

Storefront Installation Guide General Notes:

1. Check Contract Documents and Shop Drawings. Understand and clarify any Field Verify Notes and approvals of drawings and products to be familiar with the project. Installation instructions are intended to be a reasonable guideline for installation of product as based on testing and common conditions. Conditions on a project may vary and deviations or special instructions should be defined in the Shop Drawings. Shop Drawings should take precedence and define project specific product and installation.
2. All materials need to be inventoried to be certain everything required for installation is accounted for.
3. Materials need to be installed plumb, level and true.
4. Work from project defined benchmarks like center column lines, finished floors, or mullion spacing as defined by the Architectural drawings and the General Contractor.
5. All sealants need to be compatible with all materials. The Glazing Contractor and /or General Contractor are responsible for supplying sealants and submitting any sealant compatibility and performance documentation.
6. Isolation of dissimilar materials, for example, "Aluminum and uncured Concrete," should be prepared using bituminous paint or zinc chromate coating or approved equal.
7. Protection and cleaning of materials are the responsibility of the Glazing and General Contractors. (Reference AAMA documentation, and care and maintenance).
8. Diversity of Federal State and local Building Codes are the responsibility of the Architect, Owner and Customer to interpret compliance for the fenestration products used on the project. Boyd Aluminum is only a material supplier.
9. Boyd Aluminum is the material supplier of the fenestration product defined in the drawings and contract documents. Only fasteners and accessories within the system are supplied. Anchors, Sealants and Fasteners to the surrounding conditions should be defined on the shop drawings and normally the responsibility of the Glazing Contractor.
10. Due to changing fenestration parameters and evolving product lines, Boyd Aluminum reserves the right to change detailing and documentation commensurately without notification.

Boyd Center Set Historical Storefront is available in a thermal systems only. This system is designated BH01, and uses the screw spline fabrication method.

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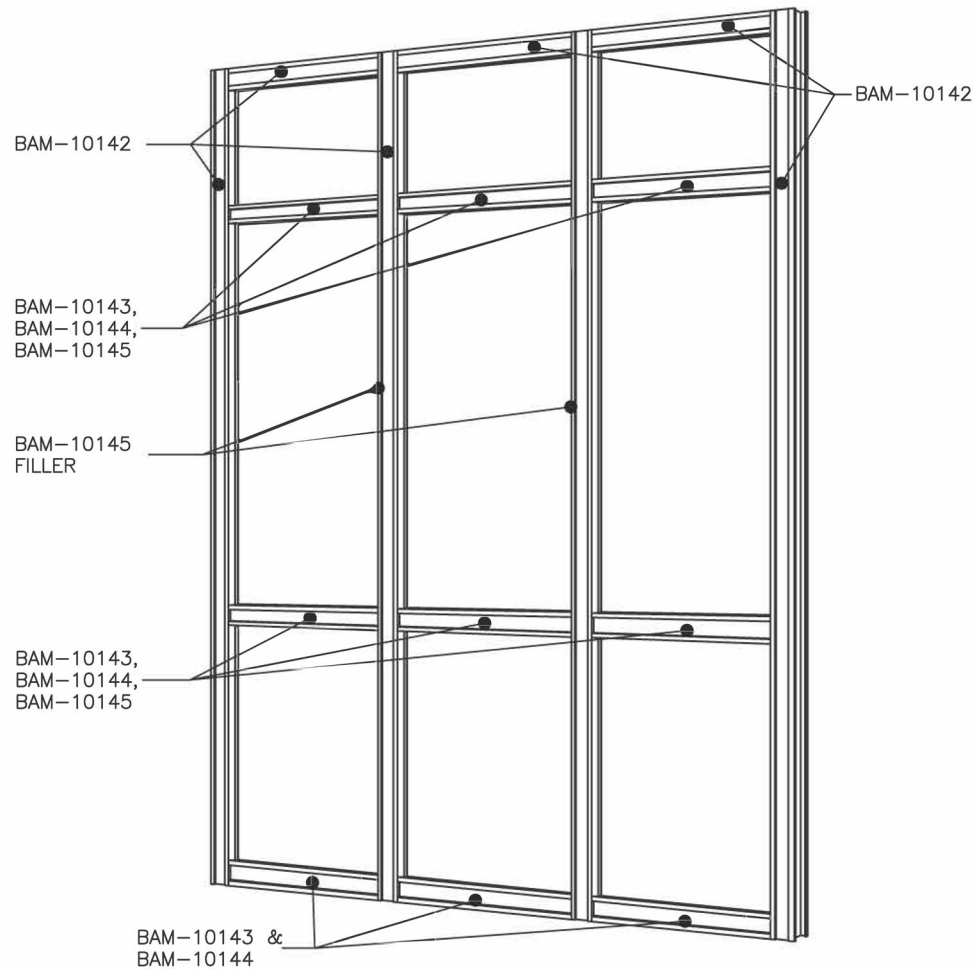


Figure: A

This illustration (Figure: A) shows a typical glazed elevation for the Boyd BH01 system.

Head - 10142

Horizontals – 10143\10144\10145

Sills – 10143\10144

Jambs - 10142

Mullions – 10142\10145

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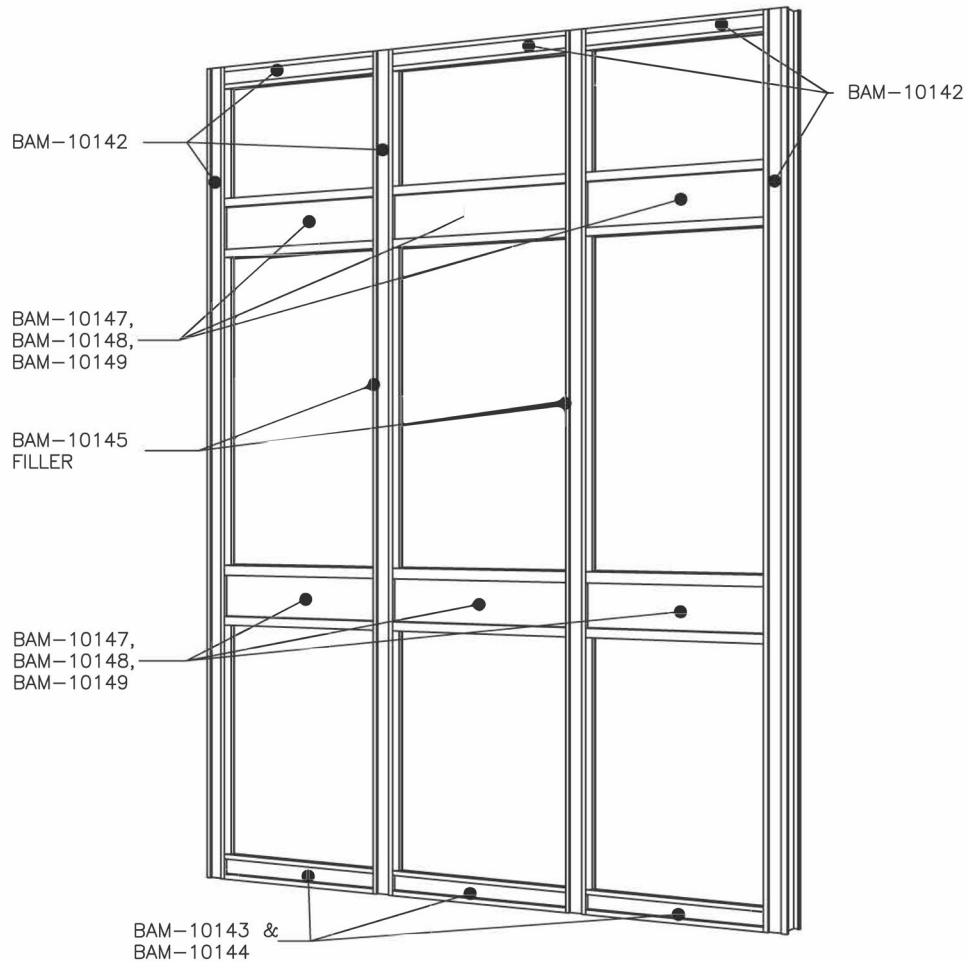


Figure: B

This illustration (Figure: B) shows a normal glazed elevation for the Boyd BH01 system with the wider horizontals.

Head - 10142

Horizontals – 10147\10148\10149

Sills – 10143\10144

Jambs - 10142

Mullions – 10142\10145

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Storefront Frame Fabrication

Step 1. Measure the Opening

- Measure the width of the opening at the top, middle, and bottom of the opening and use the smallest length to calculate your frame width.
- Then measure the height of the opening along several places on the length of the opening and use the smallest height to calculate your frame height.
- Make sure to allow extra clearance if necessary for shimming and sealant for building tolerances and movement per project requirements.

Step 2. Verticals cuts

- Verticals are the height Frame Size, (FS) - .500" to place on Sub sill.
- Verticals typically run through.

Step 3. Cut the Sub Sill to Size

- The sub sill is a horizontal that runs across the entire base of the opening to collect and expel water from the system.
- Cut your Sub Sill to the frame width figured in Step 1+any widths you allowed for shimming and sealant.
- Minimum width of sub sill is Frame Size, (FS) + .25".
- Sub Sills longer than 24 feet long must be spliced together. Expansion may require more frequent splicing, and expansion mullions per project requirements.

Step 4. Horizontal Cuts

- Cut horizontal members to Day Light Opening, (DLO).
- Cut glass stops to DLO-.062".

Step 5. Drill Assembly Holes on Vertical Members

- Screw Spline
 - Use a .201 diameter #7 drill to drill clear holes on screw spline installation



Architectural section drawing of a building facade showing three window units. The drawing includes detailed dimensions and labels for each unit.

Top Unit (BAM-10145):

- Overall width: 3"
- Side offsets: .4375" (each)
- Top offset: .75"
- Bottom offset: .75"

Middle Unit (BAM-10142):

- Overall width: 3"
- Side offsets: .75" (each)
- Top offset: .375"
- Bottom offset: .375"
- Vertical dimensions from sill: 2.25", .25", 1.5", .5", 2.5"

Bottom Unit (BAM-10143):

- Overall width: 3"
- Side offsets: .75" (each)
- Top offset: .375"
- Bottom offset: .375"
- Vertical dimensions from sill: 2.25", .25", 1.5", .5", 2.5"

Labels and Dimensions:

- BAM-10145**, **BAM-10142**, **BAM-10143**
- .201 DIA. TYPICAL ON VERTICAL**
- LOCATE TOP FROM SILL** (multiple instances)
- D.L.O.** (Double Line Offset)

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Step 6. Drill Weep Holes in Sub Sill and Apply End Dams.

- Drill 2 weep holes .25" diameter 24" on center at Sub sill. (Min. 2 per lite, 6" from verticals).
- Before fastening in the end dam make sure you butter sealant to the end of the sub sill so it bonds with the end dam.
- Screw the end dam to the sub sill using two #10 x 1/2 PHL FH SMS.
- Make sure after fastening in the end dam you apply sealant on the head of the screws to "Tool and Seal All Openings."

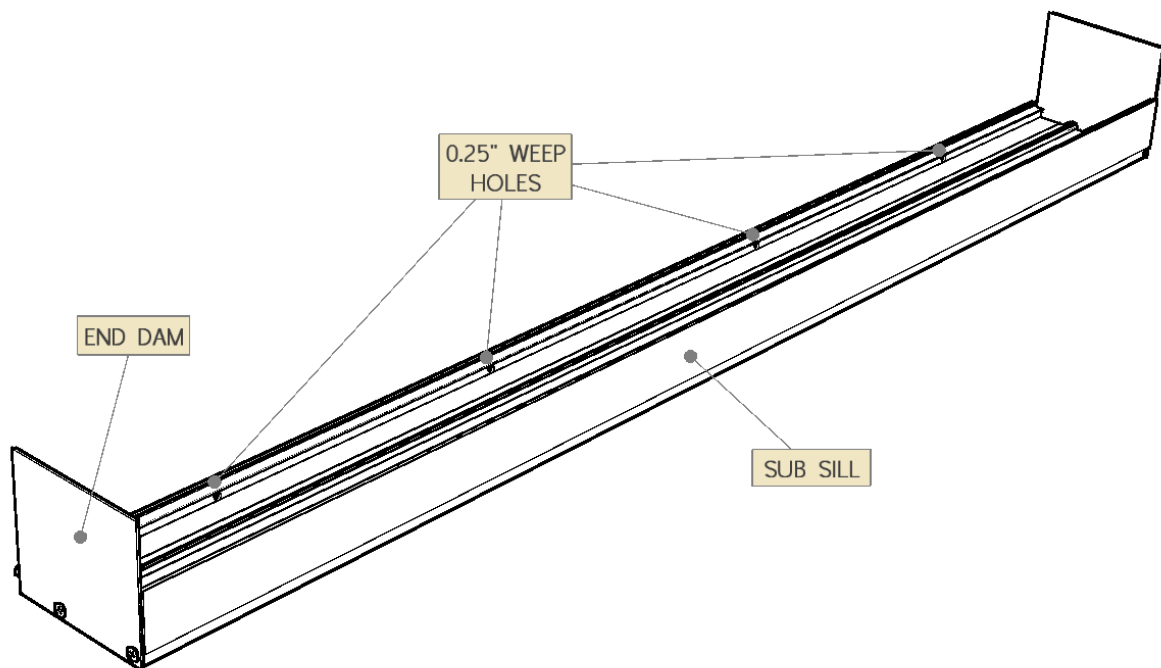


Figure: E

Storefront Installation

Step 1. Splicing the Sub Framing.

- Splice the Sub framing as required per job site and or thermal expansion requirements.
- Splice sleeves are required at splice joints.
- As required use thin silicone splice sheet material.
- Lay a bead of sealant in the expansion joint and around the edge of where the splice sleeve will be placed, positioned and embedded.
- After the splice sleeve is in place apply additional sealant around the perimeter of the sleeve. (Tool and seal all openings).

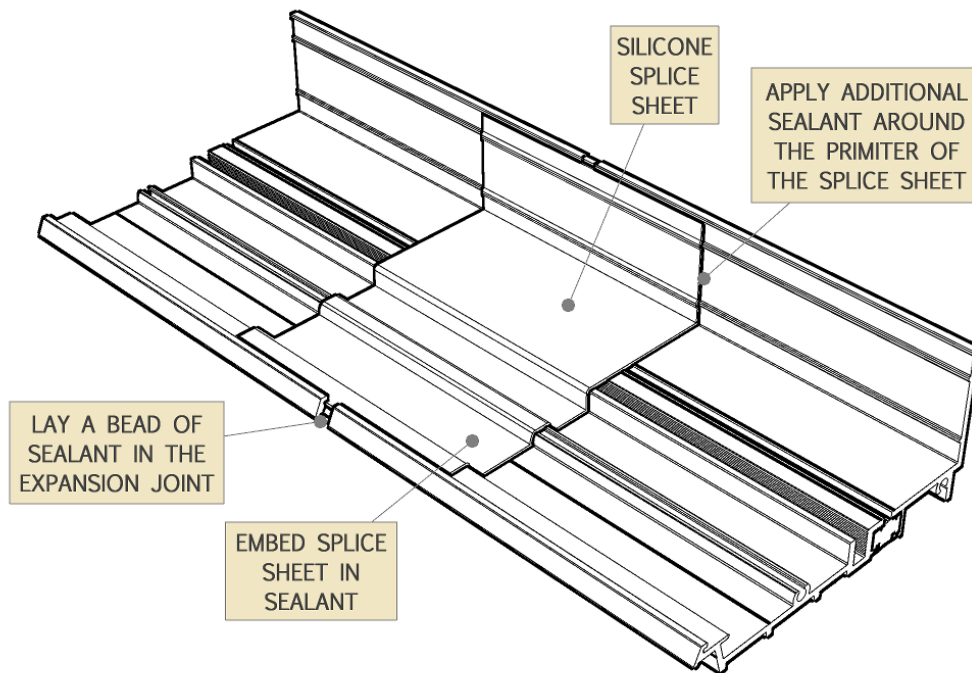


Figure: F

Step 2. Anchor and Seal the Sub Sill.

- Start installation at the wall jamb, center or benchmark.
- Apply silicone to the end dam contact areas.
- Set the sub sill into place and temporarily shim both end dams to push it tight against the jamb.
- Shim and seal unit as needed sealing all openings.
- Anchor the sub sill per project requirements and drawings. Make sure to cap and seal the anchor bolts with sealants and do not drill through the thermal barrier.
- Anchor holes should be loose or slotted to allow for job site expansions.
- Apply and tool a bead of sealant along the back leg of the sill from end to end, across the sub sill.
- Inspect and seal all openings.

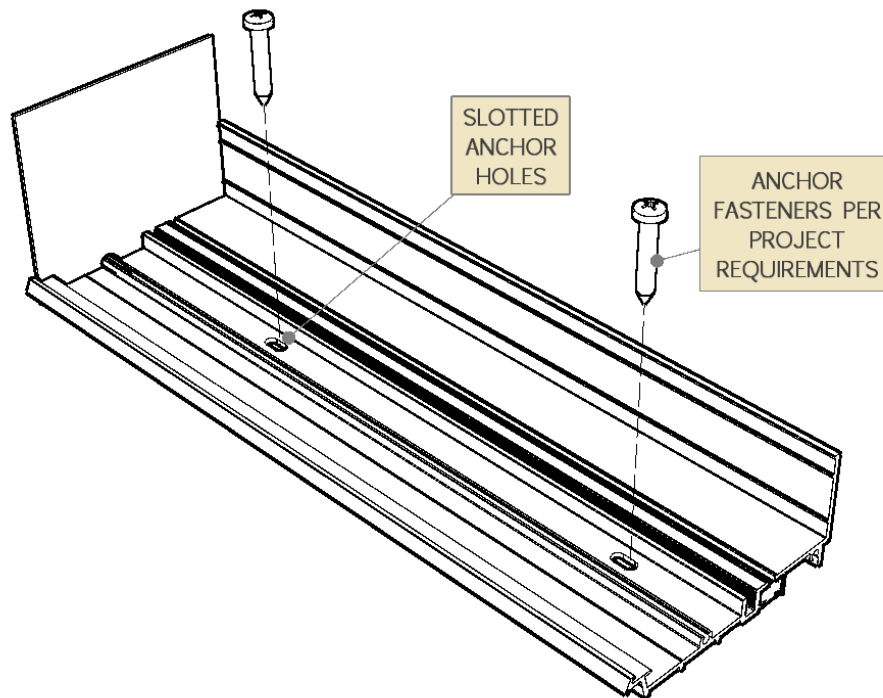


Figure: G

Step 3. Attach the Horizontals to Verticals.

- Fill the gasket reglets on the vertical between the Horizontal's gasket reglets. Be careful not to get sealant into the area of the gasket reglet to be used.
- Butter the contact edges of the horizontals with sealant.

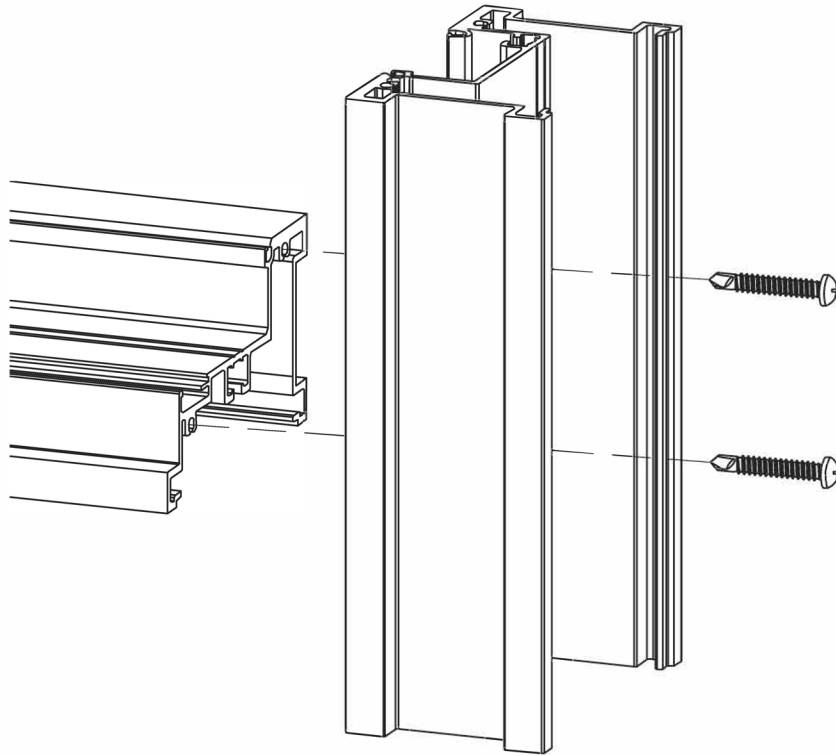


Figure: H

- Secure horizontals to verticals using #10 x 1-1/4 PHL PH SMS SS Assembly Screws.
- Start with jamb assembly.
- Make sure one side is a male vertical and the other side is a female vertical.
- Each lite must include one deep pocket and one glazing stop (Tool and seal all openings).

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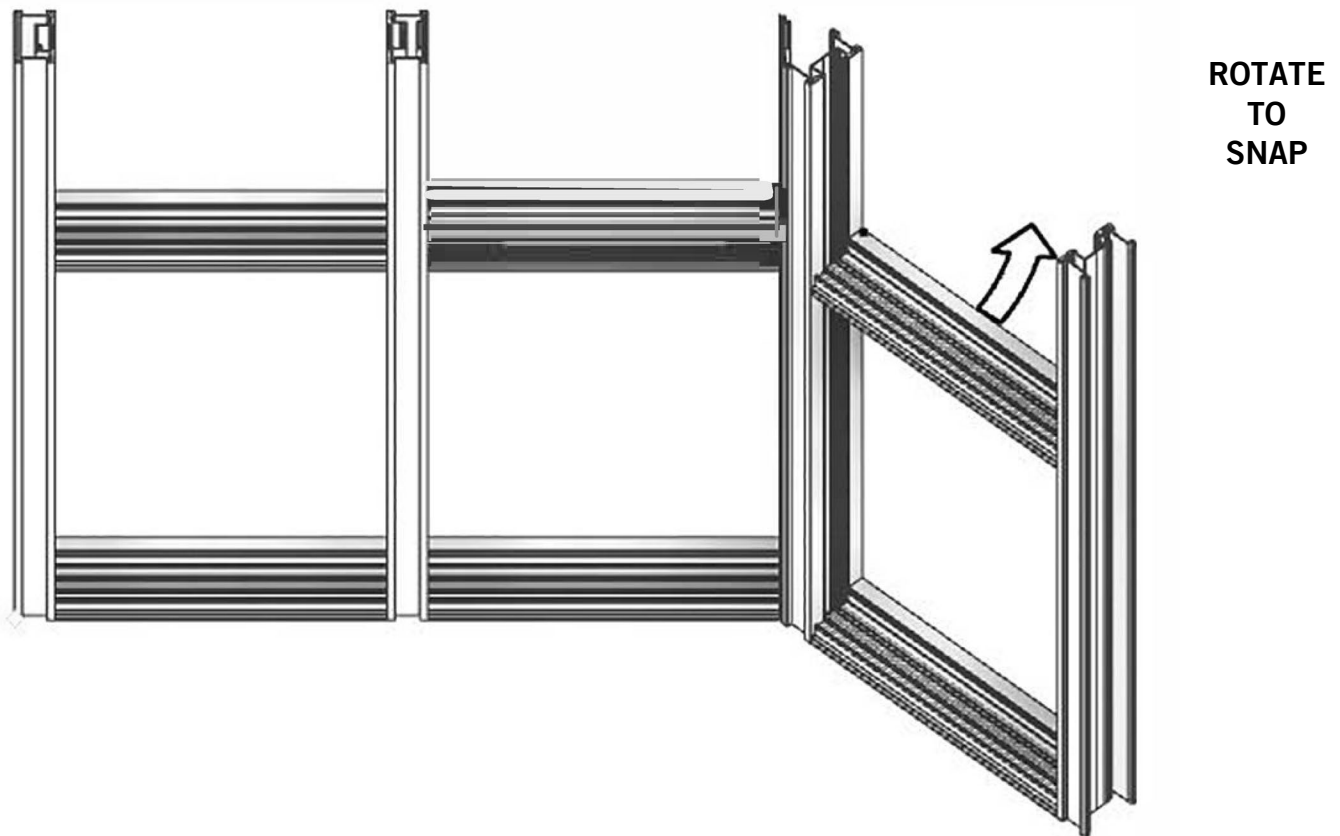
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Step 6. Install the Units.

- Butter the end of the verticals with sealant.
- Each unit must have one vertical deep pocket to allow for glazing. Remember to never have two shallow pockets facing each other.
- Apply a bead of sealant on the sub sill flashing leg.
- Begin Installation at one jamb and work toward the other tilting the unit and setting it on the flashing. Then stand the unit up, snap it together and continue to anchor in place.
- If using shear block assembly, set the units into the opening.

**Figure: K**

TOGETHER

- Apply shims as required (Tool and seal all openings).
- At least a 3" frame filler at all anchor locations is recommended.
- Secure through glazing pocket and filler and anchor to the opening.
(Caution anchors in glazing pockets may require Countersinking).
- Make sure you refer to shop drawings for appropriate anchor locations.
- Cap seal and apply perimeter sealant per sealant manufacturer's instructions.
- Tool and seal all openings.

Glazing

Glazing sizes: (Always round glass down to the nearest .062")

$$\text{BH01 Glazing Size} = \text{DLO} + .875"$$

Step 1. Seal Horizontals to Verticals.

- Be certain the glazing reglets are filled in between Horizontal glazing reglets in the unused area.
- Butter the end of the verticals with sealant.

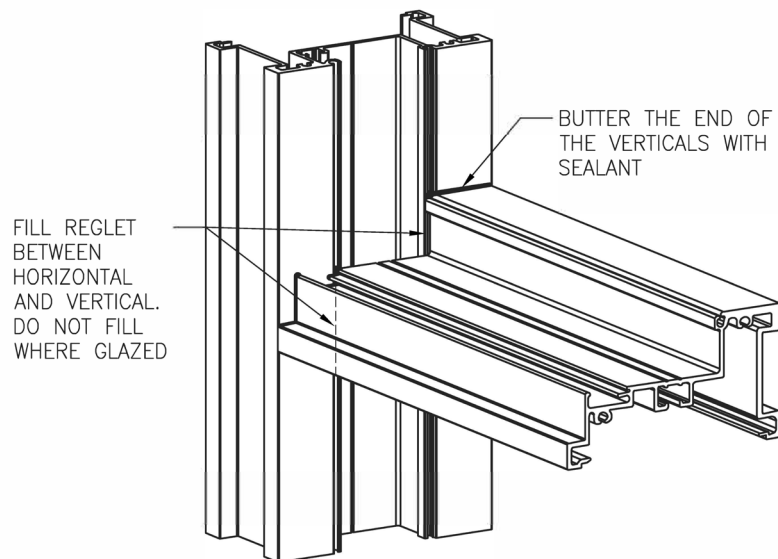


Figure: L

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Step 2. Install the Water Deflectors.

- Peel paper and apply water deflector in place.
- Seal the edges of the deflector on all sides except the edge facing the pocket and to the front to allow drainage to flow down the Vertical to the exterior.
- Allow sealant to cure per sealant manufacturer's instructions.
- Water deflectors are not required at the head or sill.

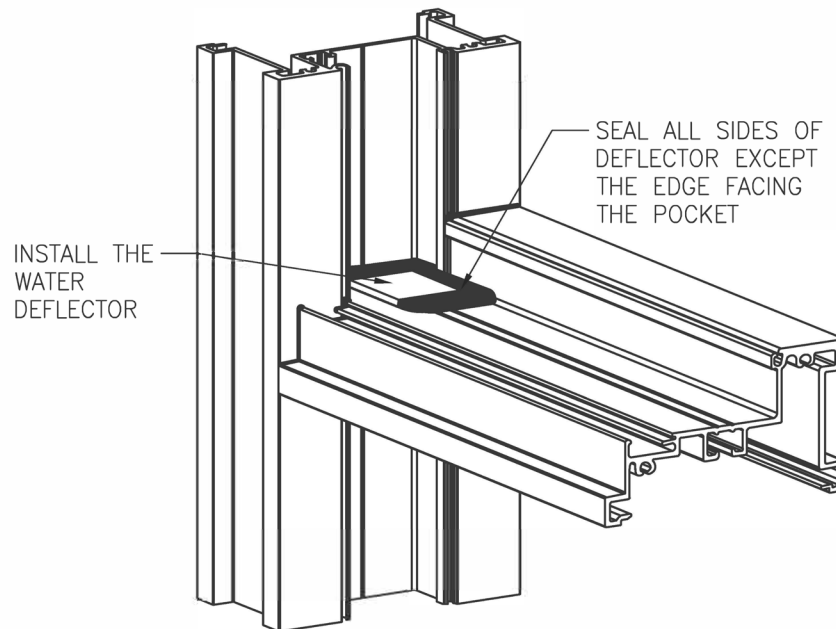


Figure: M

Step 3. Install Glass.

- Make sure to check dead load charts and shop drawings for correct setting block locations.
- Make sure glazing gasket reglets are free and clear of excess sealant and debris.
- Put two setting blocks in the glass pocket (2 per lite) for the glass to sit on at 1/8 to 1/4 point locations, or as defined on shop drawings.
- Put 1/8" "W" block in shallow side pocket.
- Center set glass on setting blocks (Note: Step 4 – Pressing against the previously installed gaskets if required) (Hint 3" spacer pieces of gasket assist in holding glass in center opposite the first side while installing gaskets).
- Snap on the glass stop.
- Stretch half inch anti-walk block and insert from the exterior at the middle of the lite in deep pocket verticals.

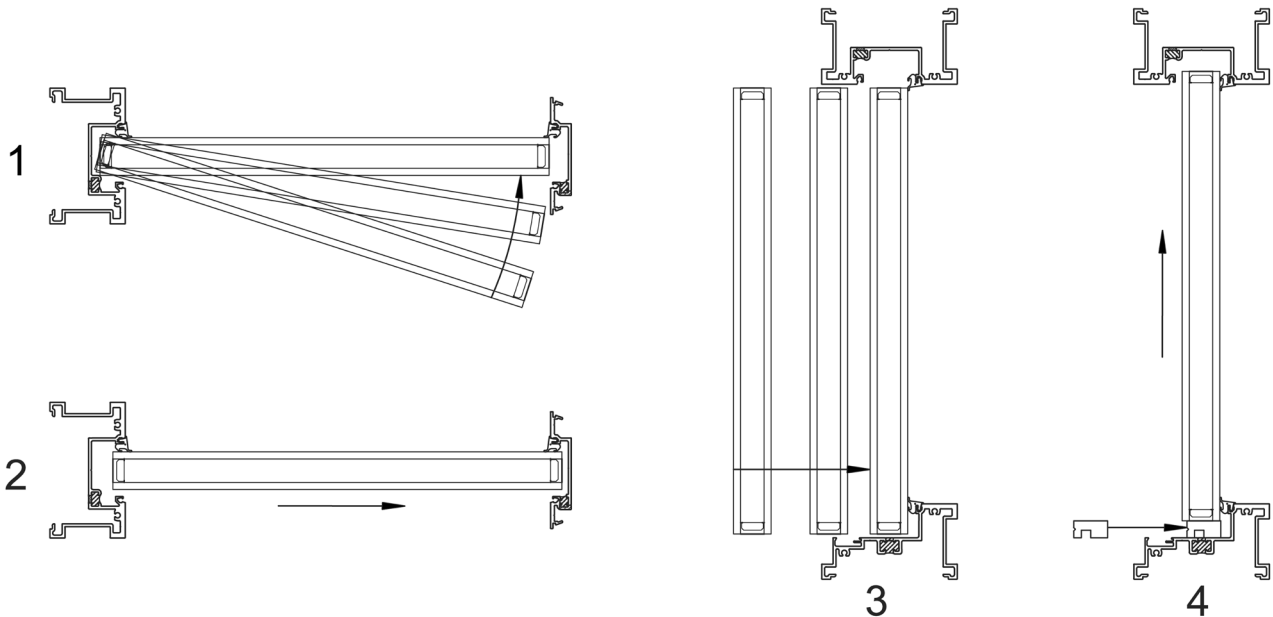


Figure: N

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Step 4. Cut and Install Gaskets.

- The gaskets should be DLO X 1.02 of the member it's installing in (Note: It may be necessary to install gasket in one side prior to setting glass, if installing at a spandrel area).
- Butter glazing reglet 1" horizontally and vertically.
- Install vertical gaskets first to run through.
- Begin installing the gasket at the top and bottom corners of verticals. (1) & (2)
- Work from the ends of the gasket and skip to the center. (3) Continue for each wave until the gasket is flush.
- Begin installing the gasket at the corners of horizontals. (4) & (5)
- Work from the ends of the gasket and skip to the center. (6) Continue for each wave until the gasket is flush.
- Seal horizontal gasket edges to vertical gaskets.
- Seal ends of inside glazed stops (Remove excess sealant).
- Remember to never stretch the gasket when installing it.

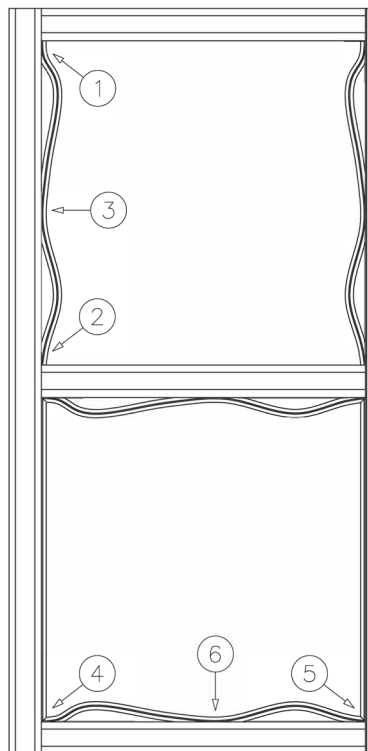


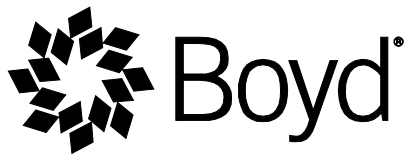
Figure: O

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Final Step

- Inspect finished product on interior and exterior. Repair any damaged seals (Tool and Seal all Openings).
- Remove excess sealant and clean system for presentation.

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