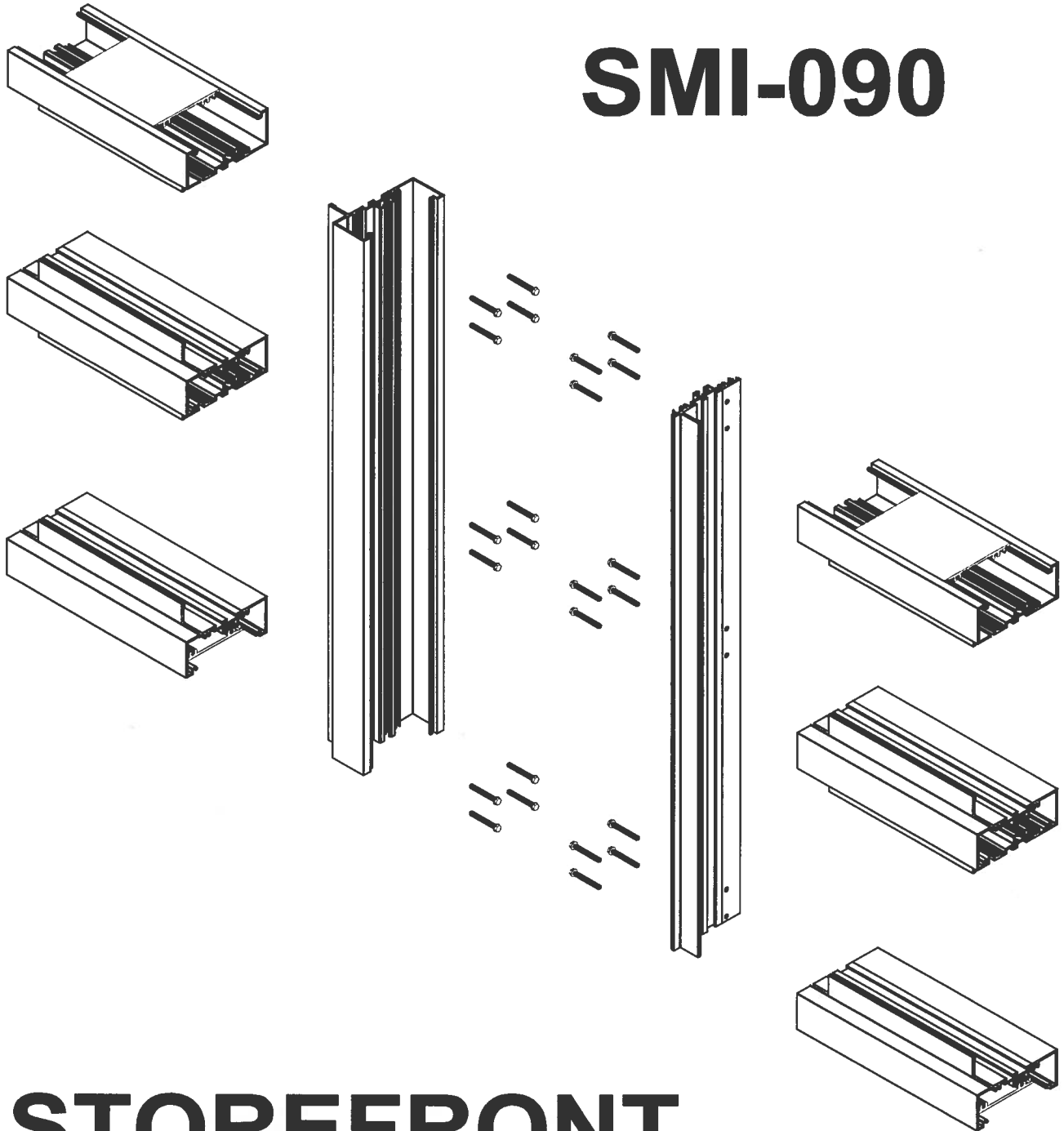


SMI-090



STOREFRONT SYSTEM

1 INSTALLATION INSTRUCTIONS

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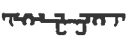


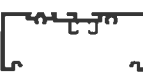
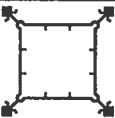






GENERAL INSTALLATION NOTES





1. **Safety-** Safety should be the primary concern throughout the installation process. Keep the installation areas clear of debris and obstructions. Lift and carry products carefully using proper lifting procedures. Always wear safety gear as determined by products and or jobsite conditions.
2. **Building Code-** The Building Code determines the requirements of products to be used on a project. Aldora manufactures products to the installer's specifications; however, Aldora does not assume any responsibility for the suitability of its products for any project. It is the responsibility of the glazier to ensure each product meets the project requirements.
3. **Openings-** Measure the openings to determine if they match the building plans. Notify the General Contractor immediately to correct any deviation.
4. **Shop drawings-** Review shop drawings to ensure all materials have been manufactured in accordance with the shop drawings.
5. **Receiving-** Inspect all products upon receipt. Do not install any damaged or deficient products. Return to Aldora immediately for correction.
6. **Protection-** Protect all materials from damage including cement, stucco, paint, mud or other abrasives or chemicals. Materials need to be protected properly before, during and after installation.
7. **Field testing-** Glaziers must fully understand all sealing procedures in advance of installation. If installed correctly and properly sealed, Aldora's products will achieve satisfactory results during field test. Aldora will not accept any responsibility for installation deficiencies.

Pre-installation

1. **Checklist-** Working from a checklist, bring all necessary documents, tools, equipment and supplies to the jobsite.
2. **Products-** Review all products versus the shop drawings to ensure everything is at the jobsite. Examine mark numbers to verify proper products per opening.
3. **Pre-glazed units-** With multiple panel openings, identify the panel with two jambs for the opening, this is typically the starting panel for the left hand side of the opening (outside looking in).
4. **Sealants-** Ensure compatibility of the sealant with all products involved.
5. **Anchors-** Verify anchors supplied match shop drawings.
6. **Opening preparation-** Clean opening of all debris and examine for level and plumb.

090 SYSTEM
PARTS IDENTIFICATION







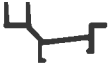

PROFILE	PART #	DESCRIPTION
	SMI-091	HEAD/SILL/JAMB/MULLION & INTERM. HORIZONTAL
	SMI-092	GLASS STOP
	SMI-093	FIN SNAP
	SMI-094	PLAIN SNAP
	SMI-095	ALUM. REINFORCEMENT & SHEAR BLOCK
	SMI-097	OUTER GLASS STOP
	SMI-098	OUTSIDE GLAZED HEAD, INTERM., JAMB & SILL
	SMI-099	CORNER POST
	SMI-091T	HEAD/SILL/JAMB/MULLION & INTERM. HORIZONTAL (POURED & DEBRIDGE)
	SMI-093T	FIN SNAP (POURED & DEBRIDGE)
	SMI-094T	PLAIN SNAP (POURED & DEBRIDGE)
	SMI-901	HEAD/SILL/JAMB/MULLION & INTERM. HORIZONTAL
	SMI-903	FIN SNAP
	SMI-901T	HEAD/SILL/JAMB/MULLION & INTERM. HORIZONTAL (POURED & DEBRIDGE)

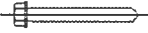
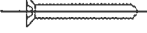


PROFILE	PART #	DESCRIPTION
	SMI-903T	FIN SNAP (POURED & DEBRIDGE)
	SMI-004	PLAIN SNAP
	ST-090a	VERTICAL STEEL REINFORCEMENT
	ST-090c	VERTICAL STEEL REINFORCEMENT

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PARTS IDENTIFICATION (continued)

PROFILE	PART #	DESCRIPTION
	SMI-G01	INTERIOR GLAZING GASKET
	SMI-G07	SPACER/ OUTER GASKET
	SMI-G08	INTERIOR GLAZING GASKET
	SMI-G13	SPACER/ RETAINER OUTER GASKET
	SMI-SB04	SETTING BLOCK 3/8" X 1 1/4" X 4" LG.
	SMI-SB06	SETTING BLOCK 3/8" X 5/8" X 4" LG.
	SMI-P03	TEMPORARY GLASS STOP
	SMI-P08	TEMPORARY GLASS STOP

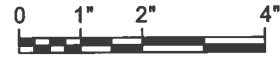
PROFILE	PART #	DESCRIPTION
		ASSEMBLY SCREW #12 X 1 1/2" LG. HX. WASHER SMS. ST/ST
		ASSEMBLY SCREW #12 X 1 1/2" LG. FT. HD. SMS. ST/ST
		MULLION SCREW 1/4-20 X 2 1/4" LG. FT. HD. MACHINE BOLT ST/ST
		NUTS 1/4-20 HEX. ST/ST

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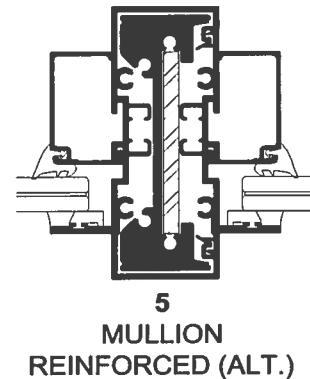
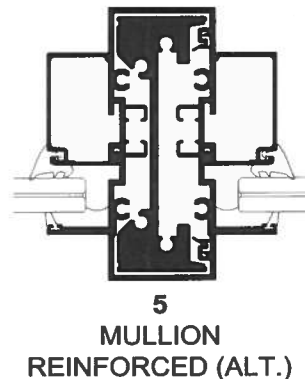
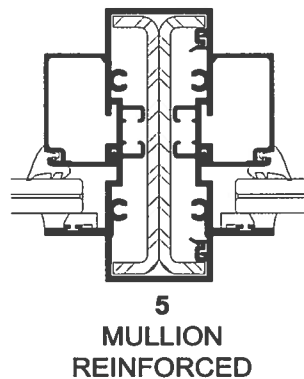
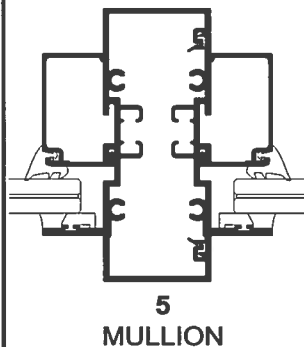
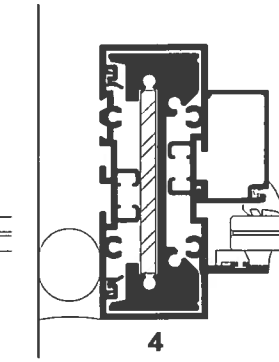
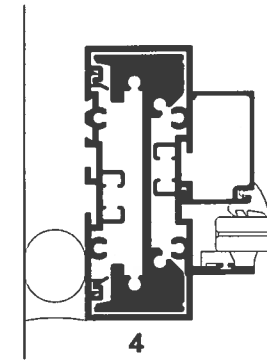
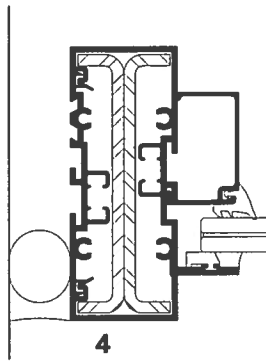
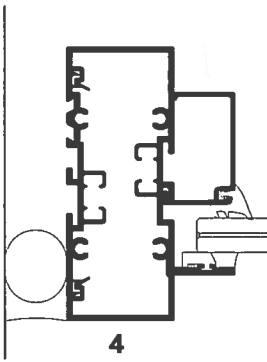
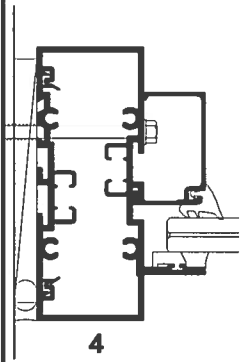
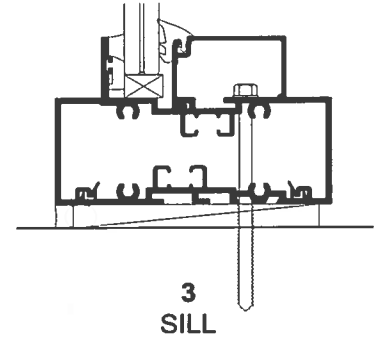
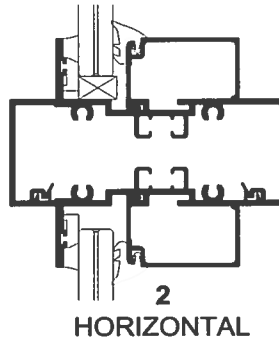
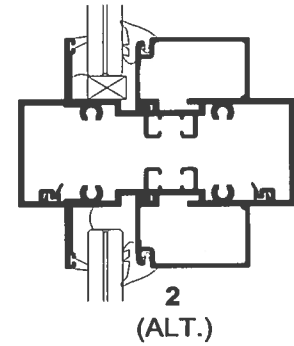
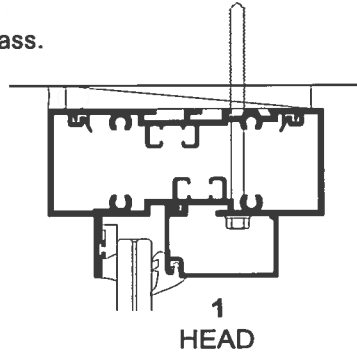
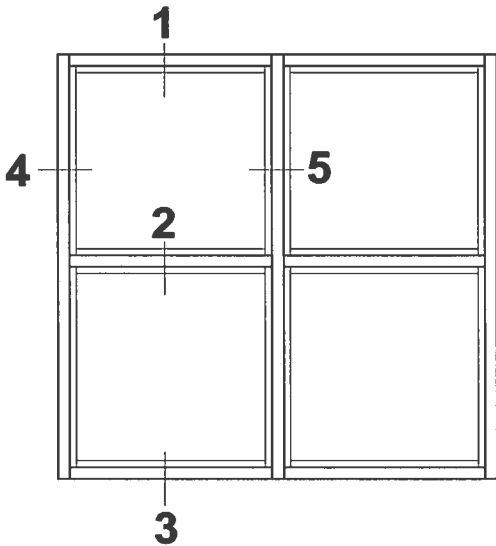
090 SYSTEM

TYPICAL WINDOW DETAILS 9/16" THK. LAM. GL.

Aldora's SMI-090 Storefront & Window Wall System can be assembled as a screw spline system or with shear block assembly. This enables the glazier to assemble based on their preference or possible unique job site conditions. The screw spline assembly can be pre-fabricated and pre-glazed for multi-unit panels using the jamb/mullion member and the fin snap. The shear block is often utilized for field assembly.



Glazing represented below is 9/16" laminated glass.



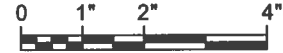
6 INSTALLATION INSTRUCTIONS

090 SYSTEM

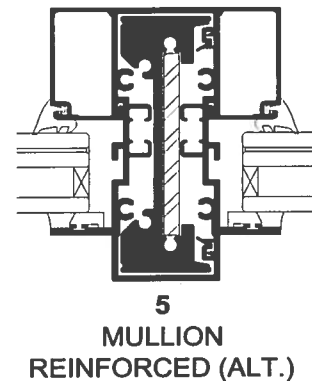
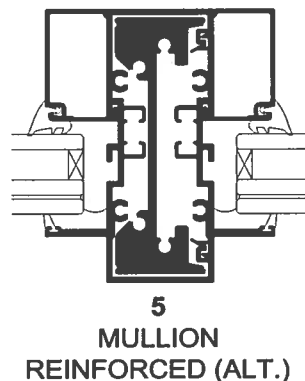
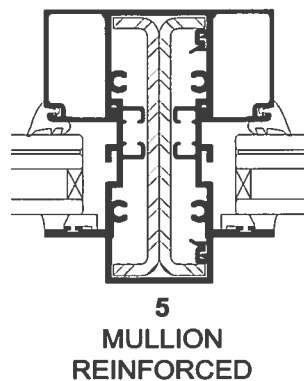
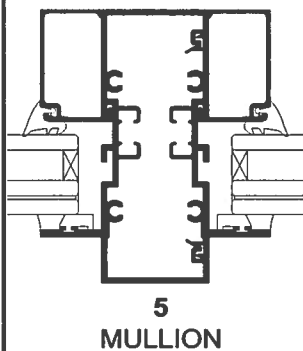
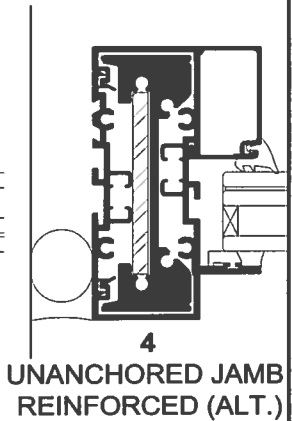
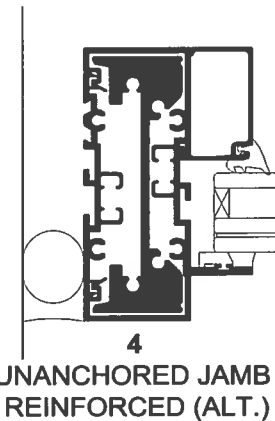
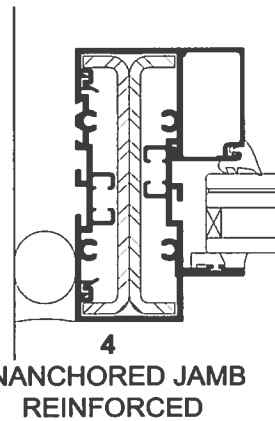
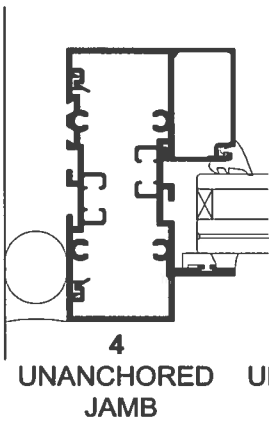
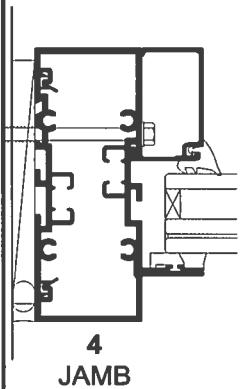
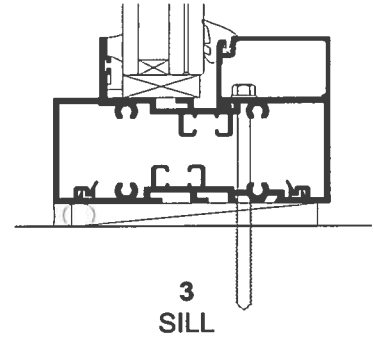
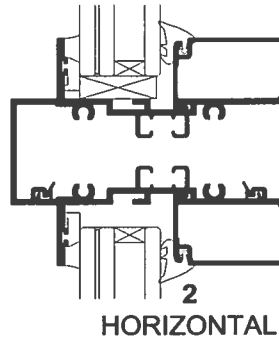
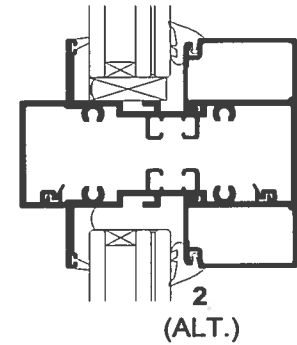
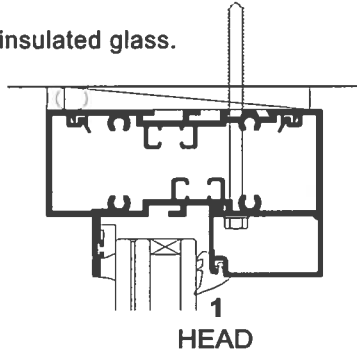
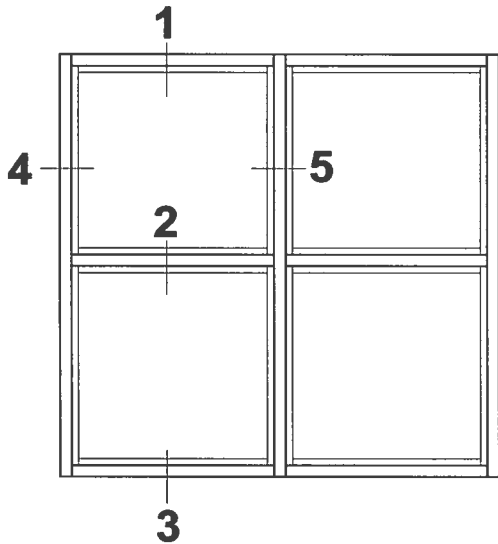
TYPICAL WINDOW DETAILS 1 5/16" THK. LAM./INS. GL.

INSTALLATION INSTRUCTIONS

Aldora's SMI-090 Storefront & Window Wall System can be assembled as a screw spline system or with shear block assembly. This enables the glazier to assemble based on their preference or possible unique job site conditions. The screw spline assembly can be pre-fabricated and pre-glazed for multi-unit panels using the jamb/mullion member and the fin snap. The shear block is often utilized for field assembly.



Glazing represented below is 1 5/16" laminated-insulated glass.



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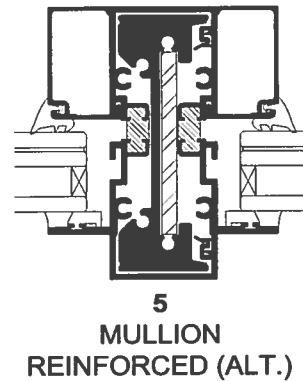
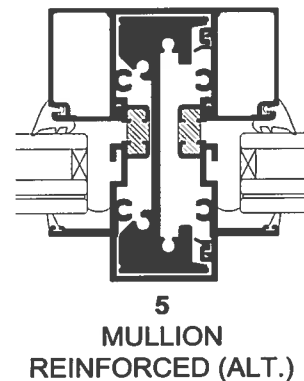
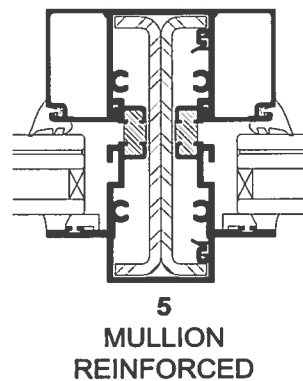
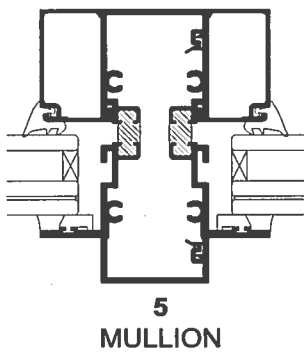
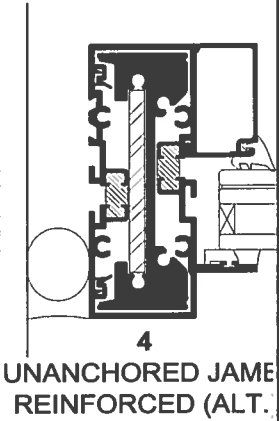
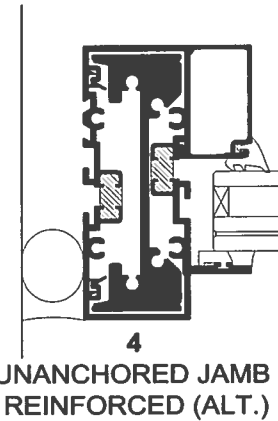
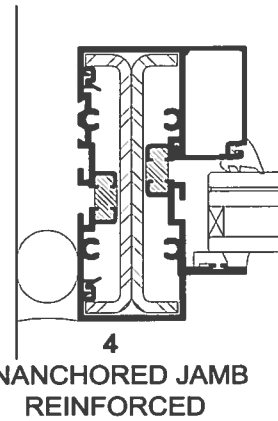
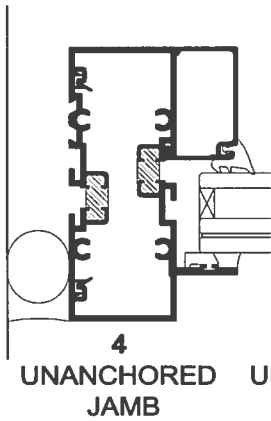
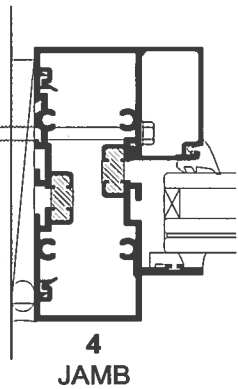
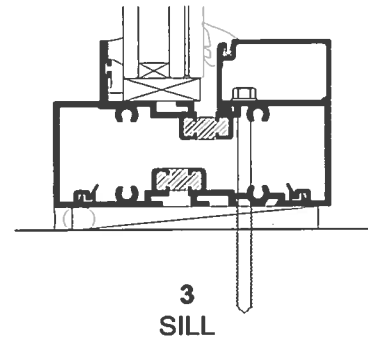
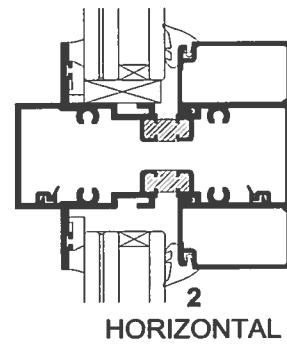
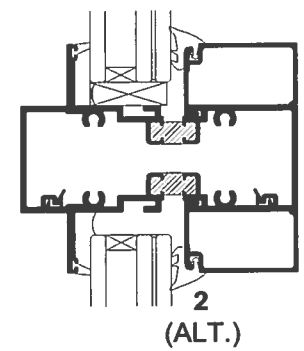
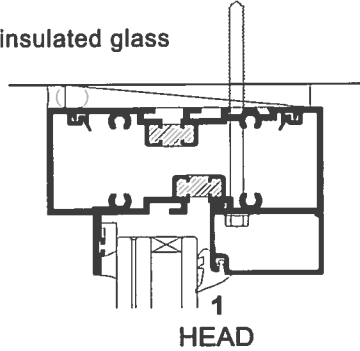
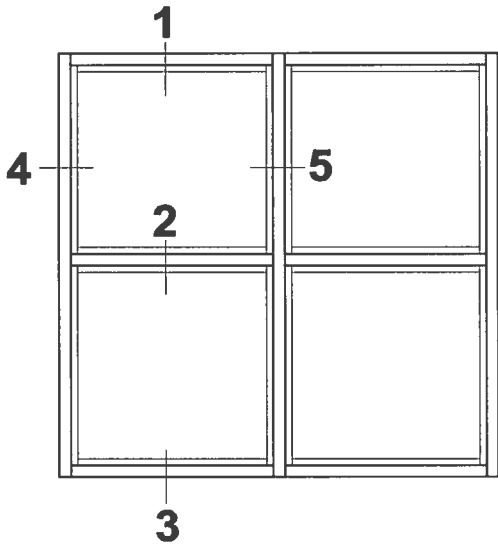
TYPICAL WINDOW DETAILS 1 5/16" THK. LAM./INS. GL. & T.B.

INSTALLATION INSTRUCTIONS

Aldora's SMI-090 Storefront & Window Wall System can be assembled as a screw spline system or with shear block assembly. This enables the glazier to assemble based on their preference or possible unique job site conditions. The screw spline assembly can be pre-fabricated and pre-glazed for multi-unit panels using the jamb/mullion member and the fin snap. The shear block is often utilized for field assembly.



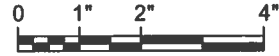
Glazing represented below is 1 5/16" laminated-insulated glass in the thermally broken variation of the SMI-090.



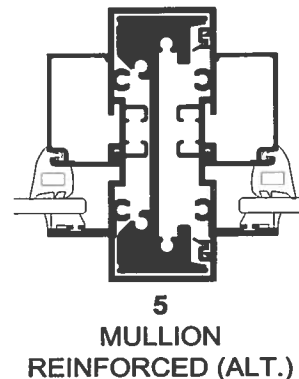
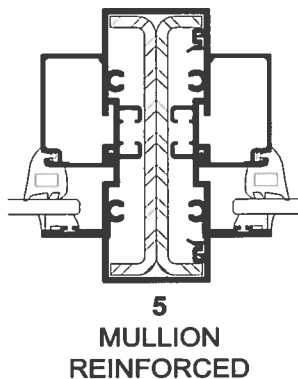
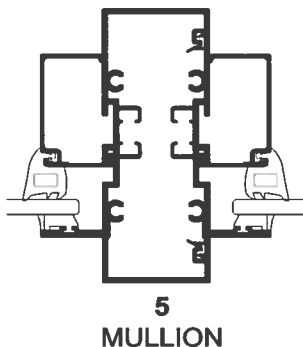
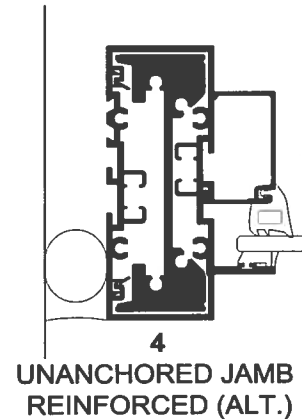
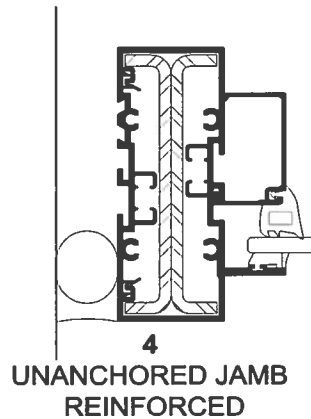
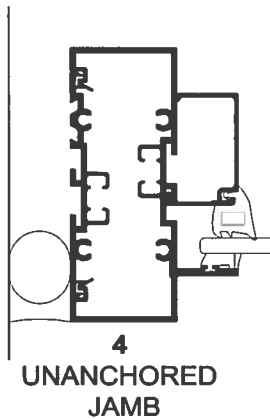
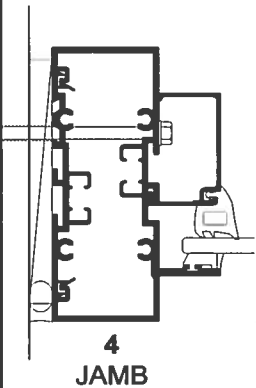
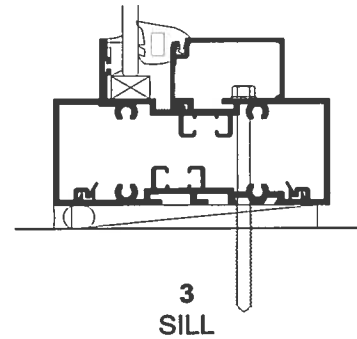
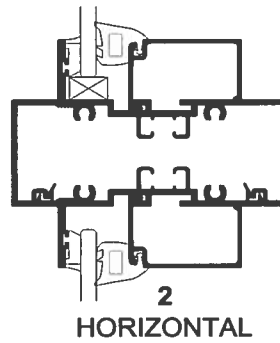
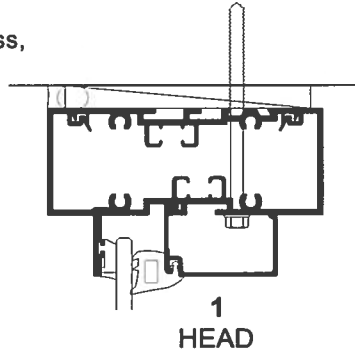
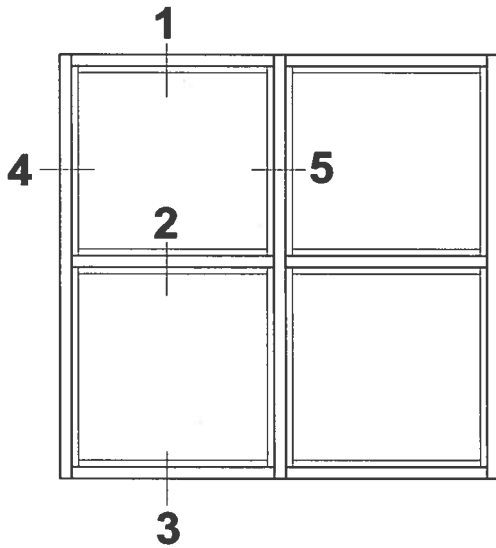
090 SYSTEM

TYPICAL WINDOW DETAILS 1/4" THK. TMP. GL.

Aldora's SMI-090 Storefront & Window Wall System can be assembled as a screw spline system or with shear block assembly. This enables the glazier to assemble based on their preference or possible unique job site conditions. The screw spline assembly can be pre-fabricated and pre-glazed for multi-unit panels using the jamb/mullion member and the fin snap. The shear block is often utilized for field assembly.



Glazing represented below is 1/4" tempered glass, Non-Impact system.



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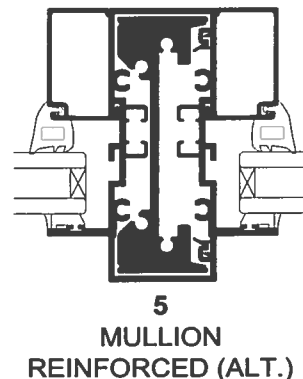
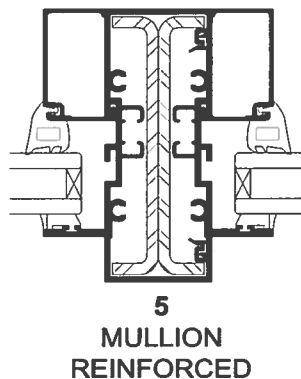
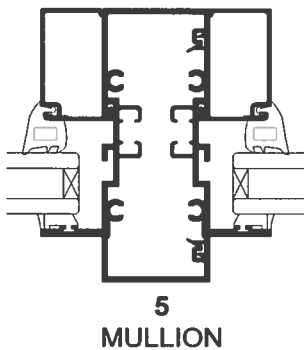
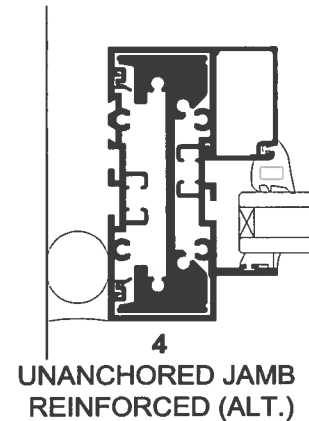
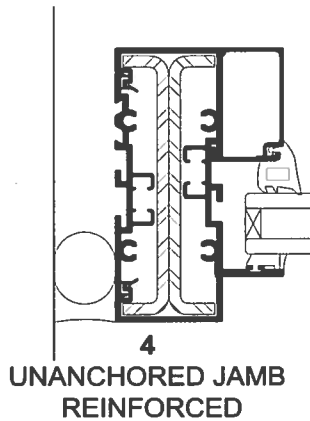
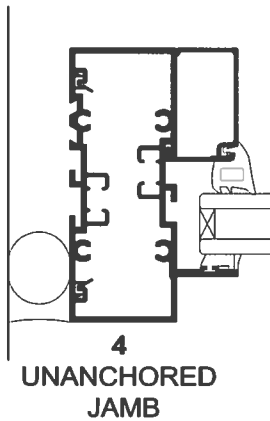
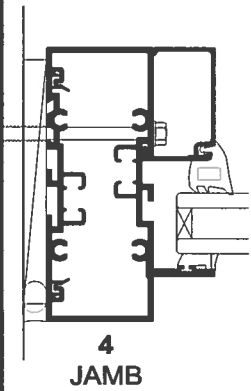
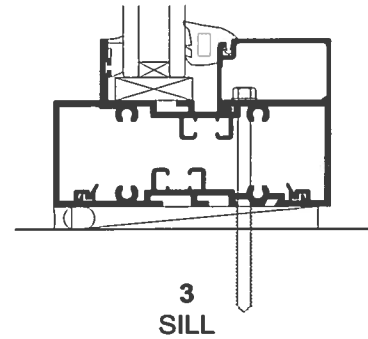
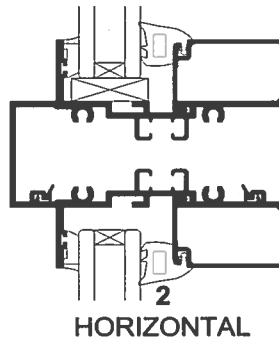
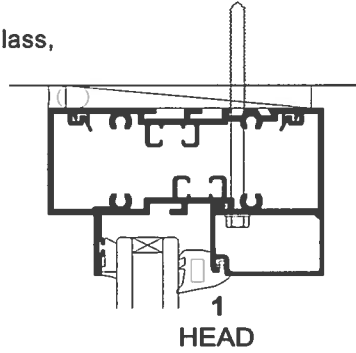
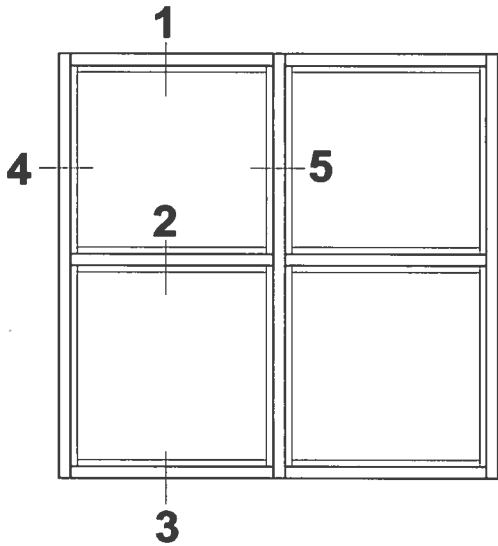
090 SYSTEM

TYPICAL WINDOW DETAILS 1" THK. I.G. TMP. GLASS

Aldora's SMI-090 Storefront & Window Wall System can be assembled as a screw spline system or with shear block assembly. This enables the glazier to assemble based on their preference or possible unique job site conditions. The screw spline assembly can be pre-fabricated and pre-glazed for multi-unit panels using the jamb/mullion member and the fin snap. The shear block is often utilized for field assembly.



Glazing represented below is 1" I.G. tempered glass, Non-Impact system.

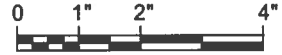


10 INSTALLATION INSTRUCTIONS

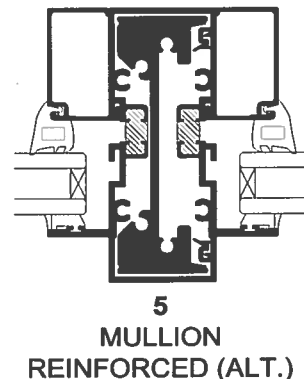
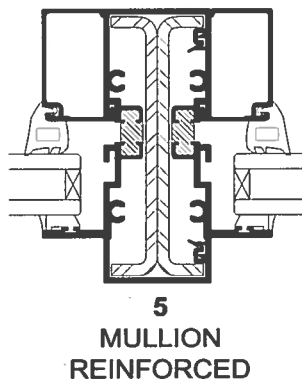
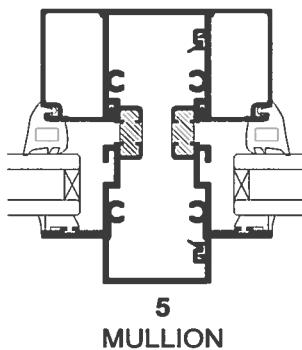
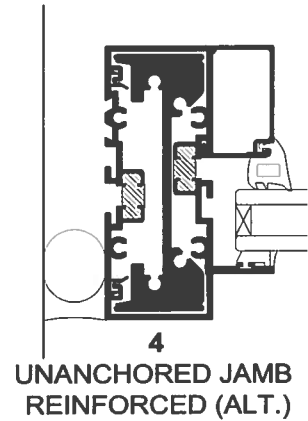
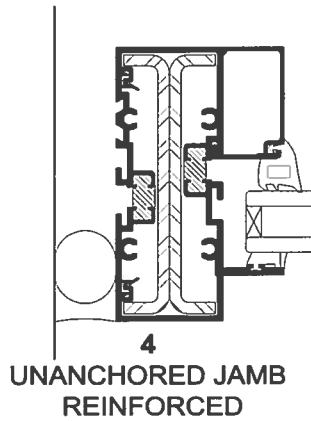
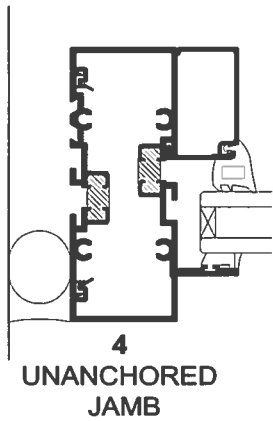
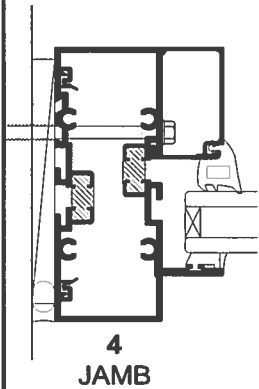
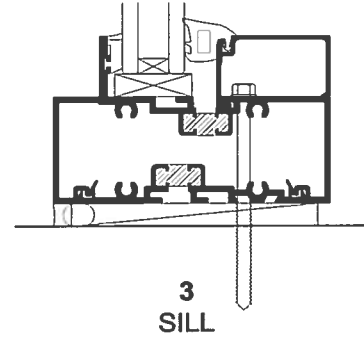
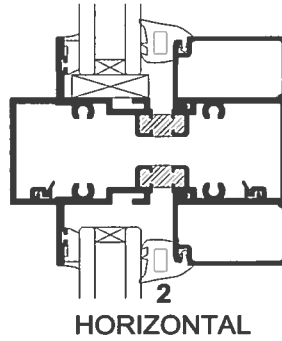
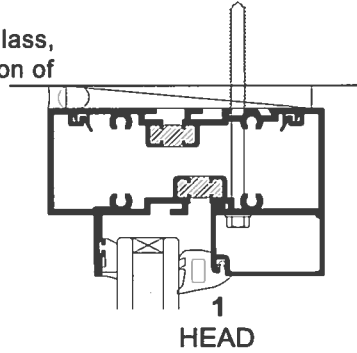
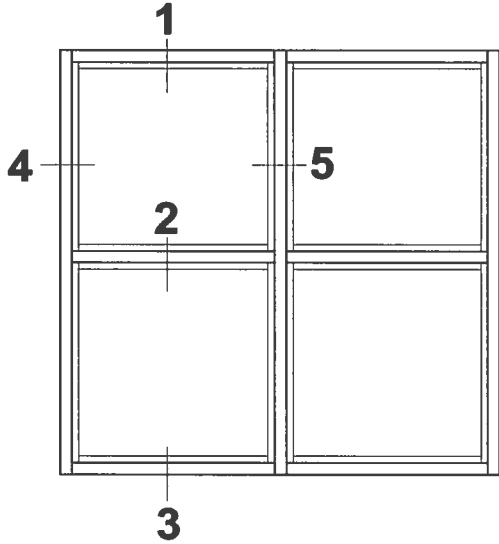
090 SYSTEM

TYPICAL WINDOW DETAILS 1" THK. I.G. TMP. GL. & T.B.

Aldora's SMI-090 Storefront & Window Wall System can be assembled as a screw spline system or with shear block assembly. This enables the glazier to assemble based on their preference or possible unique job site conditions. The screw spline assembly can be pre-fabricated and pre-glazed for multi-unit panels using the jamb/mullion member and the fin snap. The shear block is often utilized for field assembly.



Glazing represented below is 1" I.G. tempered glass, Non-Impact system in a thermally broken variation of the SMI-090.

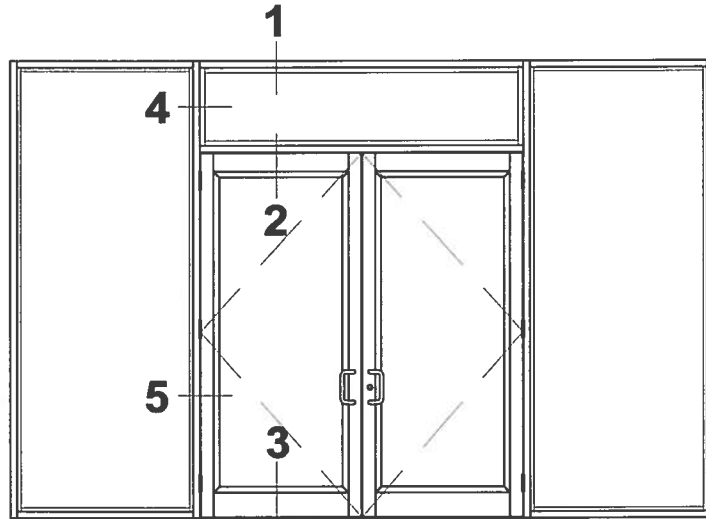


11 INSTALLATION INSTRUCTIONS

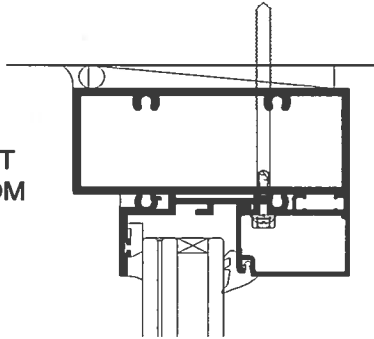
090 SYSTEM

TYPICAL WINDOW DETAILS: AT DOOR & TRANSOM

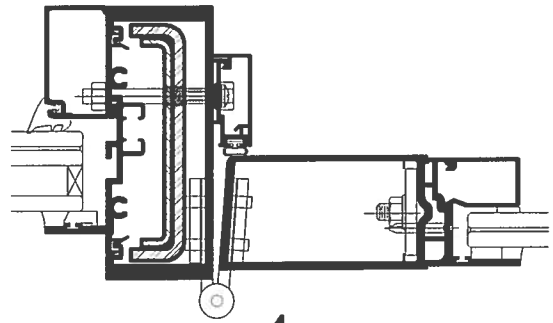
The open back jamb of Aldora's K2 Doors series accepts the fin snap of the SMI-090. Transom assembly for the 090 System is shown below with $\frac{9}{16}$ " glazing and $1 \frac{5}{16}$ " glazing.



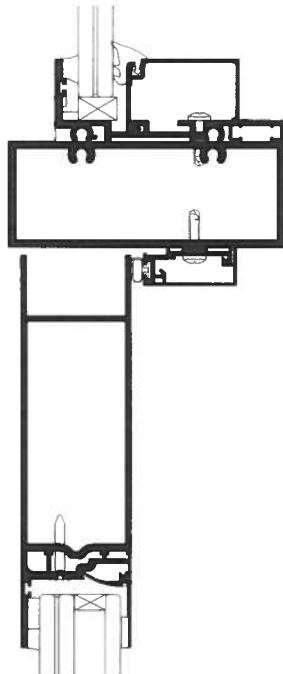
1
HEAD AT
TRANSOM



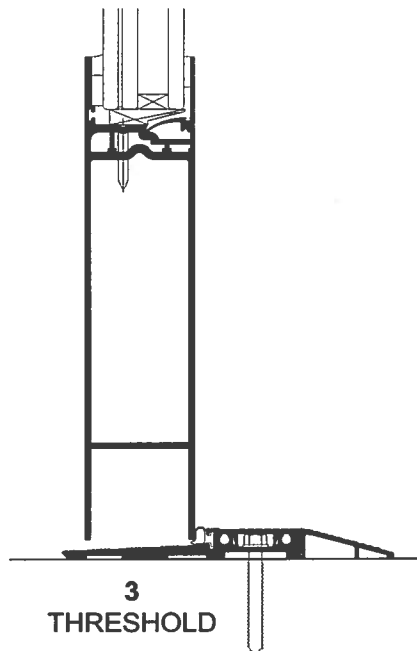
4
SIDE LITE AT
DOOR MULLION



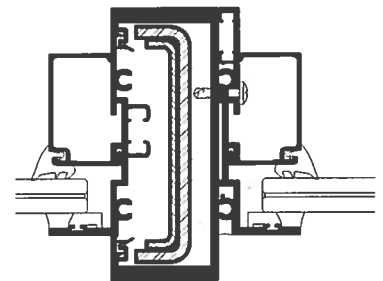
2
DOOR AT
TRANSOM



3
THRESHOLD



5
SIDE LITE AT
TRANSOM



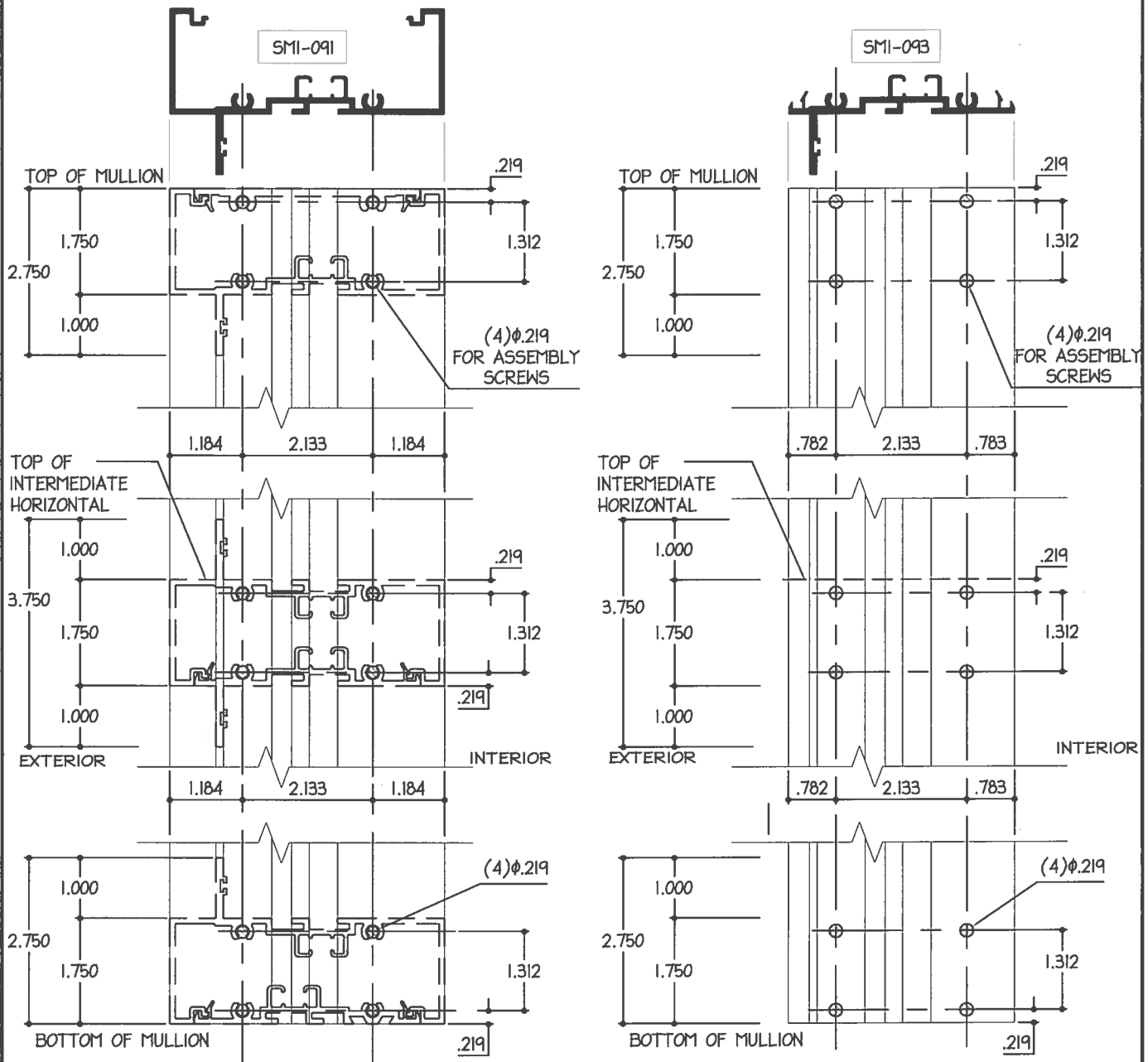
INSTALLATION INSTRUCTIONS

090 SYSTEM

FABRICATION: ASSEMBLY SCREW.

Determine opening dimensions by measuring width and height and reduce each by 3/8" on all sizes. This allows for shim spacing and perimeter sealant. If the opening is not square, use the smallest dimension for each measurement before deducting for shim space.

Vertical members are cut at the frame height dimension. Horizontal members are cut to fit within vertical members. Where intersecting with the verticals members, the fin of the horizontal must be notched (see details on page 14). Assembly holes are drilled in the verticals framing member wherever horizontals are adjoined.

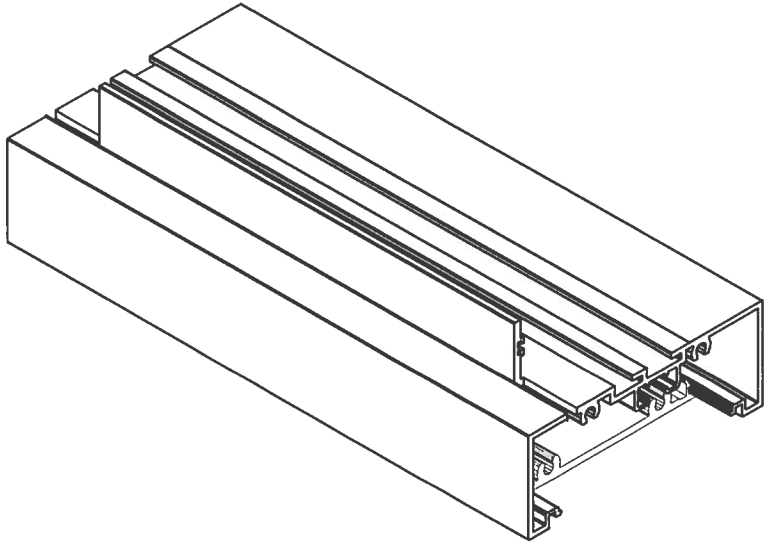


INSTALLATION INSTRUCTIONS

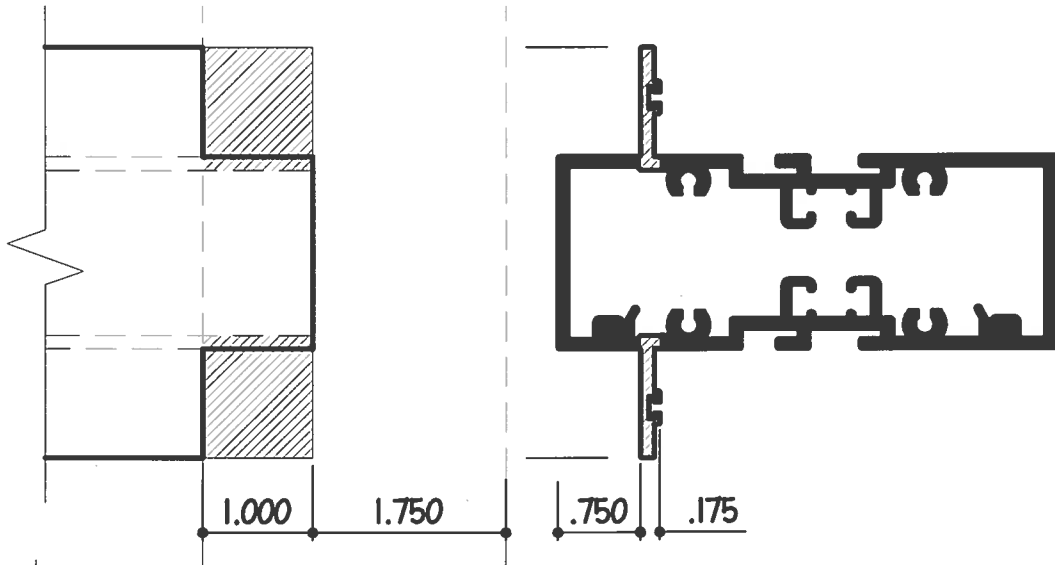
090 SYSTEM

FABRICATION: SPECIAL NOTCHES

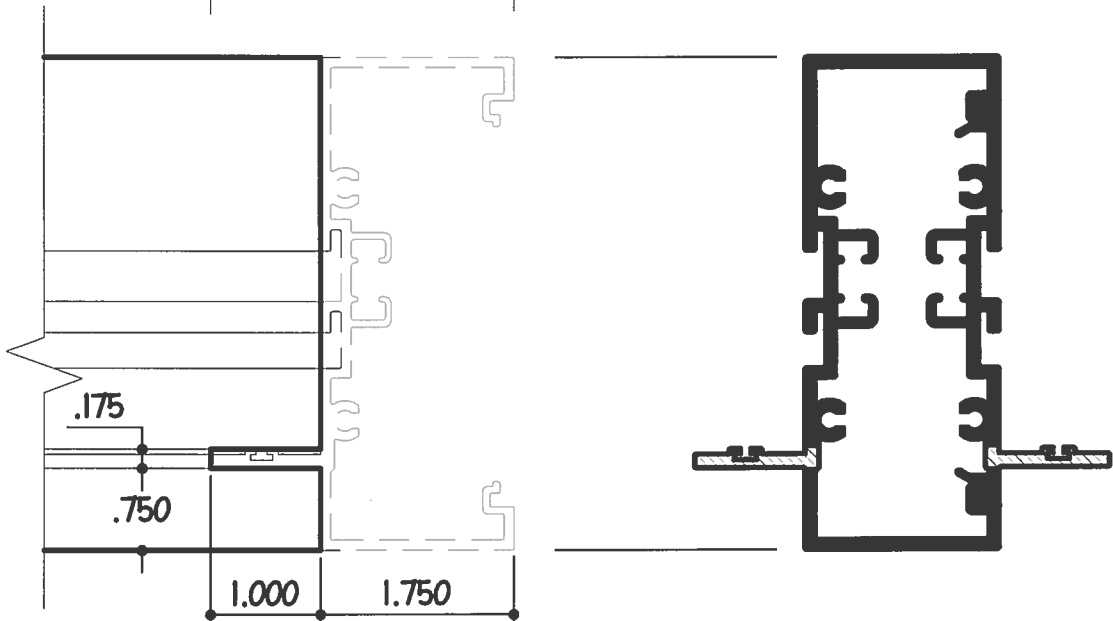
Notching details for the horizontal framing member shown below using the intermediate mullion, part numbers SMI-091 and SMI-093. The notching for the alternate horizontal framing members SMI-091T and SMI-093T is the same.



NOTCHED SPECS
SIDE VIEW.



NOTCHED SPECS
PLAN VIEW.

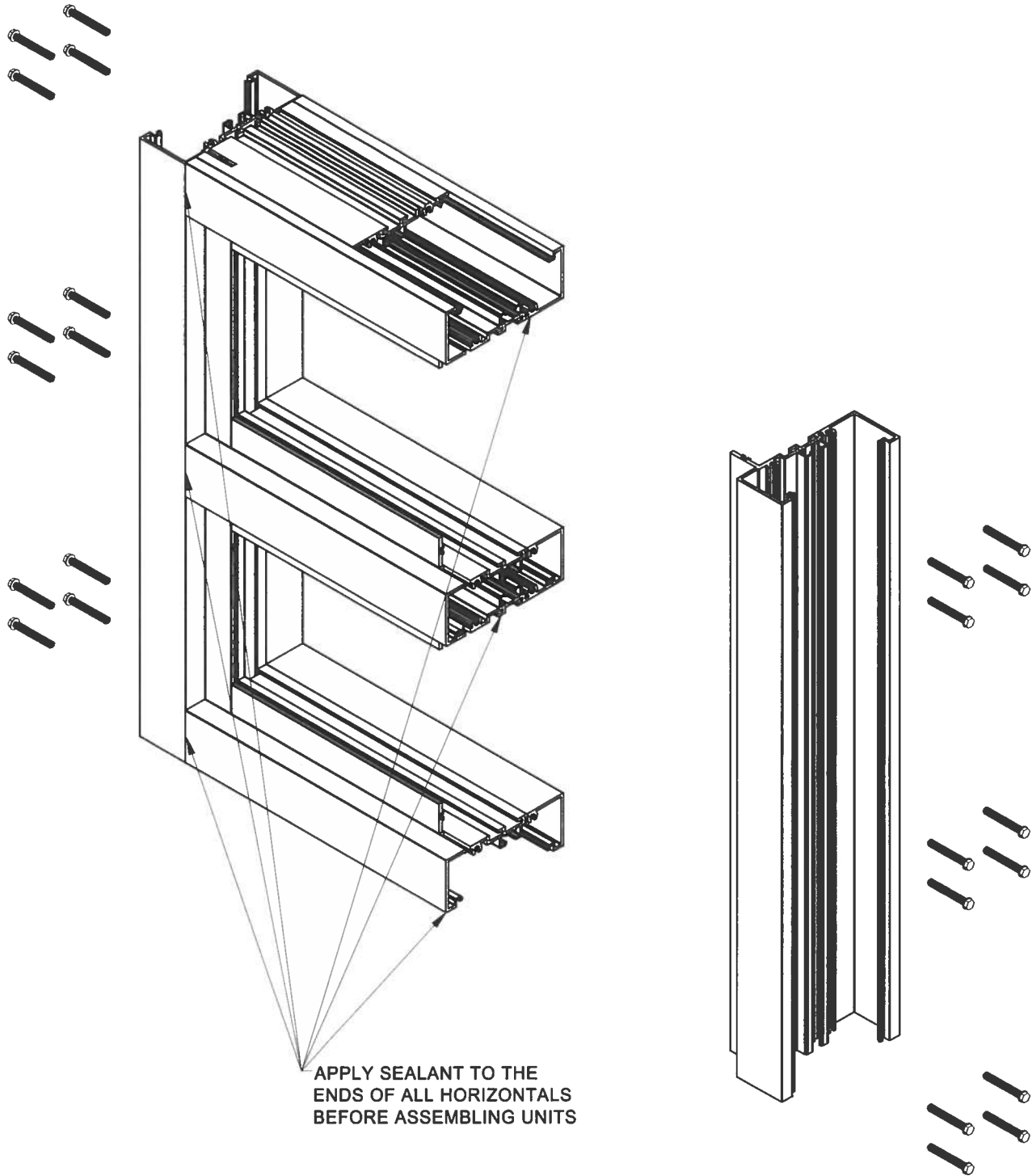


Assembly Instructions

Apply sealant to the ends of the horizontal framing members prior to fastening to the vertical jambs or mullions. This will provide the joint seal necessary to prevent water penetration.

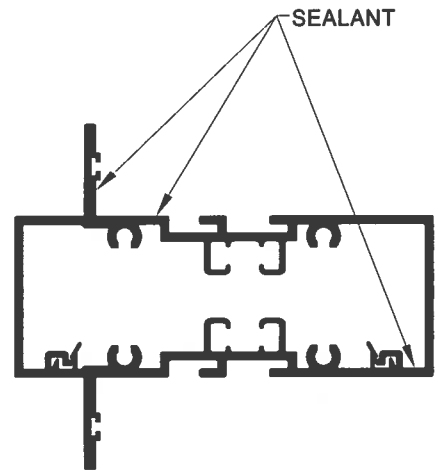
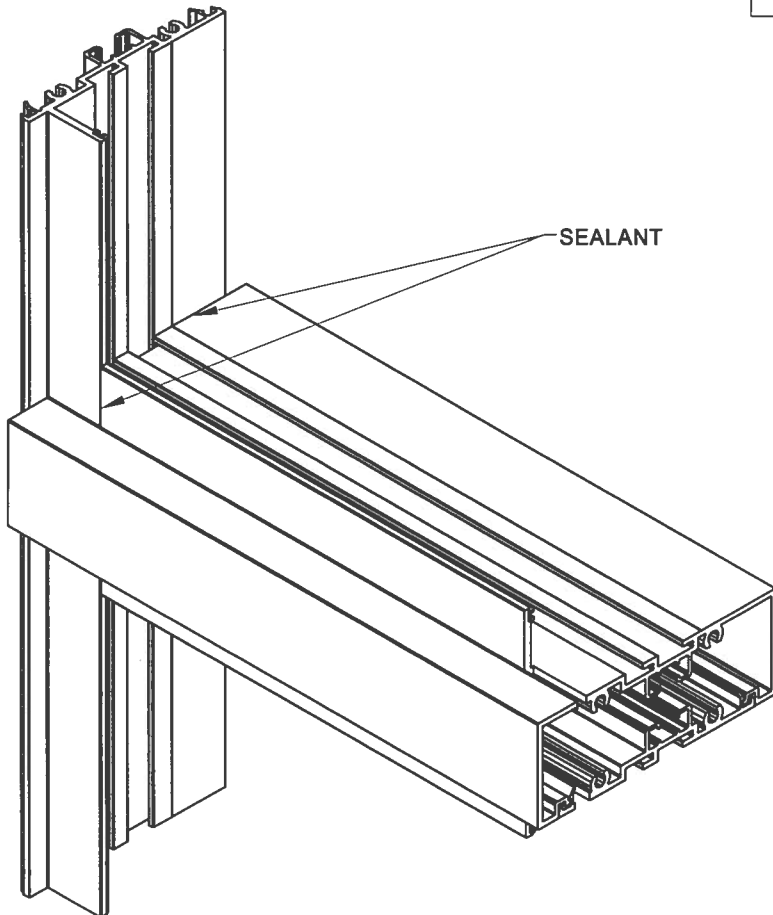
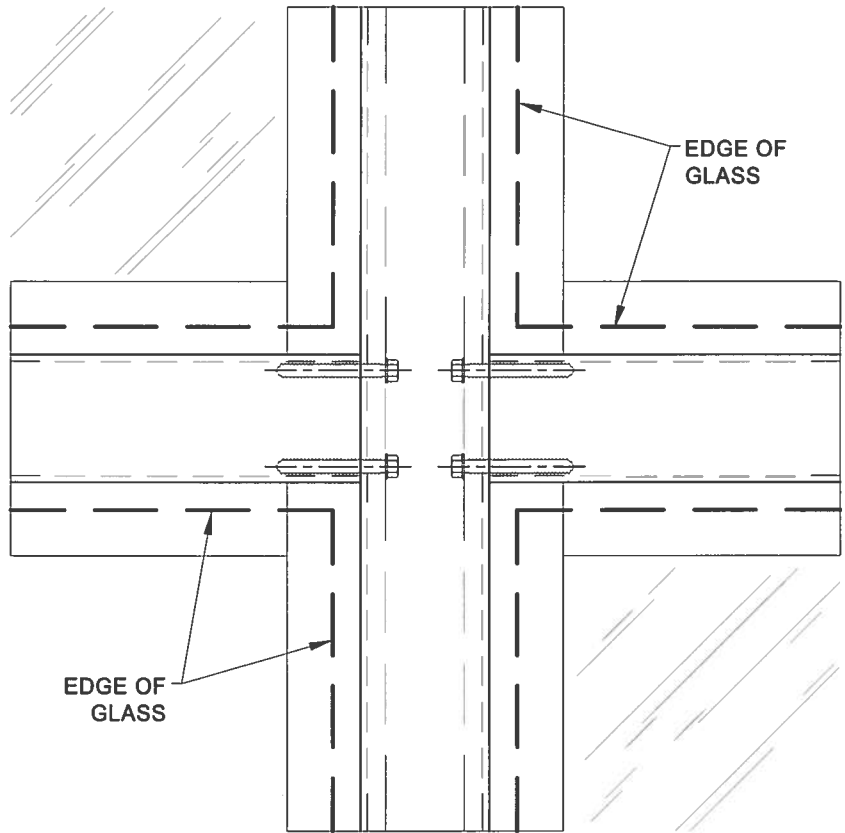
Affix the horizontal members to the vertical framing member by screwing four (4) # 12 X 1 1/2" S.S. hex head screws into each joint location as shown below.

The fabricated frame can be pre-glazed prior to shipping.



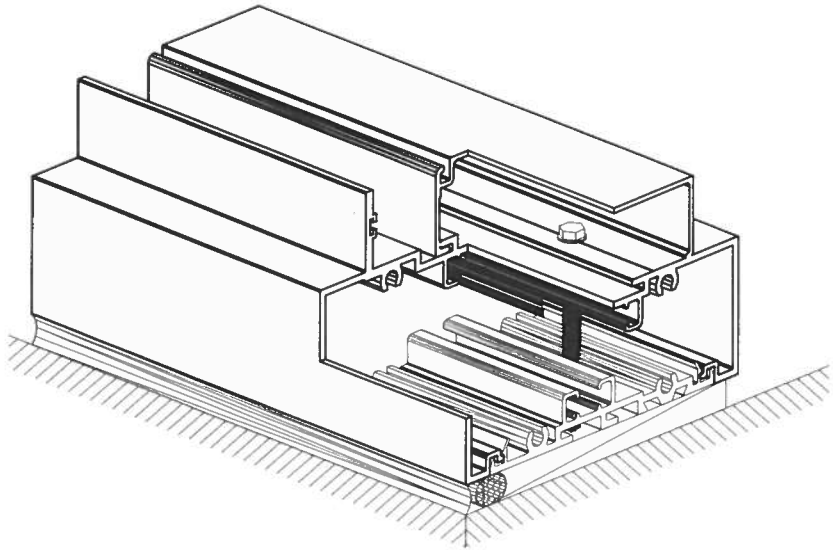
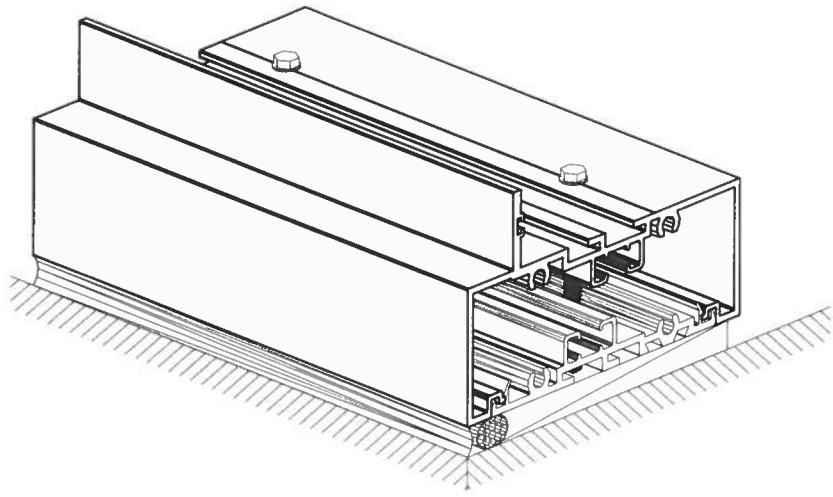
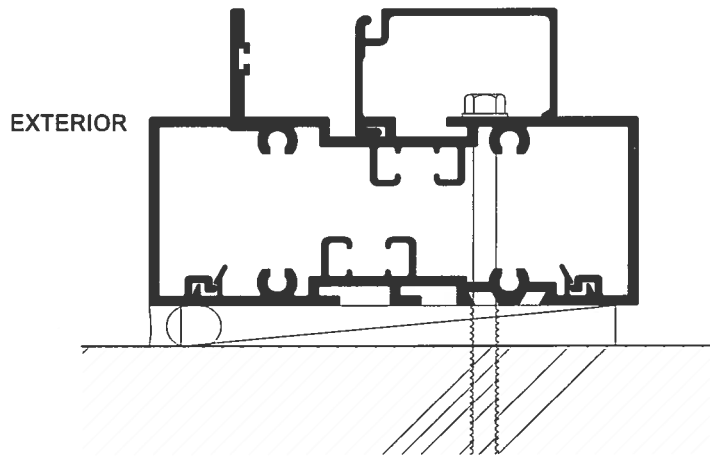
Assembly

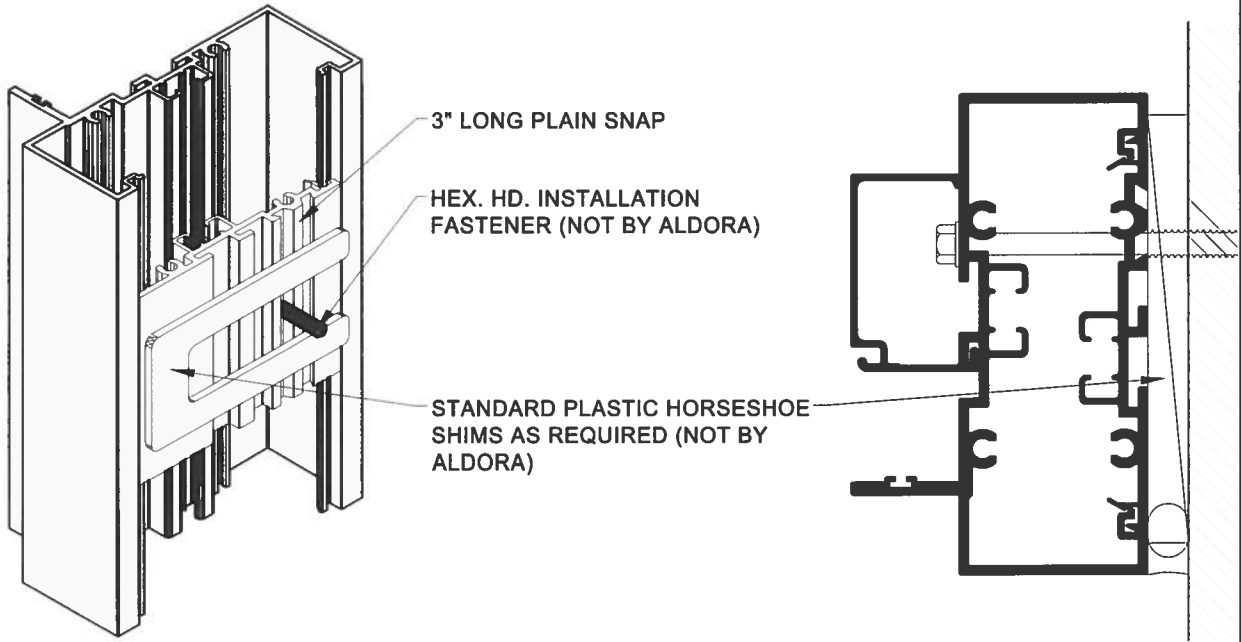
When assembling the horizontal framing member to the vertical, apply recommended sealant to the front fin surface and the edge of the horizontal extrusion. Extend the sealant around the ends of all horizontal members to ensure uniform seal between the two framing members.



Installation Instructions

When setting the sill member, create a perimeter seal gap by shimming the sill $\frac{1}{4}$ " above the substrate. Installation screws are spaced per the shop drawings and are located behind the glazing pocket. The installation screw is fastened through the sill and the plain snap and into the substrate. The screws will be covered by the glass stop after the unit has been glazed.

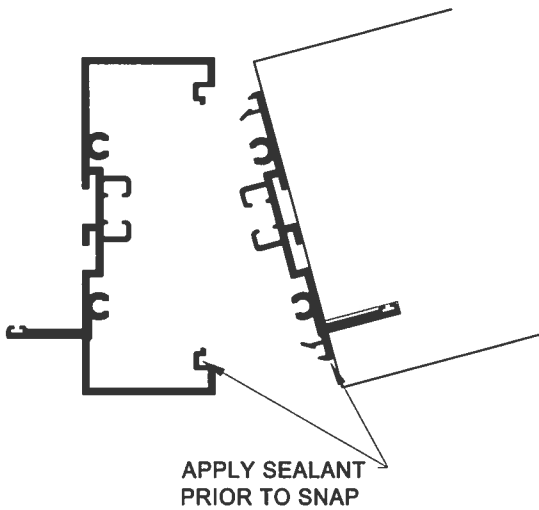




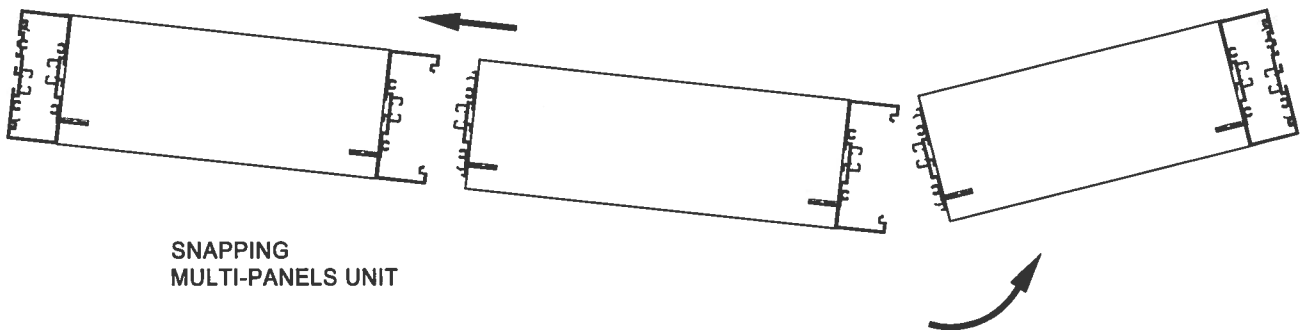
Installation Instructions (continued)

Use standard horseshoe shims to create the perimeter gap necessary for perimeter sealant to be applied. Shims are inserted around the installation screws between the plain snap and the substrate.

When installing multi-panel units, set the first panel (the panel with jambs on both verticals), then snap in the adjacent unit. Prior to snapping, run a sealant bead along the joint created at fin of both panels. Once snapped, fasten with installation screws at head and sill and repeat the process with each remaining panel until the opening is complete.



APPLY SEALANT PRIOR TO SNAP



SNAPPING MULTI-PANELS UNIT

Installation Instructions (continued)

The SMI-090 System can be glazed with four (4) different glass types; non-impact 1/4" tempered, non-impact 1" IG, impact 9/16" laminated, or impact 1 5/16" laminated insulated. Depending upon the glass type (impact or non-impact), the system is glazed two different ways.

Option 1- Impact

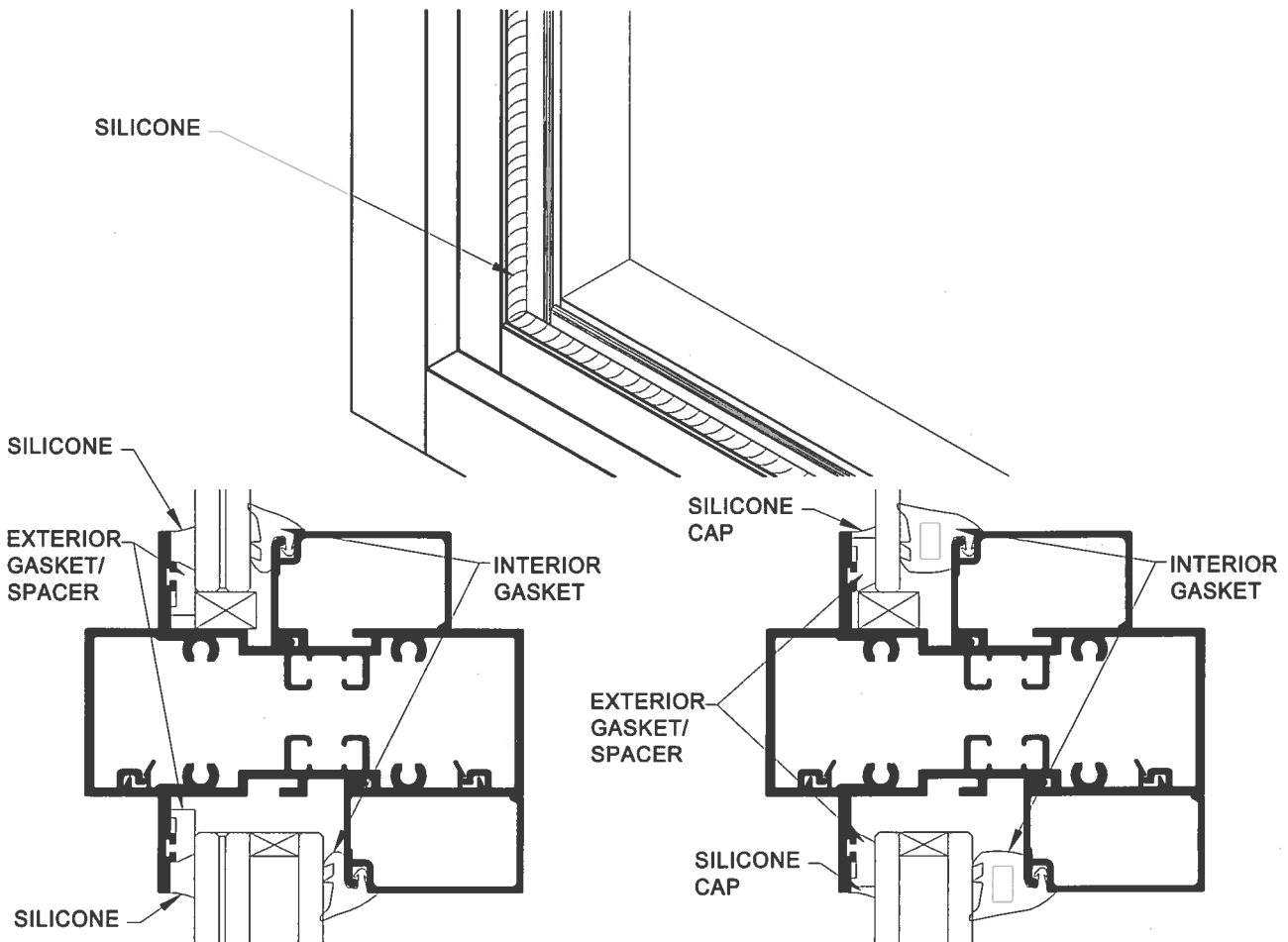
Run the gasket into the groove located on the fin of the framing member. Be sure to have the angled part of the gasket towards the top of the fin. This will create the pocket for the proper amount of structural silicone. Place the setting blocks and set the glass in the pocket. Pump silicone into the pocket from the gasket to the top of the fin. Tool the silicone so that it channels water away from the glass. Insert the glass stop in the stop guide and wedge the glazing gasket between the glass and glass stop.

Temporary glass stops may be used where screw inspections are required.

Option 2- Non-impact

Work the gasket into the groove located on the fin of the framing member. The angled portion should be facing down with the flat surface of the gasket facing up towards the top of the fin. This will create a small pocket. Place the setting blocks and set the glass in the pocket. Pump silicone into the pocket from the gasket to the top of the fin. Tool the silicone so that it channels water away from the glass. Insert the glass stop in the stop guide and wedge the glazing gasket between the glass and glass stop.

Temporary glass stops may be used where screw inspections are required.

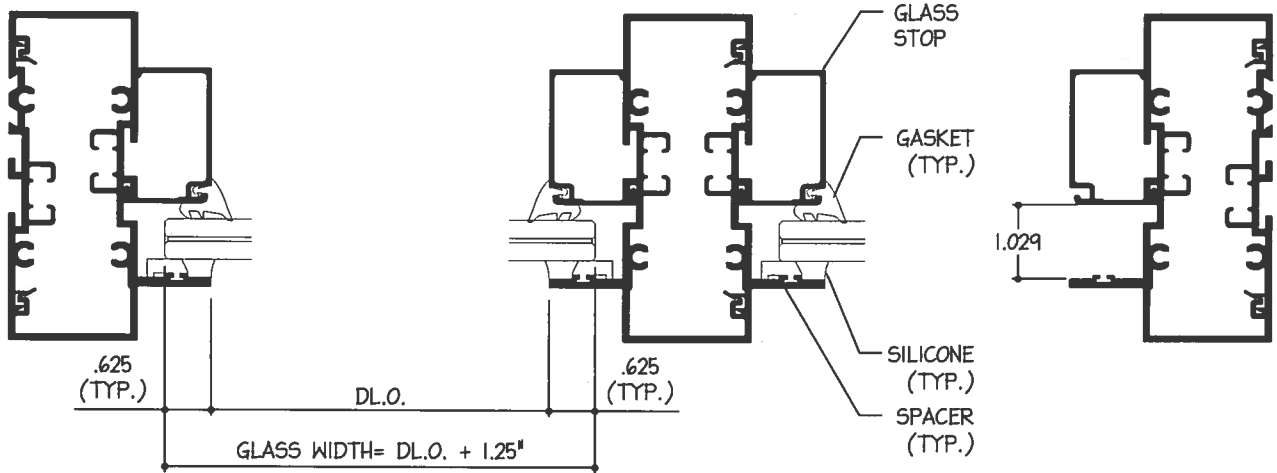


090 SYSTEM

GLAZING: 9/16" THK. LAM. GLASS

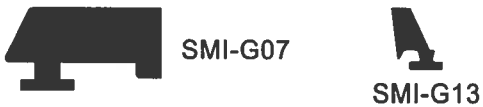
The SMI-090 has two variable glass stop locations. When glazing with 9/16" laminated hurricane resistant glass, use the front glass stop setting. With this setting, the glazing pocket measures approximately 1 1/16" in width.

TYPICAL GLASS SIZE IS DAYLITE OPENING (DL.O.) + 1.25"

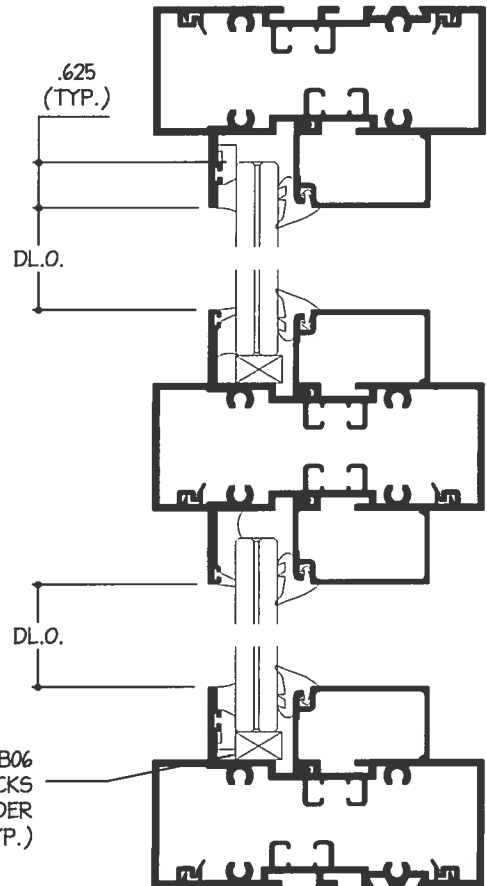


NOMINAL INFILL THICKNESS	EXTERIOR GASKET	INTERIOR GASKET
9/16"	SMI-G07	SMI-G01
9/16"	SMI-G13	SMI-G01

EXTERIOR GLAZING GASKETS:



INTERIOR GLAZING GASKET:



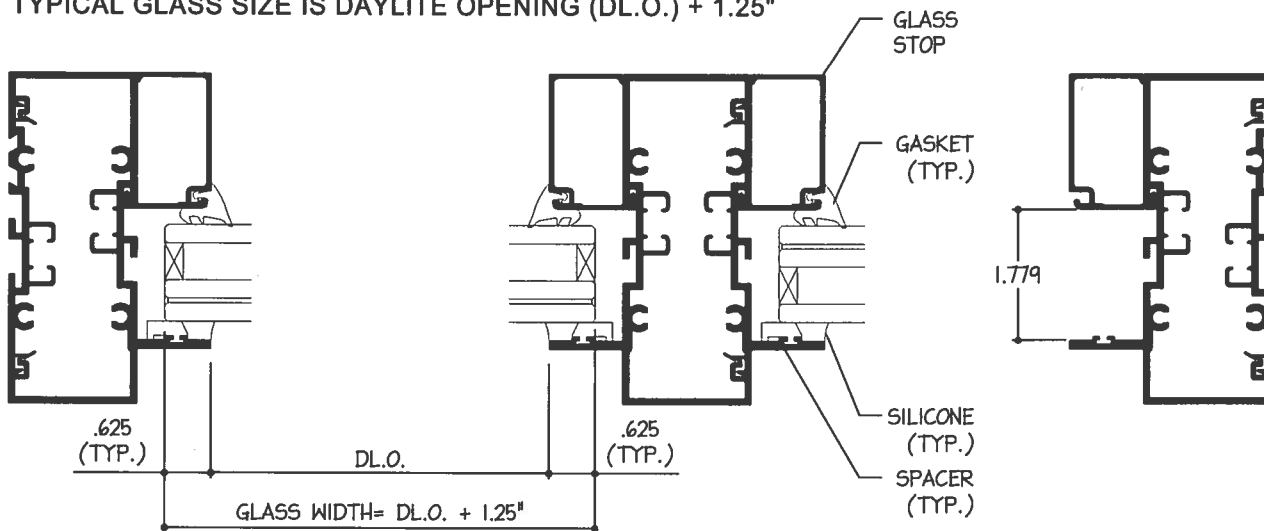
SMI-SB06
SETTING BLOCKS
AT 1/4 POINTS UNDER
THE GLASS (TYP.)

090 SYSTEM

GLAZING: 1 5/16" THK. LAM. / INSULATED GLASS

The SMI-090 has two variable glass stop locations. When glazing with 1 5/16" laminated hurricane resistant glass, use the back glass stop setting. With this setting, the glazing pocket measures approximately 1 13/16" in width.

TYPICAL GLASS SIZE IS DAYLITE OPENING (DL.O.) + 1.25"



NOMINAL INFILL THICKNESS	EXTERIOR GASKET	INTERIOR GASKET
1 5/16"	SMI-G07	SMI-G01
1 5/16"	SMI-G13	SMI-G01

EXTERIOR GLAZING GASKETS:



SMI-G07

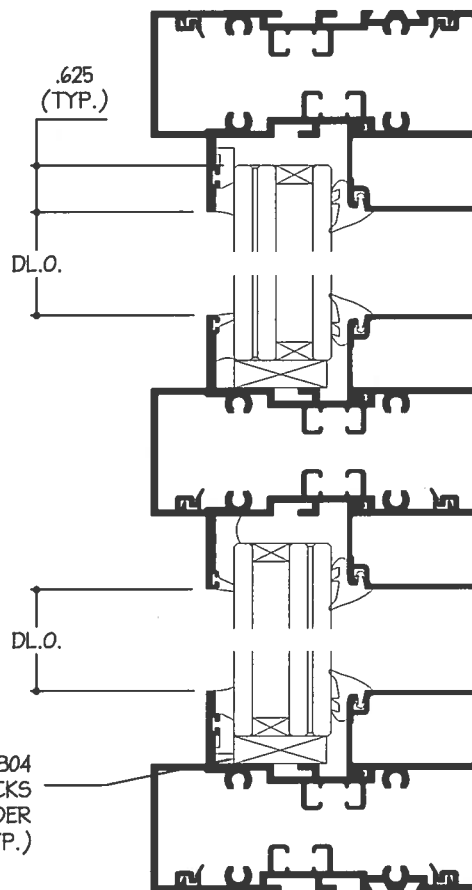


SMI-G13

INTERIOR GLAZING GASKET:



SMI-G01



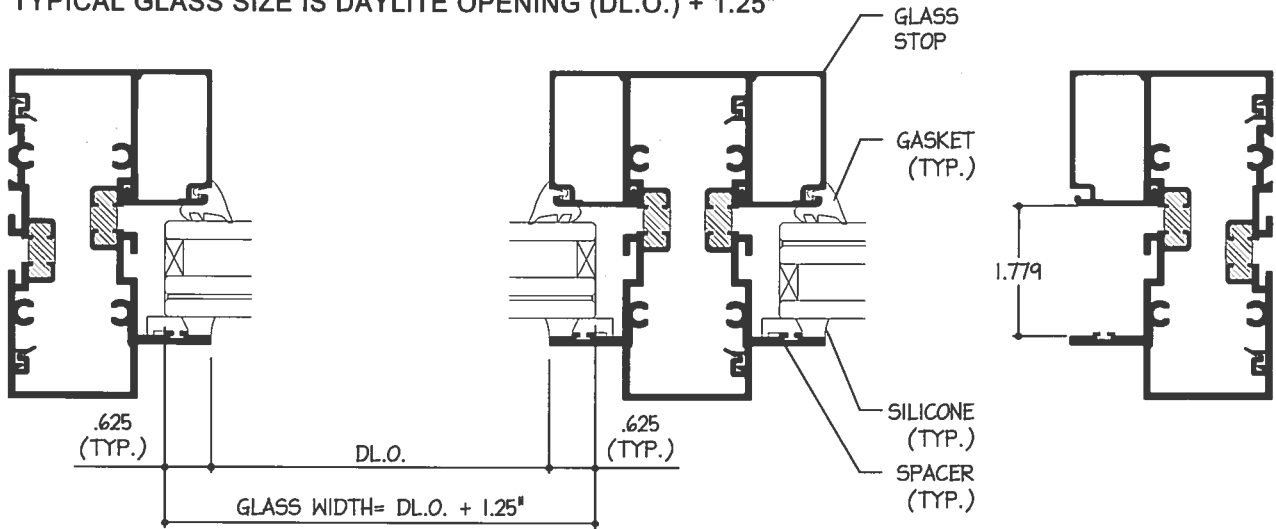
INSTALLATION INSTRUCTIONS

090 SYSTEM

GLAZING: 1 5/16" THK. LAM. / INSUL. GL. THERMAL BARRIER

Aldora's SMI-090 system has an optional thermal break for energy performance. Please specify your thermal break requirement when ordering. The thermal break is most efficient when used with insulated-laminated 1 5/16" hurricane resistant glazing. The glazing pocket measures approximately 1 13/16" in width.

TYPICAL GLASS SIZE IS DAYLITE OPENING (DL.O.) + 1.25"



GLAZING CHART FOR SMI-090 STOREFRONT SYSTEM		
NOMINAL INFILL THICKNESS	EXTERIOR GASKET	INTERIOR GASKET
1 5/16"	SMI-G07	SMI-G01
1 5/16"	SMI-G13	SMI-G01

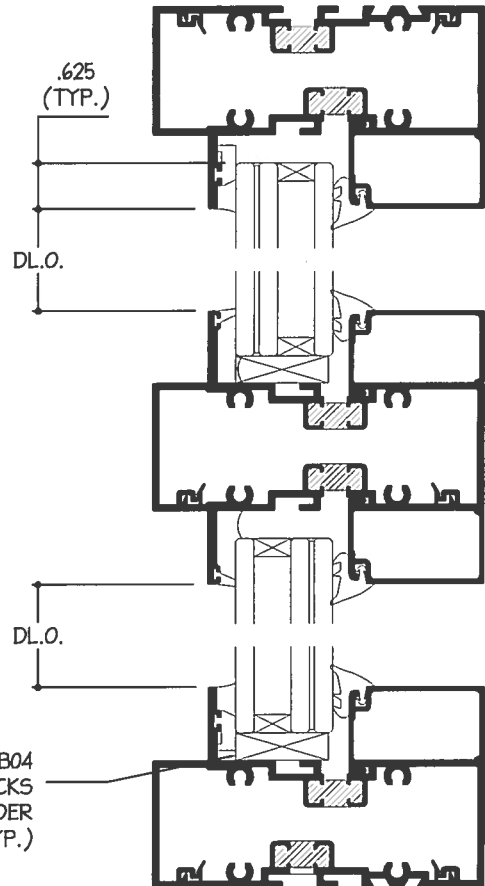
EXTERIOR GLAZING GASKETS:



INTERIOR GLAZING GASKET:



SMI-SB04
SETTING BLOCKS
AT 1/4 POINTS UNDER
THE GLASS (TYP.)



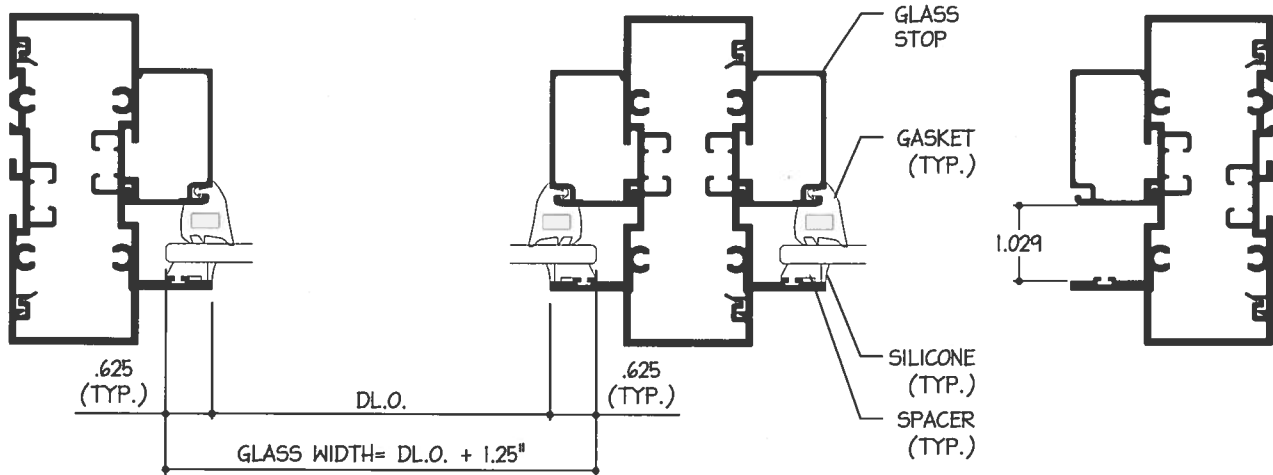
INSTALLATION INSTRUCTIONS

090 SYSTEM

GLAZING: 1/4" THK. TMP. NON-IMPACT GLASS

The SMI-090 system can be glazed using 1/4" tempered glass. Use the front glass stop setting creating 1 1/16" wide glazing pocket. This glass type requires the SMI-G07 gasket on the exterior and the SMI-G08 gasket on the interior.

TYPICAL GLASS SIZE IS DAYLITE OPENING (DL.O.) + 1.25"



GLAZING CHART FOR SMI-090 STOREFRONT SYSTEM		
NOMINAL INFILL THICKNESS	EXTERIOR GASKET	INTERIOR GASKET
1/4"	SMI-G07	SMI-G08

EXTERIOR GLAZING GASKETS:



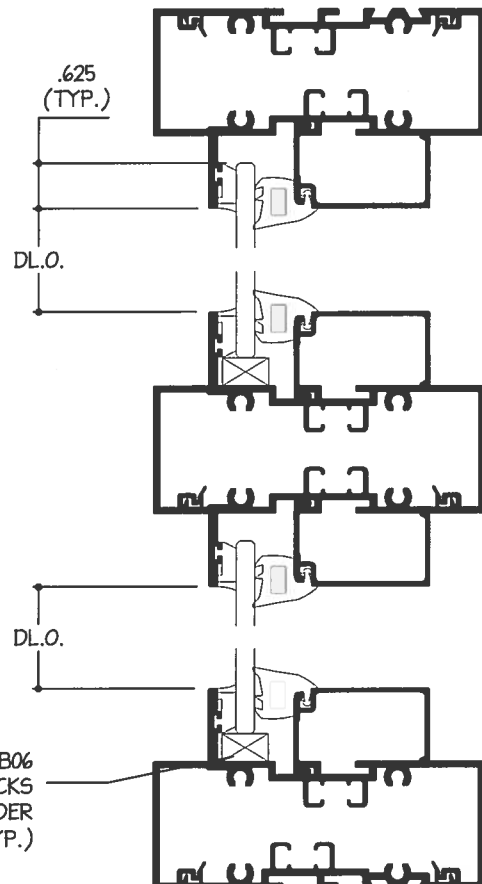
SMI-G07

INTERIOR GLAZING GASKET:



SMI-G08

SMI-SB06
SETTING BLOCKS
AT 1/4 POINTS UNDER
THE GLASS (TYP.)



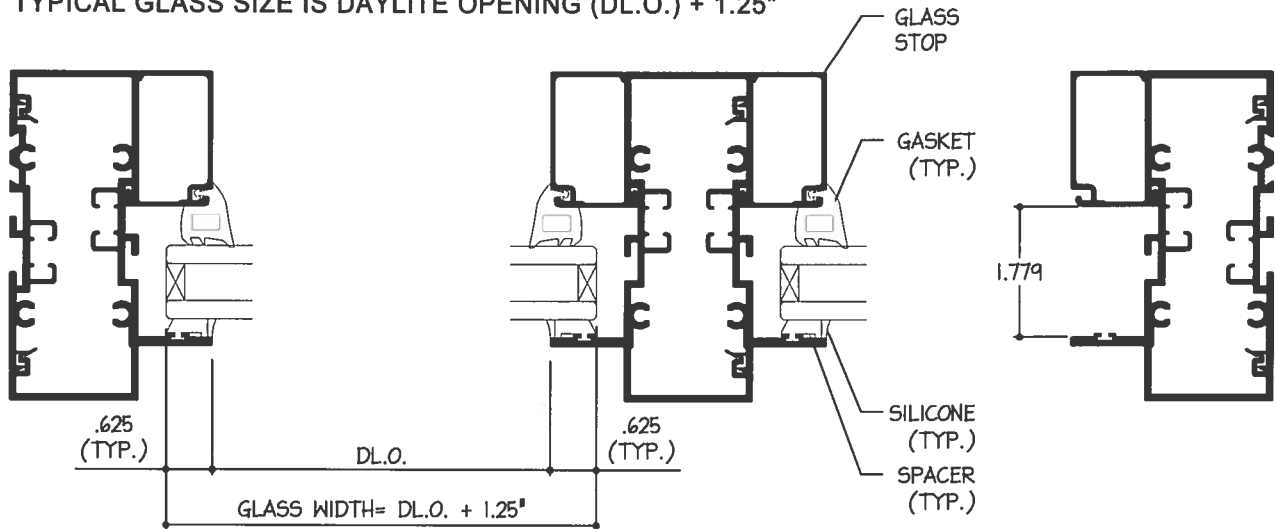
INSTALLATION INSTRUCTIONS

090 SYSTEM

GLAZING: 1" THK. I.G. NON-IMPACT GLASS

Aldora's SMI-090 system can accept a 1" IGU (Insulated Glass Unit). When glazing with 1" IG, use the back glass stop setting location. This will create a 1 13/16" wide glazing pocket. Use the SMI-G07 (Exterior) and the SMI-G08 (Interior) gaskets to secure the glass in place.

TYPICAL GLASS SIZE IS DAYLITE OPENING (DL.O.) + 1.25"

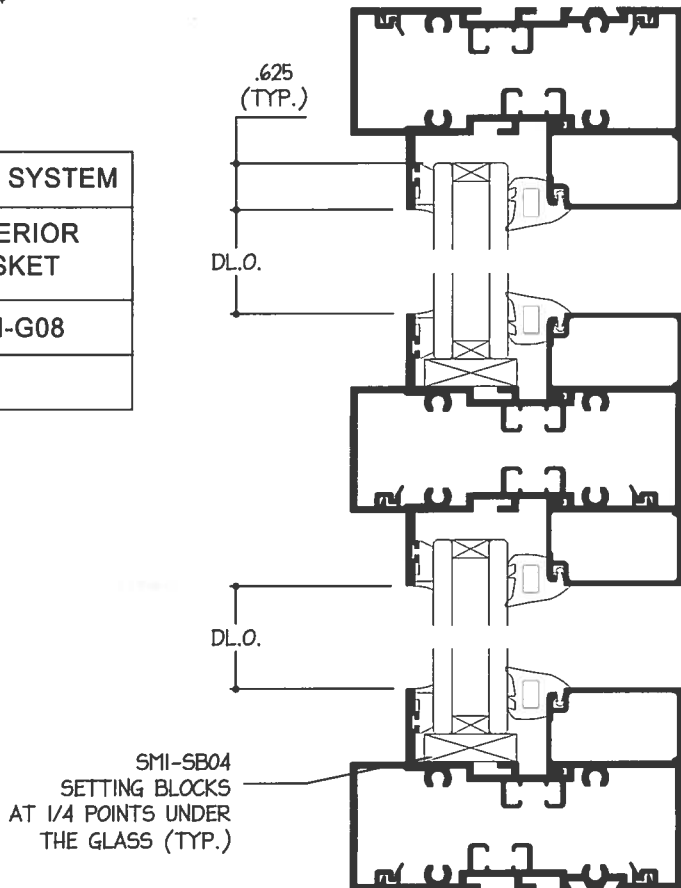


NOMINAL INFILL THICKNESS	EXTERIOR GASKET	INTERIOR GASKET
1"	SMI-G07	SMI-G08

EXTERIOR GLAZING GASKETS:



INTERIOR GLAZING GASKET:



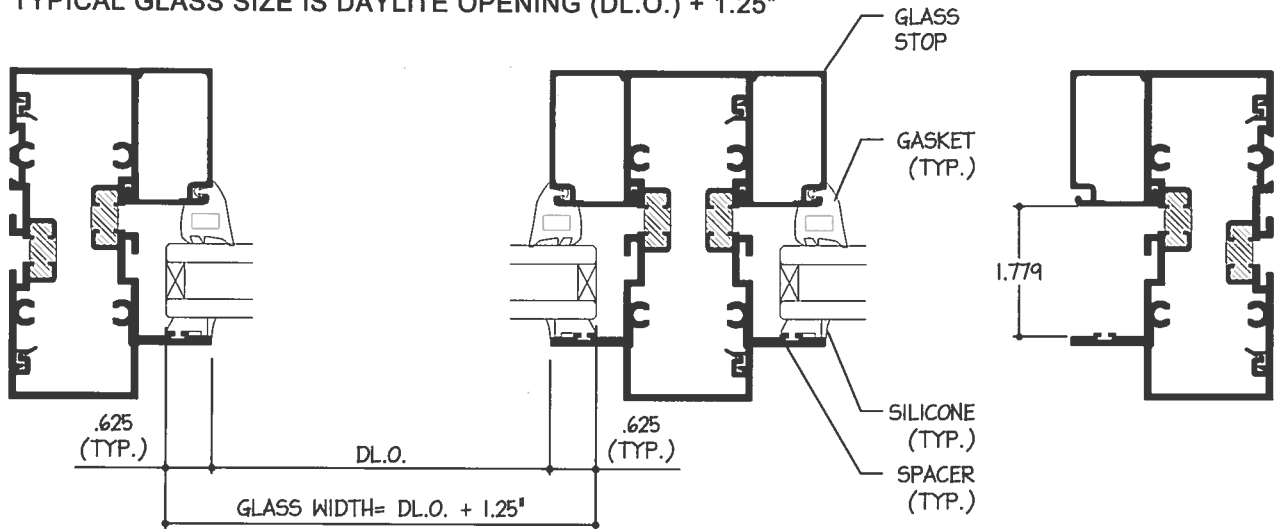
24 INSTALLATION INSTRUCTIONS

090 SYSTEM

GLAZING: 1" THK. I.G. NON-IMPACT GL. THERMAL BARRIER

The SMI-090 system can also be thermally broken for conditions requiring superior energy performance. When glazing with a 1" IGU (Insulated Glass Unit), use the back glass stop setting. This will provide a 1 13/16" glazing pocket. The G7 gasket (exterior) and the G08 (interior) will secure the glass in place.

TYPICAL GLASS SIZE IS DAYLITE OPENING (DL.O.) + 1.25"



GLAZING CHART FOR SMI-090 STOREFRONT SYSTEM		
NOMINAL INFILL THICKNESS	EXTERIOR GASKET	INTERIOR GASKET
1"	SMI-G07	SMI-G08

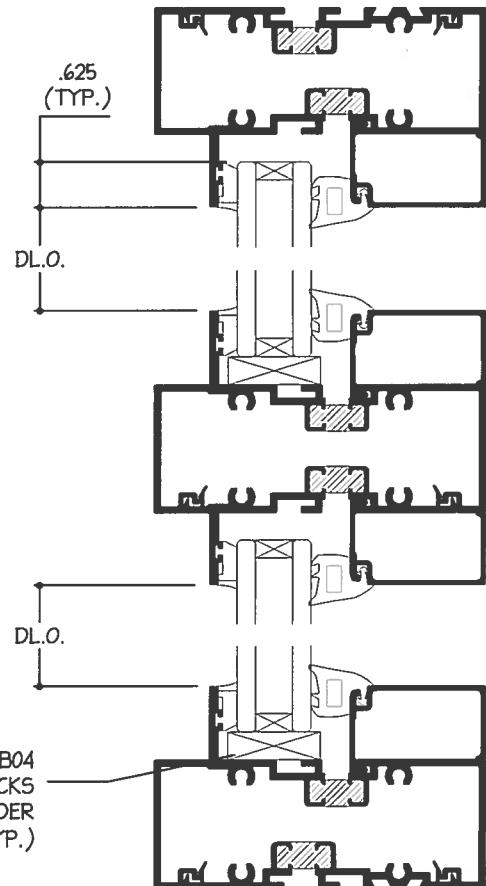
EXTERIOR GLAZING GASKETS:



INTERIOR GLAZING GASKET:



SMI-SB04
SETTING BLOCKS
AT 1/4 POINTS UNDER
THE GLASS (TYP.)



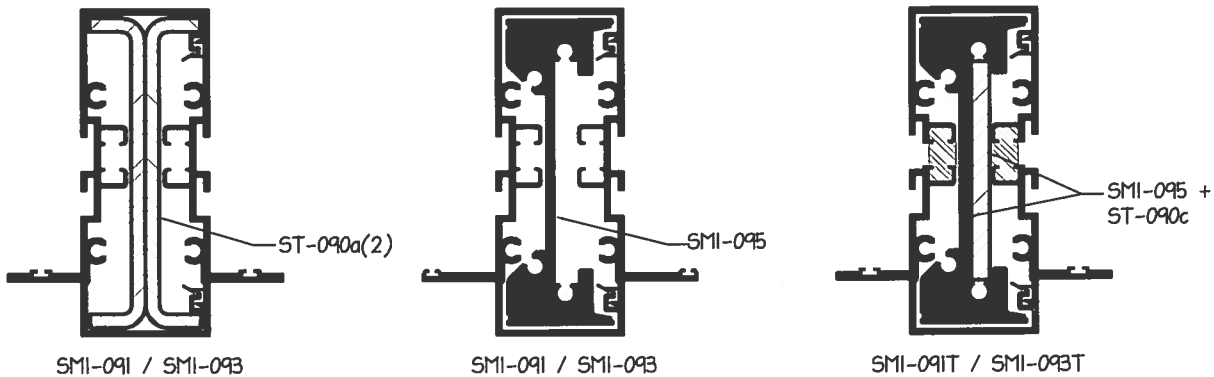
INSTALLATION INSTRUCTIONS

The 090 System has multiple reinforcement options depending on the size of the units and the design pressures required. The reinforcements must run the entire length of the vertical member. Please consult with your Aldora representative to ensure you use the proper reinforcement.

All steel must be coated with a corrosion-inhibitor including any cut ends.

STEEL REINFORCEMENT CHART FOR 090 SYSTEM			
PART #	SPECS	MULLION PART #	UNANCHORED JAMB PART #
SMI-095	ALUMINUM REINFORCEMENT	SMI-091/093	SMI-091/094
		SMI-091T/093T	SMI-091T/094T
ST-090a	3/4" X 4 1/4" X 3/4" 3/16" THK. FORMED STL. CHANNEL	SMI-091/093	SMI-091/094
		SMI-091T/093T	SMI-091T/094T
ST-090c	1/4" X 3" STL. BAR	SMI-091/093	SMI-091/094
		SMI-091T/093T	SMI-091T/094T

STEEL REINFORCEMENT AT THE STANDARD MULLION (WHEN REQUIRED, REFER TO NOA'S CHARTS)



STEEL REINFORCEMENT AT THE UNANCHORED JAMB (WHEN REQUIRED, REFER TO NOA'S CHARTS)

