

# B2500 Curtainwall Installation

## General Notes

1. Read instructions to make proper preparations before beginning.
2. Boyd Aluminum products are intended to be installed by experienced professional glazing contractors. Inexperienced contractors need to employ a qualified individual to manage and provide field instruction.
3. Make necessary coordination plans with other trades.
4. 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.
5. All materials need to be inventoried to be certain everything required for installation is available.
6. Materials need to be installed plumb, level and true.
7. Work from project defined bench marks like center column lines, finished floors, or mullion spacing as defined by the shop drawings and the General Contractor.
8. 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.
9. When applying sealants always "tool" to fill irregularities and smooth out air bubbles.
10. Isolation of dissimilar materials "like Aluminum and uncured Concrete," should be prepared for. Use a heavy bituminous paint or zinc chromate coating or approved equal to isolate incompatible materials.
11. Protection and cleaning of materials are the responsibility of the Glazing and General Contractors. (Reference AAMA documentation, and care and maintenance.)
12. Expansion Joints and perimeter joints in these instructions will be nominal sized. Refer to shop drawings to define project specific joints. Temperature variations need to be considered during installation. Install expansion gaps commensurate to the temperature during installation.
13. 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.
14. 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.
15. Due to changing fenestration parameters and evolving product lines, Boyd Aluminum reserves the right to change detailing and documentation commensurately without notification.

**Installation Instructions:**

*(Instructions will need interpreted to different glazed or mixed lites and system depth respectively.)*

**Review the drawings, project documents and read instructions carefully to make proper preparations before installation, and share drawings, project documents and read instructions with glazier and installation associates to share the knowledge and insure critical sealing and glazing steps are not missed during the processes. It is easier to do it right or make immediate corrections than to return to the jobsite. When working with sealant always clean, tool and get to an appropriate stopping place before taking a break to ensure proper sealant application and avoid contamination of these products. Follow sealant manufacturer's instructions.**

**Installation is the responsibility of the contractor.**

**Use drawing and building bench marks for installation locations.**

**Fabricate carefully and as precise as you can to make installation easier.**

**Pressure plate will initially evenly torque to 30 in-pounds.**

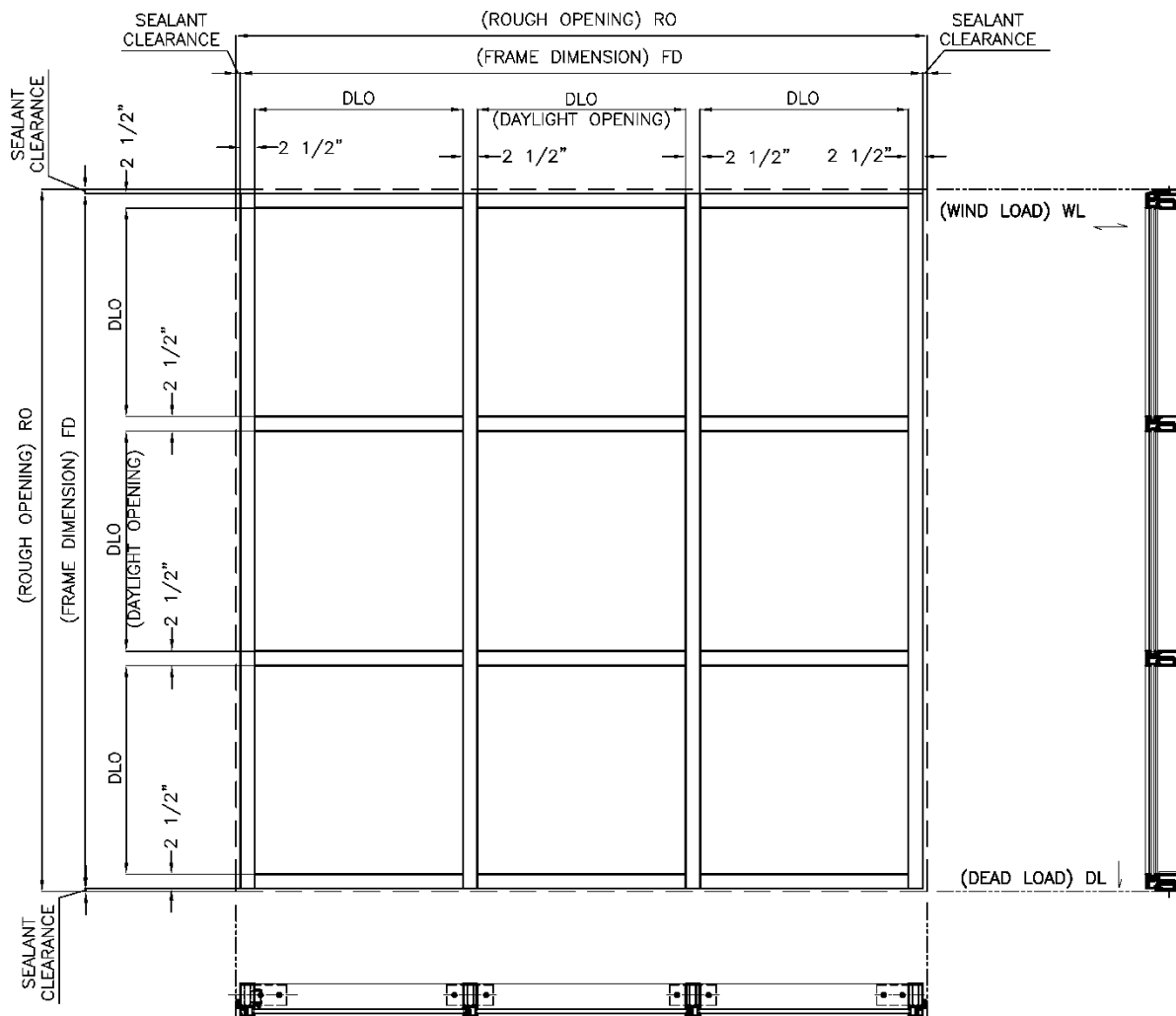
**Finally evenly torque pressure plates to 60 in-pounds.**

**Do not over torque, but evenly torque pressure plate fasteners.**

**Damage to mullions and gaskets can occur.**

**Frame Fabrication:**

- Cut horizontal and vertical parts to size:
  - Vertical Mullion = RO (Rough Opening) – top and bottom clearances = FD
  - Vertical Pressure Plate = FD – 1/4"
  - Vertical Mullion Covers = FD (Frame Dimension)
  - Vertical Transition Adaptors = DLO + 1"
  - Horizontal Mullion = DLO (Day Light Opening)
  - Horizontal Pressure Plates = DLO – 1/4"
  - Horizontal Mullion Covers = DLO – 1/16"
  - Horizontal Mullion Filler = DLO – 1/16"
  - Horizontal Inside glazed stop = DLO – 1/16"
  - Horizontal Transition Adaptors = DLO – 1/16"



OUTSIDE GLAZED SAMPLE ELEVATION

FIGURE A

- Predrill and fabricate metal prior to assembly. This assists in controlling perpendicular drilling, consistent and clean fabrication.
- Locate horizontals on outside glazed verticals:  
Mark the locations of your horizontals and locate shear block holes. ( See Figure B )

Exterior side

Interior side

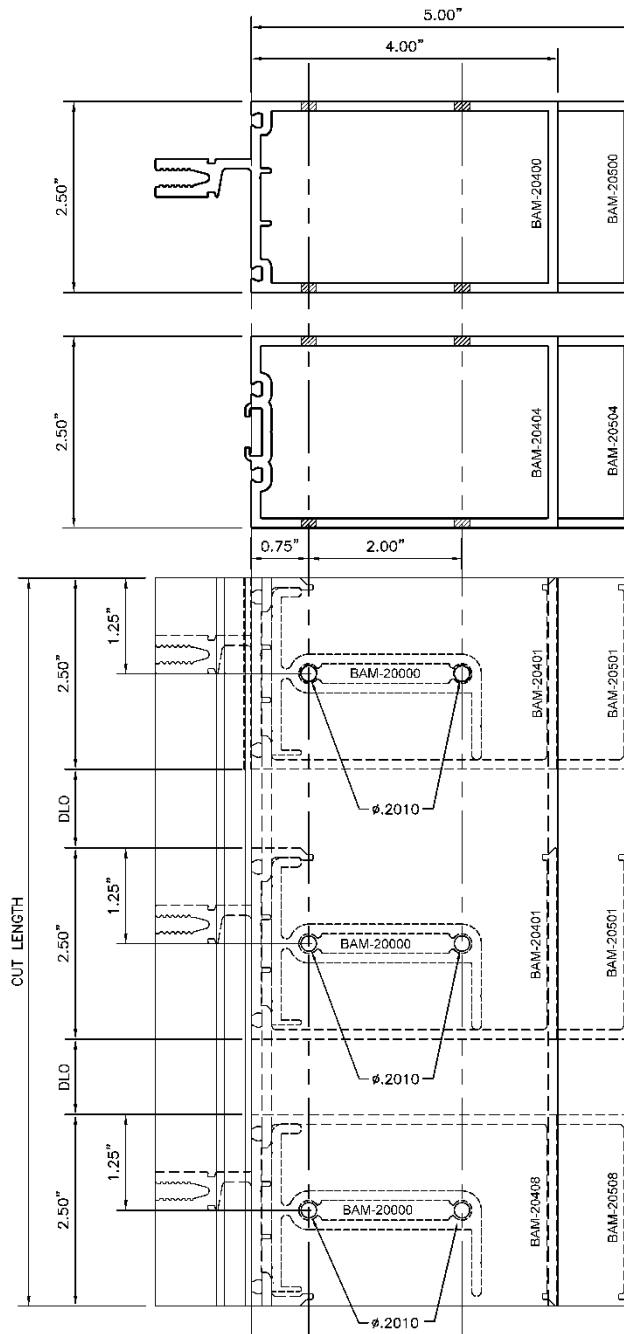


FIGURE B

- Locate horizontals on outside glazed verticals:  
Mark the locations of your horizontals and locate shear block holes. (FIGURE D)  
The use of a drill jig (FIGURE C) is recommended when hand fabricating.

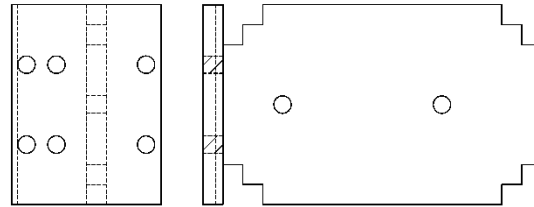


FIGURE C

Exterior side

Interior side

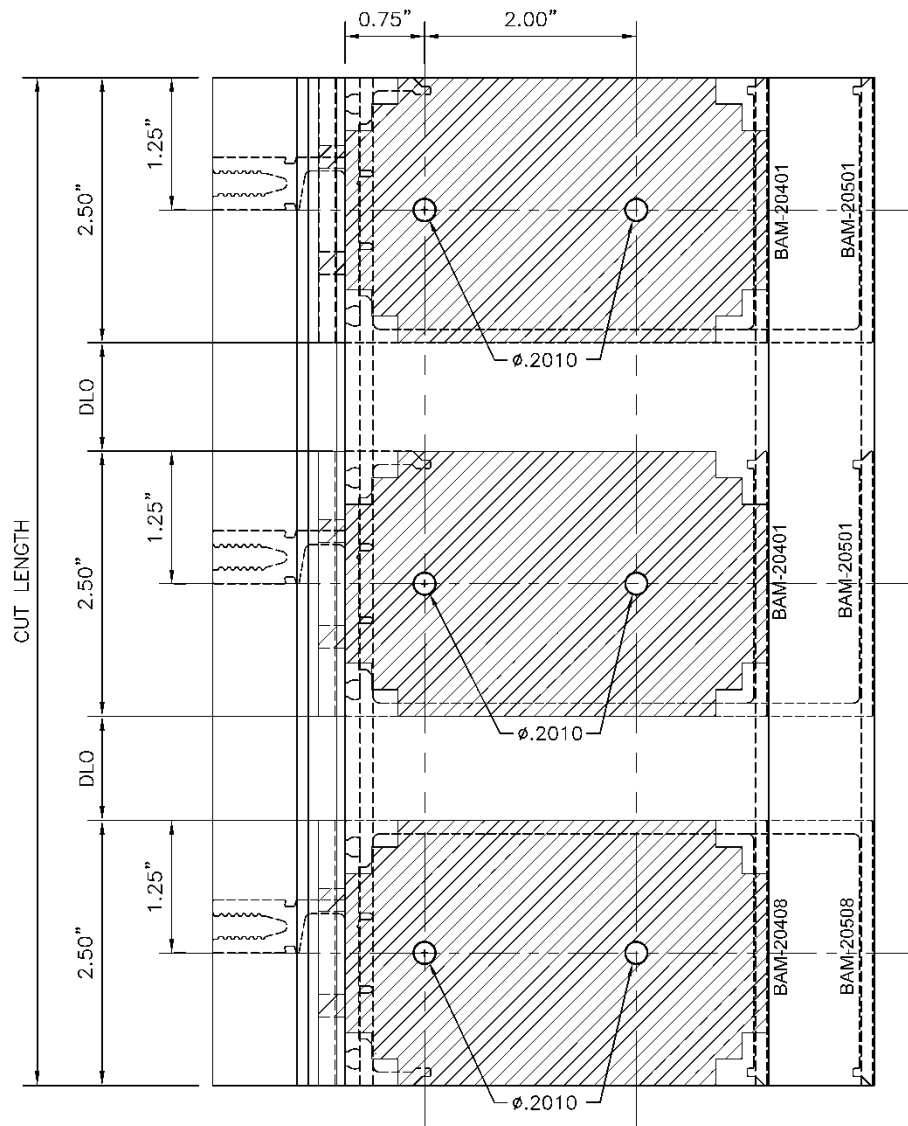


FIGURE D

- Locate horizontals on inside glazed verticals:  
Mark the locations of your horizontals and locate shear block holes.

Exterior side

Interior side

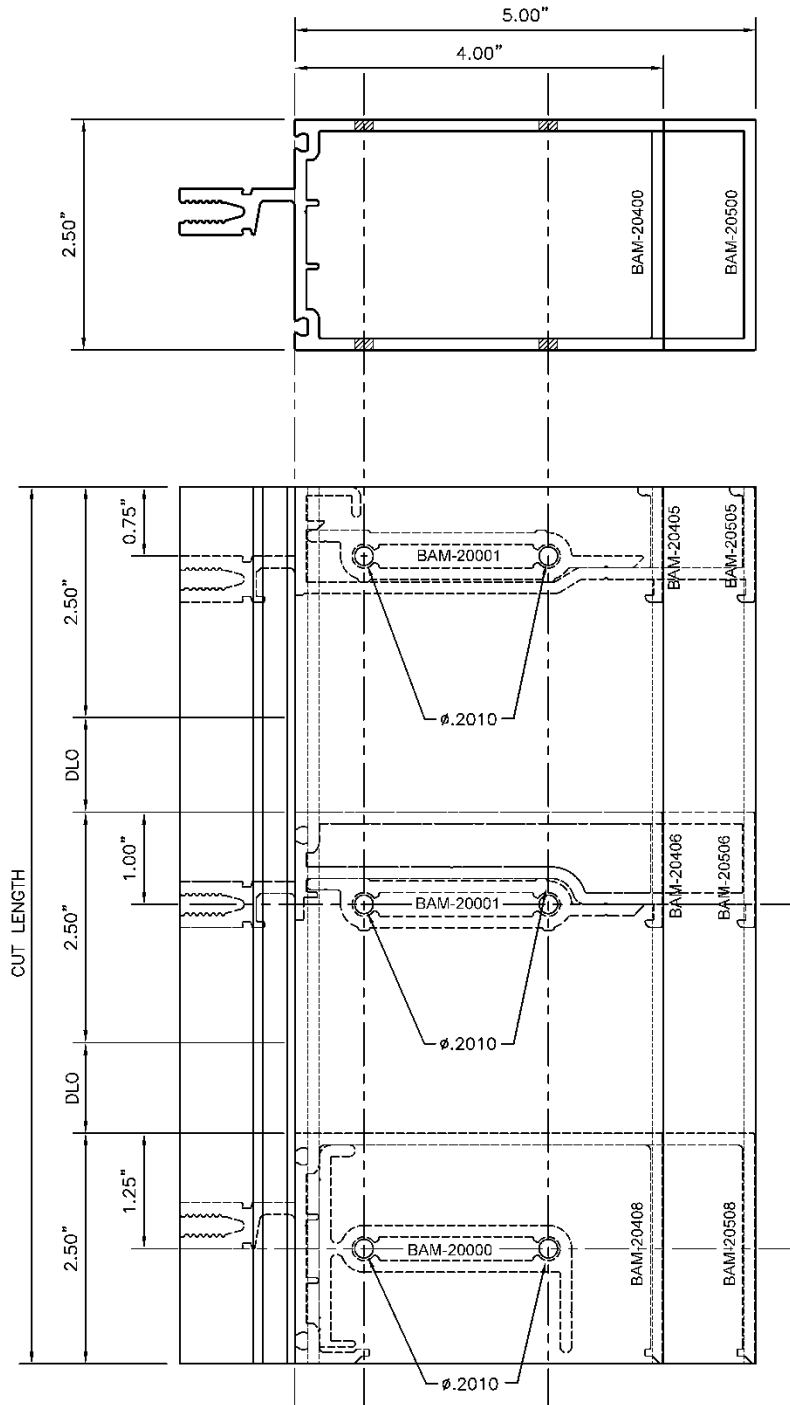


FIGURE E

- Locate horizontals on inside glazed verticals:  
Mark the locations of your horizontals and locate shear block holes. (FIGURE F)  
The use of a drill jig is recommended when hand fabricating. (FIGURE C)  
Note: Notches are designed to help locate the holes from D.L.O.

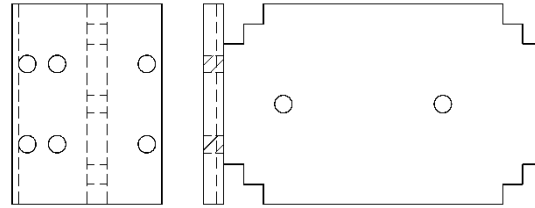
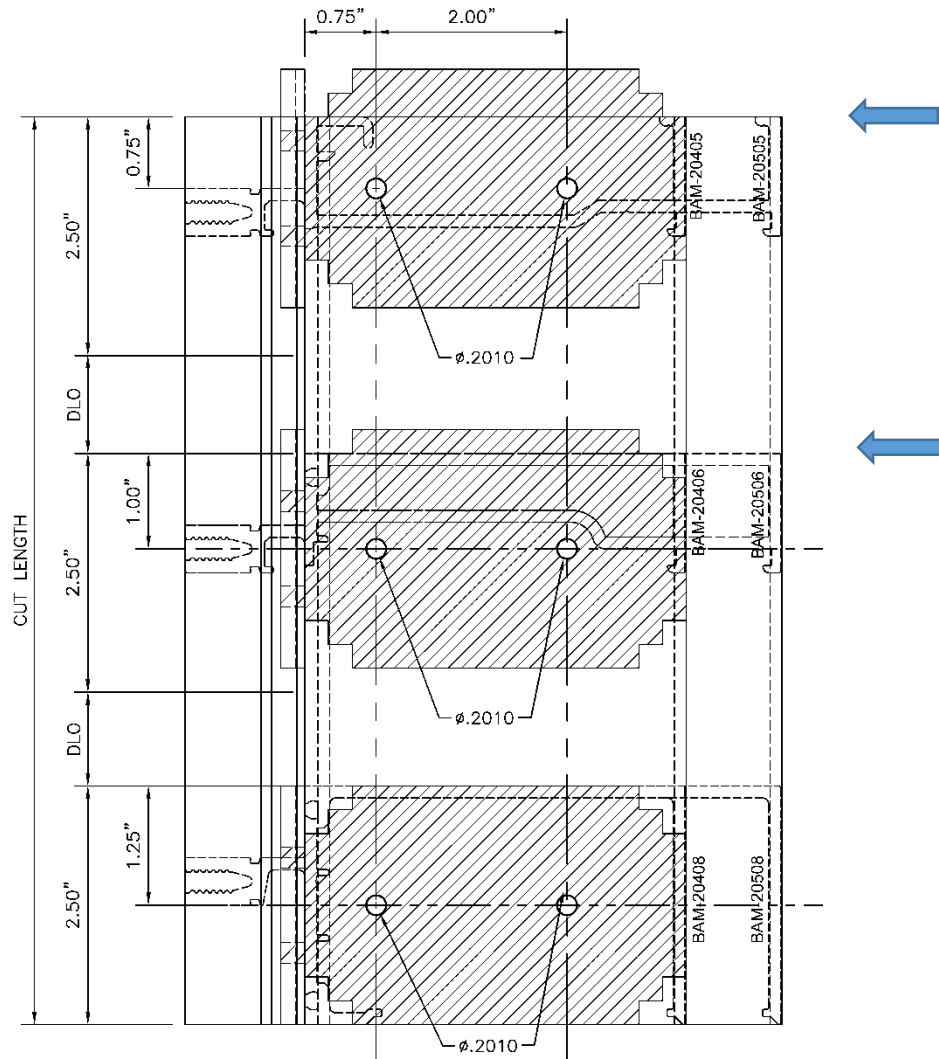


FIGURE C

Exterior side

Interior side



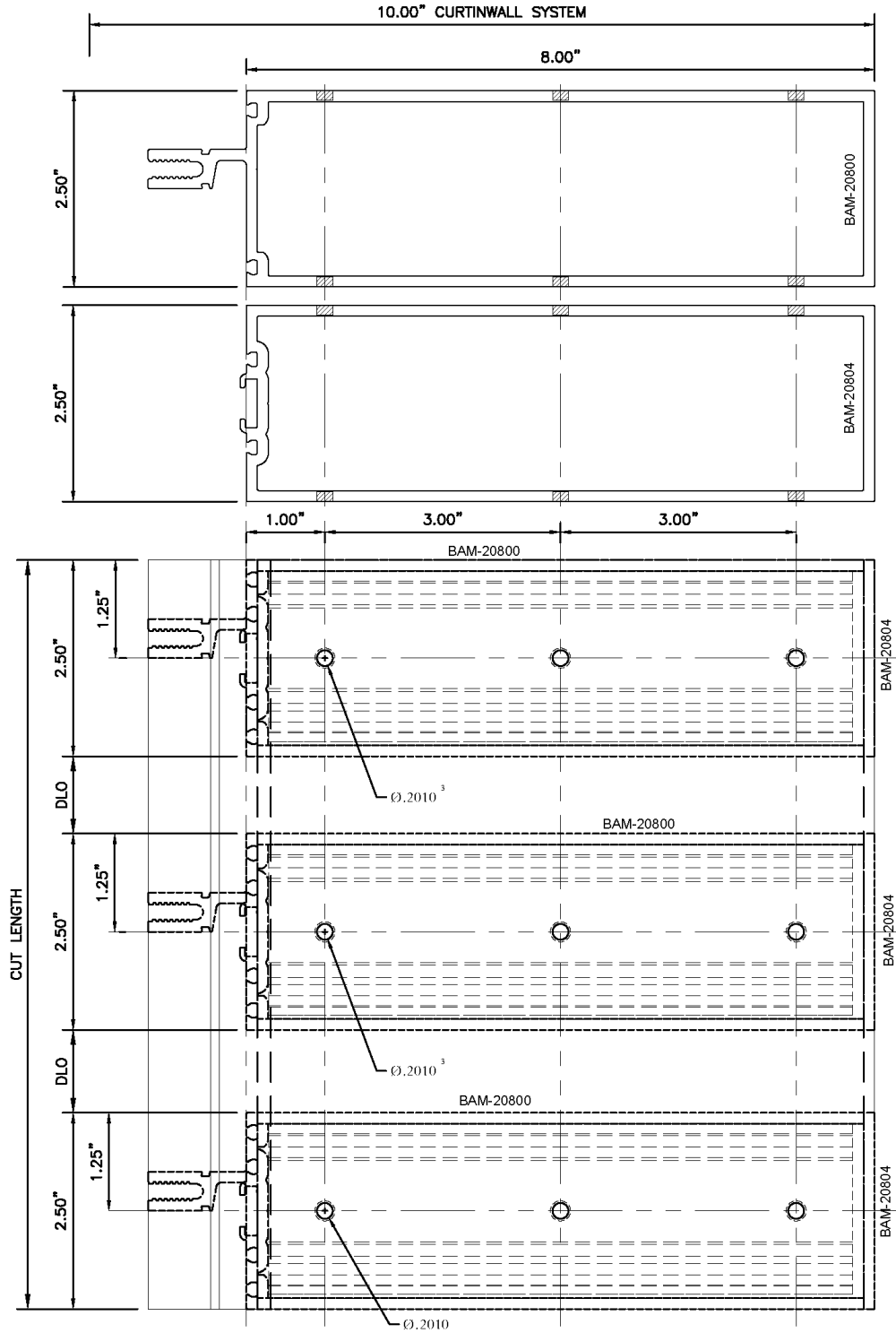
Notice the notches on the jig locate the shear block fasteners.

FIGURE F

- Locate horizontals on outside glazed 10" verticals: (FIGURE G)  
Mark the locations of your horizontals and locate shear block holes.

Exterior side

Interior side



**FIGURE G**



- Locate horizontals on outside glazed 10" verticals: (FIGURE I)  
 Mark the locations of your horizontals and locate shear block holes.  
 The use of a drill jig is recommended when hand fabricating. (FIGURE H)



FIGURE H

Exterior side

Interior side

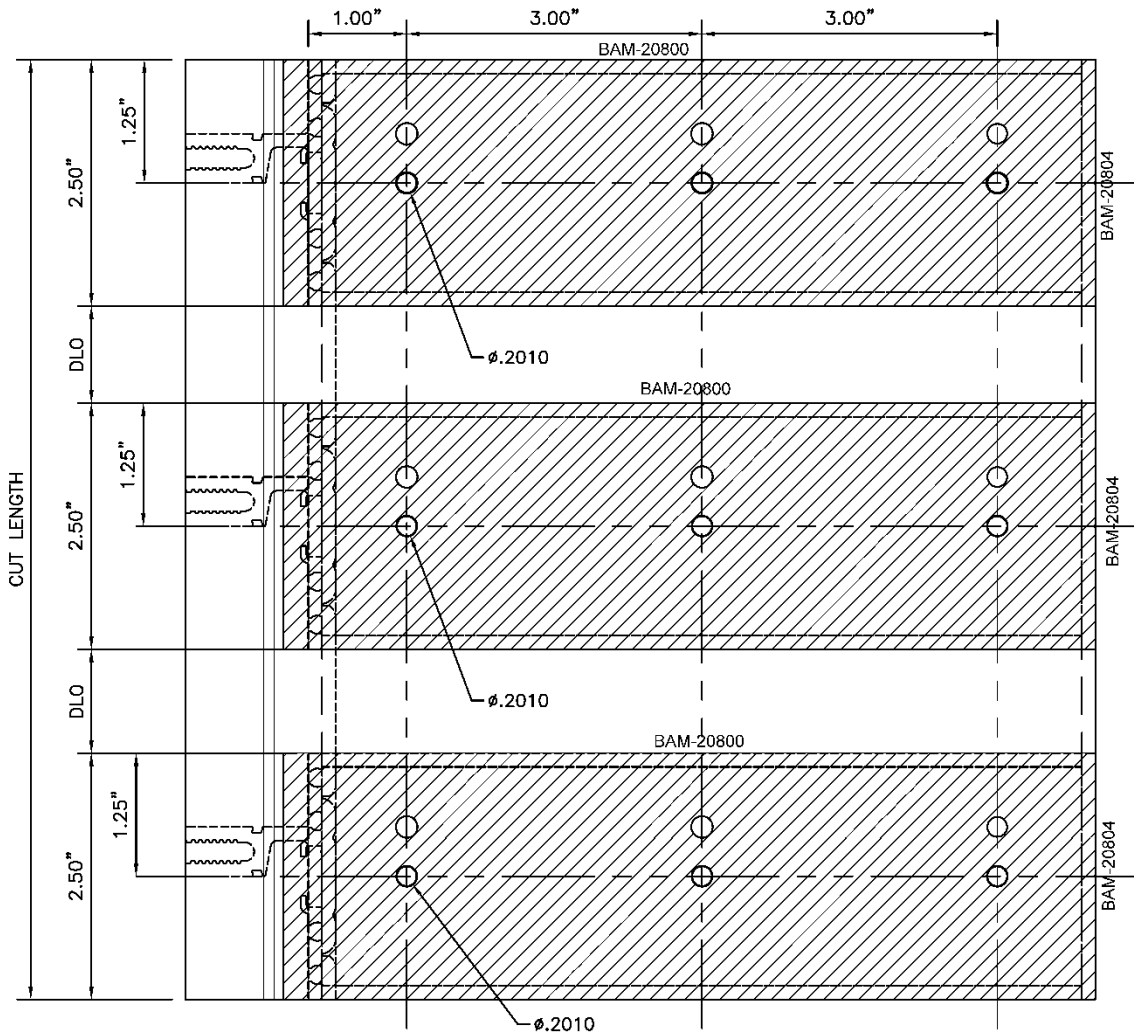


FIGURE I

- Predrill and fabricate metal prior to assembly. This assists in controlling perpendicular drilling, consistent and clean fabrication.
- Fabricate outside glazed Horizontals: (FIGURE J)  
Mark the locations for shear block screws in horizontals and fabricate.

Exterior side

Interior side

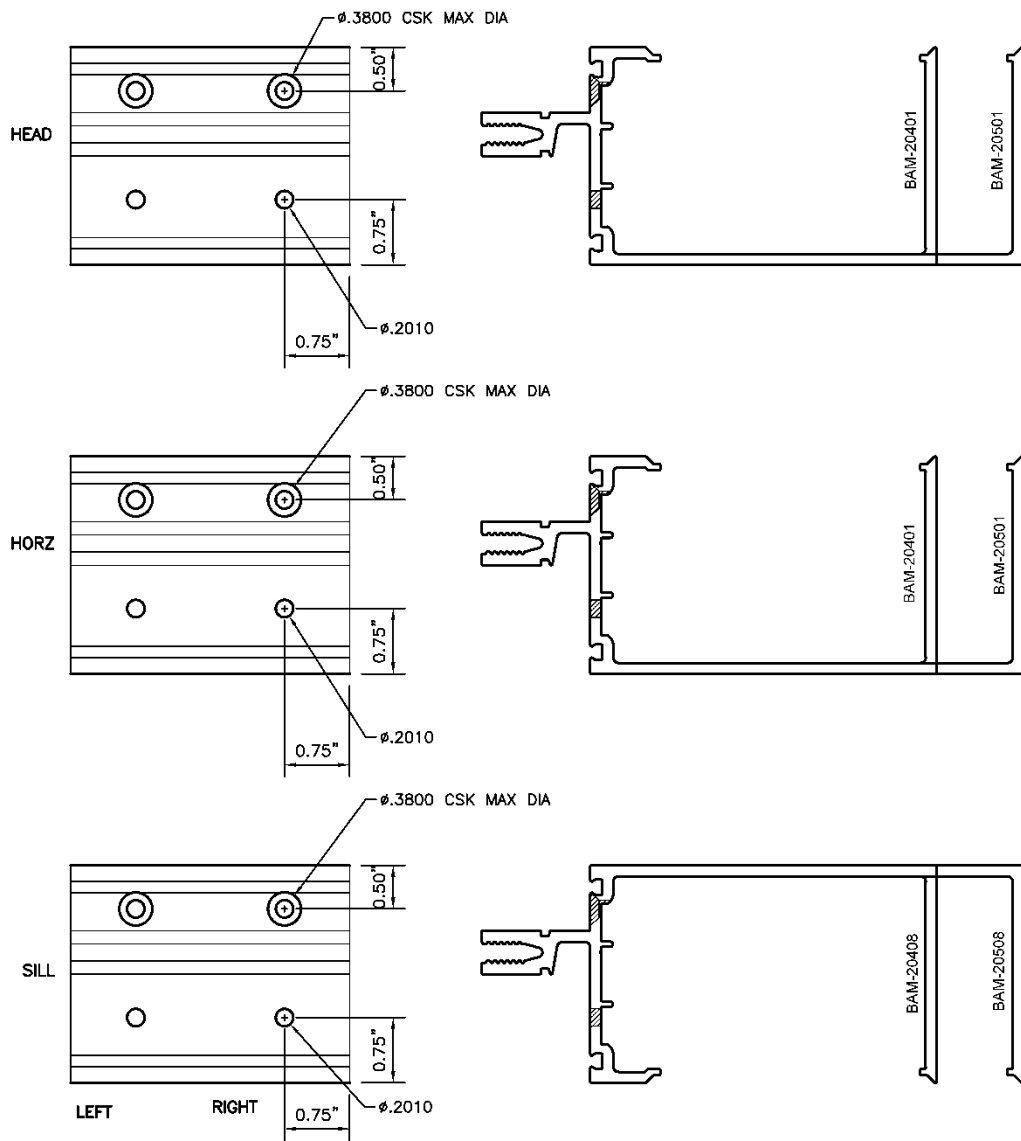


FIGURE J

- Fabricate outside glazed Horizontals: (FIGURE K)  
Mark the locations for shear block screws in horizontals and fabricate. The use of a drill jig is recommended when hand fabricating. (FIGURE C)

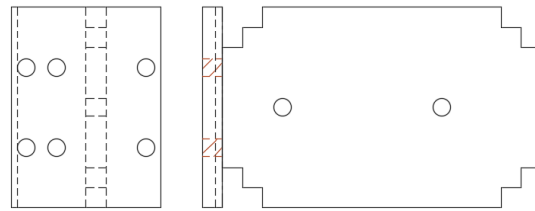


FIGURE C

Exterior side

Interior side

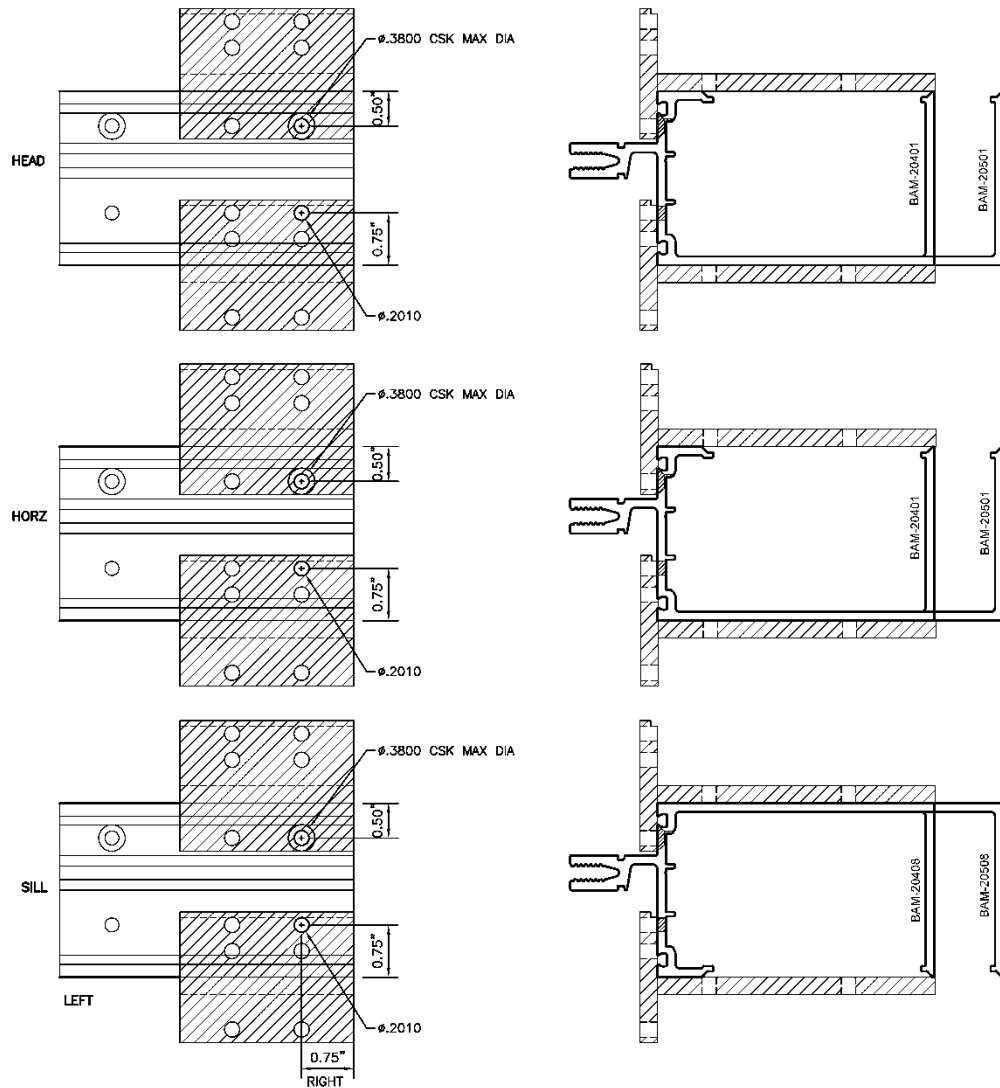


FIGURE K

- Fabricate inside glazed Horizontals: (FIGURE L)  
Mark the locations for shear block screws in horizontals and fabricate.

Exterior side

Interior side

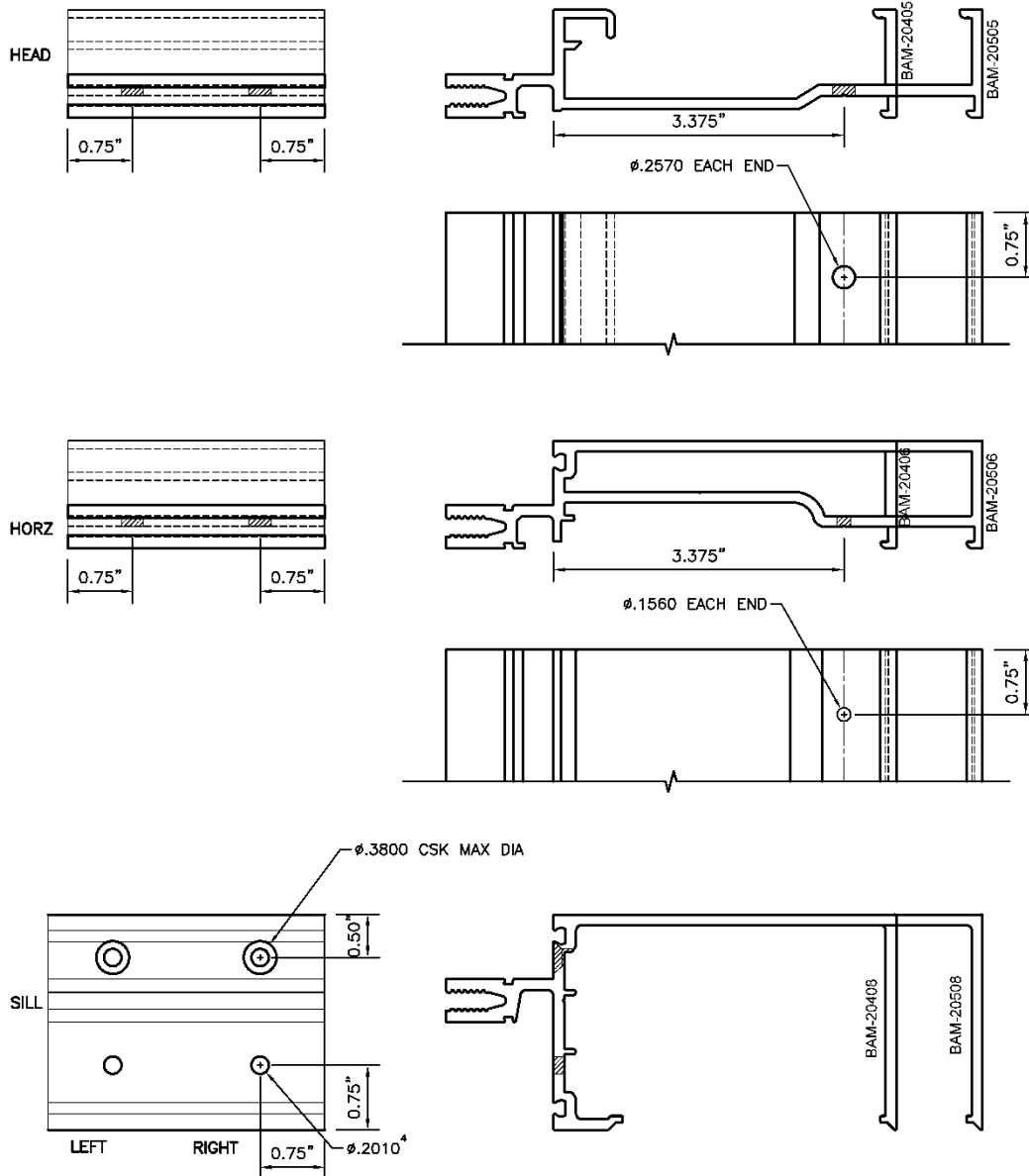


FIGURE L

- Fabricate inside glazed Horizontals: (FIGURE M)  
Mark the locations for shear block screws in horizontals and fabricate. The use of a drill jig is recommended when hand fabricating. (FIGURE C)

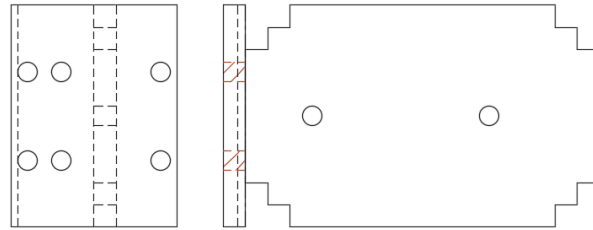


FIGURE C

Exterior side

Interior side

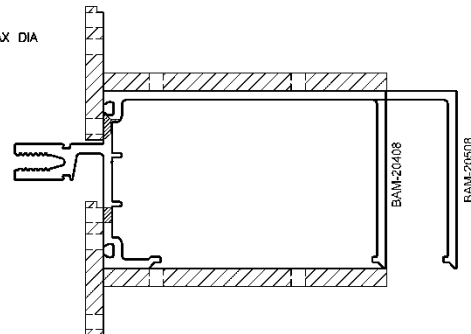
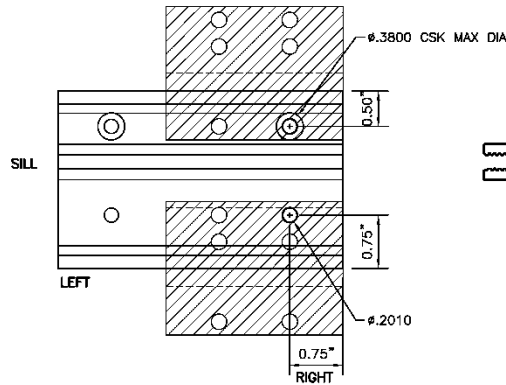
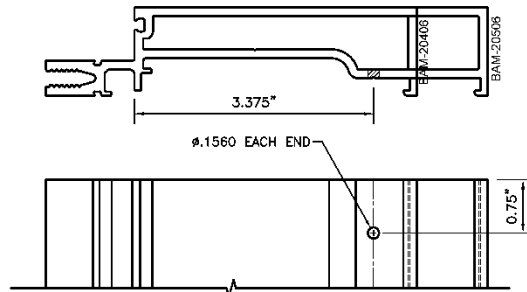
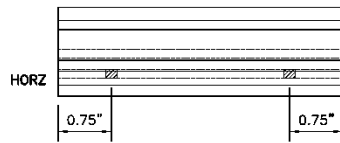
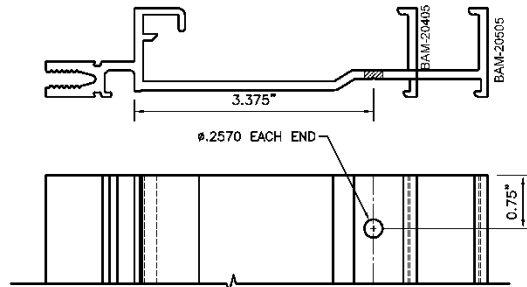
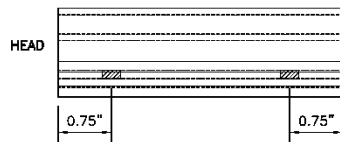


FIGURE M

- Fabricate SSG Horizontals: (FIGURE N)  
Mark the locations for shear block screws in horizontals and fabricate.

Exterior side

Interior side

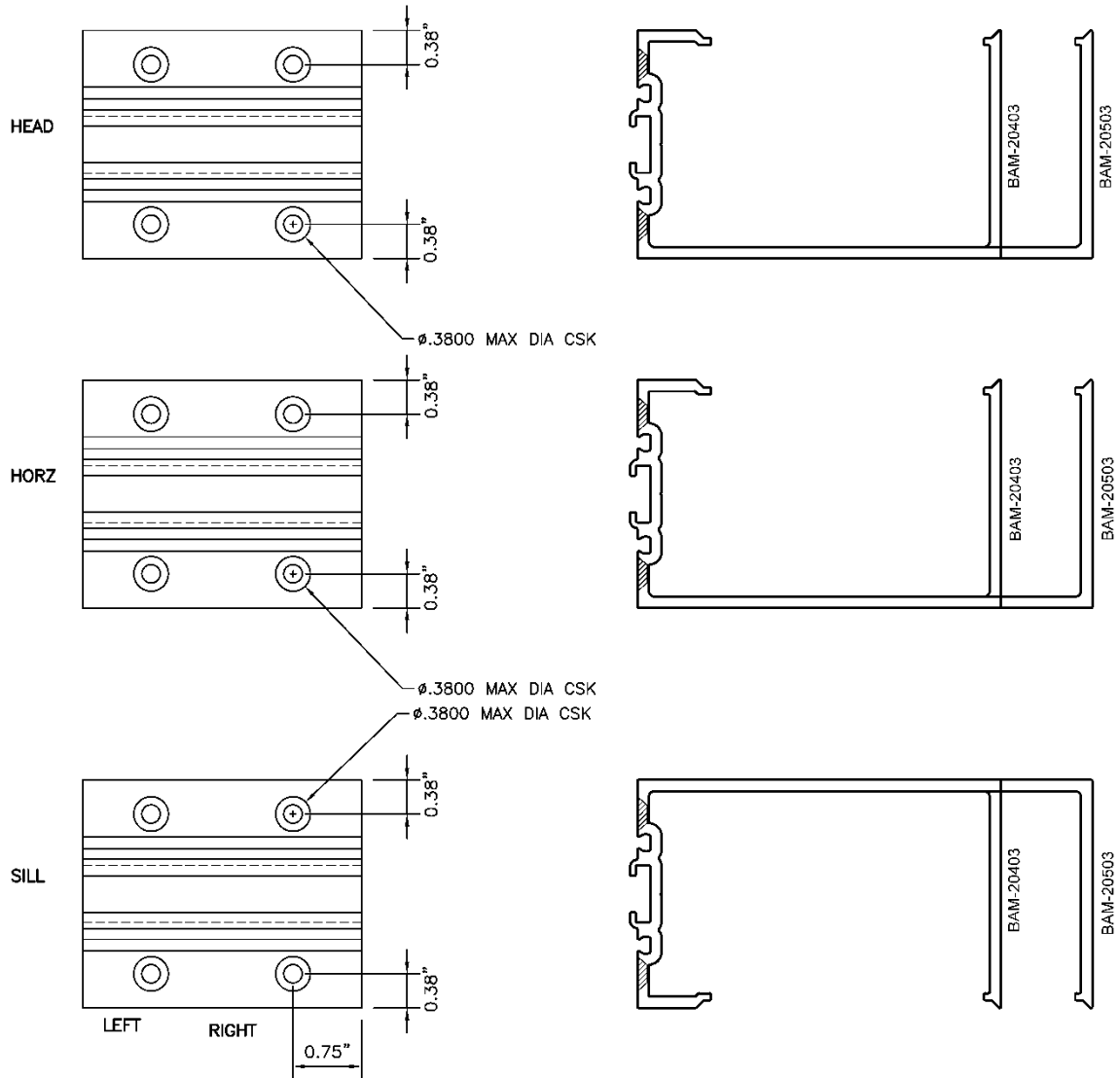


FIGURE N

- Fabricate SSG Horizontals: (FIGURE O)  
 Mark the locations for shear block screws in horizontals and fabricate. The use of a drill jig is recommended when hand fabricating. (FIGURE C)

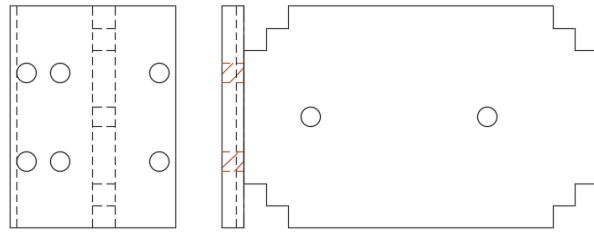


FIGURE C

Exterior side

Interior side

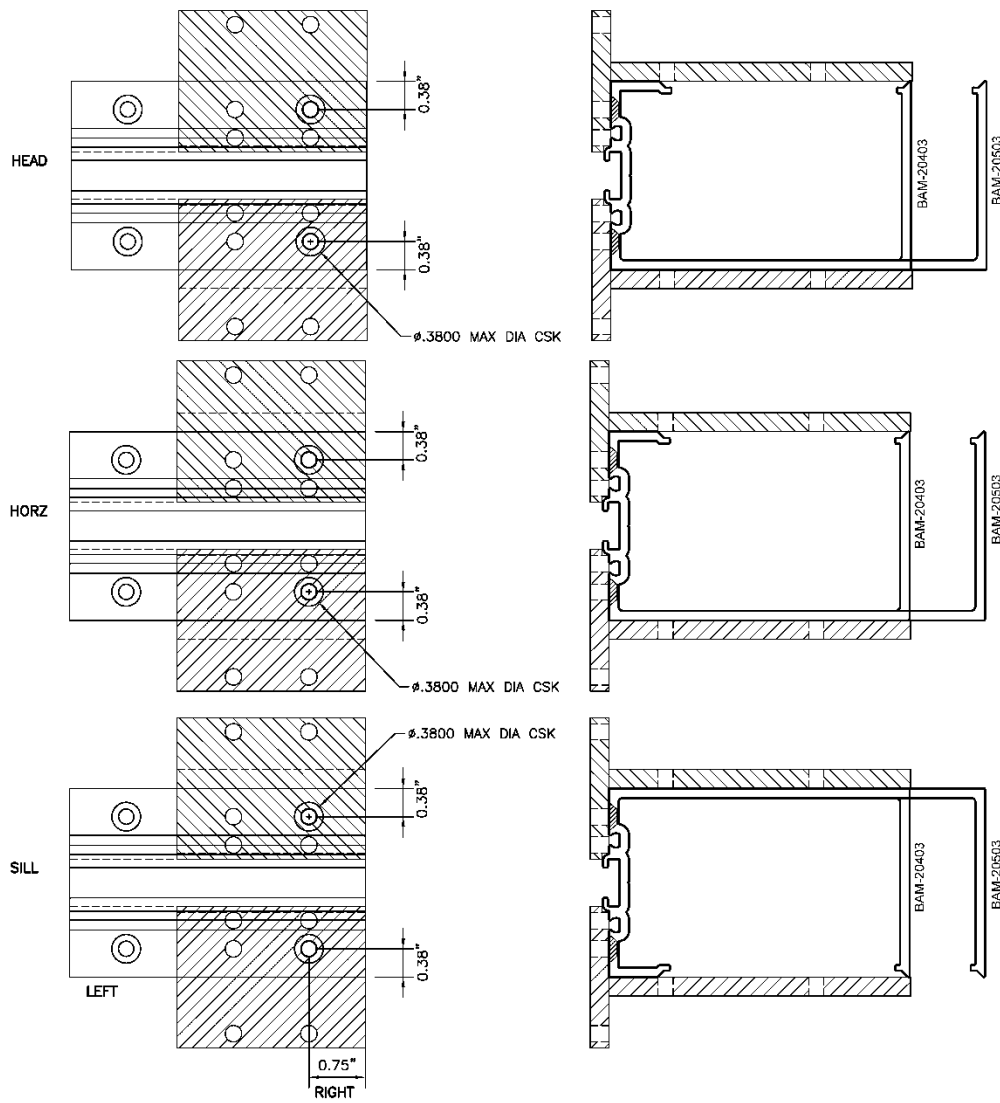


FIGURE O

- Fabricate 10" Horizontals: (FIGURE P)  
Mark the locations for shear block screws in horizontals and fabricate. The use of a drill jig is recommended for hand fabrication. Notch horizontals for shear block.

Exterior side

Interior side

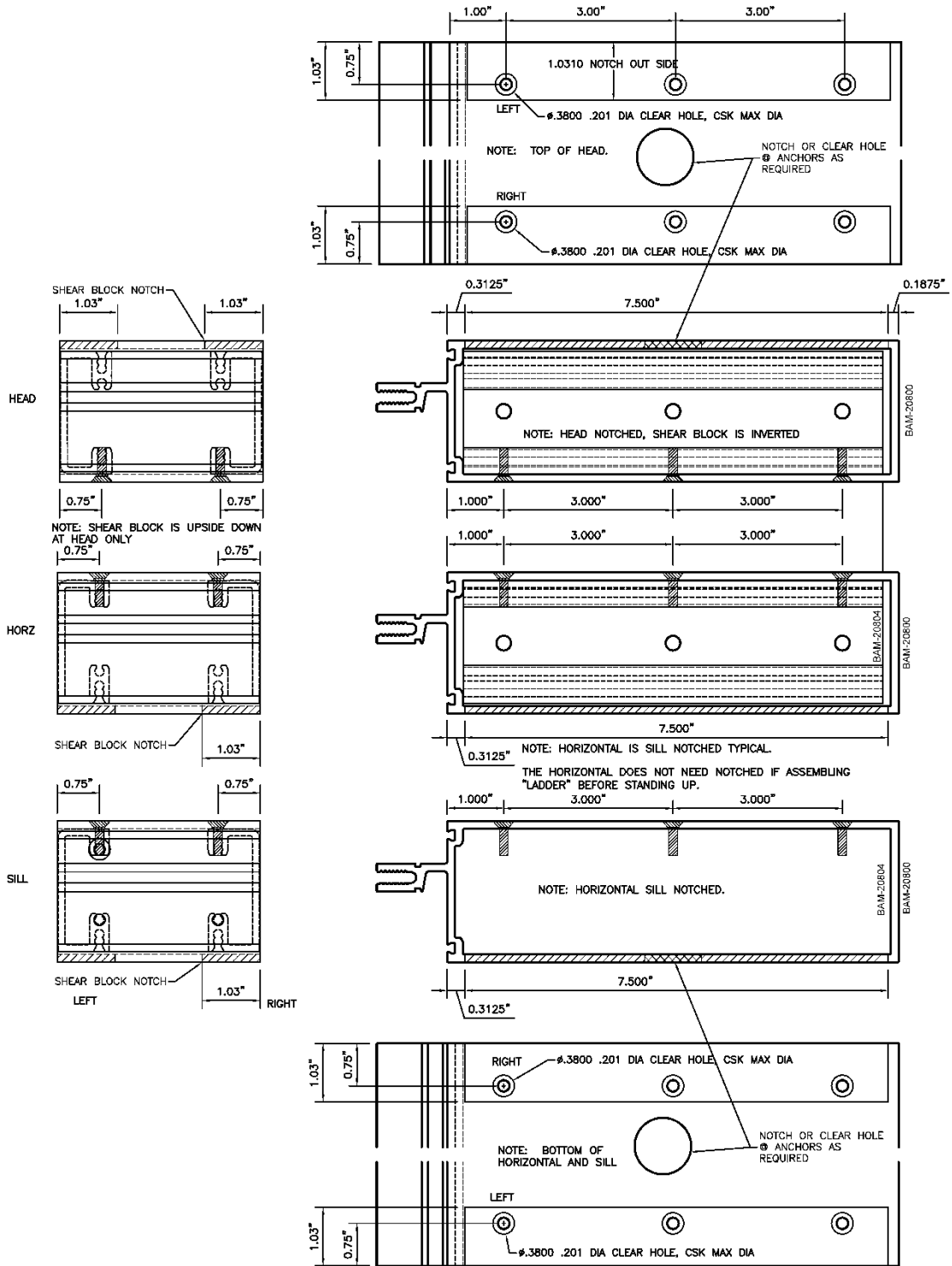


FIGURE P



- Locate horizontal attachment holes using a jig: (FIGURE Q)
- Align jig to face of mullion and end of horizontal.
- Drill holes 3/4" from edge.
- Do both ends.

Exterior side

Interior side

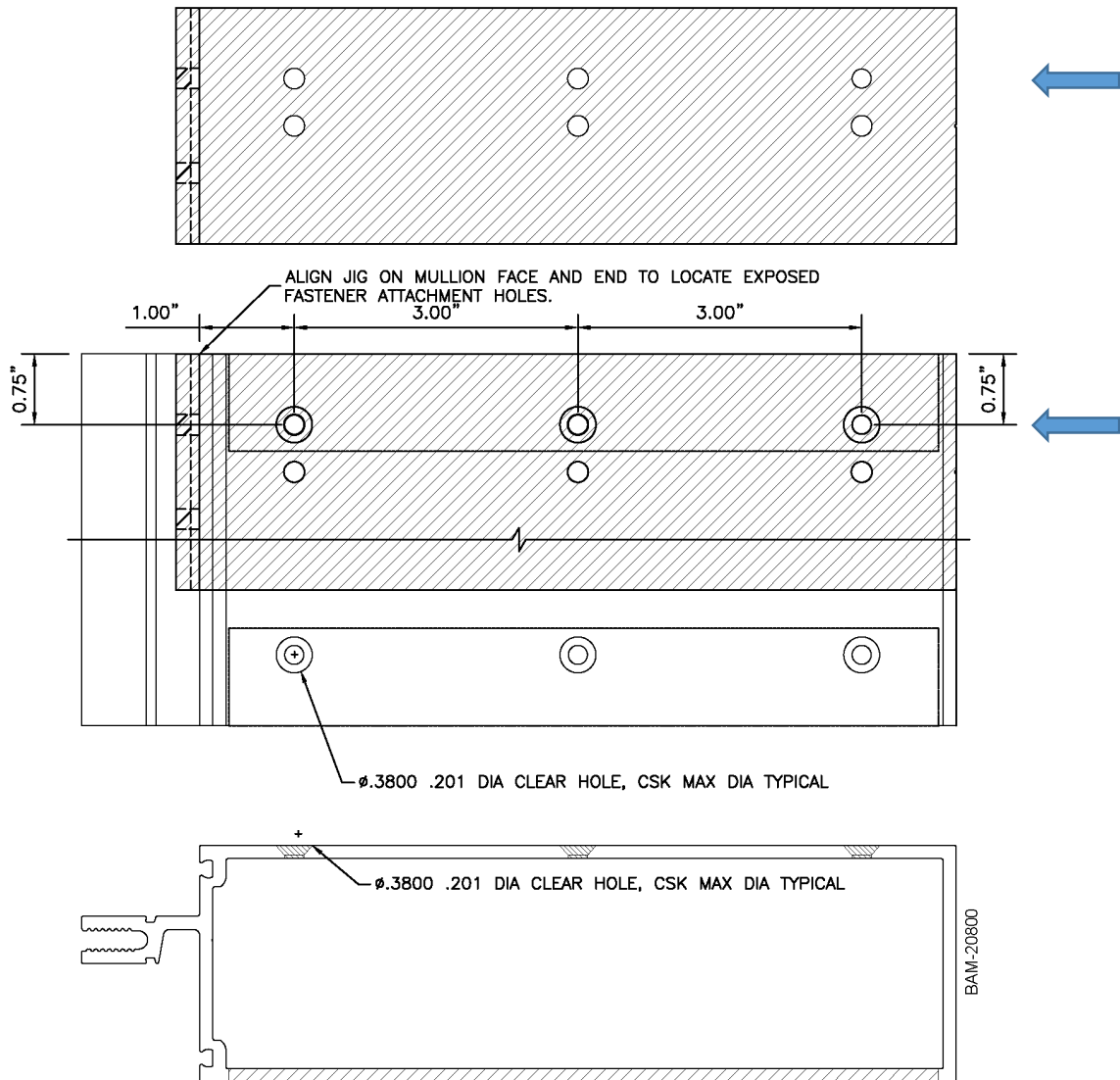


FIGURE Q

- Optional installation: (FIGURE R)
- Shear blocks can be face applied at vision area like this but the 10" tube is so long the back side will show a crack and you should use exposed fasteners when you can to pull the mullion crack out.
- An exposed fastener may still be required when using this method.

Exterior side

Interior side

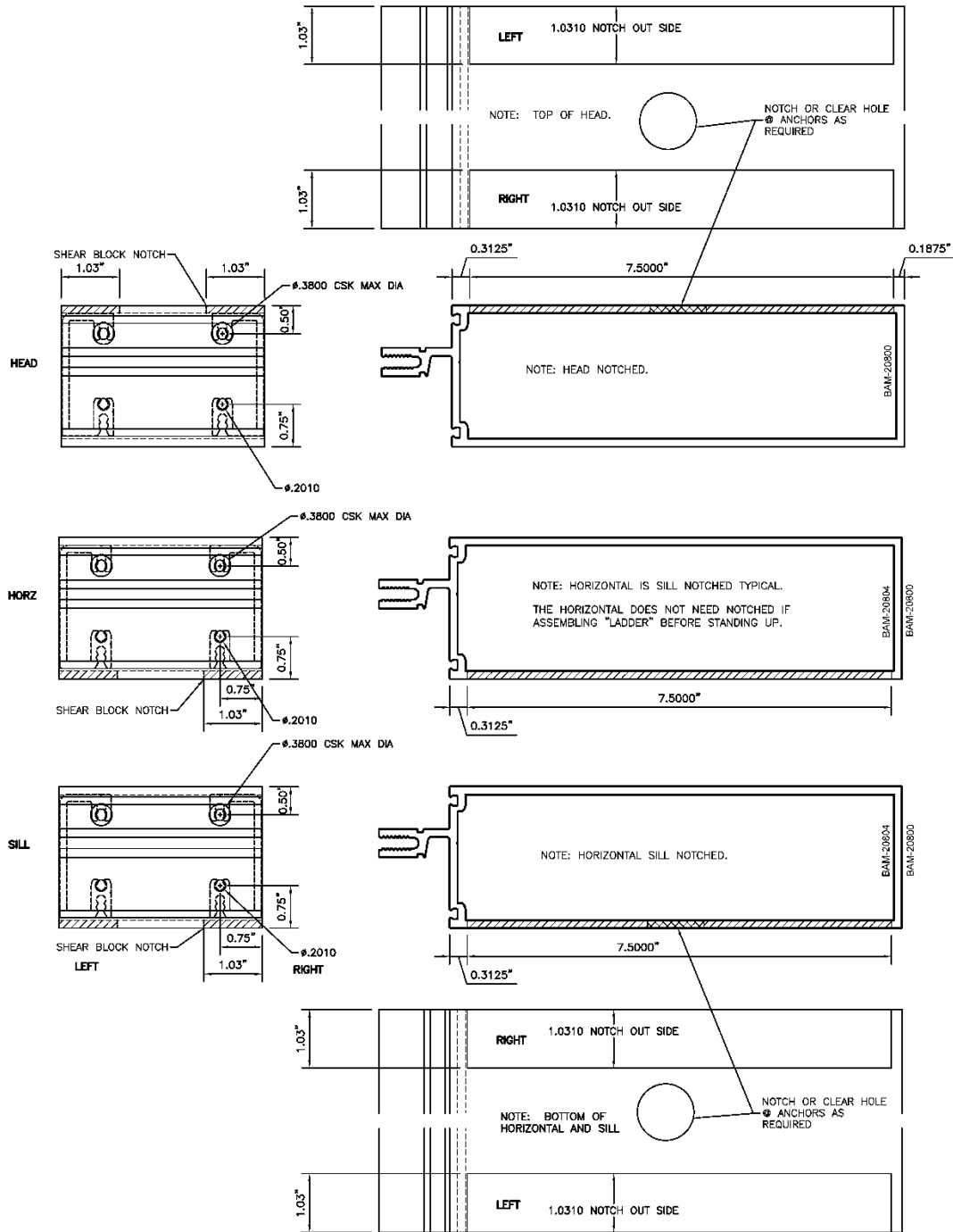
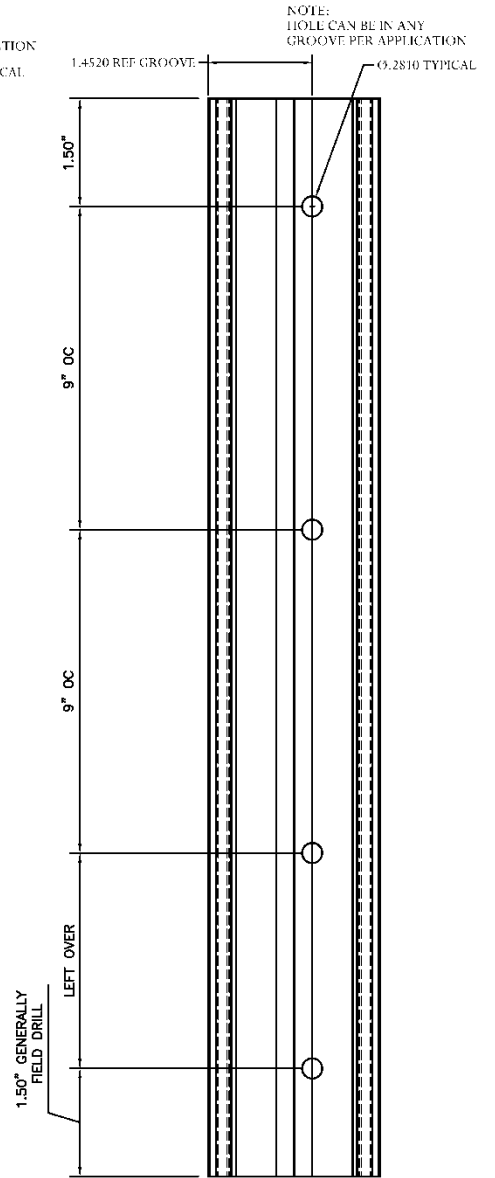
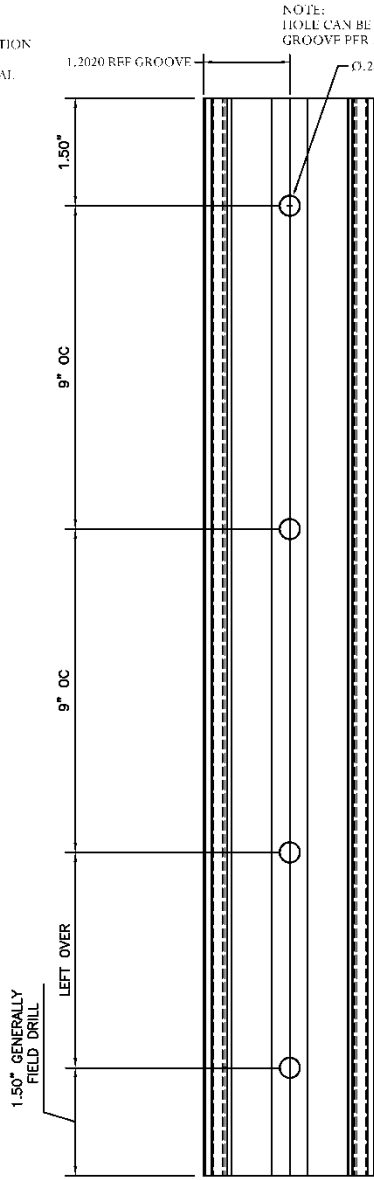
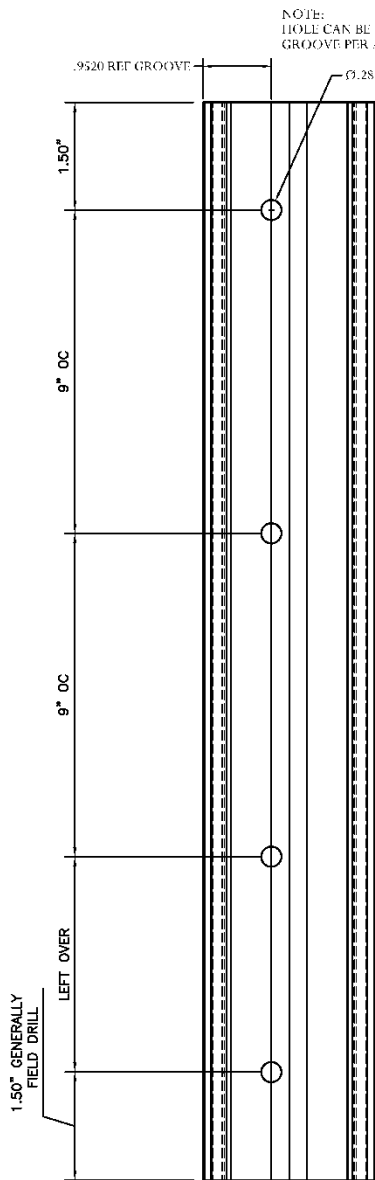
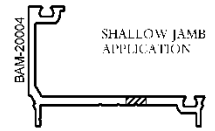
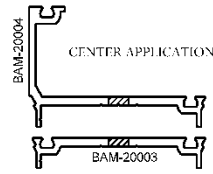
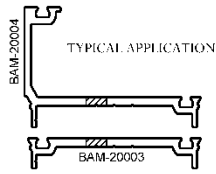


FIGURE R

➤ Fabricate vertical pressure plates: (FIGURE S)

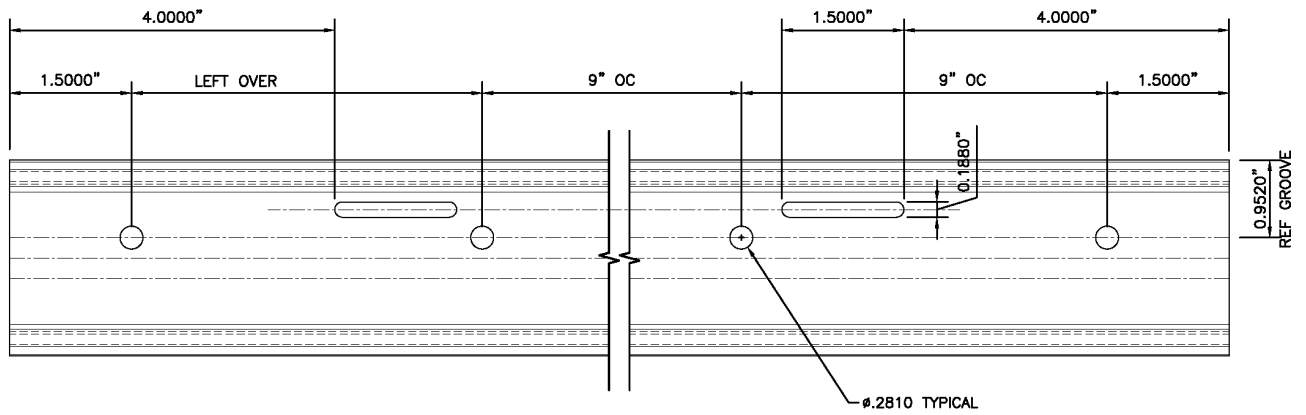


LEFT JAMB AND VERTICAL

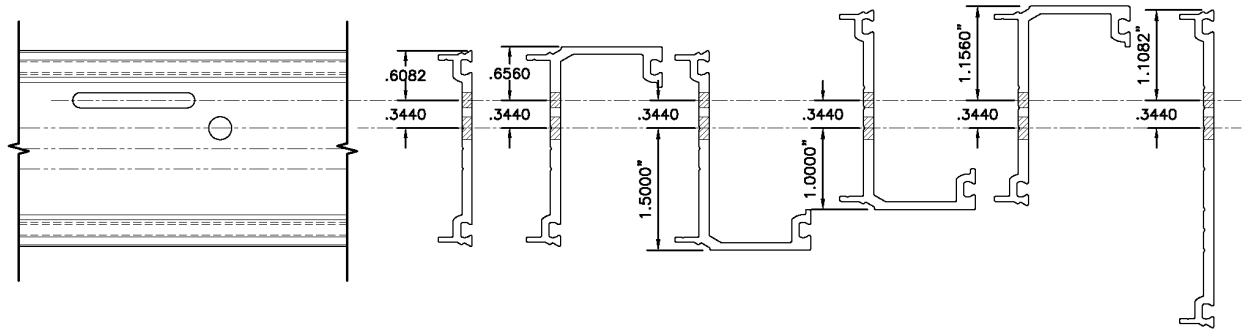
RIGHT JAMB

FIGURE S

- Fabricate horizontal pressure plates: (FIGURE T)
- Weeps are fabricated on top of CW tongue, 1-1/2" long and 3/16" tall.



NOTE:  
HOLE CAN BE IN ANY  
GROOVE PER APPLICATION  
WEEP MOVES WITH  
LOCATION ONLY ON TOP  
OF TONGUE



HORIZONTAL, HEAD AND SILL

FIGURE T

➤ Pressure plate Layout: (FIGURE U)

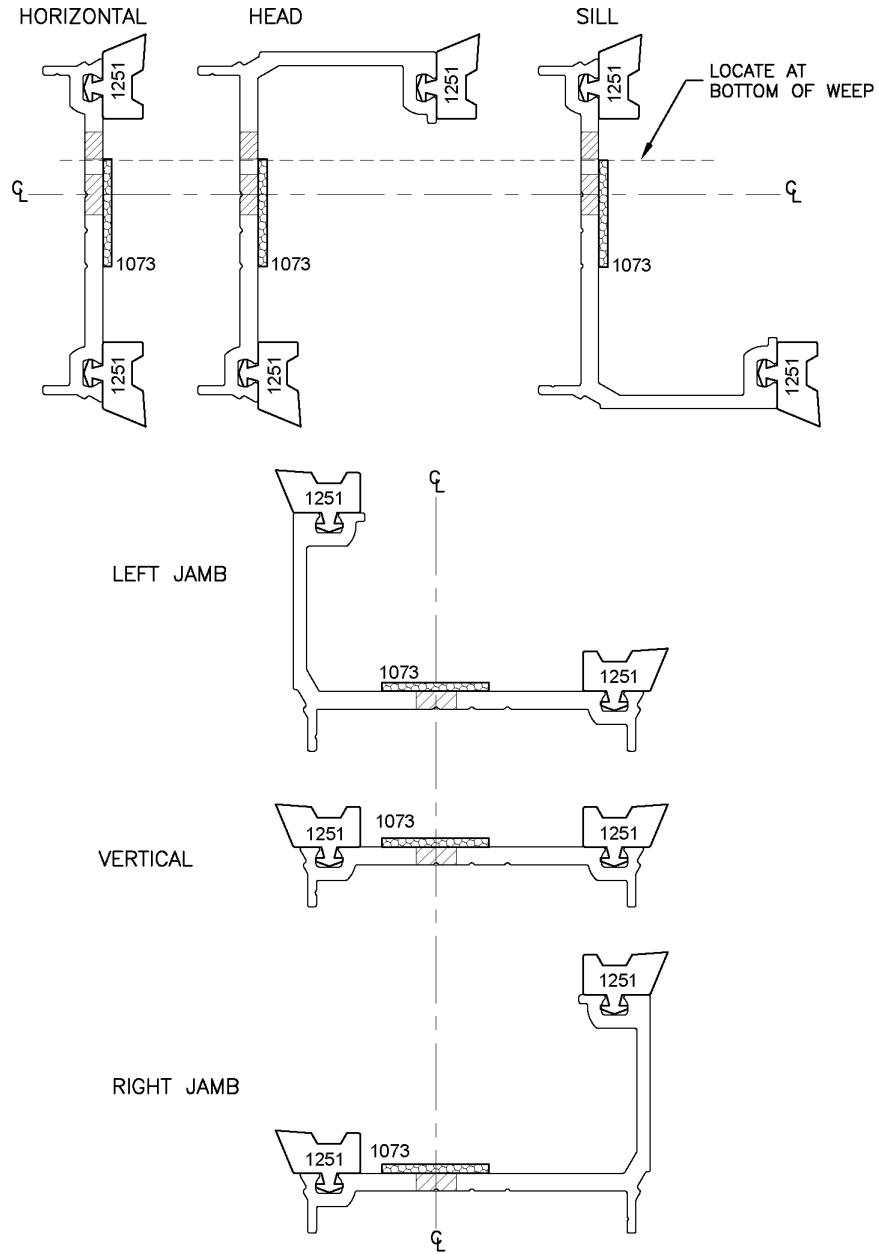
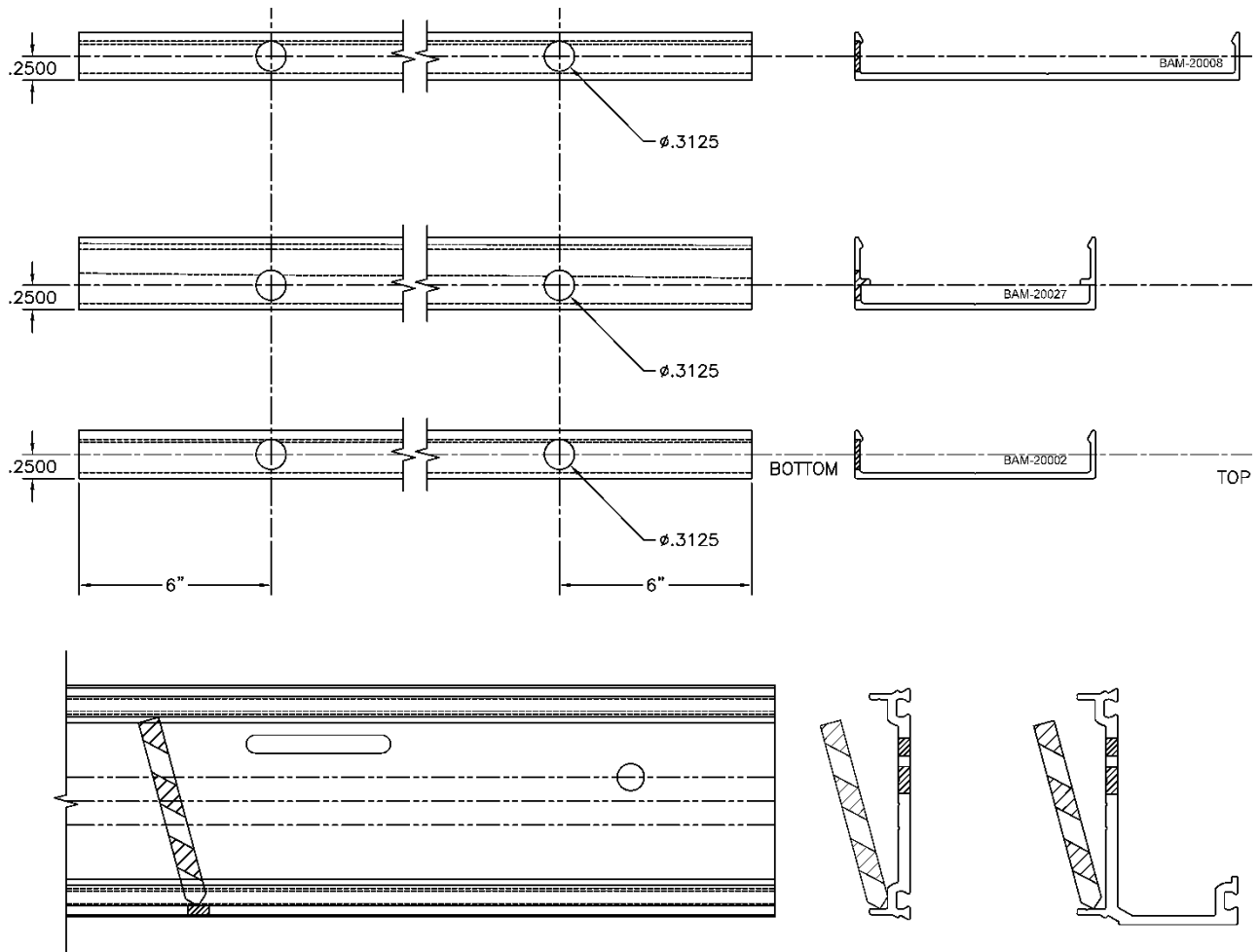


FIGURE U

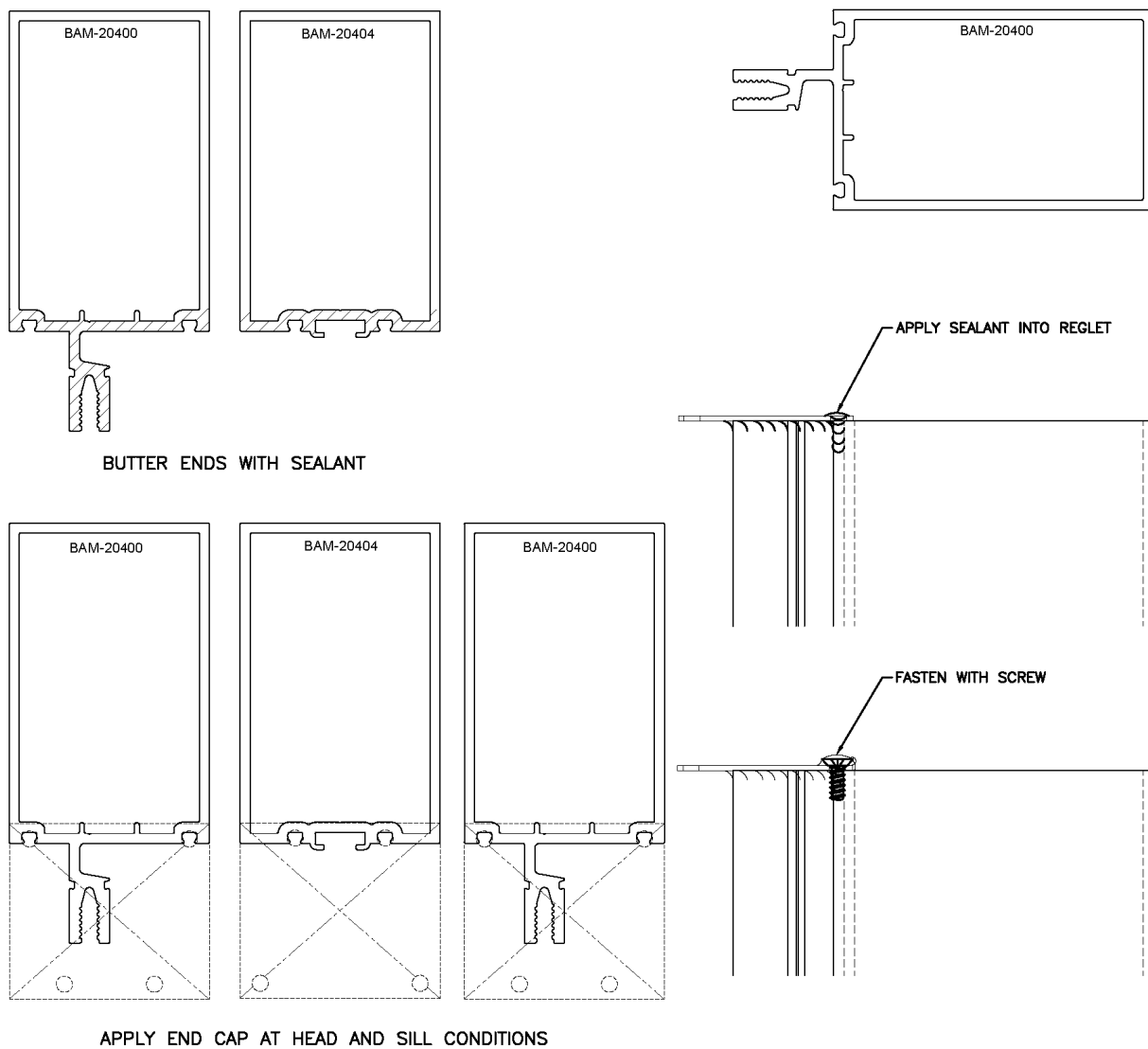
- Fabricate the weeps in Horizontal mullion covers 5/16" holes: (FIGURE V)
- Match drill pressure plates with shallow caps 7/32" drill:



**FIGURE V**

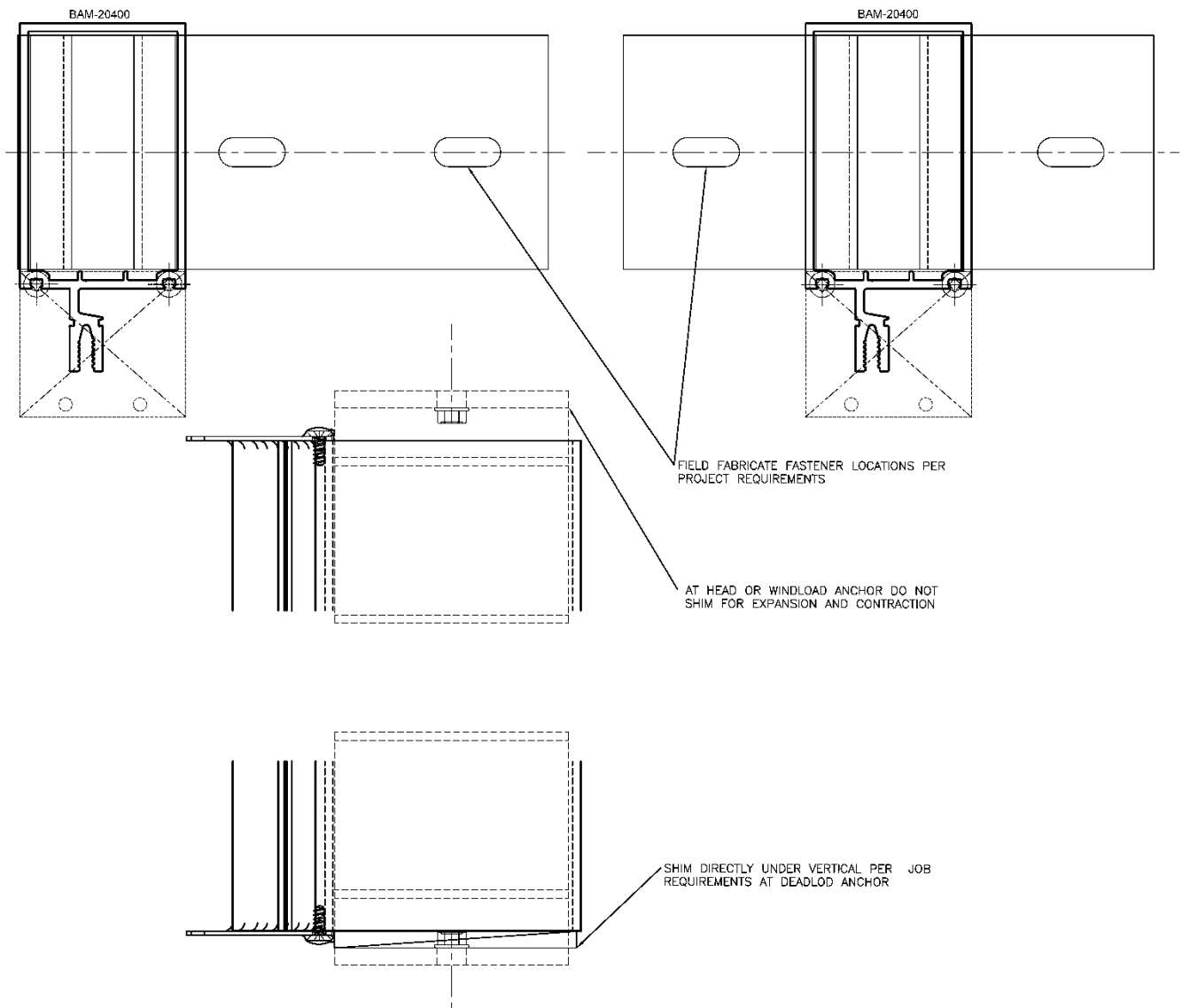
**Frame Installation:**

- Frame assembly and installation may vary per project requirements. Details shown are to be used as a guide and interpreted per application. See shop drawings for project specific installation.
- Always tool sealants when applying to fill irregularities and smooth out air bubbles.
- Attach mull end caps to vertical mullions at head and sill conditions. Butter ends with sealant. Apply end dam, apply sealant in hole at reglet and fasten with screw. Make sure all gaps are sealed. (FIGURE W)



**FIGURE W**

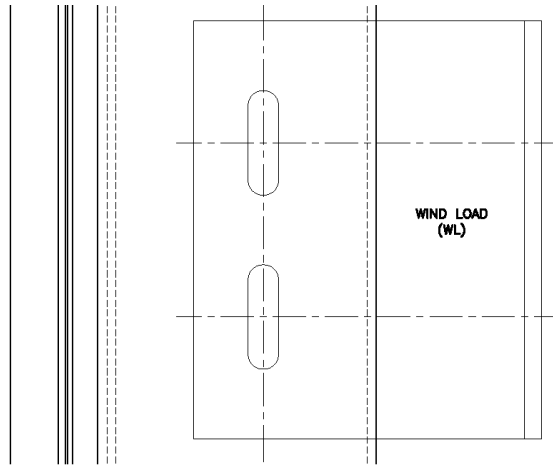
- Field fabricate and prepare “F” and “T” anchors per project condition anchor requirements.  
Note: Slots at anchor holes are recommended. Slots allow for side to side tolerance and expansion without sacrificing positive and negative movement. (FIGURE X)
- Slide the head and sill “F” anchors and “T” anchors into ends of mullions.
- Use your building and drawing bench marks to properly locate installation.
- Install verticals level and plumb, shim directly under each vertical as project condition requires.



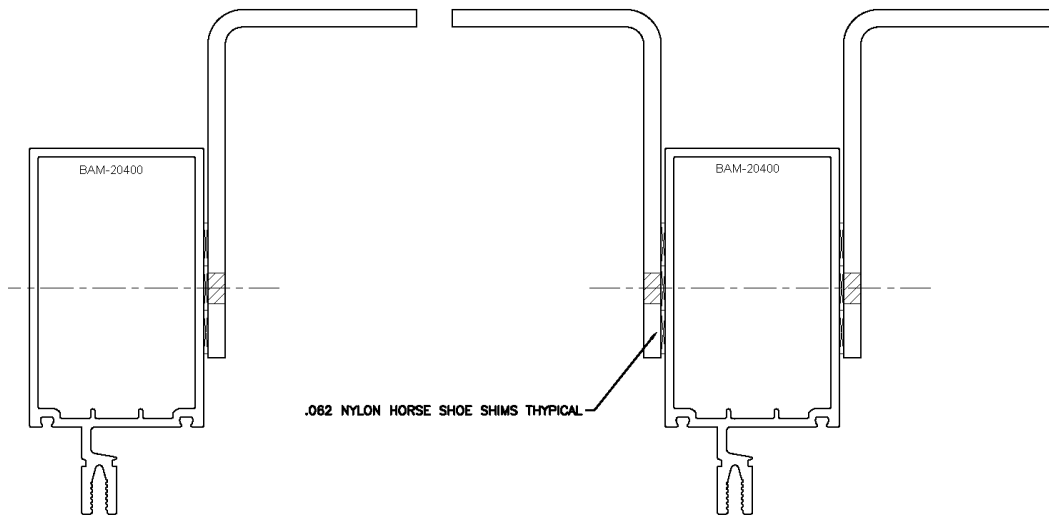
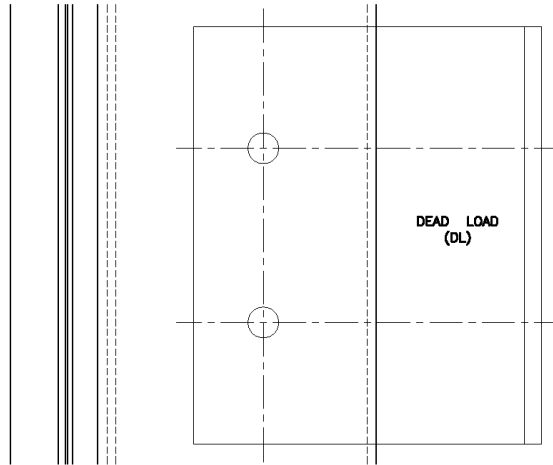
**FIGURE X**



- Multi-span anchors will vary per project. Anchors shown are a base type shown as examples.
- Dead Load (DL) and Wind Load (WL) applications will be determined per project requirements.
- Always isolate dissimilar metals with an appropriate barrier. (Shim & coated steel anchor)

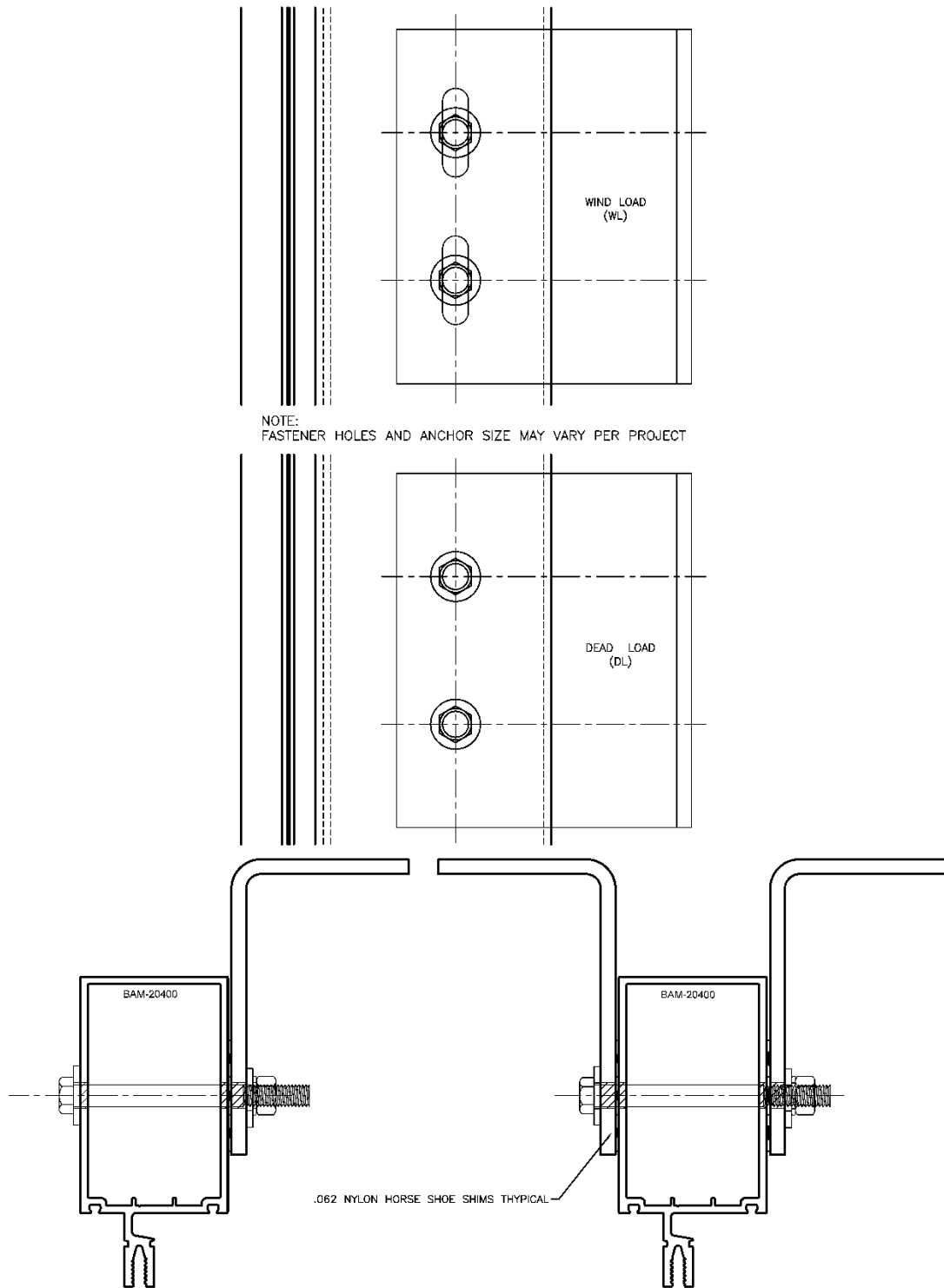


NOTE:  
FASTENER HOLES AND ANCHOR SIZE MAY VARY PER PROJECT



**FIGURE Y**

- Install anchors then align and match drill mullion use PVC / NYLON shims and attach to mullions to avoid installing in a bind. (FIGURES Y & Z)



**FIGURE Z**

- Attach shear blocks to vertical mullions. (FIGURE A.1)

Outside Glazed

Inside Glazed

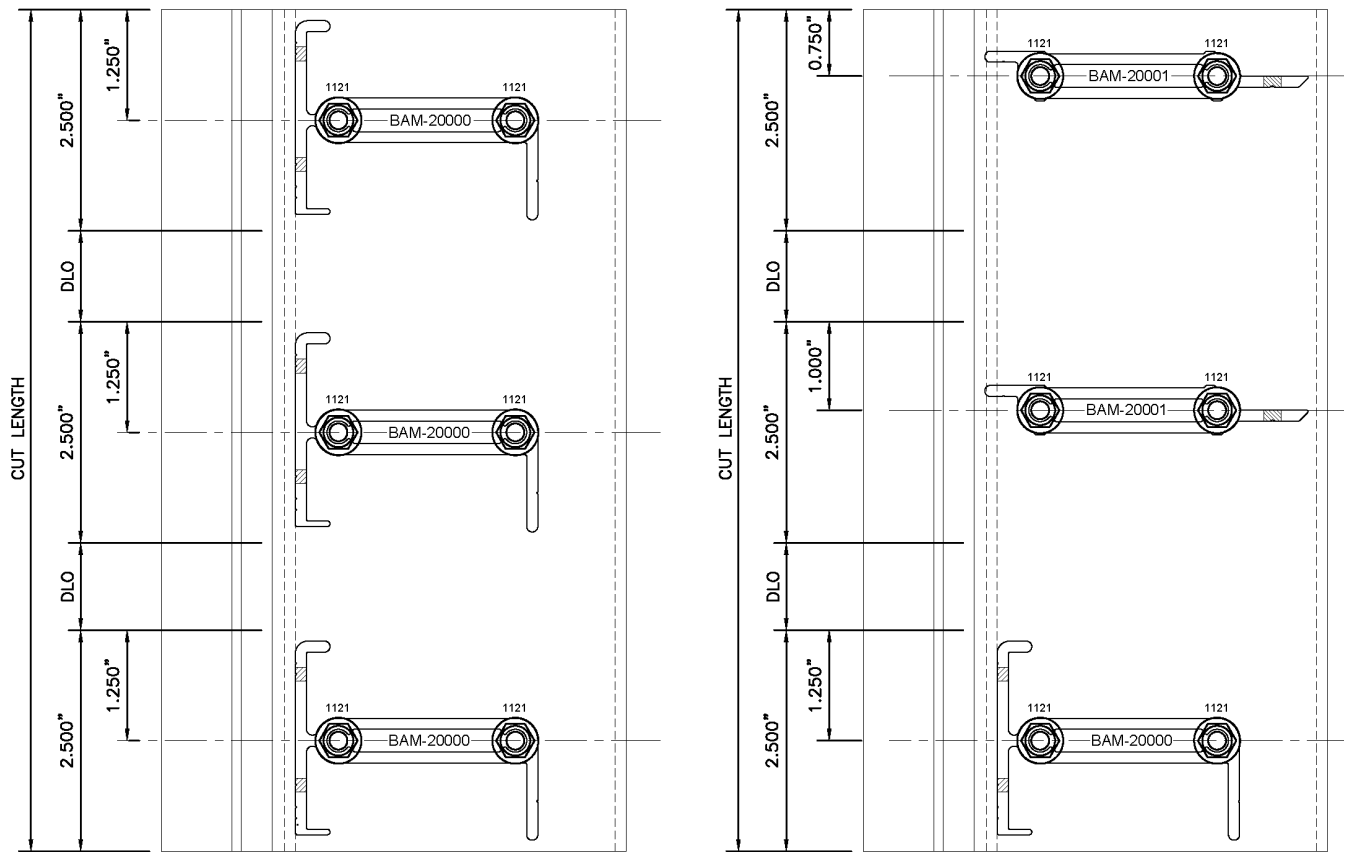


FIGURE A.1

SSG/CT Horizontals

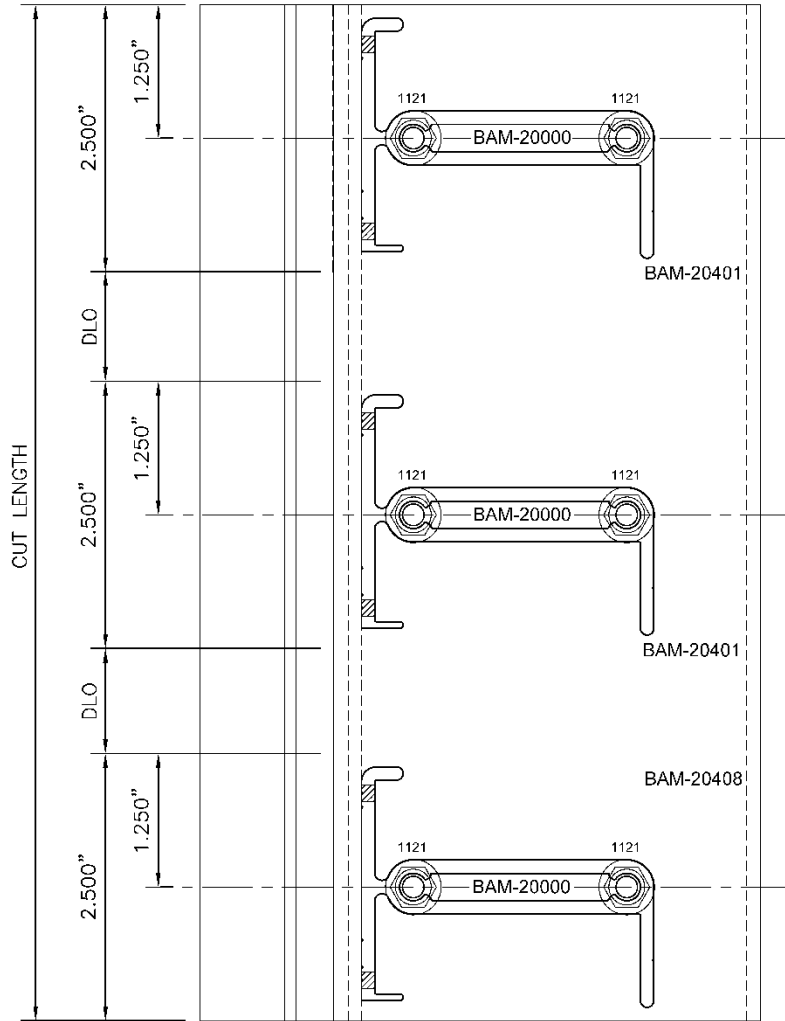


FIGURE B.1

Shear Blocks @ 10"

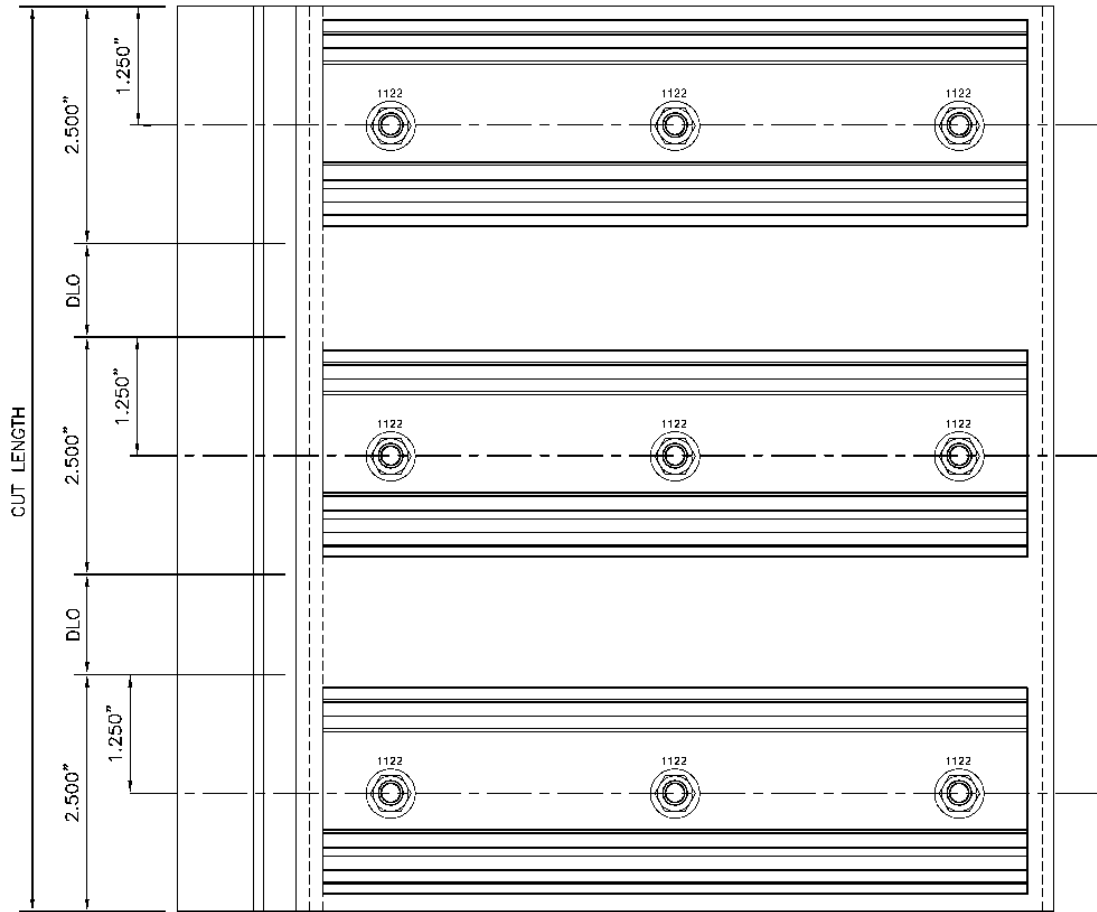


FIGURE C.1

- Butter shear blocks with sealant. (FIGURES D.1 & E.1)

Note: Only work on the lite you are assembling so the seal does not get contaminated or start to set up.

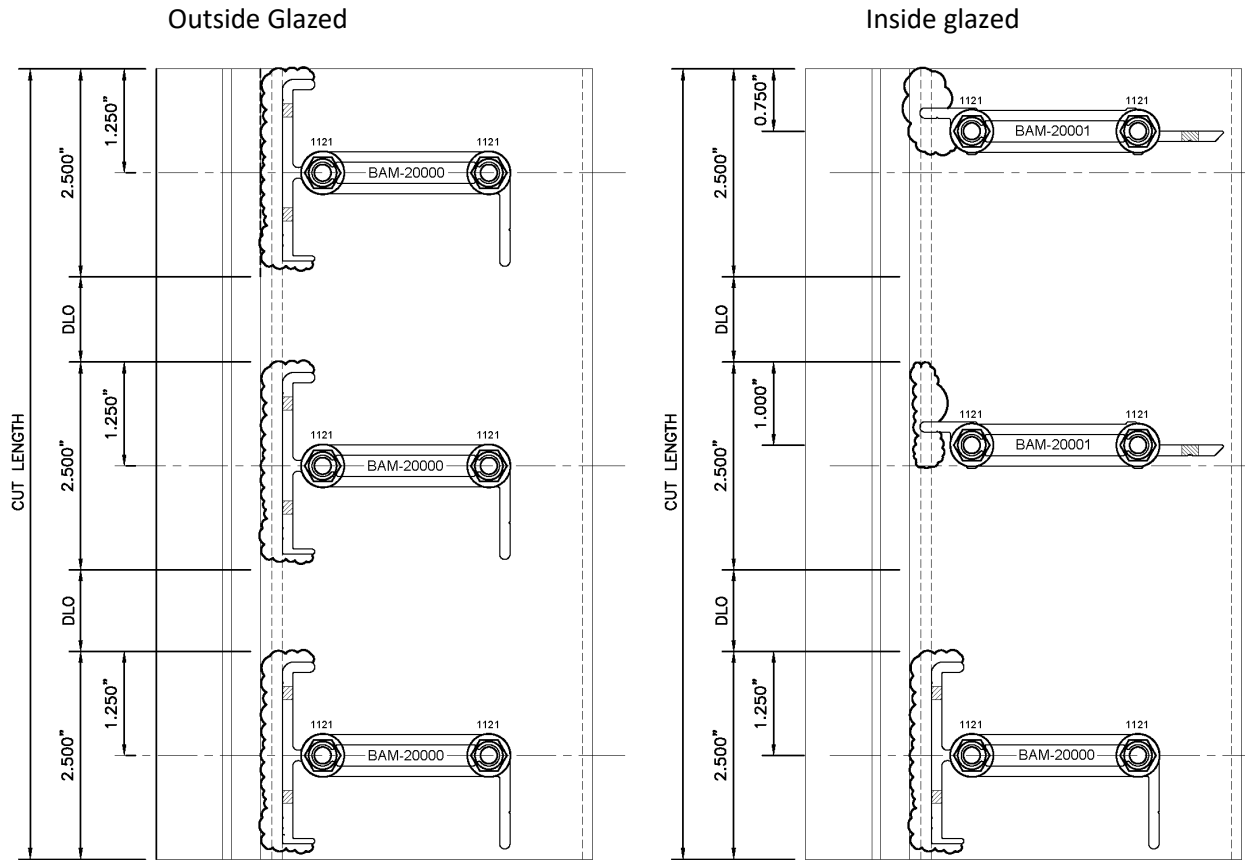


FIGURE D.1

SSG Glazed

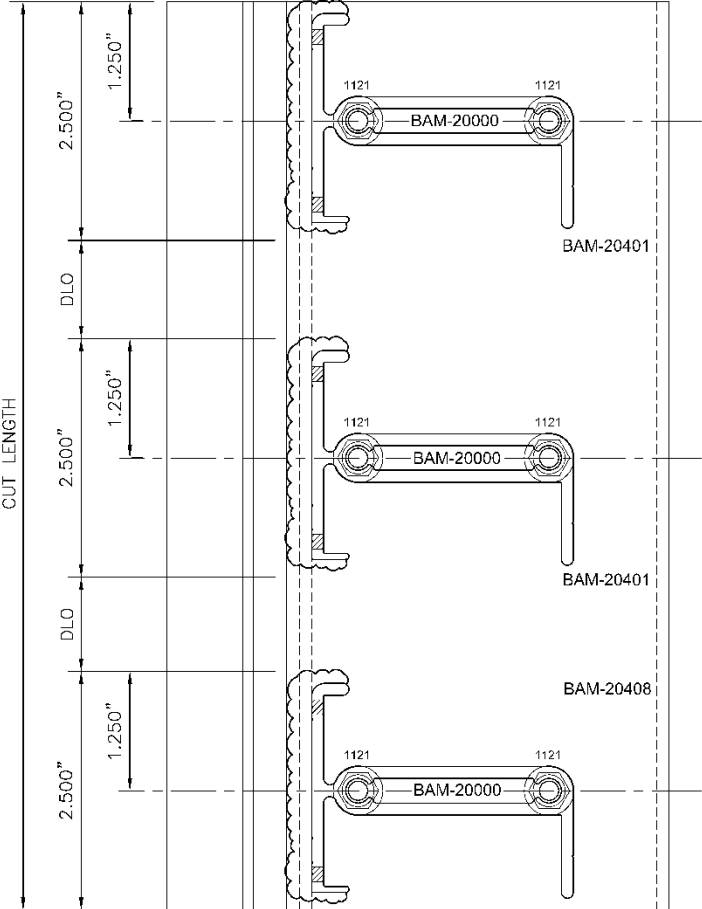


FIGURE E.1



Outside glaze Shear Block @ 10"

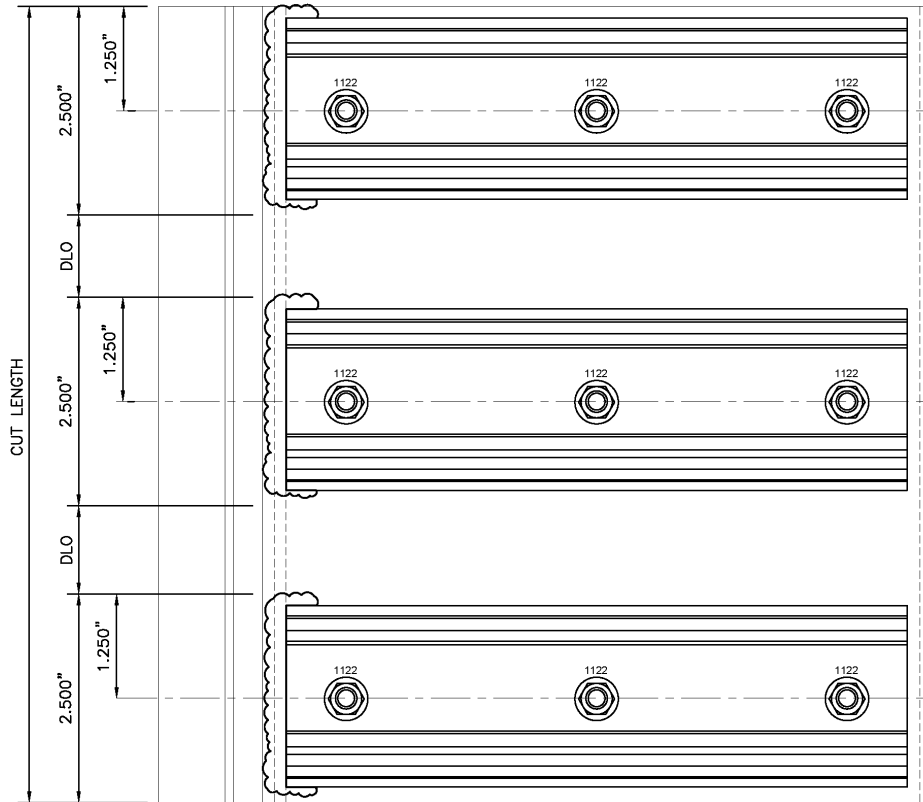
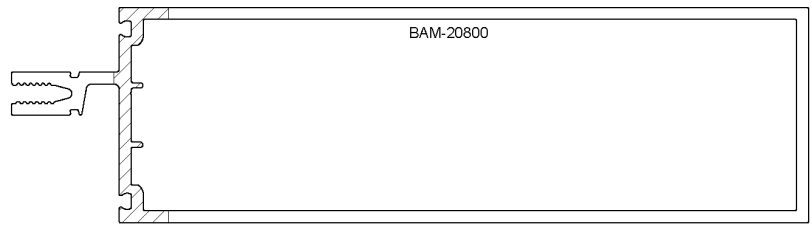
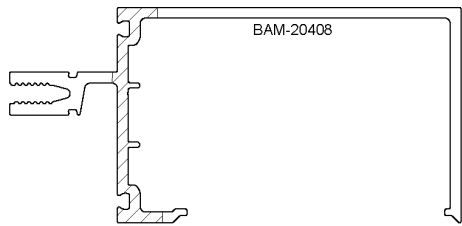
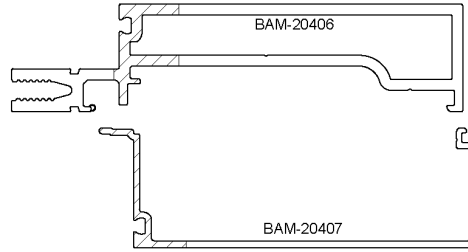
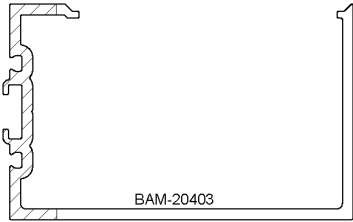
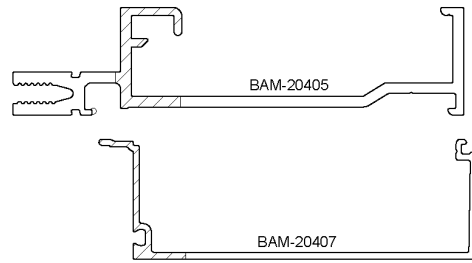
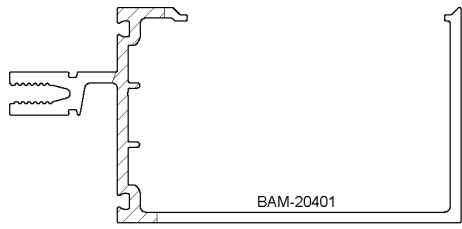


FIGURE F.1

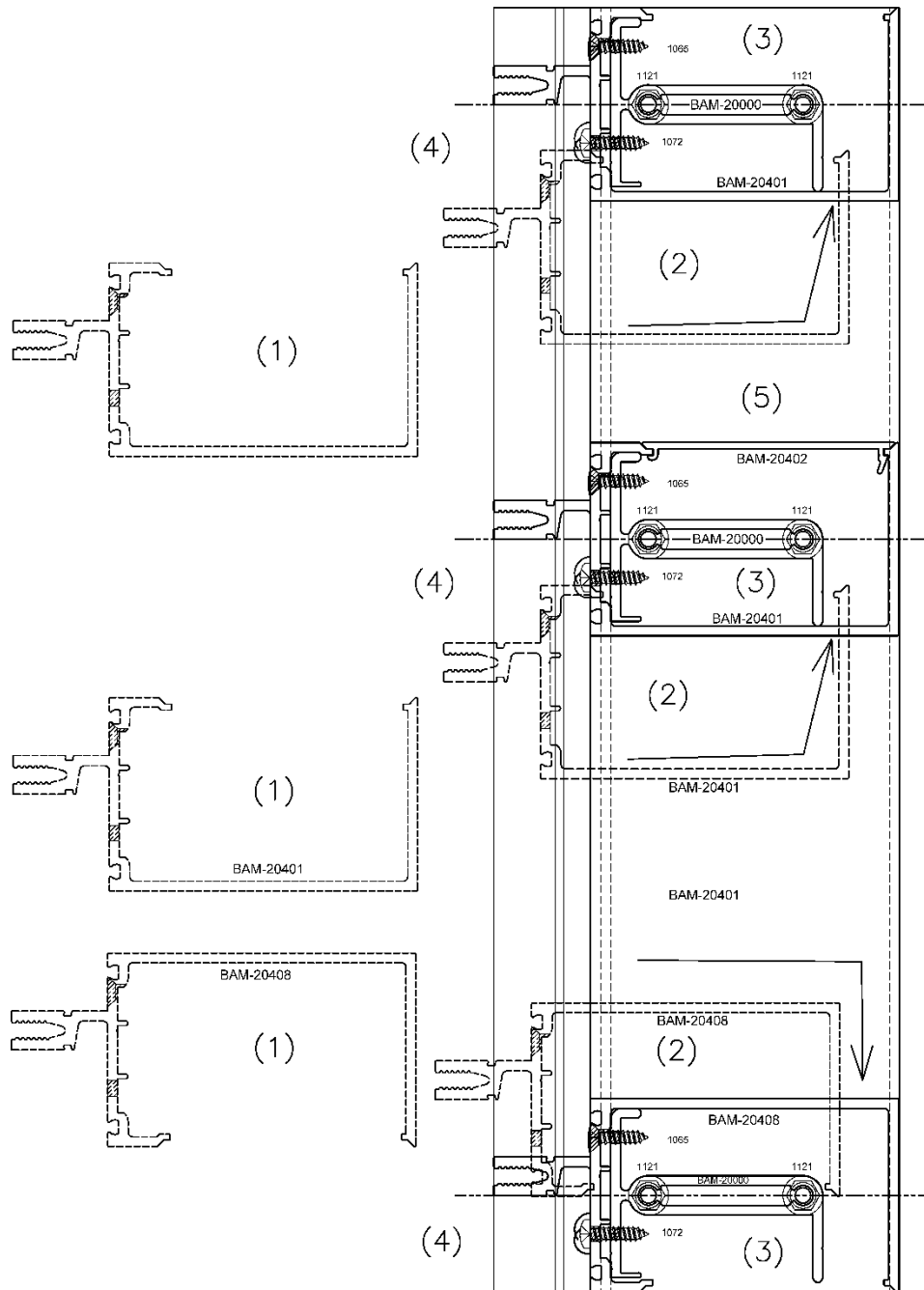
- Butter the ends of the horizontals immediately before setting them. (FIGURE F.1)



**FIGURE G.1**

➤ Installation of Outside glazed <or> SSG horizontals: (FIGURE H.1)

1. Locate and prepare horizontal.
2. Position and button horizontal over shear block.
3. Seat horizontal and fasten into place.
4. Seal fasteners and all gaps tool sealant.
5. Install cover where open back horizontal is exposed. (FIGURE H.1)



**FIGURE H.1**

- Installation of inside glazed horizontals:
  1. Locate and prepare horizontal.
  2. Position and button horizontal over shear block.
  3. Seat horizontal and fasten into place.
  4. Seal fasteners and all gaps, tool sealant.
  5. Install cover when installing as Outside glazed. Run a thin line of sealant across the Horizontal. Remember it needs to be removable for reglazing.  
(It is recommended to use inside glazing option, as a reglazing option.)
  6. Do not apply stop on inside glazed until you are ready to set glass if inside installation is required.

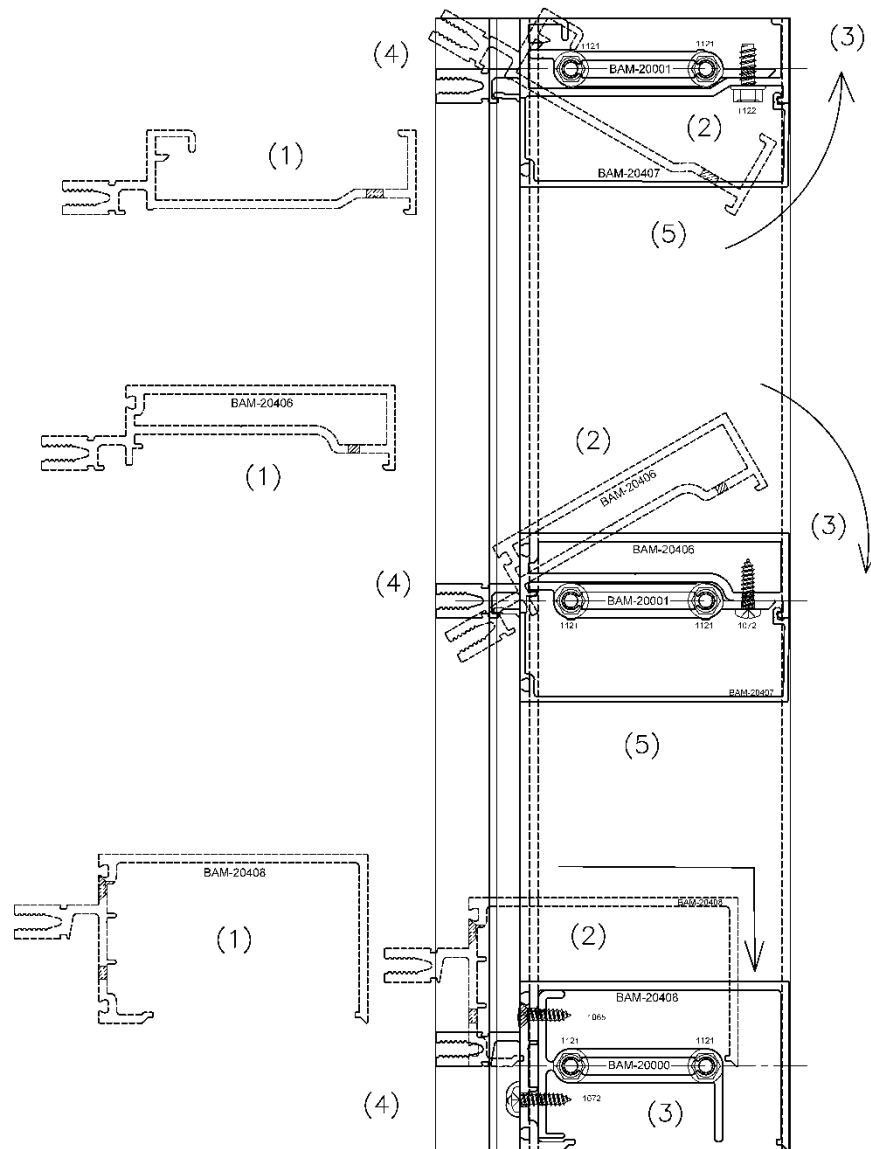


FIGURE I.1

- Installation of 10" horizontals. (FIGURE J.1)
  1. Locate and prepare horizontal.
  2. Position and button horizontal over shear block.
  3. Seat horizontal and fasten into place.
  4. Seal fasteners and all gaps, tool sealant.
  5. Apply 1" flat bar cover at exposed horizontal. Stick on with two sided tape and sealant.

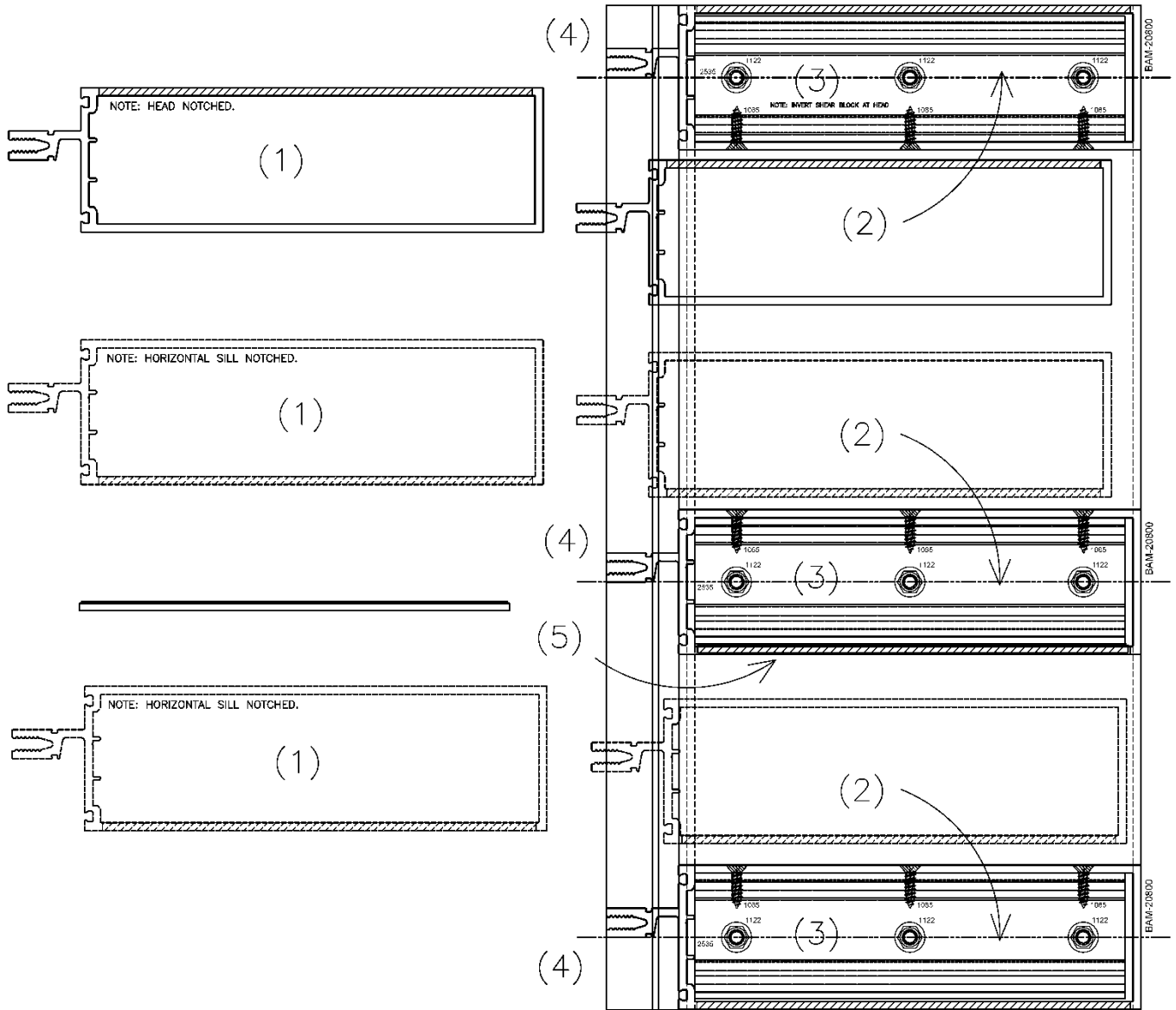


FIGURE J.1

- Note: Optional face applied method may still require an exposed fastener. The mullion is deep and will tend to show a crack at the interior when the face is attached.
- Recommend this method is used only where an exposed fastener is not desirable. (FIGURE K.1)
- Double check your order to be certain you have the correct screws.

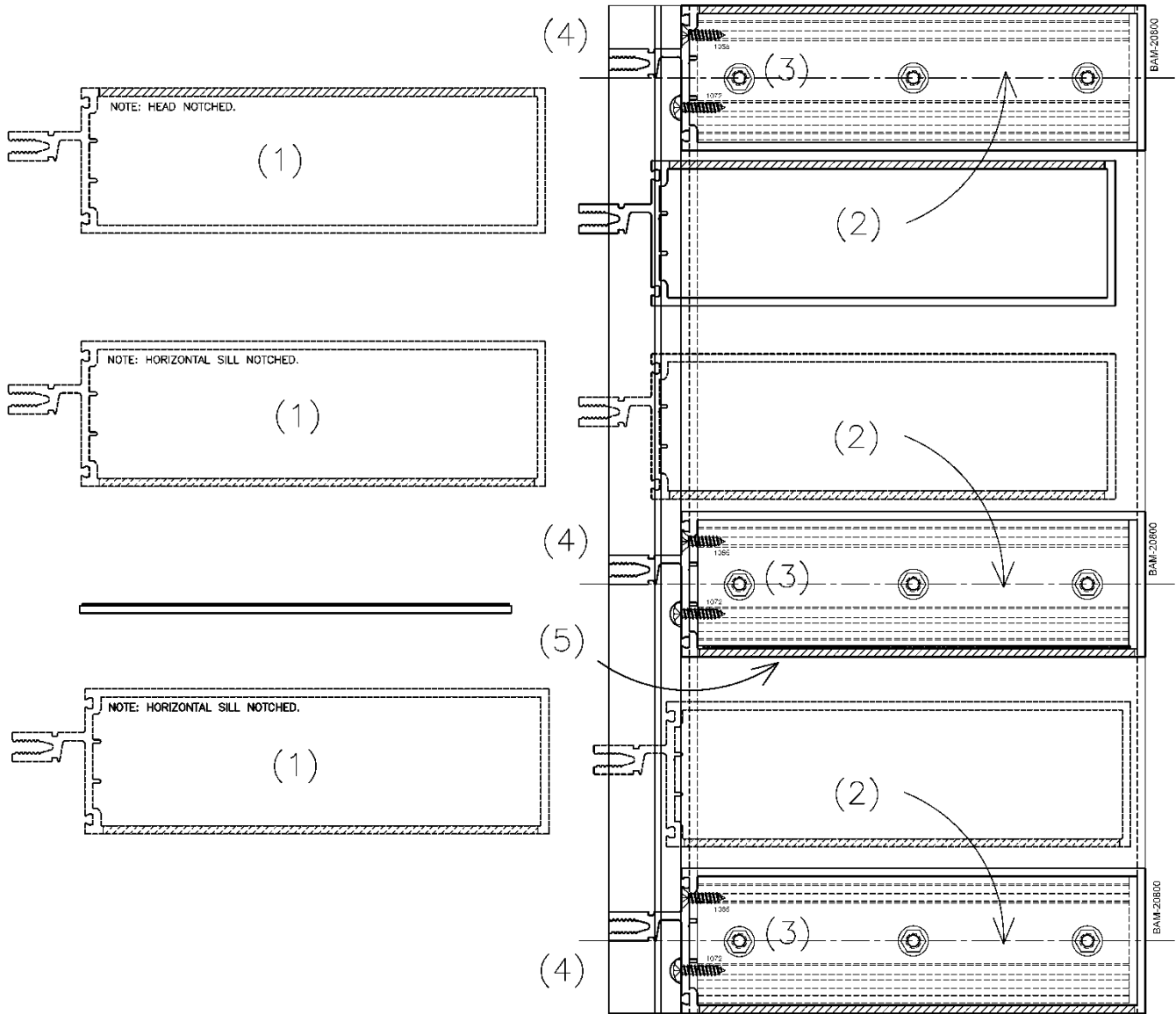


FIGURE K.1

- Apply perimeter seal as required by condition. (FIGURE L.1)

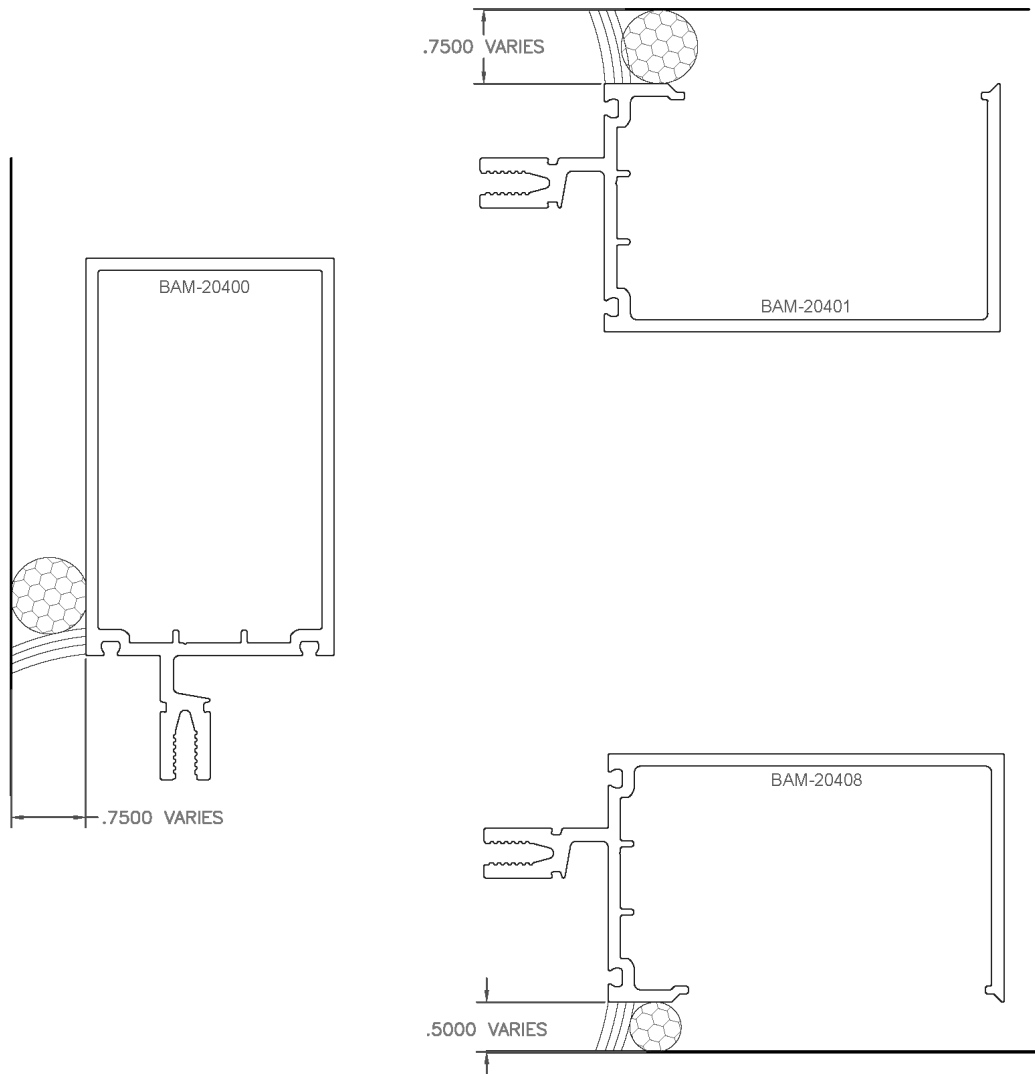


FIGURE L.1

- Prepare for Glazing Instructions:
  1. Prepare only the lites you are going to be able to glaze to avoid contamination and premature curing of sealants.
  2. Prior to glazing cut gaskets long, (Extrusion length X 1.02" minimum) gasket can always trim.
  3. Lay them out flat in a clean dry location to allow them to recover their shape.
  4. If rubber is short recut and use precut piece at a shorter location.
  5. Clean extrusion material with alcohol or approved solvent.

- Install thermal isolator gasket: (FIGURE M.1)
  1. Clean material.
  2. Install Vertical Isolator gasket should run the full extrusion length.
  3. Cut length = Mullion" X 1.02"
  4. Install from sill up to maintain shape, push into extrusion the gasket should fit tight and lay smooth. Trim as required.
  5. Install Horizontal Isolator gasket the same way.
  6. Cut length = Horizontal cut length x 1.02".

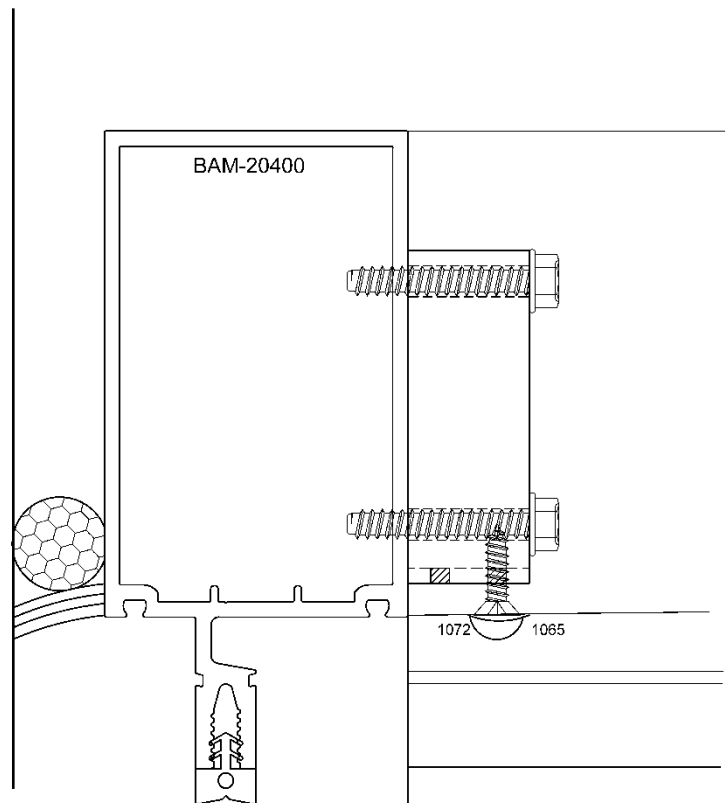


FIGURE M.1



- Install zone plugs: (FIGURES N.1 & O.1)
  1. Clean material:
  2. Check zone plug size at location.
  3. Butter zone plug cavity.

### CAPTURED ZONE PLUGS

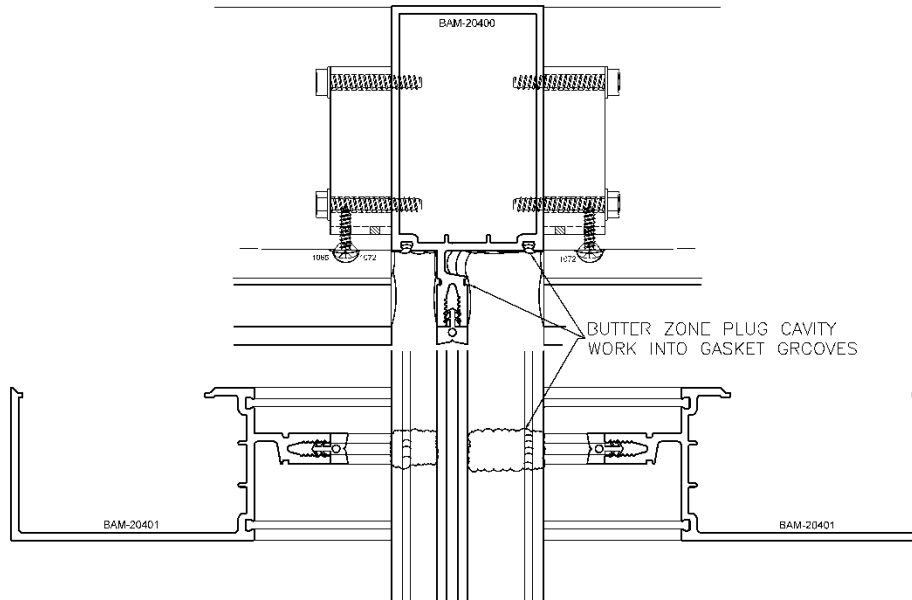


FIGURE N.1

### SSG ZONE PLUGS

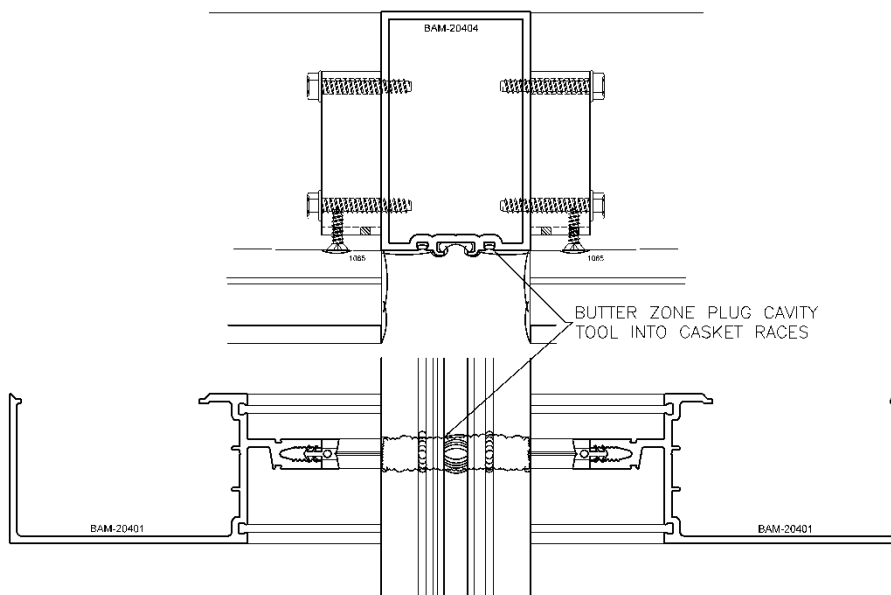


FIGURE O.1

4. Insert zone plugs. (FIGURES P.1 & Q.1)
5. Tool sealant to divert water to weeps. Keep surfaces low enough to allow water to pass the glass after completed glazing.

TONGUE VIEW

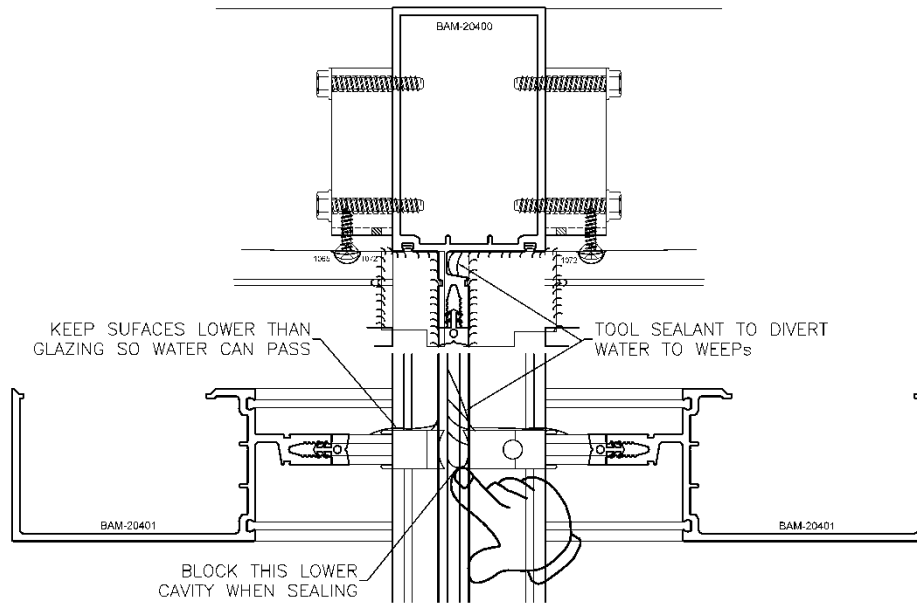


FIGURE P.1

SSG VIEW

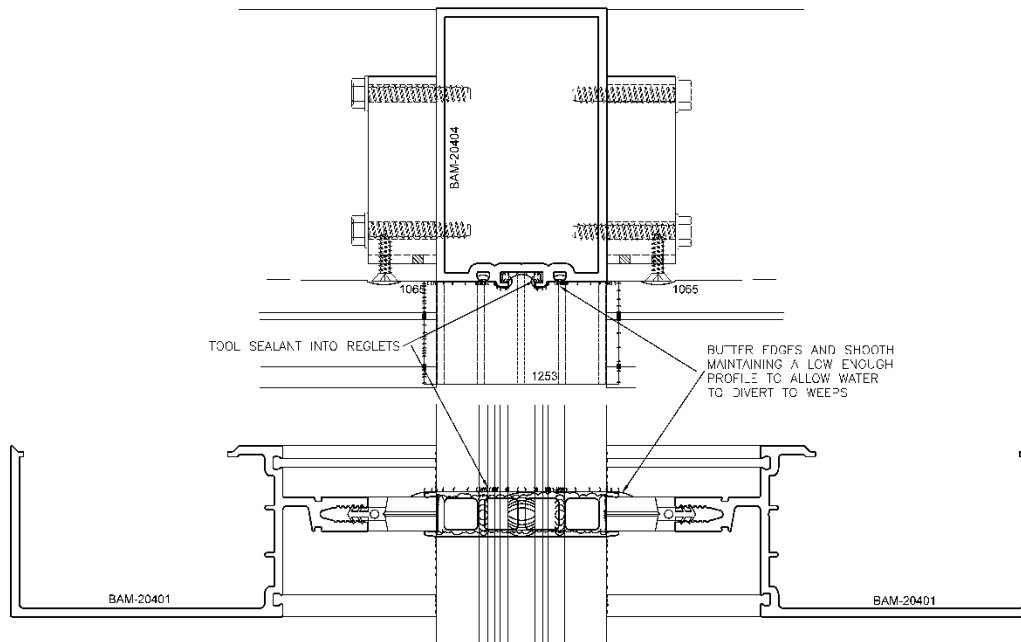
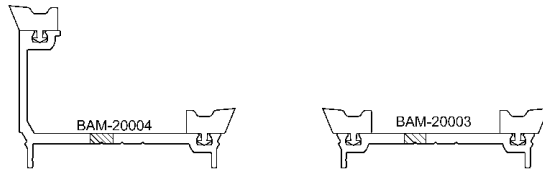


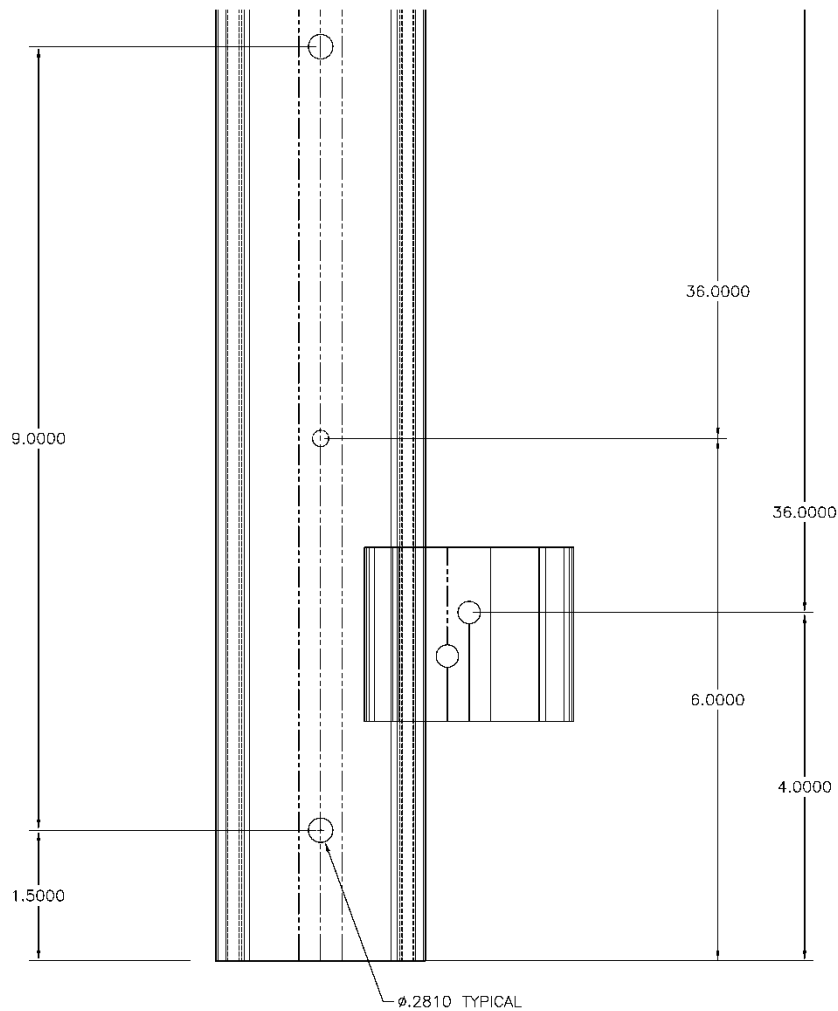
FIGURE Q.1

- Install the hard preset gaskets on the exterior:
  1. Clean material.
  2. Cut length X 1.02"
  3. Push hard rubber presets into pressure plates flat and smooth. Gaskets should be a little long to let them set before trimming for installation.



**FIGURE R.1**

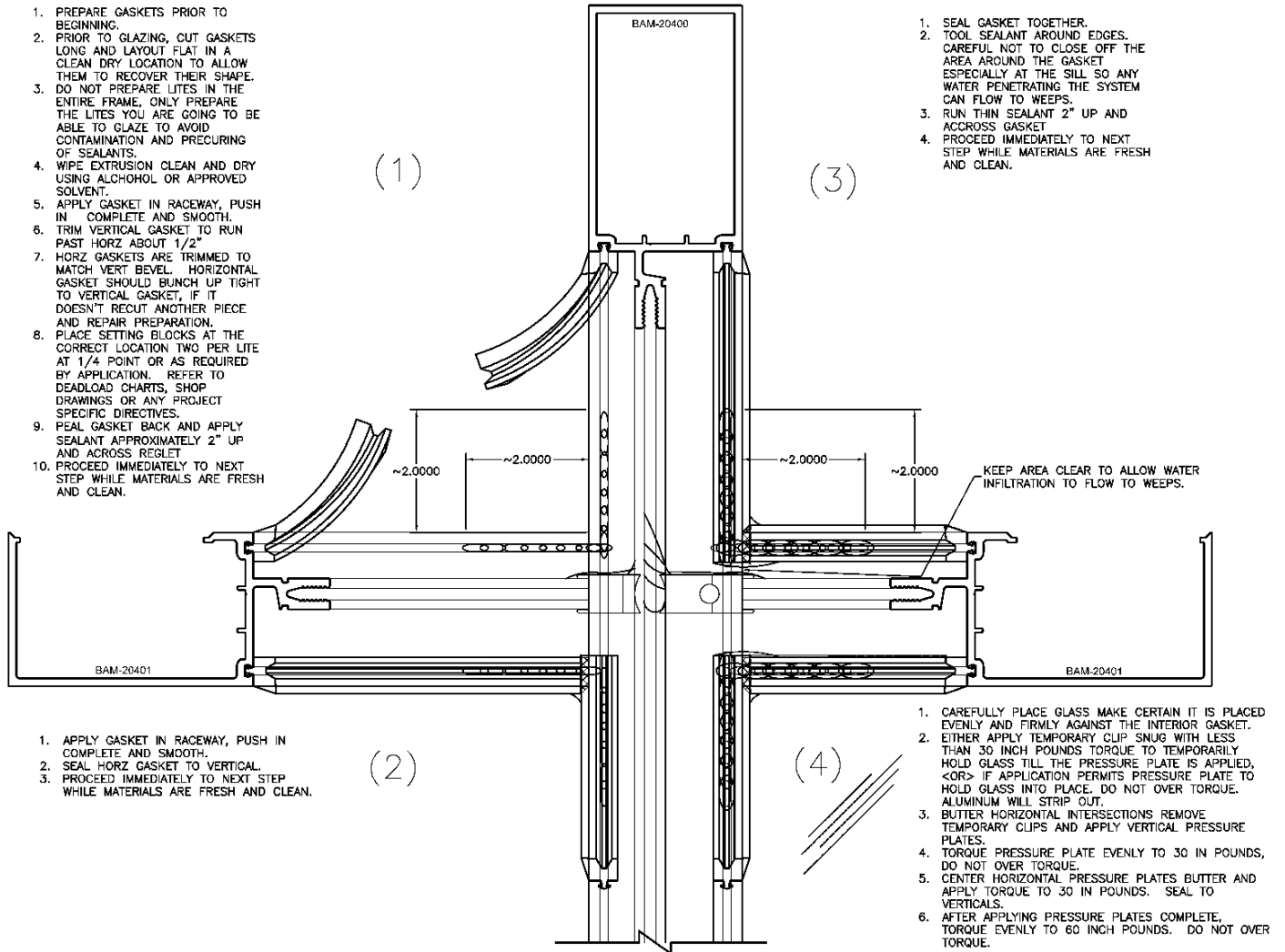
4. Plan where to place temporary clips if using them. Place 4" from each corner and at 36" intervals. Temporary clips are not intended to take design loads. If high loads are expected finish glazing the product.



**FIGURE I.2**

- Captured glazing: (Read entire Instruction before proceeding and share with associates)
  1. Push the soft preset gaskets into the vertical mullion races.
  2. Verticals need trimmed to 1/2" beyond DLO.
  3. Push the soft preset into the horizontal mullion races.
  4. Trim the horizontals to fit tight and taper to the vertical preset.
  5. Set glazing blocks 1/8 point, 1/4 point or as required by the shop drawings or any project specific directives.
  6. Place one side glass block at center of each DLO.
  7. Peel the soft preset back on the mullions, put a thin coat of sealant 2" up and across at each corner of the lite.
  8. Push the gasket back into place while sealing the horizontal end to the vertical preset.
  9. Tool the sealant around the edges, and be careful to maintain clearance for the water to be diverted to the weep locations.
  10. Apply a thin layer of sealant to the glazing side of the gasket at 2" vertical and 2" horizontal at each corner.
  11. Carefully set glass in square. Check gasket the whole time to be certain it does not roll under.
  12. Apply the temporary clips at 4" from each corner, then 36" on center as needed. Torque them evenly to 30 in-lb.

➤ GLAZING DIAGRAM:



1. PREPARE GASKETS PRIOR TO BEGINNING.
2. PRIOR TO GLAZING, CUT GASKETS LONG AND LAYOUT FLAT IN A CLEAN DRY LOCATION TO ALLOW THEM TO RECOVER THEIR SHAPE.
3. DO NOT PREPARE LITES IN THE ENTIRE FRAME, ONLY PREPARE THE LITES YOU ARE GOING TO BE ABLE TO GLAZE TO AVOID CONTAMINATION AND PRECURING OF SEALANTS.
4. WIPE EXTRUSION CLEAN AND DRY USING ALCOHOL OR APPROVED SOLVENT.
5. APPLY GASKET IN RACEWAY, PUSH IN COMPLETE AND SMOOTH.
6. TRIM VERTICAL GASKET TO RUN PAST HORZ ABOUT 1/2"
7. HORZ GASKETS ARE TRIMMED TO MATCH VERT BEVEL. HORIZONTAL GASKET SHOULD BUNCH UP TIGHT TO VERTICAL GASKET, IF IT DOESN'T RECUT ANOTHER PIECE AND REPAIR PREPARATION.
8. PLACE SETTING BLOCKS AT THE CORRECT LOCATION TWO PER LITE AT 1/4 POINT OR AS REQUIRED BY APPLICATION. REFER TO DEADLOAD CHARTS, SHOP DRAWINGS OR ANY PROJECT SPECIFIC DIRECTIVES.
9. PEAL GASKET BACK AND APPLY SEALANT APPROXIMATELY 2" UP AND ACROSS REGLET
10. PROCEED IMMEDIATELY TO NEXT STEP WHILE MATERIALS ARE FRESH AND CLEAN.

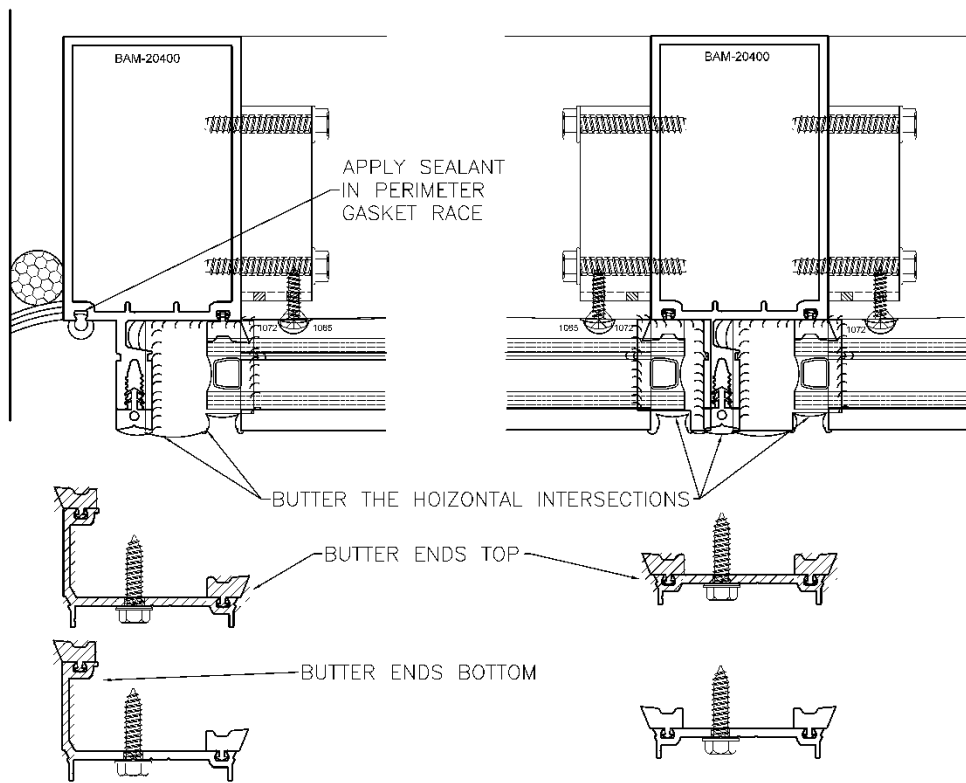
1. SEAL GASKET TOGETHER.
2. TOOL SEALANT AROUND EDGES. CAREFUL NOT TO CLOSE OFF THE AREA AROUND THE GASKET ESPECIALLY AT THE SILL SO ANY WATER PENETRATING THE SYSTEM CAN FLOW TO WEEPS.
3. RUN THIN SEALANT 2" UP AND ACCROSS GASKET
4. PROCEED IMMEDIATELY TO NEXT STEP WHILE MATERIALS ARE FRESH AND CLEAN.

1. APPLY GASKET IN RACEWAY, PUSH IN COMPLETE AND SMOOTH.
2. SEAL HORZ GASKET TO VERTICAL.
3. PROCEED IMMEDIATELY TO NEXT STEP WHILE MATERIALS ARE FRESH AND CLEAN.

1. CAREFULLY PLACE GLASS MAKE CERTAIN IT IS PLACED EVENLY AND FIRMLY AGAINST THE INTERIOR GASKET.
2. EITHER APPLY TEMPORARY CLIP SNUG WITH LESS THAN 30 INCH POUNDS TORQUE TO TEMPORARILY HOLD GLASS TILL THE PRESSURE PLATE IS APPLIED, <OR> IF APPLICATION PERMITS PRESSURE PLATE TO HOLD GLASS INTO PLACE, DO NOT OVER TORQUE. ALUMINUM WILL STRIP OUT.
3. BUTTER HORIZONTAL INTERSECTIONS REMOVE TEMPORARY CLIPS AND APPLY VERTICAL PRESSURE PLATES.
4. TORQUE PRESSURE PLATE EVENLY TO 30 IN POUNDS, DO NOT OVER TORQUE.
5. CENTER HORIZONTAL PRESSURE PLATES BUTTER AND APPLY TORQUE TO 30 IN POUNDS. SEAL TO VERTICALS.
6. AFTER APPLYING PRESSURE PLATES COMPLETE, TORQUE EVENLY TO 60 INCH POUNDS. DO NOT OVER TORQUE.

FIGURE S.1

- Prepare to apply vertical pressure plates:
  1. Apply sealant into perimeter gasket race at end mullion.
  2. Butter horizontal intersections with sealant.
  3. Butter both ends of vertical pressure plates.
  4. Remove temporary glazing clips.
  5. Apply vertical pressure plates. Wiggle in at horizontal intersections to seat the preset gaskets flat.
  6. Torque evenly to 30 in-lbs.
  
- Tool sealant that squeezes out at perimeter gasket and on mullion end dams top and bottom.



**FIGURE T.1**

➤ Prepare the Horizontal pressure plate. (FIGURE U.1)

1. Remove temporary clips
2. Trim rubber to match vertical bevel.
3. Butter ends.
4. Center and fasten to the horizontal. Torque to 30 in-pounds.
5. Tool sealant to seal all gaps.

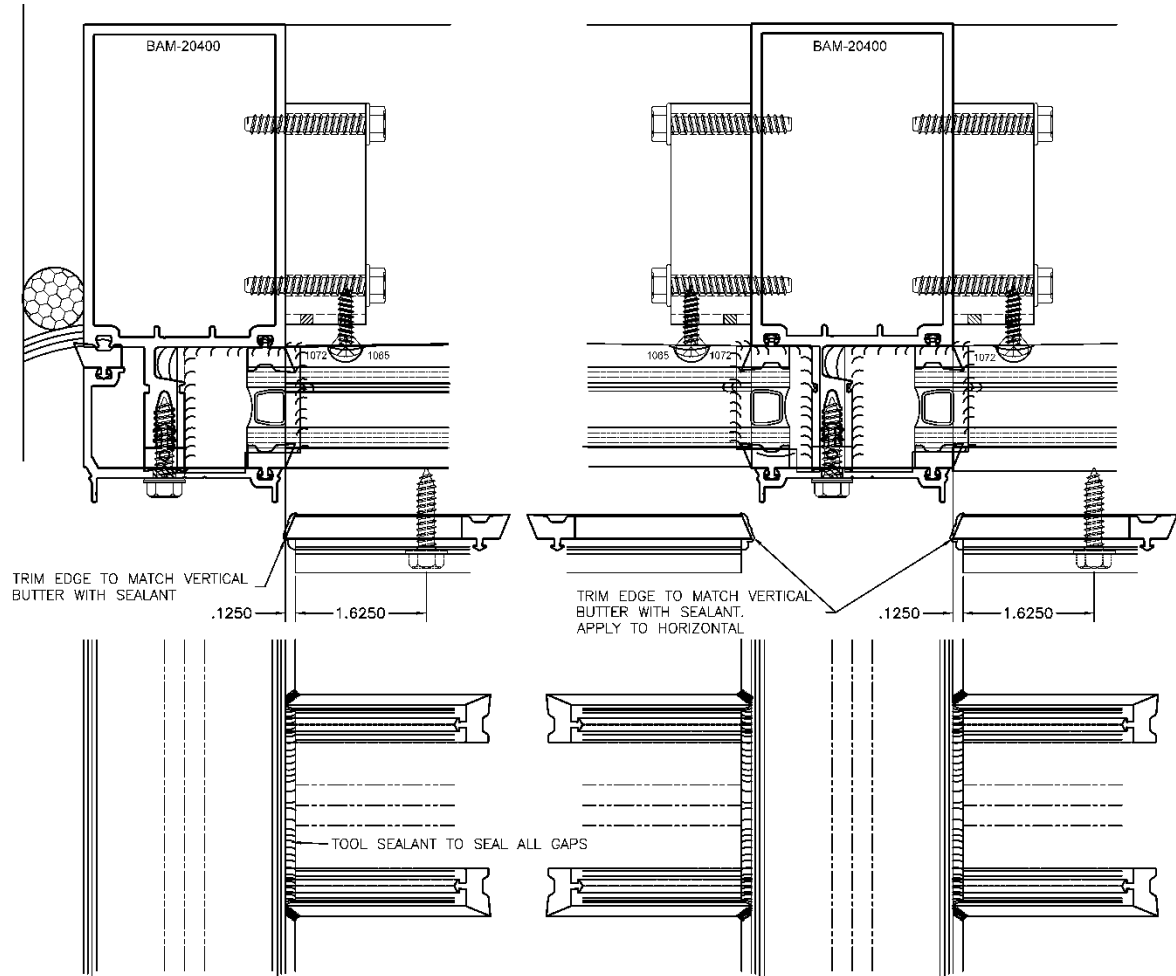
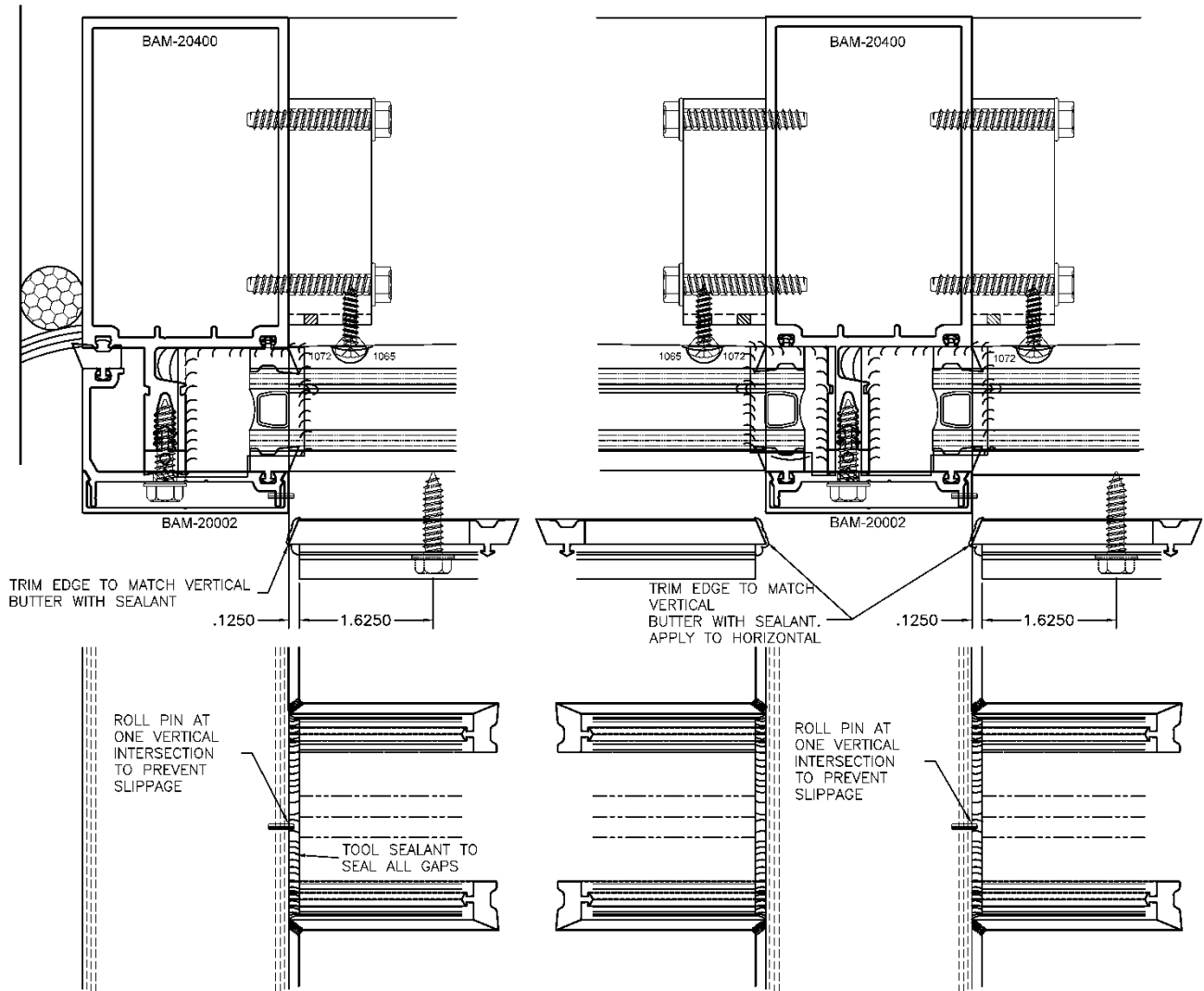


FIGURE U.1

- Check and evenly torque all pressure plates to 60 inch-pounds using a precise torque wrench.
- Snap mull cover on vertical pressure plates.
- **If needed**, pin vertical pressure plate with a roll pin at a horizontal to avoid pressure plate migration.
- Tool sealant at horizontal pressure plates to vertical mull cover.



**FIGURE V.1**



- Snap on weeped horizontal caps in center.
- Check perimeter seals.
- Seal across entire product head tapering sealant to the exterior as a water shed.
- Clean up for presentation.

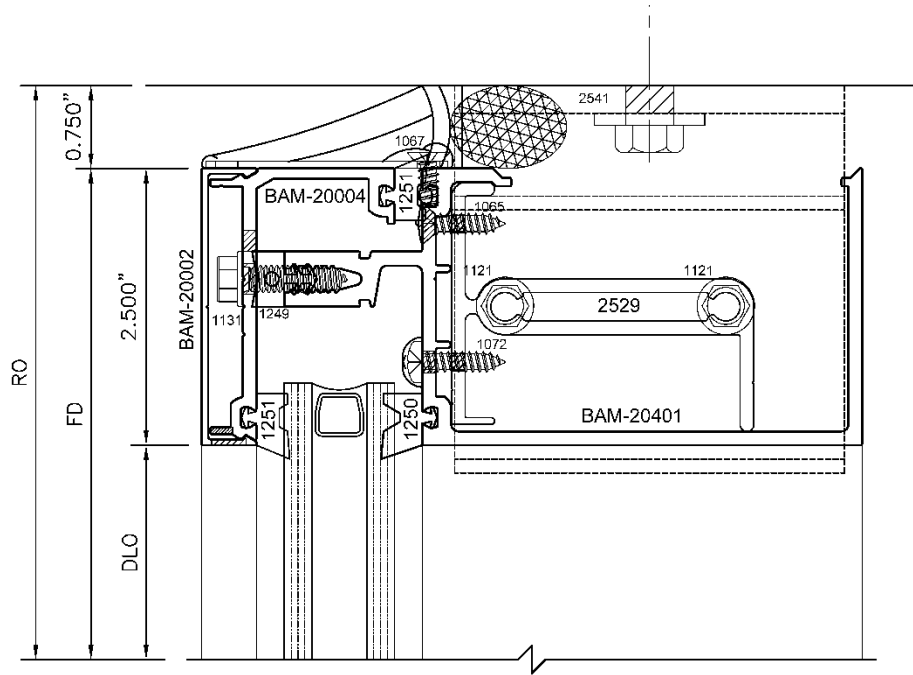


FIGURE W.1

- B2500 IG Installation: (Read entire Instruction before proceeding and share with associates)
- Notes: Typically the intent is for reglazing, but can be inside glazed from start. (FIGURE X.1)
- All preparations are identical with exception to the interior gasket, Interior glass stop is not in place yet, and setting the glass.
  - Reglazing you remove the glass, glass stop, and interior gasket.
  - Clean the cavity of glass and debris to avoid clogging weep holes and a clean surface for new sealant areas.
  - Repair any damaged sealant areas.
  - Replace exterior gasket. Generally exterior gasket is damaged, cut it cleanly at the top and bottom 1/2" inside of DLO. Clean out cavity.
  - Back seal 2" horizontal and vertical of DLO, and splice a new gasket in with silicone on each seam.

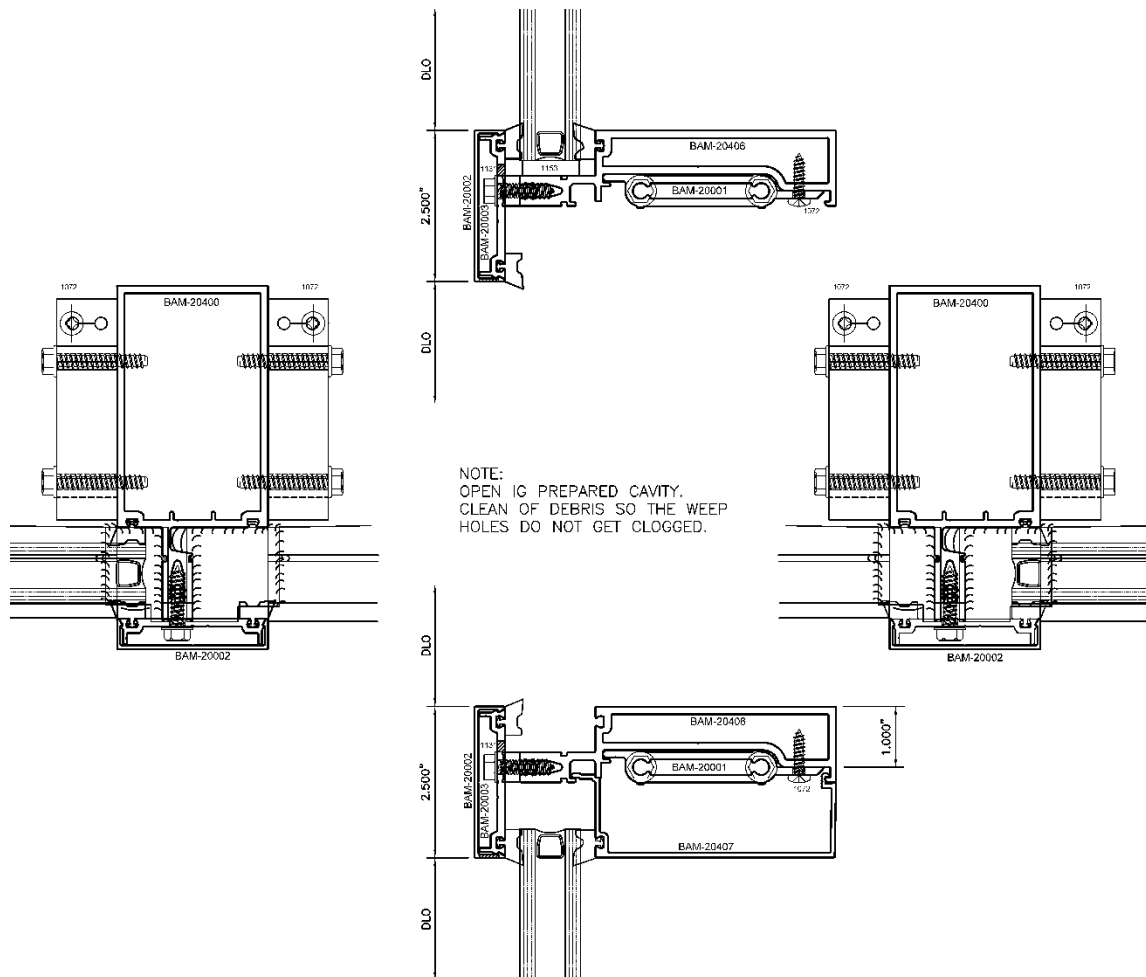


FIGURE X.1

- Set glazing blocks @ 1/8<sup>th</sup> point or 1/4 point, unless drawings indicate other requirements as per application. (FIGURE Y.1)

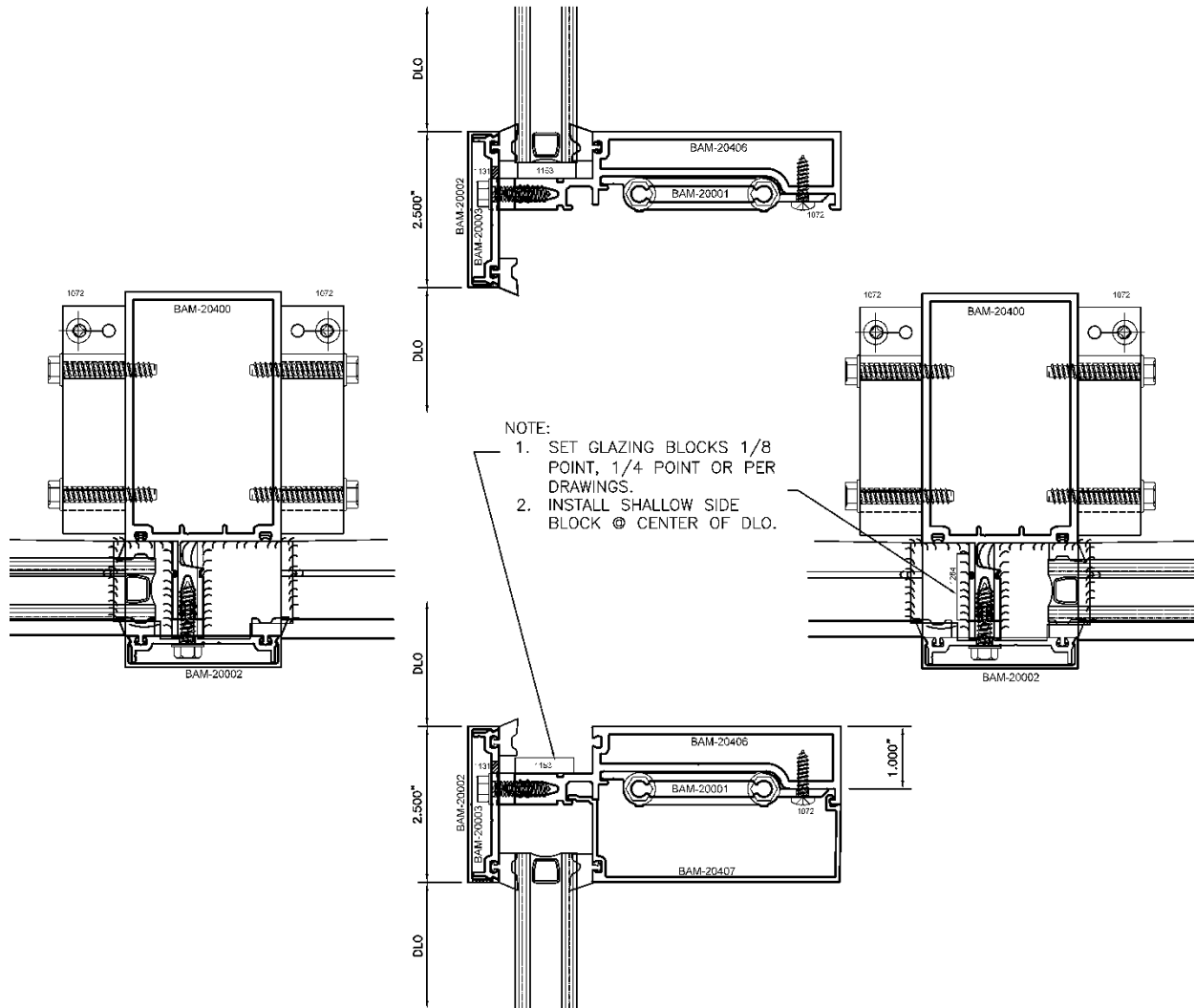


FIGURE Y.1

- Butter gasket corners at the exterior approximately 2" vertical and 2" Horizontal. (FIGURE Z.1)
- Set glass:
  1. Take glass in vertically, button the edge of the glass into the deep pocket side carefully to avoid smearing sealant.

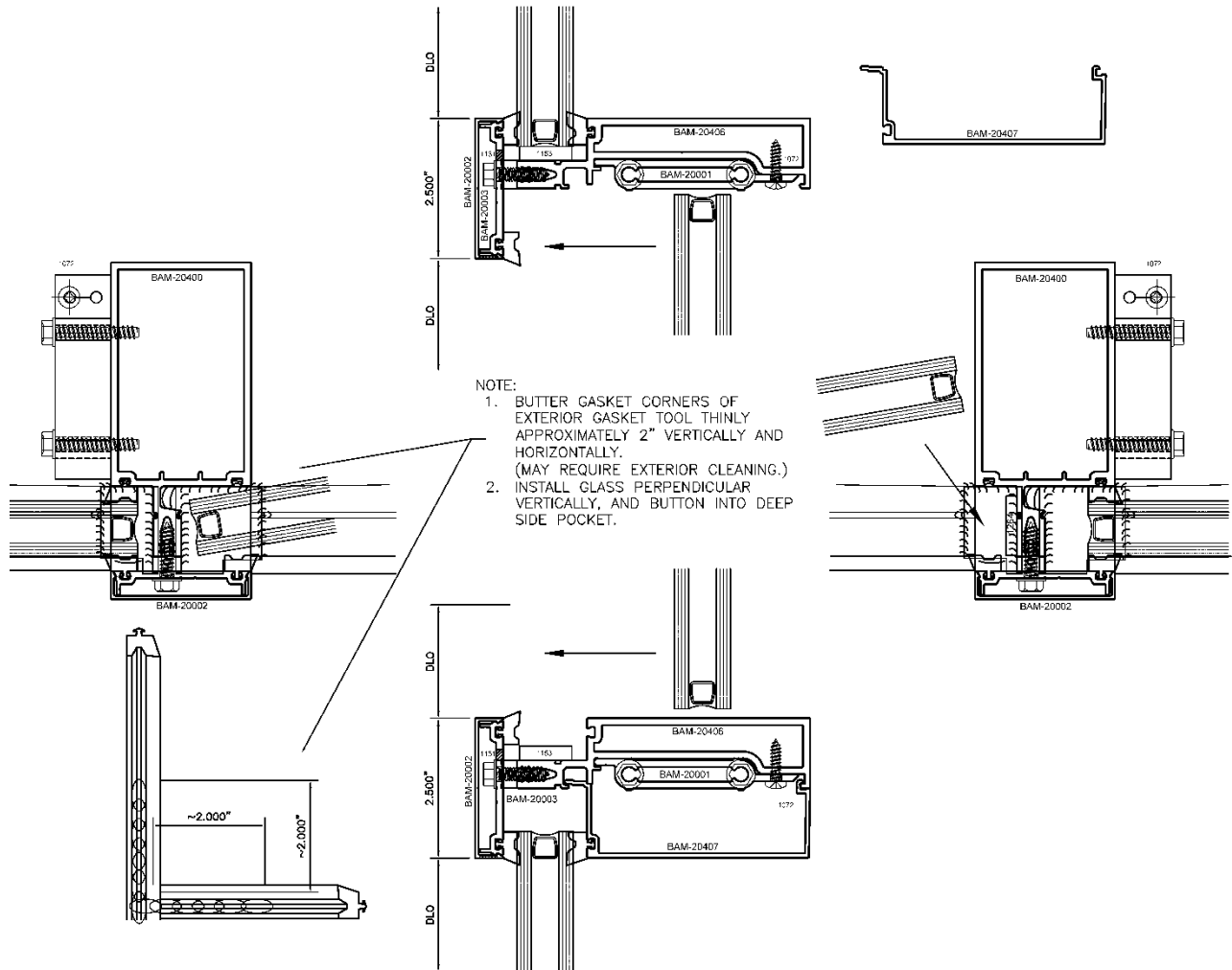
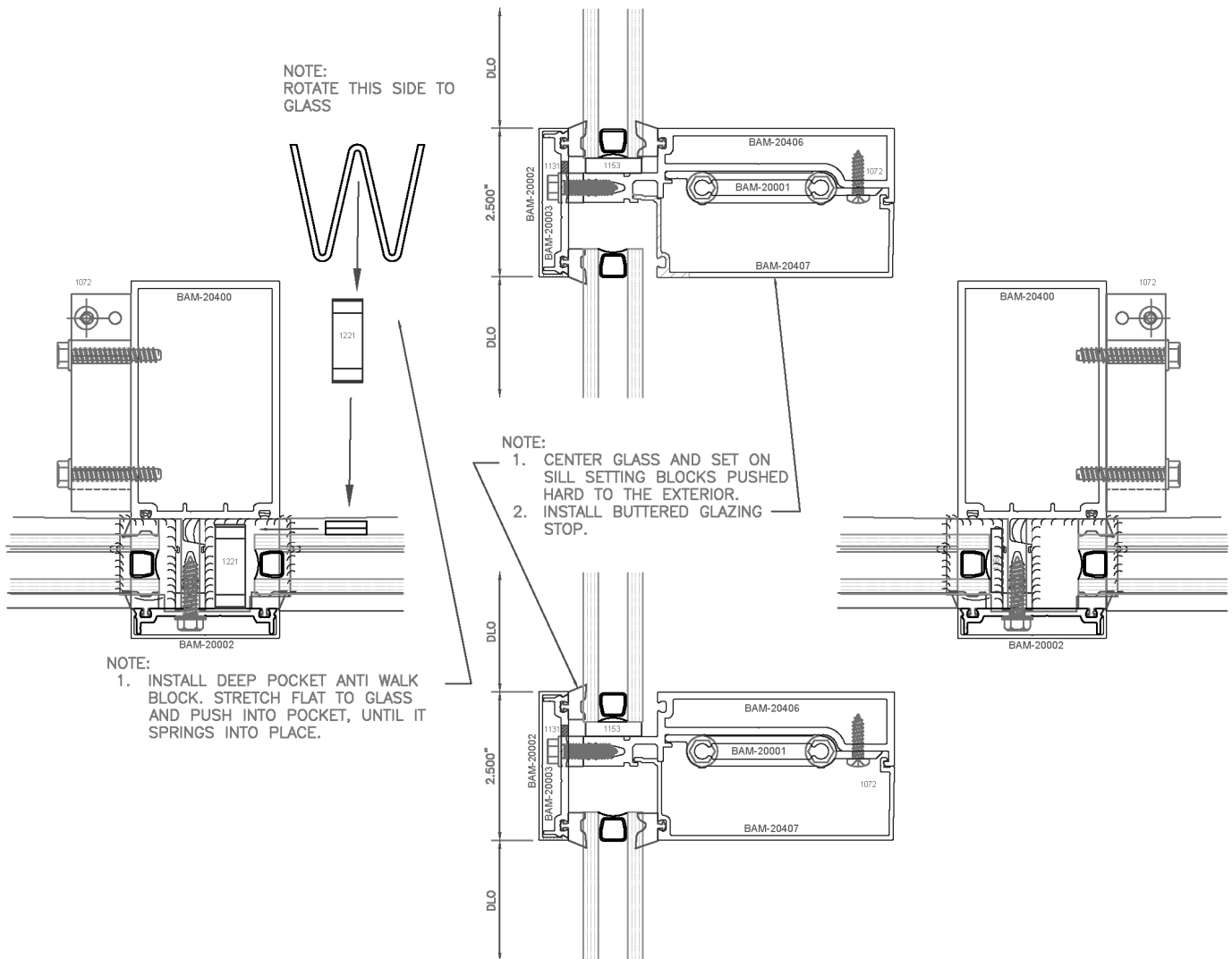


FIGURE Z.1

2. Straigten the glass and lift it to avoid moving the setting blocks and center the glass. Push it firmly against the exterior gasket and set it on the blocks. (FIGURE A.2)
3. Generally at this point it is good to use about 6" strips of glazing wedge to temporarily hold the glass in place.
4. Butter and insert glazing stop.
5. Install the "W" anti-walk block into the deep side cavity.
  - Face the open end to the glass at the center of DLO.
  - Flatten against the glass.
  - Push into the cavity. (A putty knife is a good tool to push it in with.)
  - The block will spring into place.



**FIGURE A.2**

- Install the wedge gasket. (FIGURE B.2)
  1. Cut the wedge a little longer than DLO. (DLO X 1.02)
  2. Miter the edges together and butter the ends about 1" up each side and across the edge.
    - (Note: Be careful not to fill the corner so the water cannot evacuate to the weep holes.)
  3. Push the ends into the corners first, then go to middle and push in the middle. Keep gathering the wedge in this fashion until it is in place and smooth.
  4. Tool and wipe away excess sealant.
  5. Check you perimeter seals and taper the head sealant as previously defined.(FIGURE W.1)
  6. Clean up for presentation.

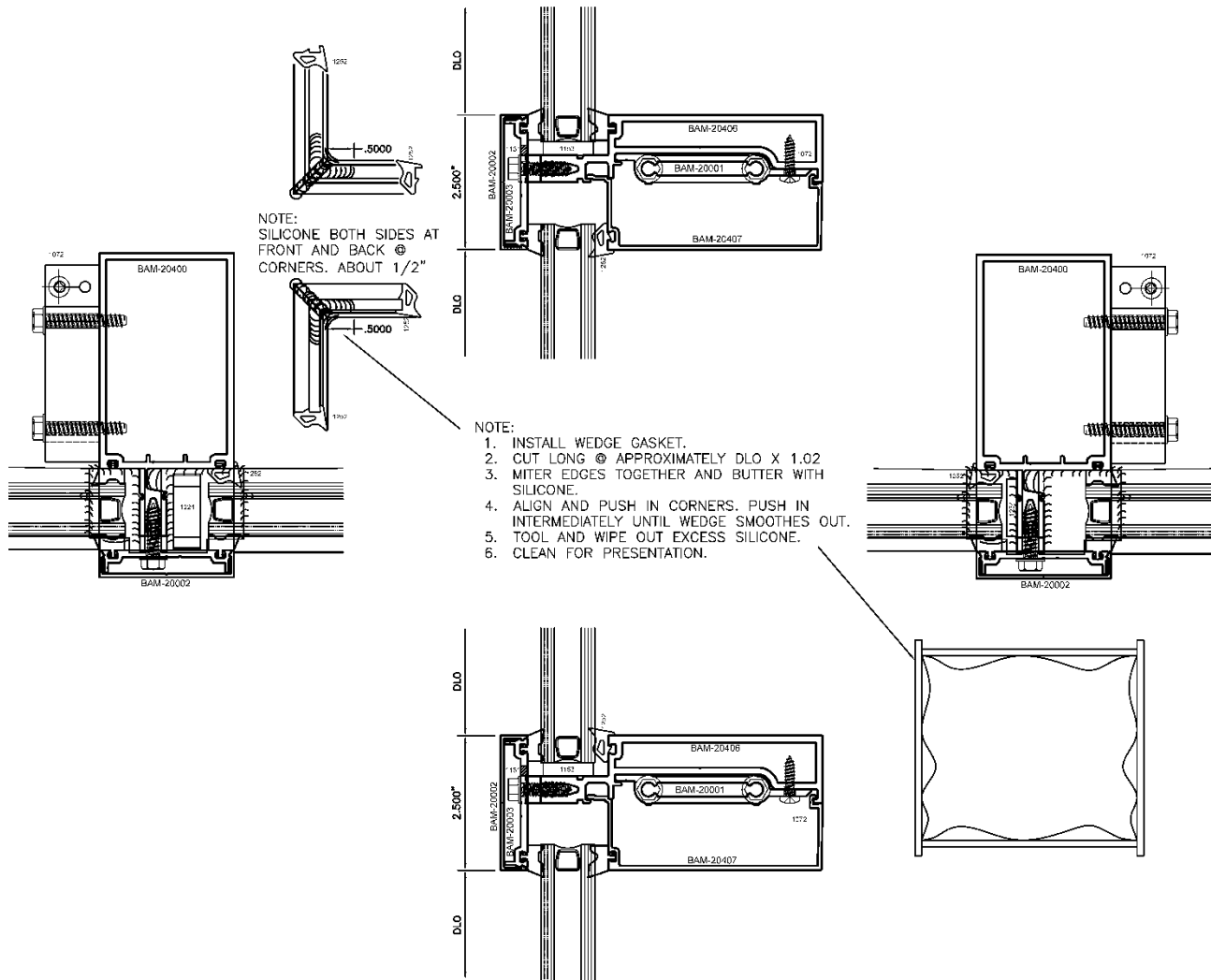


FIGURE B.2

- B2500 SSG Glazing: (Read entire Instruction before proceeding and share with associates)
- Cleaned material has zone plugs per previous pages. (FIGURE 0.1)
- Insert the SSG gasket in the very same manner. Verticals run through about ½” past horizontal. (FIGURE C.2)

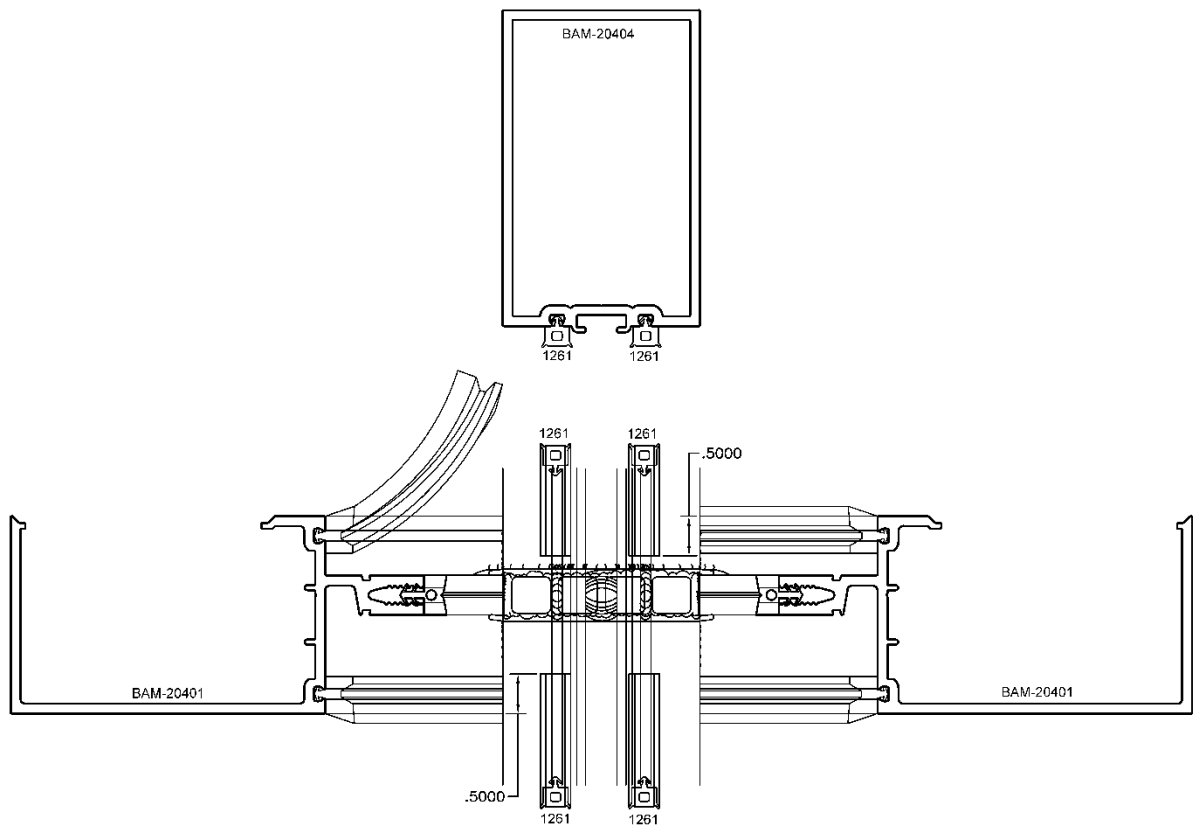


FIGURE C.2

- Place your setting blocks at 1/4 point, 1/8 point or as required by application.
  1. Plan your temporary clip locations.
  2. Carefully set glass.
  3. Apply temporary clips with 2-1/2 tek screw in same manner previously defined. Torque to 30 inch-pounds.
  4. **Note: Temporary clip hole will require sealing after removal.**

5. Tape off mullions and glass. (SSG sealant is soft and stringy. Please do not try to free hand sealant, and keep some alcohol or approved cleaner to clean the extrusion. Some sealants may stain finish.) (FIGURE D.2)
6. Tool and smooth sealant into all gaps. Remove masking.

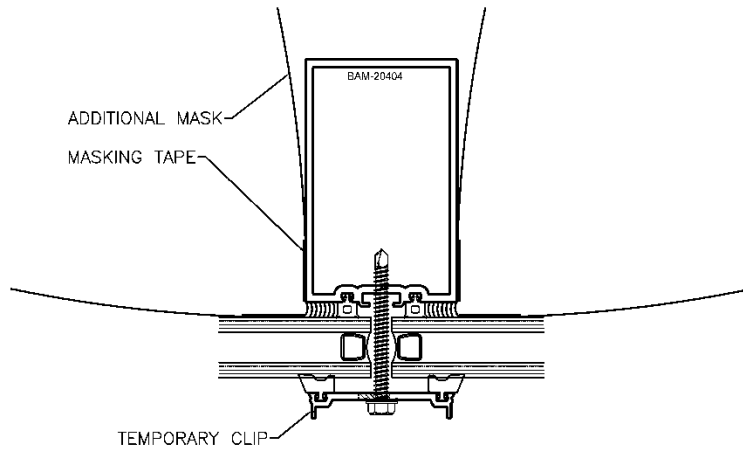
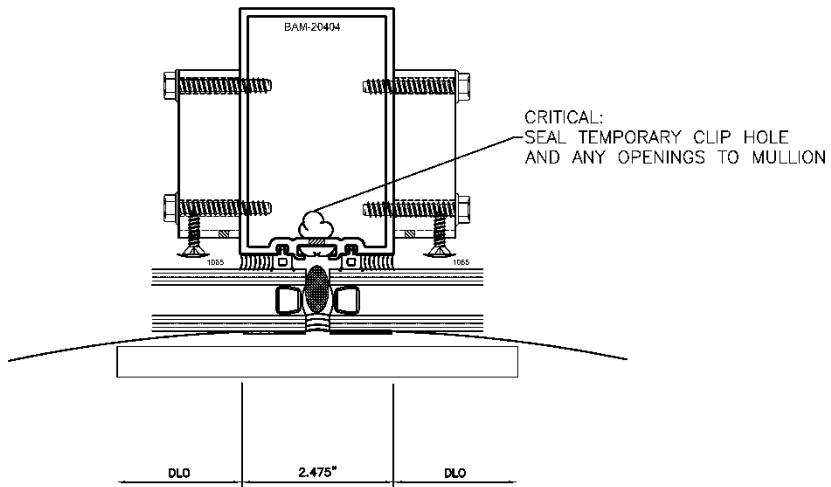


FIGURE D.2

- Let sealant set up as required by sealant manufacturer.
  1. Remove temporary clips at sections to be captured.
  2. Apply horizontal pressure plates as previously defined torque to 30 inch-pounds.
  3. Check and torque pressure plates to 60 inch-pounds.
  4. Remove remaining temporary clips.
    - **Critical:** Seal temporary clip holes, and any other opening in mullions.
    - **Center tongue adapter holes will need sealed see adaptor instructions.**
  5. Mask glass and system as required. (FIGURE E.2)
  6. Push foam backer rod into cavity at 1/4" deep, or per sealant manufacturer's instructions.
  7. Seal glass seam with sealant.
  8. Remove masking.
  9. Clean up and let sealant set up per sealant manufacturer's instructions.
  10. Check perimeter seal and taper head as previously defined. (FIGURE W.1)
  11. Clean up for presentation.



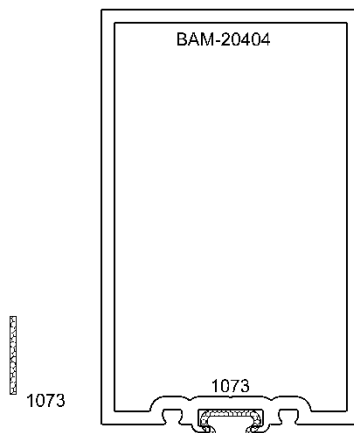


**FIGURE E.2**

- “CT” - Center Tongue adaptor:

**Note: Adaptor is generally for use in transition areas. It is recommended to use fixed tongue extrusions as much as possible. Sealing holes is critical on this application.**

- “CT” - Center Tongue adaptor preparation:  
(Read entire Instruction before proceeding and share with associates.)
- Apply tongue adaptor to cut and fabricated mullions.
- It is \*critical all holes even with/for screws through the mullions are sealed.
- Apply gasket tape to mullion reglet.



**FIGURE F.2**

- Snap two pieces of nylon tongue together to make a 1" tongue.
- If pieces are too short stagger tongue as shown.
- Apply silicone sealant at staggered joints.



FIGURE G.2

Snap tongue into place and press firmly.

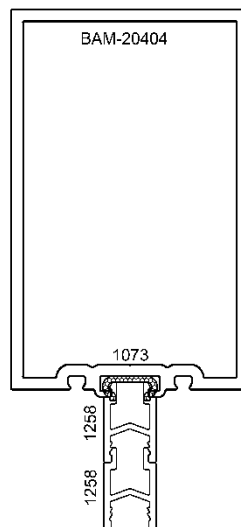


FIGURE H.2

- When drilling holes start from bottom up, Left to right to track drilling so you do not overlap holes. (Pressure plate, temp clip, and tack screw shown as example.)
- \*Critical that all holes need sealed.

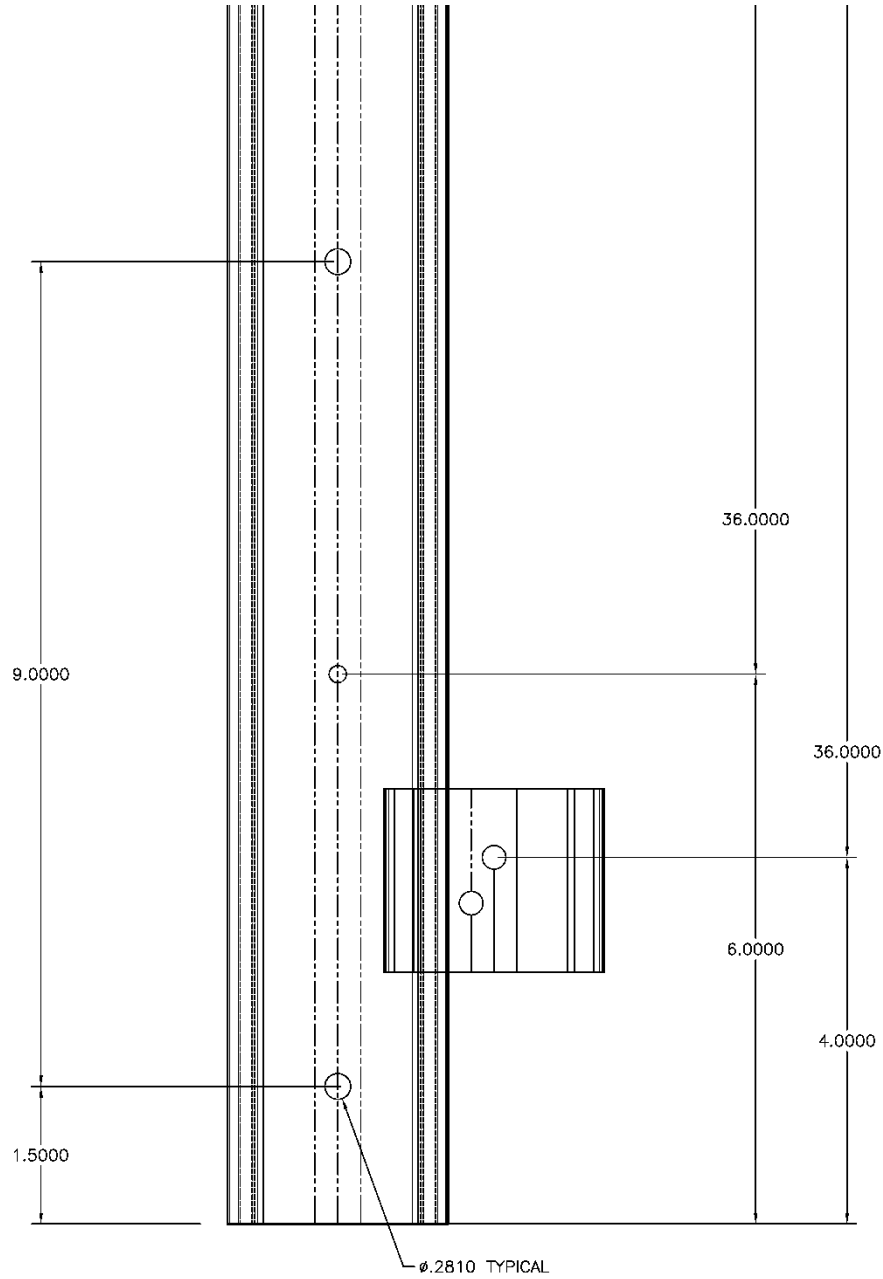
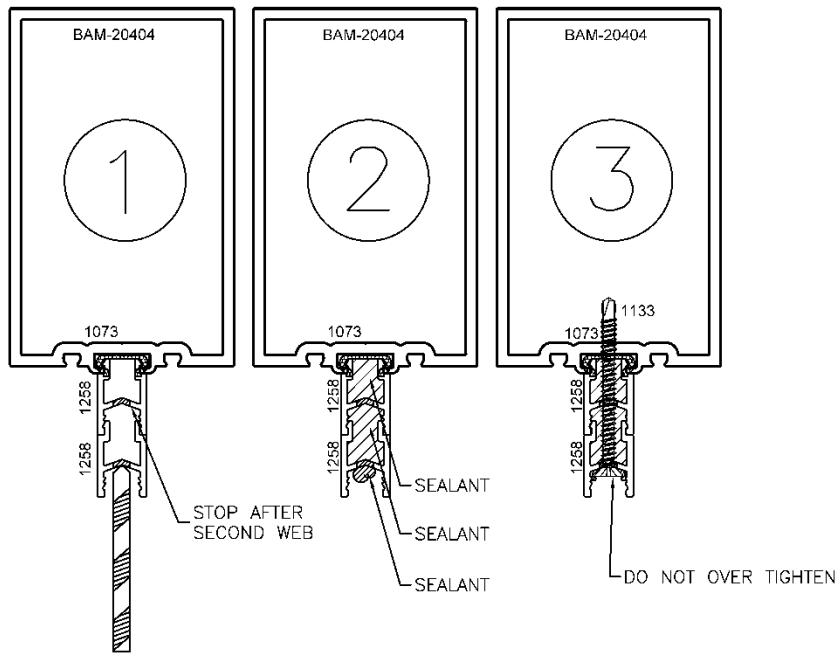


FIGURE I.2

- Drilling clear holes in the nylon tongue are recommended when applying tongue because it catches screw threads and tries to pull out or disengage the adaptor.
  - Use tack screws to assist in holding the tongue for installation, plan their locations.
    - Drill 3/16" clear holes in (nylon tongue adaptor only.) Do not penetrate mullion. 6" from bottom, 36" OC.
1. These holes are a clear hole for a #8 tack screw to hold the tongue in place during installation and will not be removed.
  2. Fill hole with sealant, so screw is well coated with sealant when piercing mullion.
  3. Tack tongue in place with the #8 Tek screw. "Do not" over tighten, because the screw will go through the nylon tongue.
    - As soon as screw breaks aluminum stop. Tighten slowly.
    - Be careful not to over tighten screw. It will go through nylon tongue.
    - Seal screw head.



**FIGURE J.2**

➤ Prepare pressure plates:

Note: working from cut to size parts.

1. Drill  $9/32$ " diameter holes 1.5" from each end, then drill holes every 9" until you cannot drill past the other end hole.
2. Fabricate a weep slot four inches from Horizontal ends @  $3/16$ " X  $1-1/2$ " long.
3. Slot should center  $11/32$ nds from Pressure plate screw groove.
4. Drill  $5/16$ " weep holes on mullion cover 6" from each end.
5. Drill matching holes to the mullion cover on pressure plate.

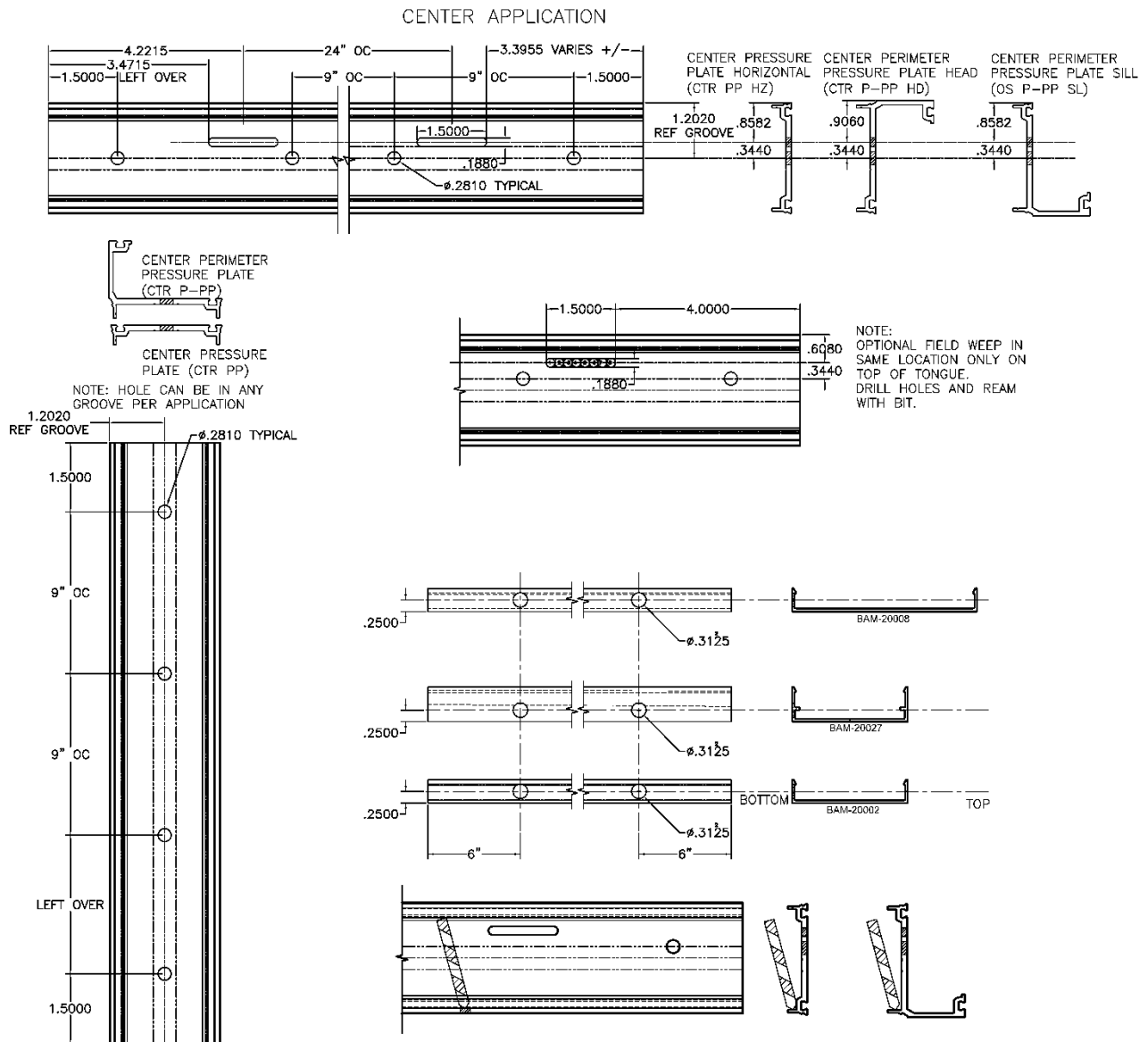


FIGURE K.2

- Apply gasket tape to pressure plate.
  - At horizontals place gasket tape below the weep holes.
  - At verticals center gasket tape on the pressure plate.
  - Apply stiff exterior preset rubber gaskets to pressure plates.

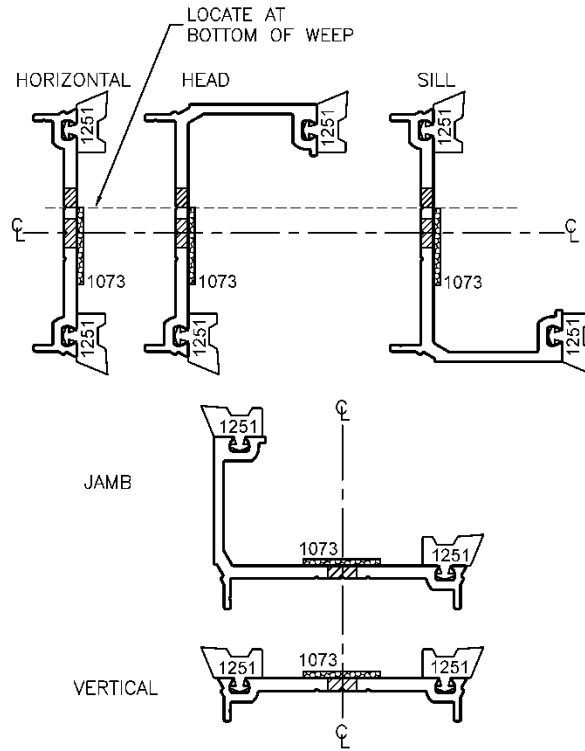


FIGURE L.2

- Fabricate for shear blocks for the vertical mullion as previously defined for SSG fabrication. (FIGURE D)
- Apply end dams, and set, and anchor mullions as previously defined or per shop drawings.
- Perimeter seal mullion per shop drawings.
- Assemble horizontals to vertical mullions and seal horizontals to mullions as previously defined. (FIGURE N)

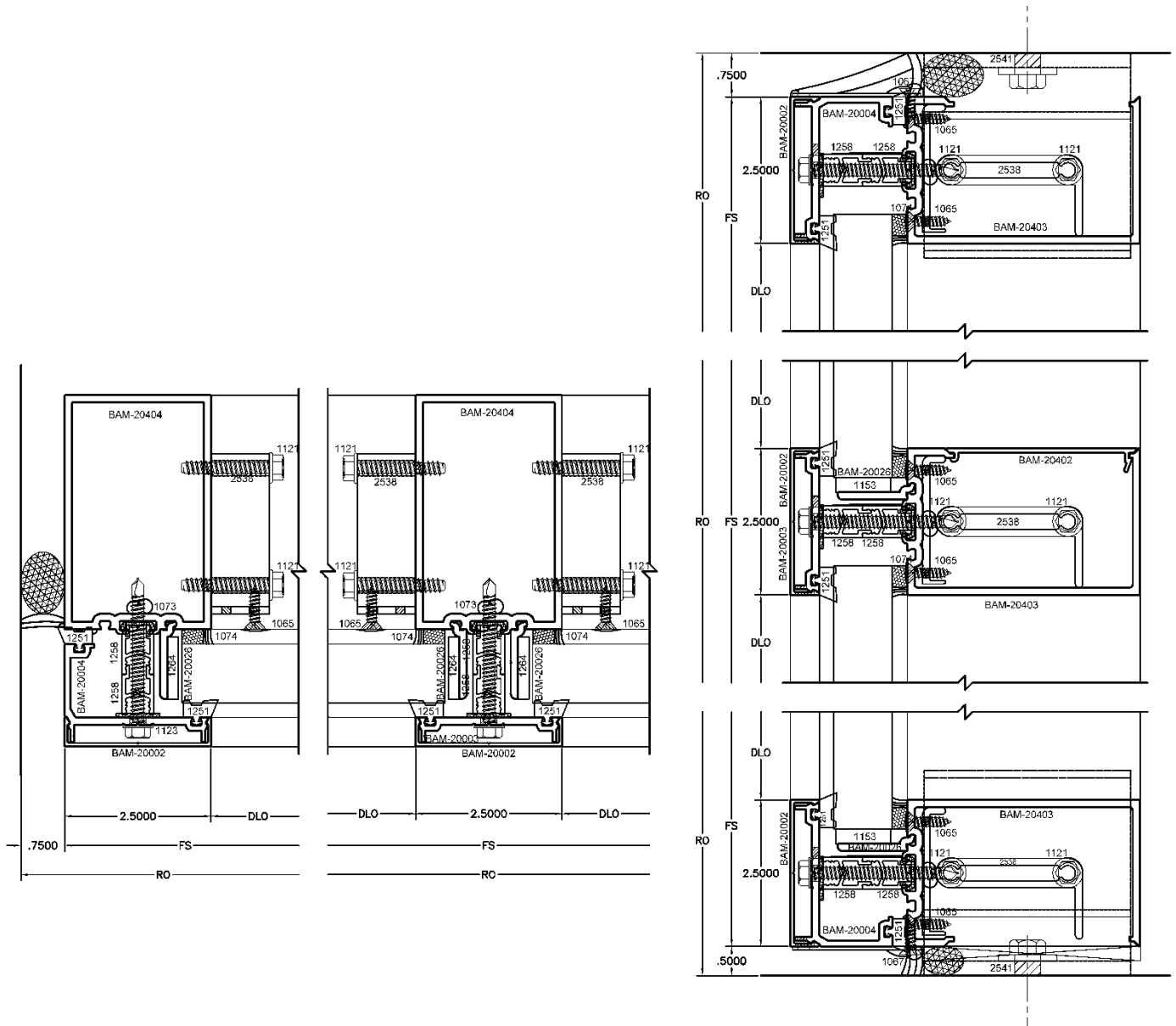
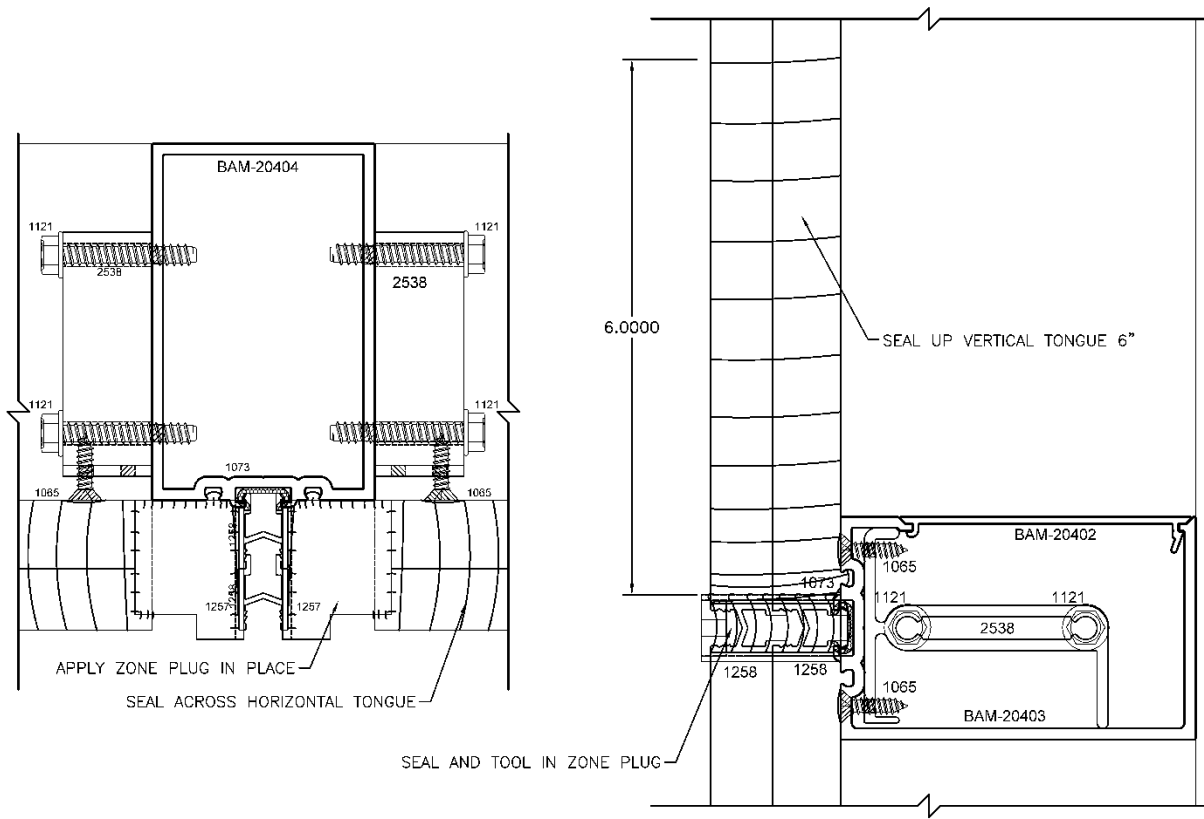


FIGURE M.2

- Apply zone plugs:
  - Butter cavity and position zone plug.
  - Tool sealant so all gaps are sealed.
- Apply thin layer of sealant 6" up vertical tongue and across horizontal tongue to complete a good water "pan" to direct water to weeps per lite.



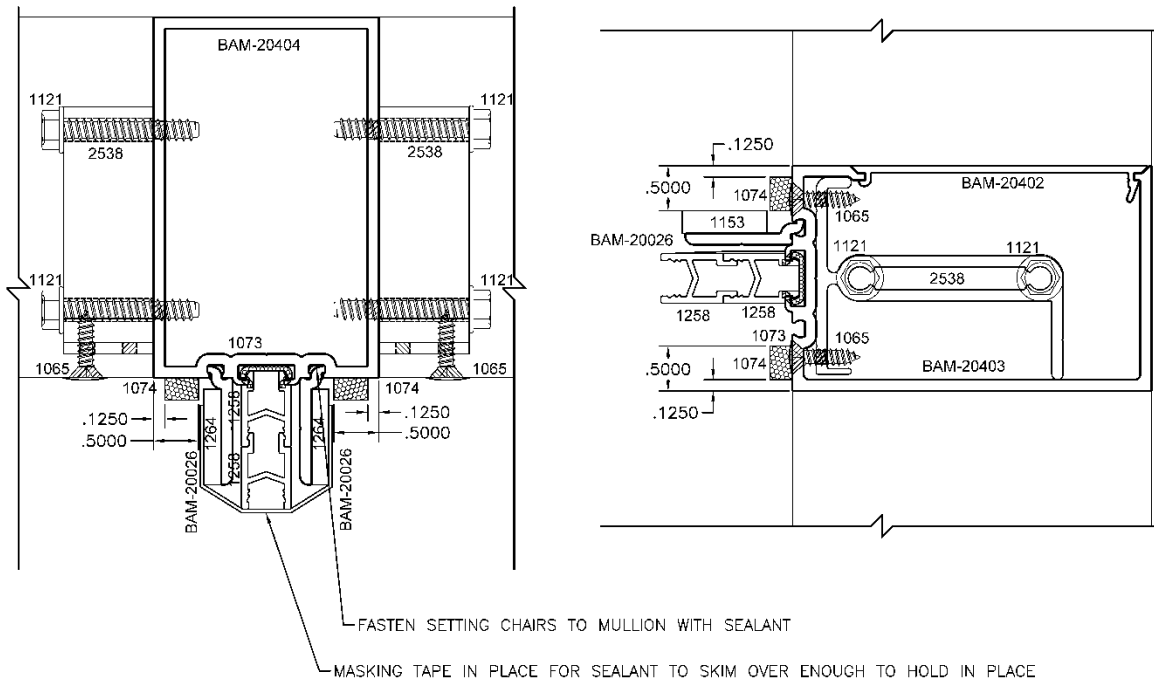
**FIGURE N.2**



- Apply glazing spacer tape:
  - Clean and apply tape 1/2" inside DLO, 1/8" from inside DLO.
  - Verticals extend 1/2" beyond DLO.
  - Horizontals but to verticals.
  - This may need to transition with a fixed tongue. If so blend installations together using sealant.
  - Seal ends of tape or rubber together.
  - Seal all gaps.
- Apply setting blocks and edge blocks:
  - Stick 1/4" setting blocks to setting chairs. 2 per sill location of lite.
  - 1/8<sup>th</sup> point, 1/4 point or as required by shop drawings or other project directive.
  - Stick 3/16" setting blocks to setting chairs and seal in at side locations.
  - Locate one each side at center point location.

Note: Stick setting chair in reglet with sealant.

Use masking tape to hold in place until sealant skims over and can support the setting block in place. You should be able to remove the tape immediately before setting glass.



**FIGURE O.2**

- Setting glass:
- Map out your temporary clip locations. 4" from one end and 36" (OC)-On Center, at horizontals and verticals. (FIGURE I.2)
  - Note: holes are located not to interfere with pin screw locations or pressure plate locations as defined previously.
- Drill .266 diameter clear holes in nylon tongue only! "Do not" drill into metal."
- Future note: Do not seal holes at temporary clip until fastener is removed.

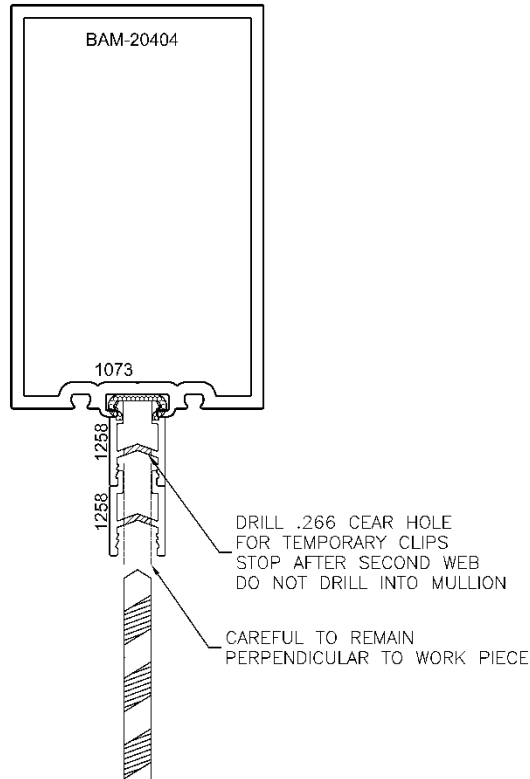
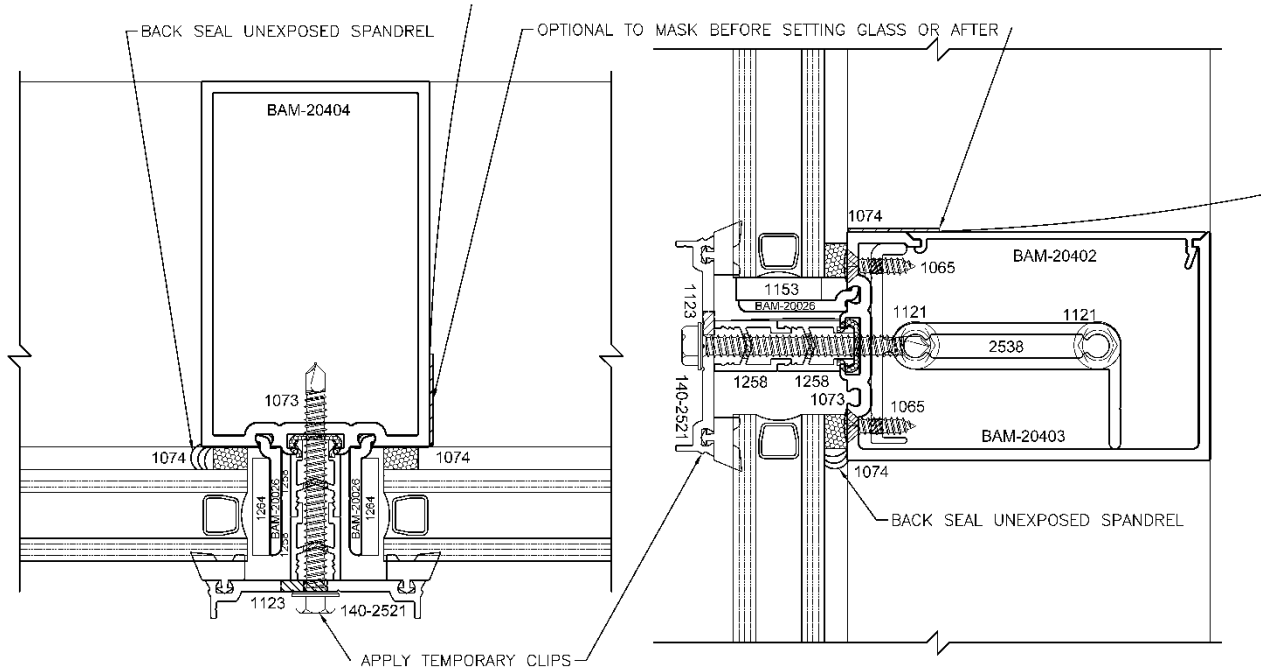


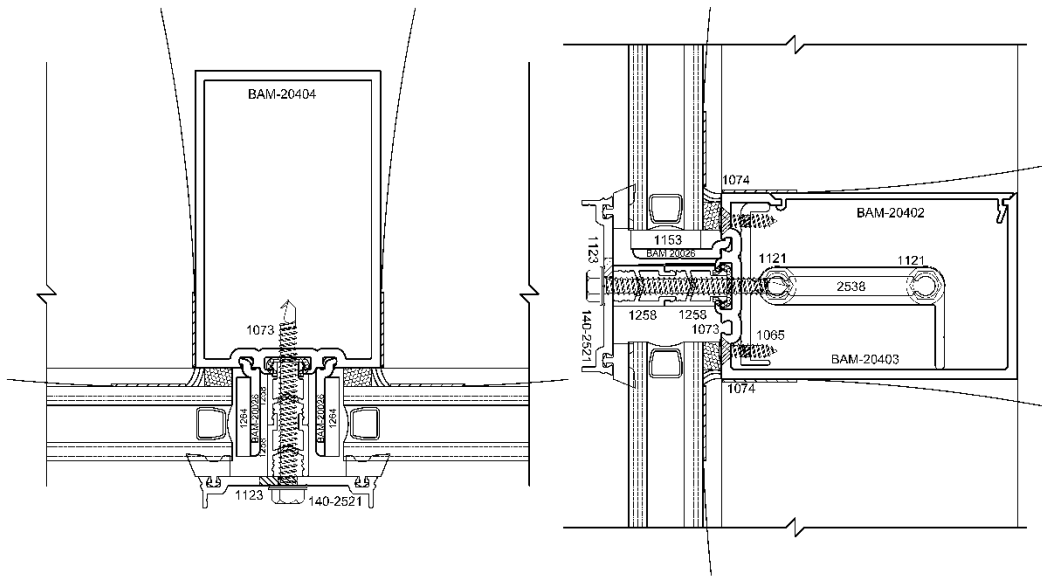
FIGURE P.2

- Remove temporary tape and clean.
- Optional here to mask off mullions for future sealant application.
- Back seal at unexposed spandrel locations prior to setting glass.
- Carefully set glass square in place.
- Apply temporary clips. Torque evenly to 30 inch-pounds.



**FIGURE Q.2**

- Clean and mask mullions for cap seal.
- Cap seal and tool.
- Clean off excess sealant and remove masking.



**FIGURE R.2**

- Remove vertical temporary clips.
- Critical, seal all temporary clip holes. Sealant needs to push through interior of mullion.

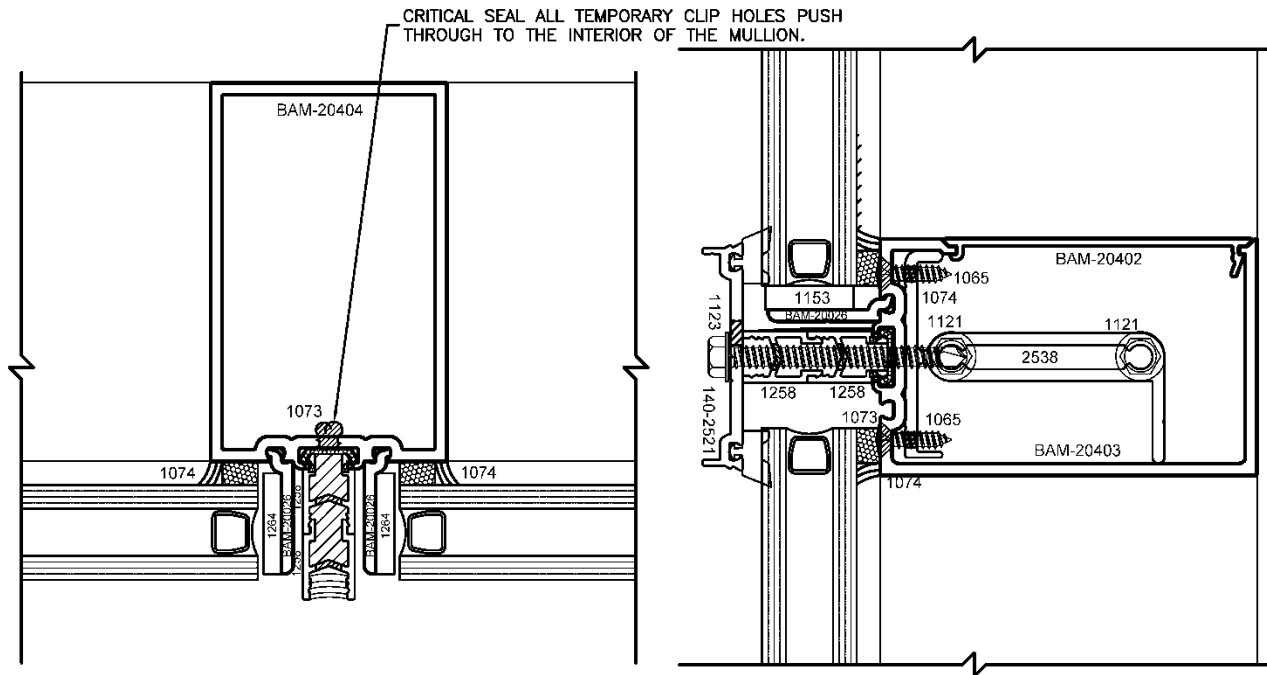


FIGURE S.2

- Apply all vertical pressure plates as per captured instructions.
- Back out vertical pressure plate screws, and fill hole with sealant similar to the temporary clip screw holes so the screw is well coated going into the mullion.
- Replace the pressure plate screws and Torque to 60 inch-pounds.
- Remove Horizontal temporary clips and seal holes.
- Apply Horizontal pressure plates the same way.
- Back out horizontal pressure plate screws at the head and sill. Fill hole with sealant similar to the temporary clip screw holes.
- Seal screws at the intermediate horizontals. This area can be sealed under the open back cover from the interior if application allows.

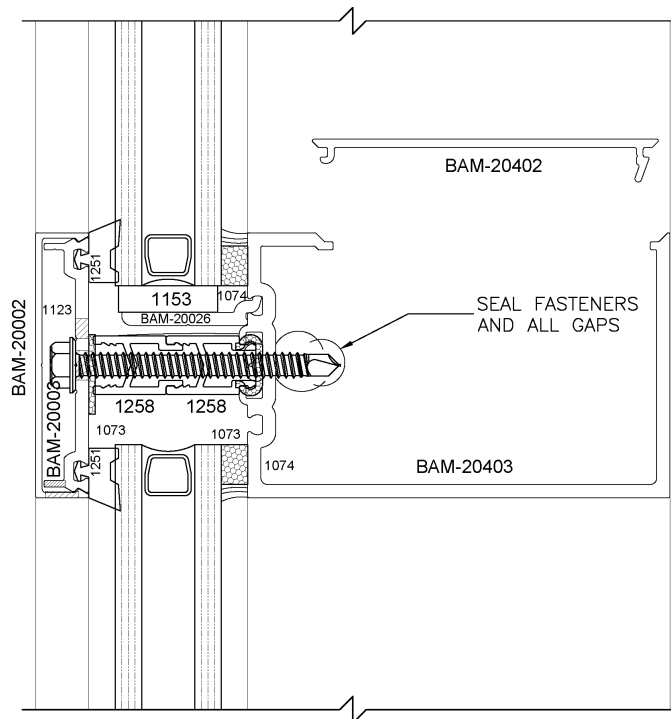


FIGURE T.2

- Replace the pressure plate screws and Torque to 60 inch-pounds.
- Check and tool sealant.
- Apply vertical mullion covers.
- Check and tool sealant.
- Apply Horizontal weeped mull covers.
- Check perimeter sealant and sloped water shed at head. (FIGURE W.1)
- Clean for presentation.

**Note:** This process to seal critical holes is why it is recommended to use fixed tongue extrusions except at transitional locations.

- Door installation:
- Install the pocket filler:
  - Use a flat head screw at the shear block location.
  - Notching the adaptor is acceptable, but it is easier to replace the screw.

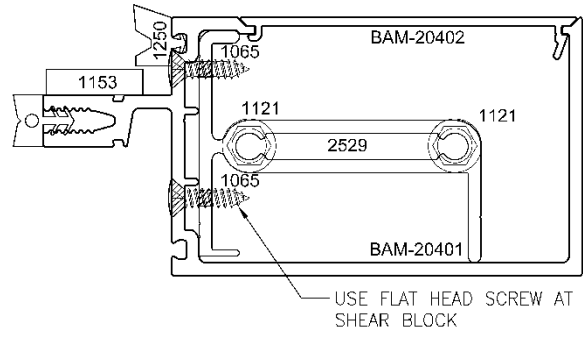


FIGURE U.2

- Fasten adaptor approximately 16" OC (On Center.)
- Sealing all gaps in the process.
- Back seal into the gasket reglet, tool off excess sealant.

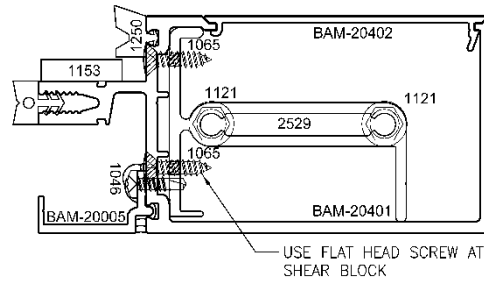


FIGURE V.2

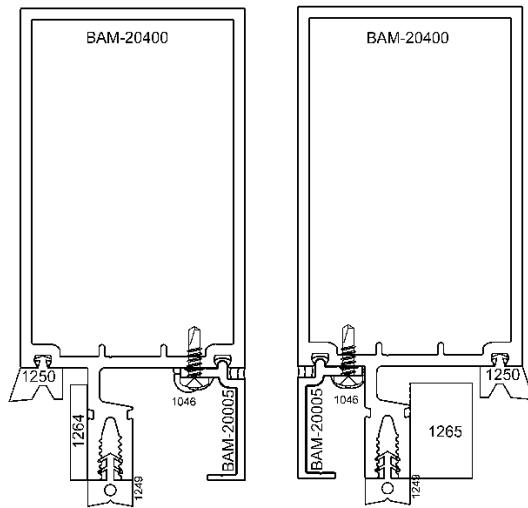


FIGURE W.2

- Apply the pressure plates and covers with glazing as previously defined to complete a sealed straight tube opening for the door installation.

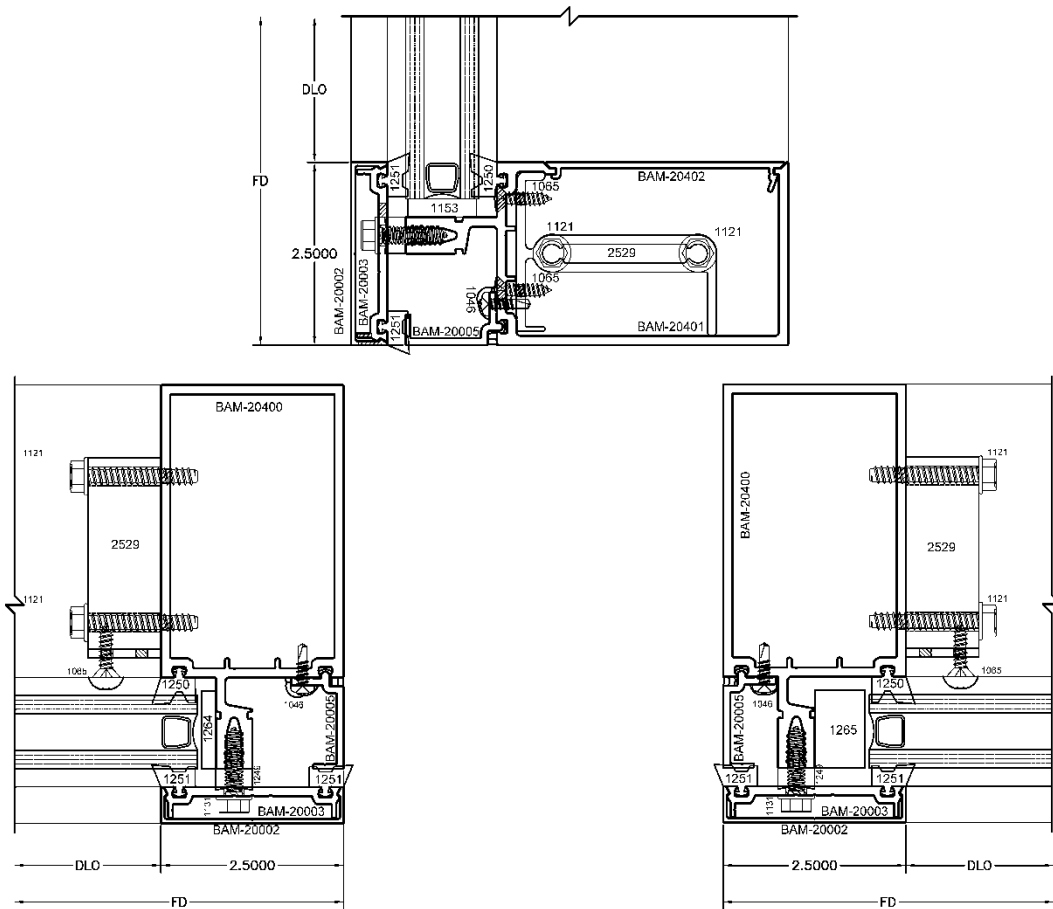


FIGURE X.2

- Install the door frame, block and fasten plumb per drawings and seal.
- Also read and familiarize yourself with Storefront entrance installation.

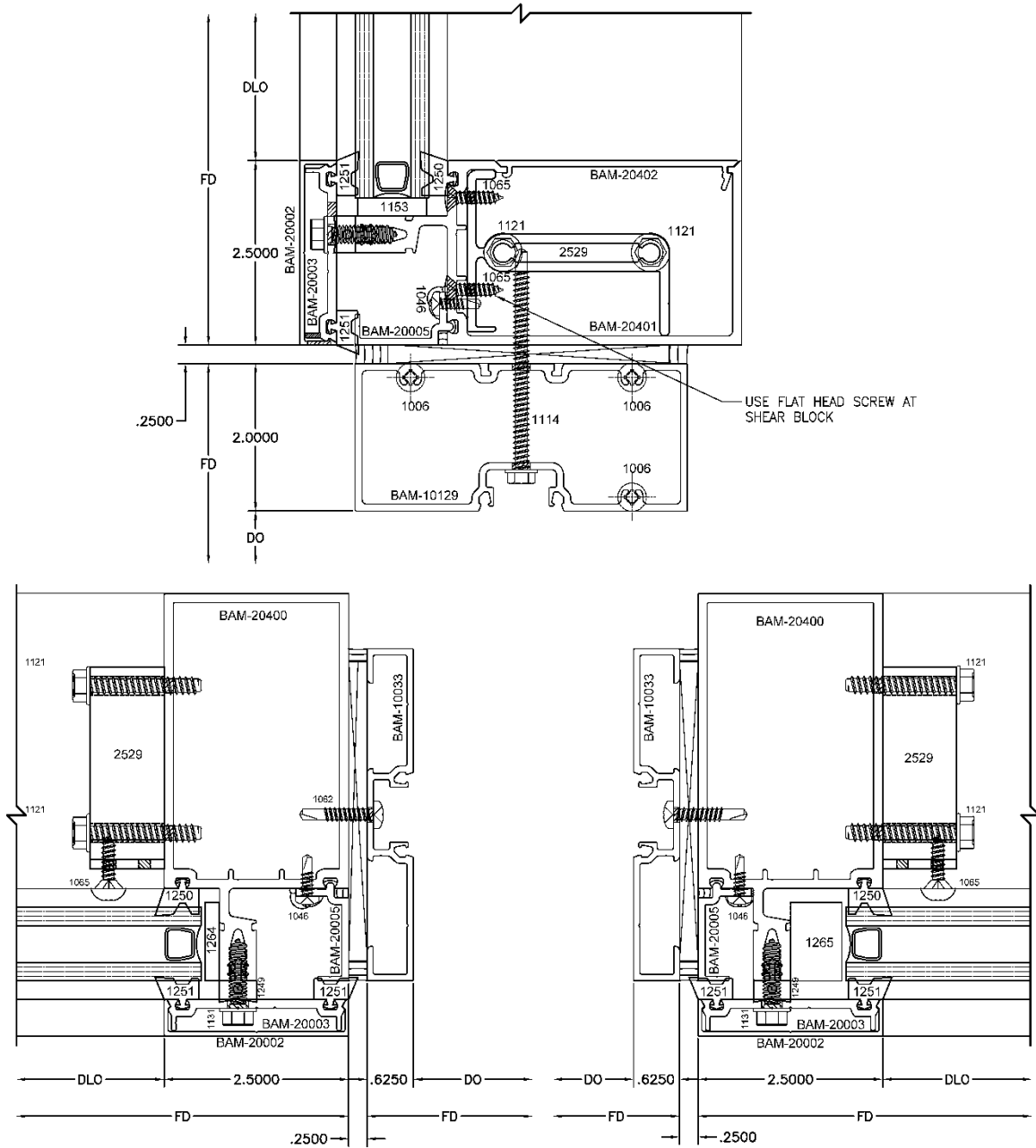


FIGURE Y.2



- Applying corner adaptors:
- Seal all holes and gaps is critical in all installations especially when penetrating the mullion.
- Two example adaptors are the 90 deg. captured adaptor and 90 deg. SSG adaptor.
- Prepare the corner mullion adapter.
  - Drill .257 clear holes from bottom 9" OC. until what is left over at the end.

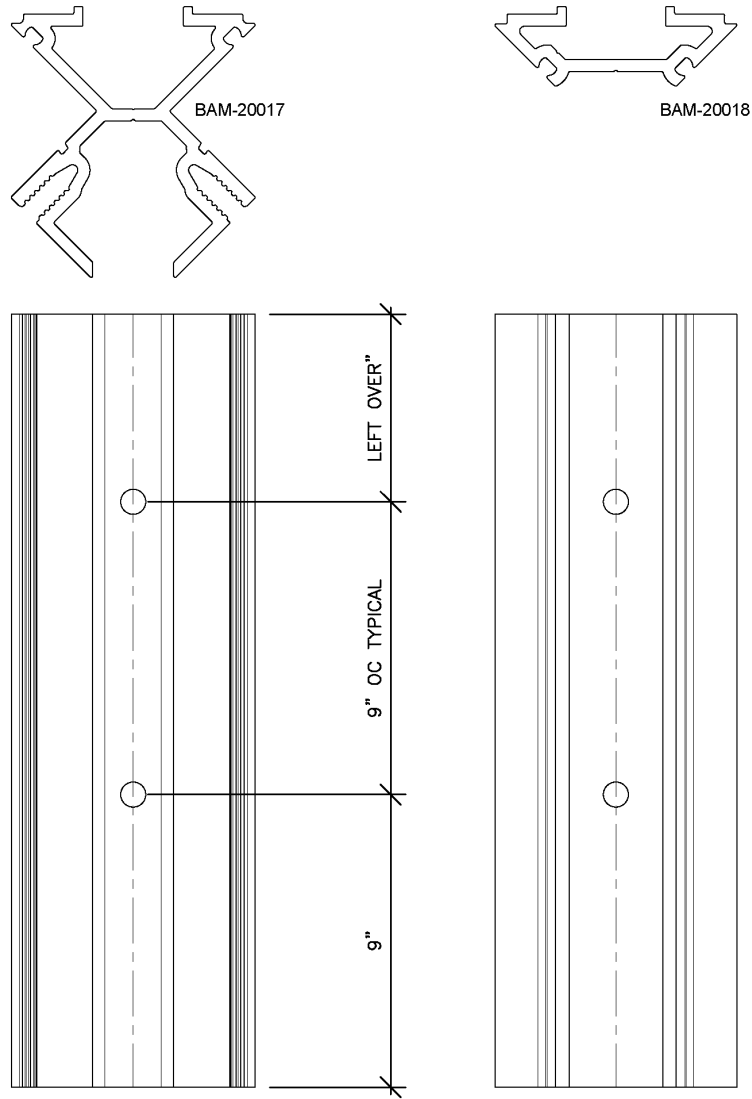
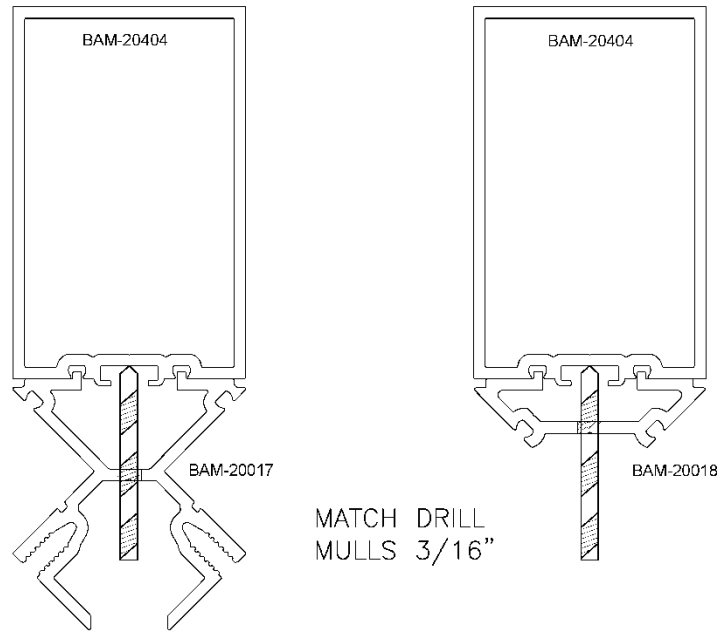


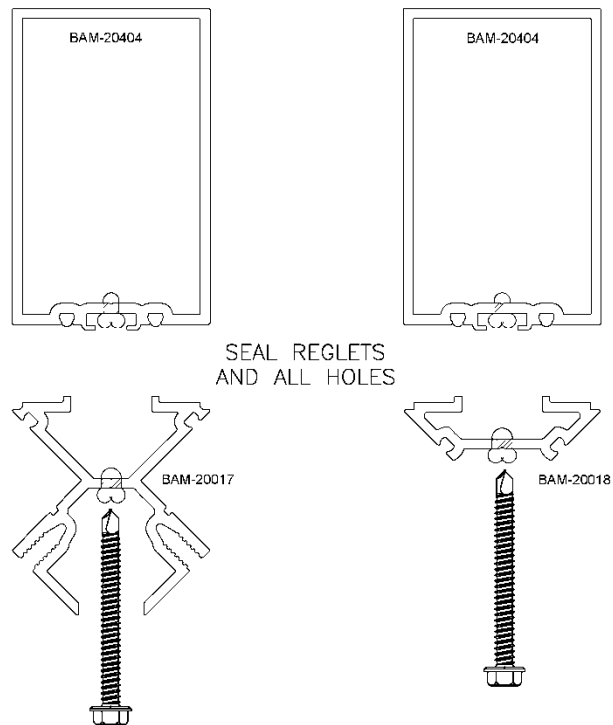
FIGURE Z.2

- Match drill mullions 3/16" to assure square and even installation.



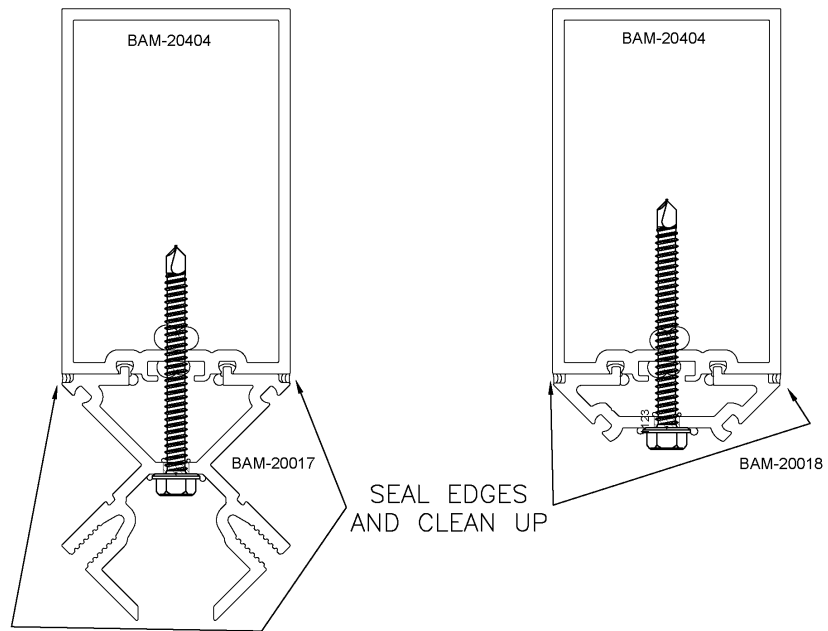
**FIGURE A.3**

- Seal reglets and holes apply adaptor.



**FIGURE B.3**

- Seal edges and clean up mullion.



**FIGURE C.3**

- Fabricate and glaze as previously defined and per shop drawings.