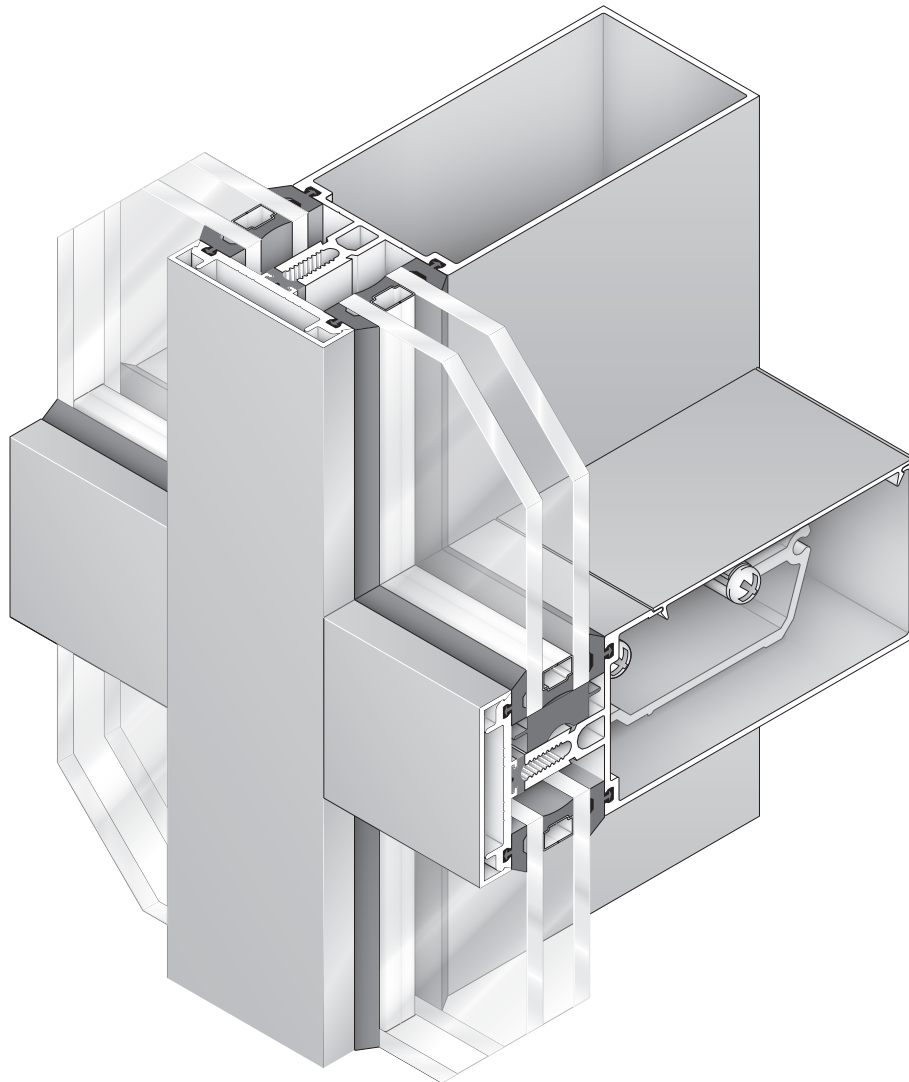


# INSTALLATION INSTRUCTIONS

## SERIES IW3250 HURRICANE RESISTANT CURTAIN WALL



Phone: (800) 262-5151 • Fax: (866) 262-3299  
[crlaurence.com](http://crlaurence.com) • [usalum.com](http://usalum.com) • [crl-arch.com](http://crl-arch.com)

# 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 counts and keep records of where various materials are stored.

**C. KEEP MATERIALS 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.***

The rapidly changing technology within the architectural aluminum products industry demands that U.S. Aluminum reserve the right to revise, discontinue or change any product line, specification or electronic media without prior written notice.

**NOTE:** Dimensions in parentheses ( ) are millimeters unless otherwise noted.

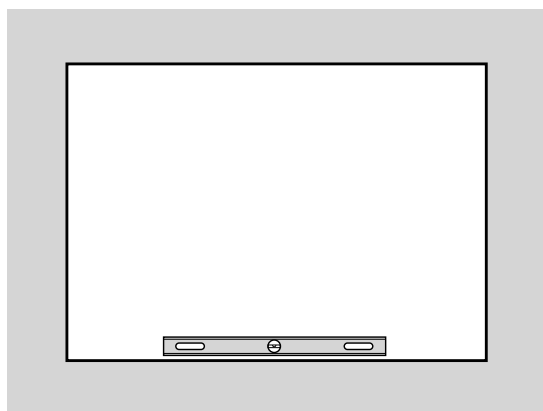
# GENERAL INSTALLATION NOTES

## Recommended guidelines for all installations:

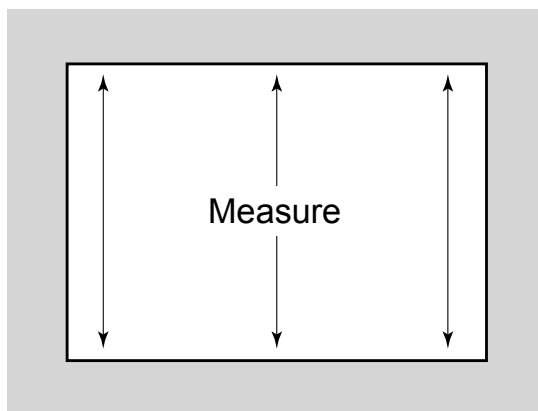
1. **REVIEW CONTRACT DOCUMENTS.** Check shop drawings, installation instructions, architectural drawings and shipping lists to become thoroughly familiar with the project. The shop drawings take precedence and include specific details for the project. Note any field verified notes on the shop drawings 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.
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 with (full or incidental), including other sealant surfaces. It is the sole responsibility of the glass company to consult the sealant manufacturer for recommendations regarding 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. Gaps 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 46.5 m<sup>2</sup>) a water hose test should be conducted in accordance with AAMA 502-08 specifications to check the installation. On all jobs the hose test should be repeated every 500 square feet (46.5 m<sup>2</sup>) 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.
13. **JOB SITE ESSENTIALS.** See pages 23 and 24.

## **SITE PREPARATION BEFORE INSTALLATION**

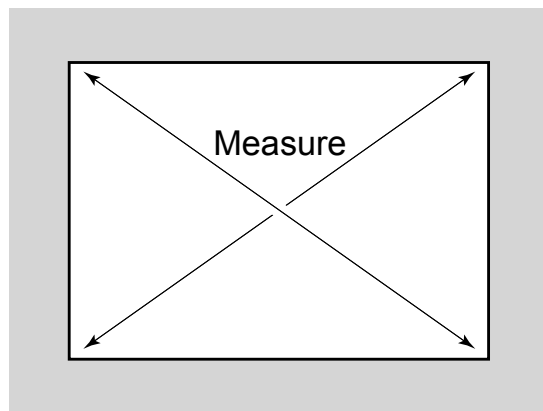
1. Review and measure the opening.
2. Verify rough window opening size 1/2" (12.7) clearance in both width and height to the window. Verify framing is plumb, straight, and true around window opening. Measure opening at each end and at center vertically and horizontally. Make corrections to openings as required. Measure opening diagonally to check squareness. Chip concrete high points to flush and rounded corners to square.



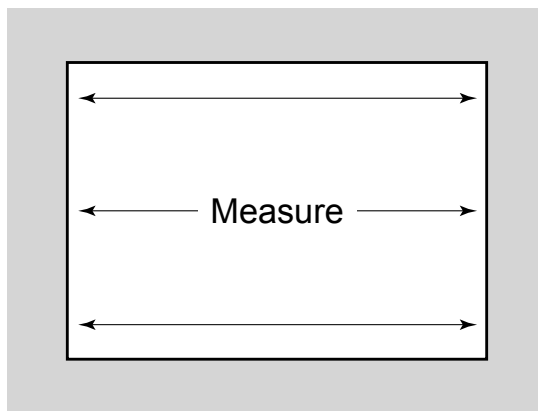
**LEVEL**



**VERTICAL DIMENSION**



**SQUARE**



**HORIZONTAL DIMENSION**

INSTALLATION INSTRUCTIONS

FRAME FABRICATION

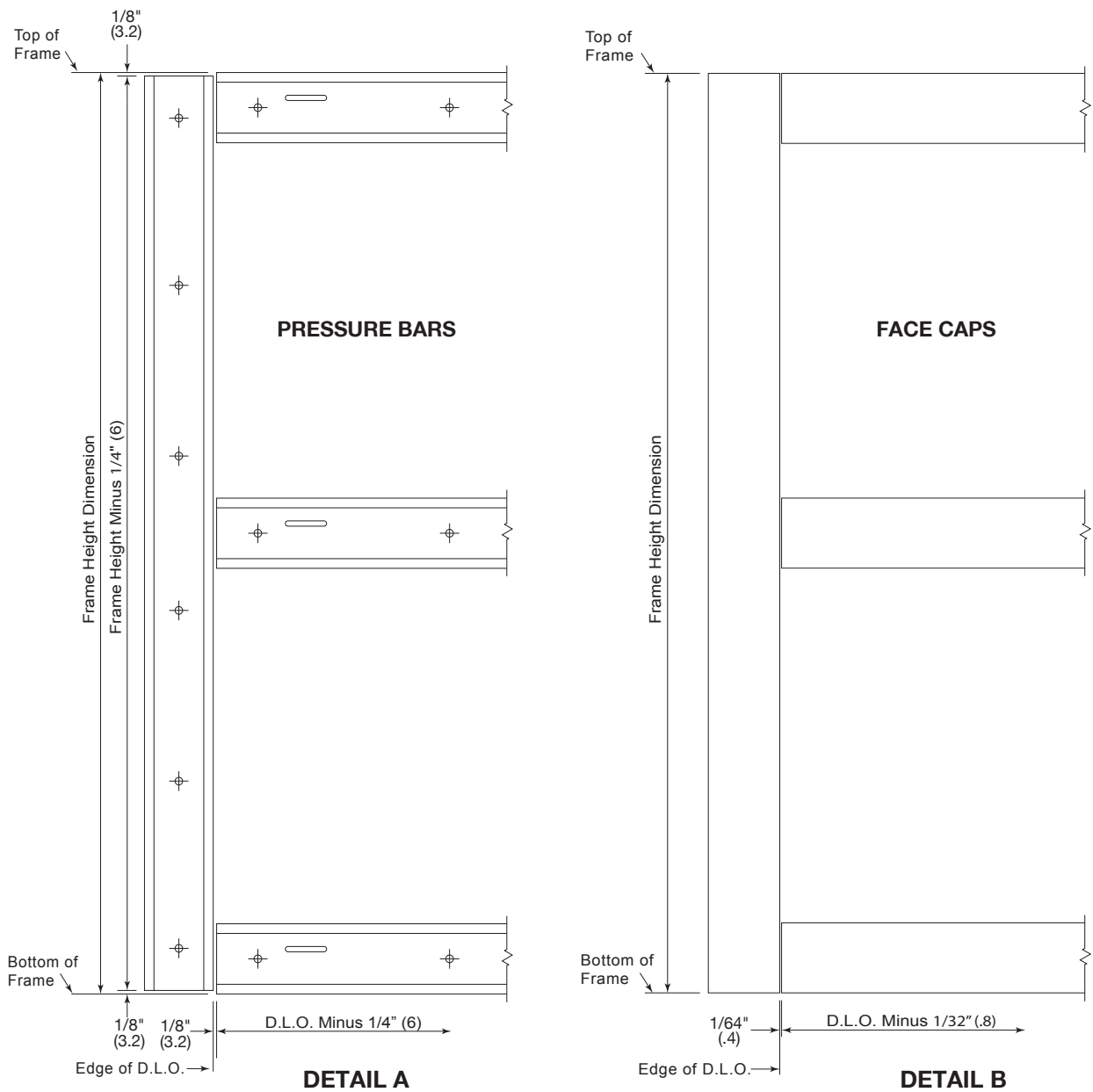
Most of the details shown on these instructions are for 1-3/16" (30.2) glazing. Details for 7/16" (11.1) glazing are similar. These instructions are used in conjunction with approved shop drawings.

FRAME CUTTING

1. Cut members to size:

Vertical Members	Rough Opening (R.O.) Minus Top and Bottom clearances = Frame Height (F.H.)
Vertical Pressure Bars	F.H. minus 1/4" (6)
Vertical Face Caps	F.H. minus 1/32" (.8)
Horizontal Members	Daylight Opening (D.L.O.) plus 0"
	(Cutting tolerances must not exceed D.L.O. dimension.)
Horizontal Pressure Bars	D.L.O. Minus 1/4" (6)
Horizontal Face Caps	D.L.O. Minus 1/32" (.8)

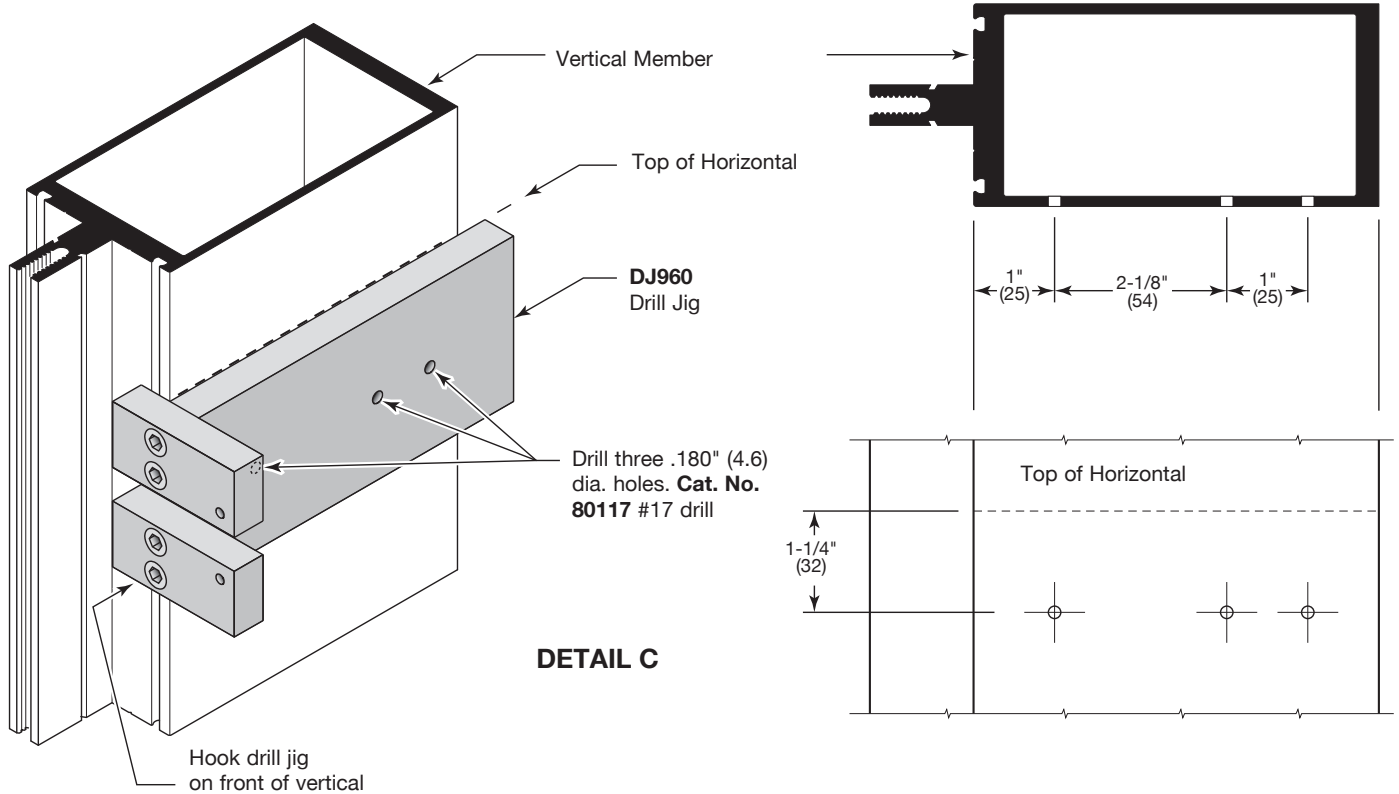
NOTE: The Vertical cut lengths shown above are for non-spliced conditions. For spliced Vertical Member cut lengths refer to approved shop drawings. See DETAIL Q on page 13.



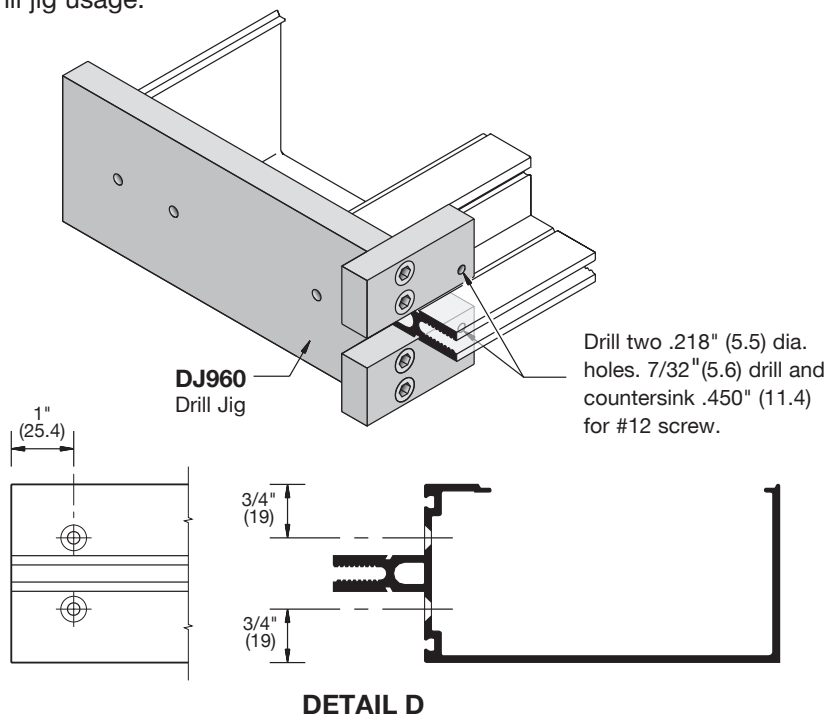
# FRAME FABRICATION

## FABRICATION FOR SHEAR BLOCKS

1. Mark mullions for top of intermediate horizontal member locations. Align drill jig flush at each end of mullion for head and sill, and at horizontal marks and drill holes for shear blocks. **See DETAIL C** for drill jig usage.



2. Fabricate ends of horizontal members for shear block pick-up screws. **See DETAIL D** for drill jig usage.

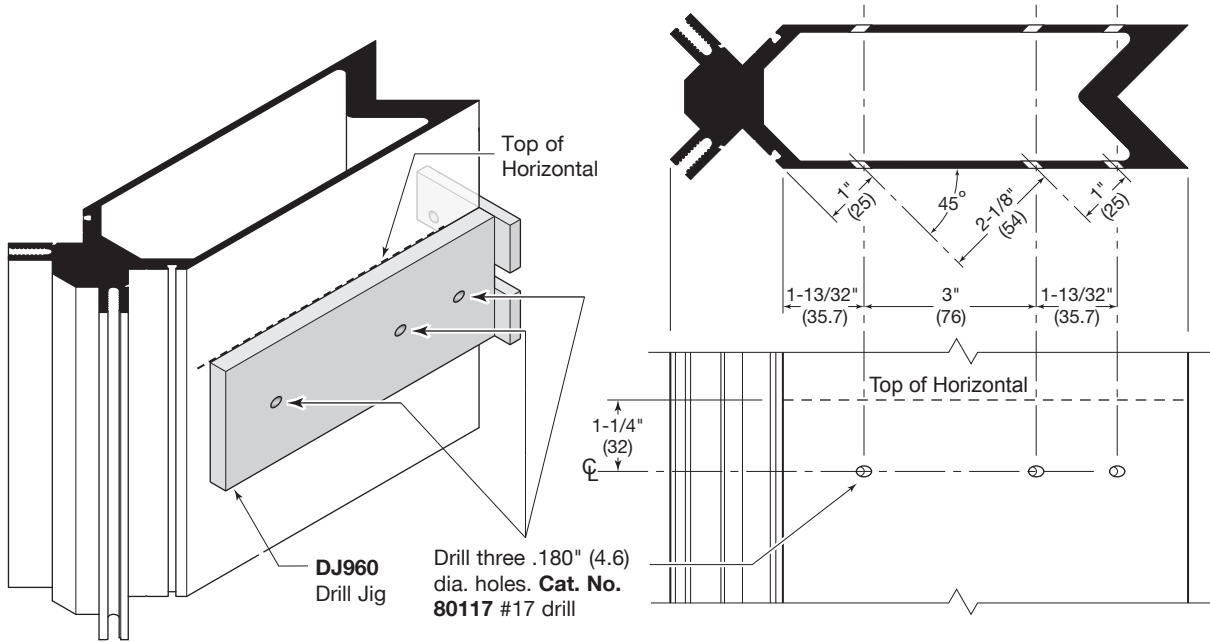


NOT TO SCALE

## FRAME FABRICATION

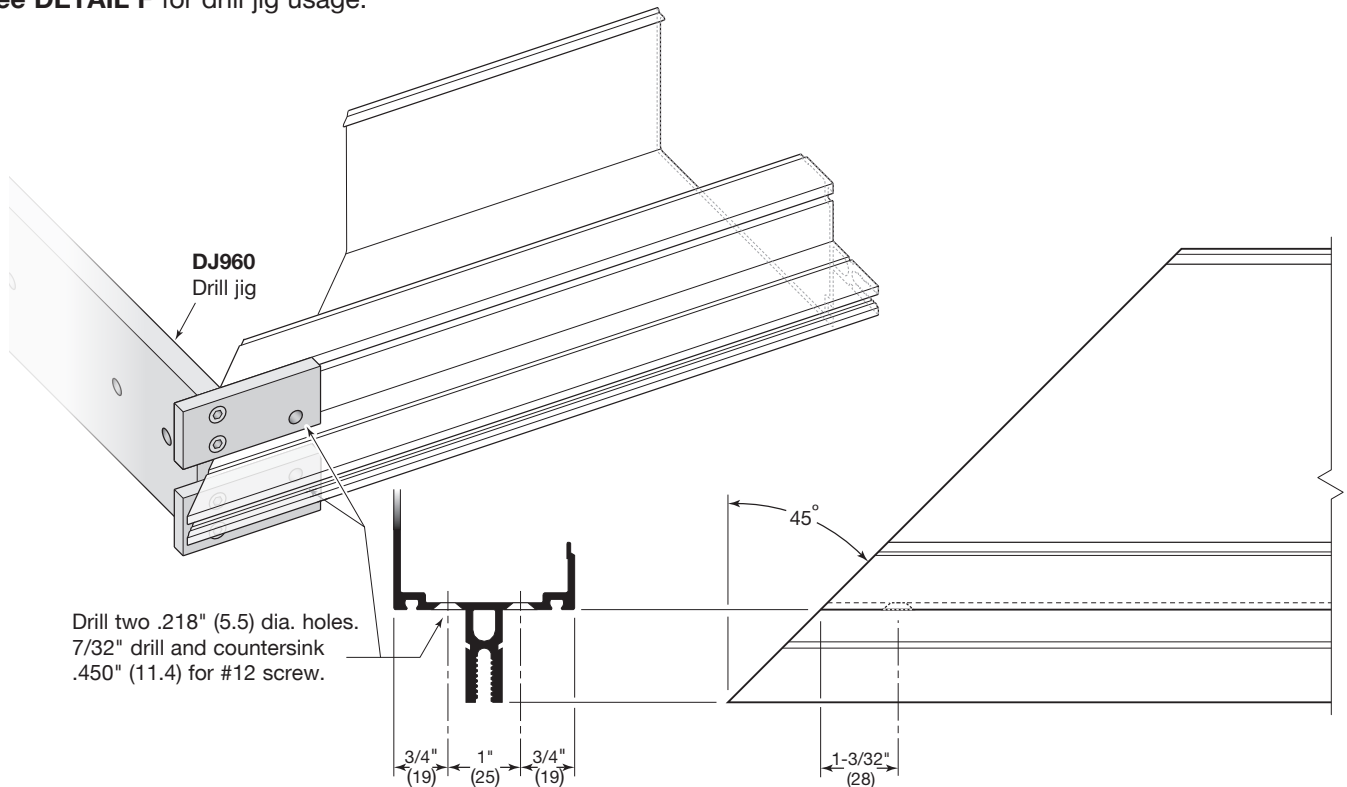
### FABRICATION FOR CORNER SHEAR BLOCKS

1. Mark mullions for top of intermediate horizontal member locations. Align drill jig flush at each end of mullion for head and sill, and at horizontal marks and drill holes for shear blocks. **See DETAIL E** for drill jig usage.



**DETAIL E**

2. Fabricate mitered end of horizontal members for shear block pick-up screws. **See DETAIL F** for drill jig usage.



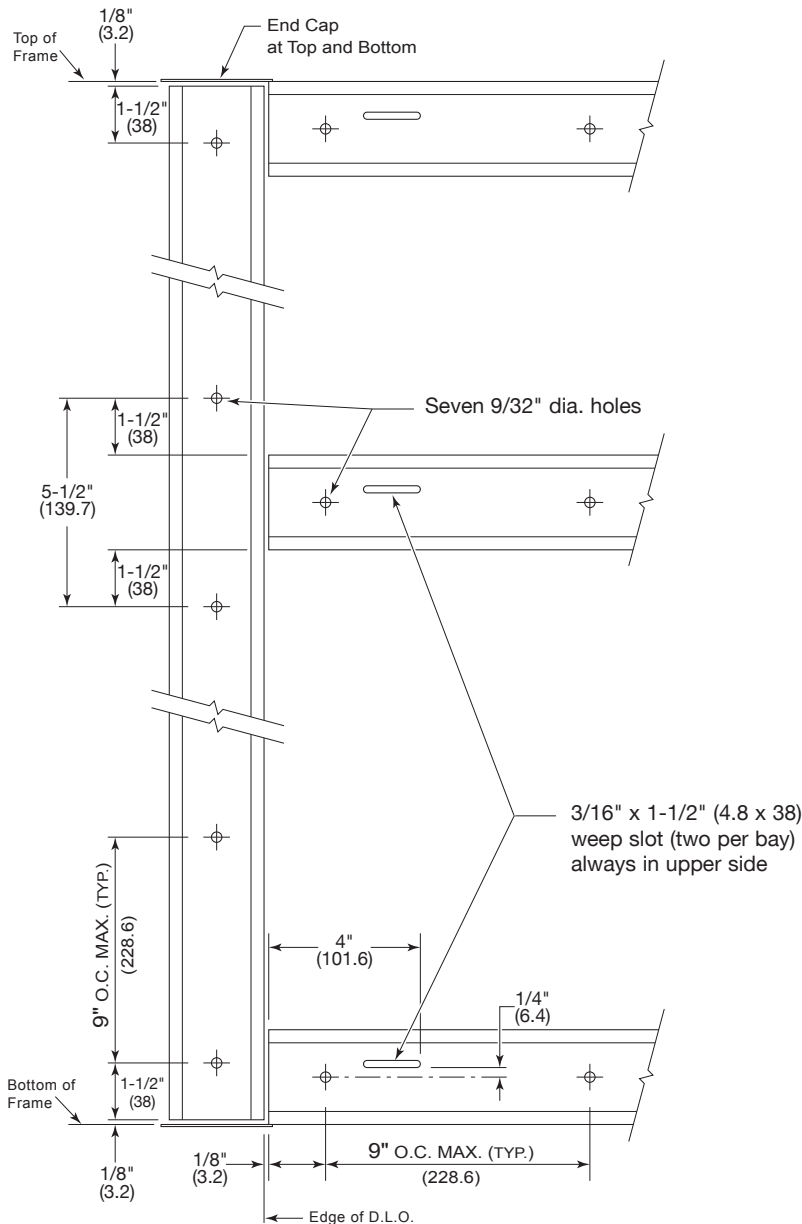
**DETAIL F**

## FRAME FABRICATION

### PRESSURE BAR AND FACE CAP FABRICATION

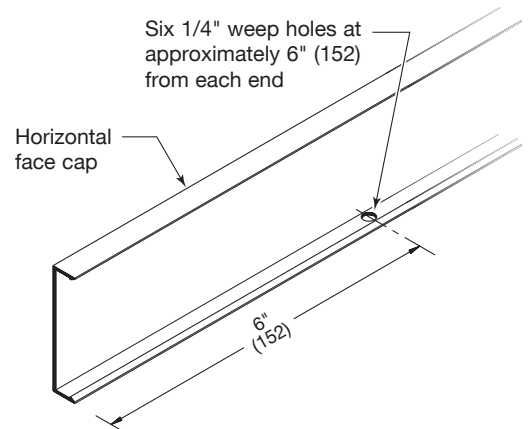
1. Pressure Bars are supplied with seven 9/32" dia. holes at 9" (228.6) O.C. for attachment bolts. Additional holes are to be drilled 1-1/2" (38.1) from all ends and at vertical/horizontal intersections. **See DETAIL G.**
2. Fabricate two 3/16" x 1-1/2" (4.8 x 38) weep slots in horizontal pressure bars as shown on **DETAIL G.**
3. Fabricate horizontal face caps for drainage. Drill six 1/4" dia. weep holes in bottom of cap at 6" (152) from each end as shown on **DETAIL H.**

#### PRESSURE BAR FABRICATION



**NOTE:** Weep slots are required in all horizontal pressure bars including the head or top horizontal

#### FACE CAP FABRICATION



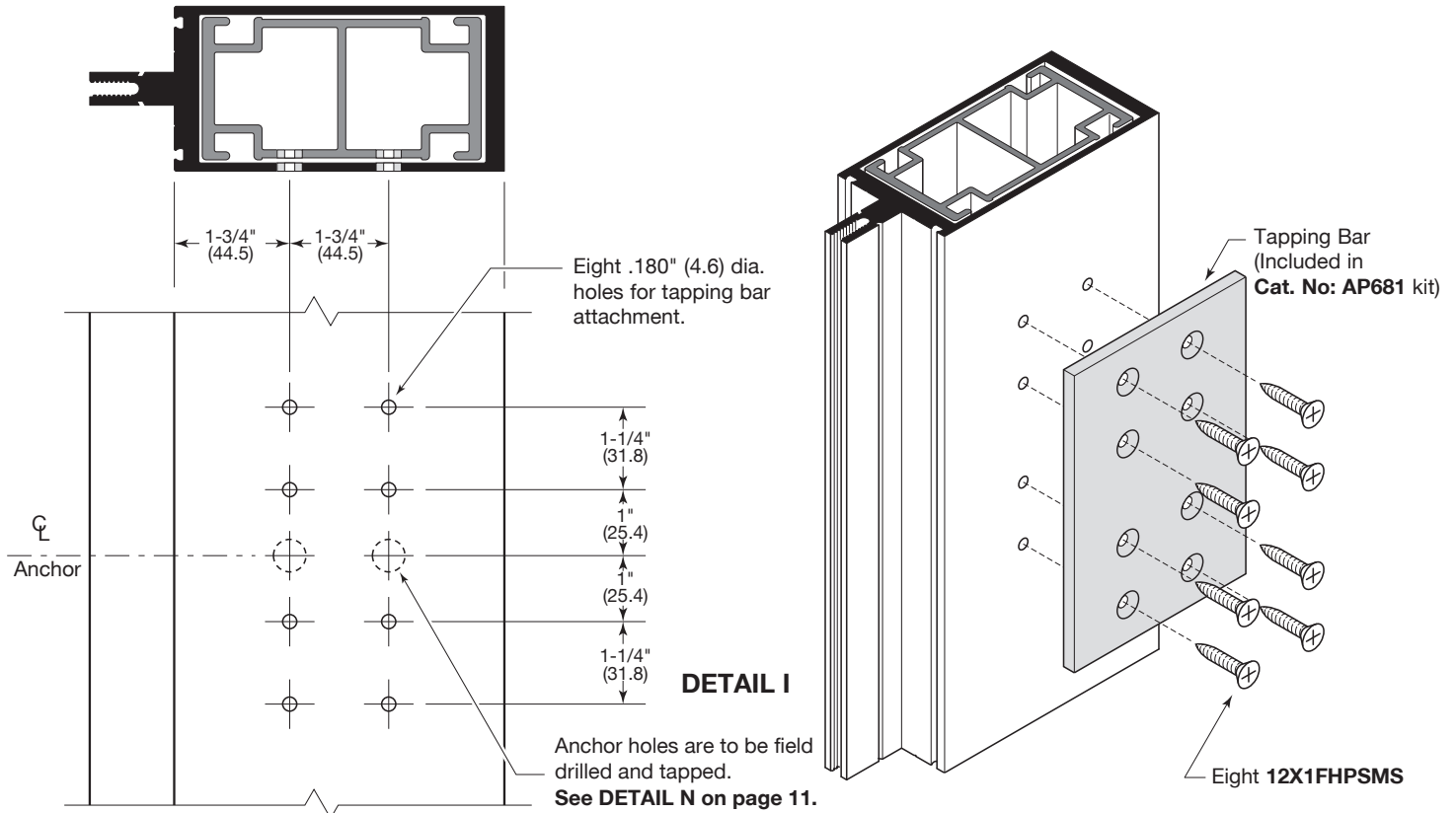
DETAIL G

DETAIL H

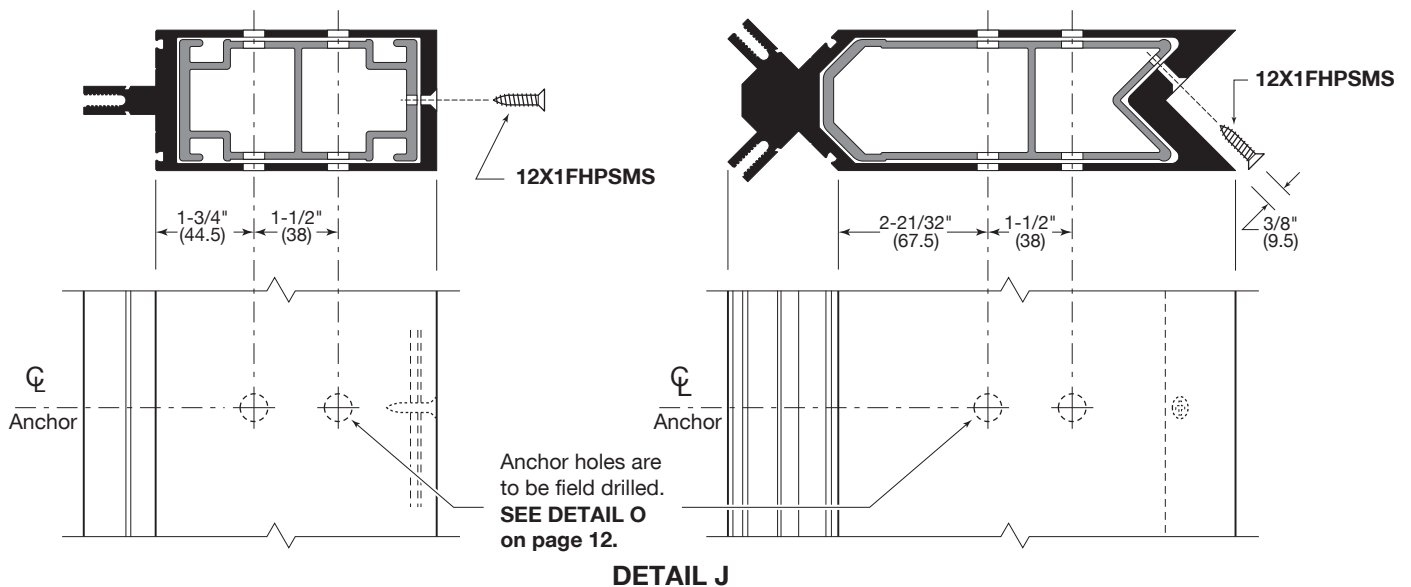
# FRAME FABRICATION

## FABRICATION FOR MULTI-SPAN ANCHOR

1. Slide reinforcement insert into jambs centering on anchor location.
2. Fabricate jamb members for tapping bar. Drill holes through mullion and insert for tapping bar attachment. Put screw into first hole drilled to temporarily hold reinforcement insert in place for remainder of fabrication. Attach tapping bar with screws provided as shown. **See DETAIL I.**



3. Slide reinforcement insert into mullions centering on anchor location. Drill and countersink back of mullion for 12X1FHPSMS to hold anchor reinforcement insert in place. **See DETAIL J.**
4. Drill two 17/32" (13.5) diameter holes through mullion and reinforcement insert for anchor bolts. **See DETAIL J.**



# FRAME FABRICATION

## FABRICATION FOR SPLICE JOINTS

Splice joint width should be based on sealant movement capability and on the following formula:

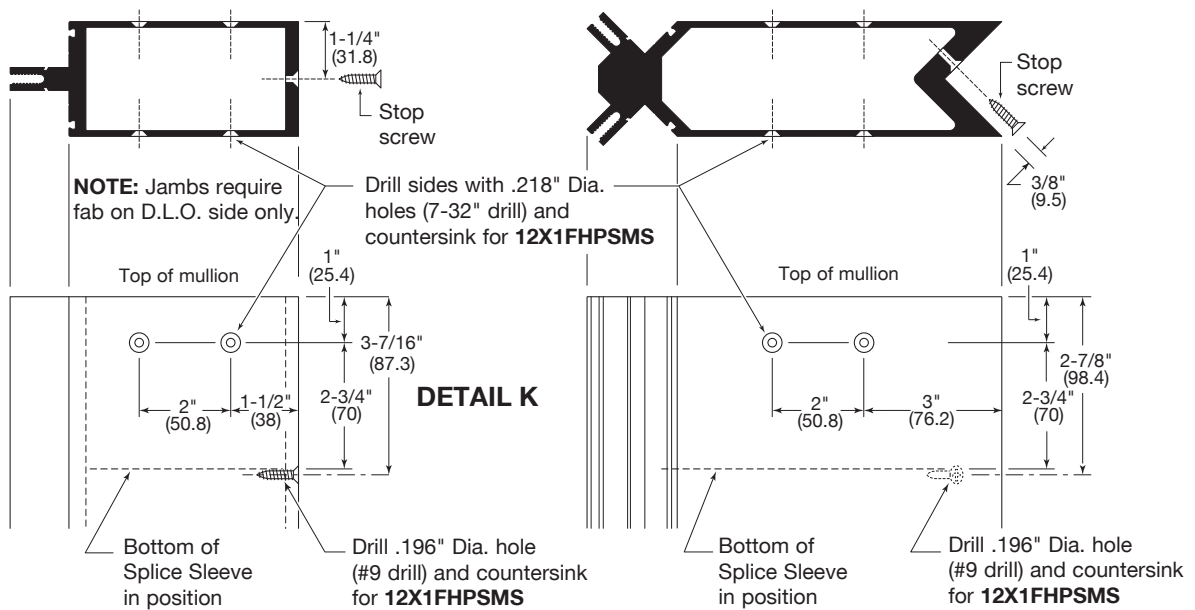
Linear expansion for aluminum, in inches	=	Length (")	x	F° difference in temperature	x	.0000129
Linear expansion for aluminum, in millimeters	=	Length (m)	x	C° difference in temperature	x	.02322

A 1/2" (12.7) minimum joint is recommended. Use a spacer shim to set and hold the mullion joint constant during erection. Remove the shim after attaching the verticals to the anchors.

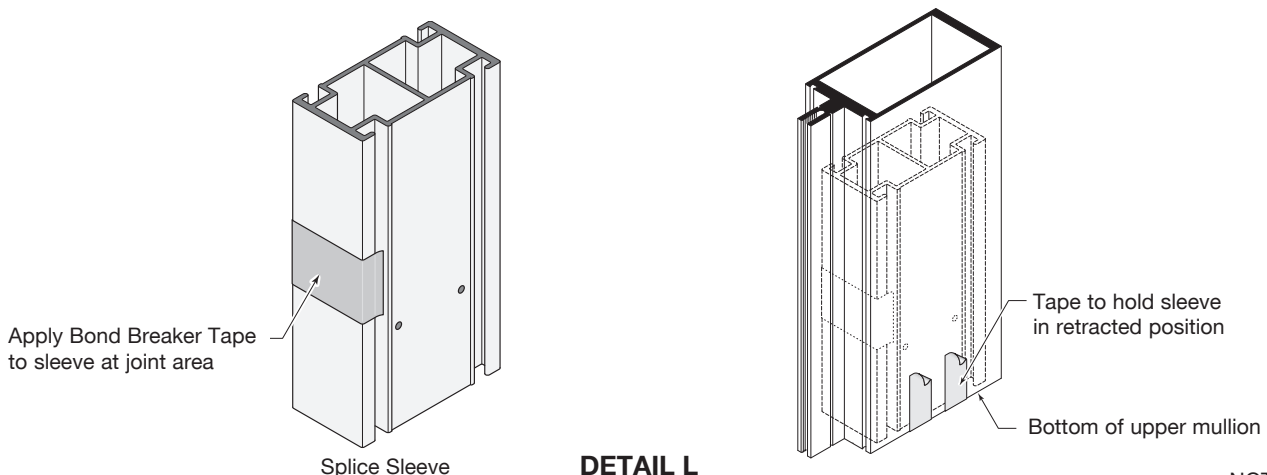
## SPLICE JOINTS MUST OCCUR IN SPANDREL AREAS.

**NOTE:** Splice joints accommodate thermal movement only. They do not compensate for variations in floor levels.

1. Fabricate lower mullions for splice attachment screws as shown in **DETAIL K**.
2. Fabricate back of mullions for stop screw. Install stop screw. **See DETAIL K.**



3. Clean splice sleeves and all joint surfaces. Apply bond breaker tape at areas where sleeve will be sealed to avoid three-sided adhesion. **See DETAIL L**
4. Slide splice sleeve into the upper member before erection and use tape to hold it in place. **See DETAIL L.**

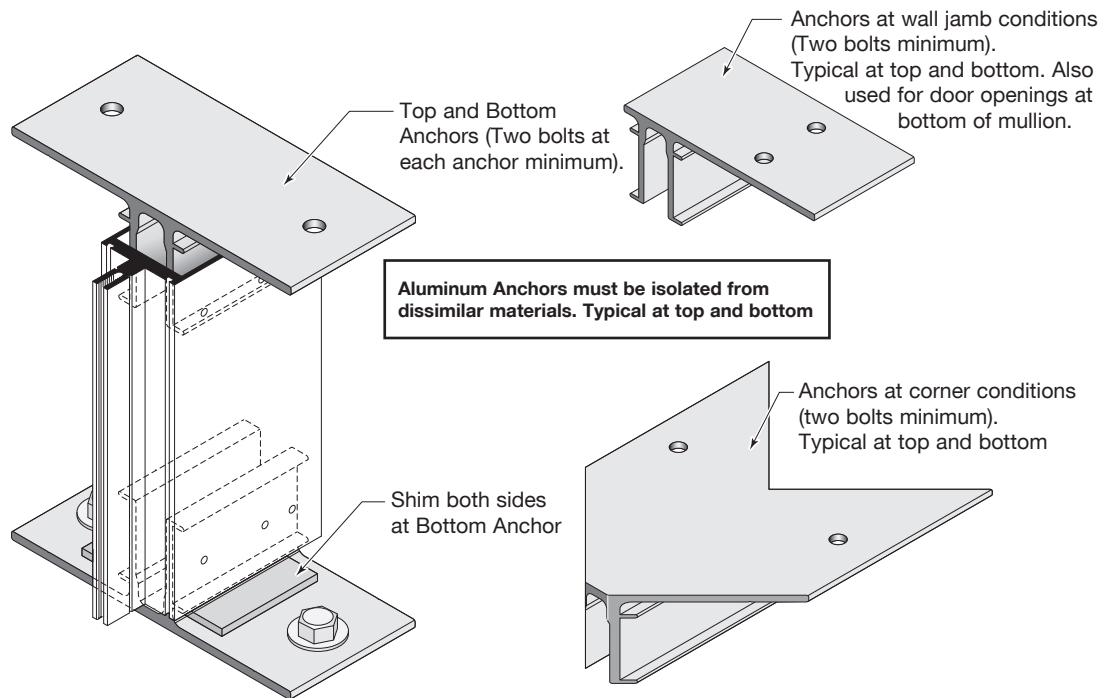


NOT TO SCALE

## ASSEMBLY AND INSTALLATION

### Single Span INSTALLATION

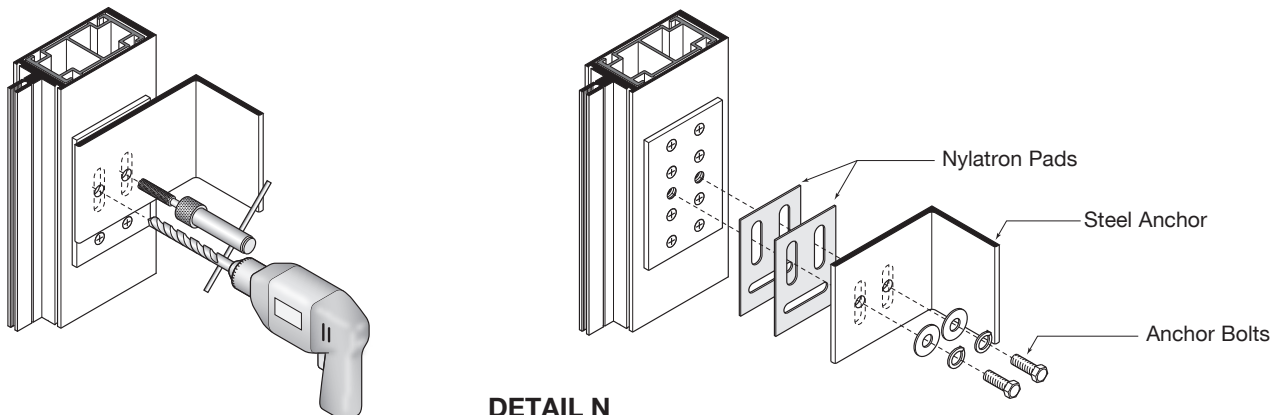
1. Slide top and bottom "T" anchors into vertical members. See **DETAIL M**.
2. Install verticals plumb and level. Secure top and bottom anchors to structure. Shim under both sides of mullion as required to adjust bottom of mullion to proper level. See approved shop drawings for anchor bolt type and size.



**DETAIL M**

### MULTI-SPAN INSTALLATION

1. Install jamb mullion. Slide jamb sill anchor into bottom of jamb mullion. Stand mullion in place plumb, level, and true. See **DETAIL M**.
2. Attach sill anchor to substrate. Shim underside of jamb as required to adjust bottom to proper level. See **DETAIL M**.
3. Attach jamb mullion to floor slab anchor. Using holes in steel anchor as template, match drill two .422" (10.7) dia. holes (27/64" drill bit) through tapping plate, mullion, and reinforcement insert. Tap holes for 1/2-13 bolts. Attach using bolts provided. See **DETAIL N**.



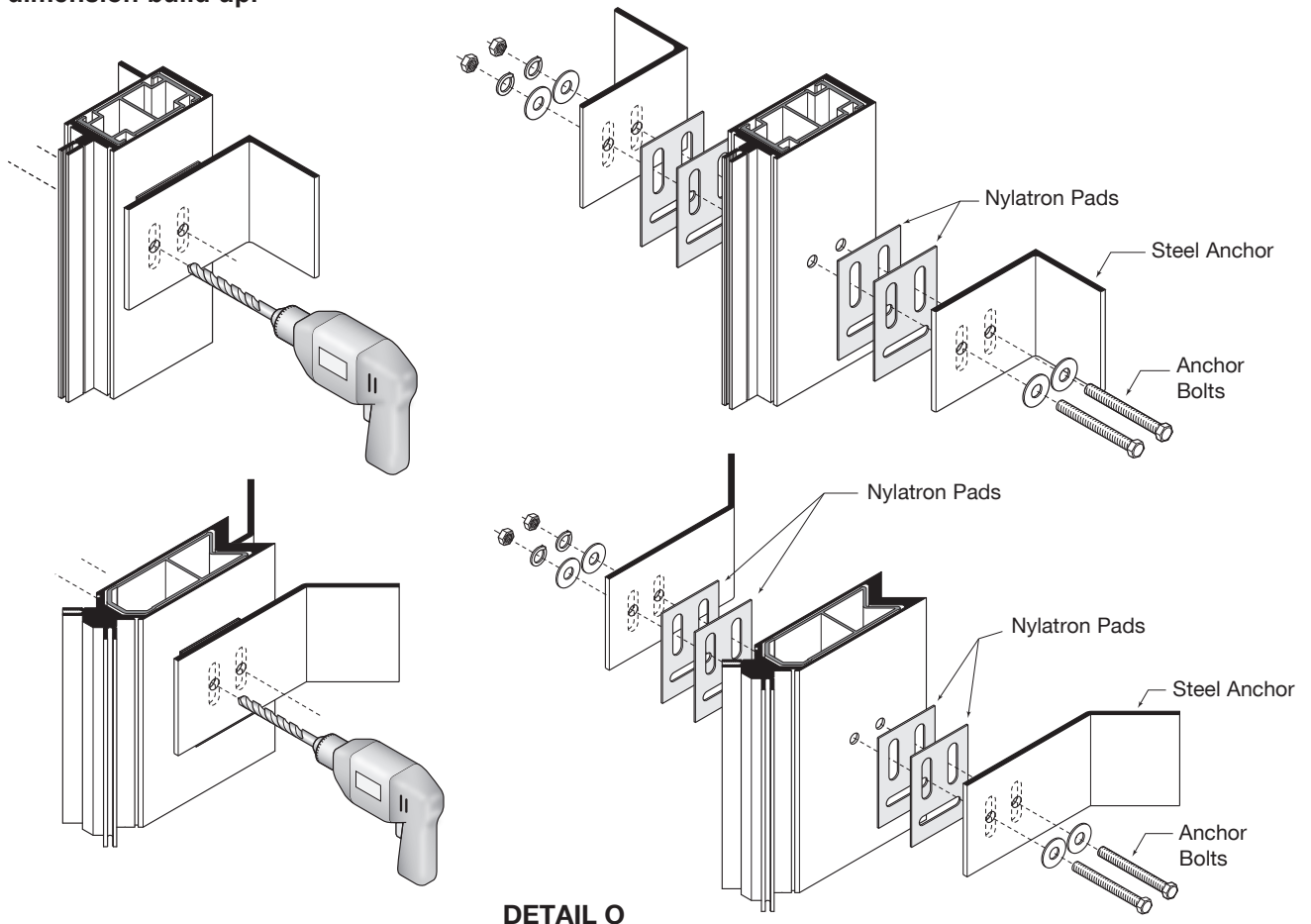
**DETAIL N**

## ASSEMBLY AND INSTALLATION

### MULTI-SPAN INSTALLATION

4. Install intermediate mullions. Slide sill anchor into bottom of mullion. Stand mullion in place plumb, level, and true. **See DETAIL M** on page 11.
5. Attach sill anchor to substratum. Shim under both sides of mullion as required to adjust bottom to proper level. **See DETAIL M** on page 11.
6. Attach mullion to floor slab anchor. Using holes in steel anchor as template, match drill two .531" dia. holes [17/32" (13.5) drill bit] on each side through mullion and reinforcement insert. Attach using bolts provided. Continue this procedure until all lower mullions are installed. **See DETAIL O.**
7. Install upper jamb and mullions. Stand upper mullion above previously erected mullion. Remove tape holding splice sleeve in place allowing the sleeve to telescope into the lower mullion hitting the stop screw. **See DETAIL P** on page 13.
8. Secure splice sleeve to lower mullion with four **12X1FHPSMS** provided. **See DETAIL P** on page 13.
9. Attach mullion to upper floor slab anchor plumb, level, and true.
10. Before erecting the extreme top mullion in a column, head anchor must be inserted into top of mullion. **See DETAIL M** on page 11. Secure mullion to floor slab anchor with bolts provided and attach head anchor to structure.
11. Continue this sequence until wall is complete.

**NOTE: Mullion spacing must be held to within  $\pm 1/32"$  (.8). Check overall frame dimension every four bays to monitor dimension build up.**

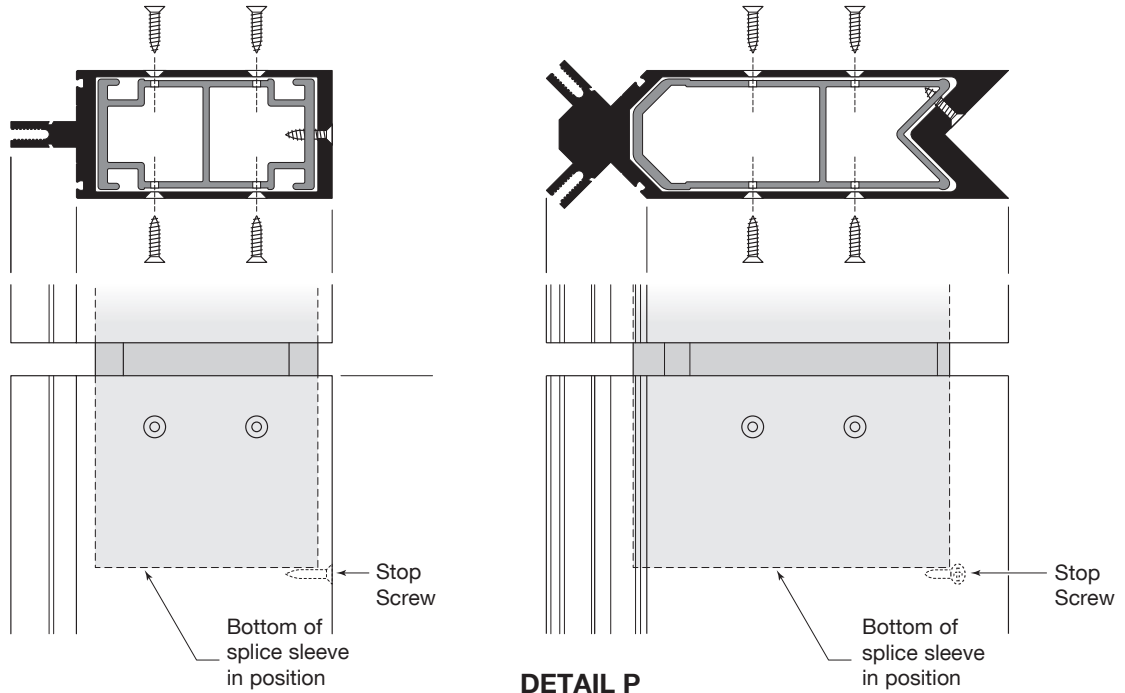


**DETAIL O**

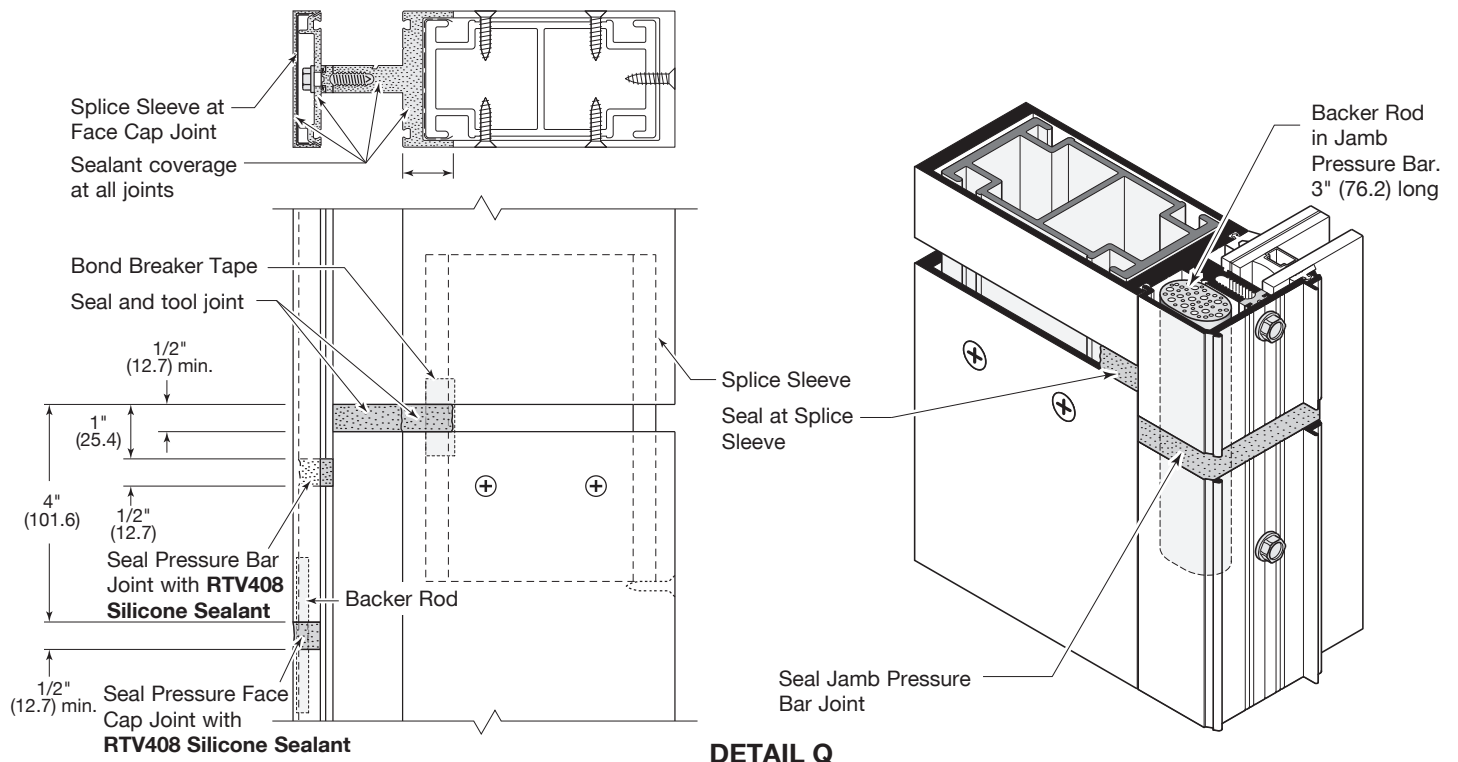
## ASSEMBLY AND INSTALLATION

### SPLICE SLEEVE BAR, AND FACE COVER INSTALLATION

1. Install upper member and let extruded sleeve slide down until it sits on top of stop screw. Match drill through lower mullion attachment holes into splice sleeve with #15 drill bit (.180"). Secure splice sleeve to lower mullion with four **12X1FHPSMS** provided. **See DETAIL P.**



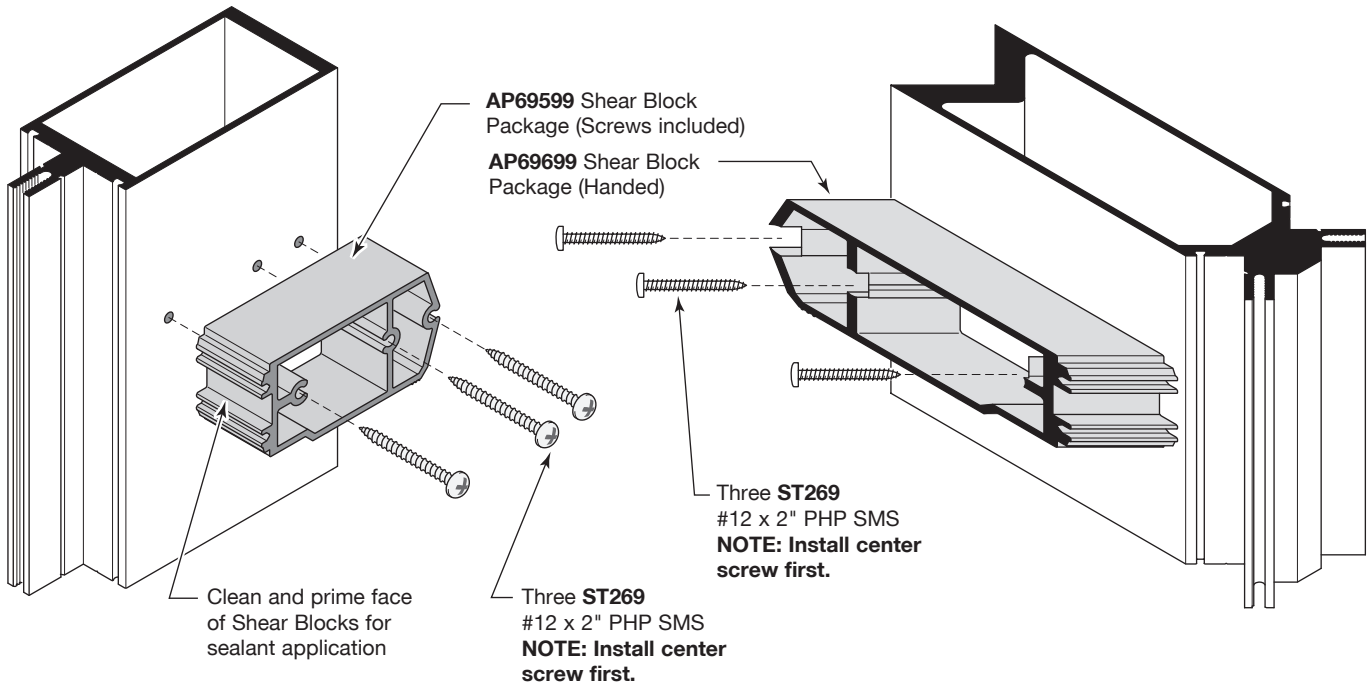
2. Stagger joints on back members, pressure bars, and face caps. Seal joints as shown with **RTV408 Silicone Sealant** in **DETAIL Q.**
3. Seal pressure bar joint with **RTV408 Silicone Sealant.** **See DETAIL Q.**



## ASSEMBLY AND INSTALLATION

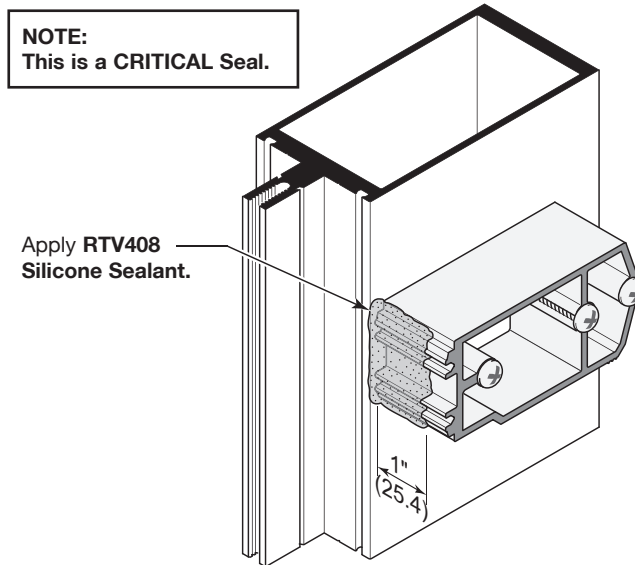
### SHEAR BLOCK AND HORIZONTAL INSTALLATION

1. Install shear blocks. Clean and prime front face of shear blocks and attach to mullions with three **ST269** #12 X 2" PHP SMS screws provided. **See DETAIL R.**



DETAIL R

2. Apply **RTV408 Silicone Sealant** to shear block face prior to installing horizontal members. **See DETAIL S.**



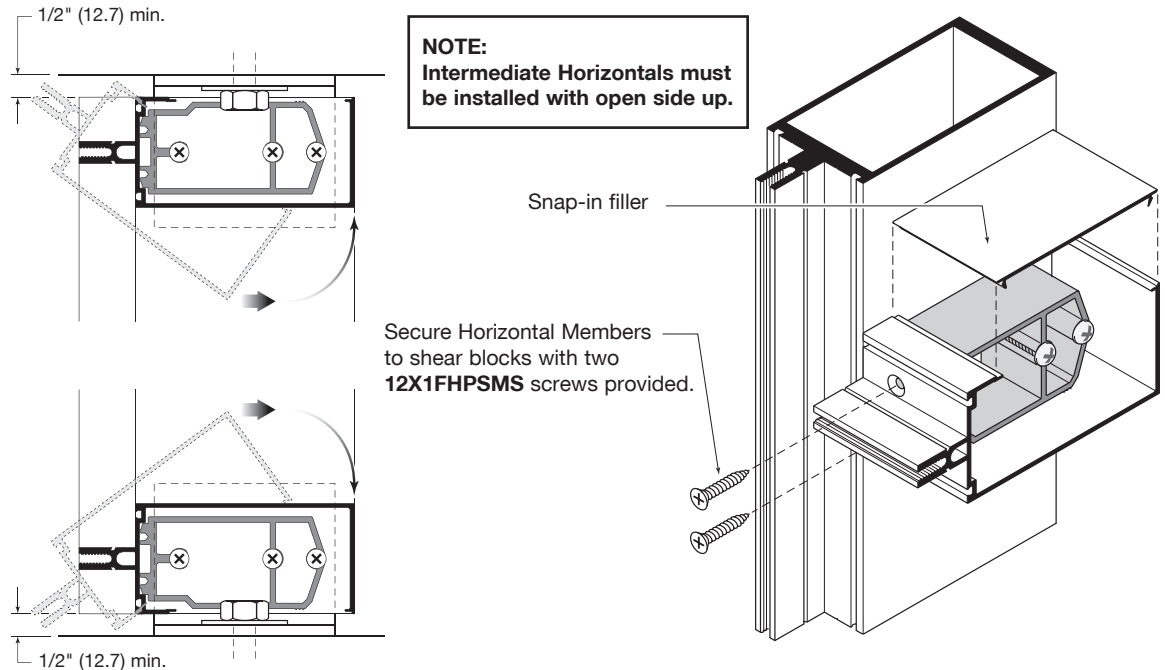
DETAIL S

## ASSEMBLY AND INSTALLATION

### INSTALL HORIZONTAL BACK MEMBERS

- Roll horizontal members over shear blocks and secure with screws provided. **See DETAIL T.**
- Install snap-in horizontal fillers. **See DETAIL T.**

**NOTE:** Snap-in fillers are optional at head and sill to facilitate interior caulking. Cut fillers 3-3/4" (95.3) short to clear shear blocks. Snap fillers in place before installing head and sill members.

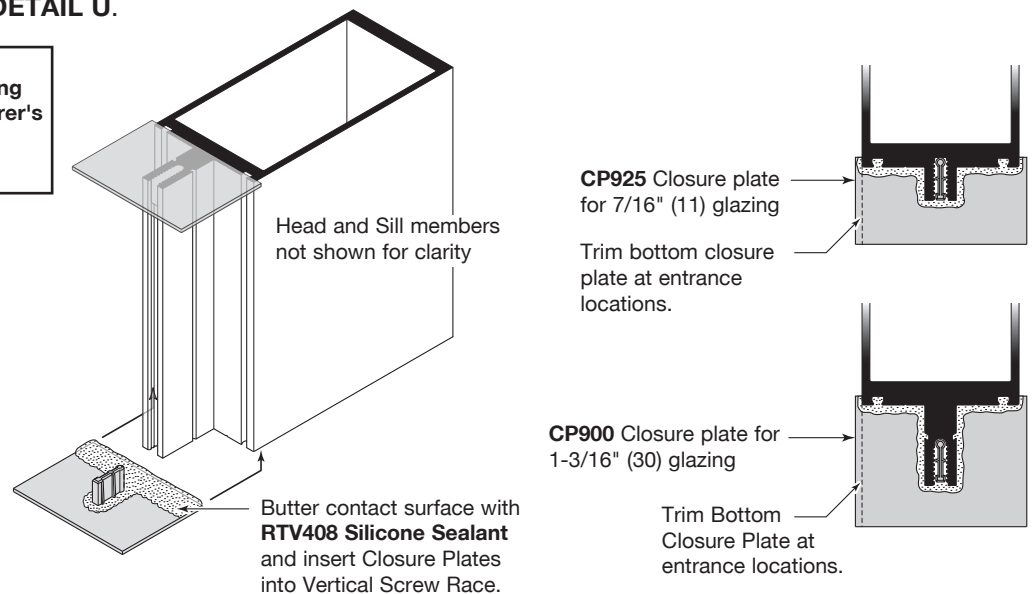


DETAIL T

### PERIMETER SEAL PROCEDURE

- Install closure plates at top and bottom of vertical mullions. **See DETAIL U.**
- Closure plates that occur at entrance locations must be trimmed flush with mullion edge at opening side for door frame clearance. **See DETAIL U.**

**NOTE:**  
Clean all surfaces prior to applying sealants. See sealant manufacturer's requirements. TYPICAL AT ALL CONDITIONS



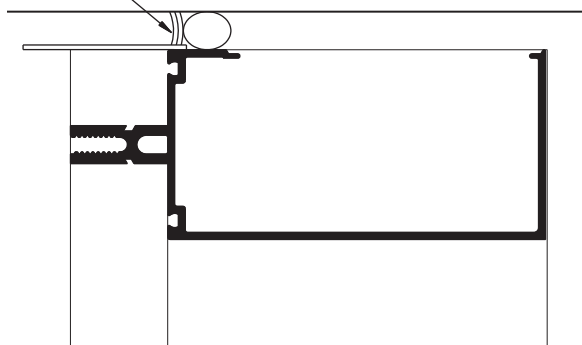
DETAIL U

# ASSEMBLY AND INSTALLATION

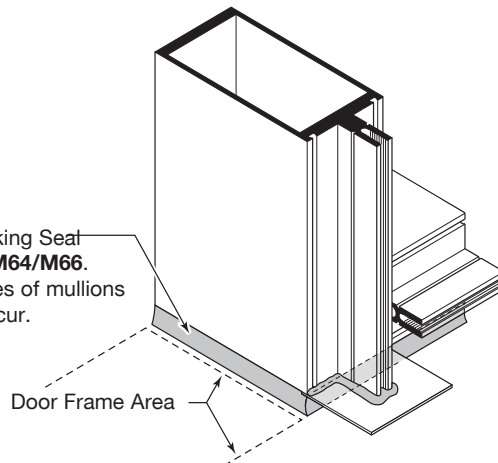
## PERIMETER SEAL PROCEDURE

- After back members are installed seal around perimeter with **Cat. No. 95C/M64/M66 Sealant**. Perimeter caulking must be completed prior to installation of glass and pressure bars. Ensure perimeter sealant has smooth transition across vertical closure plates. Run perimeter seals around the sides of mullions at entrance openings. **See DETAIL V.**

Perimeter Caulking Seal  
Cat. No. 95C/M64/M66.



Run Perimeter Caulking Seal with **Cat. No. 95C/M64/M66**. Seal around the sides of mullions where entrances occur.

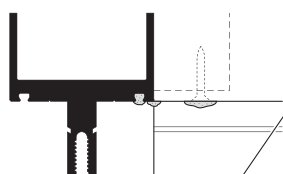


DETAIL V

## GLAZING

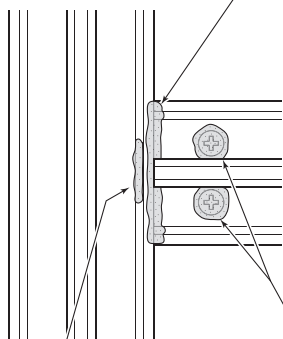
### GLASS OPENING OPERATION

- Use **RTV408 Silicone** to seal joint between horizontal and vertical. Apply **Cat. No. 33S Silicone Sealant** to seal over heads of screws in the glazing pockets.
- Apply **RTV408 Silicone** at the **three contact areas** of End Dams. Also fill the vertical gasket reglet at the End Dam location. **See DETAIL W.**
- Slide End Dams into place. **See DETAIL X. NOTE:** End Dams occur at head and sill also.

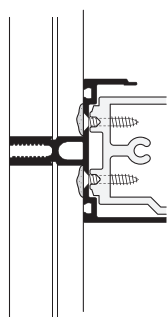


**CRITICAL SEAL AREA.**  
Seal Horizontal/Vertical joint intersection with **RTV408 Silicone Sealant**.

**NOTE:** Consult sealant manufacturer for proper cleaning and priming recommendations



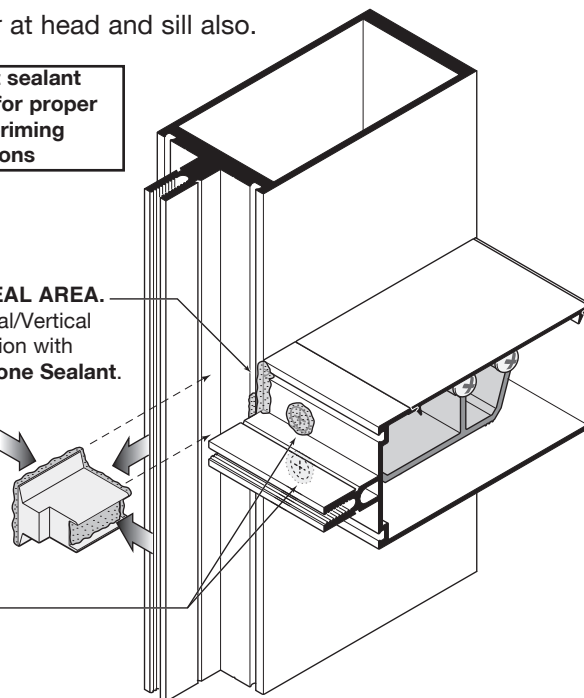
**CRITICAL SEAL AREA.**  
Fill the vertical gasket reglet with **RTV408 Silicone Sealant** right behind the End Dam.



**CRITICAL SEAL AREA.**  
Seal over head of screws with **Cat. No. 33S Silicone Sealant**.

**CRITICAL SEAL AREA.**  
Apply **RTV408 Silicone Sealant** to the three contact areas.

**CRITICAL SEAL AREA.**  
Seal Horizontal/Vertical joint intersection with **RTV408 Silicone Sealant**.



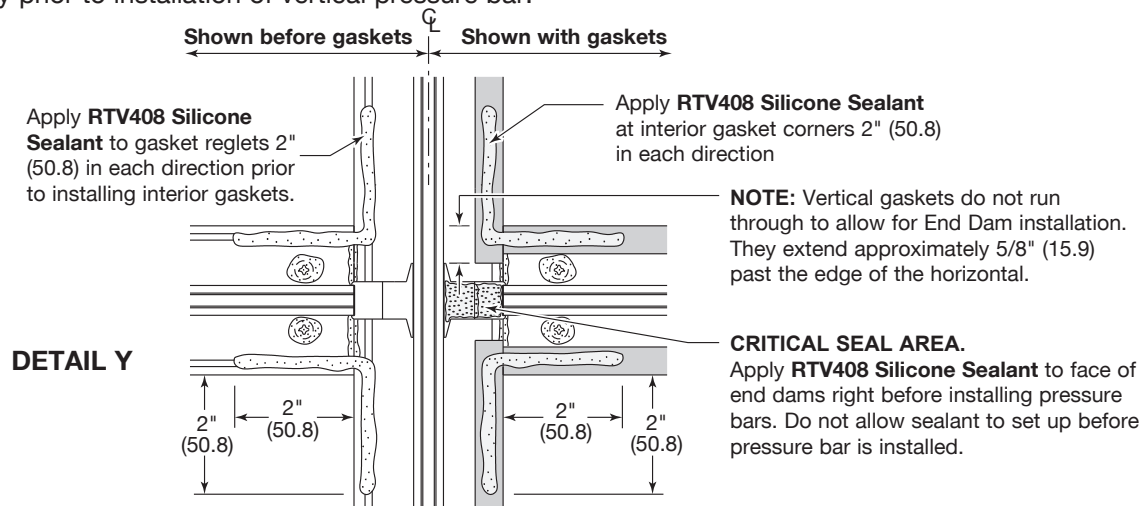
DETAIL W

DETAIL X

## GLAZING

### GLASS OPENING OPERATION

4. Apply **RTV408 Silicone Sealant** into gasket reglet at corners. **See DETAIL Y** for extent of coverage.
5. Install interior gaskets into vertical and horizontal members and exterior gaskets into pressure bars. Horizontal pressure bar gaskets should extend 1/8" (3.2) beyond each end of the extrusions. Vertical pressure bar gaskets run continuous.
6. Apply bead of **RTV408 Silicone Sealant** at interior gasket corners 2" (50.8) in each direction. **See DETAIL Y**.
7. Apply **RTV408 Silicone Sealant** to face of End Dams. This is a **critical seal area**. **See DETAIL Y**. This should be done immediately prior to installation of vertical pressure bar.



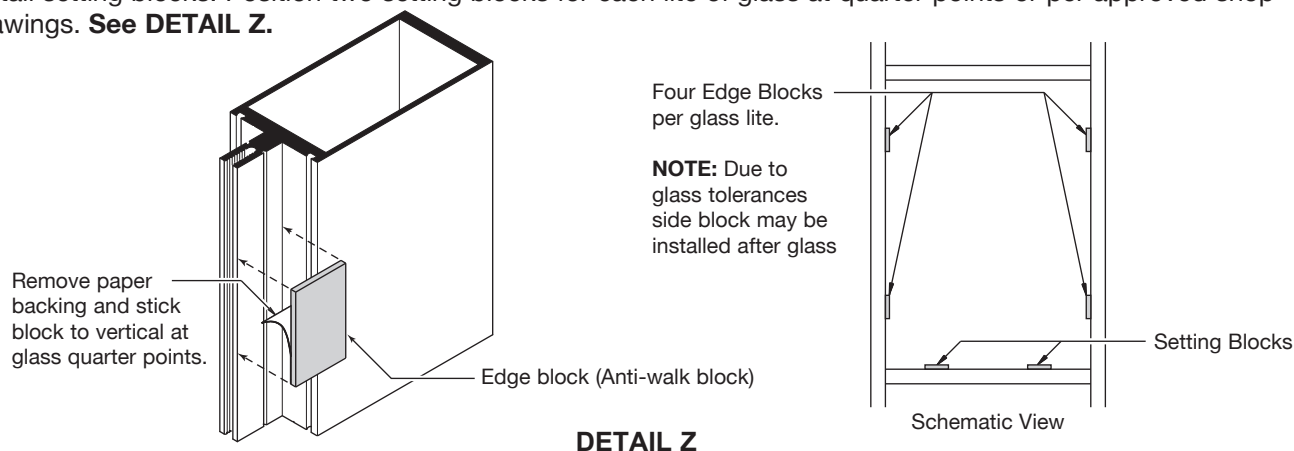
### GLASS INSTALLATION

**GLASS SIZES:** GLASS WIDTH AND HEIGHT = DAYLIGHT OPENING + 1-5/8" (41.3)

**NOTE:** Formula does not take into account glass tolerances. Consult glass manufacturer before ordering glass.

Remove gaskets from carton and lay flat in a clean, dry area in order to recover shape. Allow gaskets to relax at least two hours at temperatures above 50°F (10°C). Glaze with gaskets above 40°F (4.44°C). If necessary warm gaskets in a hot box before installing. **Use NP432 dense gasket at exterior and NP421 sponge gasket at interior.** Cut gaskets allowing 1/8" (3.2) extra length per foot of extrusion to allow for shrinkage. Vertical gaskets on mullion run past horizontal gaskets by 5/8" (15.9). **See DETAIL Y** above. Horizontal gaskets abut vertical gaskets.

1. Install side blocks. Remove paper backing from side blocks and locate them, four per glass lite, at quarter points of glass. **See DETAIL Z**.
2. Install setting blocks. Position two setting blocks for each lite of glass at quarter points or per approved shop drawings. **See DETAIL Z**.



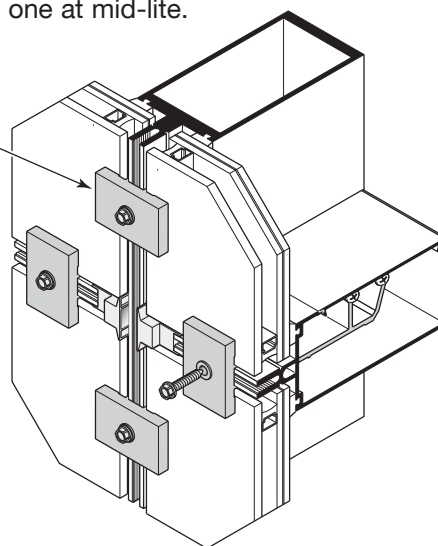
# GLAZING

## GLASS INSTALLATION

3. Install glass and center in opening. Use **CW368** temporary glass retainers to hold glass in place until pressure bars are installed. Install temporary glass retainer at corners and one at mid-lite.

**CW368** Temporary Glass Retainer. Torque to 30 in. lb. (3.4 Nm).

**NOTE:**  
Do not over torque glass retainers bolts.  
If lite of glass is over 7' (2.13 m), use two retainers at mid-lite.



**DETAIL AA**

## PRESSURE BAR INSTALLATION

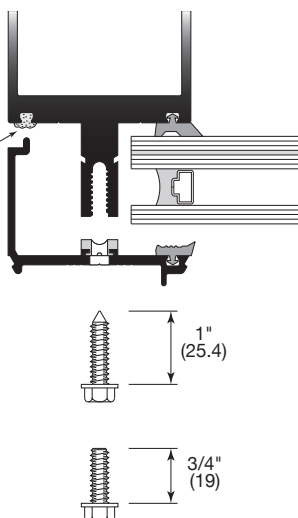
Install vertical pressure bar bolts from bottom to top and horizontal pressure bar bolts from center outward. Always locate bolts 1-1/2" (38.1) maximum from vertical/horizontal intersections to ensure proper pressure over End Dams.

**See DETAIL AA. Be sure pressure bar spacer is not disengaged.**

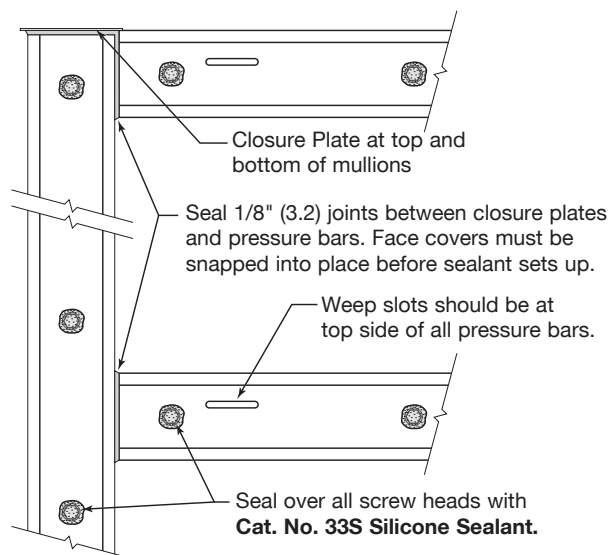
**NOTE: See DETAIL P on page 13 for pressure bar splice condition.**

1. Install gaskets into vertical and horizontal pressure bars.
2. Install vertical pressure bars first. Leave 1/8" (3.2) gaps at top and bottom. Using a speed wrench, torque bolts to 30 inch pounds (3.4 Nm). Increase torque to 50 to 60 inch pound (5.7 to 6.8 Nm) minimum after all four sides have been secured.
3. Center horizontal pressure bars in opening leaving 1/8" (3.2) gaps at each end.  
**NOTE: Weep Slots must be** in top side of all horizontal pressure bars and level with bottom of glazing pocket to ensure proper drainage. **See DETAIL BB.**
4. Seal gaps at vertical/horizontal intersections, screw heads, and at top and bottom of vertical pressure bars. Use **RTV408 Silicone Sealant**. **See DETAIL BB.**

Inject continuous bead of **RTV408 Silicone Sealant** immediately before installing Perimeter Pressure Bar



**DETAIL BB**



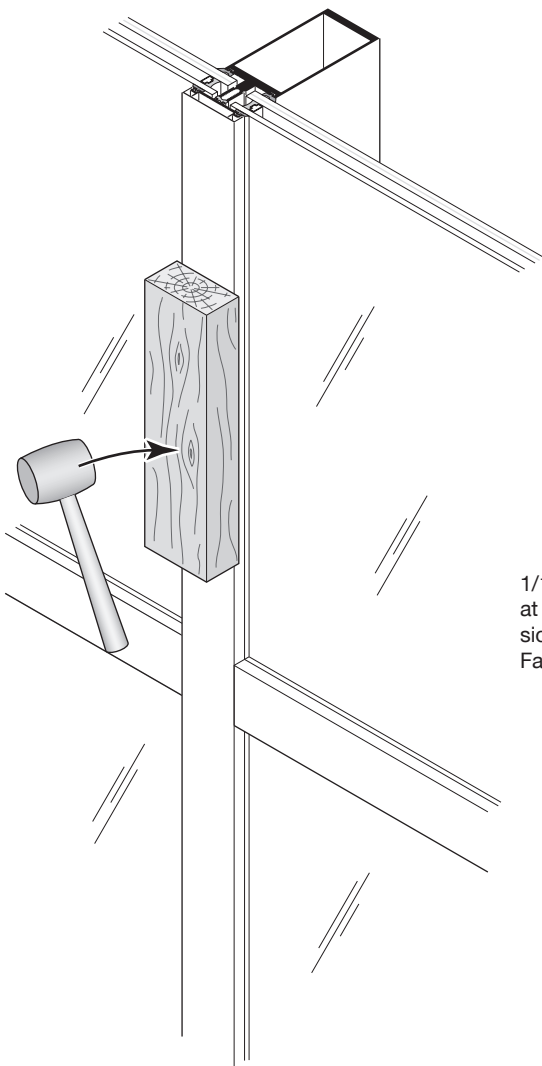
## GLAZING

### FACE COVER INSTALLATION

Care must be taken to prevent damage of face covers during installation. Use a piece of wood such as 2" x 4"x 12" (50 x 100 x 300) and **CRL Cat. No. ST57534 52 oz. Stanley® Soft Face Power Hitter**. See **DETAIL CC**.

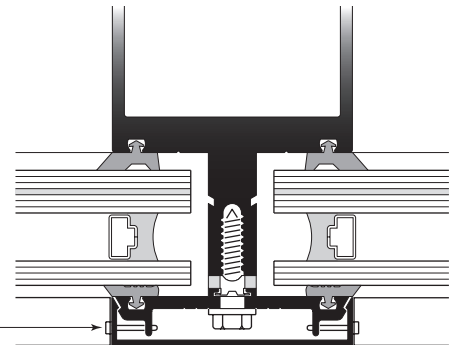
1. Install vertical face covers first. Do not disturb top and bottom closure plates when installing face covers. Pinning of vertical face cover is required to prevent slippage. Use one pin on each side per cut length concealed behind horizontal face cover. See **DETAIL DD**.
2. Install horizontal face covers with the weep holes located on the bottom side.

**NOTE:** See **DETAIL Q** on page 13 for face cover splice condition.



**DETAIL CC**

1/16" x 1/2" (1.6 x 12.7) Roll Pin  
at center of cut length on each  
side. (Concealed behind Horizontal  
Face Cover)

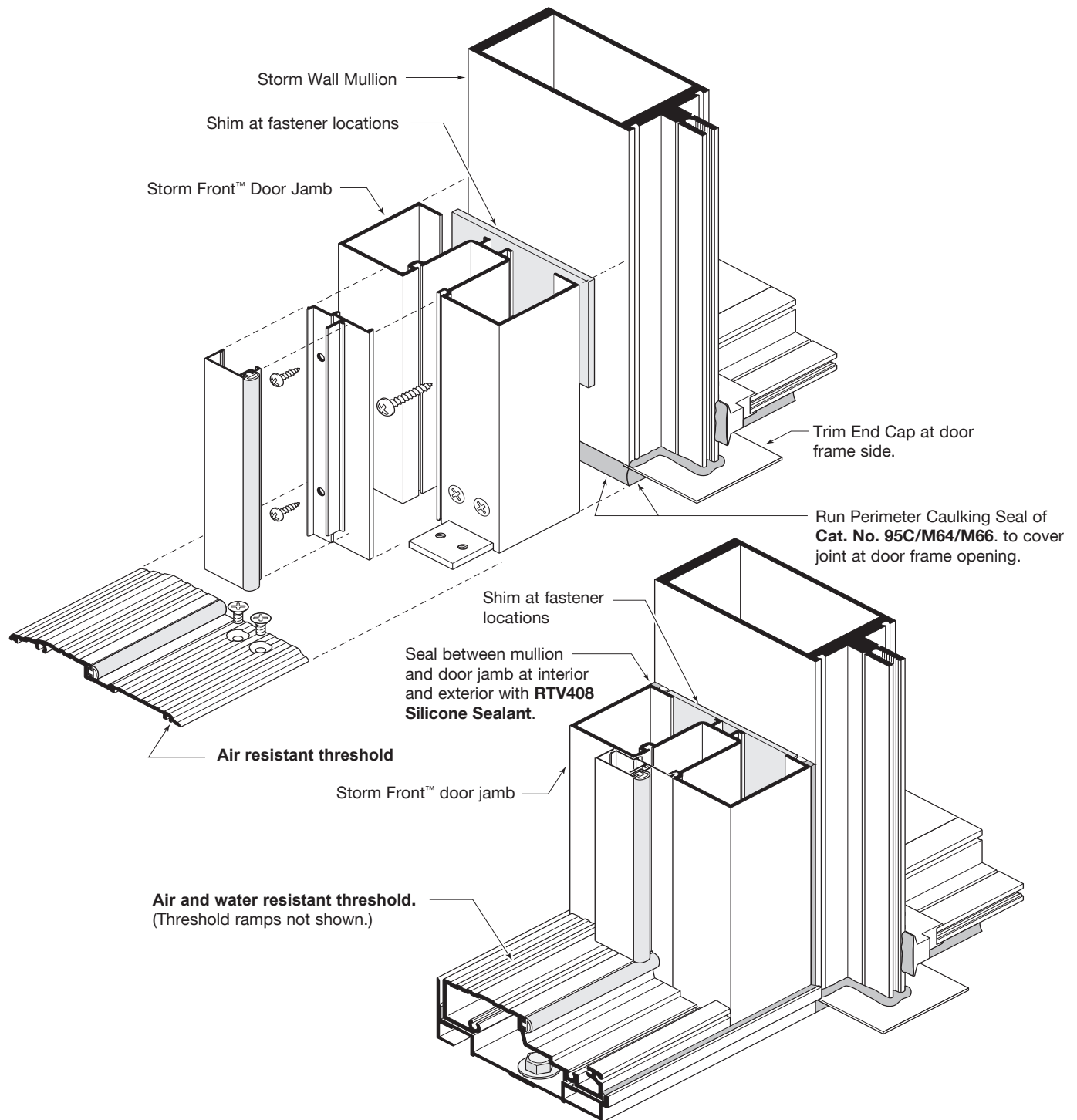


**DETAIL DD**

## ENTRANCE FRAMES

Refer to the STORM FRONT™ section of this manual for door frame installation. Door frame installation into curtain wall system is as instructed in the STORM FRONT™ section with the exception of perimeter caulk space and anchoring fastener types shown on **DETAILS FF and GG page 21**. For door frame opening allow for a 1/8" (3.2) caulk space at jambs and head.

Door frames may be installed simultaneously with curtain wall or after curtain wall installation has been completed.



DETAIL EE

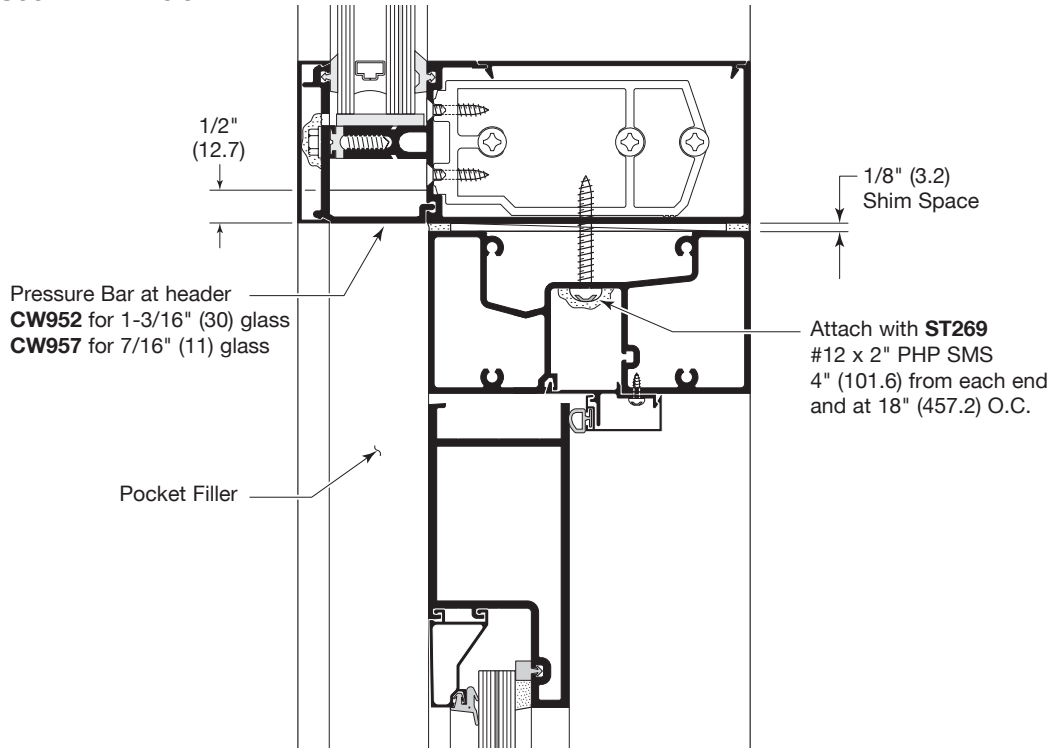
## SERIES IW3250 STORM WALL

### ENTRANCE FRAMES

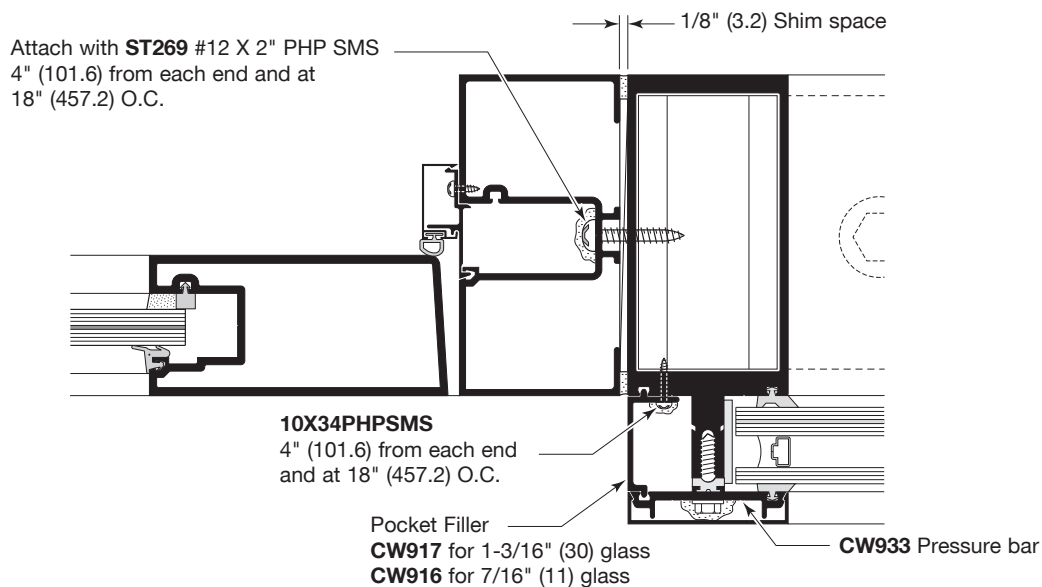
1. Place door frame into prepared opening. Align back of door frame with back of curtain wall and fasten with screws as indicated on **DETAILS FF and GG** or as shown on approved shop drawings.
2. Seal interior and exterior frame perimeter with **Cat. No. 95C/M64/M66 Sealant**.

#### NOTE:

Use the pressure bars and pocket fillers as shown on **DETAILS FF and GG** for curtain wall glazing around door frame. The pocket filler at vertical mullions is to be cut to extend 1/2" (12.7) above bottom of horizontal at door frame header. **See DETAIL GG.**



DETAIL FF



DETAIL GG



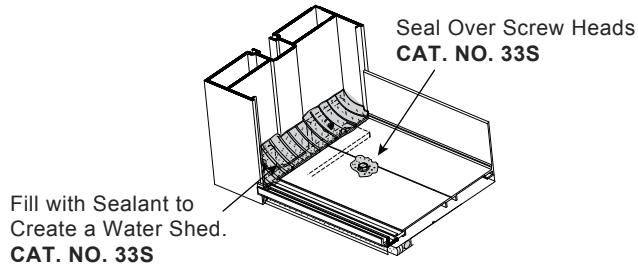
# GUIDE TO SEALANTS

**NOTE:** All sealants must be tooled to ensure proper adhesion.

## WATERPROOFING

### • 33S ACETIC CURE SILICONE

Sill to Subsill, End Dams, Screw Heads, and Threshold to Door Frame Sealing.

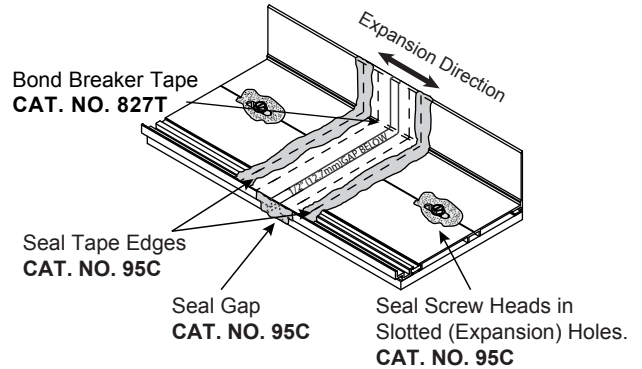


**NOTE:** Not for use near insulating glass units with butyl sealant.

## EXPANSION

### • 95C NEUTRAL CURE SILICONE

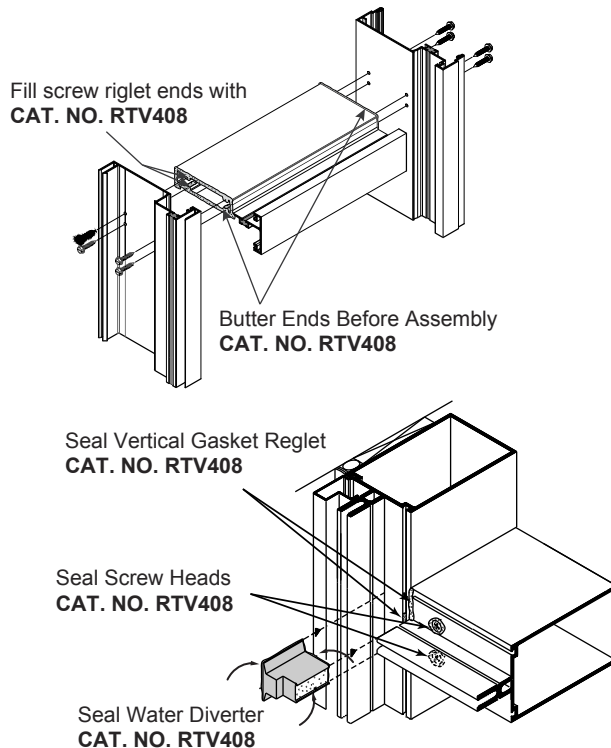
Expansion Joints.



## JOINT ADHESIVE

### • RTV408 NEUTRAL CURE SILICONE

Small Joints, End Joints and Buttered Surfaces, Water Diverters, End Dams and Reglet Fills.



**NOTE:** I.G. butyl contact OK.

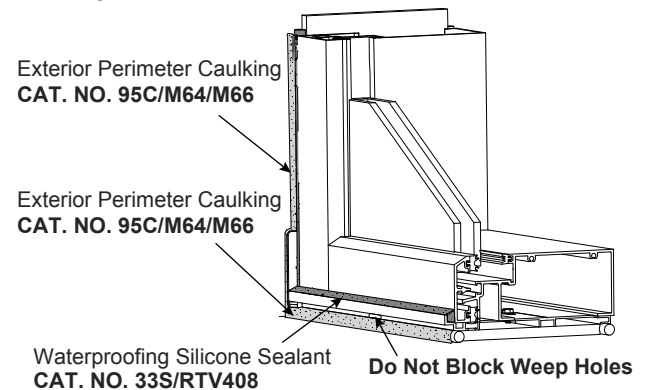
## PERIMETER

### • 95C NEUTRAL CURE SILICONE (Preferred)

### • M64 (SMOOTH) MODIFIED POLYURETHANE

### • M66 (TEXTURED) MODIFIED POLYURETHANE

Perimeter Seals, Expansion Joints, Sill and Threshold Beds, Concrete, Wood, and Steel Openings.



## STRUCTURAL

### • ALL STRUCTURAL SEALANTS REQUIRE TESTING AND APPROVAL.

Glass-to-Glass or Glass-to-Metal



# JOB SITE ESSENTIALS

Helpful Tools and Supplies for Installing CRL-U.S. Aluminum Entrances, Storefronts, Windows, and Curtain Wall Systems



**CRL 95C Silicone Building Sealant**



**CRL RTV408 Neutral Cure Silicone Sealant**



**CRL 33S Acetic Cure Silicone Sealant**



**CRL M64 Smooth Texture Modified Polyurethane Construction Sealant**



**CRL M66 Grainy Texture Modified Polyurethane Construction Sealant**



**CRL12:1 Ratio Strap Frame Caulking Gun  
CAT. NO. GA1203**



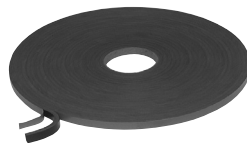
**CRL BOCBR Series Open Cell Backer Rod**



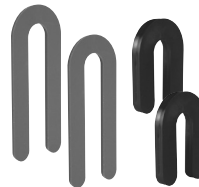
**CRL Backer Rod Roller Tool  
CAT. NO. SBRR**



**CRL Vacuum Cup  
CAT. NO. S7950**



**CRL Saint-Gobain/Norton V2100 Thermalbond® Structural Glazing Spacer Tape**



**CRL PHS Series Plastic Horseshoe Shims**



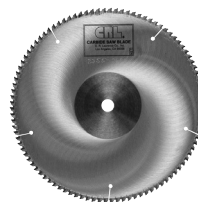
**CRL Digital Laser Level Tool  
CAT. NO. 406065**



**CRL Cordless Screwdriver  
CAT. NO. LD823**



**CRL Portable 10" Miter Saw  
CAT. NO. LS1040**



**CRL Nordic Carbide 10" Saw Blade  
CAT. NO. CSB10X100AX**



**CRL Cougar Carbide 10" Saw Blade  
CAT. NO. CT10X100**



**CRL Door Jack  
CAT. NO. DJ1**



**CRL Complete Set of Seven All Stainless Steel Spatulas  
CAT. NO. AB958G**



**CRL Portable Ladder  
CAT. NO. 6206**



**CRL Hard Hat  
CAT. NO. ES3452**



**CRL Soft-Face Power Hitter  
CAT. NO. ST57532**

## SERIES IW3250 STORM WALL



**CRL Bond  
Breaker Tape  
CAT. NO. 827T1**



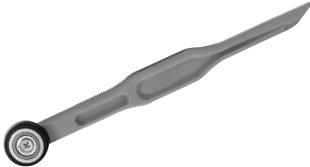
**CRL Glass Cutter  
CAT. NO. TC17B**



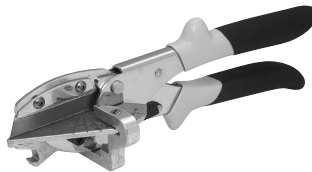
**CRL Running Pliers  
CAT. NO. PPG1**



**CRL Utility Knife  
CAT. NO. K82**



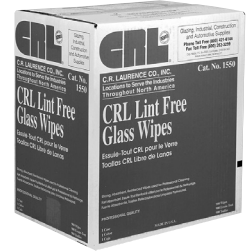
**CRL Gasket Roller  
CAT. NO. VR10**



**CRL Gasket Cutter  
CAT. NO. MC80N**



**CRL Glass Cleaner  
CAT. NO. 1973**



**CRL Glass Wipes  
CAT. NO. 1550**



**CRL 96" Phenolic  
Straight Edge  
CAT. NO. SEP96**



**CRL Glazier's Rule Holder  
CAT. NO. RH670**



**CRL Phenolic L Square  
CAT. NO. L48**



**CRL Spring Clamp  
CAT. NO. JC3202HT**



**CRL Tape Measure  
CAT. NO. 54125**



**CRL Glass Marking Pencil  
CAT. NO. GM44**



**CRL Belt Sander  
CAT. NO. LD321**



**CRL Glass Grinding Belts  
CAT. NO. CRL3X21120X**



**CRL Gloves  
CAT. NO. KF1TL**



**CRL Utility Knife Blades  
CAT. NO. 1992C**



**CRL Cordless Driver/Drill  
CAT. NO. LD147**



**CRL All Terrain Dolly  
CAT. NO. ATD1**