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 apprenticesed 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.
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

GANA  Glazing manual (50th anniversary edition)

GANA  2008  sealant manual

GANA  2009  laminated glazing reference manual

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

STARTER & TERMINATION ANCHOR

Remove legs for mullion at jamb condition

Notch height is equal to 2x anticipated movement at head plus caulking elongation requirements MIN. 1"

Hole prep per engineer's instructions

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
ANCHOR INSTALLATION

ANCHOR INSTALLATION INTO MULLION, HEAD SHOWN, SILL SIMILAR

1. Place finished anchor into mullion

2. Apply liberal amount of sealant

3. Fasten caulking continuity plate to mullion with #10 x 3/4 screw

NOTE:
Prep horizontal with oversize hole to align with anchor fastener location
Install shear block cw-305 for open back horizontal with 2 #10 x 3/4 sheet metal screw

Install shear block cw-301 for hollow horizontal with 2 #10 x 3/4 sheet metal screw
Apply liberal amounts of caulking to front of mullion where horizontals will locate.

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.
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.
CRITICAL SEAL

1. Apply liberal amounts of sealant to area shown.

2. Push end plug #999VY07 into sealant & tool caulking to provide a water tight seal between upper part of horizontal & vertical. Add more sealant & tool if necessary.

Open back or tubular back horizontal
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.
Do not fasten top of splice

CRITICAL SEAL

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

CRITICAL SEAL
Apply liberal amounts of sealant & tool into joint.
SINGLE GLAZE ADAPTERS

WHEN USED

Caulk gasket race 6 to 8"

Caulk gasket race continuous

Glazing adapters snap in place

Apply sealant & tool

PRL Glass systems inc.
251 Mason way
City of industry, CA, 91746
Phone: 800-433-7044
Fax: 626-968-9256
www.prlglass.com
Immediately after gasket is installed, pull back horizontal 1/8" & caulk horizontal gasket to vertical. Tool caulking.

Push gasket into wet caulking.

Caulk gasket race 6 to 8".

Caulk gasket race continuous.
**GLAZING**

**DO NOT**
- pull glazing gaskets off the roll

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

![Diagram showing the process of winding gaskets](image)

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.

<table>
<thead>
<tr>
<th>FROM</th>
<th>TO</th>
<th>ADD</th>
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<tr>
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<tr>
<td>60”</td>
<td>85”</td>
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<tr>
<td>OVER</td>
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</table>

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Curtain wall installation instructions
Rev-1 05-04-11
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.
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.
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 anti walk blocks 2 per jamb at 1/4 points

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.
Install horizontal **cw-101** pressure plate with #12 x 1” “B” point pressure plate screws. Screws should be 1-1/2” from each end & no greater than 8” center to center.

Apply sealant to form water tight seal between pressure plates & tool.

Install snap on beauty trim (**cw-201** or similar)
Do not hammer on trim. If required use a soft pine wood block With cloth cover & tap onto cap with a soft dead blow mallet.
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

Apply sealant & tool well to ensure both metal & glass surfaces are “wetted” to ensure contact & adhesion.

Leave beauty bead open until the cure time of the structural adhesive has passed

Check with sealant manufacturer for setting time

Temporary retainer clip made from cw-101
Leave in place until structural sealant has cured

Beauty bead of sealant.
Leave open until structural sealant has cured
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.

STRUCTURALLY GLAZED HORIZONTAL
WITH CONVENTIONAL VERTICALS

Setting block stool (cw-304) should be 4-1/2" long.
The stool will rotate into the horizontal & should be located at 1/4 point of glass.
Check with your glass supplier for setting block locations other than 1/4 points.

Locate 4" x 1" x 1/4" x 80 duro
Setting block on stool.
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

1. Temporary retainer clip made from cw-101
   Leave in place until structural sealant has cured

2. Apply sealant & tool well to ensure both metal & glass surfaces are “wetted” to endure contact & adhesion.
   Leave beauty bead open until the cure time of the structural adhesive has passed
   Check with sealant manufacturer for setting time

3. Apply sealant tool well to ensure both metal & glass surfaces are “wetted” to endure contact & adhesion.
   Leave beauty bead open until the cure time of the structural adhesive has passed
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 installation instructions
Rev-1 05-04-11

SINGLE GLAZE ADAPTER

Fill gasket race full with sealant.
Set single glaze adapter \textbf{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
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

CW-601

CW-602

CW-701

dimensional layouts mullions for shear blocks
CURTAIN WALL

DIMENSIONAL LAYOUTS
MULLIONS FOR SHEAR BLOCKS

SHEAR BLOCKS
**HORizontals for CW-301 SHEar BLOCK**

- CW-601
- CW-701
- CW-1001

**PRESSure BAR Prep**

**Vertical Pressure Bar**
- \( \text{Ø}.221 \text{(typical)} \)

- Installation holes no greater than 8" apart

**Horizontal Pressure Bar**
- \( \text{Ø}.313 \)

- Installation holes no greater than 8" apart

* Same details for CW-102*
CURTAIN WALL

PERIMETER CAULKING

Critical seal
Primary and compelatory sealant

Secondary or optional seals

Secondary or optional seals

Critical seal
Primary and compulsory sealant

Secondary or optional seals

Secondary or optional seals

Weep holes do not block critical seal
Primary and compulsory sealant

Secondary or optional seals

Dimension set by project conditions, engineer, and sealant manufacturers recommendations

Do not block weep holes

Critical seal
Primary and compulsory sealant

Secondary or optional seals

PRL Glass Systems Inc.
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City of Industry, CA. 91746
Phone: 800-433-7044
Fax: 626-968-9256
www.prlglass.com
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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
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