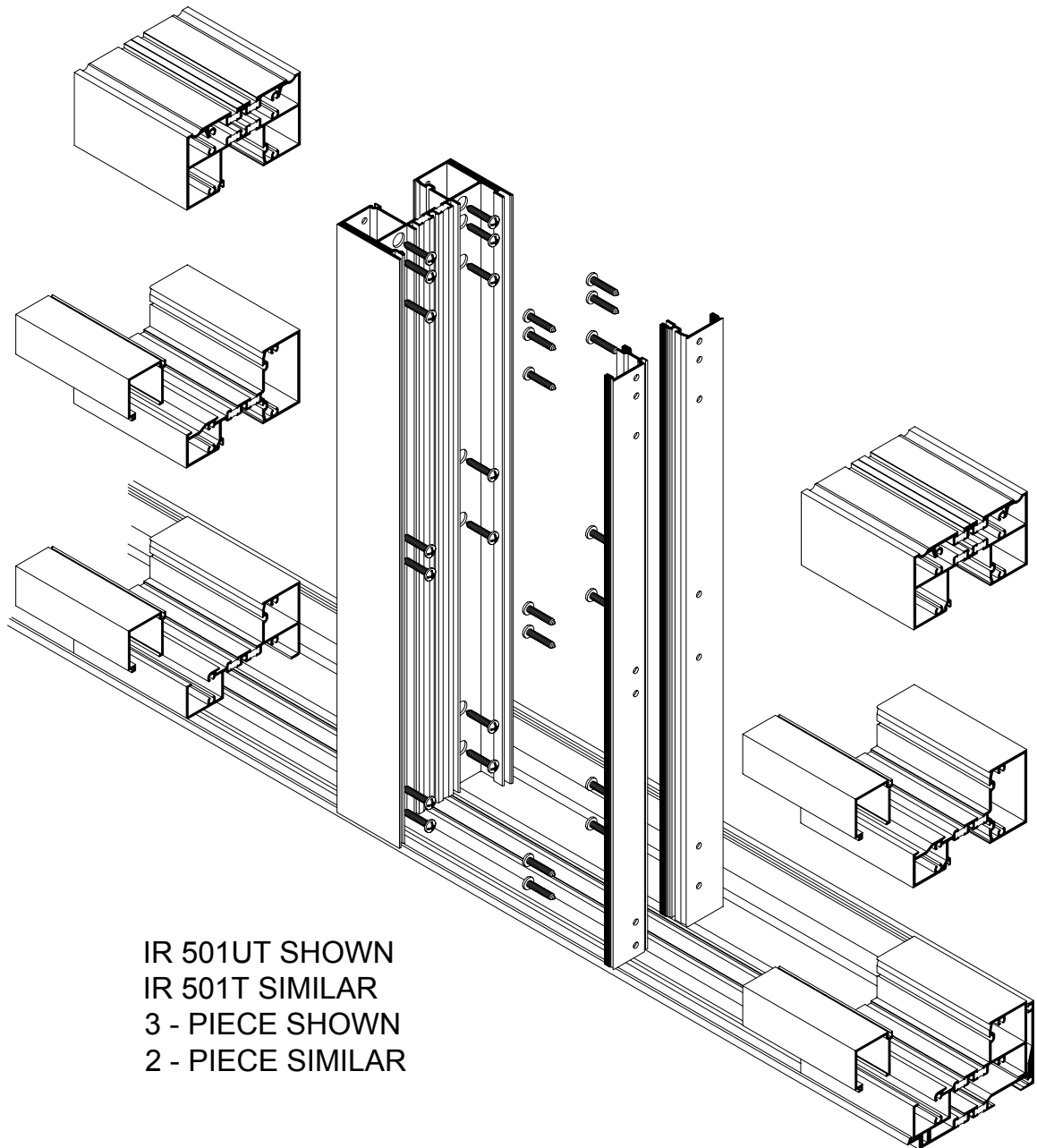


INSTALLATION



IR 501UT SHOWN
IR 501T SIMILAR
3 - PIECE SHOWN
2 - PIECE SIMILAR

INSTRUCTIONS

IR 501T / IR 501UT INSTALLATION INSTRUCTIONS

These instructions provide the general fabrication, assembly, installation sequence and erection procedures for typical applications. They are intended to supplement the project shop drawings and/or published details.

SECTION	PAGE	
I	3	GENERAL NOTES *HANDLING, STORAGE & PROTECTION OF ALUMINUM *GENERAL INSTALLATION NOTES
II	4 - 7	PARTS IDENTIFICATION
	8	BLANK PAGE
III	9 - 27	SCREW SPLINE *FABRICATION *ASSEMBLY *INSTALLATION
IV	28 - 31	GLAZING
V	32	STRUCTURAL SILICONE SEAL
VI	33	EXPANSION MULLION
VII	33	STEEL REINFORCEMENT
	34- 36	BLANK PAGES

Consult the KawneerDirect website for the latest updates to these instructions before beginning work on your project.

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HANDLING, STORING, AND PROTECTION OF ALUMINUM


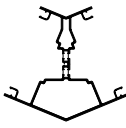

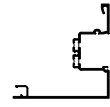
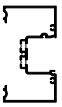
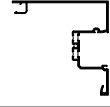
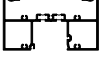

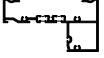
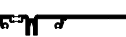

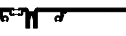
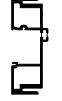



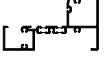

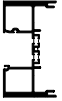

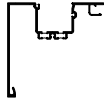

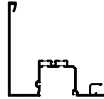




The material must be protected against damage. The following precautions are recommended to assure early acceptance of your products and workmanship.

- A. **HANDLE CAREFULLY**- Do not 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. **Work safely - always wear proper personal protective equipment. 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, and 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 the 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 ends of masonry opening to prevent dimensional build-up of day light opening.
- D. Make certain that the construction and openings which will receive your materials are in accordance with the contract documents. If not, notify the **GENERAL CONTRACTOR IN WRITING** and resolve the 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, perimeter anchor fasteners are not specified in these instructions. For perimeter anchor fastening, refer to the Shop Drawings or Engineering Calculations.
- 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 CODE** - Building 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 a 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 degree 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 frame 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.
- M. **GASKET INVENTORY ROTATION** - These high quality rubber extrusions are coated with silicone lubricant, Silicone will dry over time leaving a white "chalky" residue. Please rotate your stock "FIRST IN - FIRST OUT". If the rubber becomes dry, you may use water ONE TIME to reconstitute the silicone, after that, use a soap water solution.

ILLUSTRATION	NO.	DESCRIPTION	ILLUSTRATION	NO.	DESCRIPTION
	575531	MULLION INSERT INTERIOR HALF		575UT534	135° CORNER
	575532	MULLION INSERT EXTERIOR HALF		575UT535	90° R.S. / OUTSIDE CORNER HALF
	575UT500	JAMB		575UT536	90° R.S. / INSIDE CORNER HALF
	575UT501	HEAD		575UT537	SILL FLASHING
	575UT503	OPTIONAL HEAD		575T214	6" LONG THERMAL STRAP ANCHOR
	575T509	THERMAL EXPANSON MULLION MALE HALF		575T215	12" LONG THERMAL STRAP ANCHOR
	575T510	THERMAL EXPANSON MULLION FEMALE HALF		575UT216	6" LONG THERMAL FILLER
	575UT511	TUBE HORIZONTAL		575UT217	12" LONG THERMAL FILLER
	575UT513	SILL		575T500	JAMB
	575UT514	TUBE VERTICAL		575T501	HEAD
	575UT515	90° L.S. / OUTSIDE CORNER HALF		575T503	OPTIONAL HEAD
	575UT516	90° L.S. / INSIDE CORNER HALF		575T511	TUBE HORIZONTAL
	575UT526	THERMAL SHIM SUPPORT		575T513	SILL
	575UT528	DEEP POCKET MULLION INSERT			

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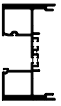
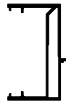
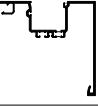

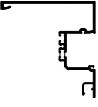

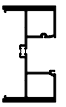







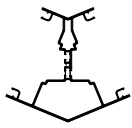

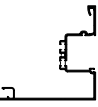

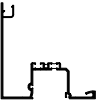



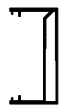
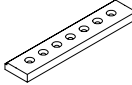
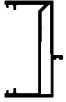





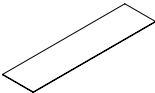




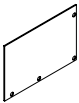



ILLUSTRATION	NO.	DESCRIPTION	ILLUSTRATION	NO.	DESCRIPTION
	575T514	TUBE VERTICAL		575551	2-3/4" DOOR JAMB WITH EXTRUDED FIN
	575T515	90° L.S. / OUTSIDE CORNER HALF		575062	C.O.C. TRANSOM BAR (IR 500 / 501)
	575T516	90° L.S. / INSIDE CORNER HALF		069177	CONCEALED SCREW APPLIED DOOR STOP
	575T521	2 PIECE TUBE MULLION		575120	TRANSOM BAR
	575T522	THERMAL SHALLOW POCKET FILLER		575122	TRANSOM BAR WITH FIN
	575T526	THERMAL SHIM SUPPORT		575123	ONE PIECE TRANSOM BAR WITH FIN
	575T528	DEEP POCKET MULLION INSERT		575133	TRANSOM POCKET FILLER
	575T534	135° CORNER		575135	POCKET FILLER DEEP
	575T535	90° R.S. / OUTSIDE CORNER HALF		575160	TRANSOM BAR STOP - EXTERIOR (IR 501)
	575T536	90° R.S. / INSIDE CORNER HALF		575161	TRANSOM BAR STOP - INTERIOR (IR 501)
	575T537	SILL FLASHING		575162	H.W. C.O.C. TRANSOM BAR (IR 500 / 501)
	575050	OPEN BACK DOOR JAMB		575297	DOOR JAMB ANCHOR BLOCK
	575051	OPEN BACK DOOR JAMB WITH EXTRUDED FIN		575310	VERTICAL STEEL REINFORCEMENT

ILLUSTRATION	NO.	DESCRIPTION	ILLUSTRATION	NO.	DESCRIPTION
	027806	FIXED GASKET			
	127121	INTERIOR FIXED GASKET (IR 501)			
	127127	EXTERIOR GLAZING GASKET (IR 501)			
	127138	TRANSOM BAR SETTING BLOCK (IR 501)			
	127178	9" LONG SILICONE SHEET			
	127179	SETTING BLOCK (IR 501UT)			
	451105	WATER DEFLECTOR (IR 501)			
	422434	"W" SIDE BLOCK			
	127209	MATING GASKET			
	575205	END DAM 501T, 501UT & 501 Non-Thermal			
	575208	END DAM 500 & 501			
	127191	PUSH-IN SPACER			
	027074	EXTERIOR STANDARD PUSH-ON GASKET			

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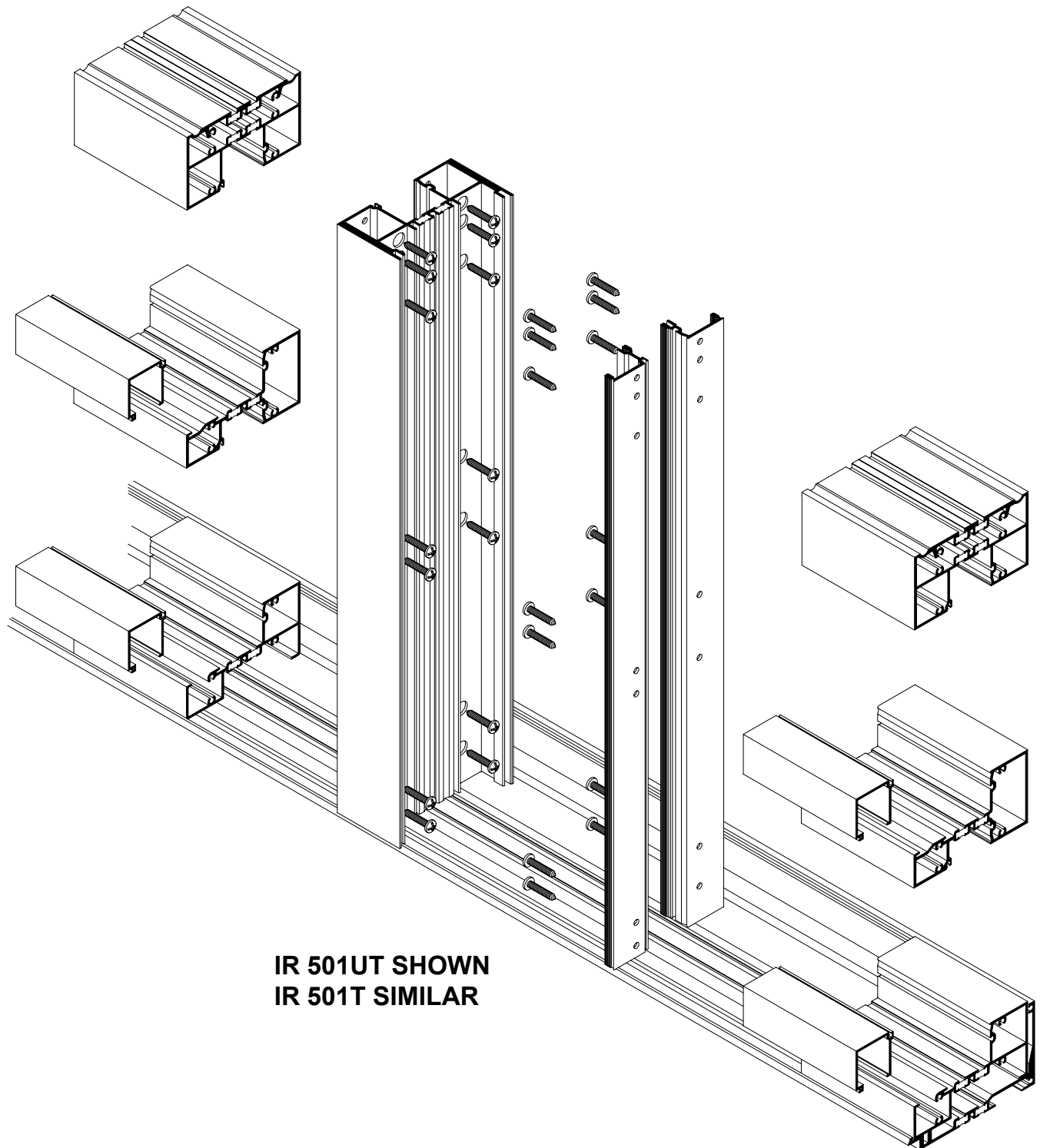
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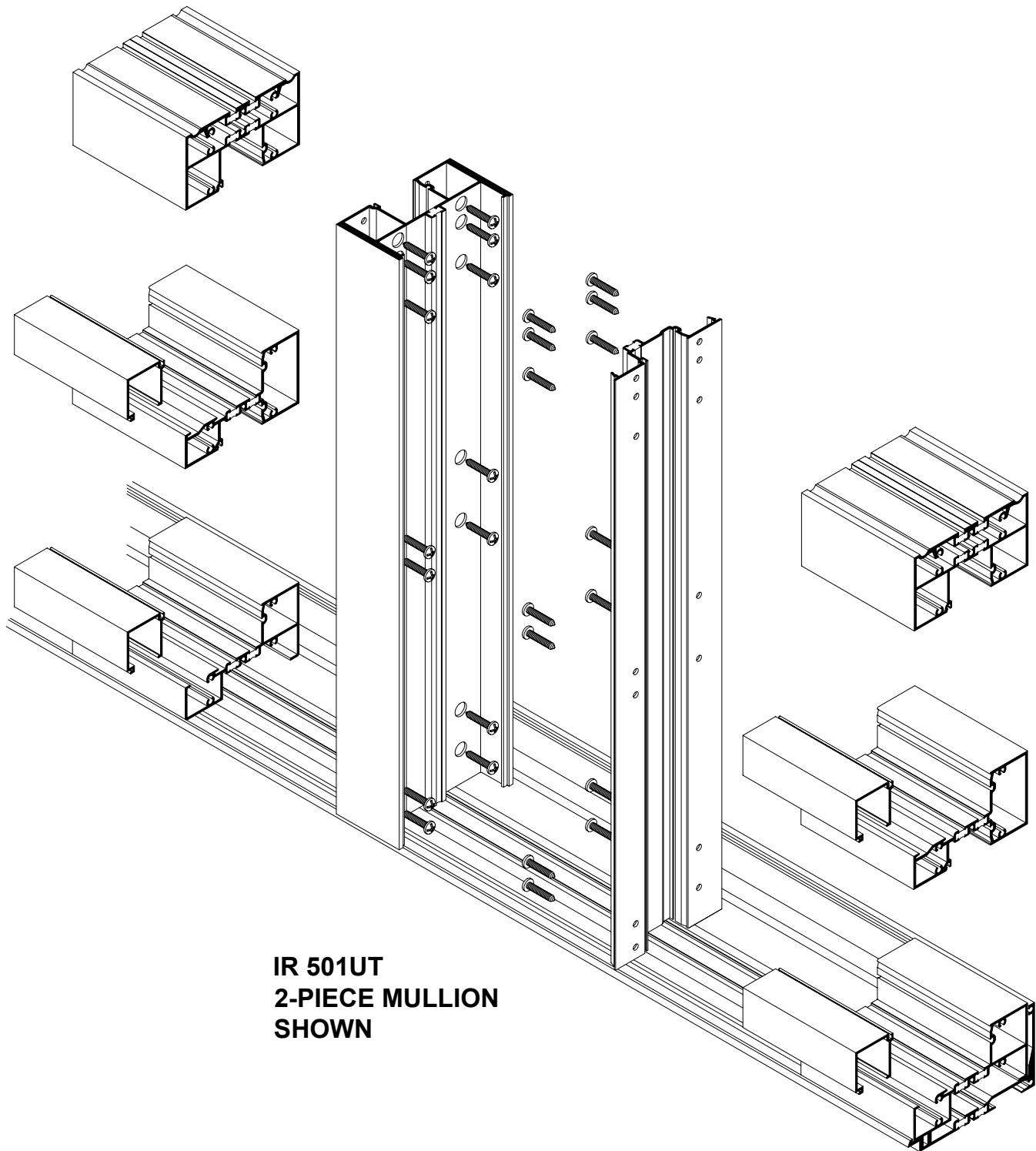


**IR 501UT SHOWN
IR 501T SIMILAR**

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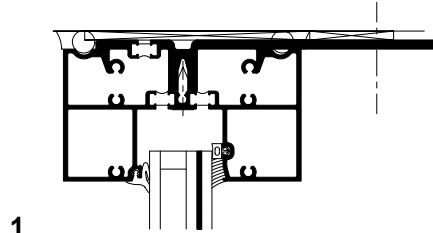
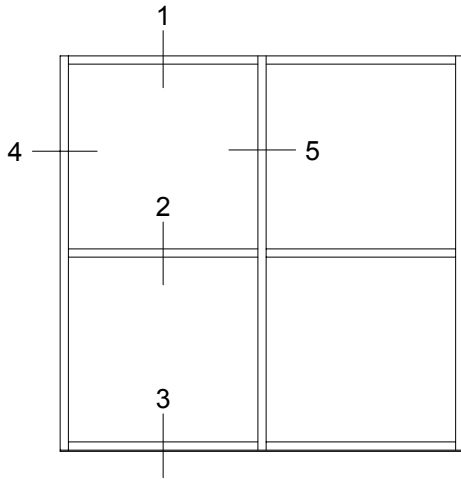
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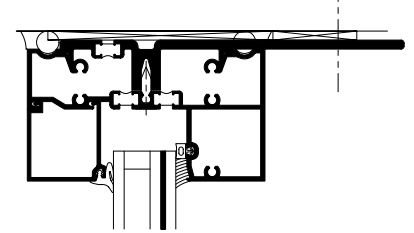
SCALE: 3" = 1'-0"

The Screw Spline method of fabrication and erection permits pre-assembly of single units in the shop or at the job site. These units are then erected by mating the male mullion half of one unit with the female mullion half of a unit already installed.

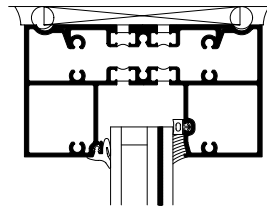
Note: 1-5/16" infill shown



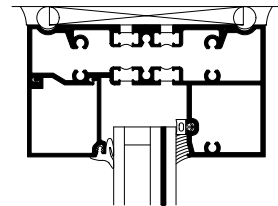
1
HEAD
WITH STRAP ANCHOR



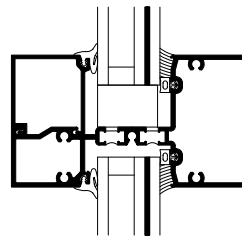
1
OPTIONAL HEAD
WITH STRAP ANCHOR



1
HEAD
WITH FILLER

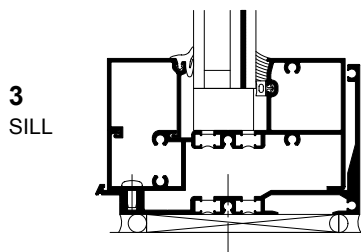


1
OPTIONAL HEAD
WITH FILLER

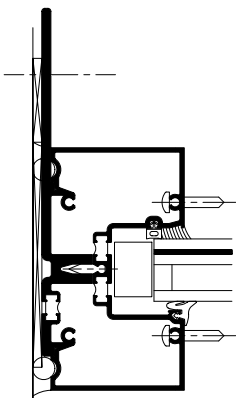


2
HORIZONTAL

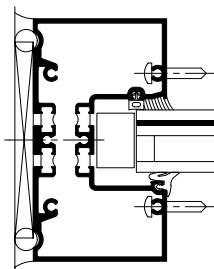
IR 501UT SHOWN
IR 501T SIMILAR



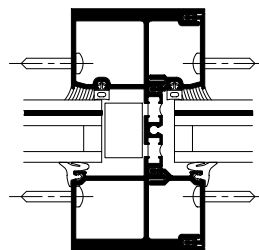
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SILL



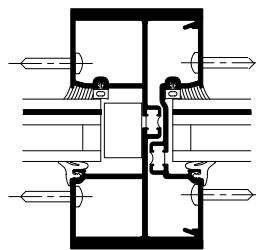
4
JAMB WITH
STRAP ANCHOR



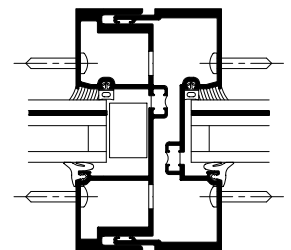
4
JAMB
WITH FILLER



5
VERTICAL MULLION
3 - PIECE



5
VERTICAL MULLION
2 - PIECE

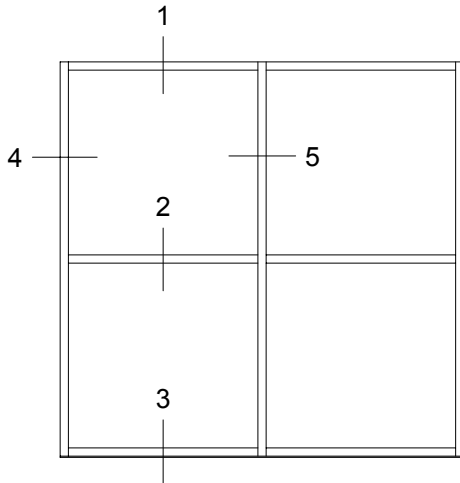


5
EXPANSION MULLION

SCALE: 3" = 1'-0"

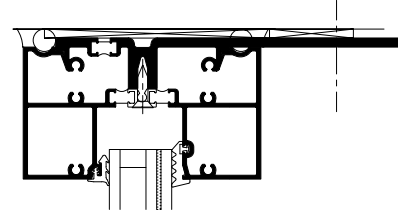
The Screw Spline method of fabrication and erection permits pre-assembly of single units in the shop or at the job site. These units are then erected by mating the male mullion half of one unit with the female mullion half of a unit already installed.

Note: 1-5/16" infill shown.

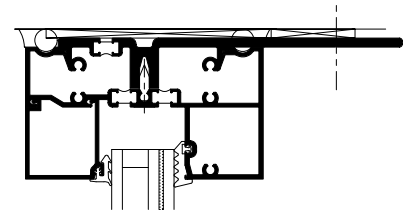


**IR 501UT SHOWN
IR 501T SIMILAR**

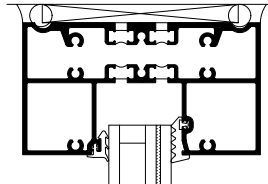
1
HEAD
WITH STRAP ANCHOR



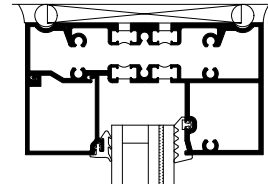
1
OPTIONAL HEAD
WITH STRAP ANCHOR



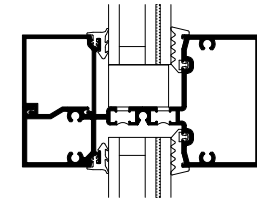
1
HEAD
WITH FILLER



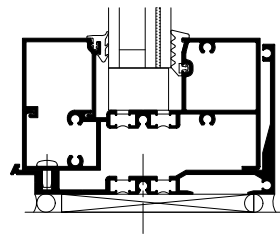
1
OPTIONAL HEAD
WITH FILLER



2
HORIZONTAL

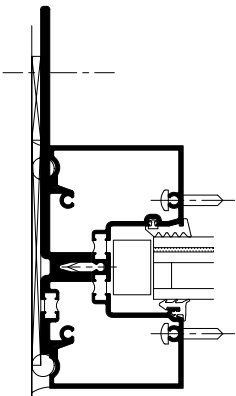


3
SILL



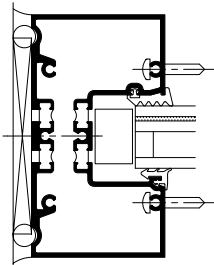
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JAMB WITH
STRAP ANCHOR



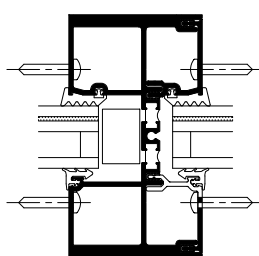
4

JAMB
WITH FILLER



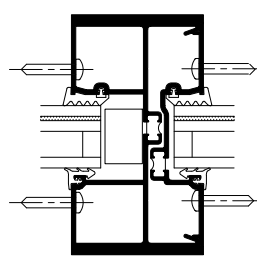
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VERTICAL MULLION
3 - PIECE



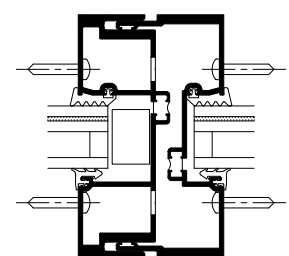
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VERTICAL MULLION
2 - PIECE



5

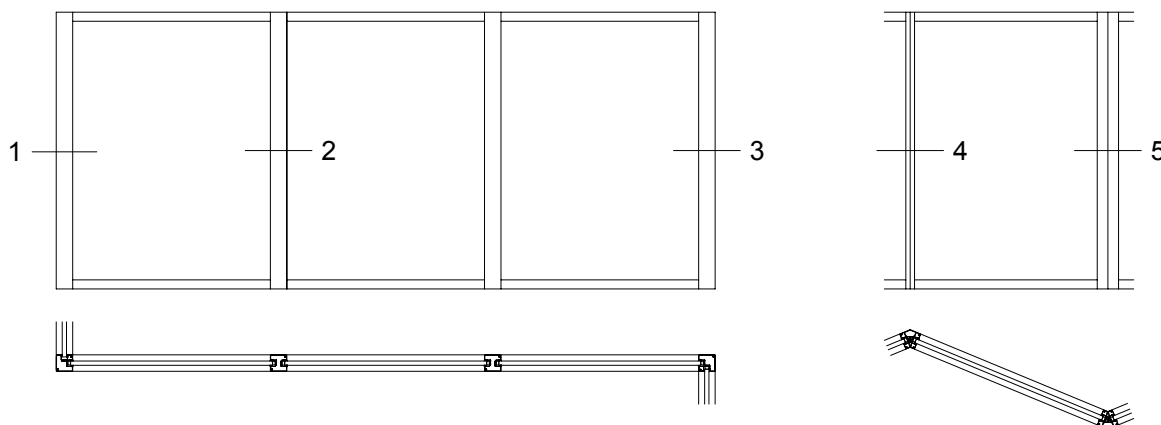
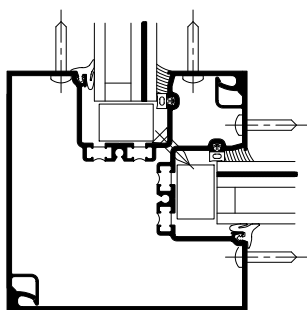
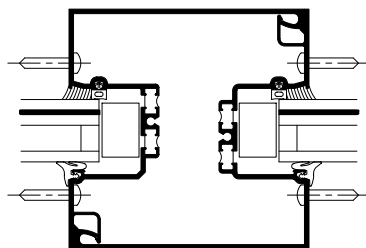
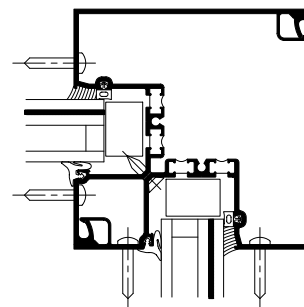
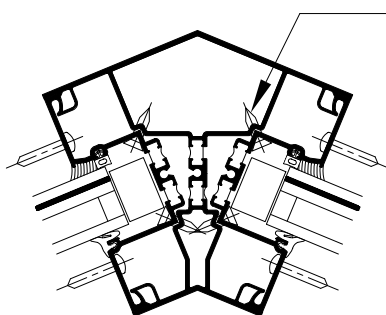
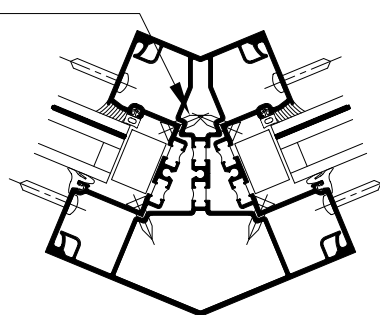
EXPANSION MULLION



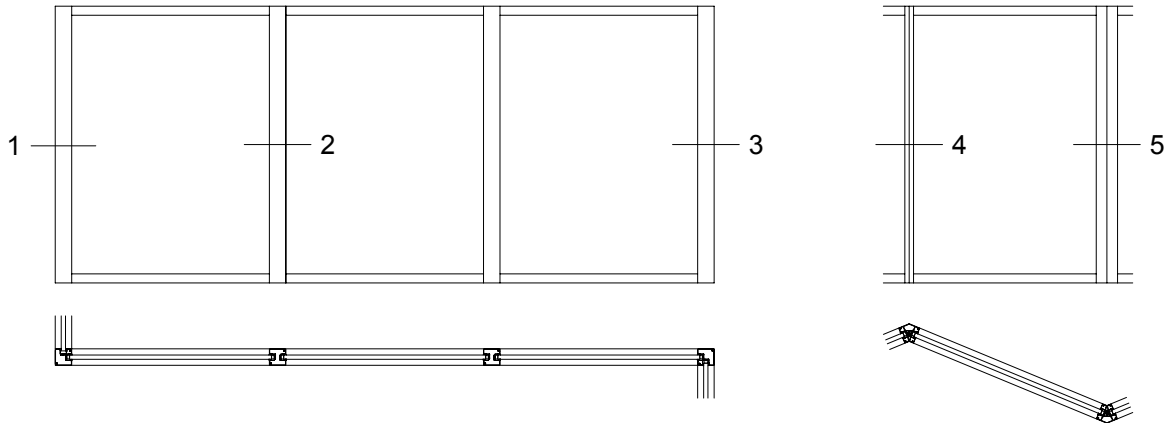
Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

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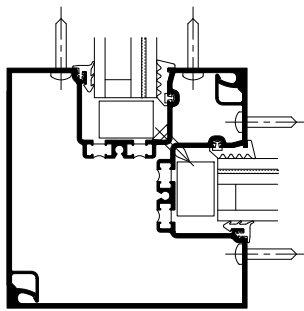
SCALE: 3" = 1'-0"**Note:** 1-5/16" infill shown**IR 501UT SHOWN
IR 501T SIMILAR****1**
OUTSIDE 90° CORNER**2**
5" MULLION POST**3**
INSIDE 90° CORNER**4**
INSIDE 135° CORNER128125 1/4-20 X 5/8" FHTC,
LOCATE 6" FROM EACH END
AND 18" O.C.**5**
OUTSIDE 135° CORNER

SCALE: 3" = 1'-0"

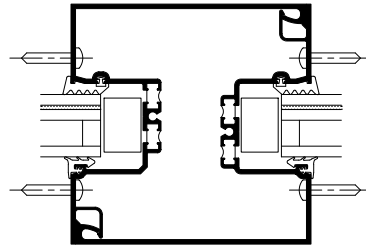


**IR 501UT SHOWN
IR 501T SIMILAR**

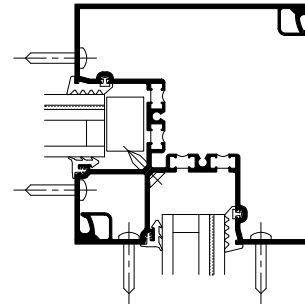
Note: 1-5/16" infill shown



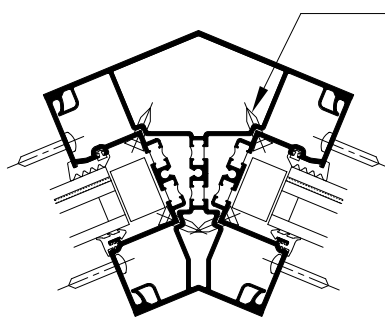
1
OUTSIDE 90° CORNER



2
5" MULLION POST

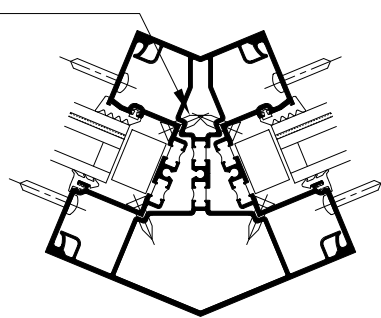


3
INSIDE 90° CORNER



4
INSIDE 135° CORNER

128125 1/4-20 X 5/8" FHTC,
LOCATE 6" FROM EACH END
AND 18" O.C.



5
OUTSIDE 135° CORNER

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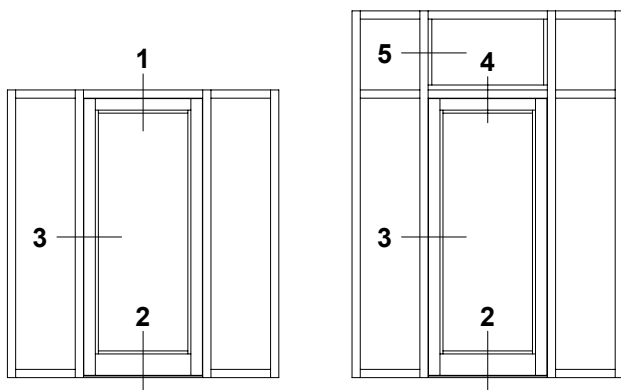
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SCALE: 3" = 1'-0"

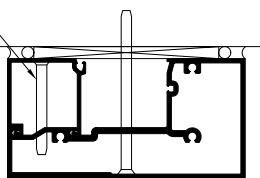
The Screw Spline method of fabrication and erection permits pre-assembly of single units in the shop or at the job site. These units are then erected by mating the male mullion half of one unit with the female mullion half of a unit already installed.

Note: 1-5/16" infill shown.

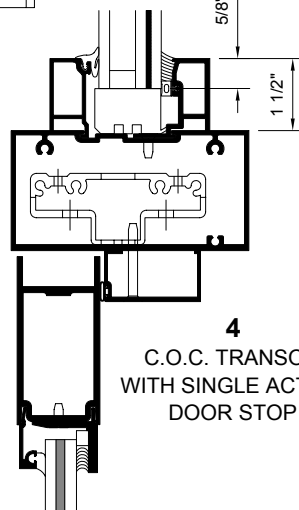


**IR 501UT SHOWN
IR 501T SIMILAR**

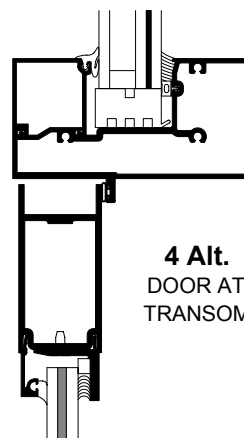
#12 x 2" F.H. screw at
3" from each end and
11" on center typical



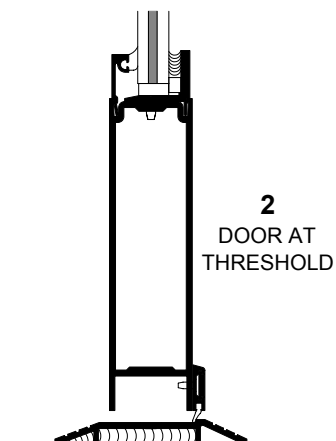
1
DOOR AT HEADER



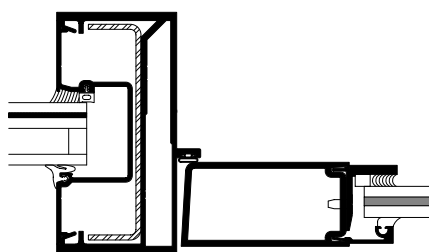
4
C.O.C. TRANSOM
WITH SINGLE ACTING
DOOR STOP



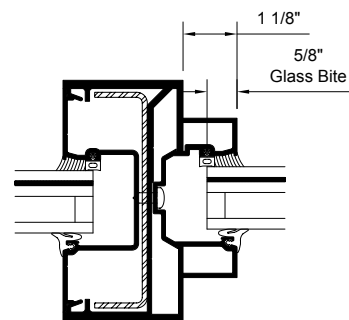
4 Alt.
DOOR AT
TRANSOM



2
DOOR AT
THRESHOLD



3
DOOR AT JAMB

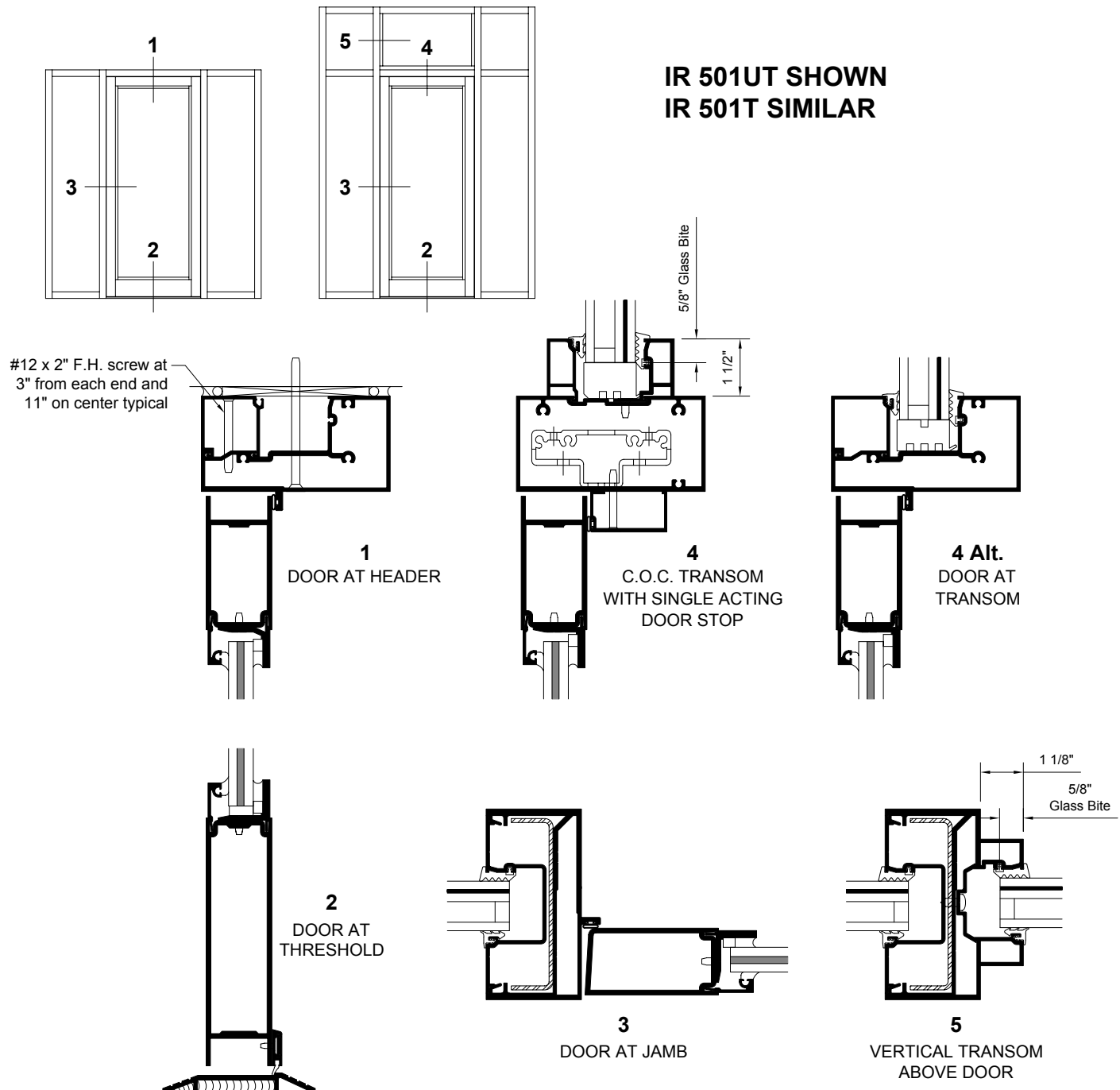


5
VERTICAL TRANSOM
ABOVE DOOR

SCALE: 3" = 1'-0"

The Screw Spline method of fabrication and erection permits pre-assembly of single units in the shop or at the job site. These units are then erected by mating the male mullion half of one unit with the female mullion half of a unit already installed.

Note: 1-5/16" infill shown.



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FABRICATION (Vertical 3-Piece Mullion)

Measure the opening to determine the required length of vertical and horizontal framing members. Allow a minimum of 1/4" clearance at the head, sill and both jambs to facilitate installation and provide space for caulking. If job conditions are uncertain or masonry openings are irregular, allow extra clearance to accommodate construction tolerances.

Cut vertical members to required length (frame height). At required horizontal locations using drill jigs, drill fastener holes in the verticals as shown below. Cut horizontal members to required length (DLO). Cut glass stops to required length (DLO + 0", - 1/16").

575UT514 SHOWN,
575UT500,
575UT509,
575UT510 SIMILAR

SCREW SPLINE PREPS
TO VERTICAL MEMBERS

TOP OF MULLION

OPTIONAL HOLE PREP
DEPENDANT ON HEAD
HORIZONTAL

TOP OF
INTERMEDIATE
HORIZONTAL

EXTERIOR

TOP OF SILL

BOTTOM OF MULLION

TOP OF MULLION

OPTIONAL HOLE PREP
DEPENDANT ON HEAD
HORIZONTAL

TOP OF
INTERMEDIATE
HORIZONTAL

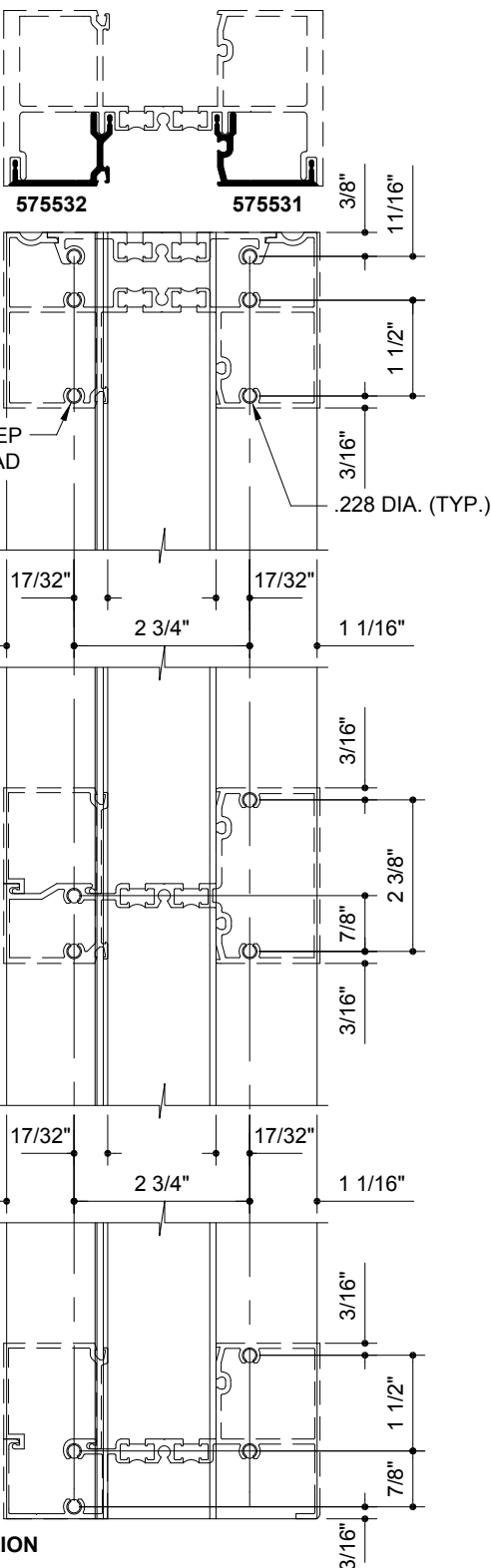
EXTERIOR

TOP OF SILL

BOTTOM OF MULLION

RIGHT HAND SHOWN
LEFT HAND OPPOSITE

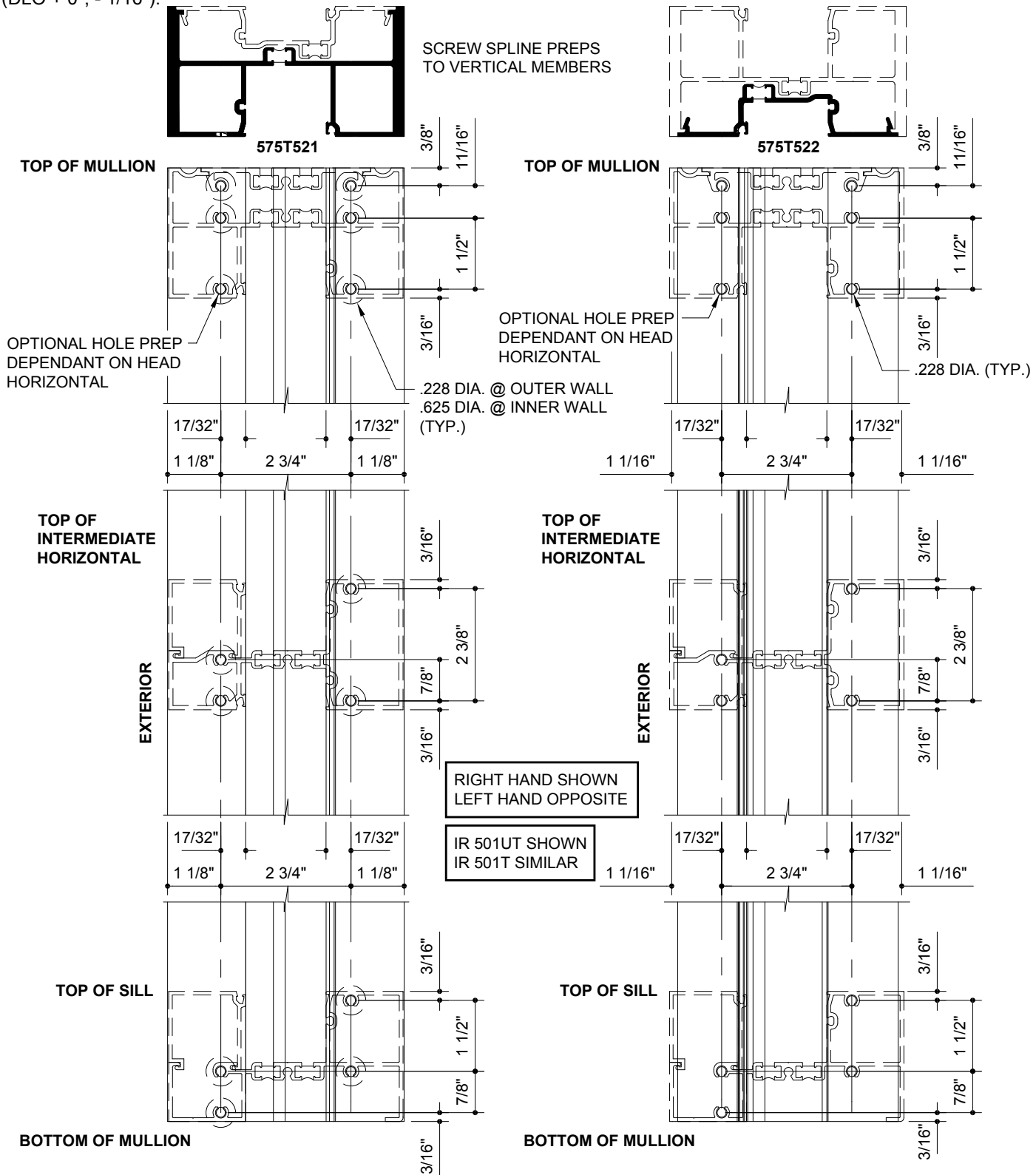
IR 501UT SHOWN
IR 501T SIMILAR



FABRICATION (Vertical 2-Piece Mullion)

Measure the opening to determine the required length of vertical and horizontal framing members. Allow a minimum of 1/4" clearance at the head, sill and both jambs to facilitate installation and provide space for caulking. If job conditions are uncertain or masonry openings are irregular, allow extra clearance to accommodate construction tolerances.

Cut vertical members to required length (frame height). At required horizontal locations using drill jigs, drill fastener holes in the verticals as shown below. Cut horizontal members to required length (DLO). Cut glass stops to required length (DLO + 0", - 1/16").



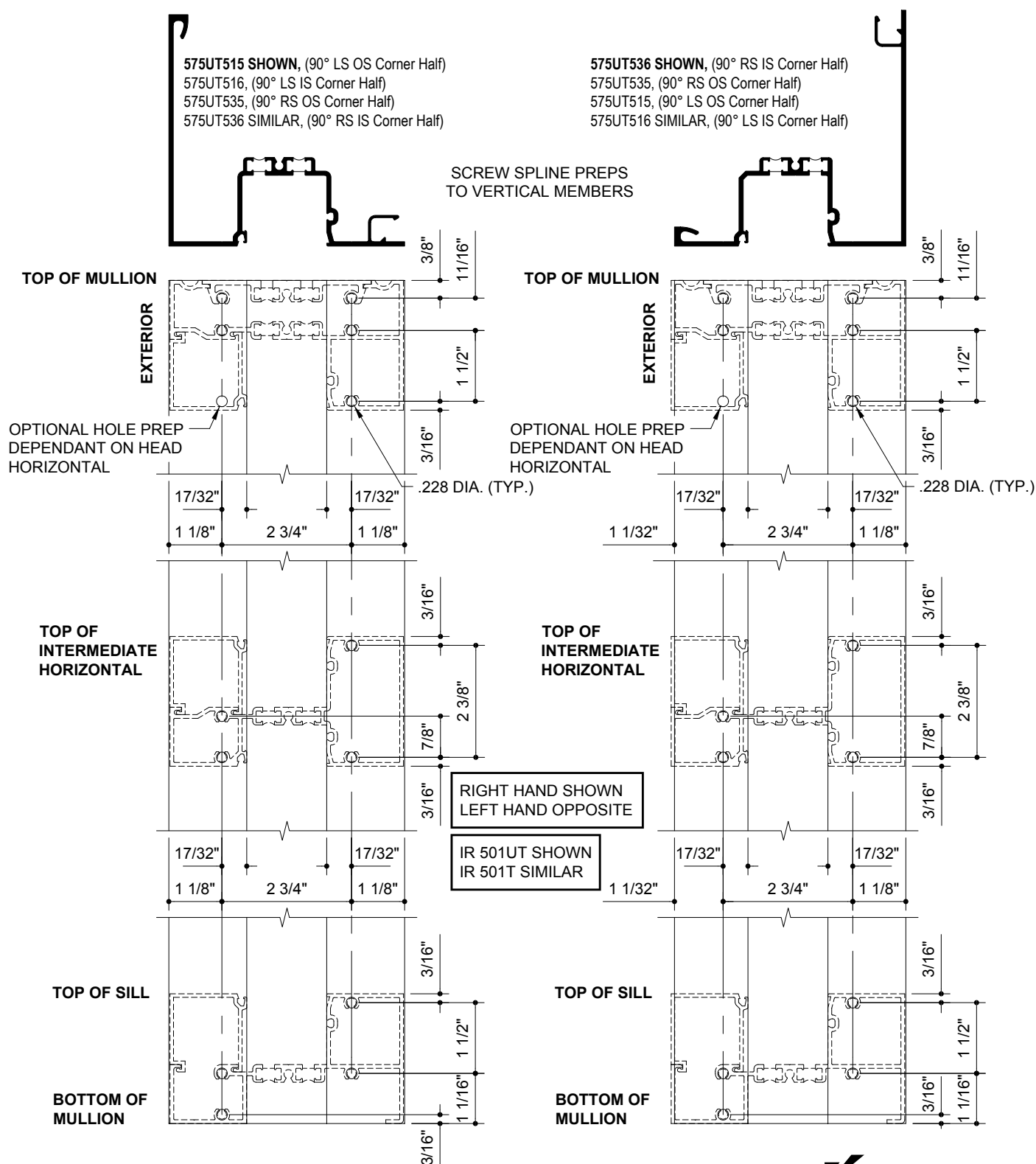
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FABRICATION (Continued)

Measure the opening to determine the required length of vertical and horizontal framing members. Allow a minimum of 1/4" clearance at the head, sill and both jambs to facilitate installation and provide space for caulking. If job conditions are uncertain or masonry openings are irregular, allow extra clearance to accommodate construction tolerances. Determine correct orientation of mullion halves for inside corner, outside corner, or intermediate mullion post. Cut vertical members to required length (frame height). At required horizontal locations using drill jigs, drill fastener holes in the verticals as shown below. Cut horizontal members to required length (DLO). Cut glass stops to required length (DLO + 0", - 1/16").



Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

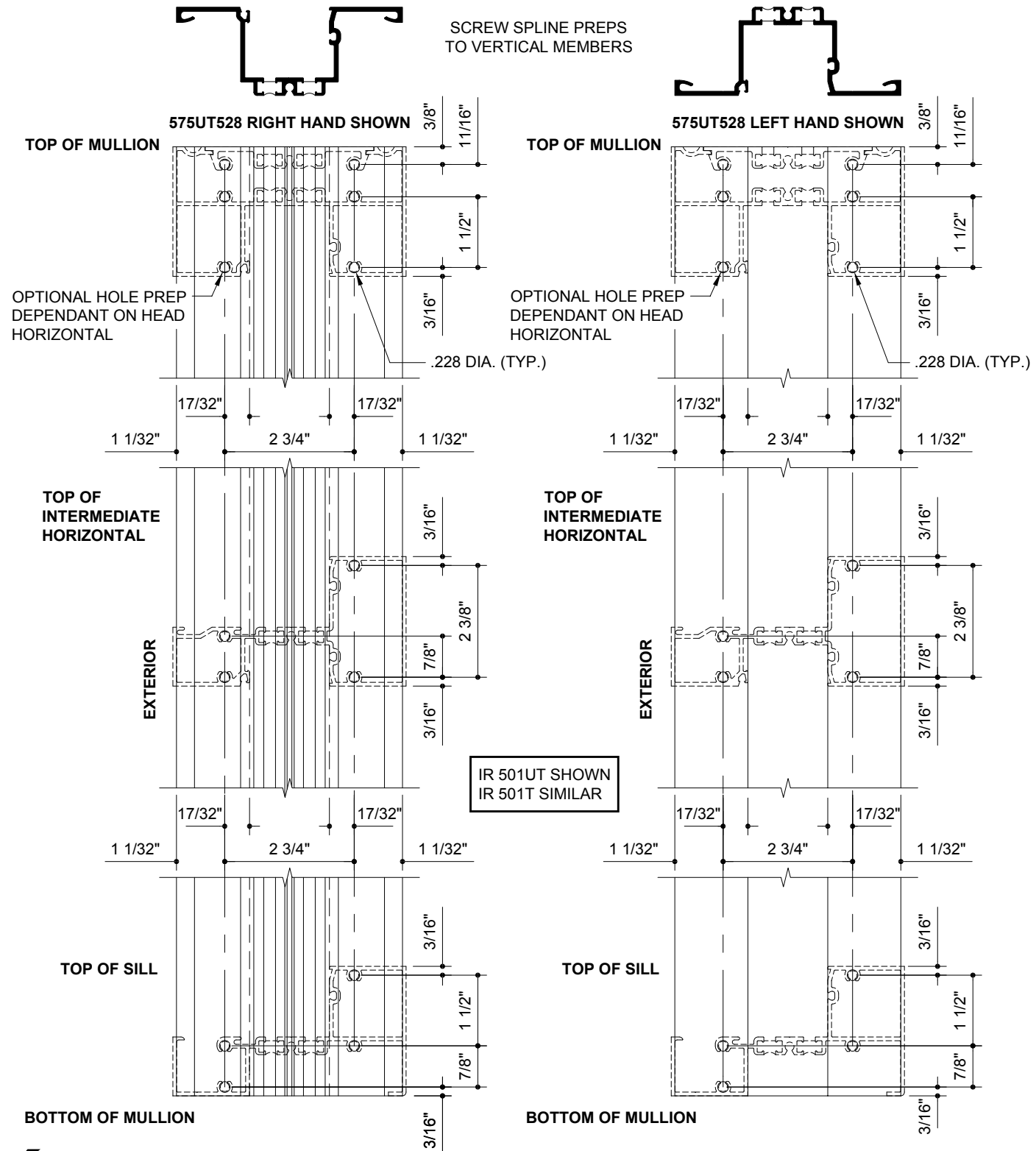
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FABRICATION (Continued)

Measure the opening to determine the required length of vertical and horizontal framing members. Allow a minimum of 1/4" clearance at the head, sill and both jambs to facilitate installation and provide space for caulking. If job conditions are uncertain or masonry openings are irregular, allow extra clearance to accommodate construction tolerances.

Cut vertical members to required length (frame height). At required horizontal locations using drill jigs, drill fastener holes in the verticals as shown below. Cut horizontal members to required length (DLO). Cut glass stops to required length (DLO + 0", - 1/16").



Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

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ASSEMBLY (Typical Vertical 3-Piece Mullion)

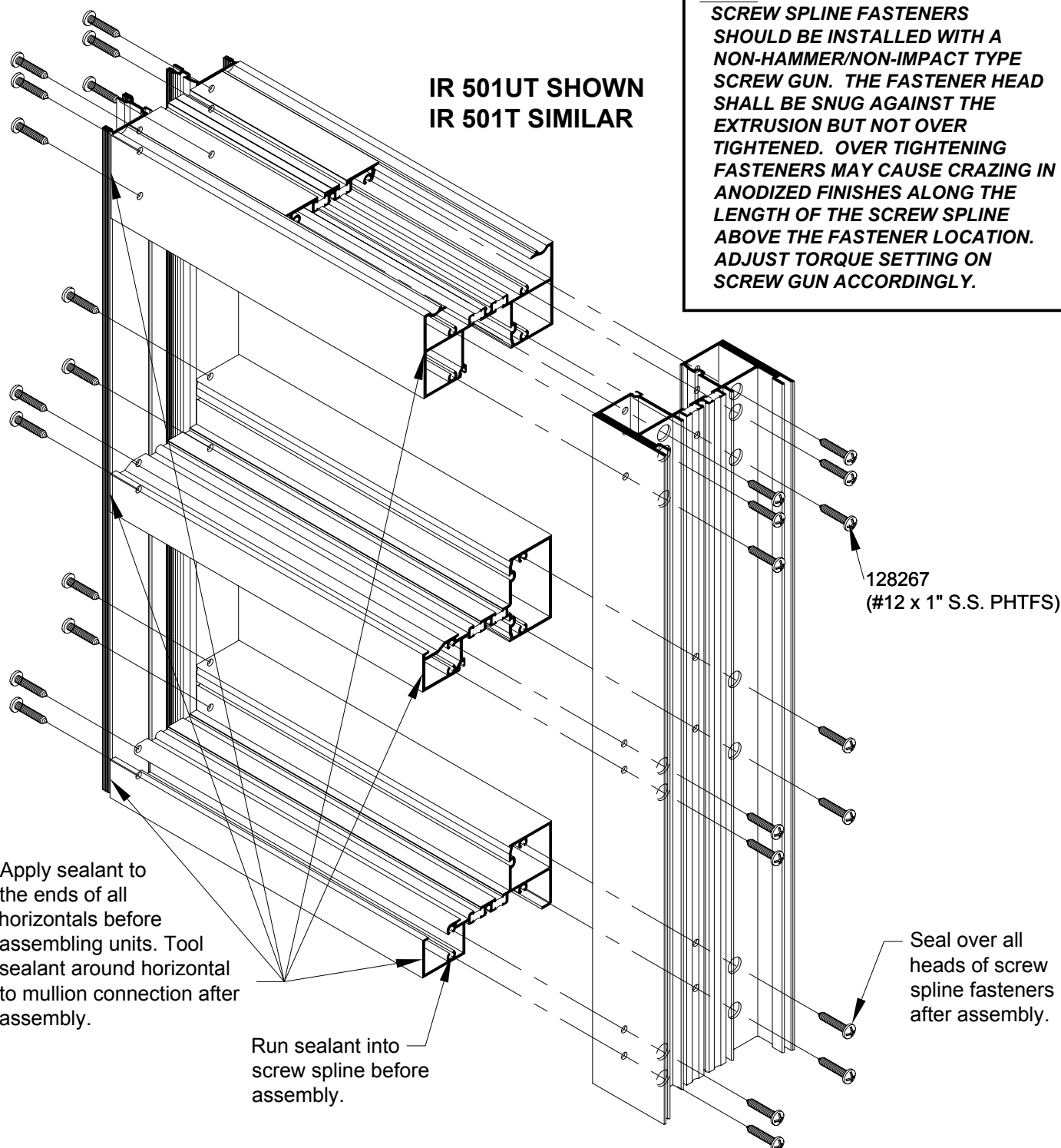
Apply sealant to the ends of all horizontal members to provide a good seal at the vertical members. Vertical mullions always run through, and horizontal mullions butt between the vertical mullions.

Assemble the units using three (3) or four (4) 128267 (#12 x 1" S.S. PHTFS) screws at each joint as shown below. Each unit includes a mullion and two (2) mullion inserts. A deep pocket is required in at least one of the vertical members in each unit. Install cut to length thermal filler or strap anchor into each end of the head horizontal. Attach to vertical member with two (2) 128267 (#12 x 1" S.S. PHTFS).

NOTE:

SCREW SPLINE FASTENERS SHOULD BE INSTALLED WITH A NON-HAMMER/NON-IMPACT TYPE SCREW GUN. THE FASTENER HEAD SHALL BE SNUG AGAINST THE EXTRUSION BUT NOT OVER TIGHTENED. OVER TIGHTENING FASTENERS MAY CAUSE CRAZING IN ANODIZED FINISHES ALONG THE LENGTH OF THE SCREW SPLINE ABOVE THE FASTENER LOCATION. ADJUST TORQUE SETTING ON SCREW GUN ACCORDINGLY.

IR 501UT SHOWN
IR 501T SIMILAR



Apply sealant to the ends of all horizontals before assembling units. Tool sealant around horizontal to mullion connection after assembly.

Run sealant into screw spline before assembly.

Seal over all heads of screw spline fasteners after assembly.

128267
(#12 x 1" S.S. PHTFS)

ASSEMBLY (Typical Vertical 2-Piece Mullion)

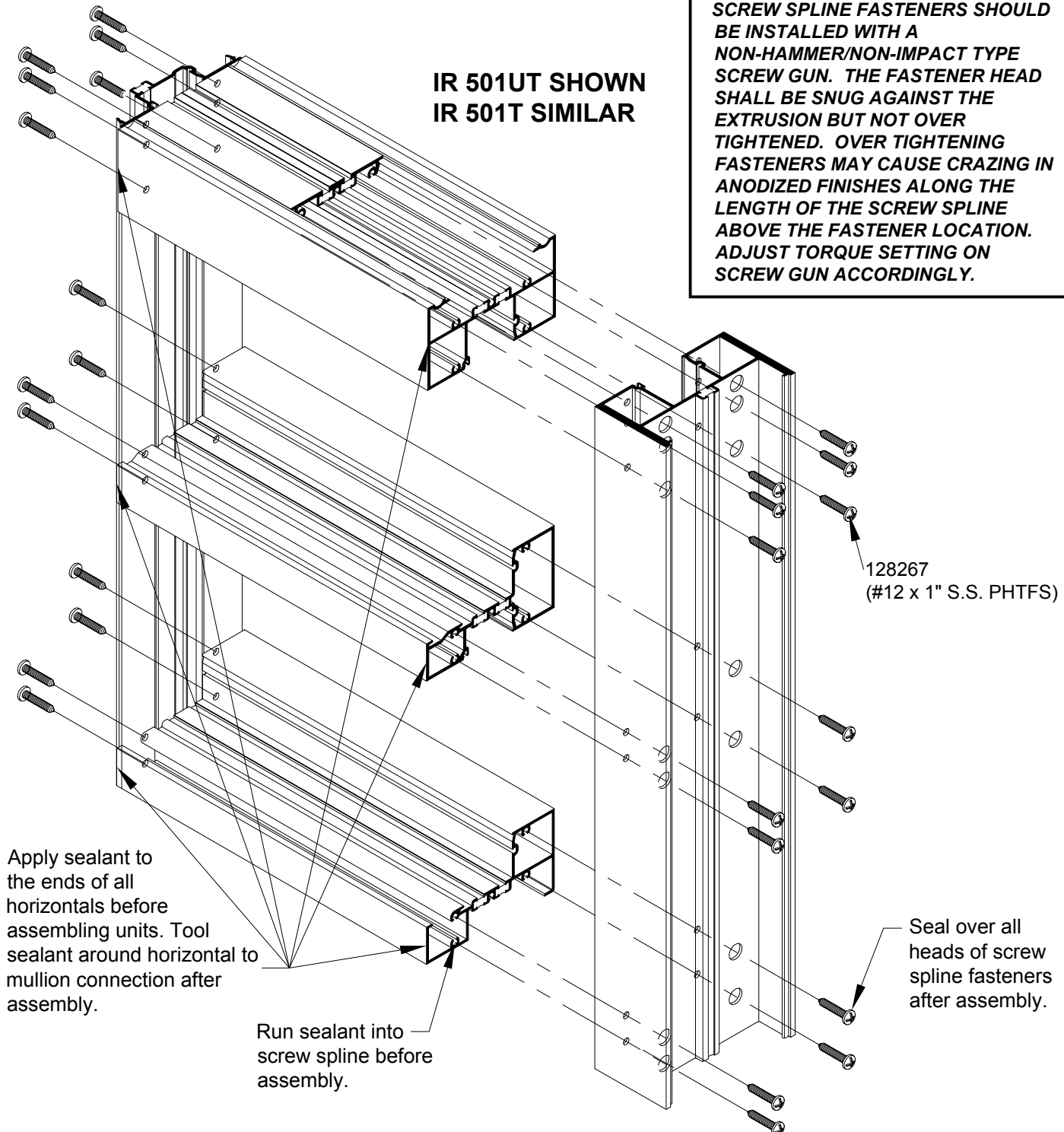
Apply sealant to the ends of all horizontal members to provide a good seal at the vertical members. Vertical mullions always run through, and horizontal mullions butt between the vertical mullions.

Assemble the units using three (3) or four (4) 128267 (#12 x 1" S.S. PHTFS) screws at each joint as shown below. Each unit includes a mullion and two (2) mullion inserts. A deep pocket is required in at least one of the vertical members in each unit. Install cut to length thermal filler or strap anchor into each end of the head horizontal. Attach to vertical member with two (2) 128267 (#12 x 1" S.S. PHTFS).

IR 501UT SHOWN
IR 501T SIMILAR

NOTE:

SCREW SPLINE FASTENERS SHOULD BE INSTALLED WITH A NON-HAMMER/NON-IMPACT TYPE SCREW GUN. THE FASTENER HEAD SHALL BE SNUG AGAINST THE EXTRUSION BUT NOT OVER TIGHTENED. OVER TIGHTENING FASTENERS MAY CAUSE CRAZING IN ANODIZED FINISHES ALONG THE LENGTH OF THE SCREW SPLINE ABOVE THE FASTENER LOCATION. ADJUST TORQUE SETTING ON SCREW GUN ACCORDINGLY.

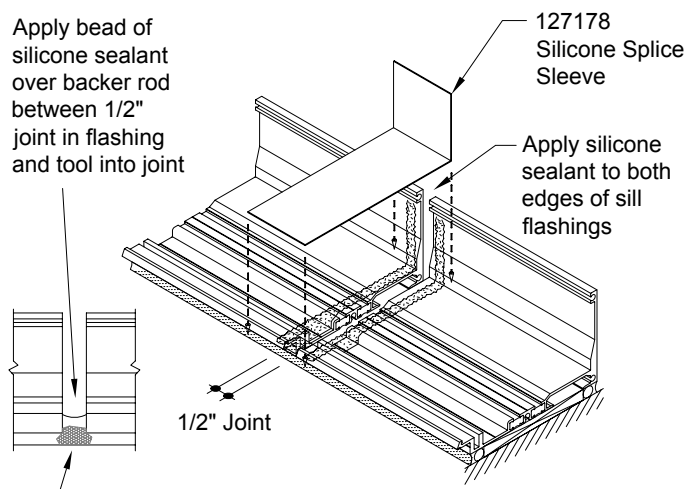


INSTALLATION

IR 501UT SHOWN
IR 501T SIMILAR

Install 575UT537 flashing at the sill and attach it to the floor. The flashing should be shimmed up a minimum of 1/4" to make sure that it is flat and level. It should run the full width of the opening - 1/4", and be interrupted only at entrances. The flashing must be carefully sealed at each end *. Attach 575205 end dams with (3) 128267 fasteners for all typical perimeter conditions, and seal the end dams to the flashing and perimeter conditions as shown (See Figure 1). Seal over the heads of all perimeter anchor fasteners.

Apply bead of silicone sealant over backer rod between 1/2" joint in flashing and tool into joint



Place backer rod between splice in the shim space and seal between splice sleeve and perimeter seal

FIGURE 2

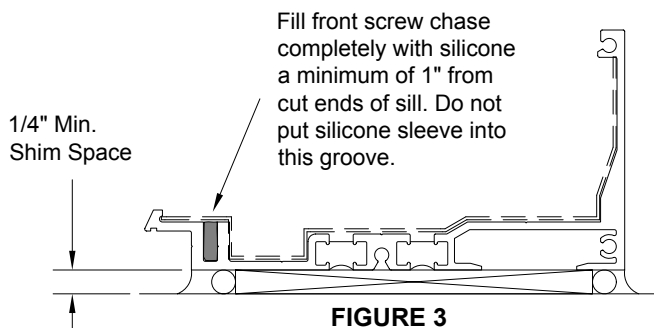


FIGURE 3

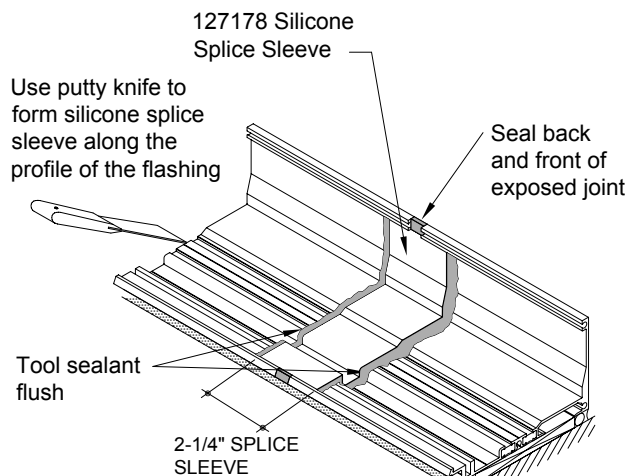


FIGURE 4

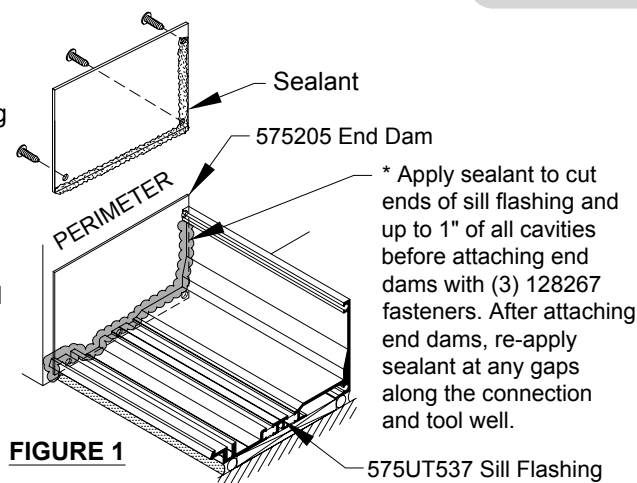


FIGURE 1

NOTE:

1) SPLICES SHOULD BE INSTALLED EVERY 12' WHEN FLASHING IS OVER 24'. SPLICE SLEEVES ARE TO BE LOCATED AT THE CENTER OF A DLO.

DO NOT LOCATE SPLICE SLEEVES AT MULLIONS.

2) IF THERE IS AN ENTRANCE, THE ENTRANCE FRAME AND ATTACHED SIDELITE(S) SHOULD BE INSTALLED FIRST, BEING CAREFUL TO LOCATE THEM ACCURATELY IN THE OPENING. FASTEN THE ENTRANCE FRAME TO THE PERIMETER CONDITION AS NECESSARY USING THE REQUIRED PERIMETER FASTENERS.

3) SILICONE MUST BE TESTED AND APPROVED FOR COMPATIBILITY BY THE SEALANT MANUFACTURER.

PROCEDURE FOR INSTALLING SILICONE SPLICE SLEEVE

1. Cut Silicone Splice Sleeve (127178) to length 8" long. (Figure 2)
2. Clean splice area with solvent.
3. Apply bead of silicone within 1/2" of the edge of the sill members on each side of the 1/2" joint. (Figure 2)
4. Fill front screw chase completely with silicone beyond splice a minimum of 1 inch from cut end of sill. (Figure 3)
5. Remove protective liner from Splice Sleeve.
(For cold weather applications see note below.)
6. Center the Splice Sleeve over the joint. Then, using a putty knife, form the Splice Sleeve along the profile of the flashing. (Figure 4)
7. Silicone will squeeze out from under the Splice Sleeve. Use putty knife to tool off excess silicone. (Figure 4)
8. Seal back and front exposed joint. Be sure to force sealant up under the Splice Sleeve in front. Seal the exposed joint. (Figure 4)

COLD WEATHER NOTE:

FOR TEMPERATURES BELOW 40° THE FOLLOWING PRECAUTIONS SHOULD BE TAKEN. JUST PRIOR TO INSTALLING THE SPLICE SLEEVE, WIPE SILL FLASHING WITH A SOLVENT OR CLEANING SOLUTION RECOMMENDED BY THE SEALANT MANUFACTURER.

CAUTION:

CAREFULLY FOLLOW THE RECOMMENDATIONS CONTAINED IN THE MATERIAL SAFETY DATA SHEET PROVIDED BY THE SOLVENT/CLEANING SOLUTION MANUFACTURER REGARDING HEALTH AND FIRE/EXPLOSION RISKS.

INSTALLATION (Continued)

Prior to installing assembled frame into opening, drill 1/2" weep holes in each sill member at centerline of horizontals as shown in Figure 1.

Position the assembled frame in the opening to align it with the sill flashing, checking to make sure that the unit is level and plumb.

Insert shims as needed at the head and jambs, and anchor the frame to the perimeter condition as required. Shims should be continuous and extend to both return caulk legs on the head and jambs. Contact your Area Application Engineering Dept. for help in selecting fasteners if necessary. Seal over the heads of all perimeter fasteners at the sill.

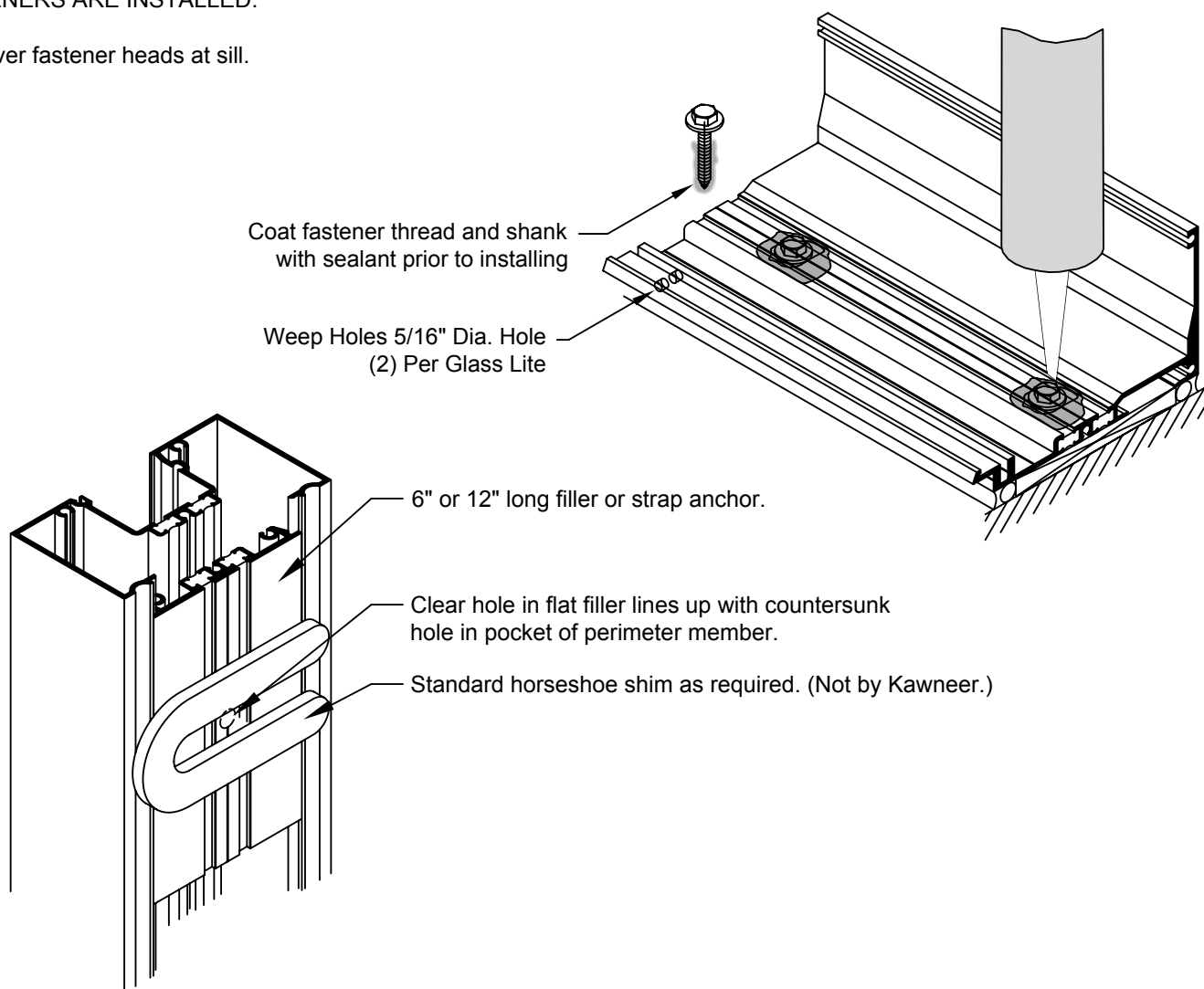
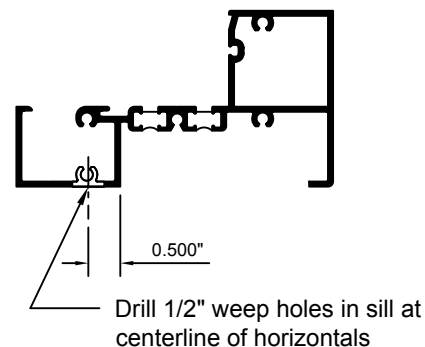
Caulk the exterior perimeter joints at the head, jambs and under the sill flashing with a high quality sealant.

NOTE: FORCE SEALANT INTO THE HOLES FOR SILL PERIMETER FASTENERS PRIOR TO INSERTING THE FASTENERS. THIS IS IMPORTANT TO INSURE THAT THE HOLES IN THE SILL FLASHING ARE SEALED BEFORE THE FASTENERS ARE INSTALLED.

Seal over fastener heads at sill.

IR 501UT SHOWN
IR 501T SIMILAR

FIGURE 1



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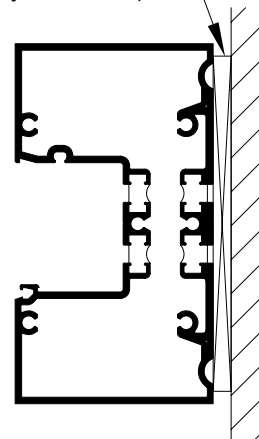
INSTALLATION (Continued)

SHIM INSTALLATION

Install filler or strap anchor at head, sill and jamb. Place between pocket filler and perimeter condition at perimeter anchor locations.

**IR 501UT SHOWN
IR 501T SIMILAR**

Standard horseshoe shim as required.
(Not by Kawneer.)

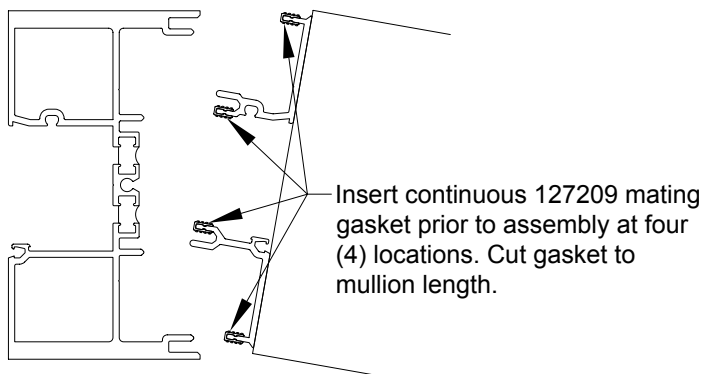


Install the frame units starting at the entrance and working towards the other end. If there is no entrance, start at one jamb and then work toward the other jamb. **NOTE THAT IF STRAP ANCHORS ARE USED AT THE JAMB, THEY MUST BE SLID ONTO THE JAMBS BEFORE INSTALLATION OF THE END UNITS.** Crimp one of the retaining legs at the bottom of the jambs to prevent strap anchors from sliding off the jambs during installation. Slide strap anchors up to the required locations after the frame is set in place.

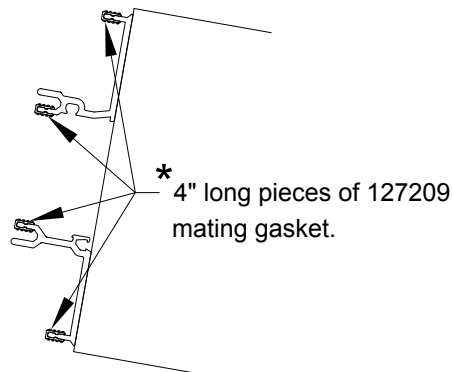
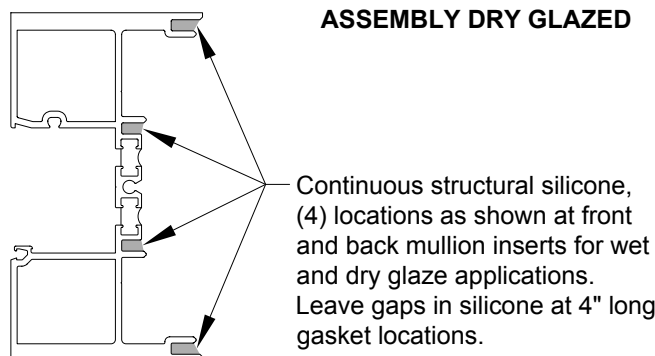
The first unit should be attached to the perimeter condition as required at the head, sill and jamb. The remaining units are installed by pressing together the female mullion half with the male mullion half of the adjacent unit as shown below.

NOTE: Mullions are not designed to be disengaged after installation.

VERTICAL FRAME ASSEMBLY DRY GLAZED



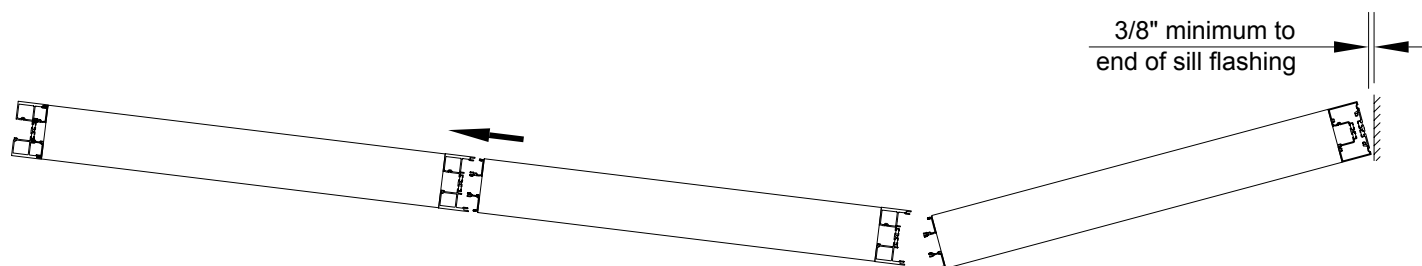
OPTIONAL VERTICAL FRAME ASSEMBLY DRY GLAZED



* Insert 4" long pieces of 127209 mating gasket at 3rd points of mullion in wet seal locations to temporarily hold mullion in place while silicone cures.

INSTALLATION (Continued)

The last unit should be pivoted into position using the last installed mullion half as a pivot point. With narrow units (under 4') the last two units should be snapped together and installed as a single unit.

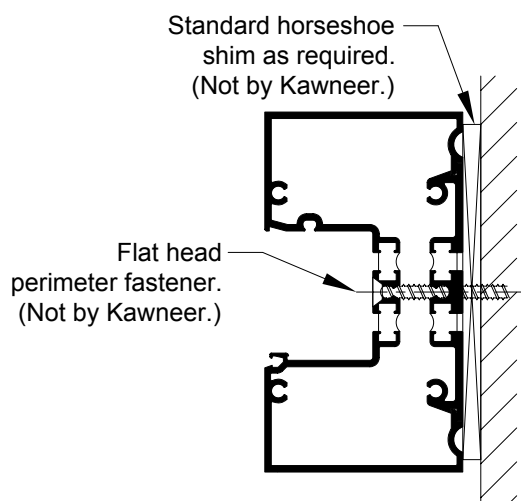


NOTE:

By pressing the mullion halves together as the frame is assembled, the frame can be installed as one unit for elevations less than three bays wide.

Rotate last panel into position.

Attach the sill horizontal to the sill flashing with 128369 1/4-20 x 7/16" PHTC fasteners. Quantities are determined per project.



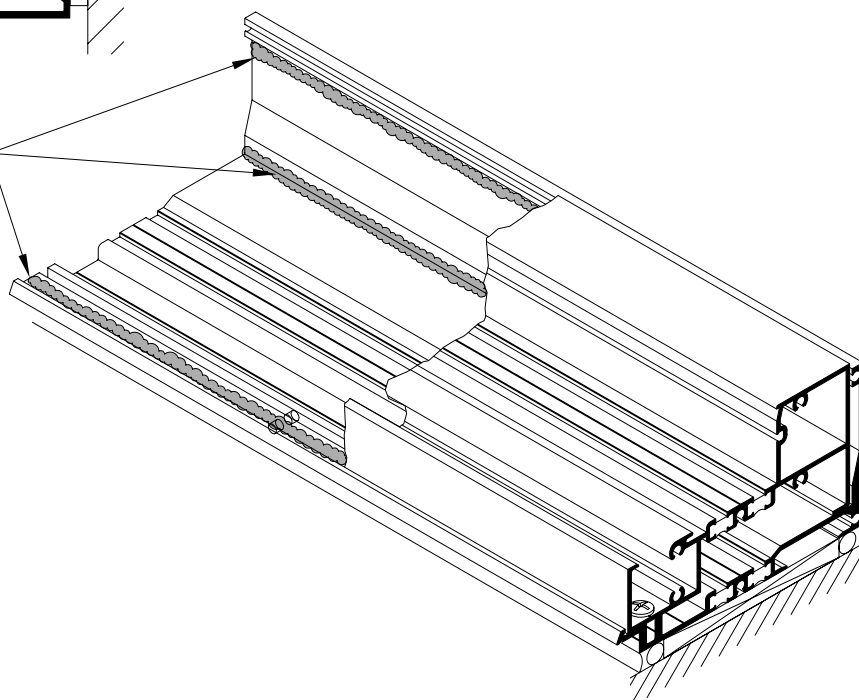
EXTERIOR ATTACHMENT

128369
1/4-20 x 7/16" PHTC

Weep Holes
5/16" Dia. Hole
(2) Per Glass Lite

Bed in silicone sealant in (3) locations.

Bed in silicone sealant in (3) locations



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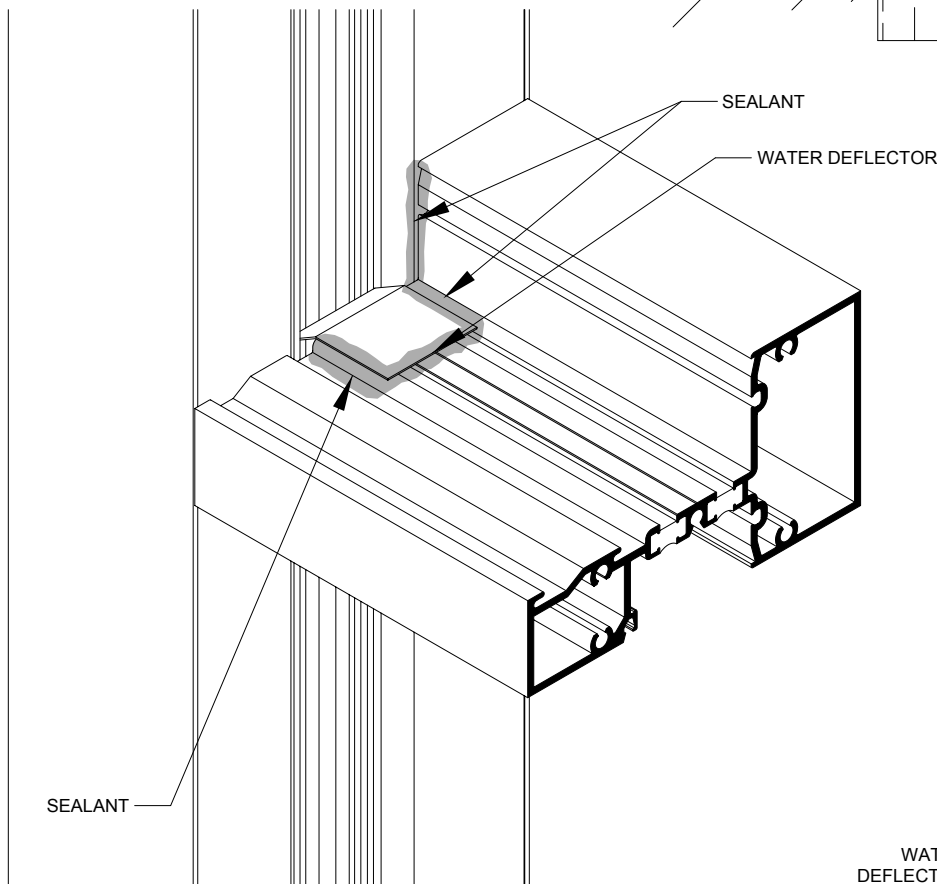
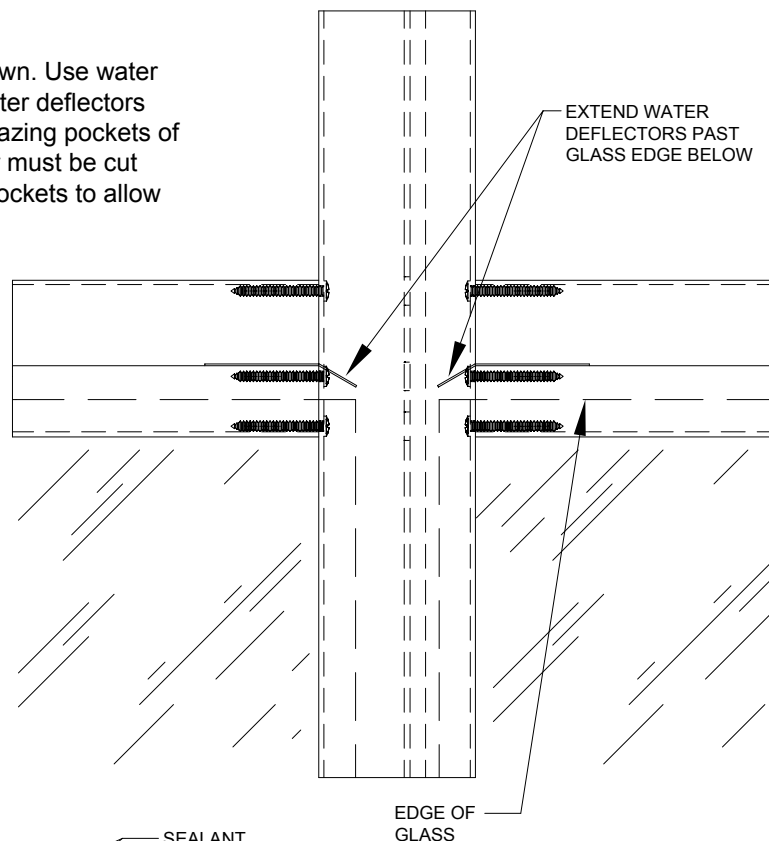
INSTALLATION (Continued)

Install water deflectors on intermediate horizontals as shown. Use water deflector 451105. Remove the paper backing from the water deflectors and install them on a clean, dry surface centered in the glazing pockets of the intermediate horizontals. Note that the 127191 spacer must be cut short or notched at the top of all intermediate horizontal pockets to allow installation of the water deflectors.

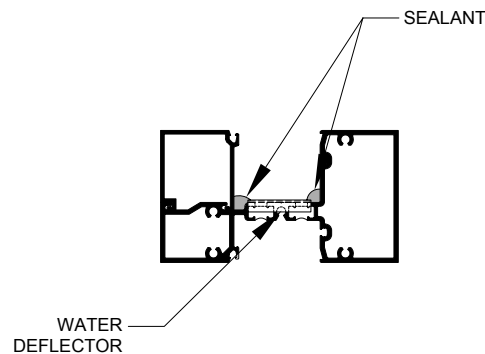
COLD WEATHER NOTE:

For temperatures below 40° the following precautions should be taken: Just prior to installing the water deflectors, wipe glazing pocket with a solvent or cleaning solution recommended by the manufacturer.

***CAUTION:** Carefully follow the recommendations contained in the material data safety sheet provided by the solvent/cleaning solution manufacturer regarding health and fire/explosion risks.



IR 501UT SHOWN
IR 501T SIMILAR

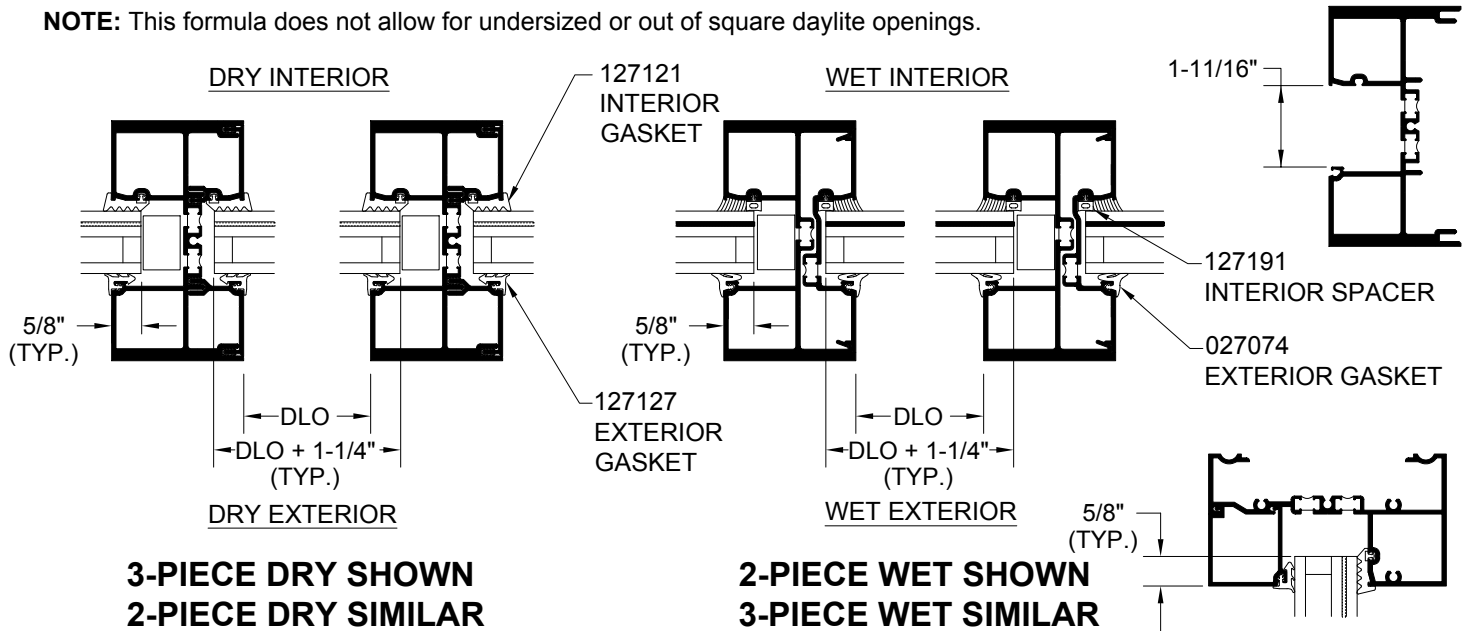


AFTER THE WATER DEFLECTOR IS INSTALLED, SEAL THE JOINT BETWEEN THE BACK OF THE HORIZONTAL AND THE VERTICAL AND AROUND THE WATER DEFLECTOR. MAKE SURE TO SEAL THE JOINT BETWEEN ANY GLAZING ADAPTERS AND ANY VOID IN THE GLAZING REGLETS IN THIS AREA TO PREVENT WATER FROM RUNNING DOWN TO THE LITE BELOW.

The standard glass pocket is approximately 1-11/16" in width, and accommodates 1-5/16" glazing. These pockets are designed for glass products that are typically used in applications that must conform to hurricane impact/cycling requirements. **Contact your Kawneer representative for specific glazing applications.**




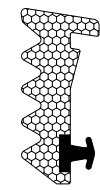
Typical glass size is daylight opening (DLO) + 1-1/4".

NOTE: This formula does not allow for undersized or out of square daylight openings.



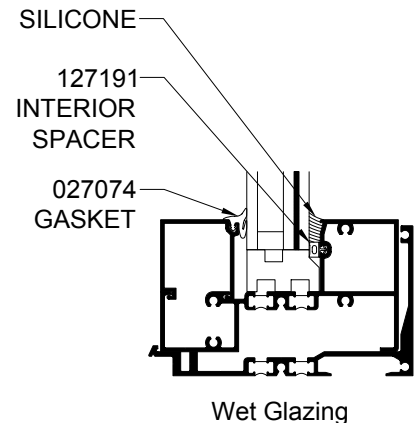
Glazing Chart for IR 501UT Framing

Nominal Infill Thickness	Actual Infill Thickness	Glazing Method	Exterior Gasket	Interior Spacer	Impact Rating
1-5/16"	1.263" - 1.325"	Wet Glaze	027074	127191	Large
1-5/16"	1.263" - 1.325"	Dry Glaze	127127	127121	Large & Small

Exterior Glazing Gaskets	Interior Spacers
 027074	 127127
 127191	 127121

Position the glass in the frame using the standard flush glazing technique. Place setting blocks under the glass at 1/4 points or as otherwise specified by engineering calculations. Make sure that there is a consistent glass bite of 5/8" on each side of the glass.

IR 501UT SHOWN
IR 501T SIMILAR



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"W" SIDE BLOCKS

One "W" Side Block should be installed into the deep pocket of the mullion of each lite of glass in the opening. When there are two deep pockets at a glass lite, install two "W" Side Blocks into each side. Locate at 1/3 points of the DLO.

"W" Block will expand and wedge between walls of glazing pocket pocket and prevent glass from shifting into deep pocket.

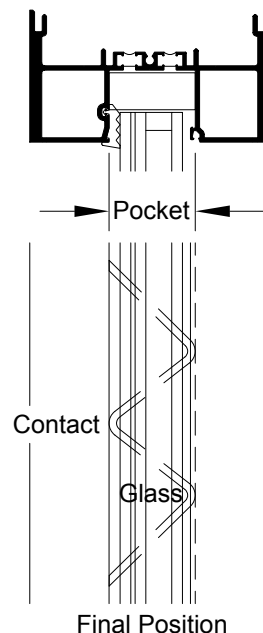
Note: If deglazing of the lite is required after "W" Block is installed, remove both interior and exterior weathering and use hook to pull "W" Block out of the pocket.

Side Block Installation

**IR 501UT SHOWN
IR 501T SIMILAR
3-PIECE SHOWN
2-PIECE SIMILAR**

Flatten block and
slide between reglet
and glass lite.

Insert between
glass and frame.



GASKET AND GLASS STOP INSTALLATION (Dry Glazing)

- Step 1: Cut horizontal and vertical gaskets to an approximate length of D.L.O. + 1/4" per foot of D.L.O.
- Step 2: Install gasket 127121 on the interior side of frame first. Insert gaskets into the horizontal members first starting at the ends and work toward the center as shown. (See Figure #1)
- Step 3: Install vertical 127121 gaskets into the interior side of frame after horizontal gaskets are in place in the same manner. Vertical gasket runs through, trim edge of vertical gasket to pass by horizontal gasket.
- Step 4: Peel back corners of gasket. Apply sealant between gasket and metal approximately 1" from corner. Push gasket back into place.
- Step 5: Apply sealant between vertical and horizontal gaskets.
- Step 6: Position setting blocks at points under glass as required.
- Step 7: Install glass into frame using standard flush glazing technique.
- Step 8: Run bead of sealant along vertical reglets where glass stop meets, then install glass stop.
- Step 9: Install exterior gasket into frame in the same manner as described in Step #2.

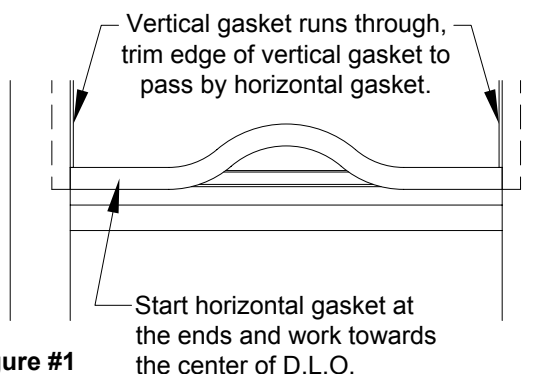
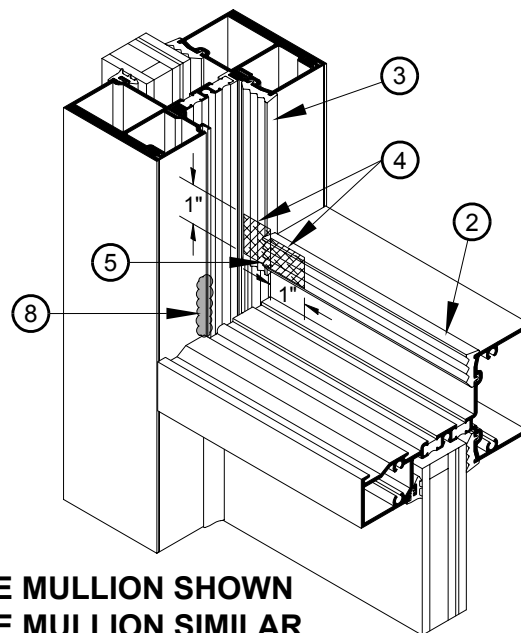
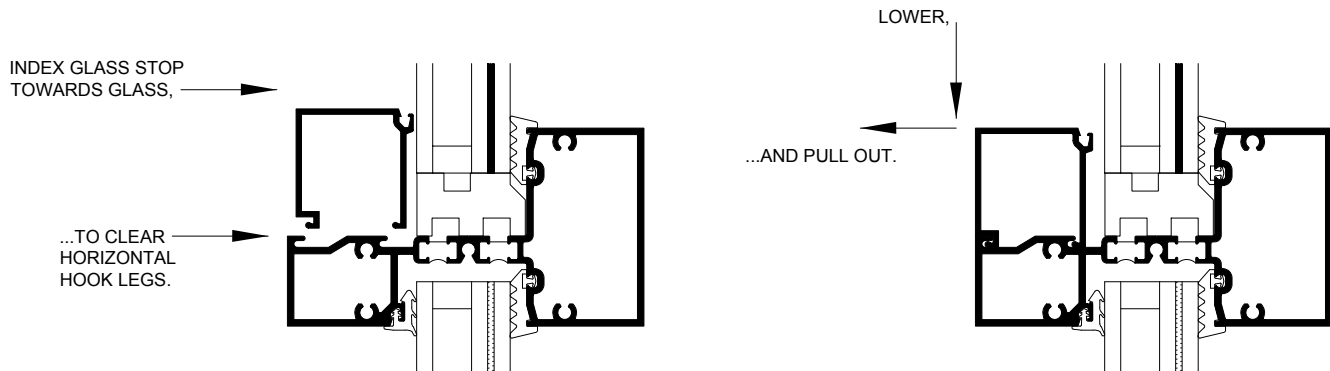


Figure #1



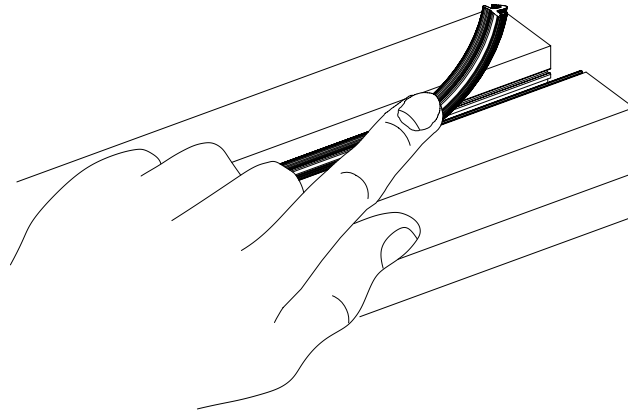
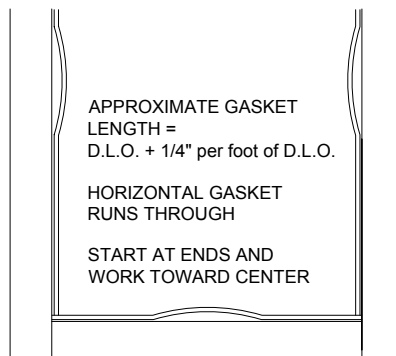
**3 PIECE MULLION SHOWN
2 PIECE MULLION SIMILAR**

Install the glass stops by indexing them toward the glass to clear the hook legs on the horizontal members. Lower (raise at head) the stop to the horizontal member and pull out, making sure that both hook legs engage.



**IR 501UT SHOWN
IR 501T SIMILAR**

Cut the exterior push-in gasket to an approximate length of $DLO + 1/4"$ per foot of DLO. Start the installation of the gaskets at the ends and work toward the center. The horizontal gaskets run through.



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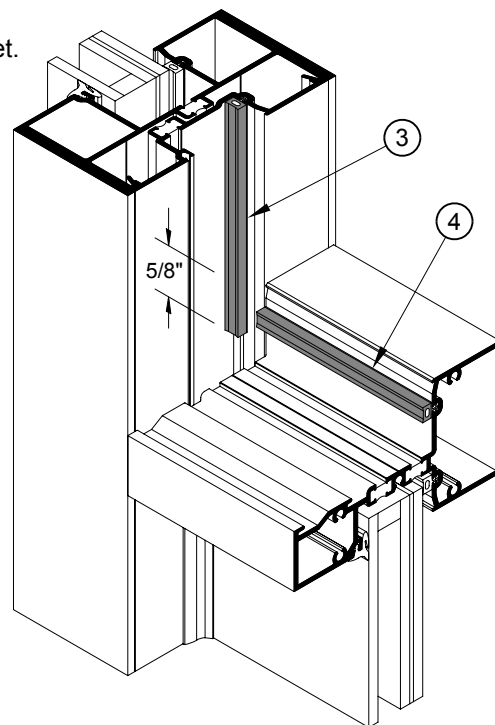
GASKET AND GLASS STOP INSTALLATION (Wet Glazing)

- Step 1: Cut horizontal and vertical gaskets to an approximate length of D.L.O. + 1/4" per foot of D.L.O.
- Step 2: Install gasket 127191 on the interior side of frame by pushing into the reglet.
- Step 3: Run vertical gasket approximately 5/8" past the horizontal.
- Step 4: Run horizontal gasket D.L.O.

Option:

Gasket may be pre-loaded into the frame members.
If choosing the pre-load option, run vertical gasket mullion length.

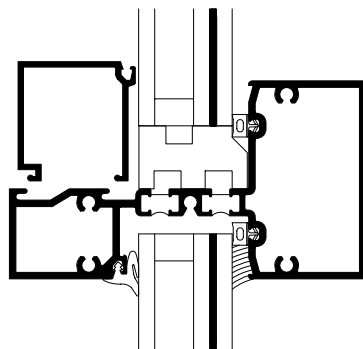
IR 501UT SHOWN
IR 501T SIMILAR
2-PIECE SHOWN
3-PIECE SIMILAR



Install the glass stops by indexing them toward the glass to clear the hook legs on the horizontal members. Lower (raise at head) the stop to the horizontal member and pull out, making sure that both hook legs engage.

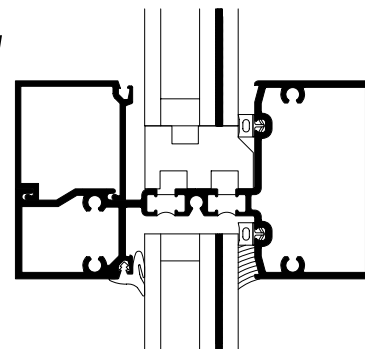
INDEX GLASS STOP
TOWARDS GLASS,

...TO CLEAR
HORIZONTAL
HOOK LEGS.



LOWER,

...AND PULL OUT.

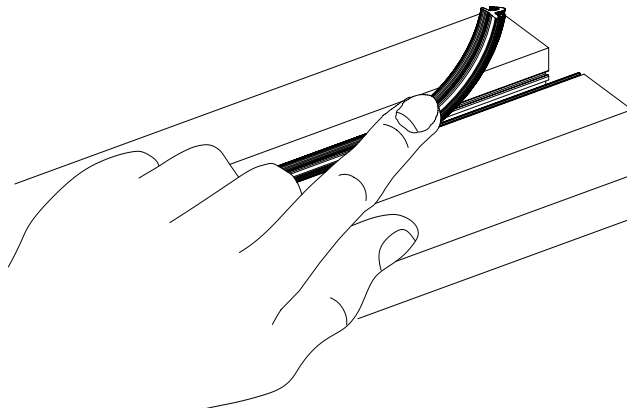
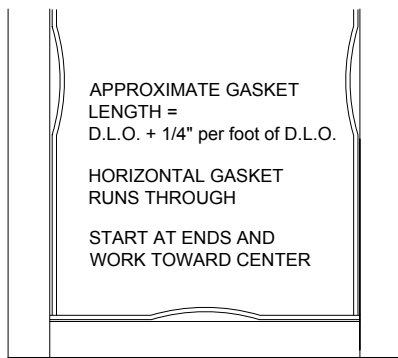


Cut the exterior push-in gasket to an approximate length of DLO + 1/4" per foot of DLO.
Start the installation of the gaskets at the ends and work toward the center. The horizontal gaskets run through.

APPROXIMATE GASKET
LENGTH =
D.L.O. + 1/4" per foot of D.L.O.

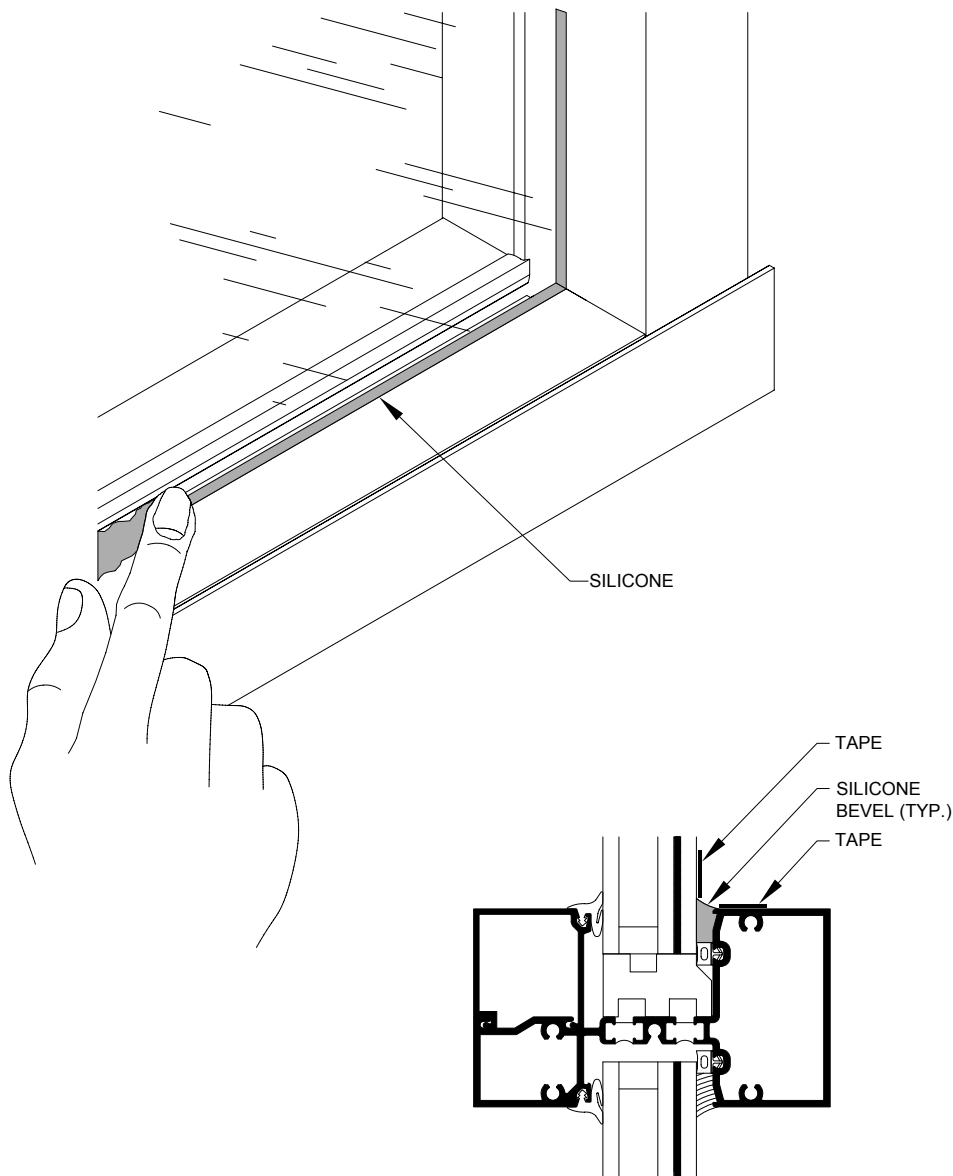
HORIZONTAL GASKET
RUNS THROUGH

START AT ENDS AND
WORK TOWARD CENTER



Apply masking tape to the metal and glass.

Apply Dow Corning 995, GE Silpruf or Tremco Proglaze SSG silicone on the interior side of the glass pocket around all four sides of the glass. Make sure the silicone fills the entire cavity between the glass, frame and silicone spacer. Tool the silicone as necessary. Bevel the silicone at an approximate angle of 30 degrees so that you cannot see the exterior gasket from the inside. Remove the masking tape.



**IR 501UT SHOWN
IR 501T SIMILAR**

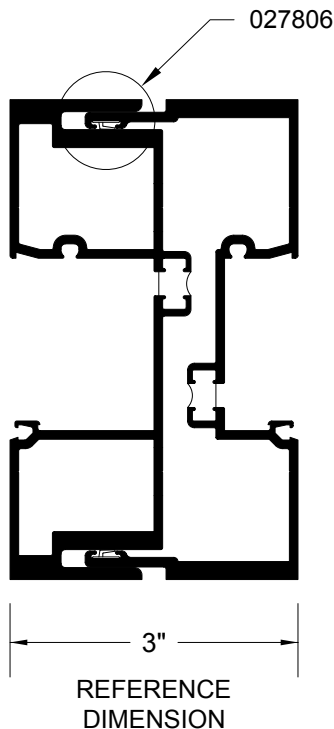
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An expansion mullion should be used every 20' in large openings. The dimension of the assembly should be adjusted based on the temperature at the time of assembly and expected high and low service temperatures. Use 3" as a reference dimension. (For example, the sightline will be reduced slightly when installed in hot weather and increased slightly when installed in cold weather).

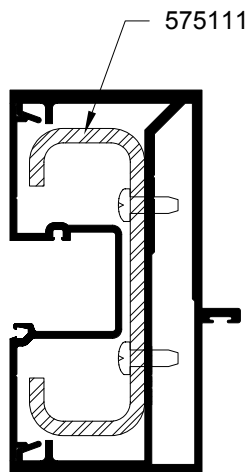
IR 501UT SHOWN
IR 501T SIMILAR



SECTION VII - STEEL REINFORCEMENT

575111 steel reinforcement should be used in the door jambs. Steel reinforcement should run the full length of the mullion and be fastened into place as shown below. NOTE THAT THE STEEL MUST BE ATTACHED TO THE MULLIONS AFTER ASSEMBLY OF THE UNIT.

The cut ends of the steel reinforcement must be coated with a corrosion-inhibiting primer before installation.



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