

INSTALLATION INSTRUCTIONS

UNIT GLAZE SYSTEMS SERIES TT601 WINDOW WALL WITH OPTIONAL SLAB COVER



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HANDLING, STORAGE, AND PROTECTION OF ALUMINUM

The following precautions are recommended to protect the material against damage. Following these precautions will help ensure early acceptance of your products and workmanship.

A. HANDLE CAREFULLY.

All aluminum materials at job site must be stored in a safe place well removed from possible damage by other trades. Cardboard wrapped or paper interleaved materials must be kept dry.

B. CHECK ARRIVING MATERIALS.

Check for quantity and keep records of where various materials are stored.

C. KEEP MATERIAL AWAY FROM WATER, MUD, AND SPRAY.

Prevent cement plaster or other materials from damaging the finish.

D. PROTECT THE MATERIALS AFTER ERECTION.

Protect erected frame with polyethylene or canvas splatter screen. Cement, plaster, terrazzo, other alkaline solutions, and acid based materials used to clean masonry are harmful to the finish. If any of these materials come in contact with the aluminum, immediately remove with water and mild soap.

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GENERAL INSTALLATION NOTES

RECOMMENDED GUIDELINES FOR ALL INSTALLATIONS:

- 1. REVIEW CONTRACT DOCUMENTS.** Check shop drawings, installation instructions, architectural drawings, and shipping lists to become thoroughly familiar with the project. The shop drawings take precedence and include specific details for the project. Note any **field verified** notes on the shop drawings prior to installing. The installation instructions are of a general nature and cover most conditions.
- 2. INSTALLATION.** All materials are to be installed plumb, level, and true. Install operable windows preglazed only.
- 3. BENCH MARKS.** All work should start from bench marks and/or column lines as established by the architectural drawings and the general contractor with guaranteed accuracy. Working from these datum points and lines determine:
 - a) The plane of the wall in reference to offset lines provided on each floor.
 - b) The finish floor lines in reference to bench marks on the outer building columns.
 - c) Mullion spacing from both ends of masonry opening to prevent dimensional build-up of daylight opening.
- 4. FIELD WELDING.** All field welding must be adequately shielded to avoid any splatter on glass or aluminum. Results will be unsightly and/or structurally unsound. Advise general contractor and other trades accordingly. All field welds of steel anchors must receive touch-up paint (zinc chromate) to avoid rust.
- 5. SURROUNDING CONDITIONS.** Make certain that construction 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 work.
- 6. ISOLATION OF ALUMINUM.** Aluminum to be placed in direct contact with uncured masonry or incompatible materials should be isolated with a heavy coat of zinc chromate or bituminous paint.
- 7. SEALANTS.** 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, cleaning/priming, tooling, adhesion, etc. It is the responsibility of the Glazing Contractor to submit a statement from the sealant manufacturer indicating that glass and glazing materials have been tested for compatibility and adhesion with glazing sealants, and interpreting test results relative to material performance, including recommendations for primers and substrate preparation required to obtain adhesion. The chemical compatibility of all glazing materials and framing sealants with each other and with like materials used in glass fabrication must be established. This is required on every project.
- 8. FASTENING.** Within the body of these instructions "fastening" means any method of securing one part to another or to adjacent materials. Only those fasteners used within the system are specified in these instructions. Due to the varying perimeter conditions and performance requirements perimeter and anchor fasteners are not specified in these instructions. For perimeter and anchor fasteners refer to the shop drawings or consult the fastener supplier.
- 9. BUILDING CODES.** Due to the diversity in state/provincial local, and federal laws and codes that govern the design and application of architectural products it is the responsibility of the individual architect, owner, and installer to assure that products selected for use on projects comply with all the applicable building codes and laws. U.S. Aluminum exercises no control over the use or application of its products, glazing materials, and operating hardware and assumes no responsibility thereof.
- 10. EXPANSION JOINTS.** Expansion joints and perimeter seals shown in these instructions and in the shop drawings are shown at normal size. Actual dimensions may vary due to perimeter conditions and/or difference in metal temperature between the time of fabrication and the time of installation. Gap between expansion members should be based on temperature at time of installation.
- 11. WATER HOSE TEST.** As soon as a representative amount of the wall has been glazed (500 square feet or 46.5m²) a water hose test should be conducted in accordance with AAMA 501.2 specifications to check the installation. On all jobs the hose test should be repeated every 500 square feet (46.5m²) during the glazing operation.
- 12. COORDINATION WITH OTHER TRADES.** Coordinate with the general contractor any sequence with other trades which offset curtain wall installation (i.e. fire proofing, back-up walls, partitions, ceilings, mechanical ducts, converters etc.)
- 13. CARE AND MAINTENANCE.** Final cleaning of exposed aluminum surfaces should be done in accordance with AAMA. 609.1 for anodized aluminum and 610.1 for painted aluminum.

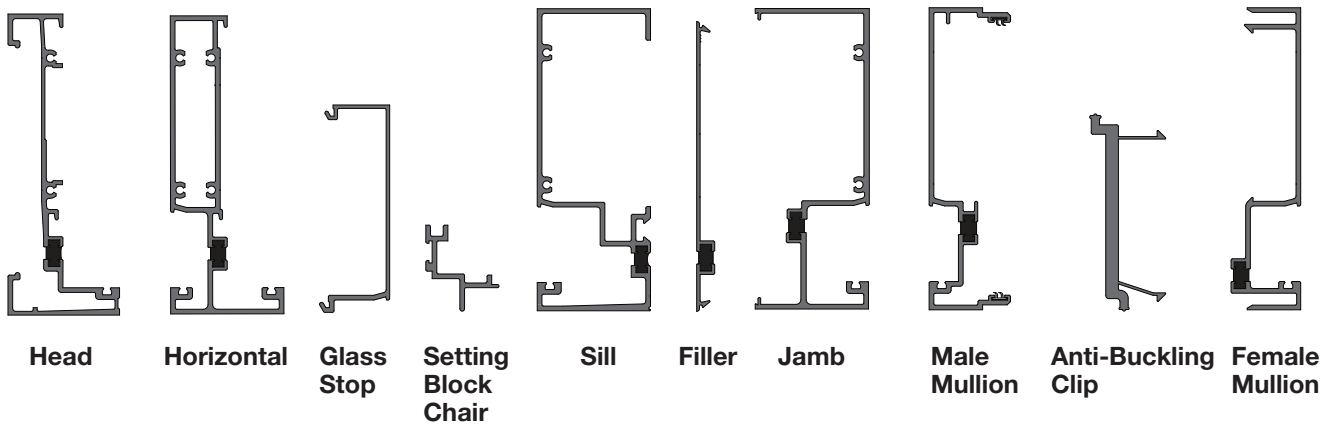
PRODUCT DESCRIPTION

Thank you purchasing the C.R. Laurence Co. Inc. Unit Glaze System. It is designed to install easily and efficiently. Each fully glazed panel is fabricated to specifications in the shop rather than on the job site. This gives the contractor access to in-house equipment and fixtures not available in the field. Once the Unit Glaze panels are assembled and glazed they are easily transported to the job where they are installed and sealed to the structure.

This Installation Manual covers the general procedures required for all Unit Glaze Systems.

PLEASE REVIEW THIS MANUAL THOROUGHLY BEFORE BEGINNING.

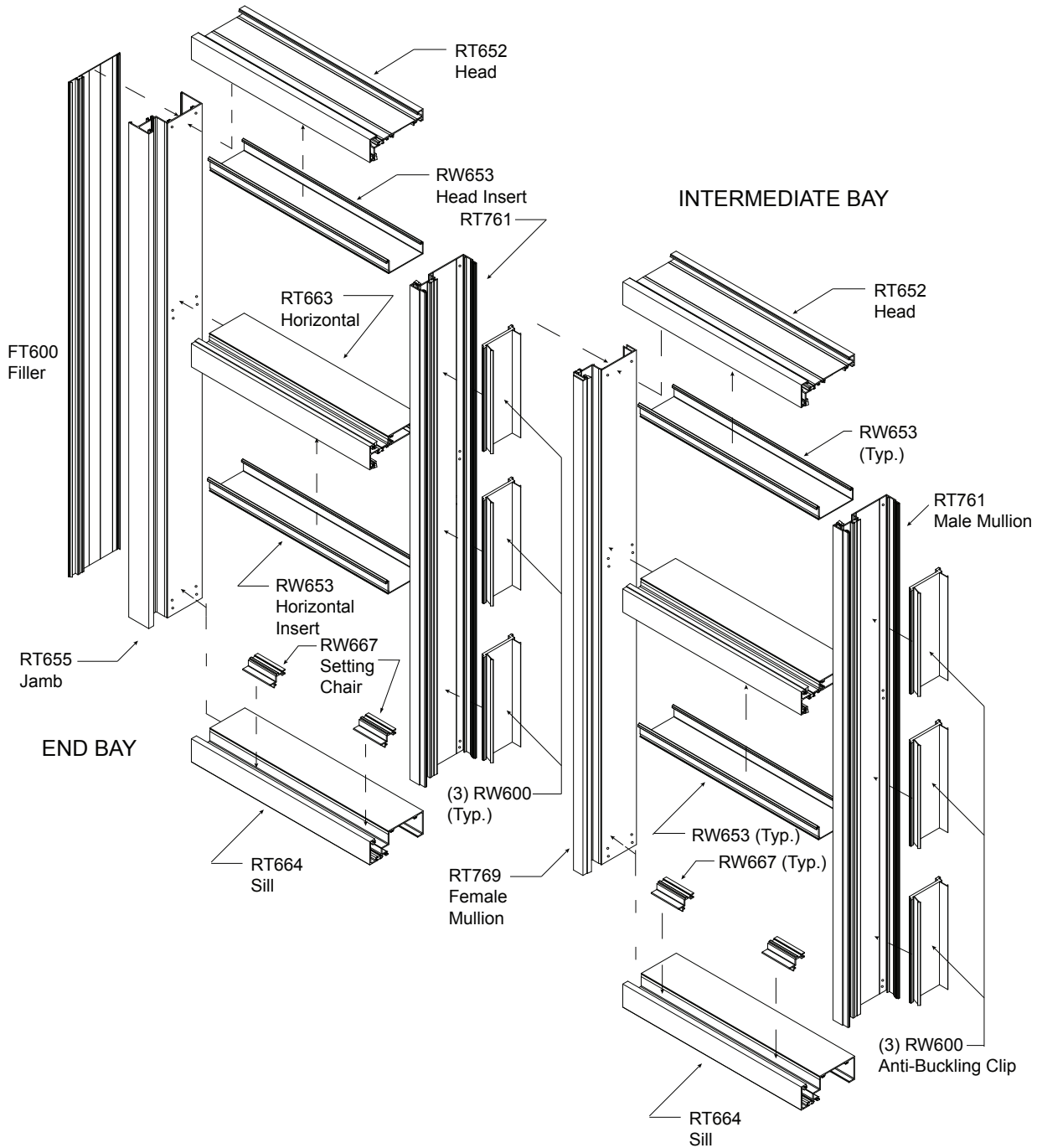
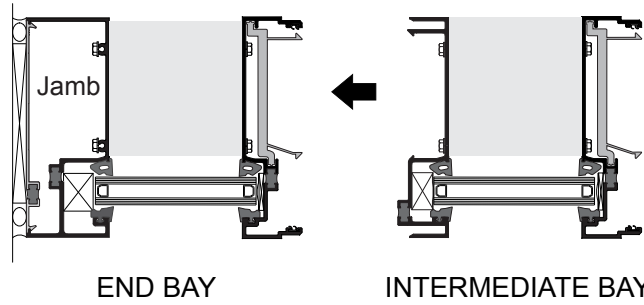
PARTS LIST - MAIN ASSEMBLIES



CAT. NO.	Description	CAT. NO.	Description	CAT. NO.	Description
DJ456	Drill Jig	RT664	Sill	RT663	Horizontal
EC801	End Dam	RT652	Head	RW667	Setting Block Chair
FT600	Jamb Filler	RT655	Jamb	SB663	Setting Block - Horizontal
NP425	Exterior Gasket	RW600	Stiffener - Anit-Buckling Clip	SB334	Setting Block - Sill
NP606	Interior Gasket	RT605	Sub Sill	WB452	"W" Edge Block
NP825	Head Stop Gasket	RT610	Compensating Head Channel	WD650	Water Diverter - Deep Pocket
RT769	Deep Pocket Vertical	RW612	Head Stop	WD652	Water Diverter - Shallow Pocket
RT761	Shallow Pocket Vertical	RW653	Glass Stop		

NOTE: For Slab Condition See Page 18 DETAIL J

PARTS OVERVIEW - MAIN ASSEMBLIES



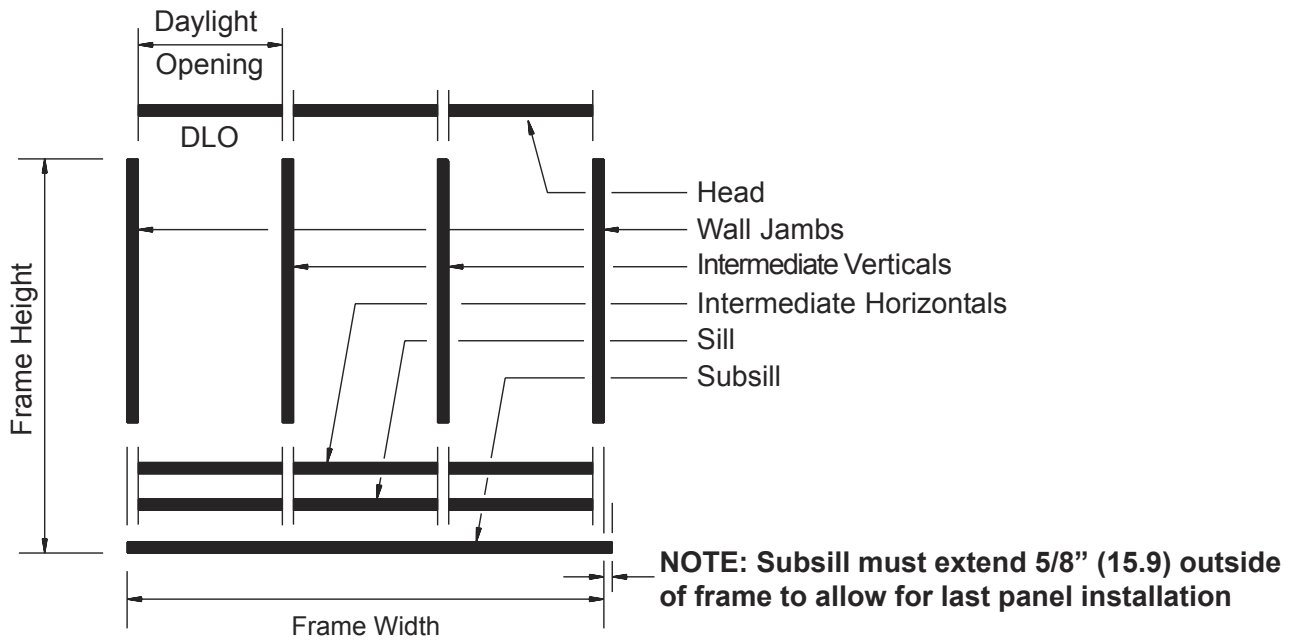
FRAME FABRICATION

1. Measure rough opening to determine frame width and height dimension. Allow a minimum clearance of 5/8" (15.9mm) at header and 5/8" (15.9mm) at wall jambs and subsill. Extra clearances may be necessary to accommodate building tolerances.
2. Cut members to length:

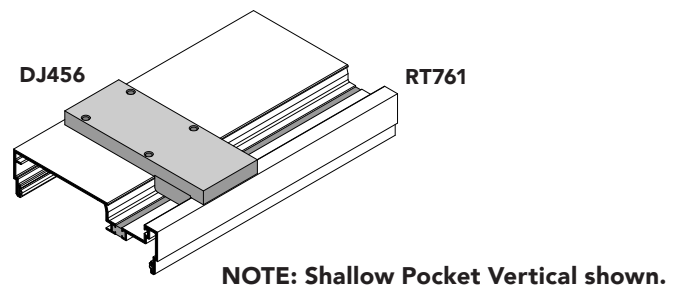
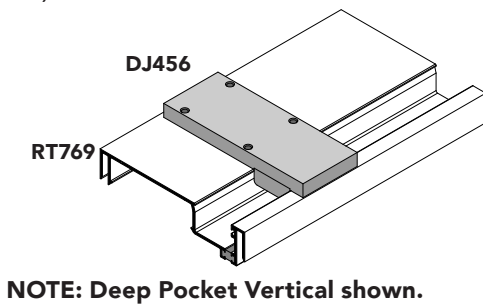
Subsill length = Overall Frame Width plus 5/8" (15.9mm). Subsill runs through. Use splice sleeves at splice joints. If opening exceeds 24' (7.32m) in width. If entrances occur subsill butts against door jambs.

Vertical length = Frame Height minus 5/16" (7.9mm). Verticals run through.

Horizontal length = Daylight Opening. Horizontals run between verticals. Cut horizontal glazing beads 1/32" (0.8mm) undersize for easier installation.

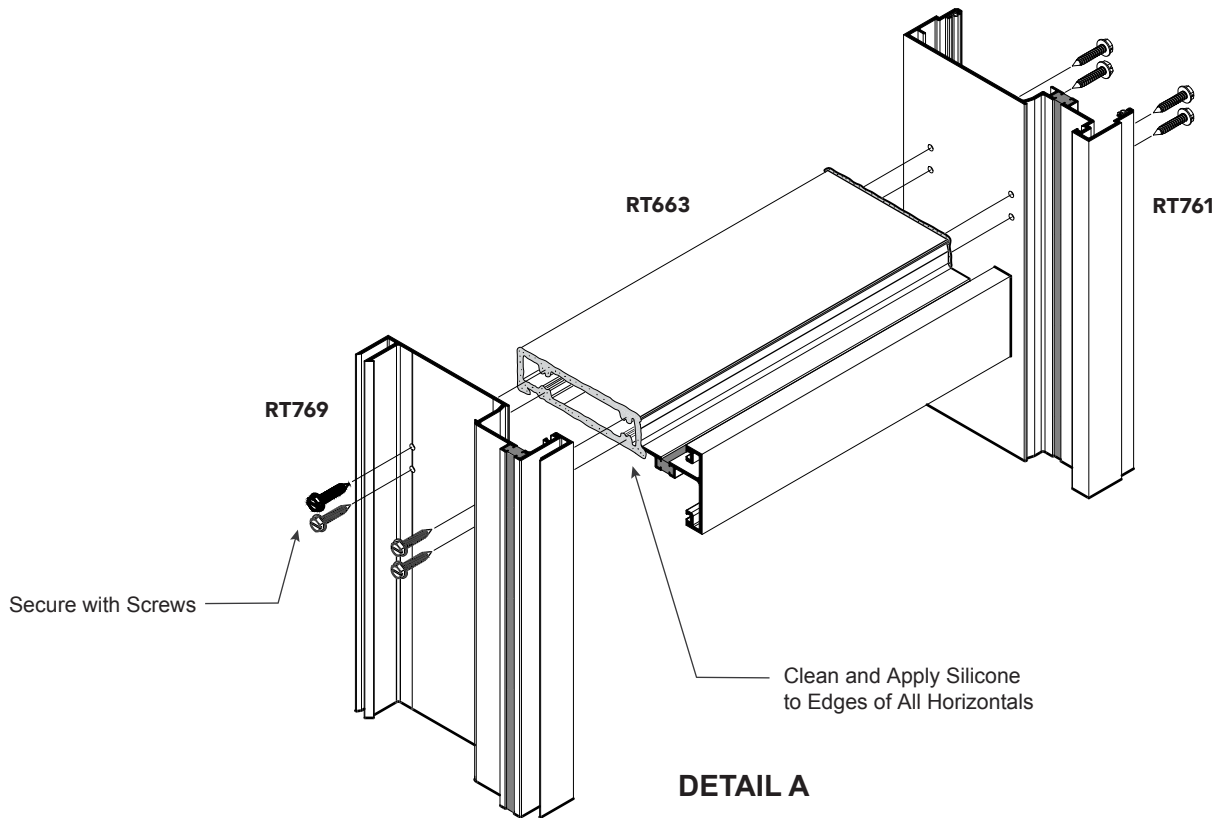


3. Position DJ456 drill jig on end of each member and drill holes for assembly screws. Use #7 bit to drill .201" (5.1mm) holes.

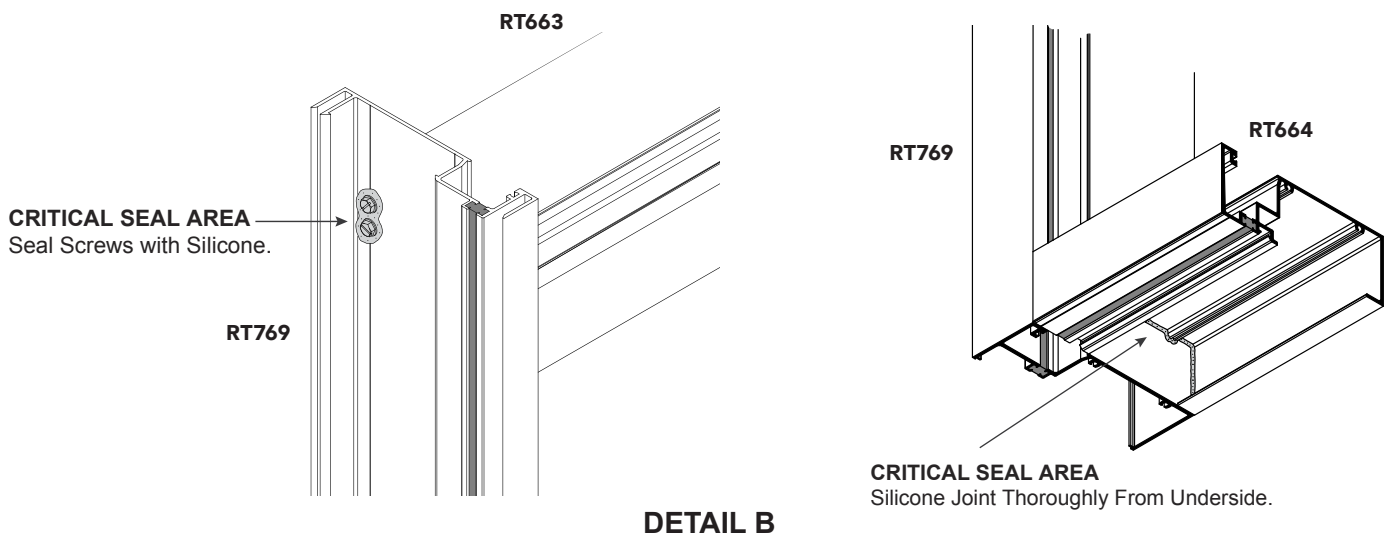


ASSEMBLY

1. Clean ends of horizontal members and apply silicone. Assemble with screws. Tool excess silicone.
See **DETAIL A**.

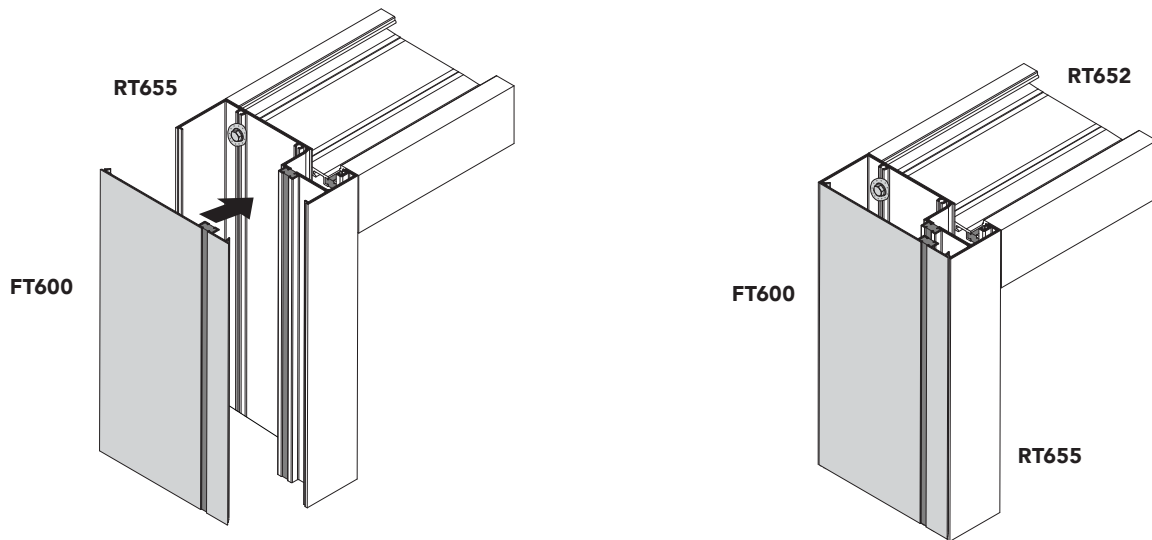


2. Silicone over screws and joint underneath between verticals and horizontals.
See **DETAIL B**.



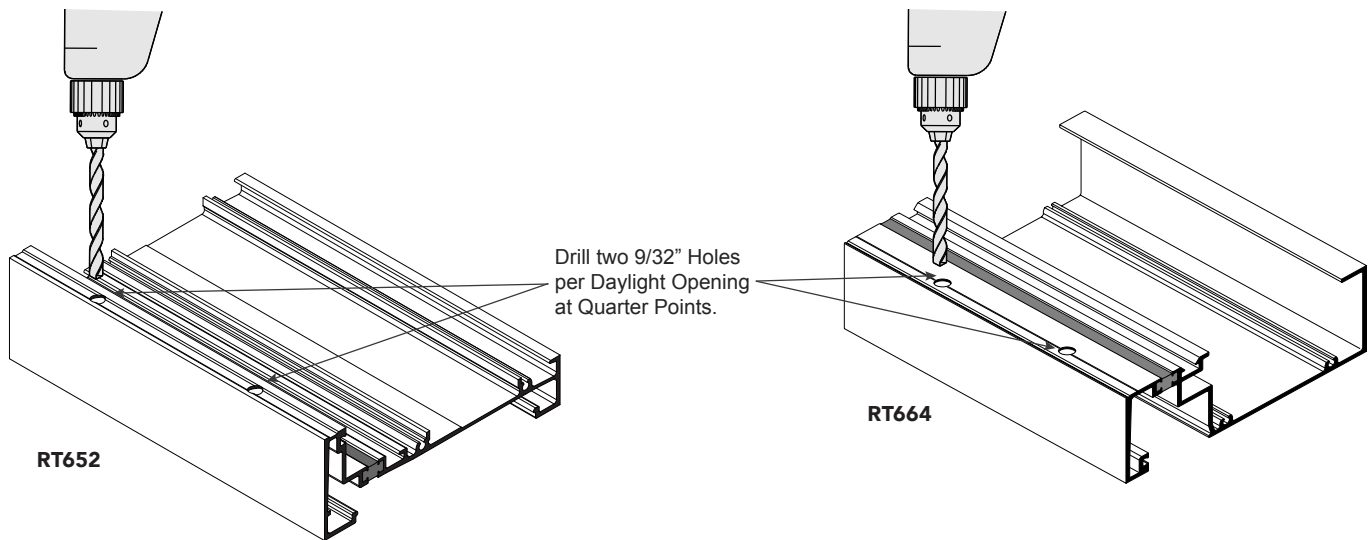
PREPARATION JAMB

1. Snap jamb filler into back of wall jamb.



WEEP HOLE PREPARATION FOR HEAD AND SILL

NOTE: Install weep baffle during installation.

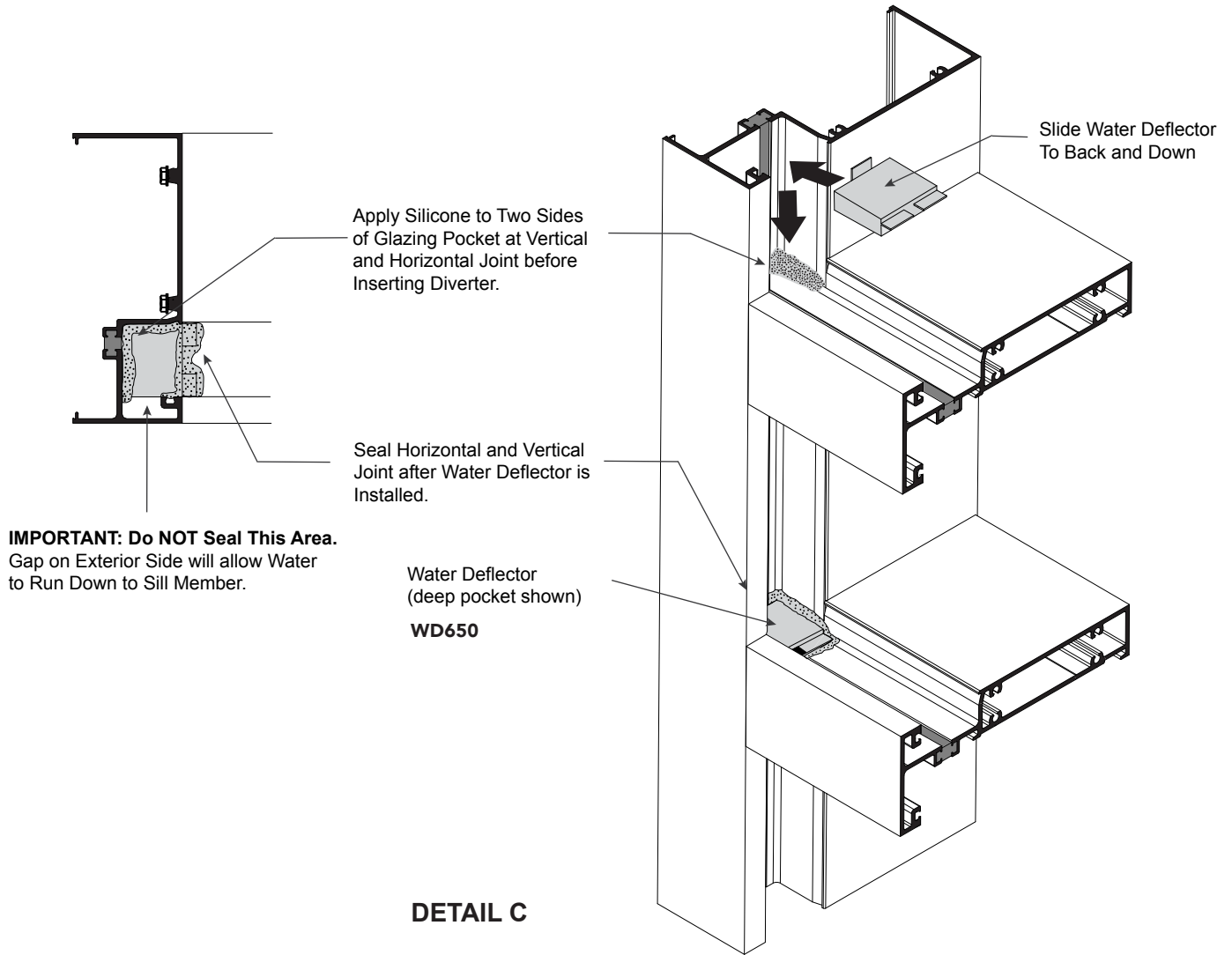


NOTE: Head member shown.

NOTE: Sill member under side shown.

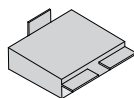
WATER DEFLECTOR INSTALLATION

1. Apply sealant to vertical glazing pocket at vertical and horizontal intersections **See DETAIL C**. Sealant must be applied to two sides of pocket only. Clearance at outside will allow water to run down to sill member.
2. Insert water deflector into glazing pocket and slide it down into position. Top of deflector must be flush with horizontal glazing pocket. Apply sealant to three sides of water deflector.

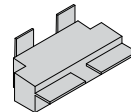


NOTE: Deep Pocket Vertical Mullion with WD650 Water Deflector Shown

NOTE: Use deep pocket water deflector WD650 with deep pocket mullion and shallow pocket water deflector WD652 with shallow pocket mullion.



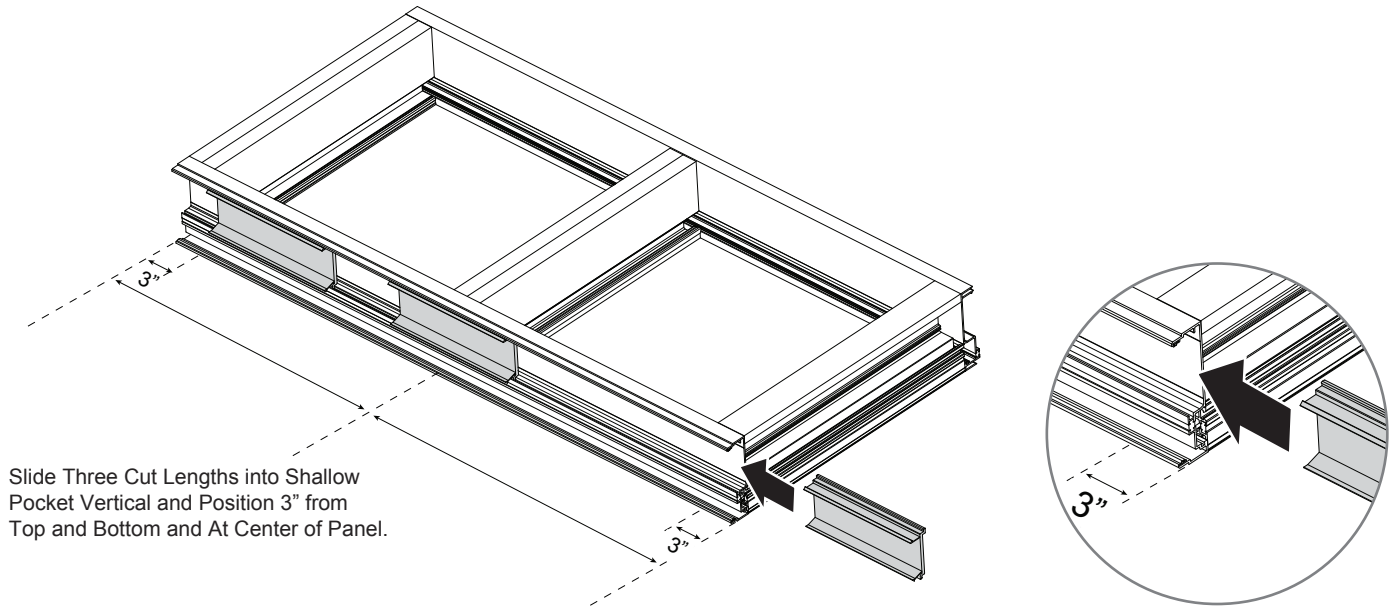
Deep Pocket Water Deflector
WD650



Shallow Pocket Water Deflector
WD652

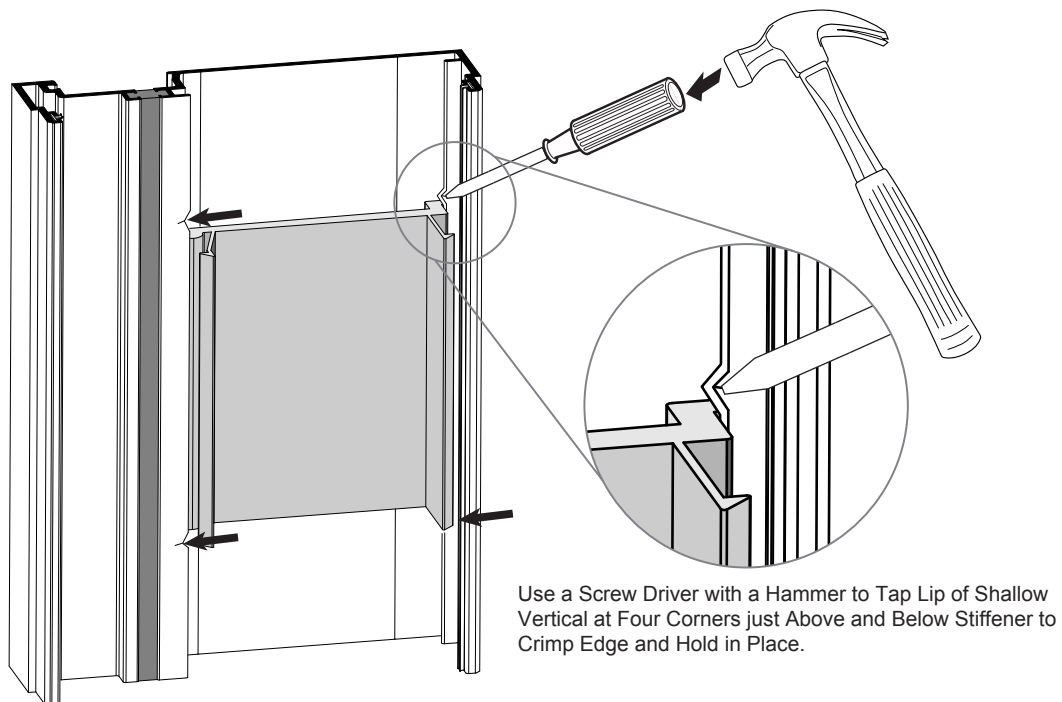
ANTI-BUCKLING CLIP INSTALLATION

1. Cut to 8-10" length, three pieces per panel. **See DETAIL D.**
2. Slide in to install. Position 3 inches from top and bottom and at center of panel.



3. Crimp above and below to hold in place. **See DETAIL E.**

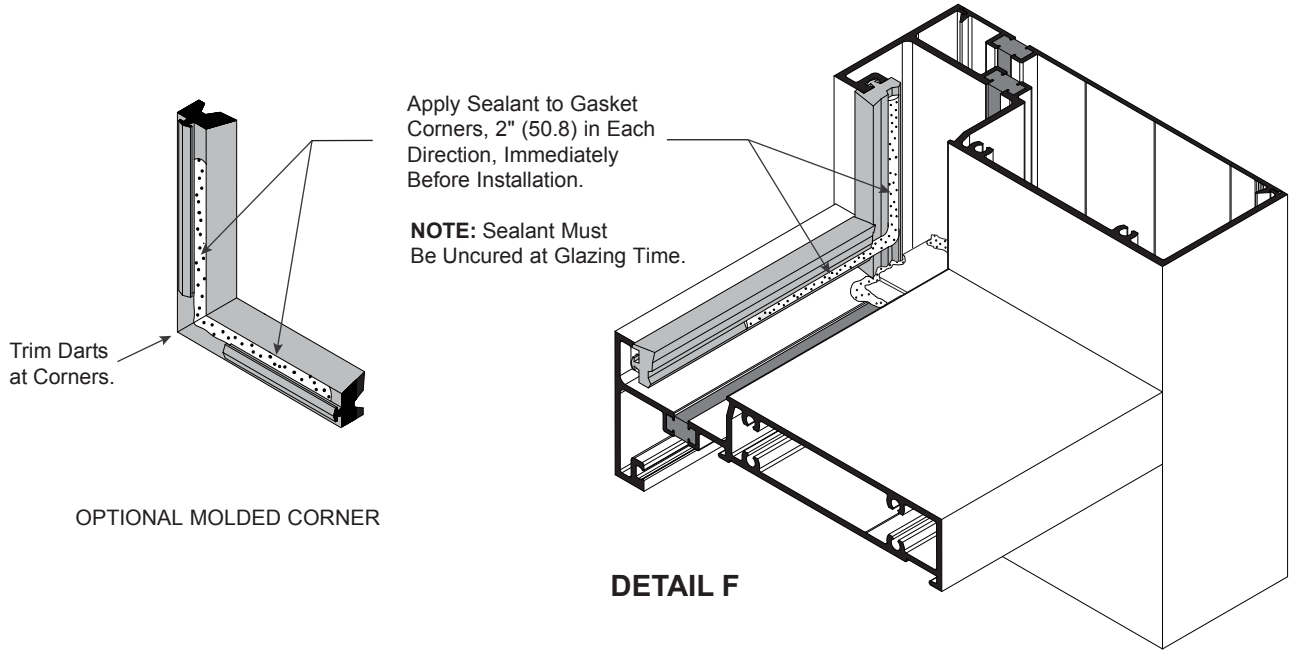
DETAIL D



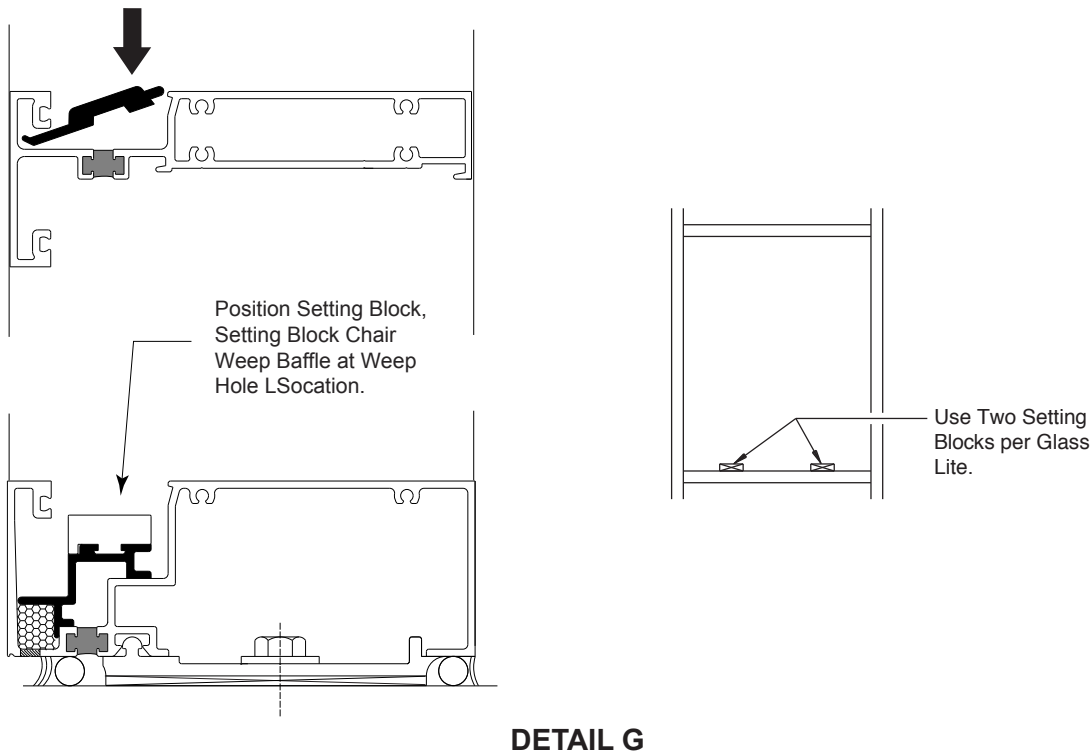
DETAIL E

GASKET AND SETTING BLOCK INSTALLATION

1. Use NP425 exterior gasket. Apply sealant into exterior gasket reglets at corners, 2" (50.8mm) in each direction. **See DETAIL F.**

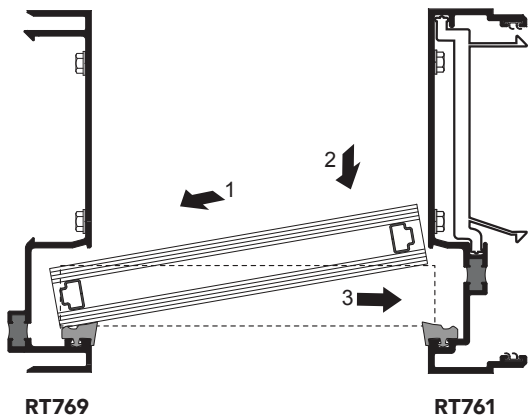


2. Place setting blocks at 1/4 points into intermediate horizontal members. Use SB663 setting block with horizontal members and SB334 setting block with RW667 setting block chair with sill members. **See DETAIL G.**



GLASS INSTALLATION

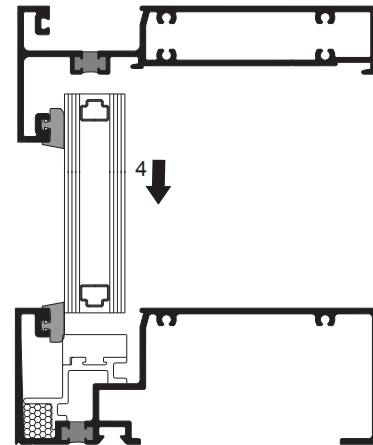
1. Following glazing sequence below is install glass panels and center to Daylight Opening (D.L.O.)



NOTE: Shown from top

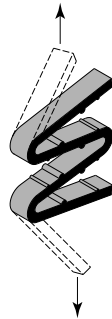
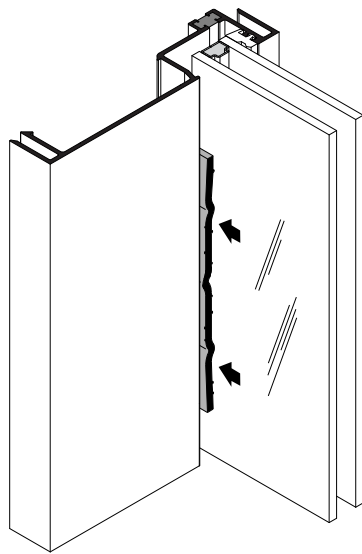
GLAZING SEQUENCE

1. Into deep pocket
2. Swing to plane
3. Slide to shallow pocket
4. Down onto setting blocks



NOTE: Shown from side

2. Install WB452 W edge block into deep vertical pockets. **See DETAIL H.**

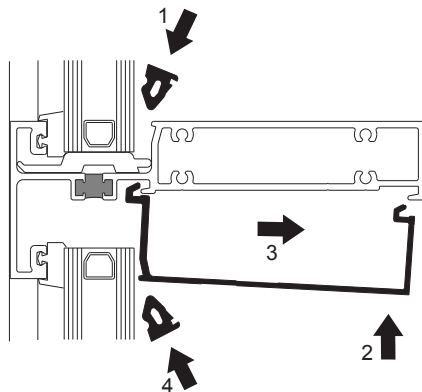


WB452

Stretch W block and Slide it Between Glass and Mullion into Glazing Pocket. Push it All The Way Until it Clears Glass and Locks Itself in Place.

DETAIL H

3. Secure glass panel with NP606 interior gaskets and RW653 glass stop. **See DETAIL I.**



SEQUENCE

1. Install NP606 gasket Above
2. Hook RW653 Glass Stop
3. Snap Into Place
4. Install NP606 Gasket Below

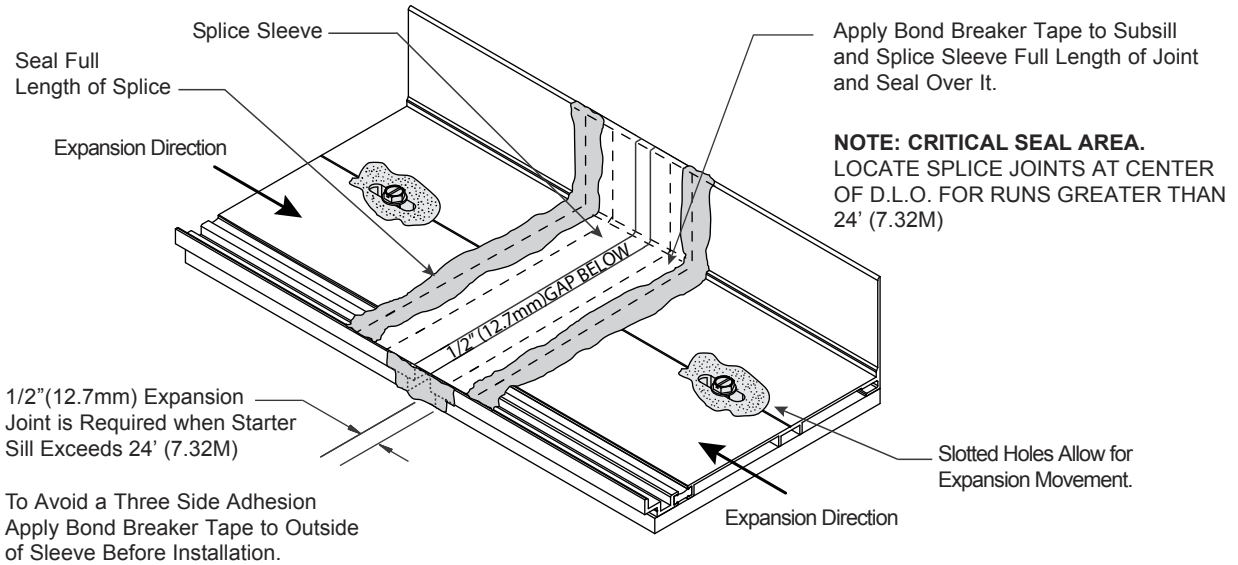
DETAIL I

SUBSILL AND END DAM INSTALLATION

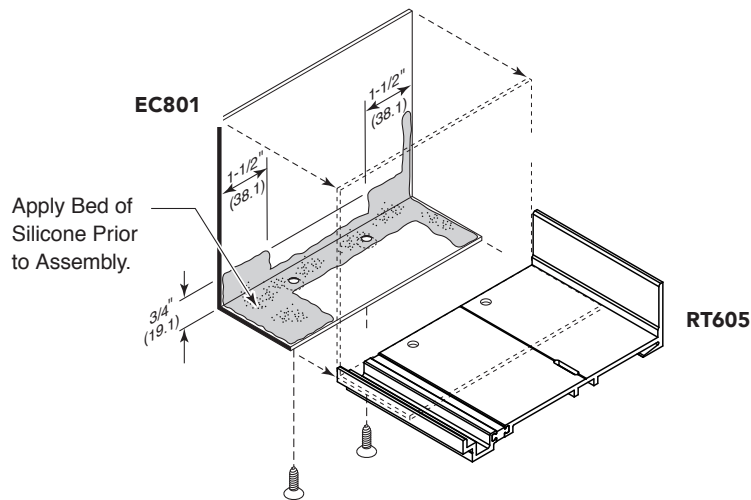
1. Splice subsill (required every 24 feet)

Expansion of Aluminum Extrusions:

Inches of Expansion = Extrusion Length (inches) X Temperature Variation (F°) X .000129
 Millimeters of Expansion = Extrusion Length (m) X Temperature Variation (C°) X .02322



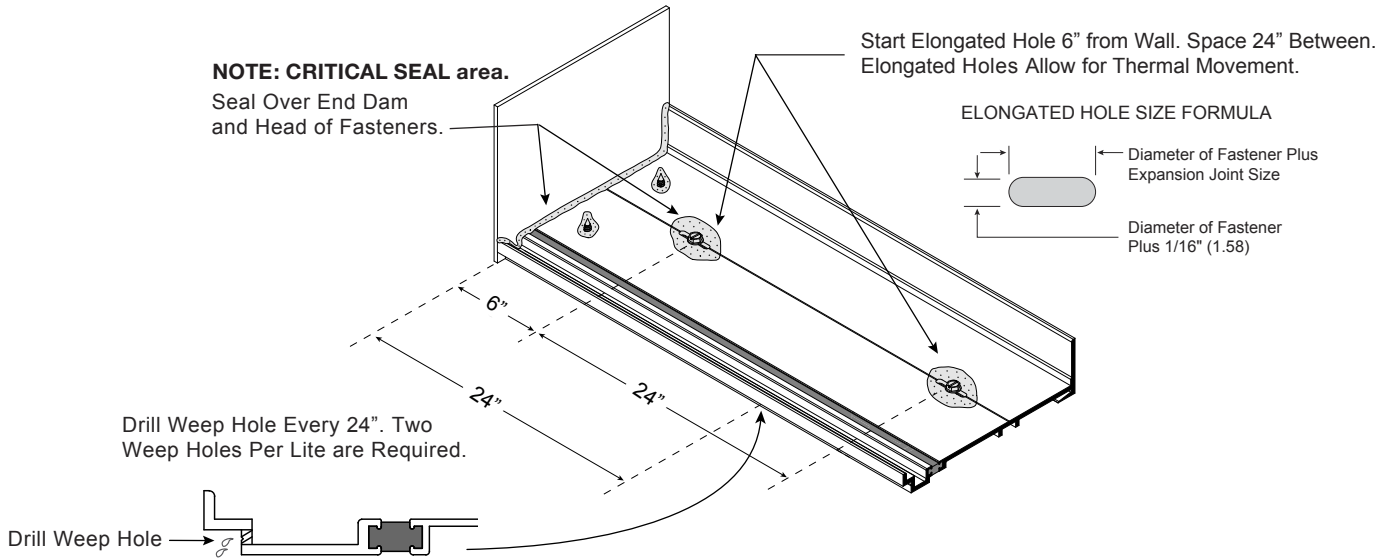
2. Attach EC801 end dams to ends of subsill. Apply sealant to both edges and secure with screws.



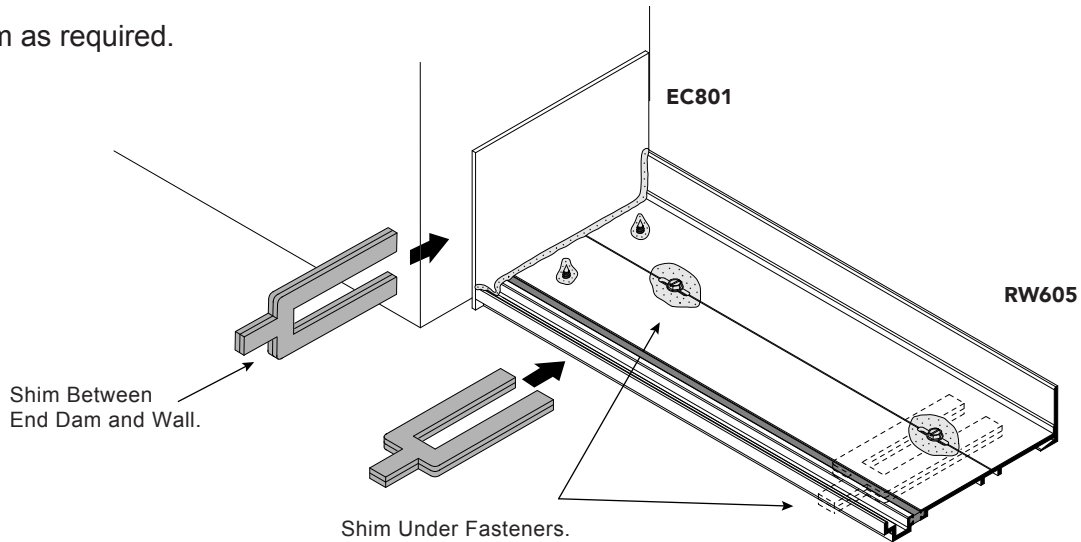
NOTE: Fasteners Supplied by Others.

UNIT GLAZE SYSTEMS

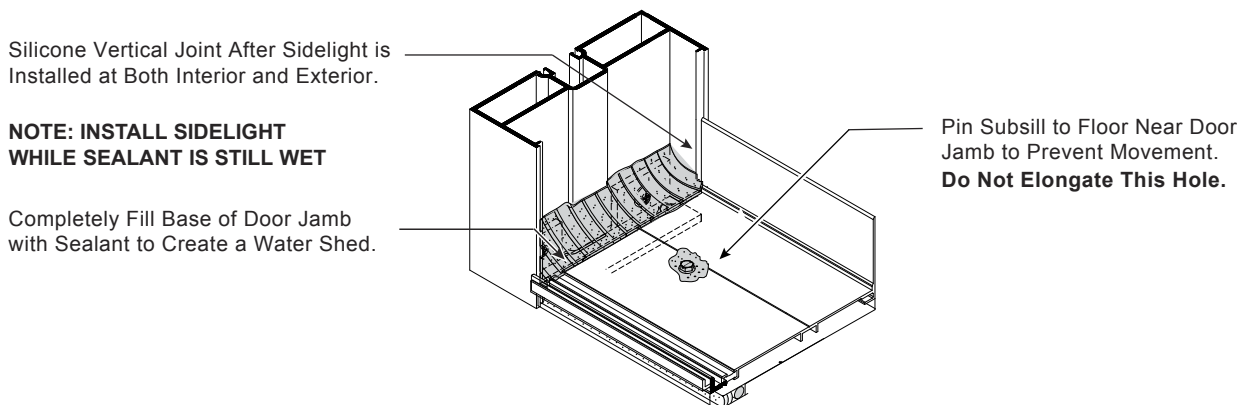
3. Set subsill in place. Create weep holes every 24".



4. Shim as required.

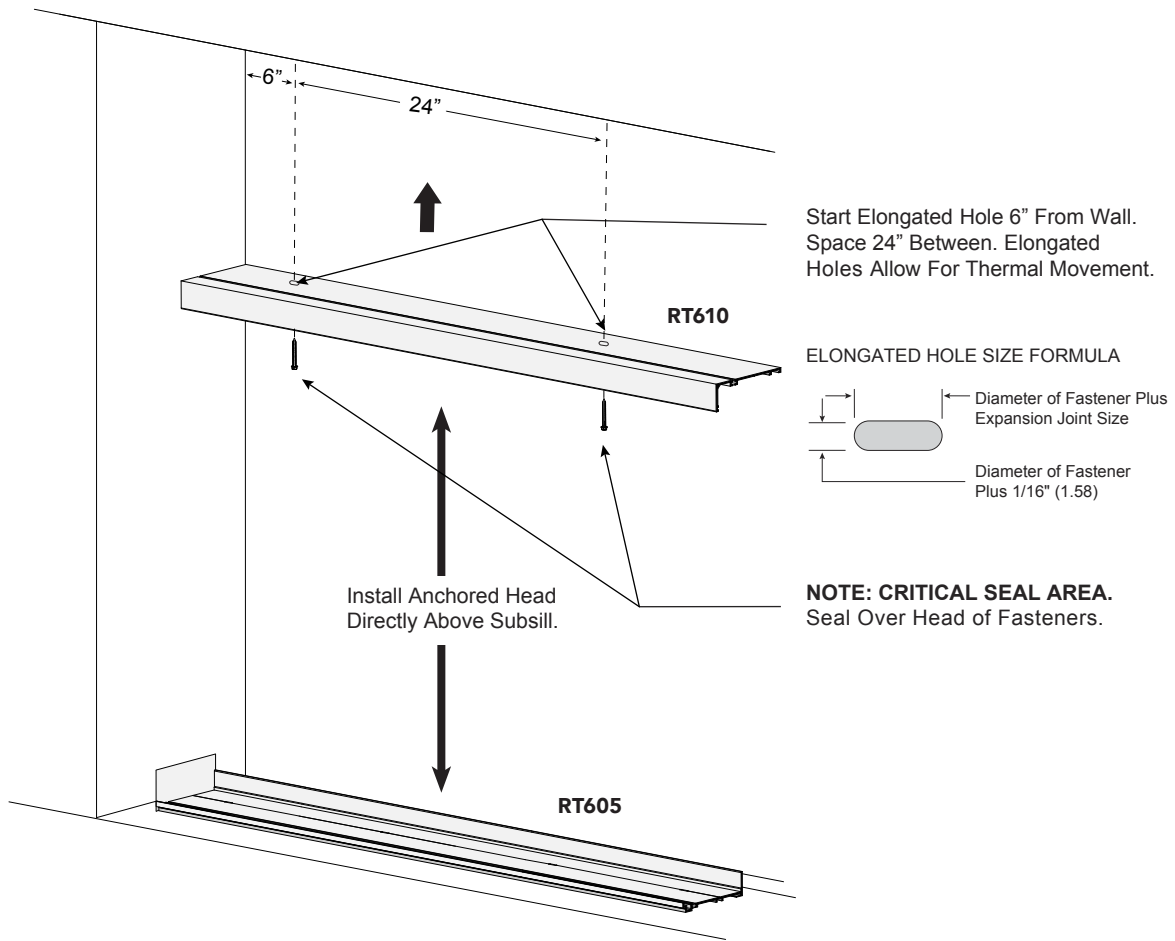


5. Install subsill against door jamb.

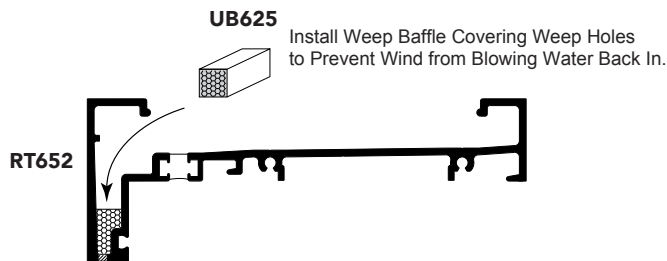


COMPENSATING HEAD CHANNEL INSTALLATION

1. Install directly above subsill. Ensure plumb and level.



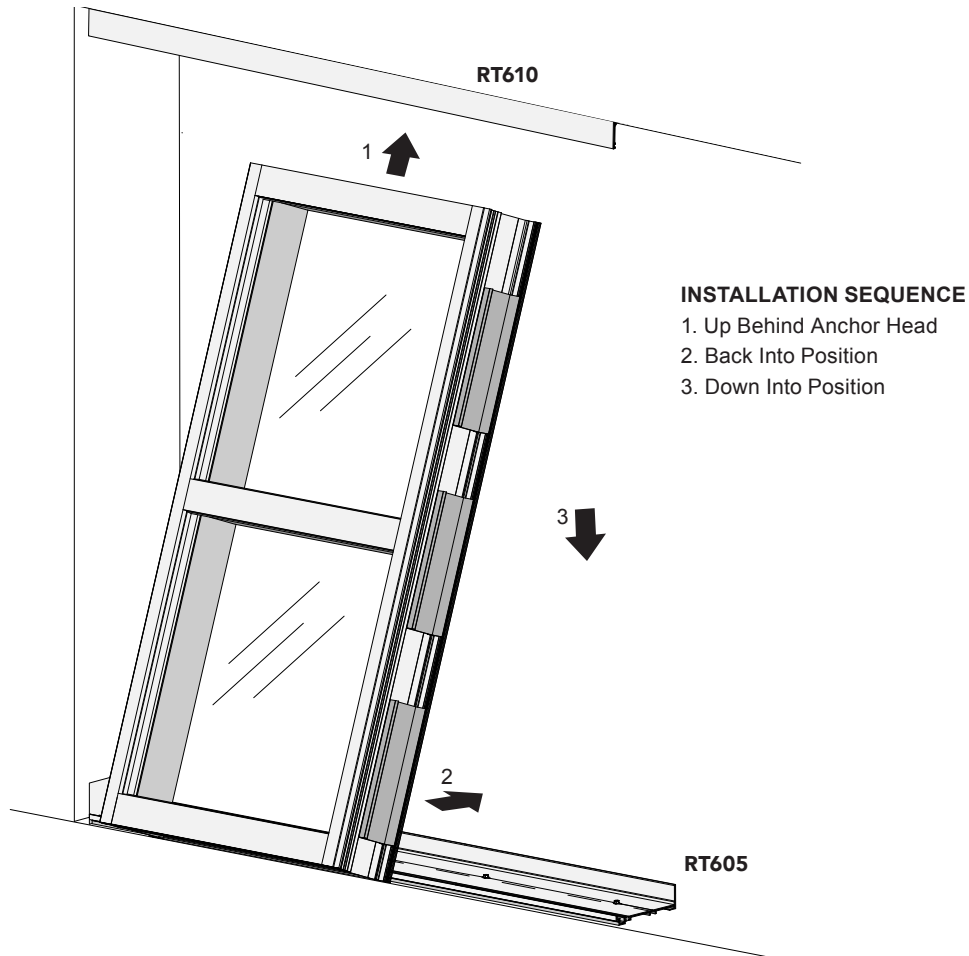
2. Cover weep holes in head and sill with UB625 weep baffle.



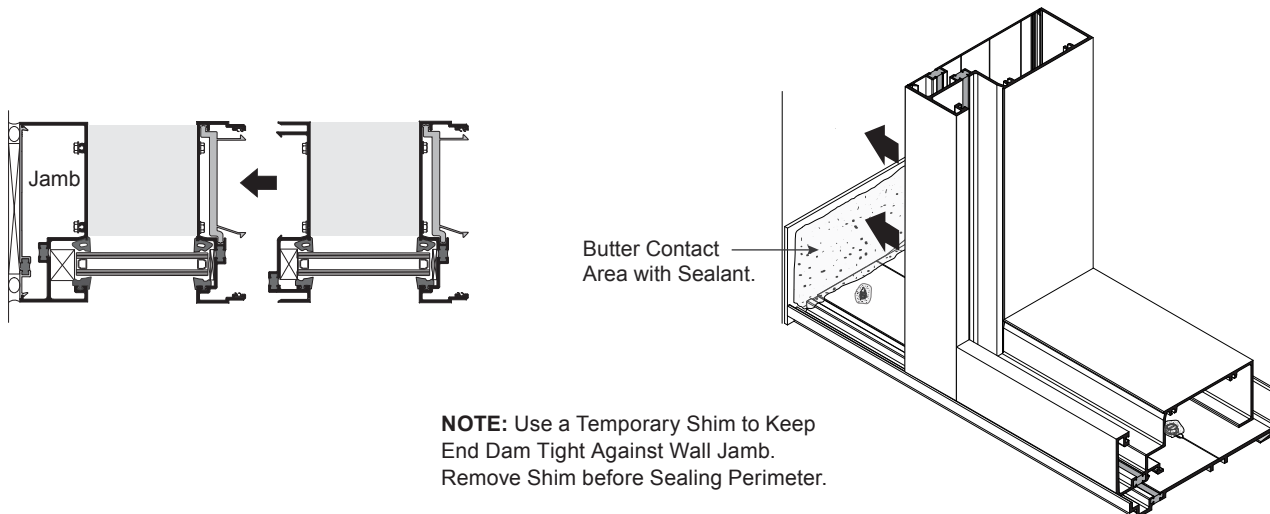
NOTE: Head Member Shown.

UNIT GLAZE SYSTEMS

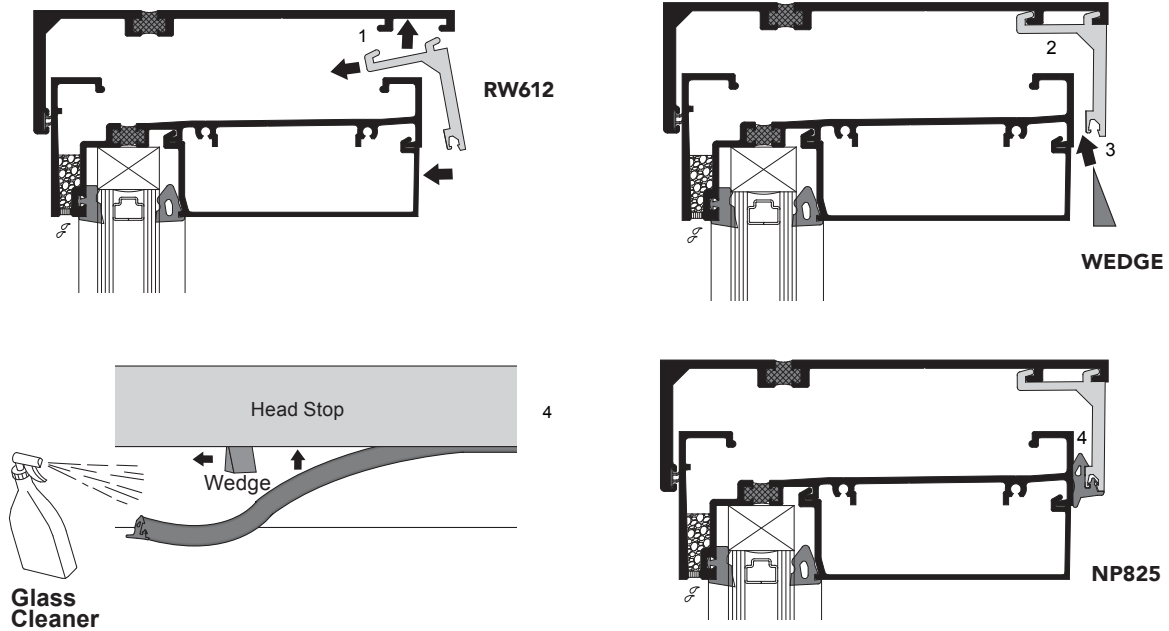
1. Lift window over subsill and up behind the head comp channel. Push back to drop into subsill.



2. Slide Jamb against wall. Install next window and slide to snap into place.



3. Install Head Stop

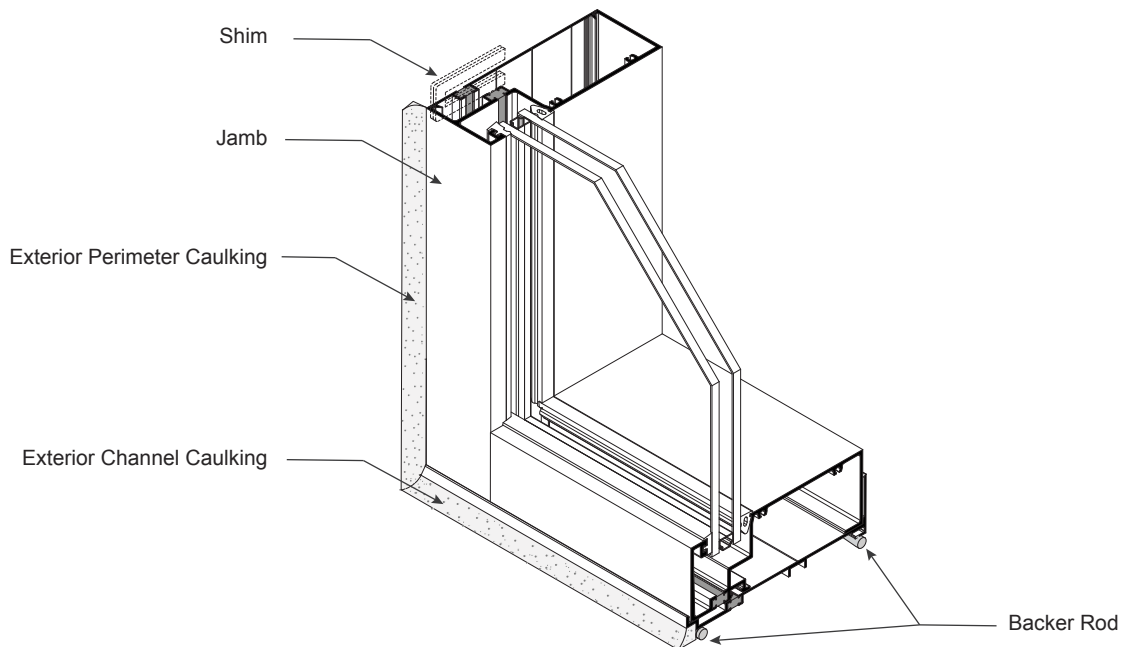


INSTALLATION SEQUENCE

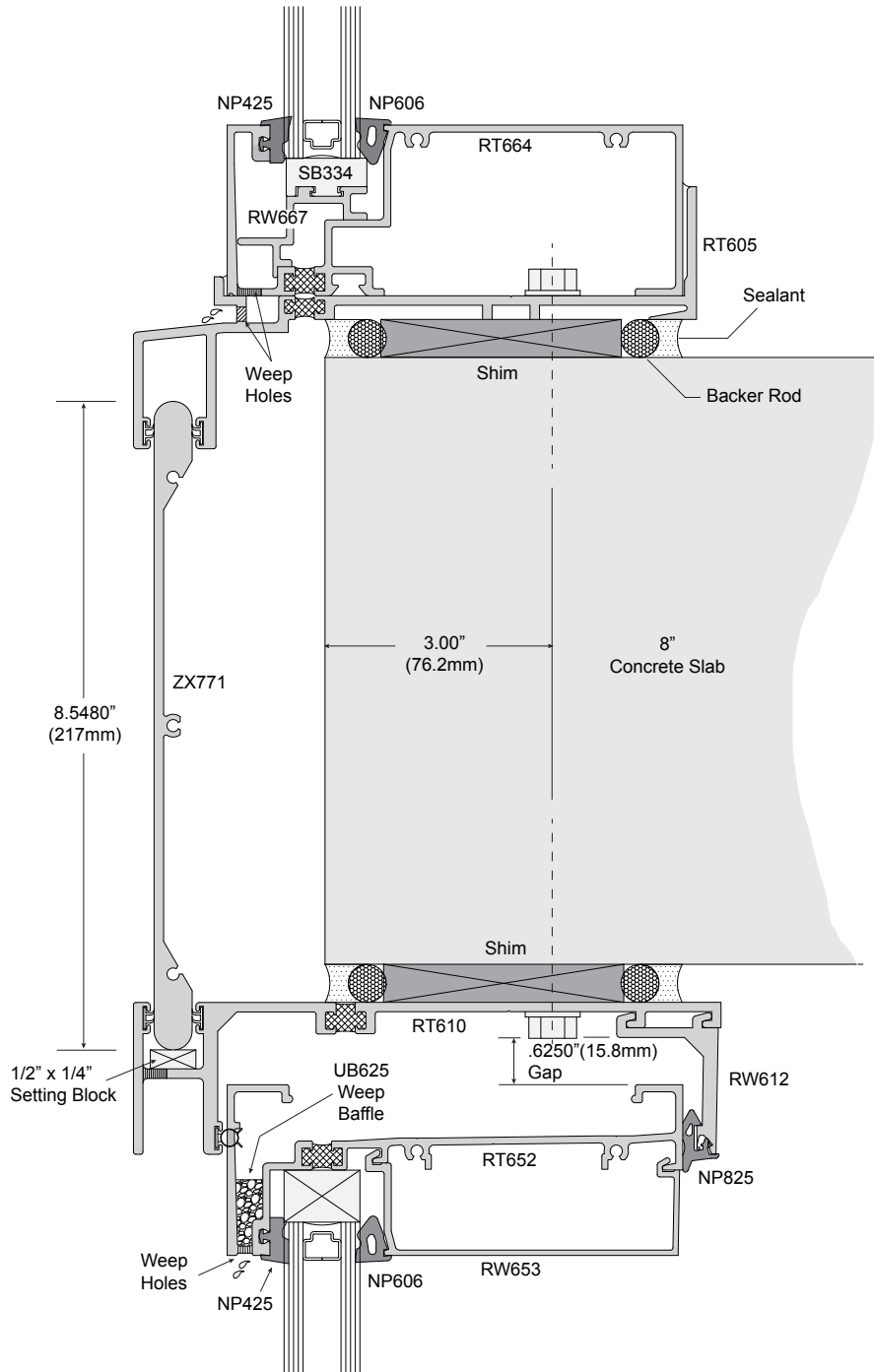
1. Apply forward pressure on head while inserting RW612 head stop.
2. Snap into position.
3. Insert a wedge to create space to install NP825 gasket.
4. Work NP825 gasket into RW612 reglet while moving wedge across as needed. Use liquid glass cleaner to lubricate gasket.

4. Seal Perimeter

Install backer rod and caulk thoroughly to seal exterior. Do not block weep holes.



OPTIONAL SLAB COVER



DETAIL J