

CURTAIN WALL

Assembly & installation instructions for the prl

PLCW-600, PLCW-700 & PLCW1000

These installation instructions are generic in nature but specific to the PRL curtain wall systems. They are specific to all of PRL's curtain-walls including the PLCW-600, PLCW-700 and PLCW-1000. Because each project will have differing conditions, each project should have job specific drawings prepared by journeymen drafters or engineers who are familiar with curtain-wall construction and have an intimate understanding of PRL's curtain wall system and how to integrate it into the construction details specific to the project it is being used on. The shop drawings will take precedence over these instructions as they are project specific. You may refer to PRL's test reports for further familiarity with construction details of the curtain walls. When in doubt contact your PRL technical representative.

Engineering calculations and shop drawing review should be performed by a professional engineer.

We sell only to bona fide professional glazing contractors and we expect that you employ seasoned journeymen who have apprenticed and been trained in all aspects of fenestration construction and assembly. We expect that you are familiar with, and have installed products of same and similar type.

You should be aware of local building codes and practices and be sure to comply with them. PRL has no ability to ensure you are complying and practicing in accordance with them and assumes no responsibility for your compliance.

Coordinate with your sealant supplier to be sure you are using the correct sealants. Coordinate with the sealant supplier to be sure of compatibility and adhesion with all curtain wall and building components. Have your sealant supplier test for compatibility and adhesion with all curtain wall and building components on each project you perform and give you a written report stating that all materials conform.

These installation and assembly instructions refer you to areas where caulking seals are required. In each case you must fully clean the surface that the caulking is to adhere to. You will clean using sealant manufactures recommended solvents. You will use any adhesion primers or adhesion promoters that the sealant supplier recommends to you.

These instructions show one of many acceptable steps to fabricate and install the curtain wall system. It is not always necessary to follow these instructions in the exact order we have suggested but you should be familiar enough with the construction of PRL's curtain wall should you decide to deviate and specify an alternate order of fabrication and assembly. When in doubt contact your PRL technical representative.

Isolate and separate aluminum products from steel, masonry and cementitious materials. We recommend a heavy coat of bituminous paint.

We recommend that after 5% of the project has been glazed and completed a water test be performed in accordance with AAMA-501.2. We recommend this test be repeated every time an additional 10% has been completed until the project is 100% complete.

Check all shipments from PRL immediately upon receipt thereof. Check for damage, count and quality.

Inform your PRL service representative immediately of errors, omissions, questionable quality or damage.

PRL's products are constantly being refined, improved and expanded. Check for latest bulletins and publications.

If in doubt of any item or procedure contact your PRL technical representative.

CURTAIN WALL

Documents applicable and supplemental to these installation instructions include but are not limited to the following.

We expect that you, the professional glazier are familiar and compliant with them all.

AAMA 501.2-09 Quality Assurance and Diagnostic Water Leakage Field Check of Installed Storefronts, Curtain Walls and Sloped Glazing Systems.

AAMA 501-05 methods of test for exterior walls.

AAMA 502-08 Voluntary specifications for field testing of newly installed fenestration products.

AAMA 503-08 Voluntary Specification for Field Testing of Newly Installed Storefronts, Curtain Walls and Sloped Glazing Systems

AAMA 609 & 610-09 cleaning and maintenance guide for architecturally finished aluminum.

AAMA 851-09 fenestration sealants guide for windows, window walls and curtain walls

AAMA AFPA-91 Anodic Finishes/Painted Aluminum

AAMA CW 10-04 Care and Handling of Architectural Aluminum from Shop to Site

AAMA CW-13-85 structural sealant glazing systems

AAMA CWG-1-89 Installation of Aluminum Curtain Walls

AAMA 609 & 610 Cleaning and Maintenance Guide for Architecturally Finished Aluminum

AAMA TIR A9-91 metal curtain wall fasteners

AAMA TIR A14-10 fenestration anchorage guidelines

GANAL Glazing manual (50th anniversary edition)

GANAL 2008 sealant manual

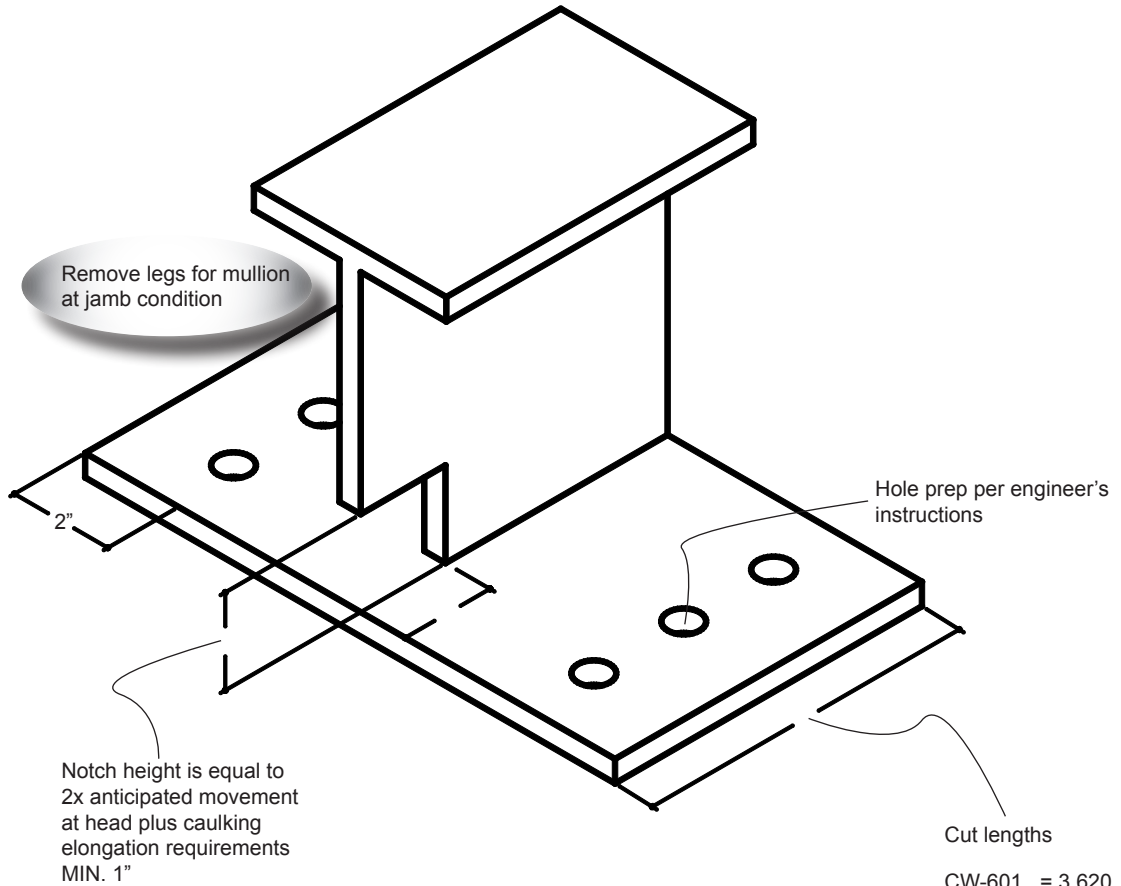
GANAL 2009 laminated glazing reference manual

IGMA TM-3000-90 NORTH AMERICAN GLAZING GUIDELINES FOR SEALED INSULATING GLASS UNITS FOR COMMERCIAL & RESIDENTIAL USE

CURTAIN WALL

ANCHOR PREPARATION

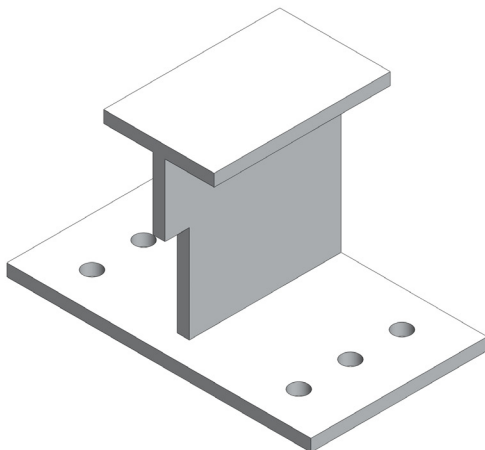
STARTER & TERMINATION ANCHOR



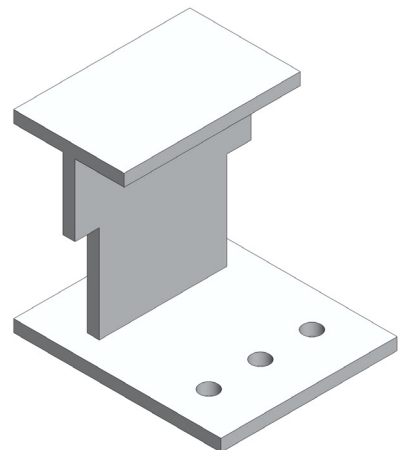
Cut lengths

CW-601	=	3.620
CW-603	=	3.470
CW-604	=	3.470
CW-605	=	3.410
CW-701	=	4.620
CW-703	=	4.470
CW-704	=	4.470
CW-705	=	4.410
CW-1001	=	7.370

Anchors at floor slabs will be custom for each project &
 should be detailed by a structural engineer



See page 33

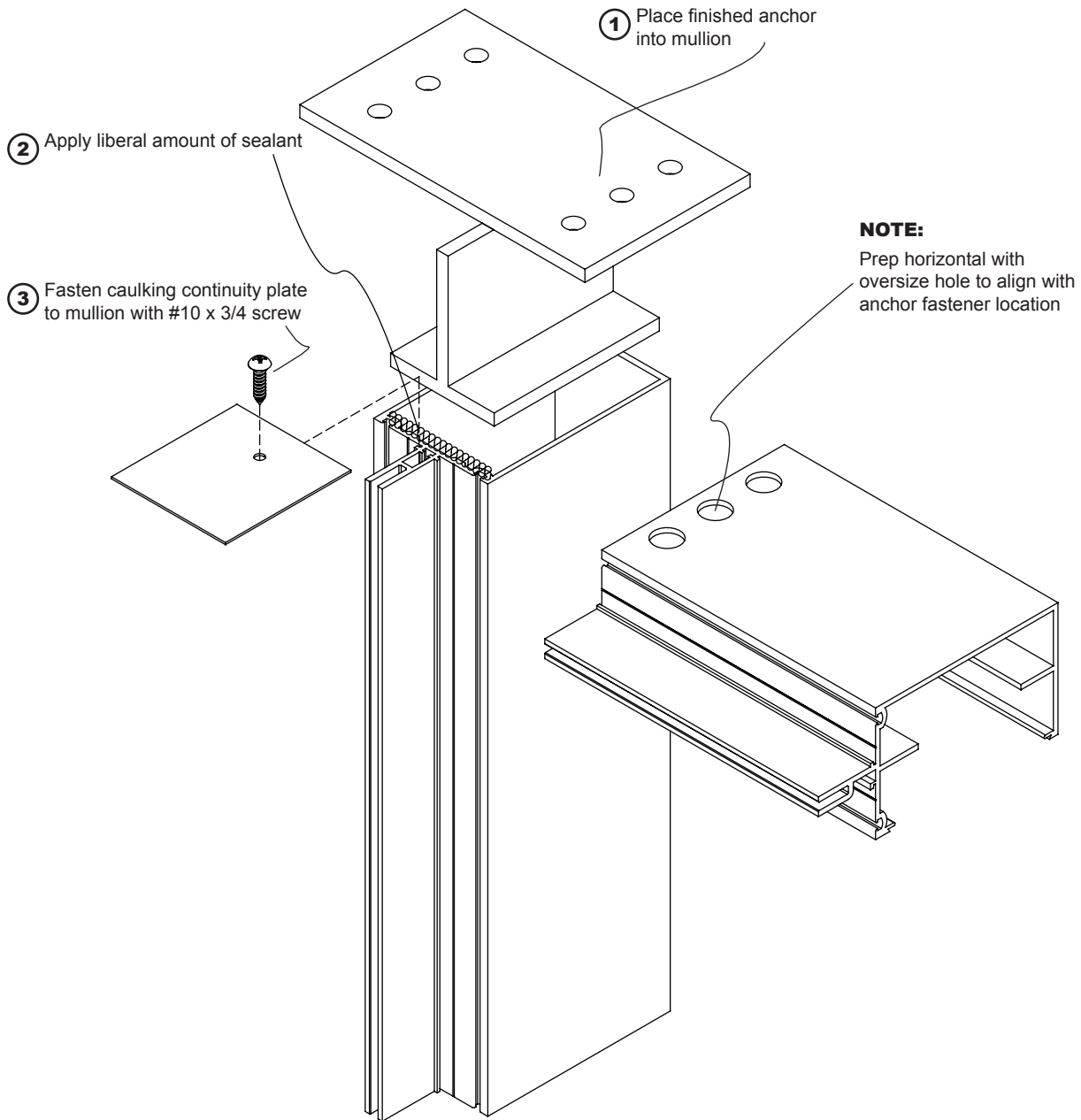


See page 34

CURTAIN WALL

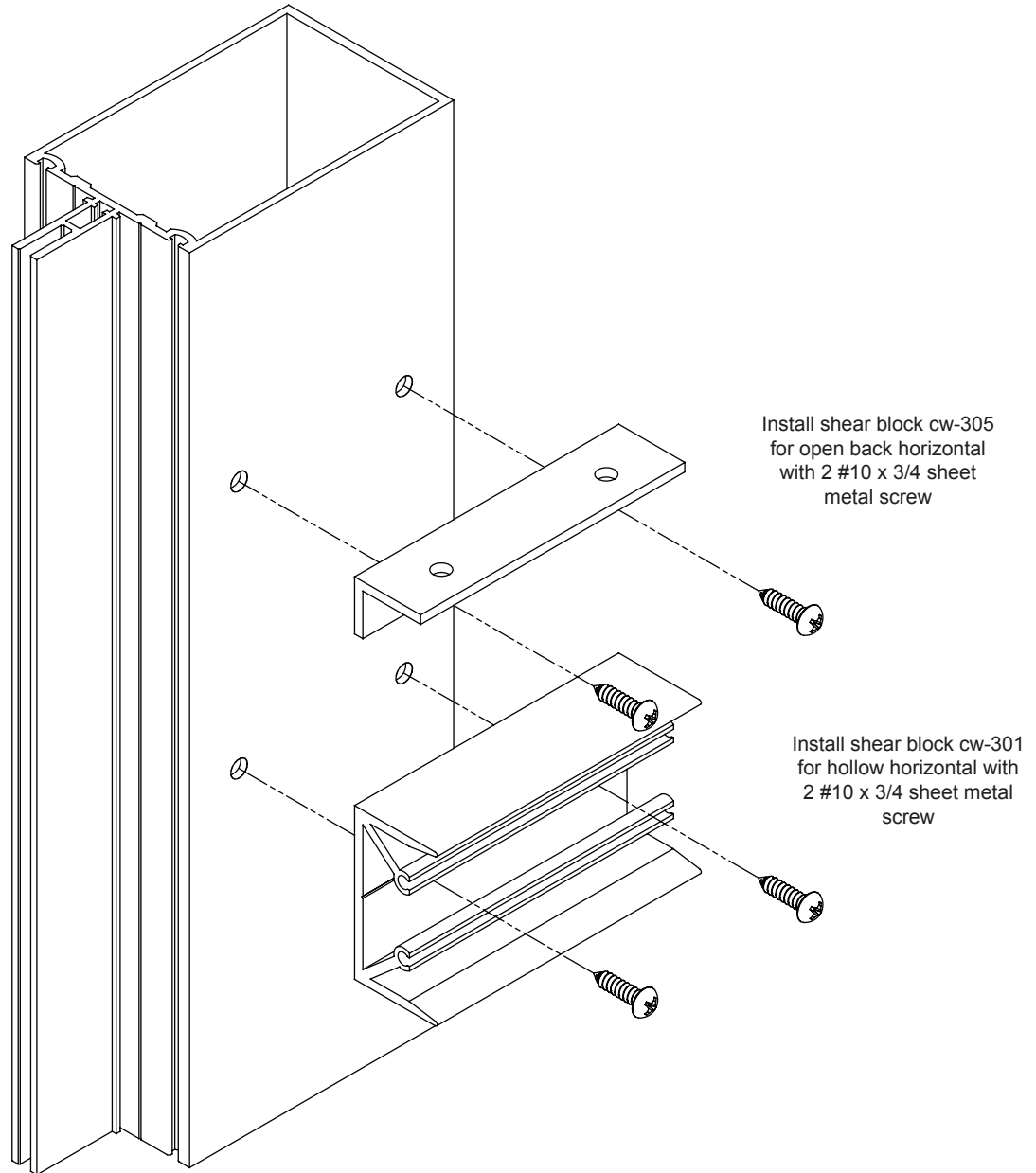
ANCHOR INSTALLATION

ANCHOR INSTALLATION INTO MULLION, HEAD SHOWN, SILL SIMILAR



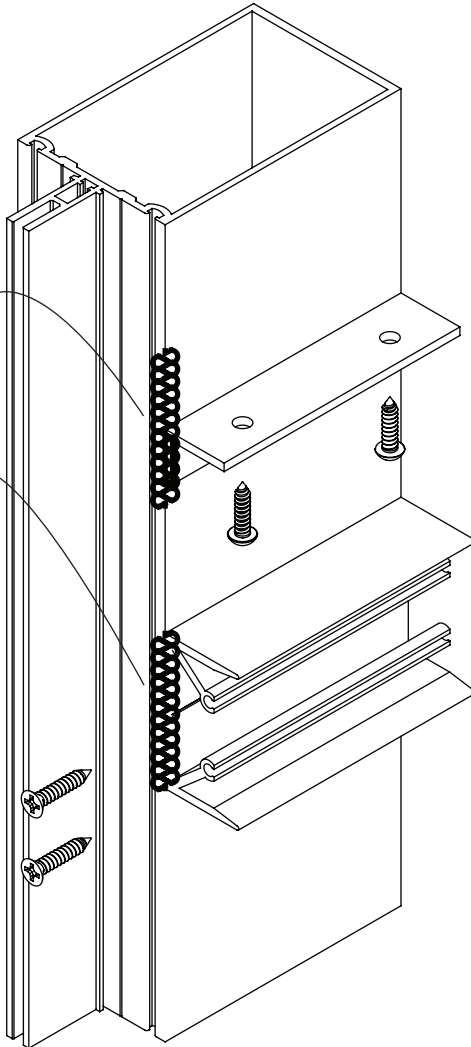
CURTAIN WALL

INSTALLATION & SEALING



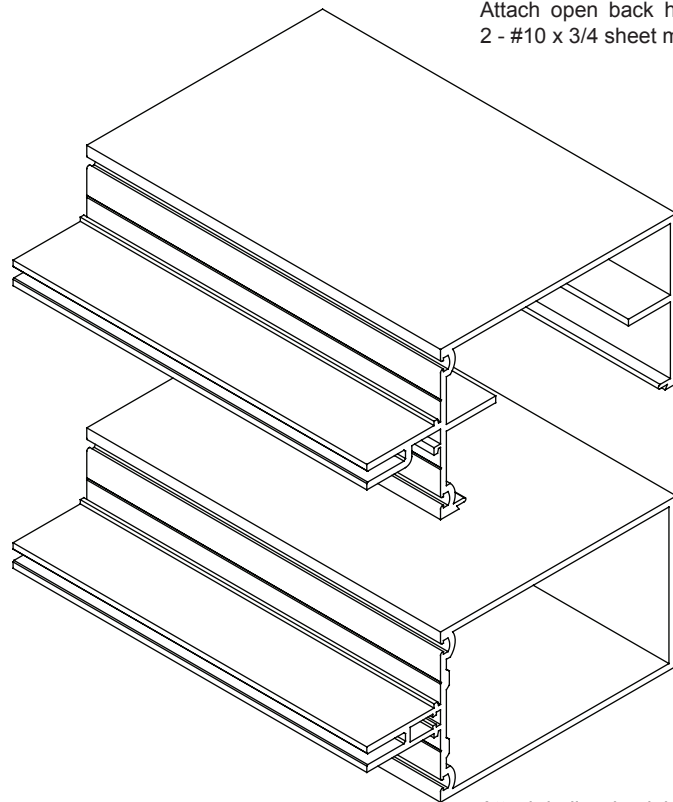
CURTAIN WALL

- ① Apply liberal amounts of caulking to front of mullion where horizontals will locate



- ② Install horizontals onto shear block. Clamp into place & insure front faces are flush with vertical front faces.

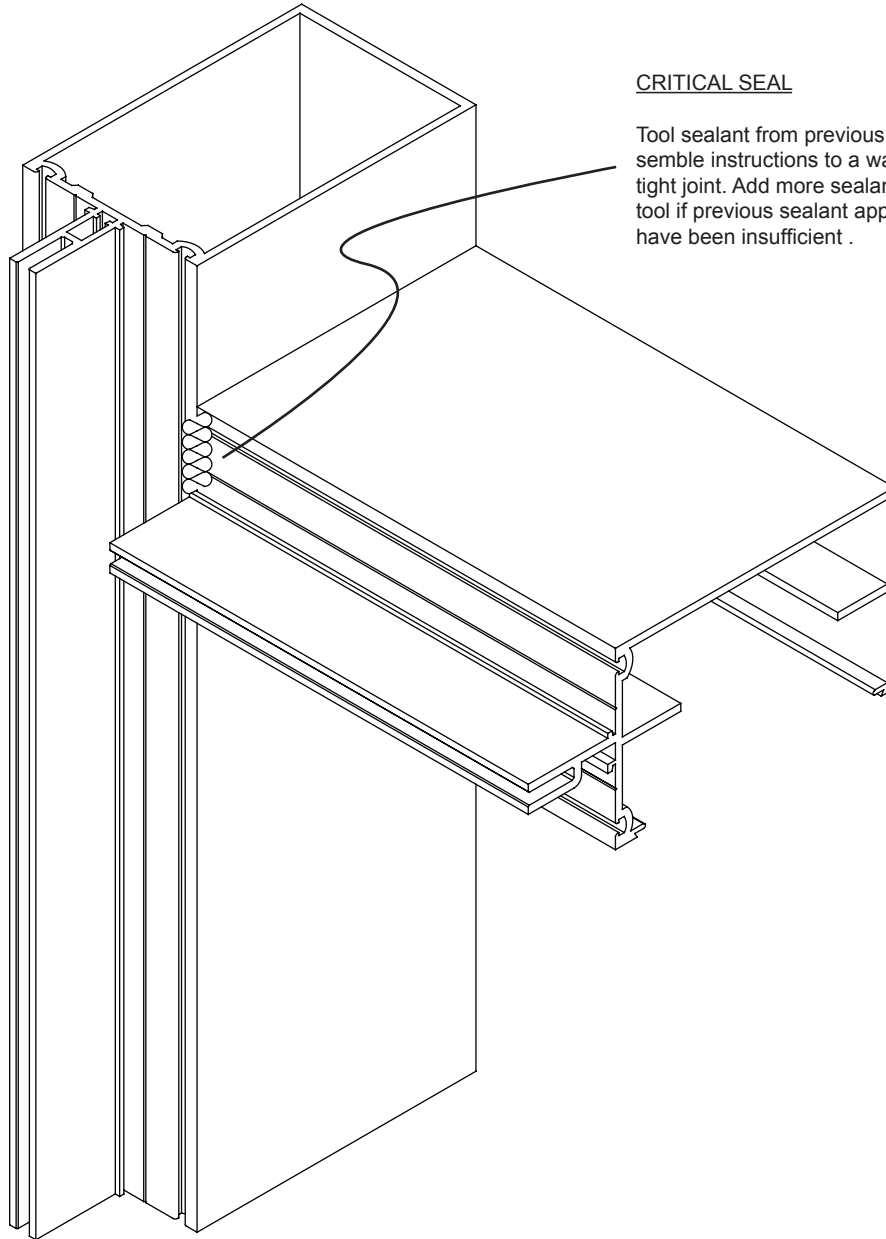
Attach open back horizontals with 2 - #10 x 3/4 sheet metal screws.



Attach hollow back horizontals with 2 - #10 x 1 flat head sheet metal screws. Depending on accuracy of cut & installation you may need to add an additional #10 x 3/4 sheet metal screw at the rear horizontal surface to keep the back joint looking good

CURTAIN WALL

CRITICAL SEAL

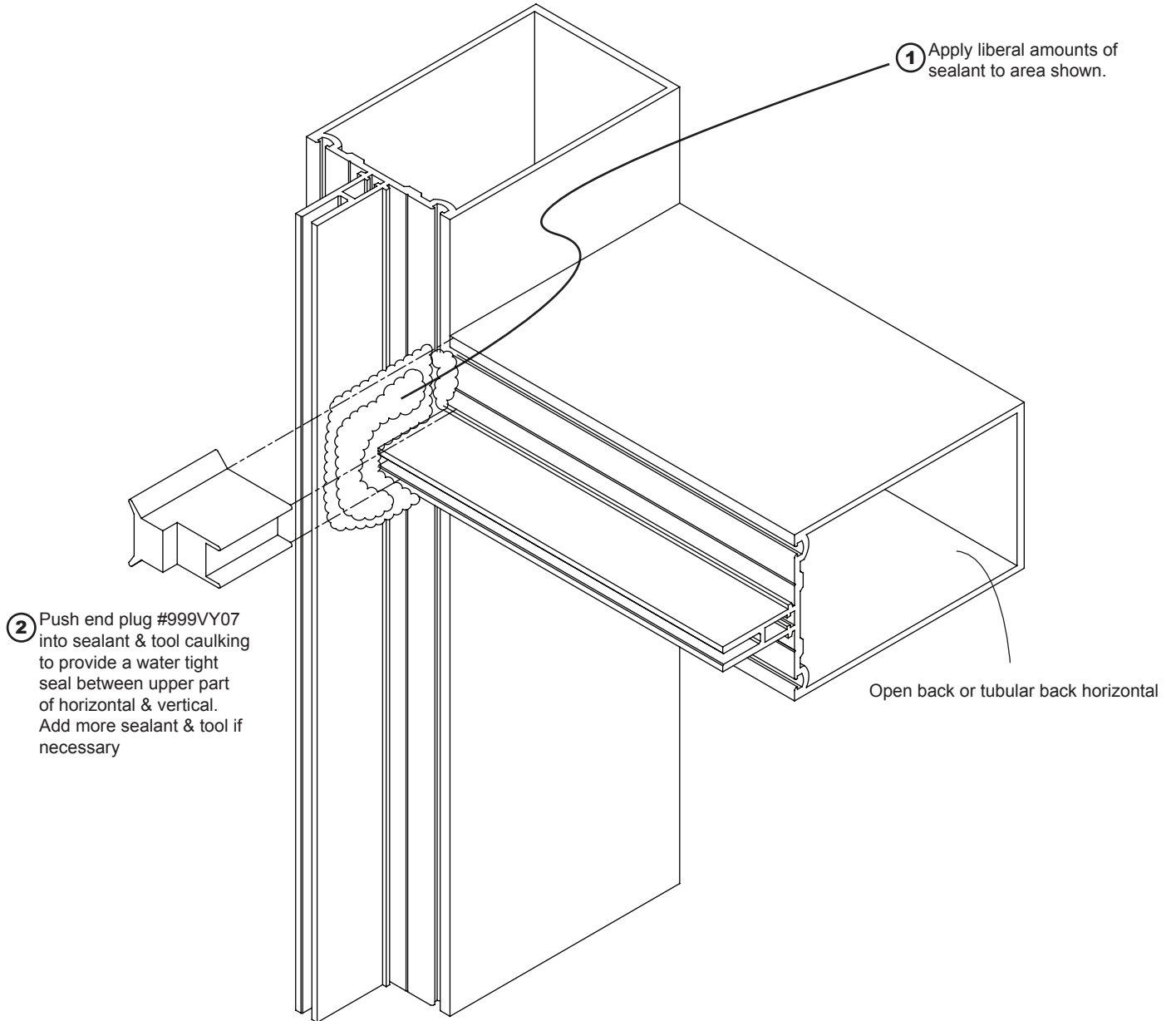


CRITICAL SEAL

Tool sealant from previous assemble instructions to a water tight joint. Add more sealant & tool if previous sealant appears to have been insufficient .

CURTAIN WALL

CRITICAL SEAL



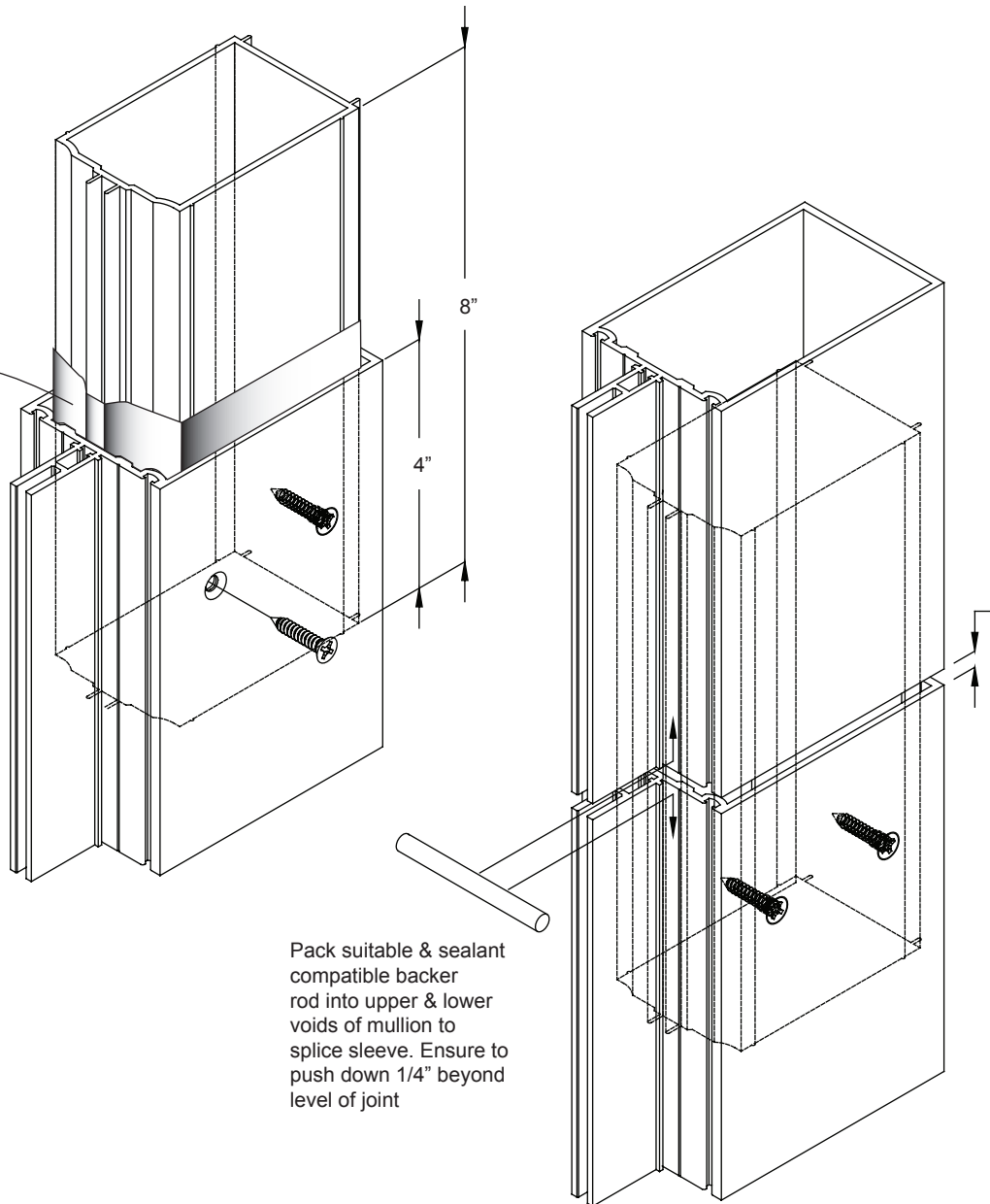
CURTAIN WALL

SPLICE SLEEVE ASSEMBLY & INSTALLATION

Splice sleeve assembly & installation (if required)
 Recommend this joint be in a non visual area

Attach splice sleeve joint tube
 (cw-650,750-1050 as applicable)
 to the lower horizontal with
 4 - #10 x 1" sheet metal screws

Apply bond braker tape to area
 shown



Pack suitable & sealant
 compatible backer
 rod into upper & lower
 voids of mullion to
 splice sleeve. Ensure to
 push down 1/4" beyond
 level of joint

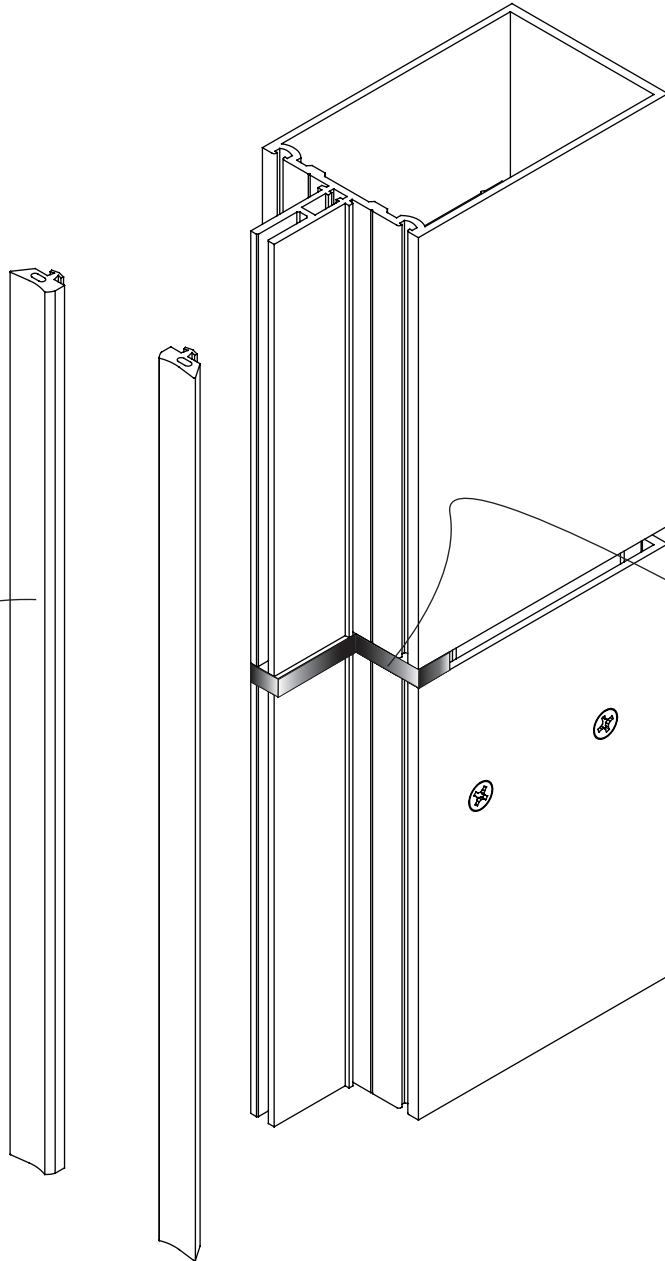
Dimension is specific to project requirements.
 Consult your structural engineer.
 Max movement capacity is +/- 1/4"

CURTAIN WALL

CRITICAL SEAL

Do not fasten top of splice

Push glazing gasket into wet sealant & tool. Add additional sealant if required.



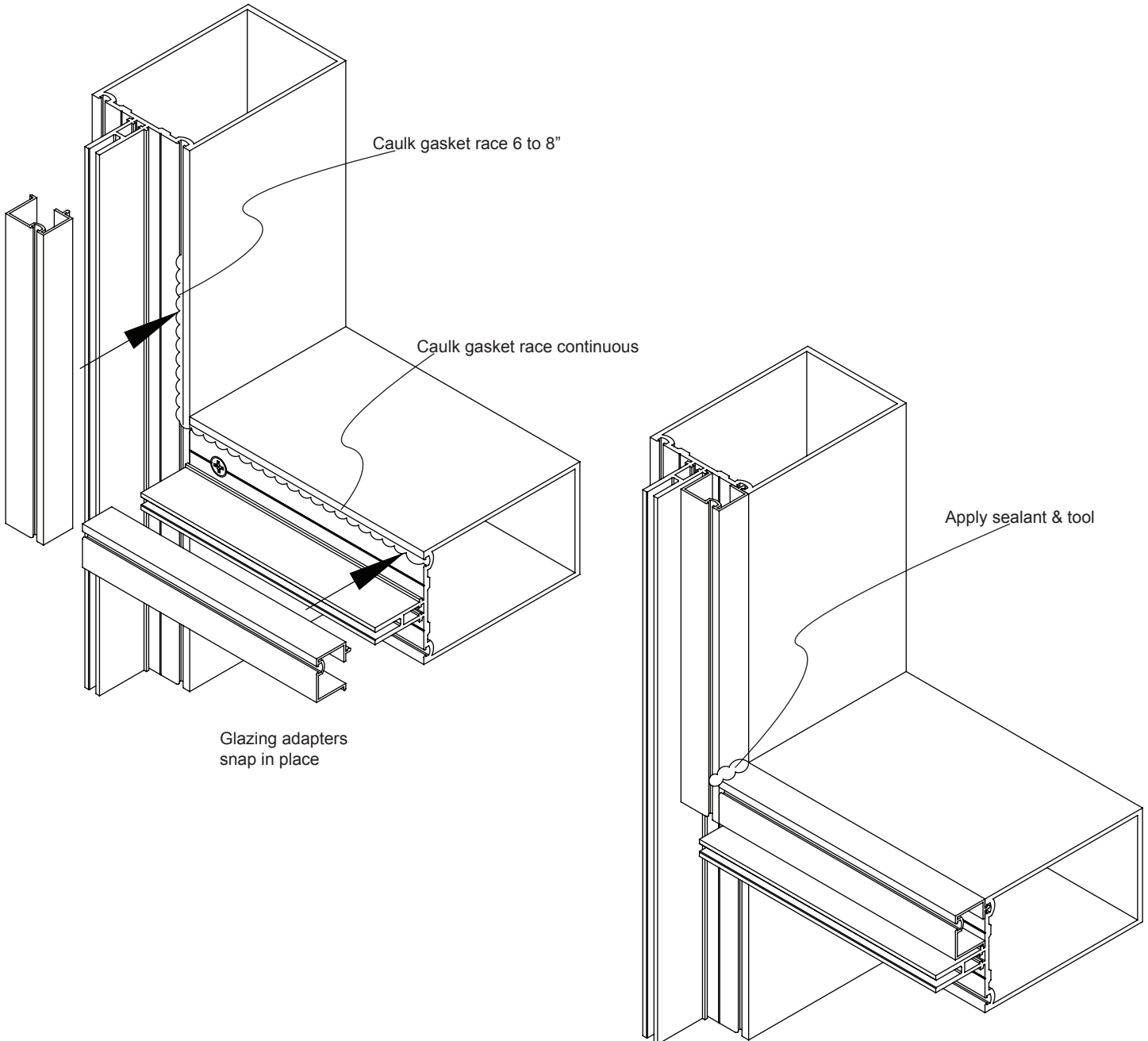
CRITICAL SEAL

Apply liberal amounts of sealant & tool into joint

CURTAIN WALL

SINGLE GLAZE ADAPTERS

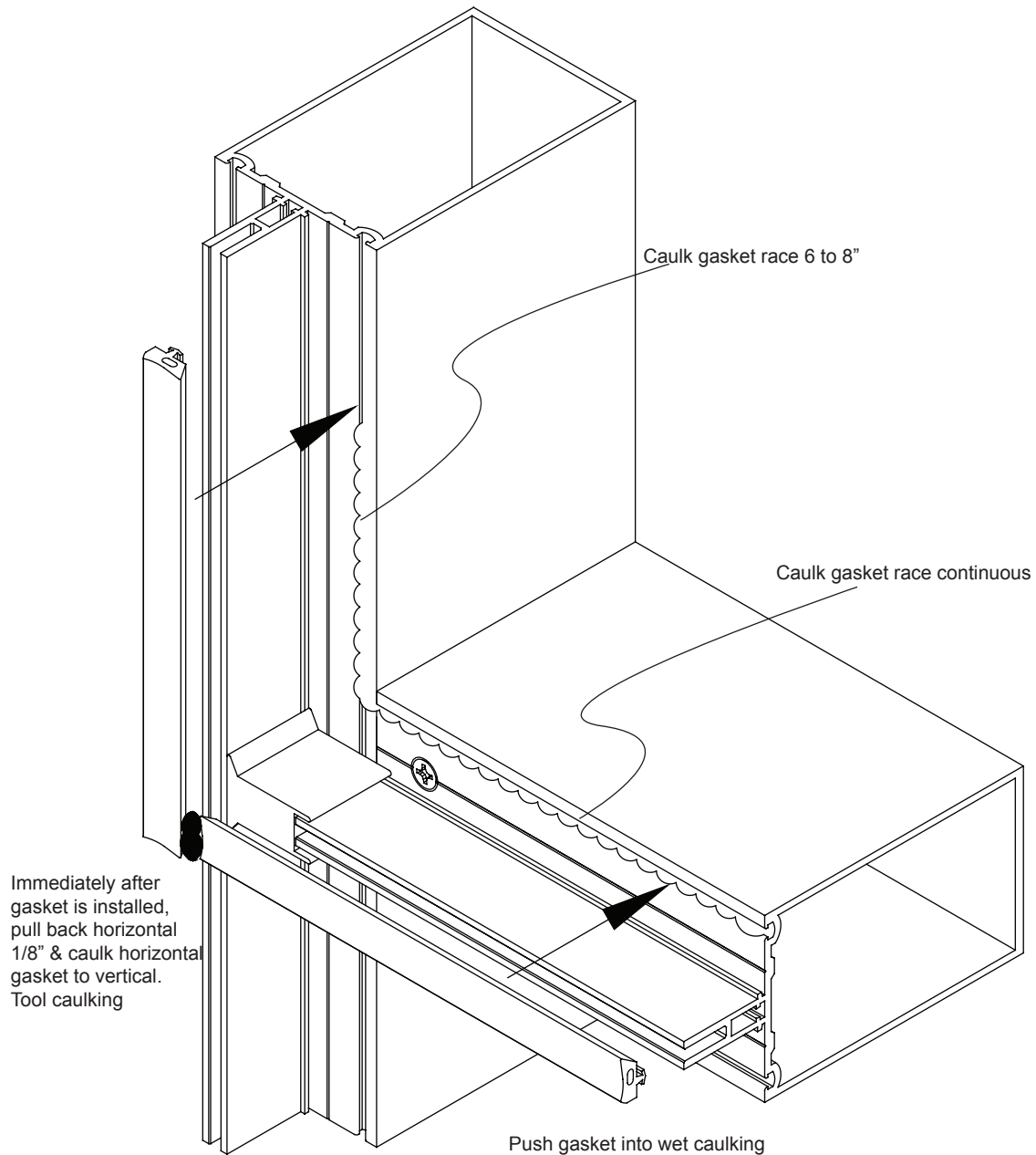
WHEN USED



CURTAIN WALL

INSIDE GASKET INSTRUCTION

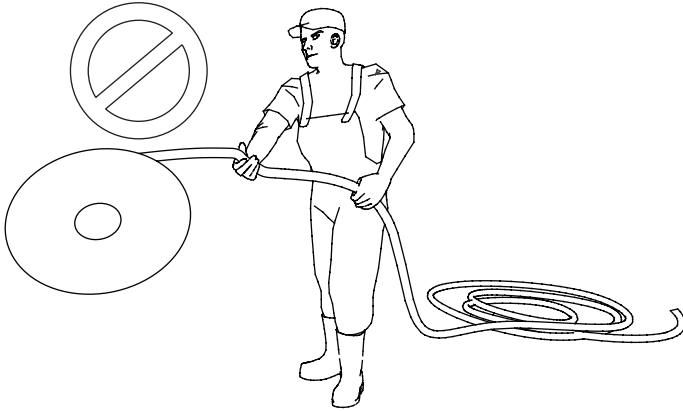
CRITICAL SEAL



CURTAIN WALL

GLAZING

DO NOT
 pull
 glazing gaskets
 off the roll



DO
 wind the gasket off the
 roll gently in a spiral
 manner



Lay gaskets in a safe clean place
 & allow 24 hrs to recover from any
 stretching that may have occurred

gaskets should always be cut longer than the calculated length
this process is known as “ crowding “

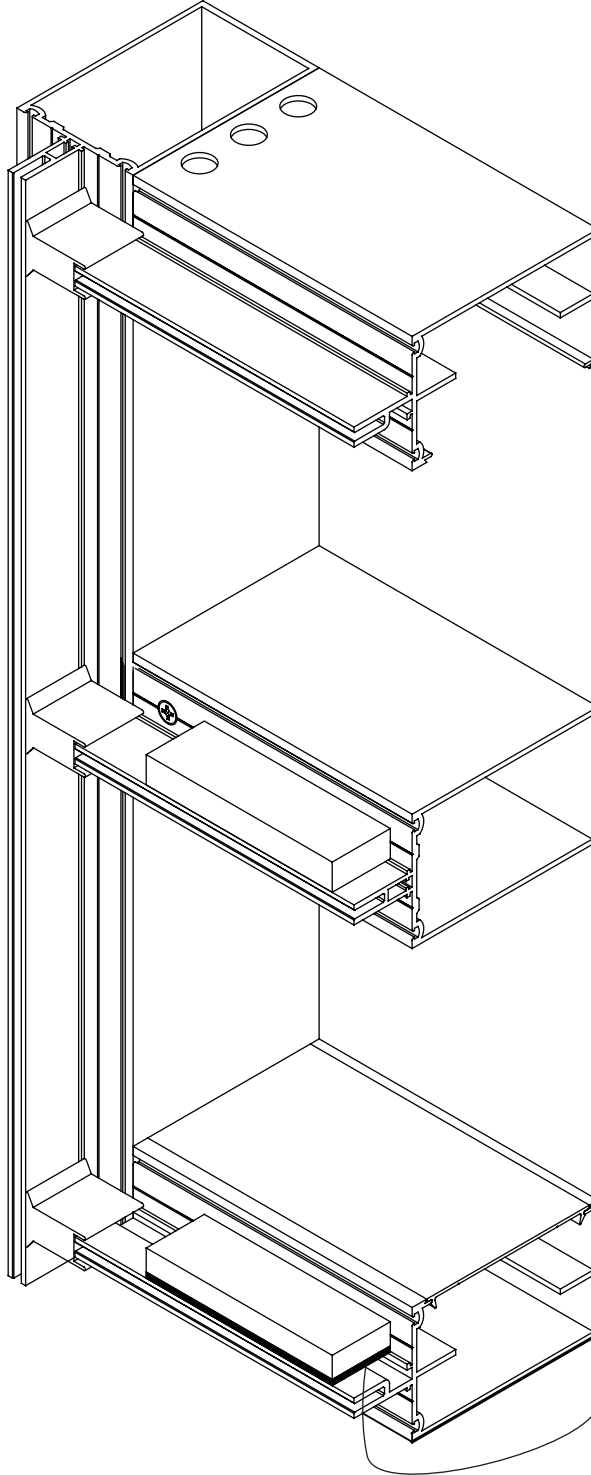
The following chart gives crowding
 factors for calculated lengths.

FROM	0”	TO	30”	ADD	1/4”
FROM	30”	TO	45”	ADD	3/8”
FROM	45”	TO	60”	ADD	1/2”
FROM	60”	TO	85”	ADD	5/8”
OVER	75”			ADD	0.008%

CURTAIN WALL

SETTING BLOCK LOCATIONS

SEE GASKET INSTRUCTIONS IN PREVIOUS PAGE



Setting blocks

4" long x 1" wide x 9/16 deep x 80 **duro** rubber setting blocks.

When using CW-602 / CW-702 / CW-1002
It is necessary to support the setting block
With a 4" x 1" x 1/8" alum chair.

Setting block size is then
4 x 1-1/4" x 7/16" deep

2 per light, per **GANA** Glazing manual.

Install at 1/4 points of glass.

Consult your professional engineer to be
sure if load distribution is acceptable.

PRL provides safe load charts as a general
guide.

For setting block locations other than 1/4
points consult your engineer
& glass manufacturer for suitability.

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Set glass into opening with equal clearance to frame all around.

Secure glass safely in place with temporary retainer clips, fabricated from **cw-101**.

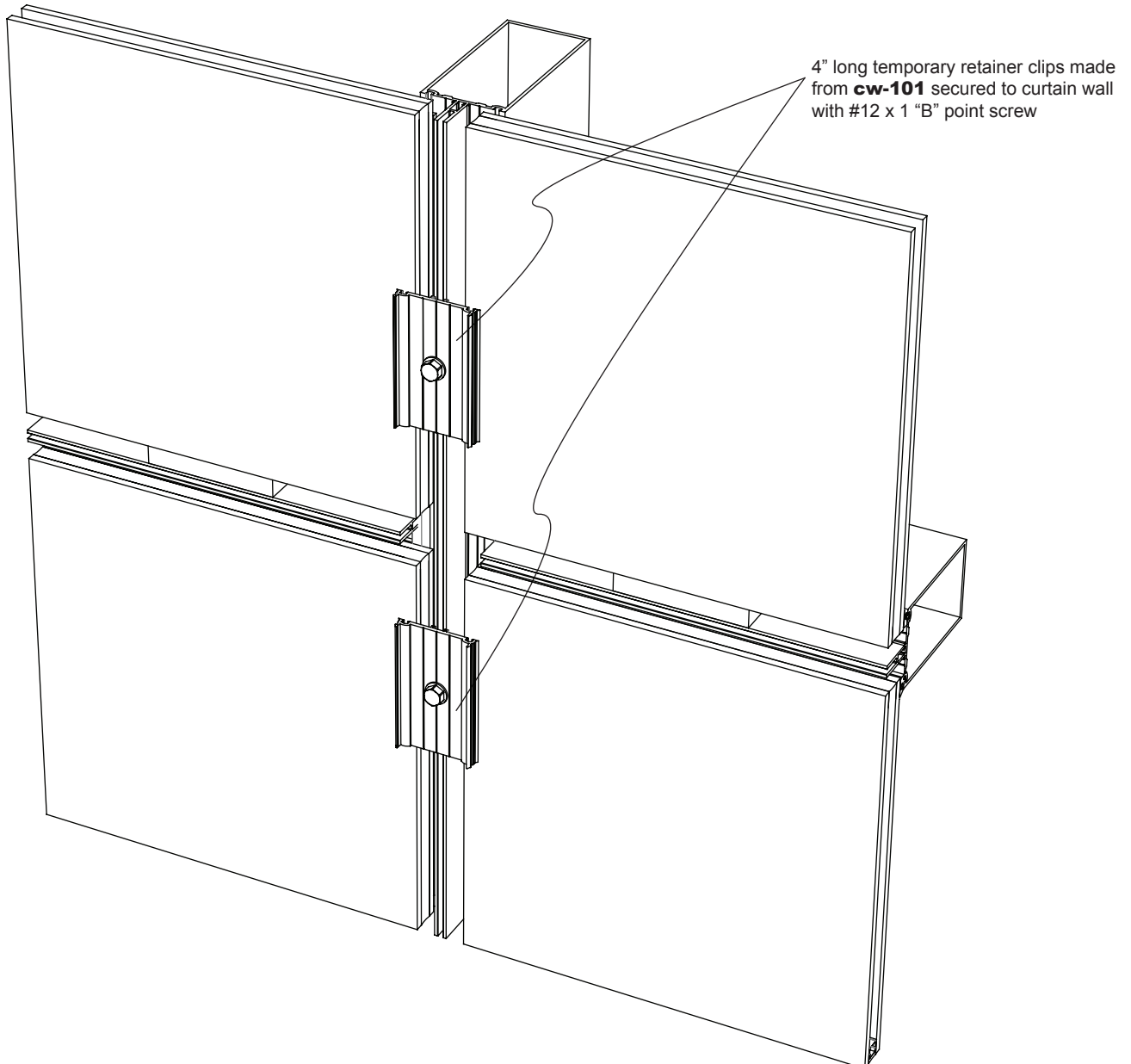
Handling of glass is a dangerous task that can result in injury & death.

We sell only to bona fide glazing contractors who employ journey men who have been apprenticed & trained in the handling of glass.

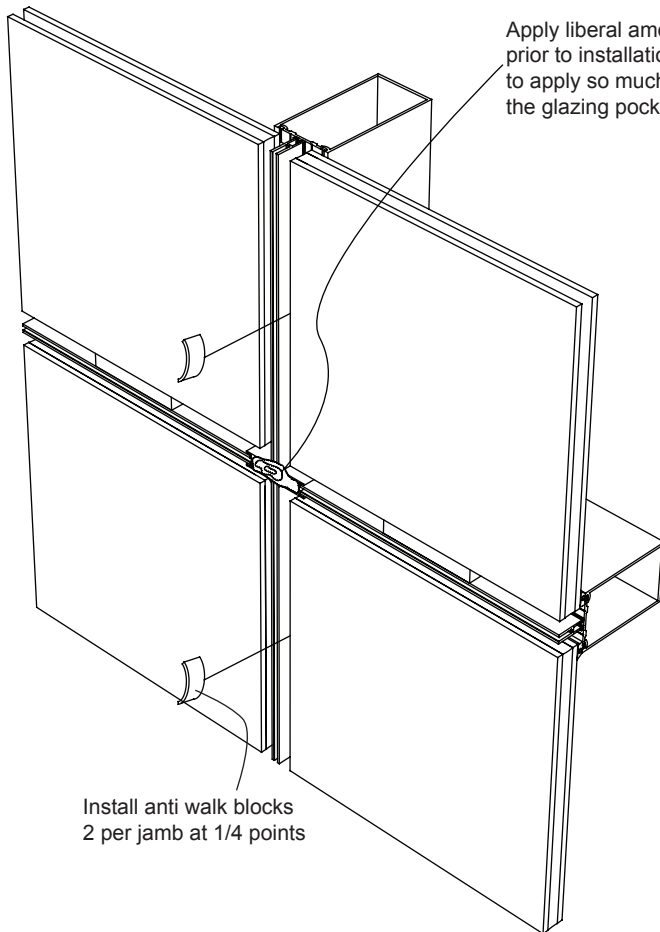
We expect you know more than us safe handling of glass in job site conditions.

We make no suggestions or recommendations on the handling of glass.

If you are unsure about how to handle glass of a special condition, contact your employer for guidance.

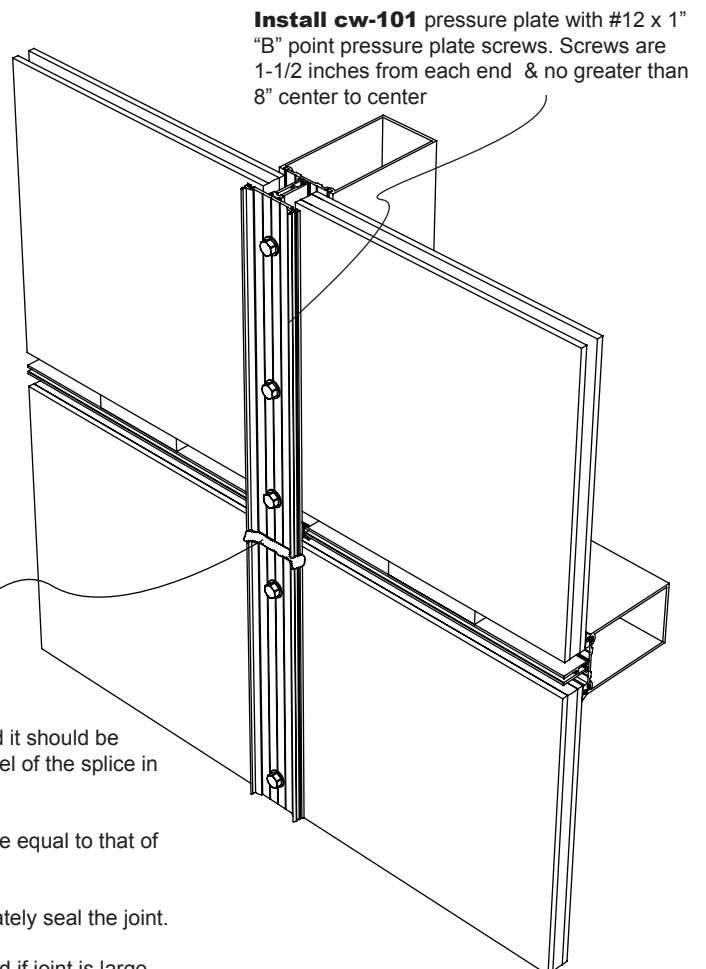


CURTAIN WALL



Install anti walk blocks
2 per jamb at 1/4 points

Apply liberal amounts of sealant onto end dams just prior to installation of vertical pressure plate, be sure not to apply so much sealant that you dam up the corner of the glazing pocket.



Install cw-101 pressure plate with #12 x 1" "B" point pressure plate screws. Screws are 1-1/2 inches from each end & no greater than 8" center to center

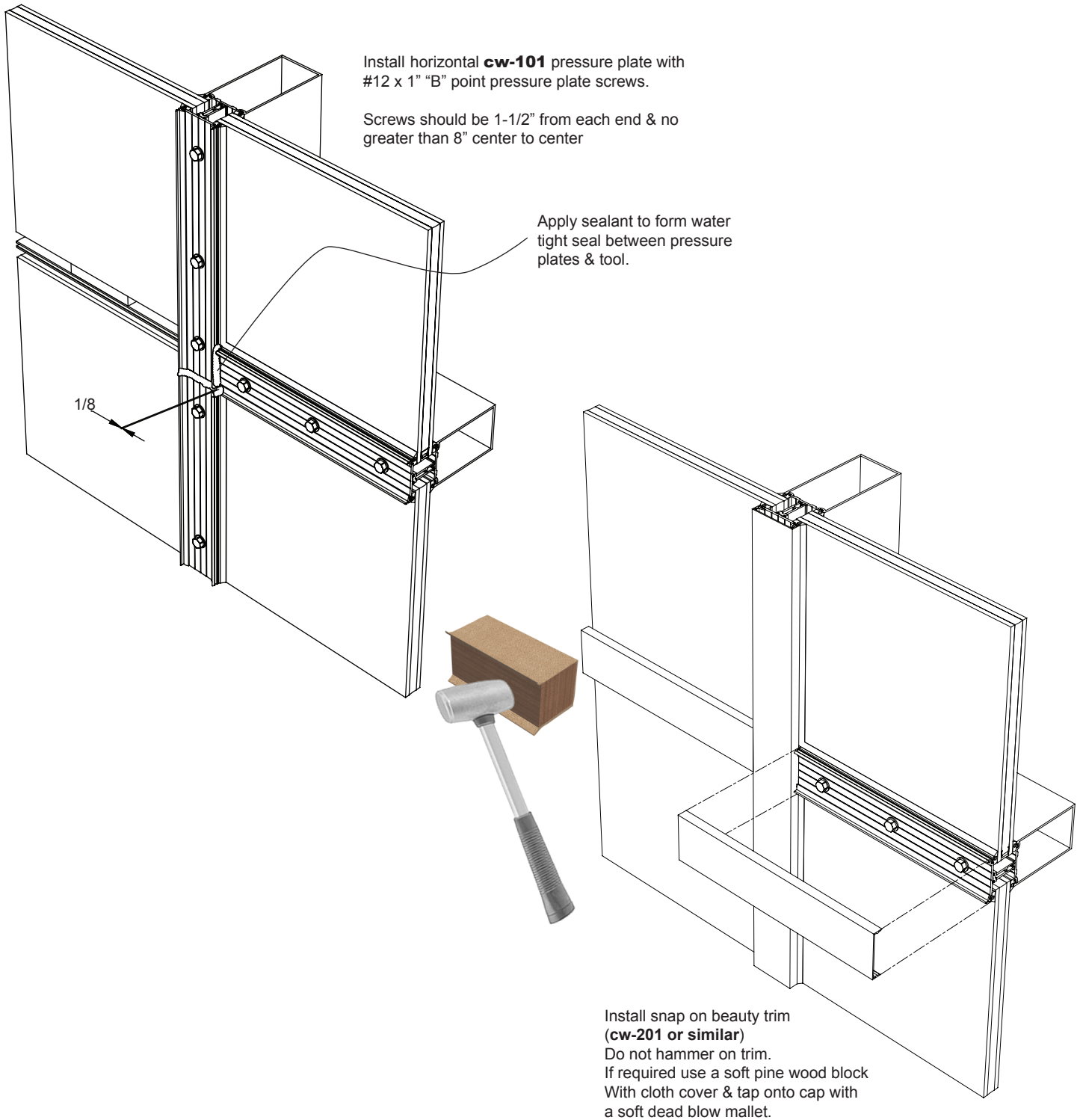
Where splice is required it should be located 1" below the level of the splice in the mullion.

The joint width should be equal to that of the mullion splice joint.

Apply sealant to adequately seal the joint.

Use open cell backer rod if joint is large.

CURTAIN WALL



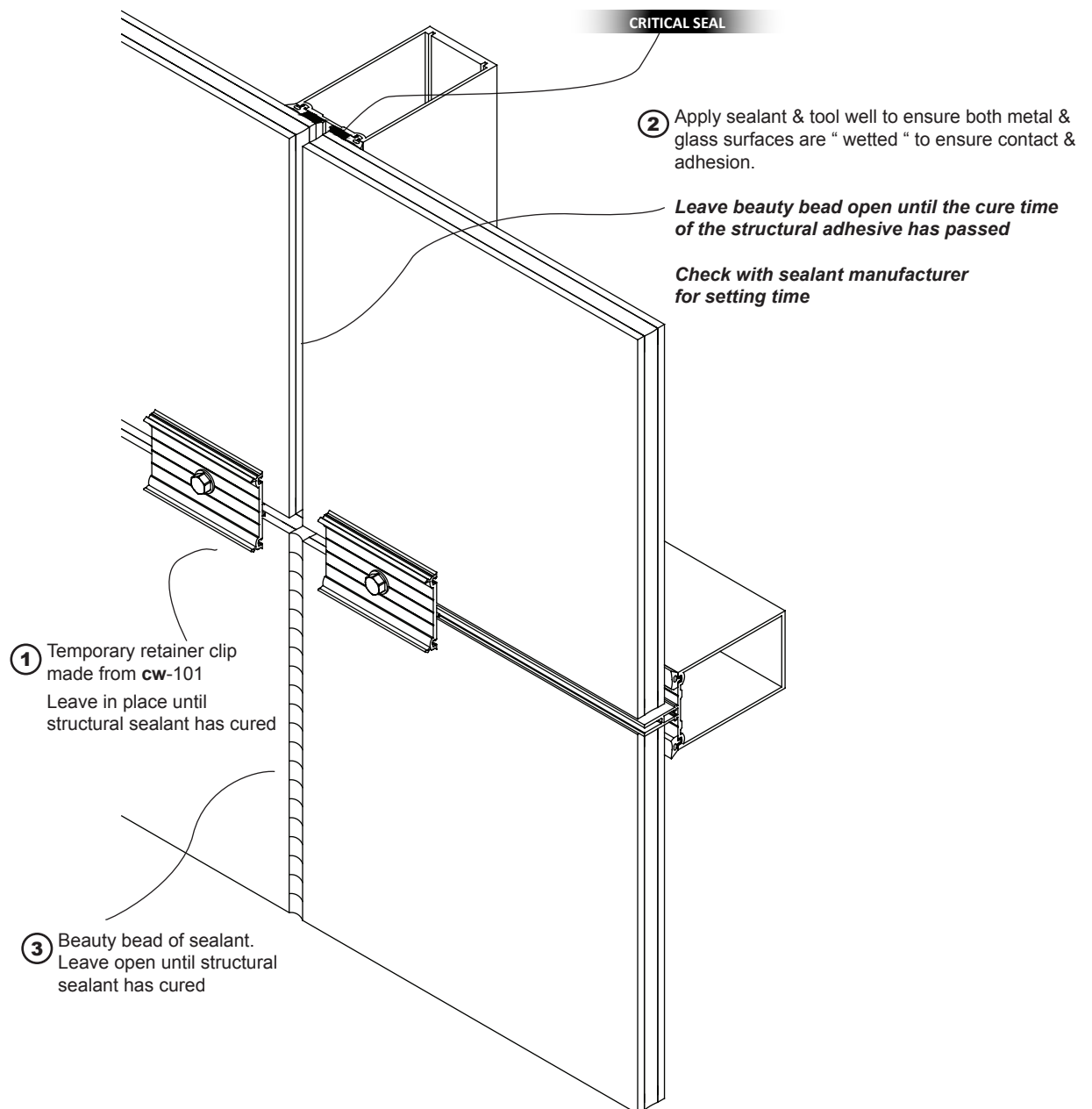
CURTAIN WALL

SUPPLEMENTAL INSTRUCTIONS FOR STRUCTURAL GLAZE (BUTT GLAZE) APPLICATIONS

It is critical that you have a thorough design review performed by the sealant manufacturer & professional engineer. The sealant manufacturer must also perform adhesion & compatibility testing for all materials.

VERTICALLY STRUCTURAL GLAZE MULLION

WITH CONVENTIONAL HORIZONTALS



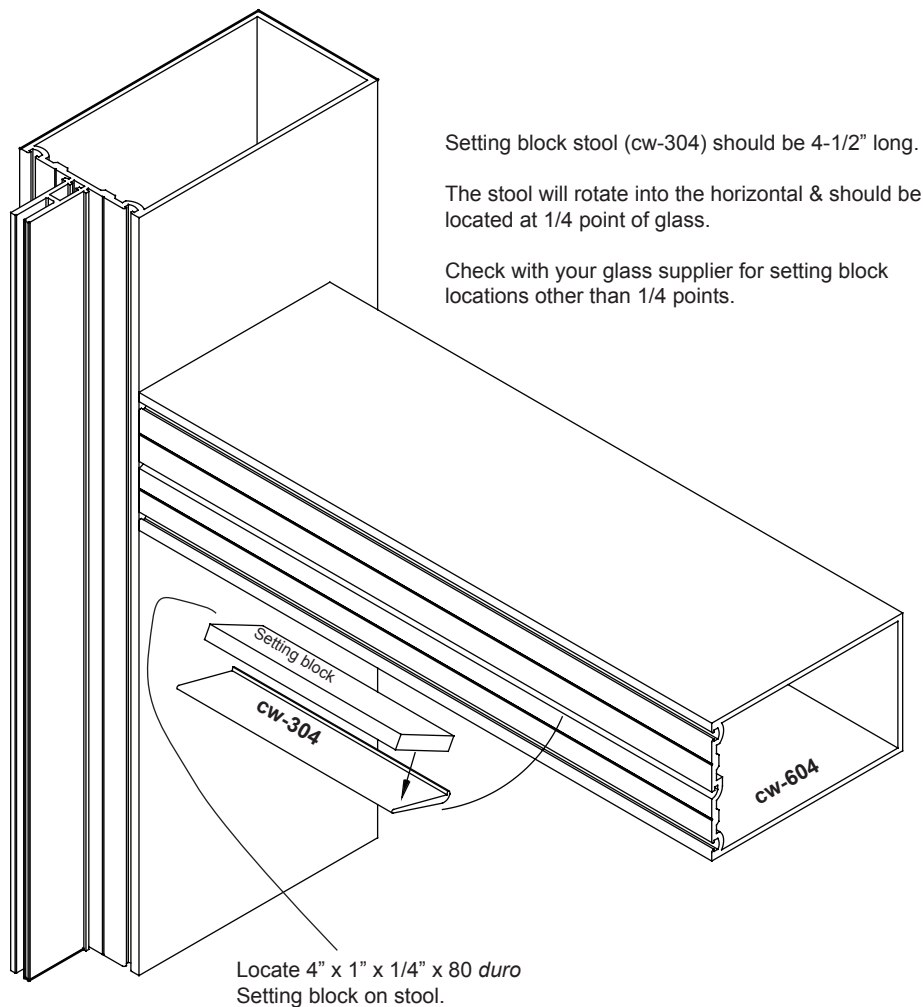
CURTAIN WALL

SUPPLEMENTAL INSTRUCTIONS FOR STRUCTURAL GLAZE (BUTT GLAZE) APPLICATIONS

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STRUCTURALLY GLAZED HORIZONTAL

WITH CONVENTIONAL VERTICALS



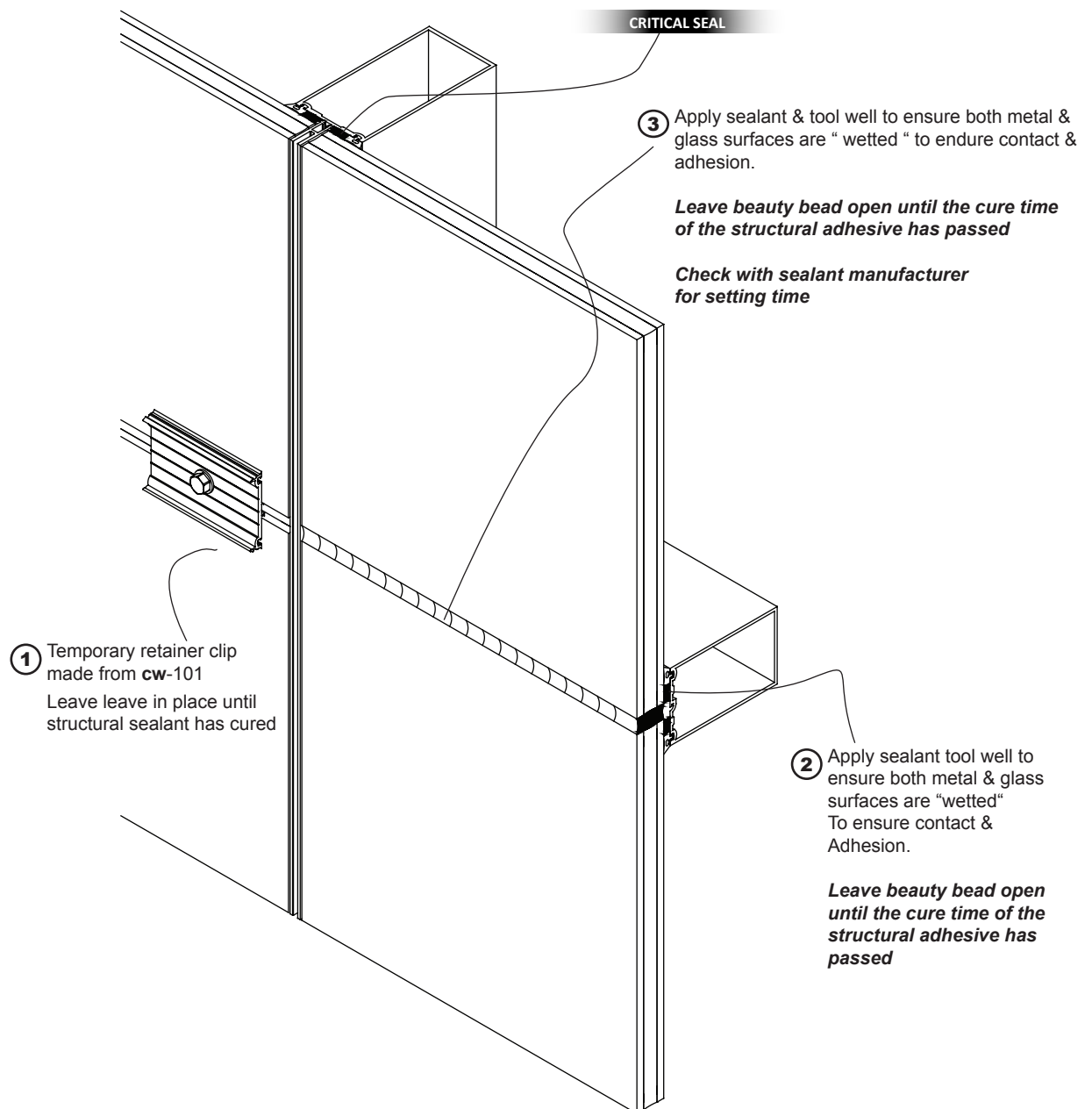
CURTAIN WALL

SUPPLEMENTAL INSTRUCTIONS FOR STRUCTURAL GLAZE (BUTT GLAZE) APPLICATIONS

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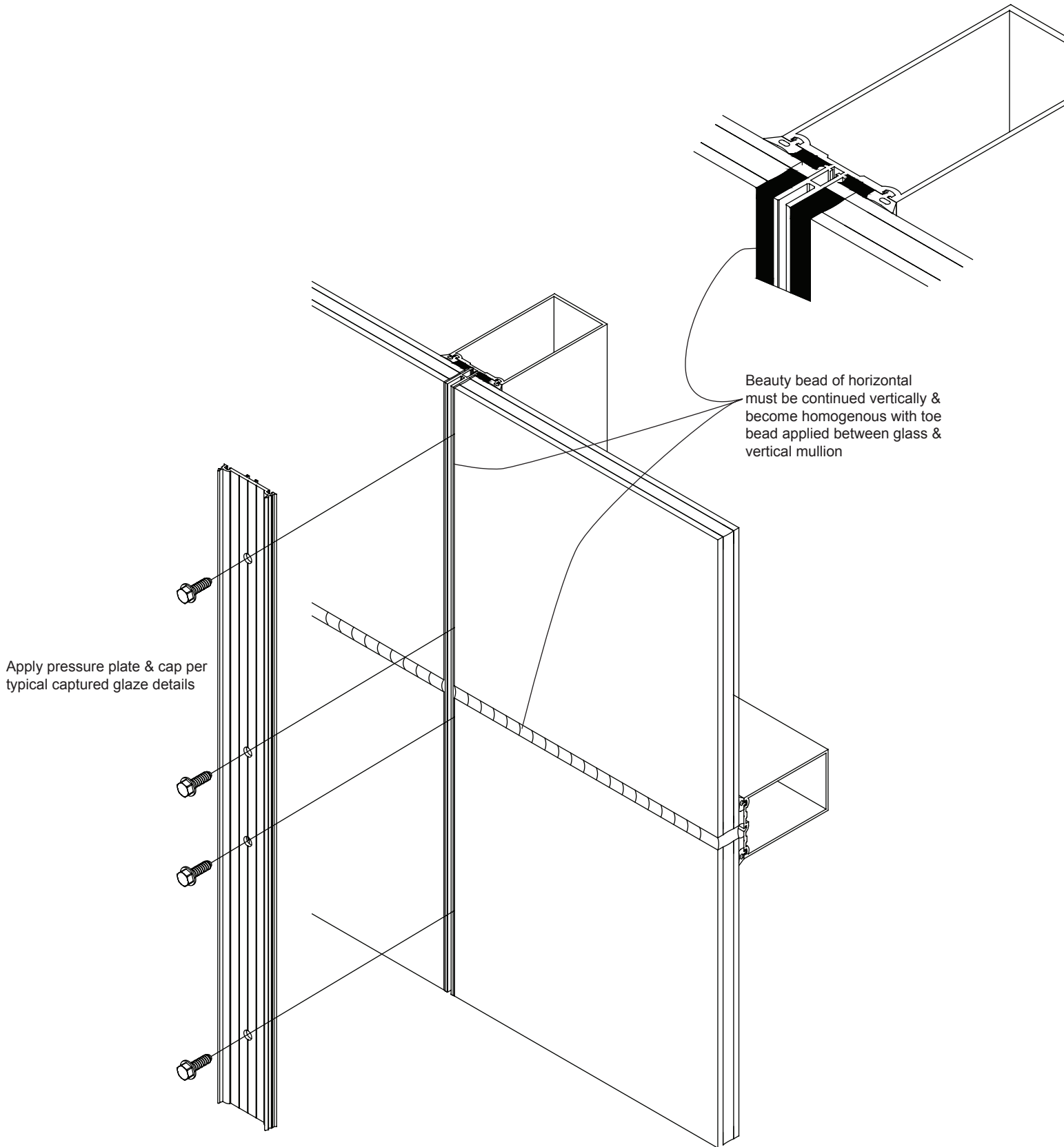
VERTICALLY STRUCTURAL GLAZE MULLION

WITH CONVENTIONAL HORIZONTALS



CURTAIN WALL

Beauty bead of horizontal must be continued vertically
& become homogenous with the bead applied between
glass & vertical mullion

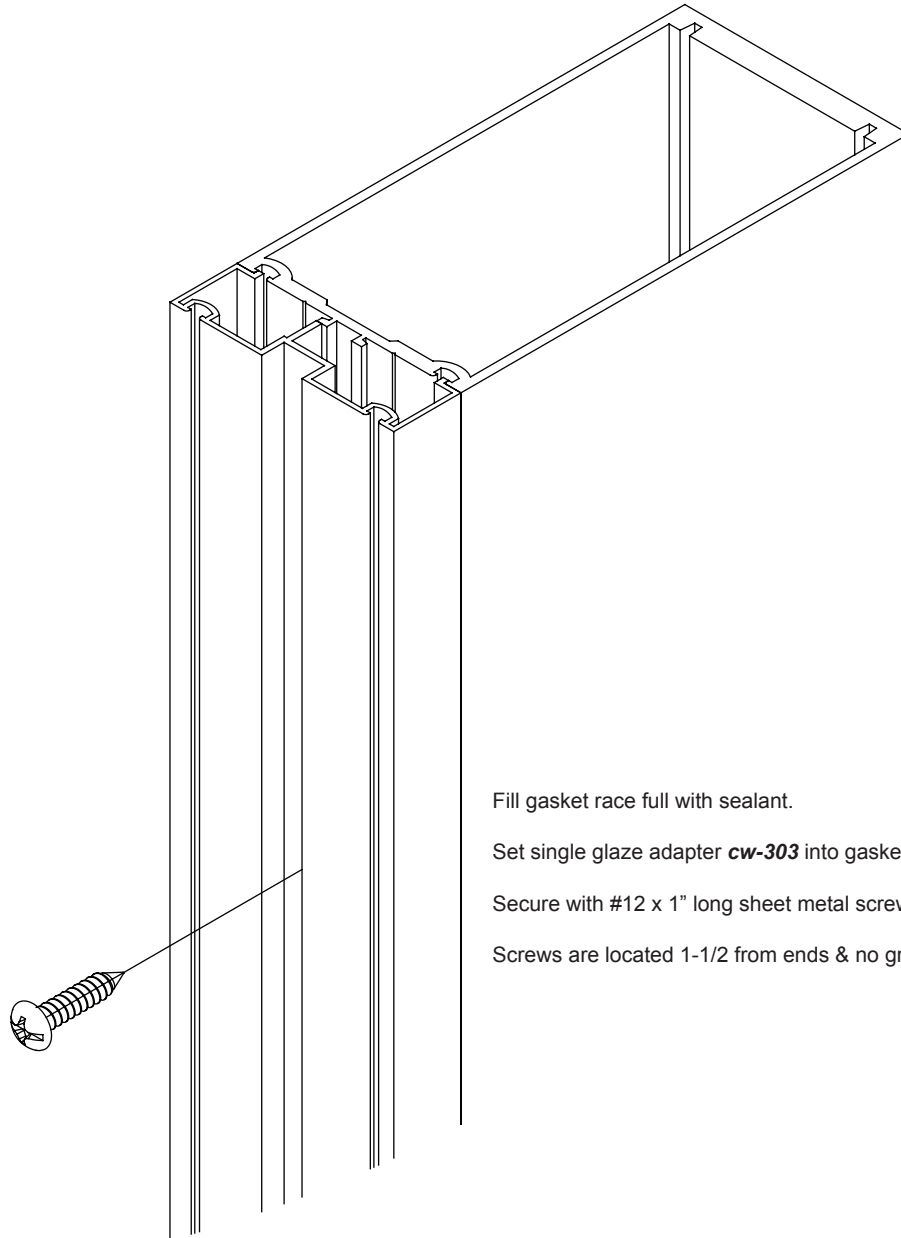


Apply pressure plate & cap per
typical captured glaze details

Beauty bead of horizontal
must be continued vertically &
become homogenous with toe
bead applied between glass &
vertical mullion

CURTAIN WALL

SINGLE GLAZE ADAPTER



Fill gasket race full with sealant.

Set single glaze adapter **cw-303** into gasket race.

Secure with #12 x 1" long sheet metal screws.

Screws are located 1-1/2" from ends & no greater than 8" on center

GLAZE IN SAME MANNER AS INSULATING GLASS

ASSEMBLE AND SEAL HORIZONTALS AS PREVIOUS



CURTAIN WALL

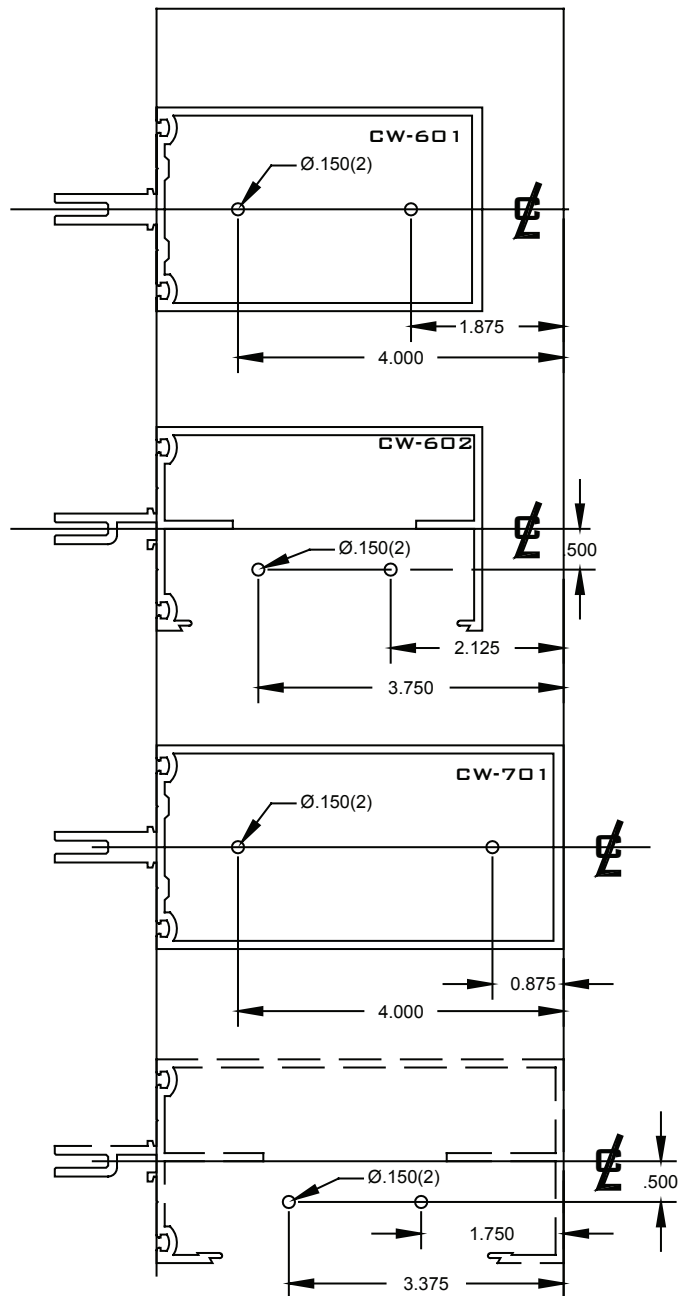
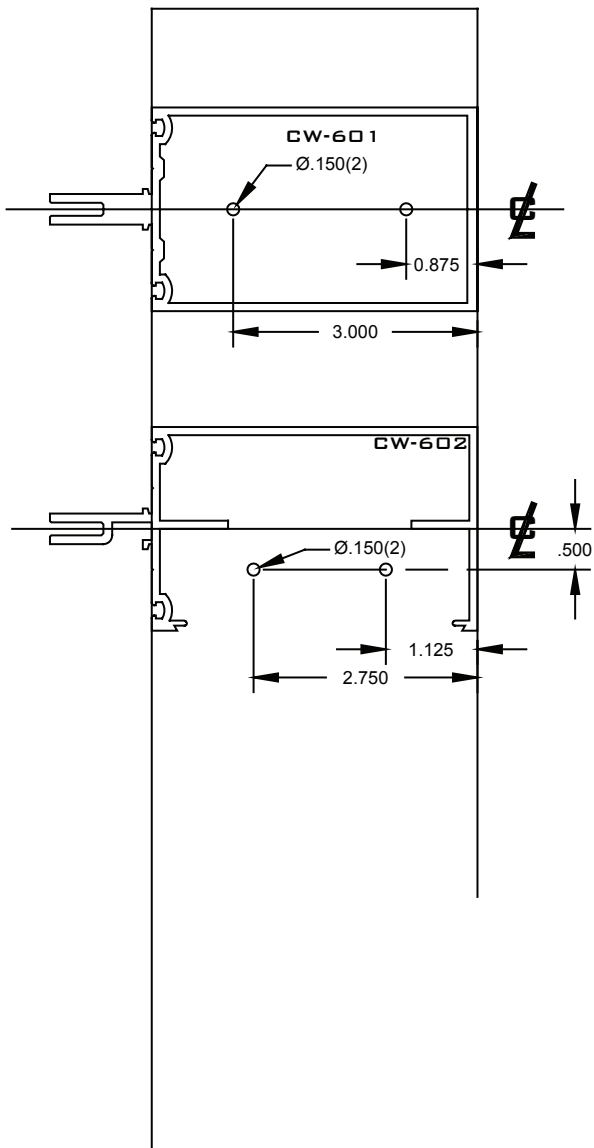
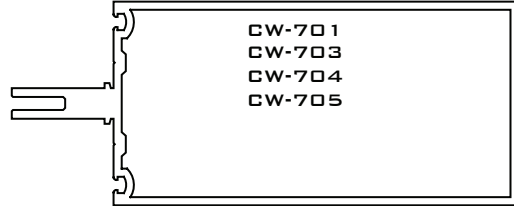
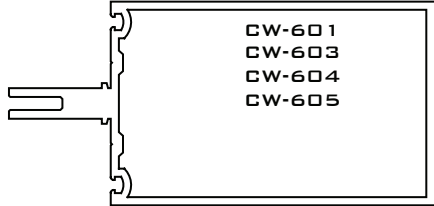
Horizontal & vertical (4 sided) structural glaze products

1.- Glaze verticals per vertical instructions

2.- Glaze horizontals per horizontal instructions

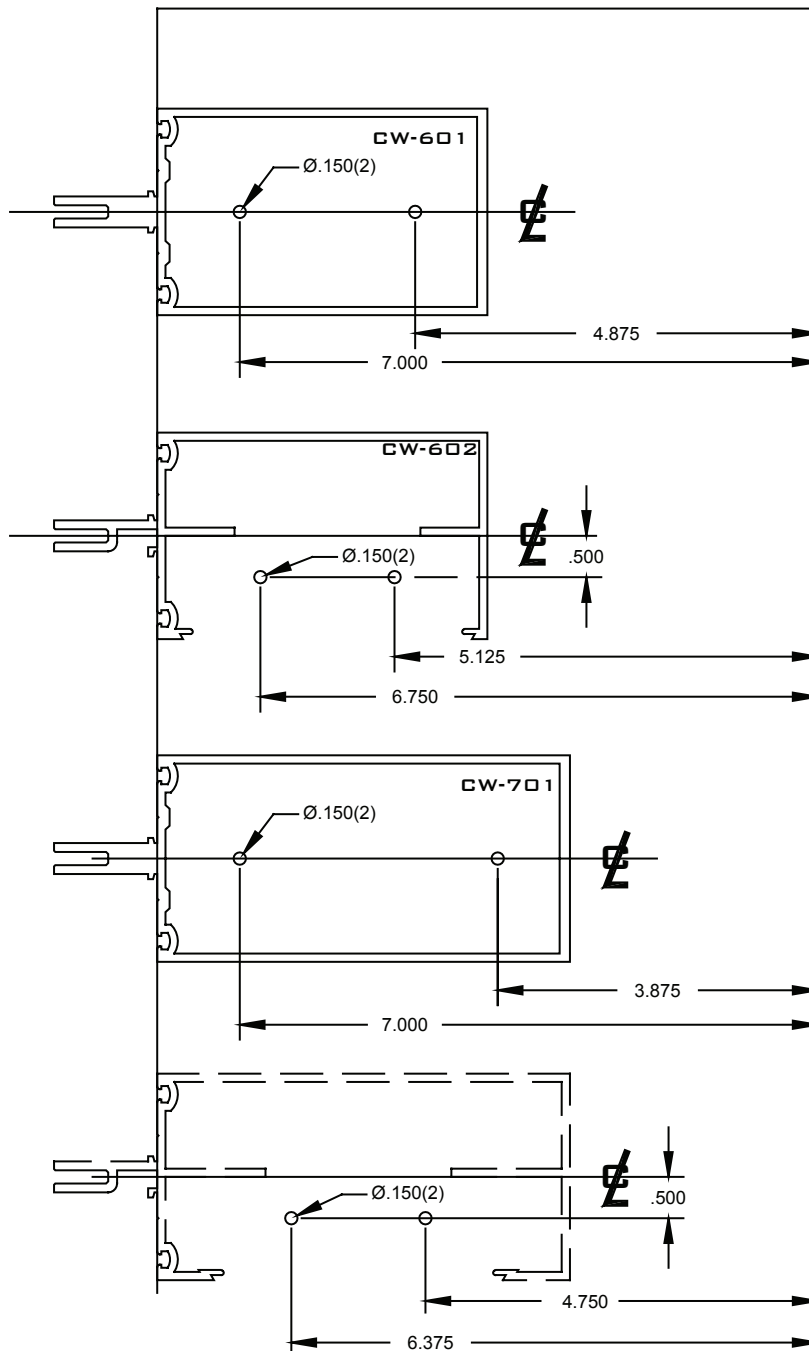
CURTAIN WALL

DIMENSIONAL LAYOUTS MULLIONS FOR SHEAR BLOCKS



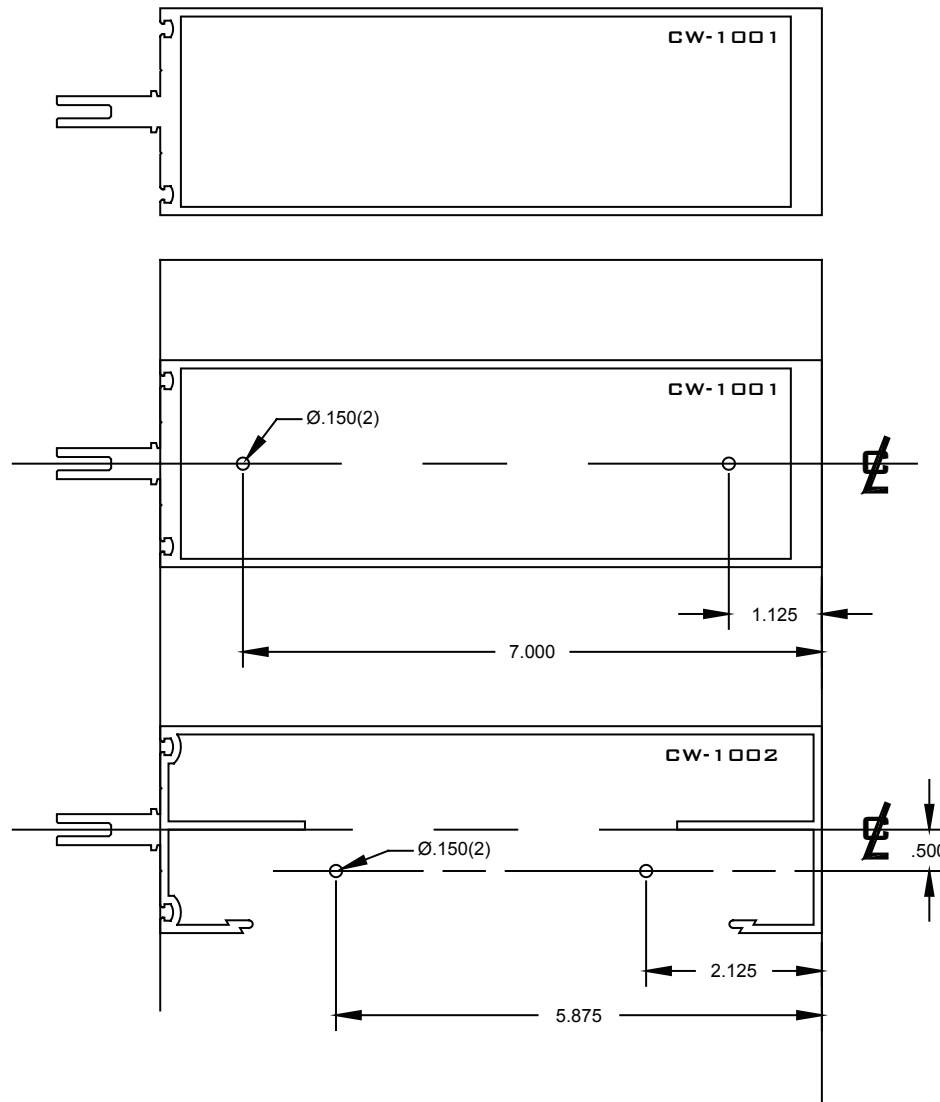
CURTAIN WALL

DIMENSIONAL LAYOUTS MULLIONS FOR SHEAR BLOCKS

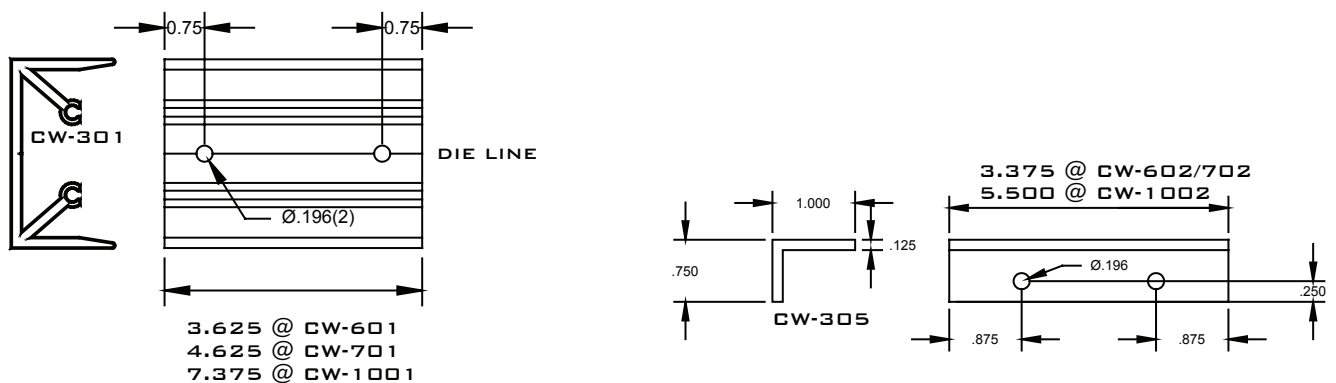


CURTAIN WALL

DIMENSIONAL LAYOUTS MULLIONS FOR SHEAR BLOCKS



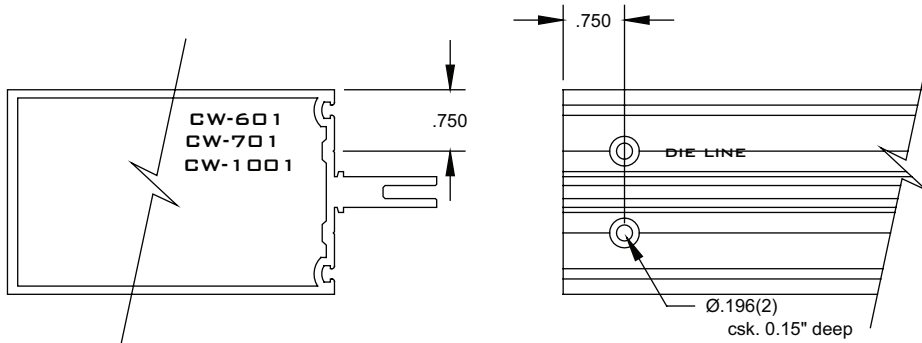
SHEAR BLOCKS



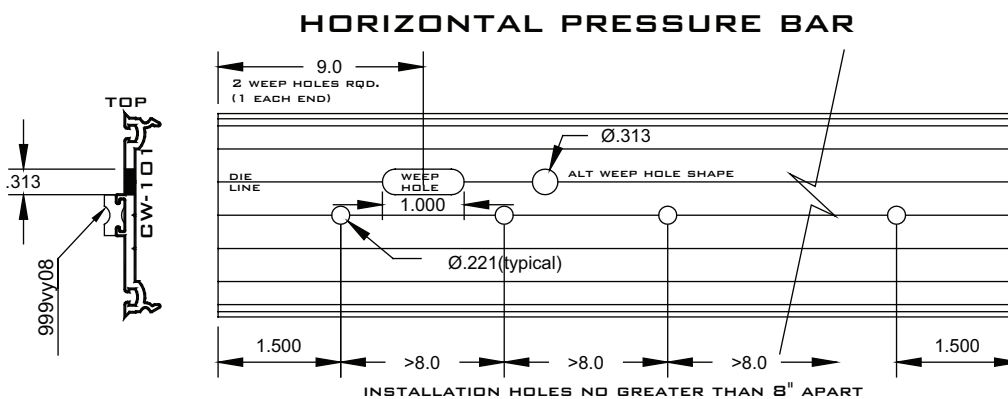
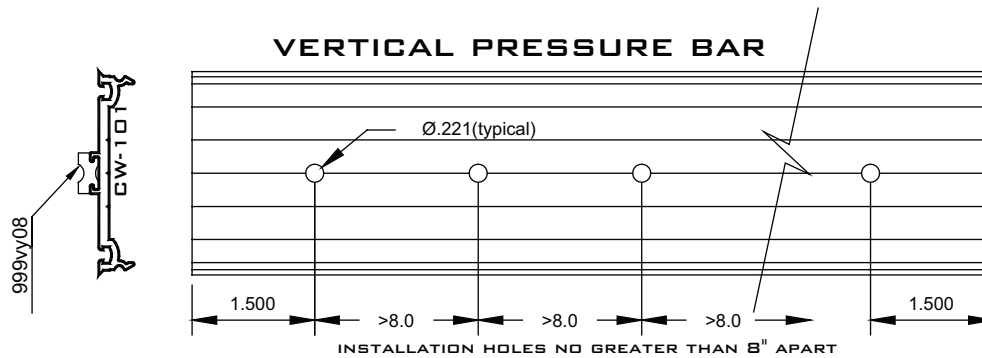
CURTAIN WALL

DIMENSIONAL LAYOUTS

HORIZONTALS FOR CW-301 SHEAR BLOCK



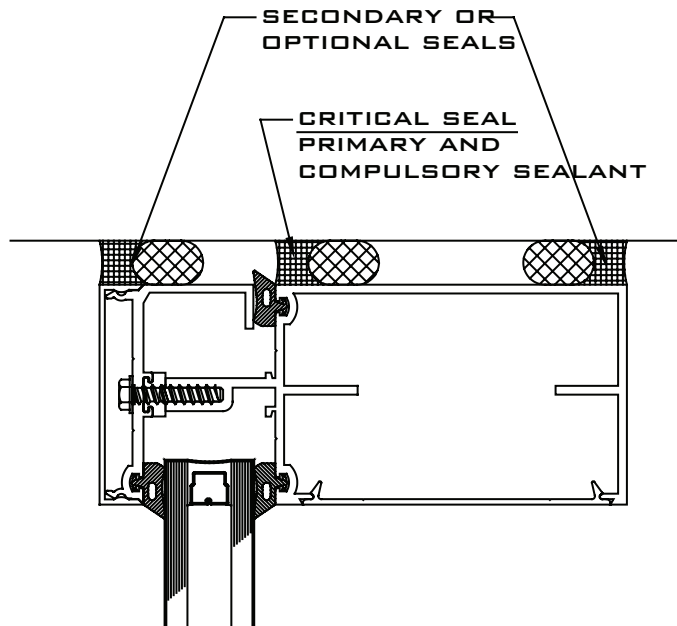
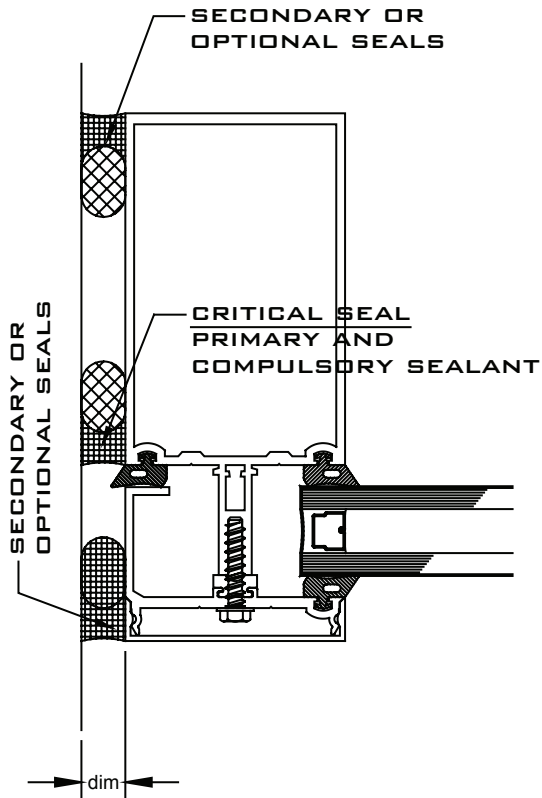
PRESSURE BAR PREP



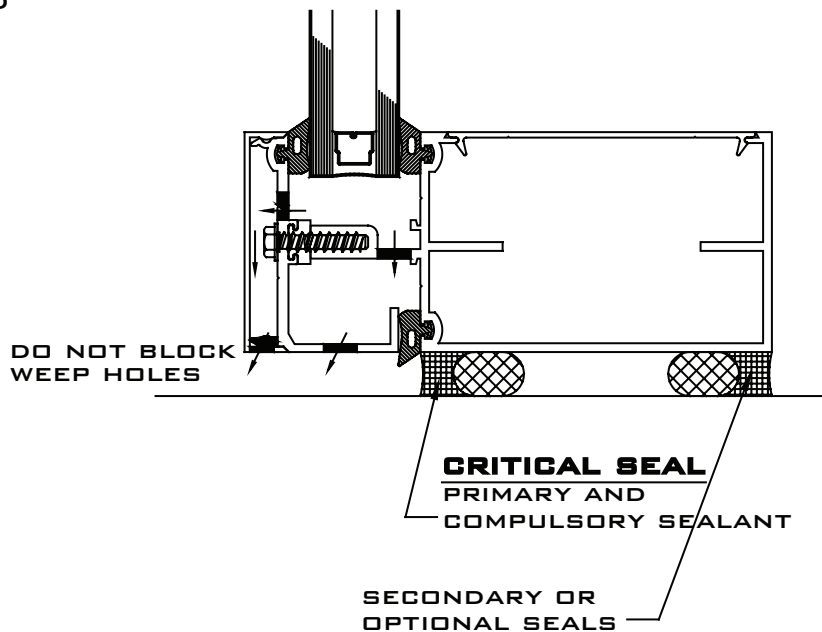
* SAME DETAILS FOR CW-102

CURTAIN WALL

PERIMETER CAULKING



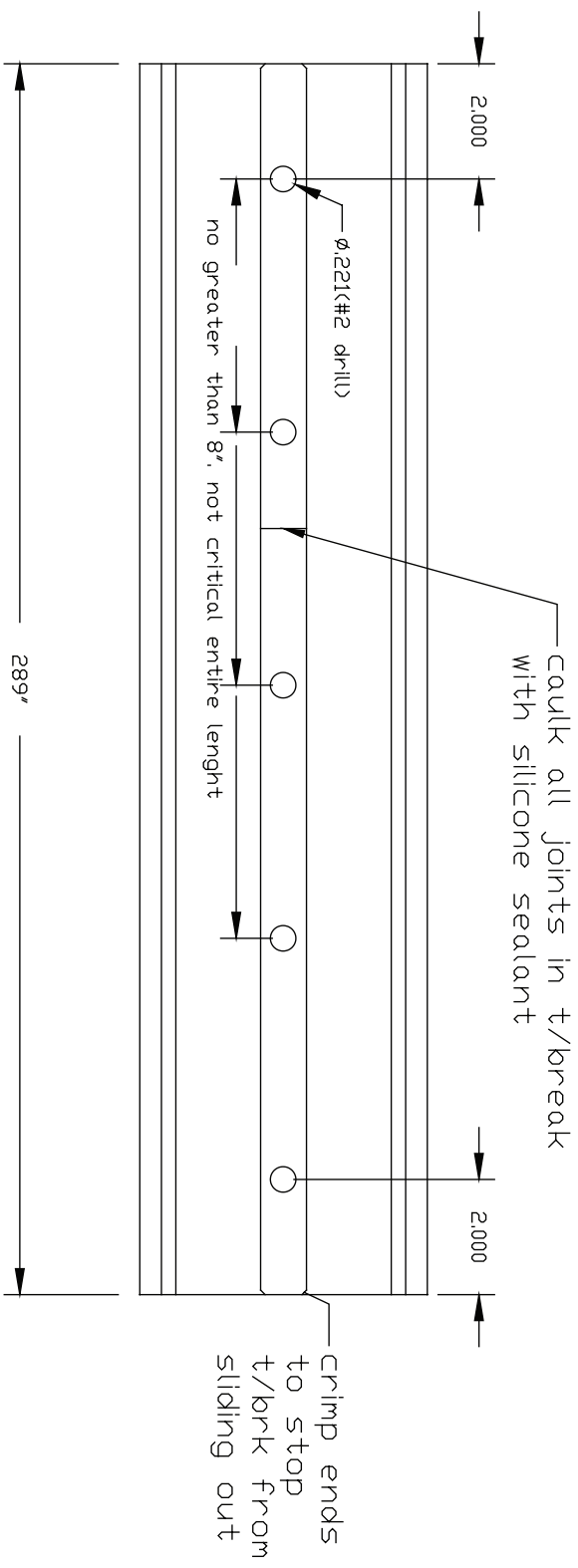
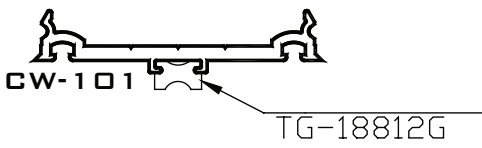
DIMENSION SET BY PROJECT
 CONDITIONS, ENGINEER, AND
 SEALANT MANUFACTURERS
 RECOMMENDATIONS



PRL CURTAIN WALL

ACCESSORY PART NUMBERS

PRE FABRICATED PARTS

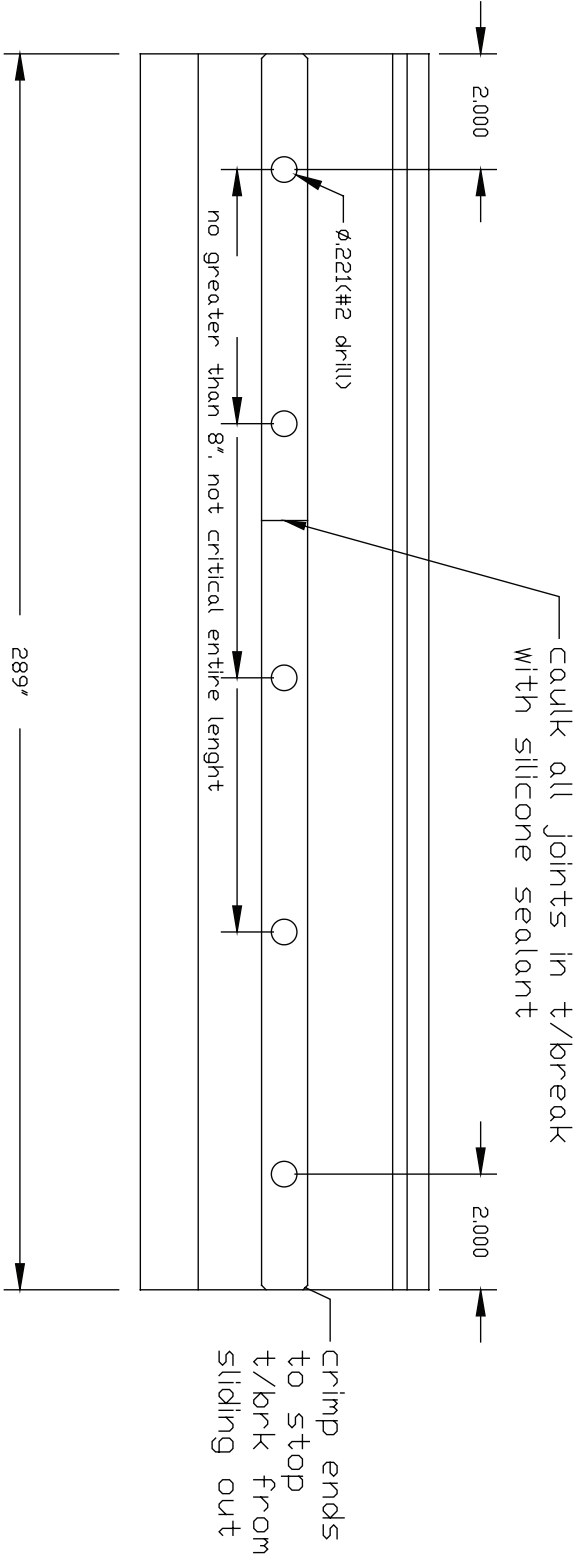
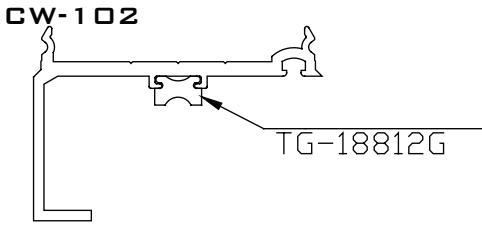


part numbers:

CW-101-F01

DRAWN **F2**
DATE: 04-21-11

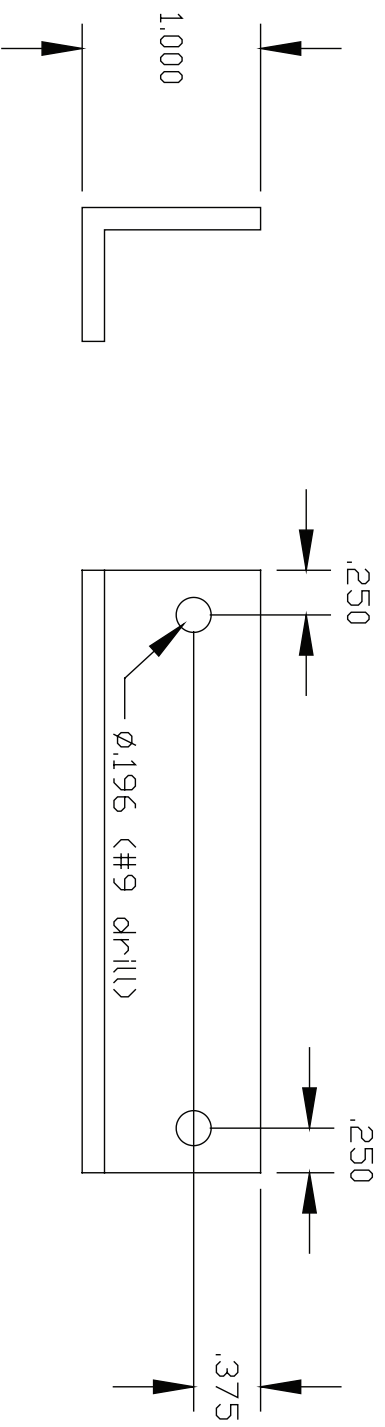
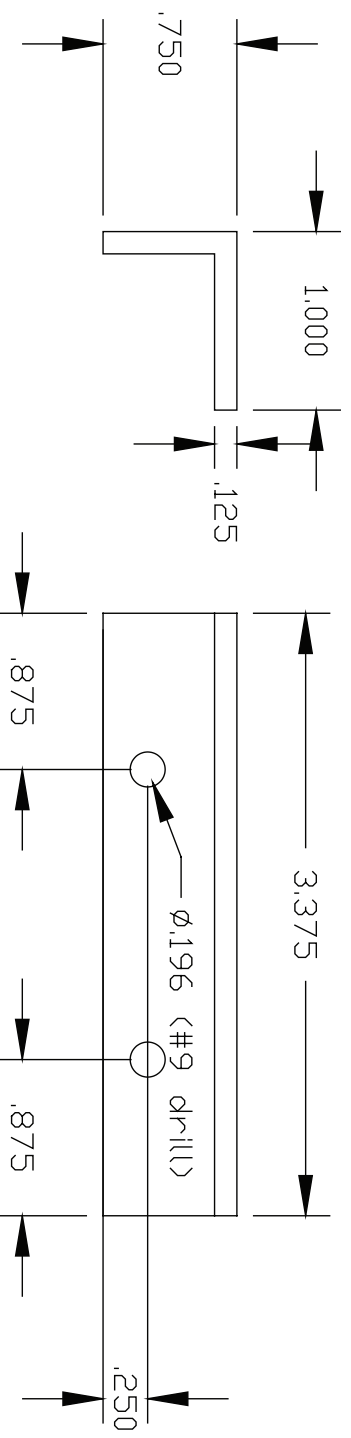
PRIL
ALUMINUM, INC.
14760 DON JULIAN RD.
INDUSTRY CA, 91746
TEL. (877) 775-2586
FAX (877) 274-8800
PRIL-ALUM



part numbers: **CW-102-F01**

DRAWN **F2**
DATE: 04-21-11

PRIL
ALUMINUM, INC.
14760 DON JULIAN RD.
INDUSTRY CA, 91746
TEL. (877) 775-2586
FAX (877) 274-8800
PRIL-ALUM



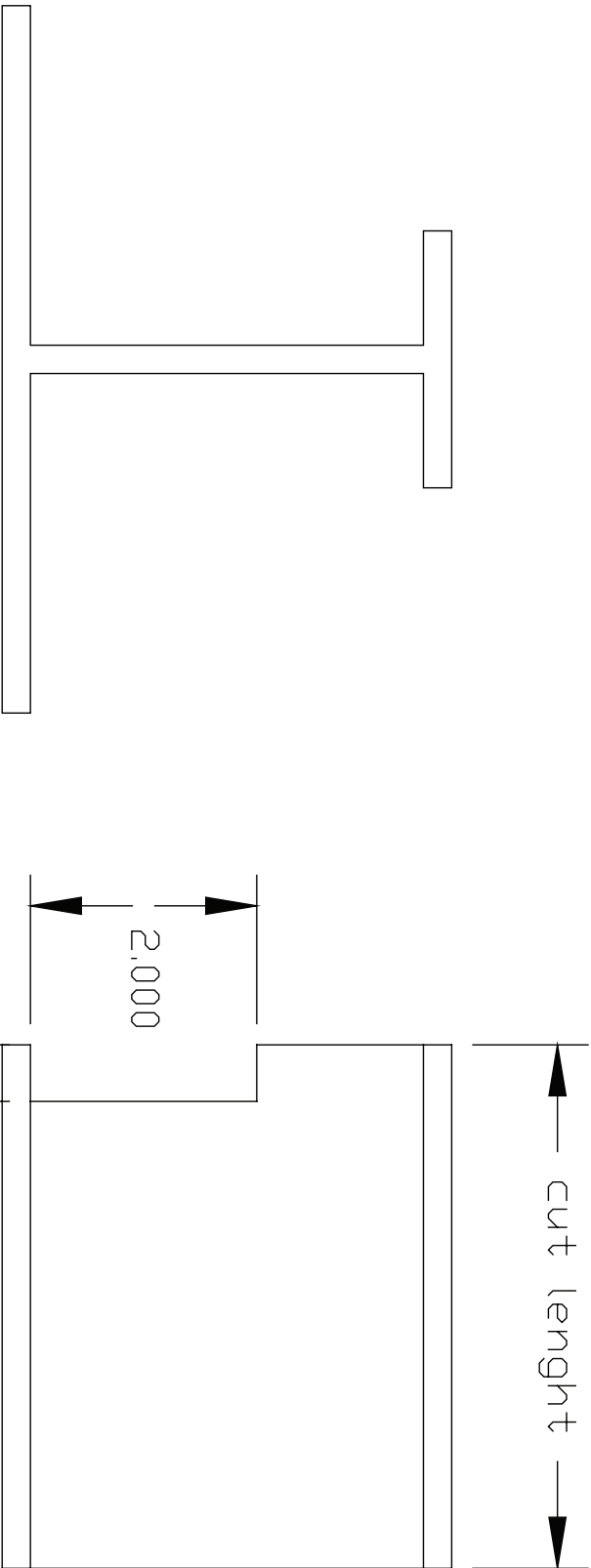
part number:

CW-306-F01

USE WITH CW-602 & CW-702

DRAWN **F2**
DATE: 04-21-11

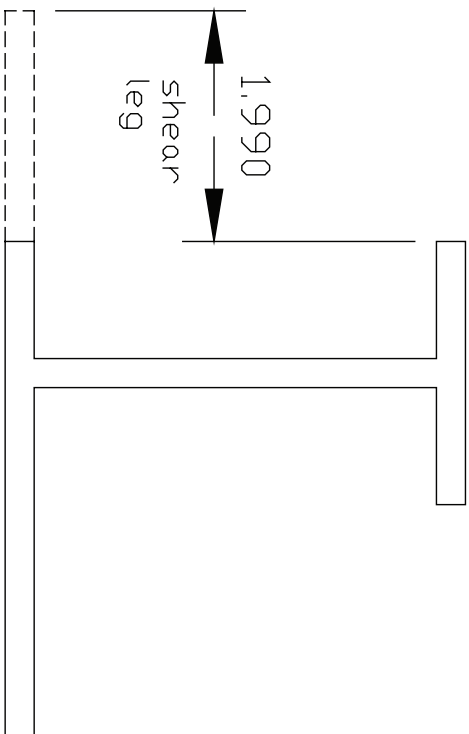
PRL
ALUMINUM INC.
14760 DDN JULIAN RD,
INDUSTRY CA, 91746
TEL. (877) 775-2586
PRL-ALUM
FAX (877) 274-8800



PART NUMBER	CUT LENGTH
CW-401-F01-601	3.625
CW-401-F01-603/4	3.475
CW-401-F01-605	3.413
CW-401-F01-701	4.625
CW-401-F01-703	4.475
CW-401-F01-704	4.562
CW-401-F01-705	4.413
CW-401-F01-1001	7.375

PRL
ALUMINUM, INC.
 14760 DON JULIAN RD,
 INDUSTRY CA, 91746
 TEL. (877) 775-2586
 FAX (877) 274-8800
 PRL-ALUM
 CW401-F01
 anchor

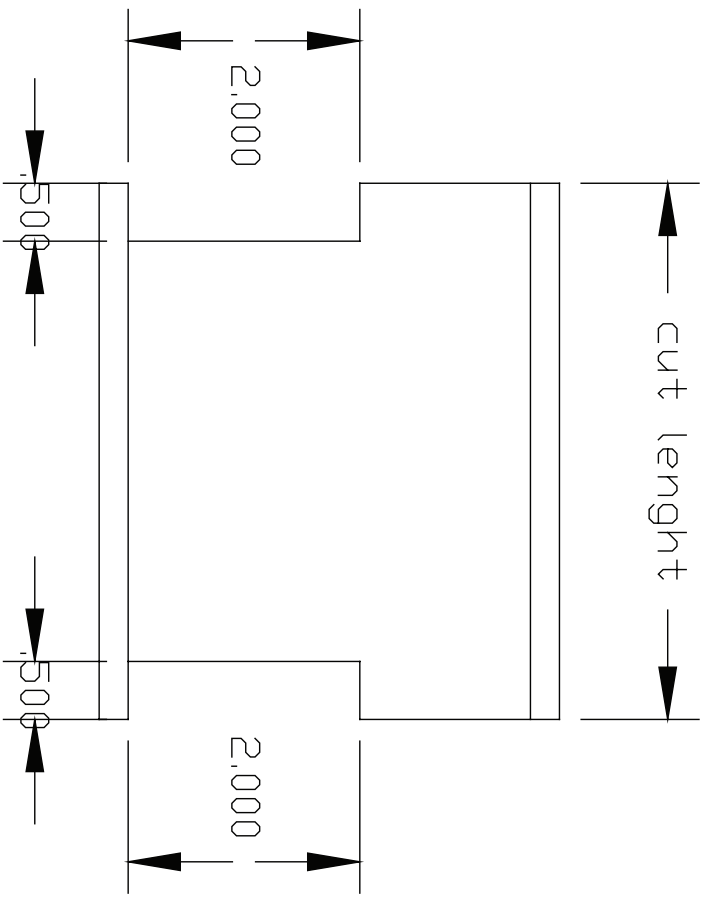
DRAWN F2
 DATE: 4-21-11



PART NUMBER

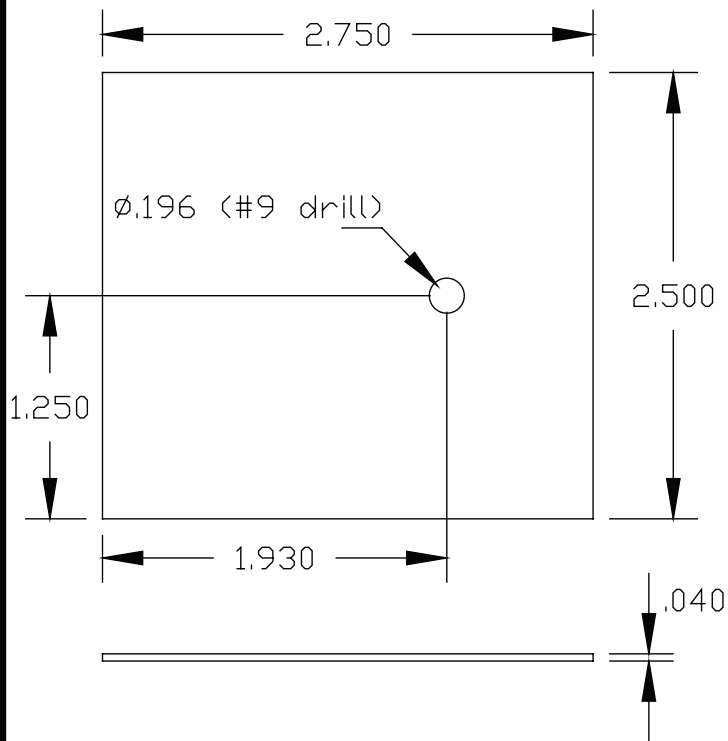
CUT LENGTH

CW-401-F02-601	3.625
CW-401-F02-603/4	3.475
CW-401-F02-605	3.413
CW-401-F02-701	4.625
CW-401-F02-703	4.475
CW-401-F02-704	4.562
CW-401-F02-705	4.413
CW-401-F02-1001	7.375



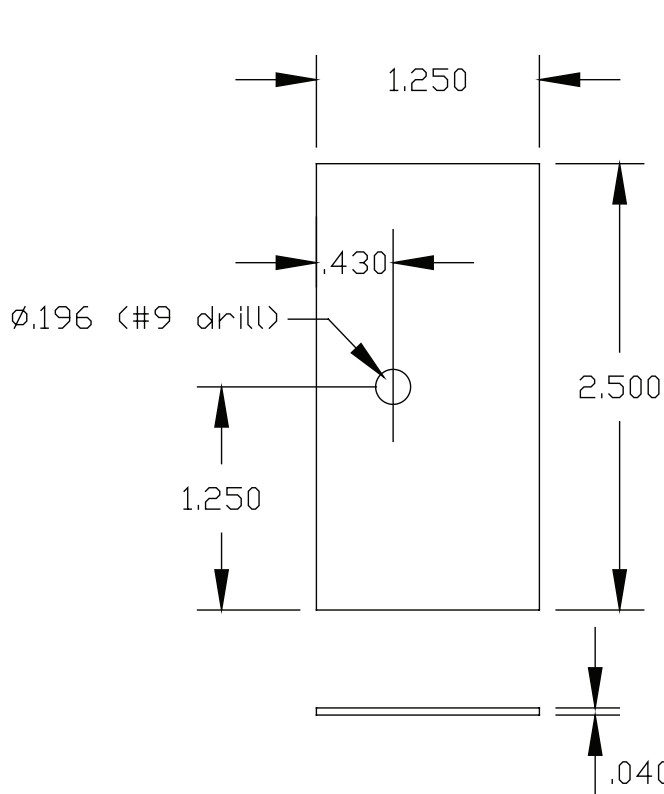
PRL
ALUMINUM, INC.
 14760 DON JULIAN RD.
 INDUSTRY CA, 91746
 TEL. (877) 775-2586
 PRL-ALUM
 FAX (877) 274-8800
 CW401-F02
 anchor

DRAWN F²
 DATE:04-21-11




part number:
CW-MISC-F01

caulking continuity/closer
 plate for use at head
 and sill of mullions

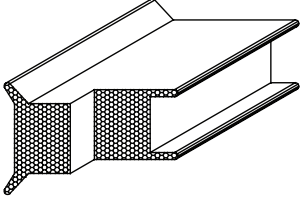
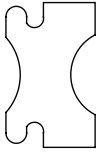
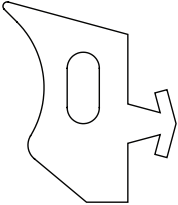
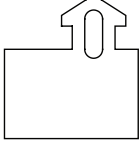



part number:
CW-MISC-F02

alternate caulking continuity
 plate for use at sill
 of mullions

PRL 
ALUMINUM INC.
 14760 DON JULIAN RD.
 INDUSTRY CA, 91746
 TEL. (877) 775-2586
 PRL-ALUM
 FAX (877) 274-8800
 CW-MISC-F01 & F02

DRAWN **F²**
 DATE: 04-20-11

	description	part number	
	horz to vert end plug/dam	999vy07	
	thermal break	999vy08	
	glazing gasket	999vy09	
	silicon glazing spacer	999vy10	

PRL 
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14760 DON JULIAN RD.
INDUSTRY CA. 91746
TEL. (877) 775-2586
PRL-ALUM
FAX (877) 274-8800
gaskets etc

DRAWN F²
DATE: 04-20-11