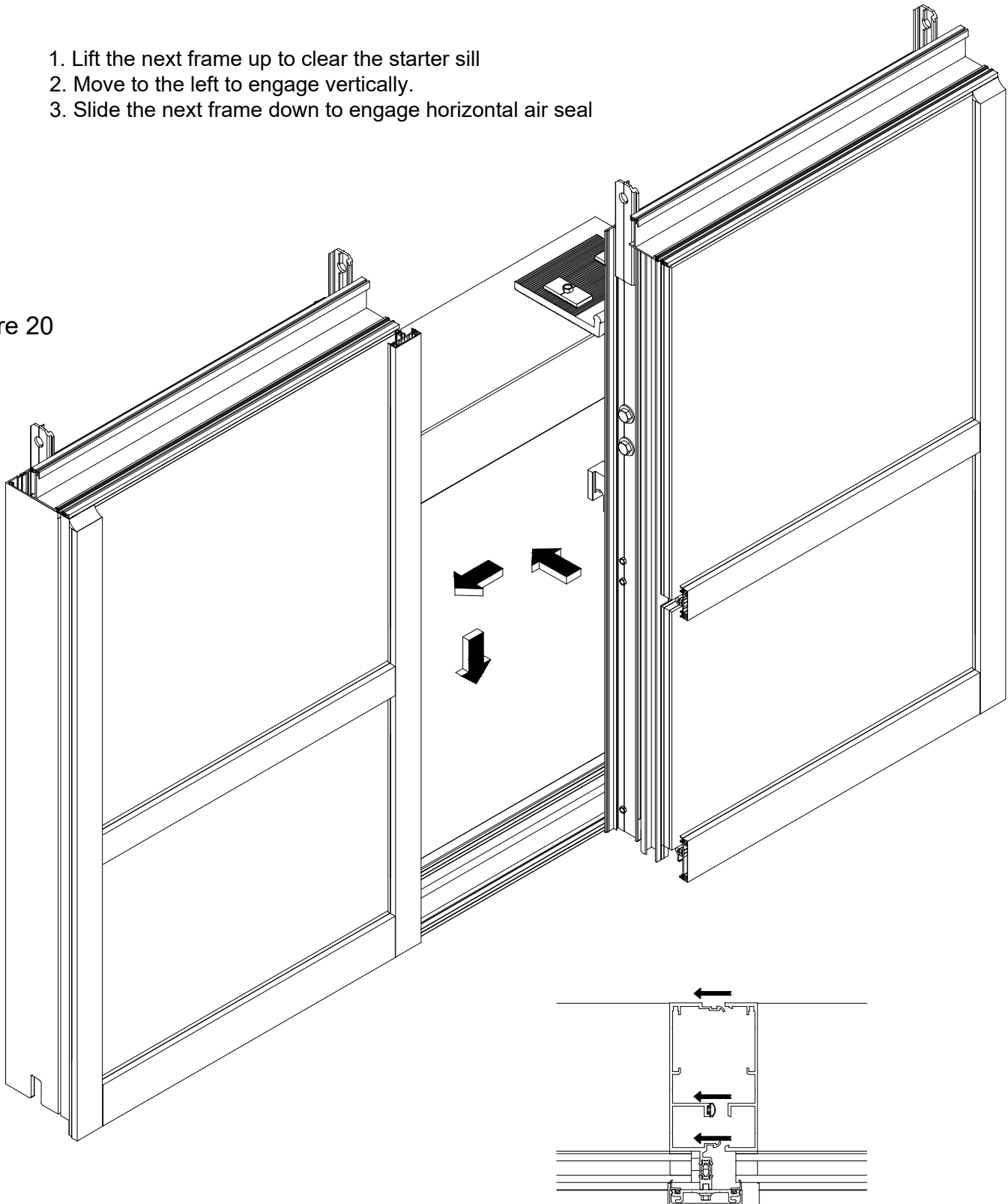
Check and ensure vertical air seal gasket GP-483 has not slid down or up in the gasket raceway in mullion.

Repeat in the same method for installing the rest of the frames at ground floor.

# RELIANCE™ UNIT WALL - INSTALLATION MANUAL

1. Lift the next frame up to clear the starter sill
2. Move to the left to engage vertically.
3. Slide the next frame down to engage horizontal air seal

Figure 20

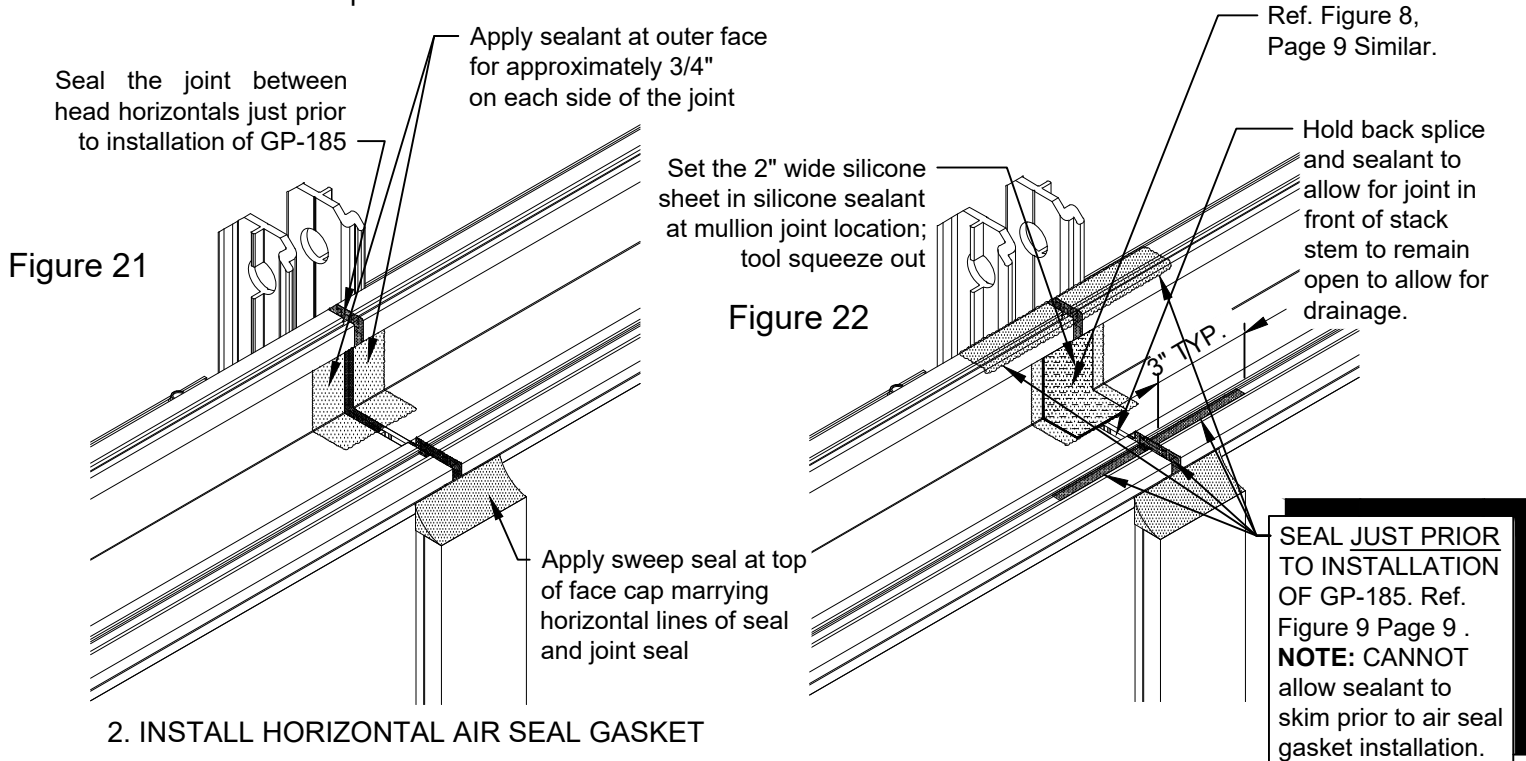


INSTALL ADJACENT FRAME

# RELIANCE™ UNIT WALL - INSTALLATION MANUAL

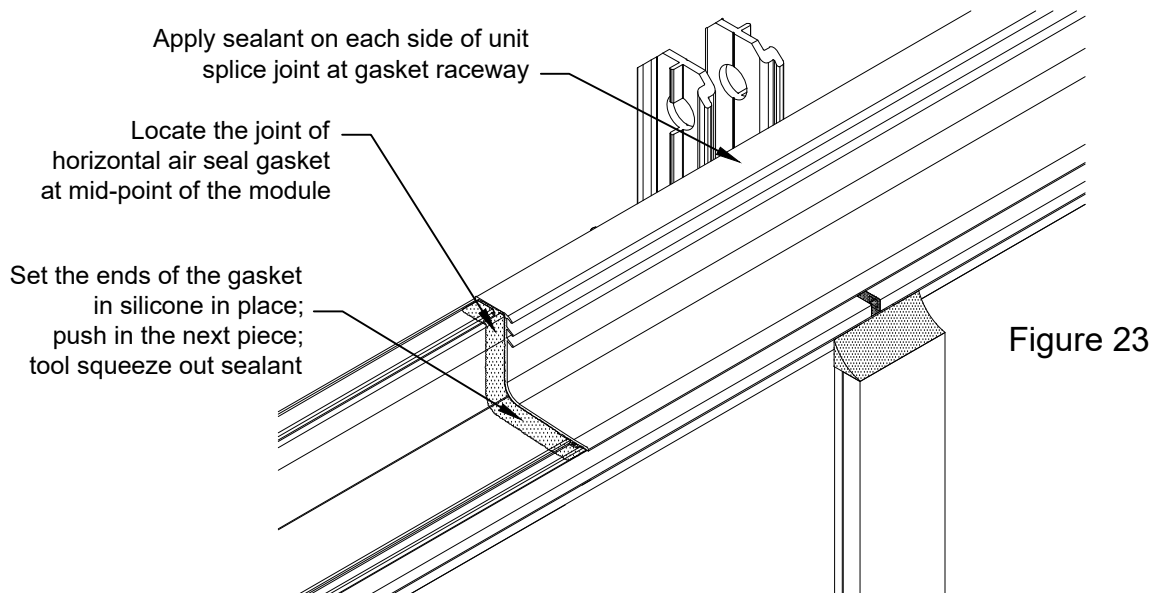
## 1. SEAL THE JOINTS

Clean and prepare the surfaces of the head horizontal at mullion joints per sealant manufacturer's recommendations. Apply sealant along the joint between head horizontals as shown; also apply sealant at front face for approximately 3/4" on each side of the joint as shown; set 2" wide silicone sheet on top of the silicone sealant.



## 2. INSTALL HORIZONTAL AIR SEAL GASKET

Install horizontal air seal gasket GP-185 into head horizontals continuously across elevation. Apply sealant for approximately 3" long on each side of the splice joint in gasket raceway, push gasket into raceway, tool squeeze out sealant. Where splicing of air seal gasket is necessary, locate the joint at mid-point of the module and apply bead of sealant to set the ends of gasket in place. Push in the next piece of gasket, tool squeeze out sealant and remove excess sealant from outer face.



SEAL JOINT/INSTALL HOR. AIR SEAL GASKET

# RELIANCE™ UNIT WALL - INSTALLATION MANUAL

## 3. SEAL THE HOISTING HOLES FOR WINDLOAD ANCHOR LUG OPTION

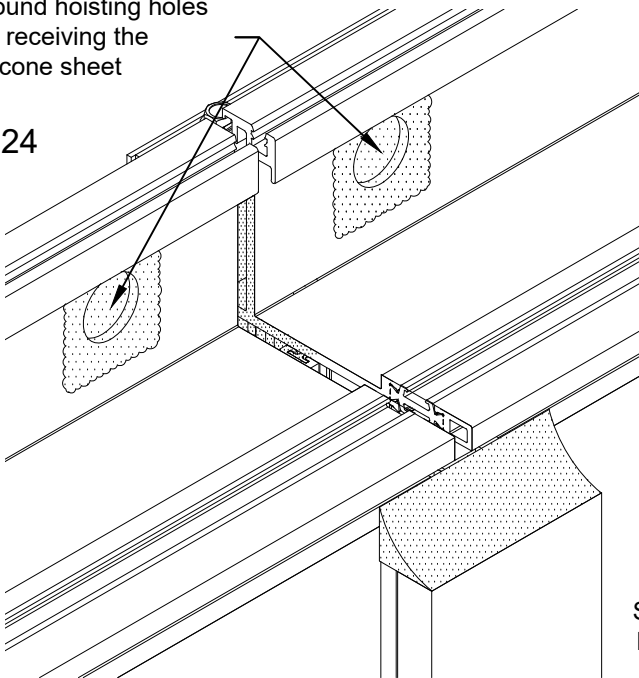
For frames with windload anchor lug (shear angle) option, clean and prepare the surfaces of the head horizontal at mullion joints; apply sealant along the joint between head horizontals; also apply sealant at and around hoisting hole, set 2" by 2" silicone sheet at hoisting hole location.

See page 16 for installation of splice joint.

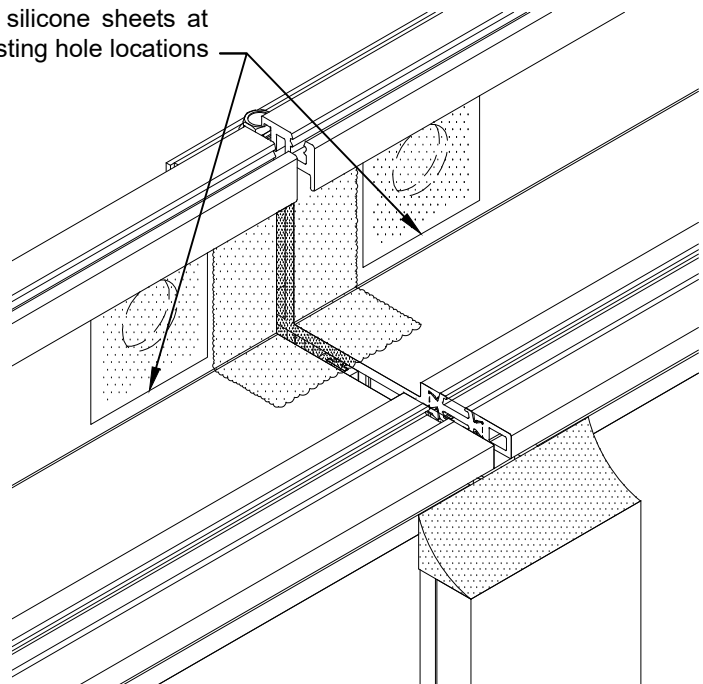
Then install horizontal air seal gasket GP-50041 into head horizontals continuously across elevation (see page 16 for proper procedure at unit joints). Where splicing is necessary, to locate the joint at mid-point of the module and apply bead of sealant and set the ends of gasket in place. Tool squeeze out sealant.

Apply sealant at and around hoisting holes for receiving the silicone sheet

Figure 24



Set silicone sheets at hoisting hole locations



**NOTE:** Non-typical detail. Detail provided to illustrate hoisting hole sealing requirements. Refer to sheet Figure 25 14 Figures 21, 22 and 23 for typical sealant methods of horizontal splice and air seal gasket.

## SEAL HOISTING HOLES (WITH SHEAR ANGLE)

# RELIANCE™ UNIT WALL - INSTALLATION MANUAL

## 4. INSTALL FIRST FRAME AT UPPER LEVEL

Before proceeding to upper level, check all horizontal joints at lower level to make sure they are properly sealed and horizontal air seal gaskets have been applied (reference page 11).

Apply a 3" to 6" long bead of silicone sealant towards exterior portion of the horizontal air seal gasket (reference page 13) on top of head horizontal at each end at the frame below. This sealant will marry into the 4" sealant applied to the vertical air barrier gasket. (reference page 14) (NOTE: Apply these sealants only just prior to installing the unit. DO NOT allow to skin) Install the first frame at upper level by lifting the frame over head horizontal and shear sleeve/lifting lug and lower the frame down.

Use the adjustment bolt on anchor bracket to adjust the elevation of the frame. **NOTE:** Do not use adjustment screw to raise unit. Use shims if necessary to maintain the nominal distance between bottom of the mullion and top of the head horizontal. Remove shims after adjustment.

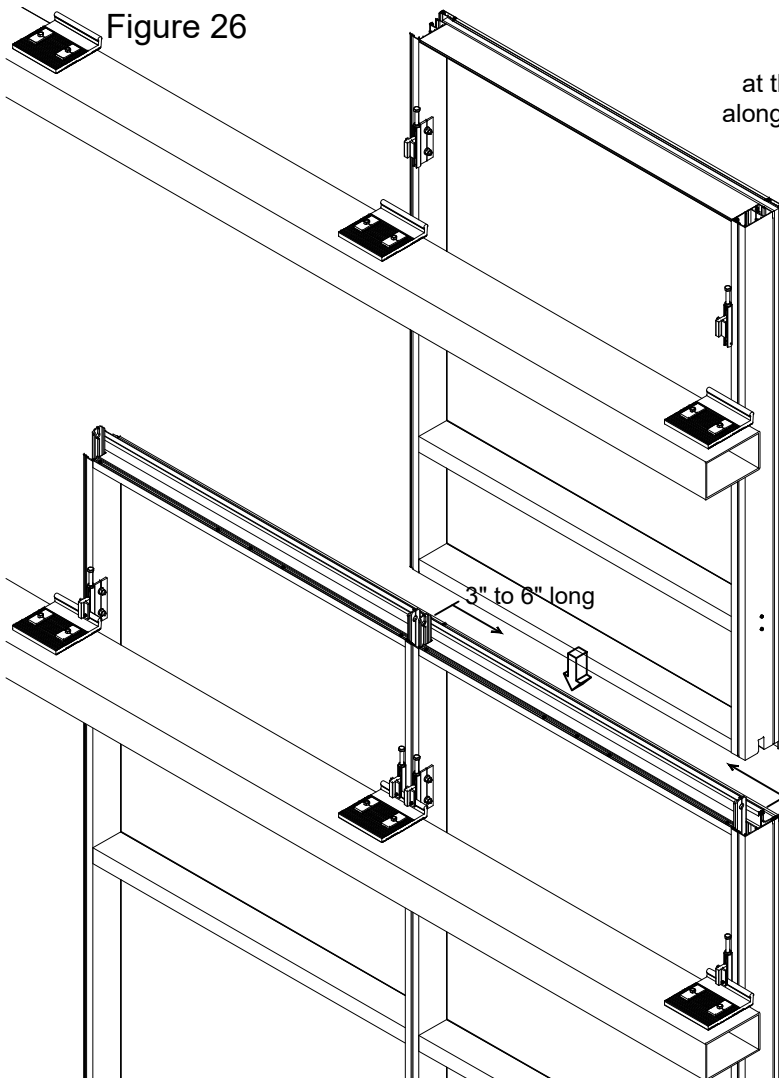
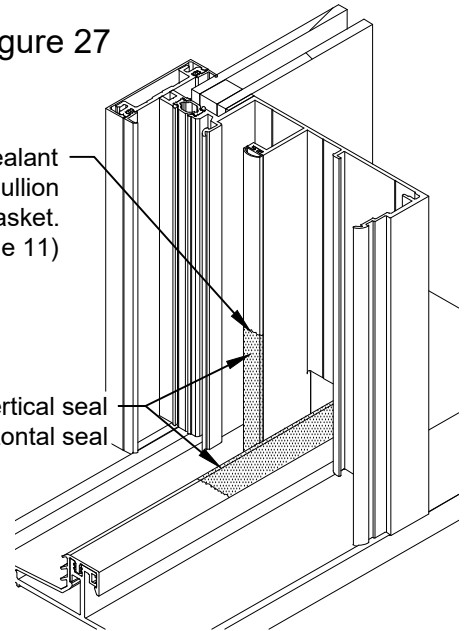


Figure 26

Figure 27

Apply 4" long sealant at the bottom of the mullion along vertical air seal gasket. (Reference page 11)

Connect vertical seal and horizontal seal



3" to 6" long

Apply 3" to 6" long of sealant on top of head horizontal towards the exterior portion of horizontal air seal gasket

INSTALL UPPER LEVEL FRAME

# RELIANCE™ UNIT WALL - INSTALLATION MANUAL

## 5. INSTALL ADJACENT FRAMES AT UPPER LEVEL

Just prior to installing the next frame, apply sealant at the bottom of the first frame up vertical air seal gasket GP-186 for approximately 4" long above horizontal air seal gasket. Connect the vertical seal with the horizontal seal which was previously applied on top of the head horizontal.

Figure 28

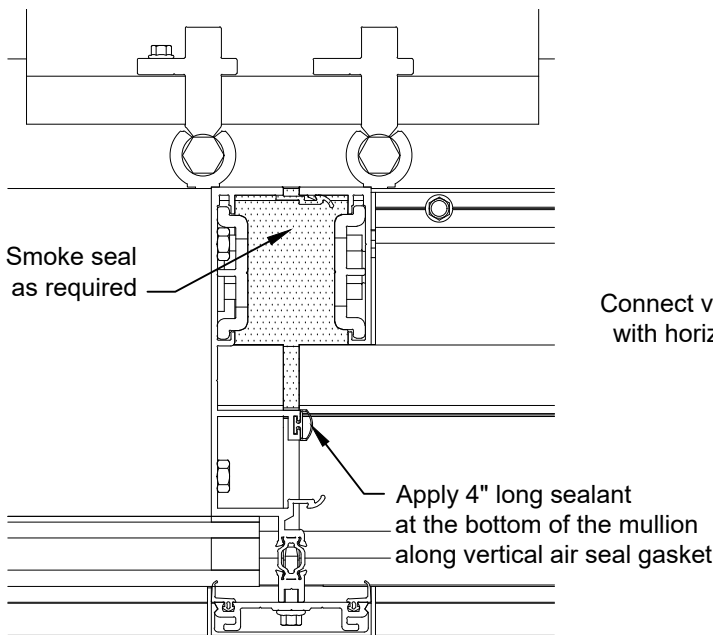
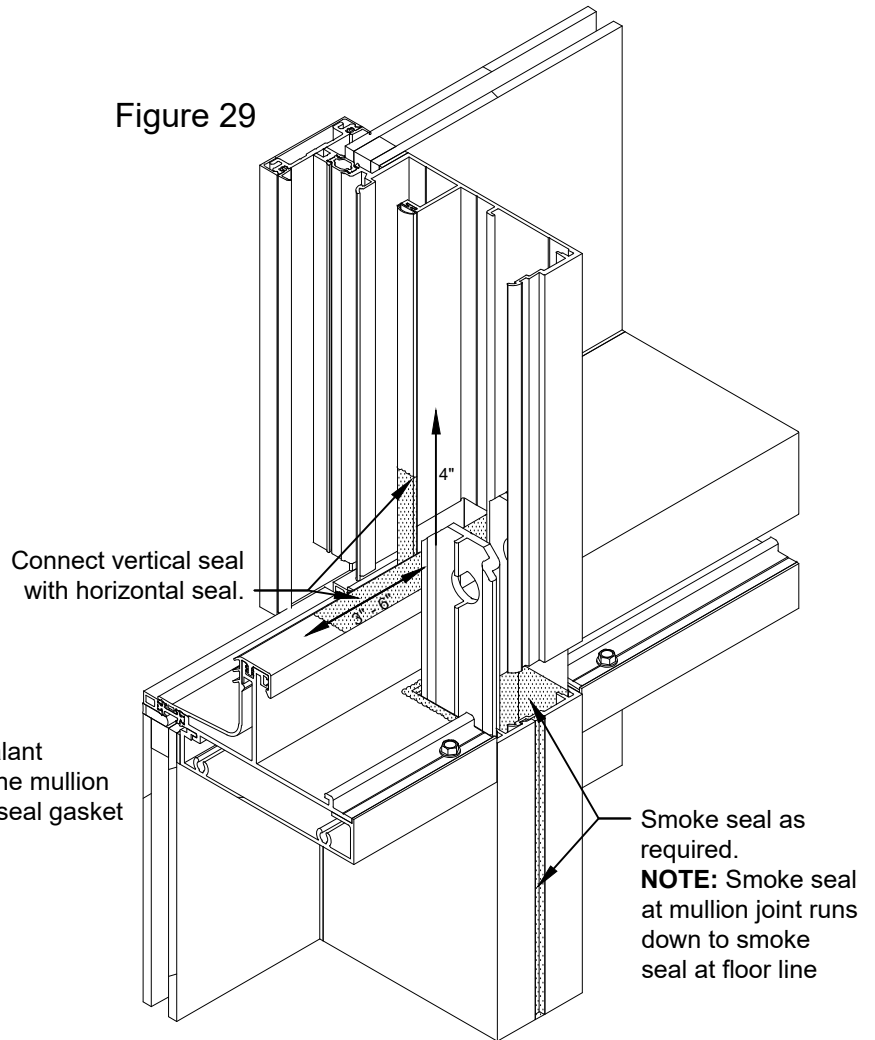


Figure 29



Install the next frame by lifting the frame 4" to 6" above previous frame to clear the sleeves and head horizontals. Move the next frame to the left to engage the outer mullion hooks; then rotate the next frame towards building to snap inner hooks; once snapped, slide the next frame down to engage horizontal air seal at stack joint. (Reference page 20)

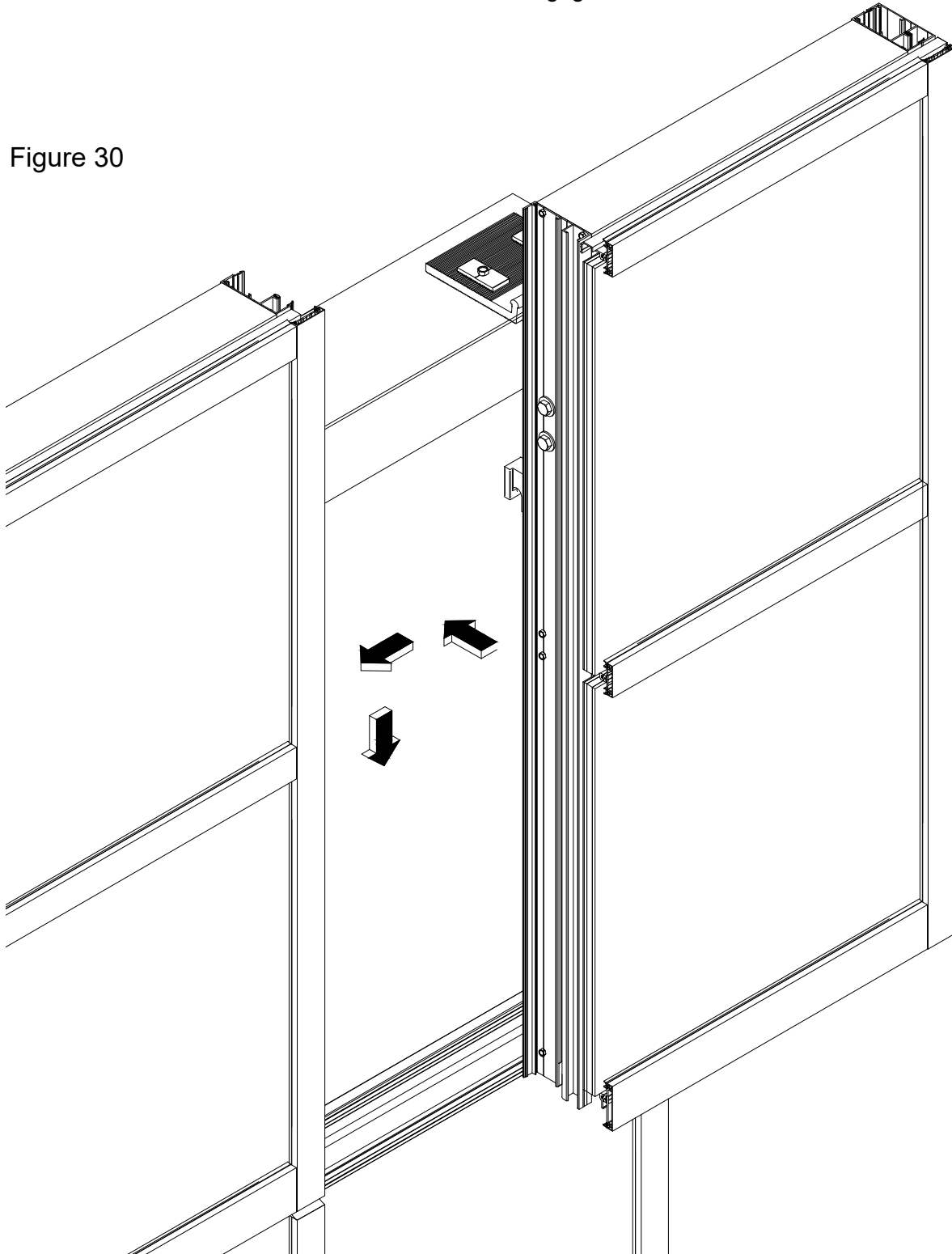
Again use adjustment bolt on anchor bracket to set the final elevation of the frame, then freeze the lateral movement by installing FS-8 screw on anchor hook.

Repeat in the same method for installing the rest of the frames.

# RELIANCE™ UNIT WALL - INSTALLATION MANUAL

1. Lift the next frame up to clear the starter sill
2. Move to the left to engage vertically.
3. Slide the next frame down to engage horizontal air seal

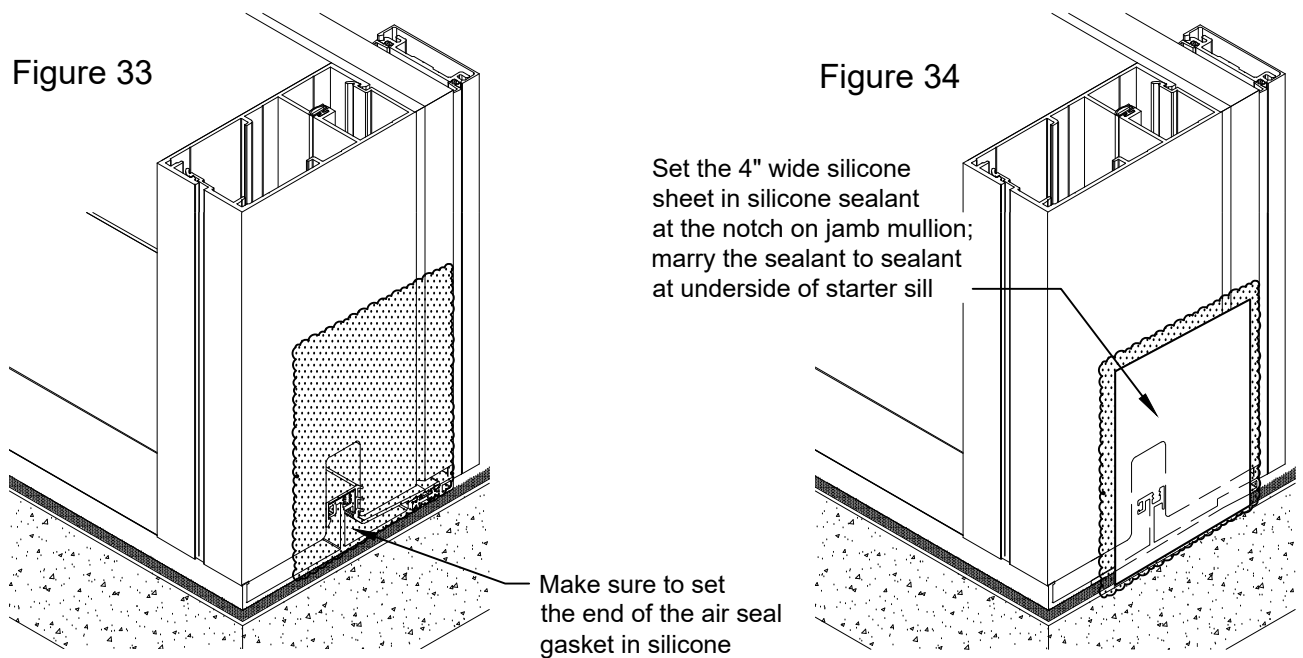
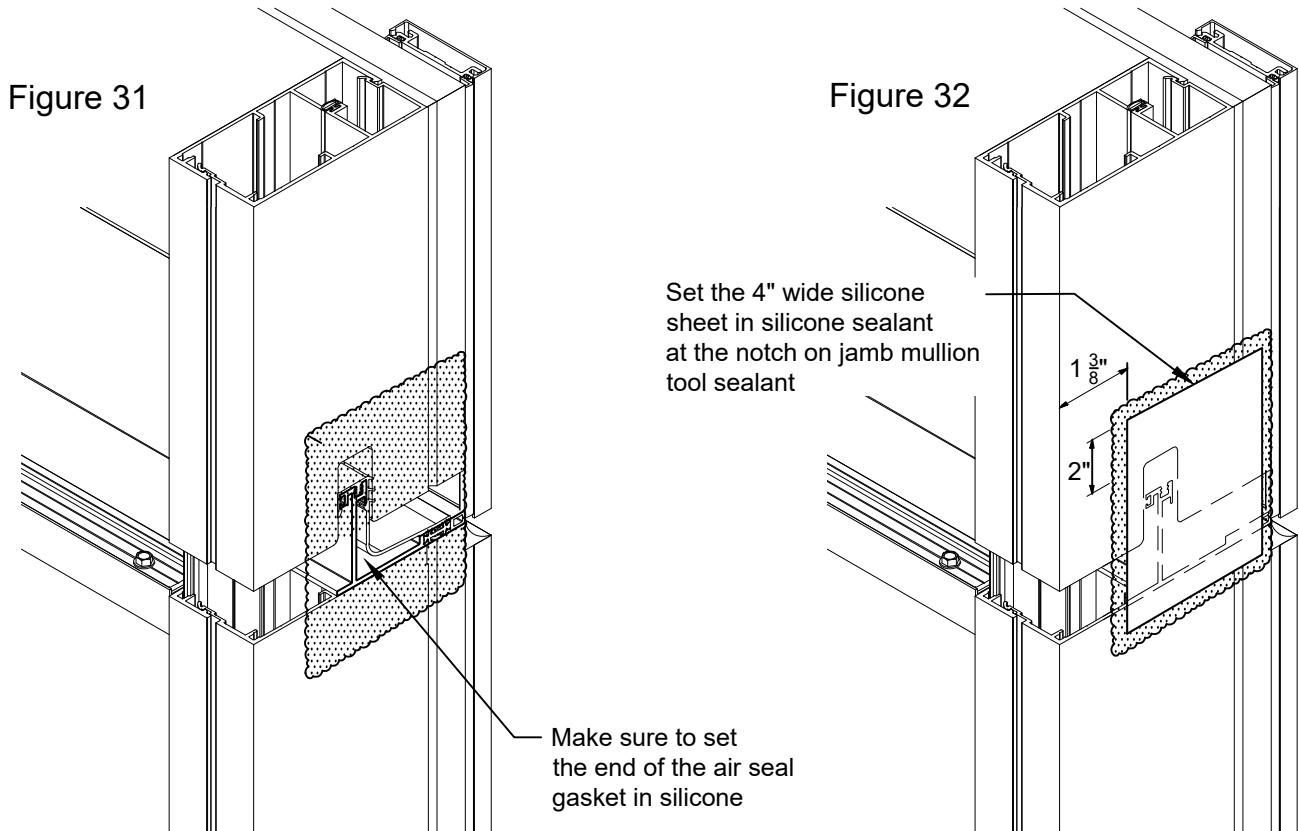
Figure 30




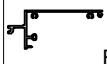
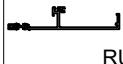




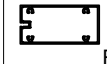
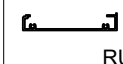





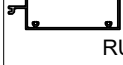


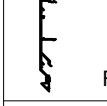
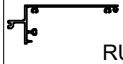
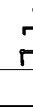
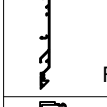


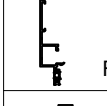
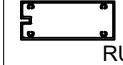

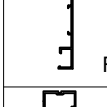


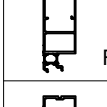
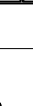
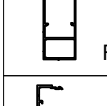
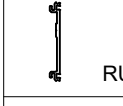
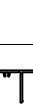
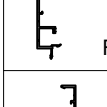


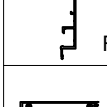
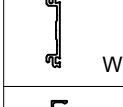

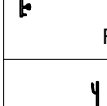
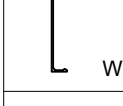


# RELIANCE™ UNIT WALL - INSTALLATION MANUAL

## 1. SEAL AT THE NOTCH ON JAMB MULLION





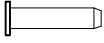


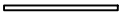
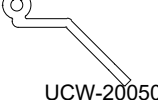



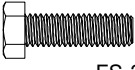















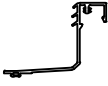
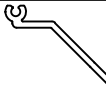










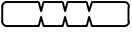



For jamb frames at expansion joints or starter sills, apply sealant at the notch on mullion above and below the expansion joint. Set silicone sheet in place as required.



# RELIANCE™ UNIT WALL - INSTALLATION MANUAL

7" SYSTEM					
 RU-662	Male Corner Mullion 90° Outside Captured	 RU-636	Head Horizontal Captured	 RU-750	Dead Load Sill Starter
 RU-663	Female Corner Mullion 90° Outside Captured	 RU-673	Sill Non Captured	 RU-749	Stack Horizontal @ Stack Condition
 RU-632	Male Mullion Captured	 RU-654	Standard Horizontal Non Captured	 RU-744	Head Horizontal @ Stack Condition
 RU-634	Female Mullion Captured	 RU-670	Dead Load Sill, Captured	 RU-739	Sill, Captured
 RU-667	Jamb Captured	 RU-671	Dead Load Sill, Non Captured	 RU-738	Standard Horizontal Captured
 RU-658	Jamb Non Captured	<b>8" SYSTEM</b>			
 RU-651	Male Mullion Non Captured	 RU-762	Male Corner Mullion 90° Outside Captured	 RU-736	Head Horizontal Captured
 RU-652	Female Mullion Non Captured	 RU-763	Female Corner Mullion 90° Outside Captured	 RU-773	Sill Non Captured
 RU-653	Head Horizontal Non Captured	 RU-732	Male Mullion Captured	 RU-754	Standard Horizontal Non Captured
 RU-637	Filler Trim for Head Horizontal	 RU-734	Female Mullion Captured	 RU-770	Dead Load Sill, Captured
 RU-650	Dead Load Sill Starter	 RU-767	Jamb Captured	<b>COMMON EXTRUSIONS</b>	
 RU-649	Stack Horizontal @ Stack Condition	 RU-758	Jamb Non Captured	 RU-642	Pressure Plate for 3 1/2" Face Cap @ Stack, Captured
 RU-644	Head Horizontal @ Stack Condition	 RU-751	Male Mullion Non Captured	 WW-1505	3 1/2" Face Cap @ Stack Condition, Captured
 RU-639	Sill 1" Infill, Captured	 RU-752	Female Mullion Non Captured	 WW-162	Pressure Plate for 2 1/2" Face Cap (Typ.), Captured
 RU-638	Standard Horizontal Captured	 RU-753	Head Horizontal Non Captured	 WW-110	2 1/2" Face Cap @ Typical Condition, Captured
		 RU-737	Filler Trim for Head Horizontal	 RU-641	Pocket Filler, Captured

# RELIANCE™ UNIT WALL - INSTALLATION MANUAL

 RU-657	Perimeter Filler, Non Captured	 FS-346	Taplock Threaded Insert 3/8"-16x11/16"	 UCW-387	Anchor Lug Typical
 SPW-1482	Perimeter Filler Cap, Non Captured	 FS-317	Attachment Pin	 RU-668	7" Mullion Anchor Typical
 RU-230	Pressure Plate for 90° Corner Face Cap Captured	 UW-465	Silicone Splice 4"	 UCW-20050	7" Mullion Anchor 90° O.S. Corner
 RU-231	Face Cap for 90° Corner Condition Captured	 UW-466	Silicone Splice 2"	 UCW-309	Anchor Plate Typical
<b>ACCESSORIES</b>					
 FS-289	Hex Head Bolt 3/8" X 1 1/4"	 GP-492	Formed Silicone Boot for Sealing of 90° O.S. Corner	 UCW-200	Serrated Anchor Plate Washer
 FSW-80	Flat Washer For 3/8" Bolt	 GP-483	Santoprene Weather Gasket	 UCW-6006	Lifting Lug Typical
 FSN-81	Nut For 3/8" Bolt	 GP-142	EPDM Isolator	 UCW-6012	Lifting Lug 90° O.S. Corner
 FS-74	Hex Head Bolt 1/2"-13 X 2"	 GP-50008	EPDM / Silicone Gasket	 RU-647	Dead Load Block
 FSW-73	Flat Washer For 1/2" Bolt	 GP-50028	EPDM / Silicone Weatherseal Gasket	 RU-768	8" Mullion Anchor Typical
 FSW-71	Lock Washer For 1/2" Bolt	 GP-185	Air Seal Gasket @ Stack	 RU-237	8" Mullion Anchor 90° O.S. Corner
 FSN-69	Nut For 1/2"-13 Bolt	 GP-186	Air Seal Gasket @ Sill	 RU-201	7" Sill Shear Angle
 FS-8	Typical Assembly Fastener	 GP-484	1" X 1/4" Setting Block	 RU-204	8" Sill Shear Angle
 FS-322	Vertical Pressure Plate, Pocket Filler / Chicken Head Fastener	 GP-485	5/16" X 1/2" Spacer Block	 RU-645	Stack Shear Angle
 FS-325	Horizontal Pressure Plate Fastener (#12-24 X 1-11/32 HWH Self Drilling Screw)	 HP-17	Edge Block Modified as Needed		
 FS-347	Adjustment Bolt 3/8"-16x5" Square Head Cup Point Bolt	 3M™ VHB™ SGT	3M Structural Glazing Tape (NOT Provided by O.B.E)		
		 UCW-8759	Serrated Washer		

## ACCESSORY LIST