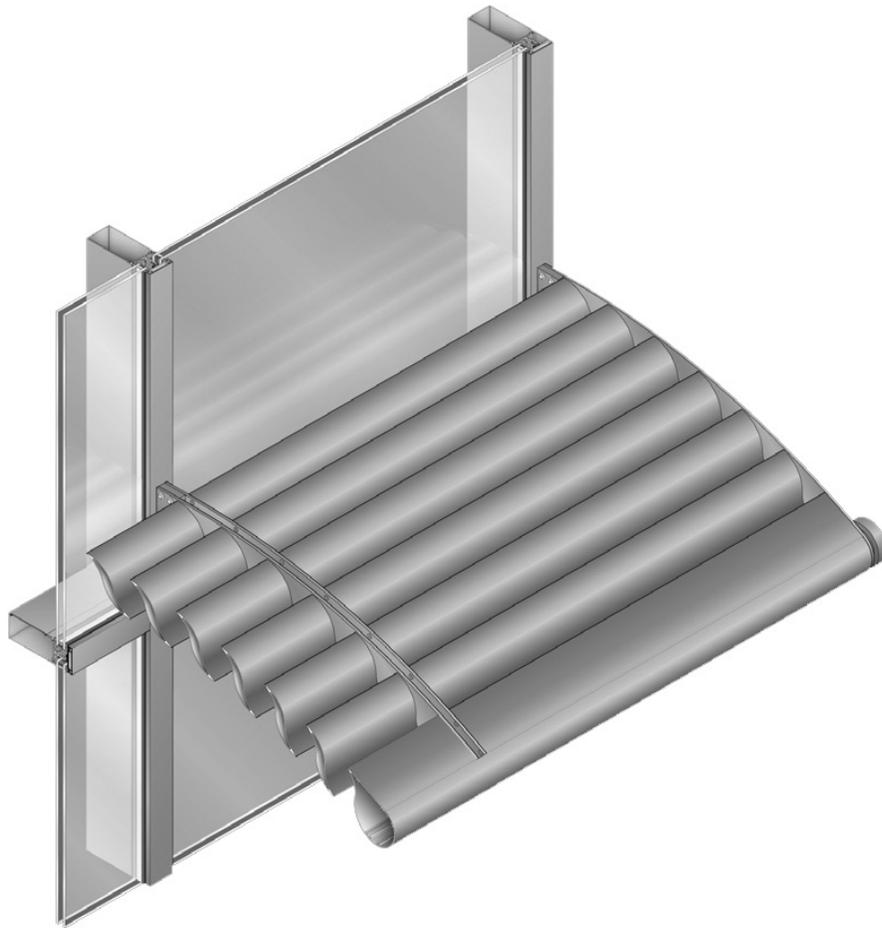


INSTALLATION INSTRUCTIONS

SERIES 3600 SUNSHADE SYSTEM



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

HANDLING, STORAGE, AND PROTECTION OF ALUMINUM

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

A. HANDLE CAREFULLY.

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

B. CHECK ARRIVING MATERIALS.

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

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

Prevent cement, plaster, or other materials from damaging the finish.

D. PROTECT THE MATERIALS AFTER ERECTION.

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

IMPORTANT: READ THIS MANUAL THOROUGHLY BEFORE BEGINNING INSTALLATION.

ORDER OF ASSEMBLY AND INSTALLATION

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GENERAL INSTALLATION NOTES

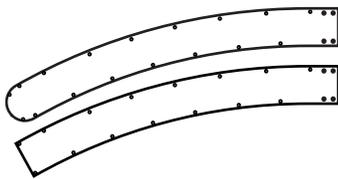
Recommended Guidelines For All Installations:

REVIEW CONTRACT DOCUMENTS. Check shop drawings, installation instructions, architectural drawings, and shipping lists to become thoroughly familiar with the project. The shop drawings take precedence and include specific details for the project. Note any *field verified* notes on the shop drawings prior to installing. The installation instructions are of a general nature and cover most conditions.

1. **INSTALLATION.** All materials are to be installed plumb, level, and true. Install operable windows preglazed only.
2. **BENCH MARKS.** All work should start from bench marks and/or column lines as established by the architectural drawings and the general contractor with guaranteed accuracy. Working from these datum points and lines determine:
 - a) The plane of the wall in reference to offset lines provided on each floor.
 - b) The finish floor lines in reference to bench marks on the outer building columns.
 - c) Mullion spacing from both ends of masonry opening to prevent dimensional build-up of daylight opening.
3. **FIELD WELDING.** All field welding must be adequately shielded to avoid any splatter on glass or aluminum. Results will be unsightly and/or structurally unsound. Advise general contractor and other trades accordingly. All field welds of steel anchors must receive touch-up paint (zinc chromate) to avoid rust.
4. **SURROUNDING CONDITIONS.** Make certain that construction which will receive your materials is in accordance with the contract documents. If not, notify the general contractor in writing and resolve differences before proceeding with work.
5. **ISOLATION OF ALUMINUM.** Aluminum to be placed in direct contact with uncured masonry or incompatible materials should be isolated with a heavy coat of zinc chromate or bituminous paint.
6. **SEALANTS.** Sealants must be compatible with all materials with which they have contact, including other sealant surfaces. Consult with sealant manufacturer for recommendations relative to joint size, shelf life, compatibility, cleaning, priming, tooling, adhesion, etc. It is the responsibility of the **Glazing Contractor** to submit a statement from the sealant manufacturer indicating that glass and glazing materials have been tested for compatibility and adhesion with glazing sealants, and interpreting test results relative to material performance, including recommendations for primers and substrate preparation required to obtain adhesion. The chemical compatibility of all glazing materials and framing sealants with each other and with like materials used in glass fabrication must be established. ***This is required on every project.***
7. **FASTENING.** Within the body of these instructions "fastening" means any method of securing one part to another or to adjacent materials. Only those fasteners used within the system are specified in these instructions. Due to the varying perimeter conditions and performance requirements, perimeter and anchor fasteners are not specified in these instructions. For perimeter and anchor fasteners refer to the shop drawings or consult the fastener supplier.
8. **BUILDING CODES.** Due to the diversity in state/provincial local, and federal laws and codes that govern the design and application of architectural products, it is the responsibility of the individual architect, owner, and installer to assure that products selected for use on projects comply with all the applicable building codes and laws. U.S. Aluminum exercises no control over the use or application of its products, glazing materials, and operating hardware, and assumes no responsibility thereof.
9. **EXPANSION JOINTS.** Expansion joints and perimeter seals shown in these instructions and in the shop drawings are shown at normal size. Actual dimensions may vary due to perimeter conditions and/or difference in metal temperature between the time of fabrication and the time of installation. Gap between expansion members should be based on temperature at time of installation.
10. **WATER HOSE TEST.** As soon as a representative amount of the wall has been glazed (500 square feet or 46.5 m²) a water hose test should be conducted in accordance with AAMA 501.2 specifications to check the installation. On all jobs the hose test should be repeated every 500 square feet (46.5 m²) during the glazing operation.
11. **COORDINATION WITH OTHER TRADES.** Coordinate with the general contractor any sequence with other trades which offset curtain wall installation (i.e. fire proofing, back-up walls, partitions, ceilings, mechanical ducts, converters, etc.).
12. **CARE AND MAINTENANCE.** Final cleaning of exposed aluminum surfaces should be done in accordance with AAMA 609.1 for anodized aluminum and 610.1 for painted aluminum.
13. **JOB SITE ESSENTIALS.** See pages 15 and 16.

PRODUCT DESCRIPTION

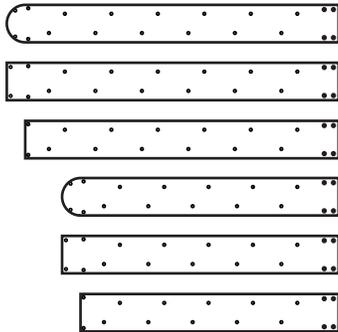
CURVED SUNSHADE



- 36" Curved end outrigger
- 36" Curved intermediate outrigger

- Round fascia cover  Tear Drop fascia
-  Curved Foil louver

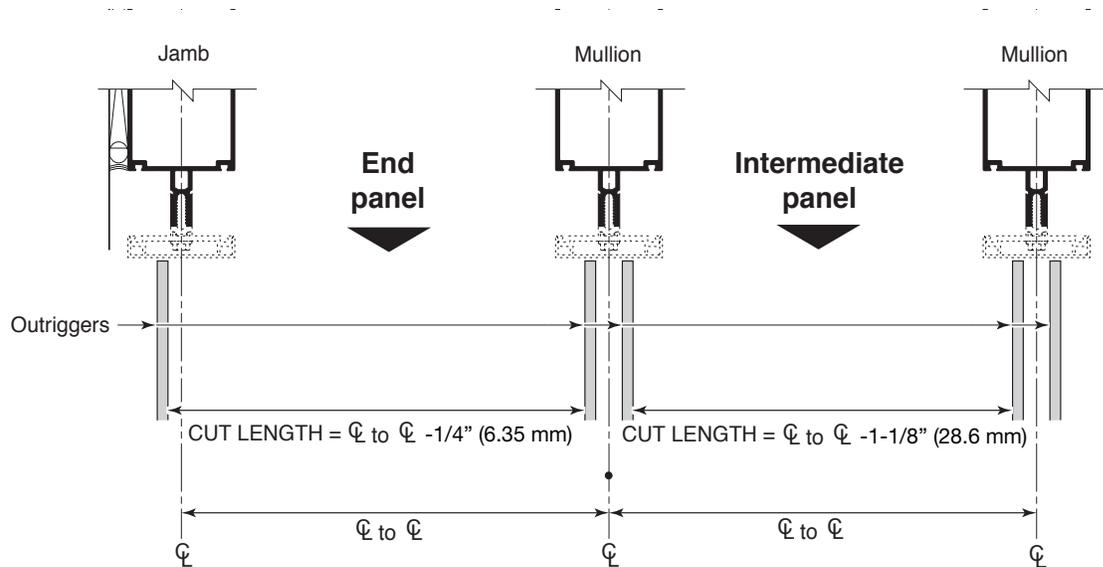
STRAIGHT SUNSHADES



- 36" Straight end outrigger for round fascia cover
- 36" Straight end outrigger for square fascia cover
- 36" Straight intermediate outrigger
- 30" Straight end outrigger for round fascia cover
- 30" Straight end outrigger for square fascia cover
- 30" Straight intermediate outrigger

- Round fascia cover  Round fascia
- Round fascia cover  Square fascia
- Square fascia cover  Square fascia
-  Air Foil louver
-  Angle Blade louver
-  Round louver
-  Curved Blade louver
-  Square louver

FABRICATION



DETAIL A

FABRICATION (CONTINUED)

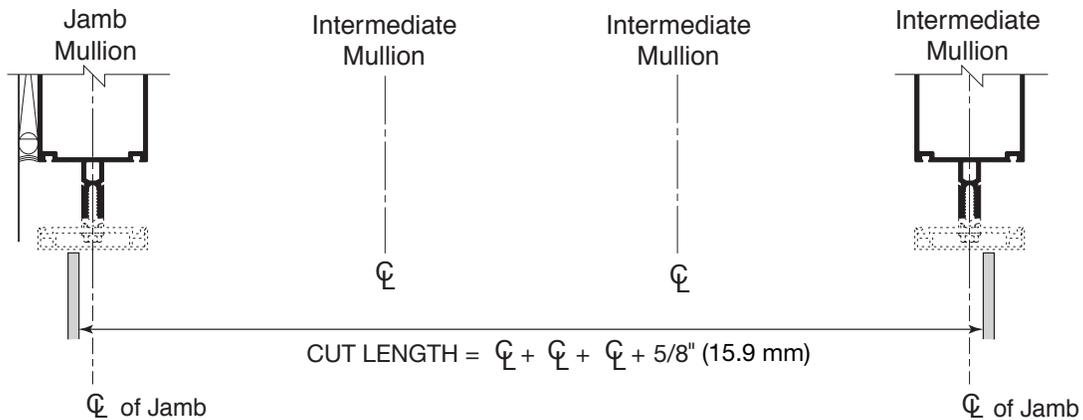
1. Cut fascia cover to size. See **DETAIL B**.

Jamb to Jamb face trim (From end outrigger to end outrigger) .. Jamb \varnothing to Jamb \varnothing plus 5/8" (15.9 mm)

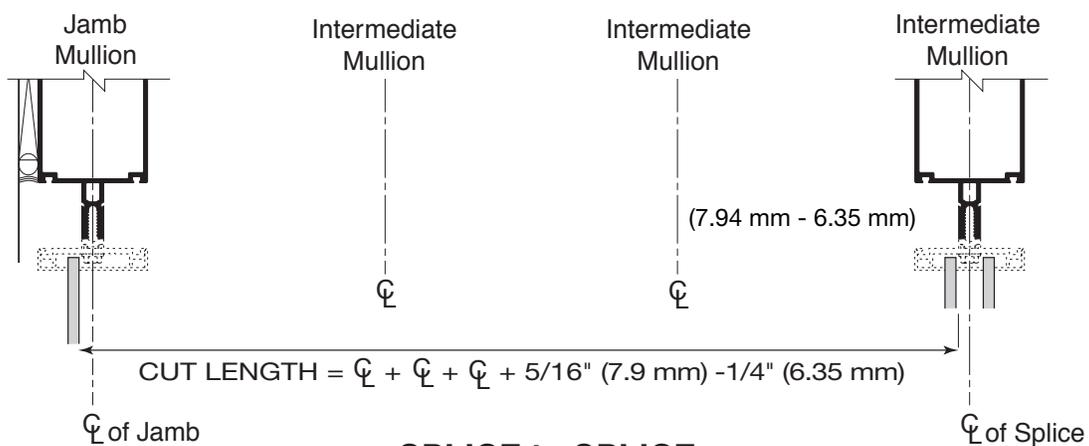
Jamb to Splice face trim Jamb \varnothing to Splice \varnothing plus 1/16" (1.6 mm)

Splice to Splice face trim Splice \varnothing to Splice \varnothing plus 1/2" (12.7 mm)

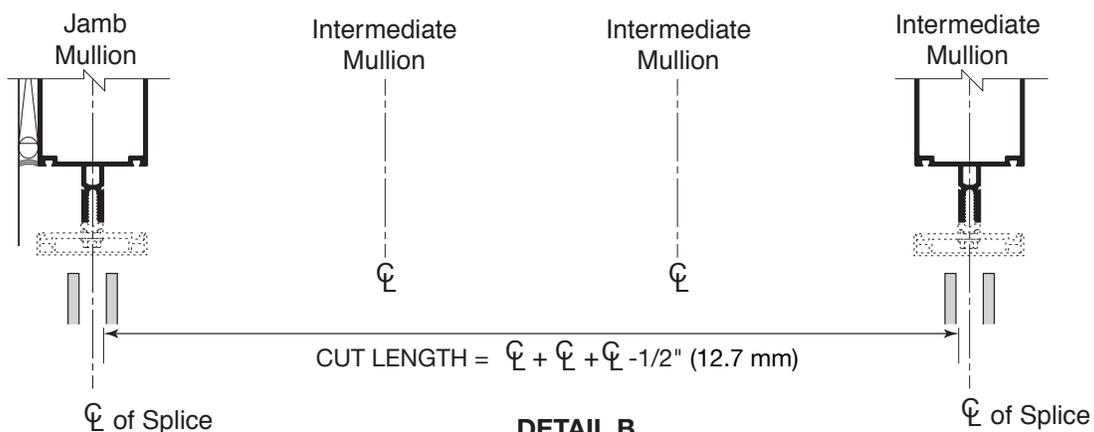
END to END



END to SPLICE



SPLICE to SPLICE

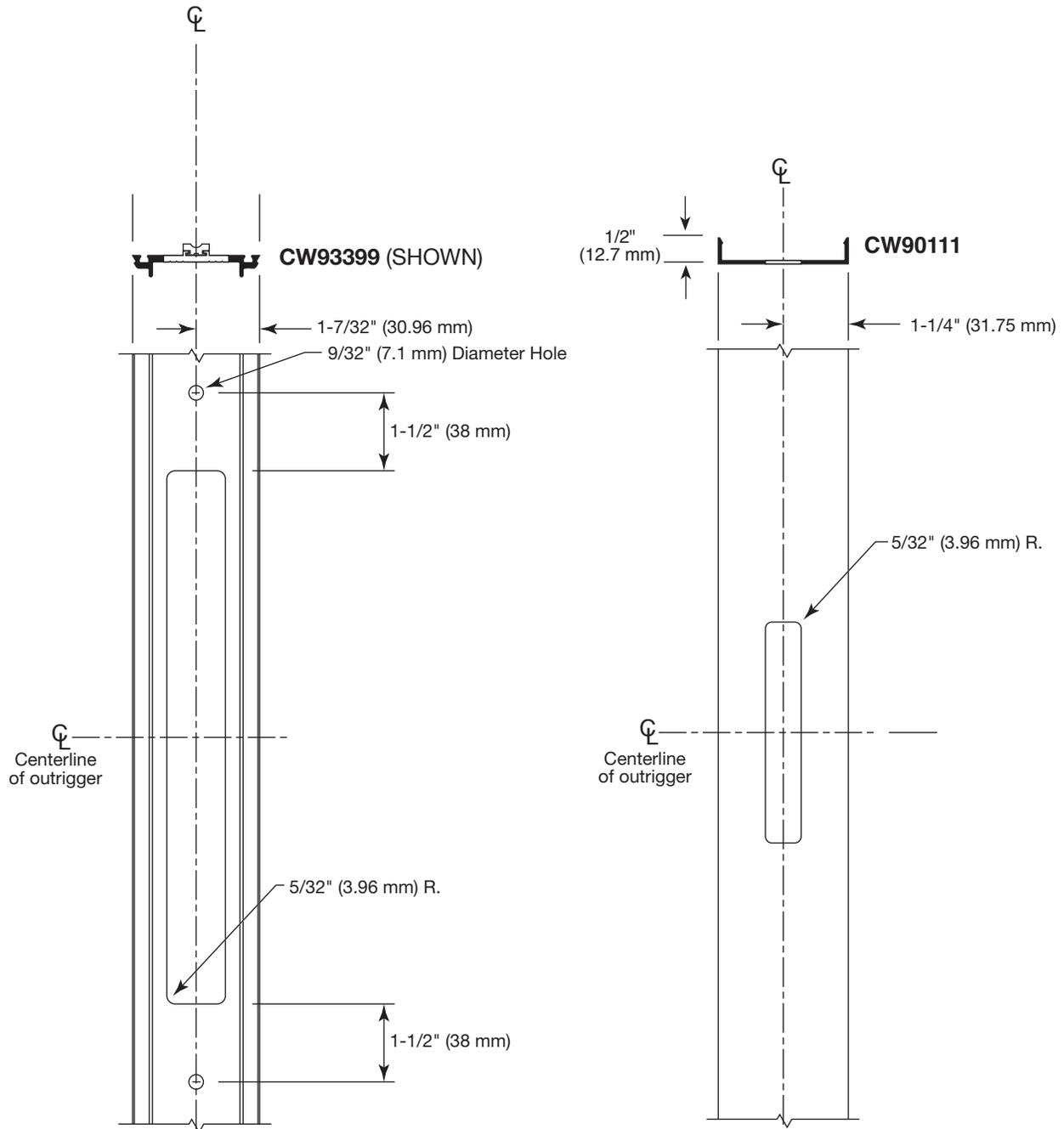


DETAIL B

FABRICATION (CONTINUED)

- Fabricate cut outs in pressure bars and face caps that occur at mounting bracket locations as shown in **DETAIL C**.

NOTE: Cut out location accuracy is CRITICAL. (Plus or minus 1/32" (.8 mm))

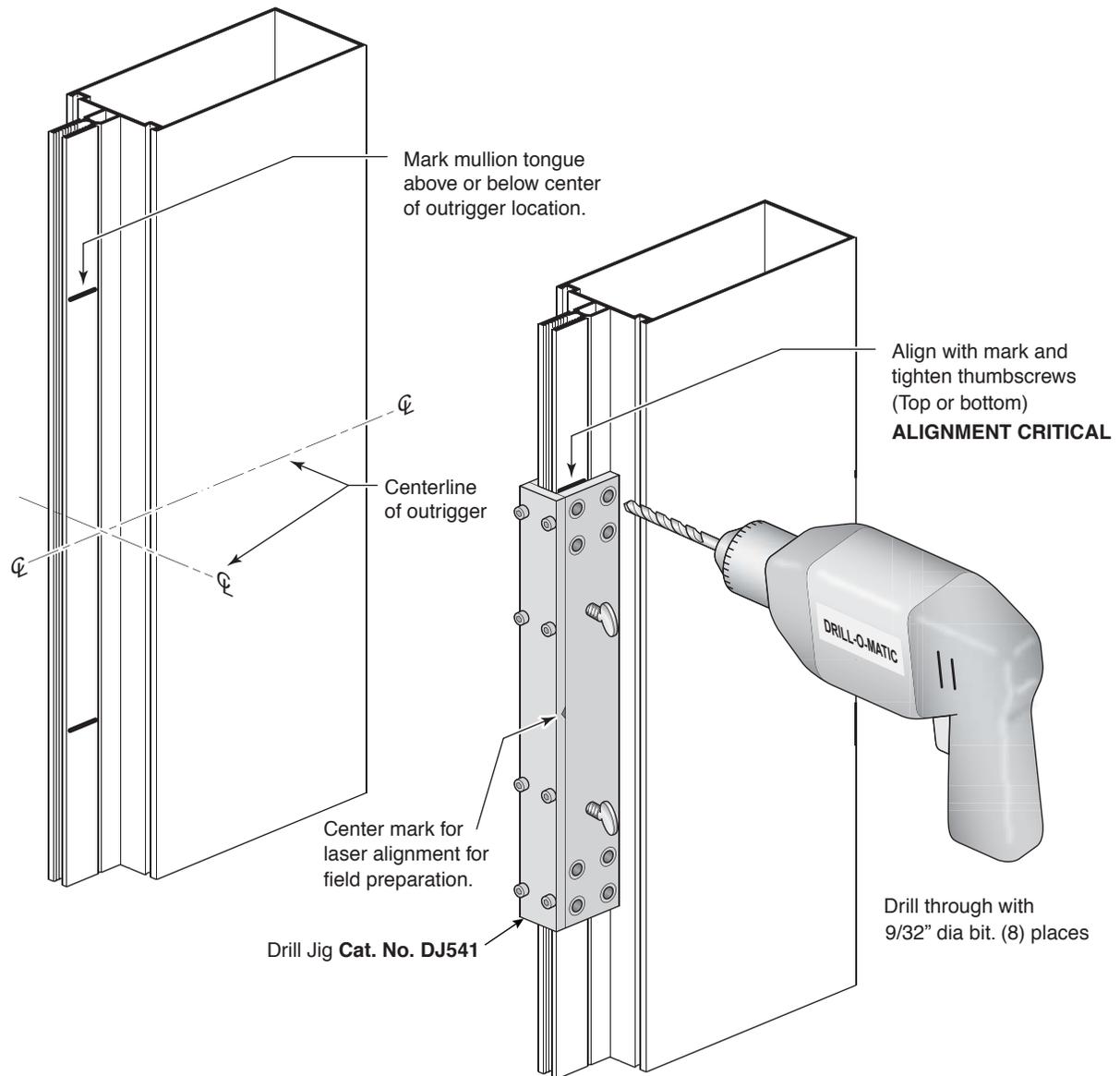


DETAIL C

FABRICATION (CONTINUED)

3. Prepare vertical mullions for outrigger anchor brackets. Mark and drill vertical mullions as shown in using **Cat. No. DJ541 Drill Jig.** (See **DETAIL D**)

NOTE: Drill guide alignment may be done in the shop as shown in **DETAIL D**, or aligned by a laser leveling system in the field. Plan work accordingly.

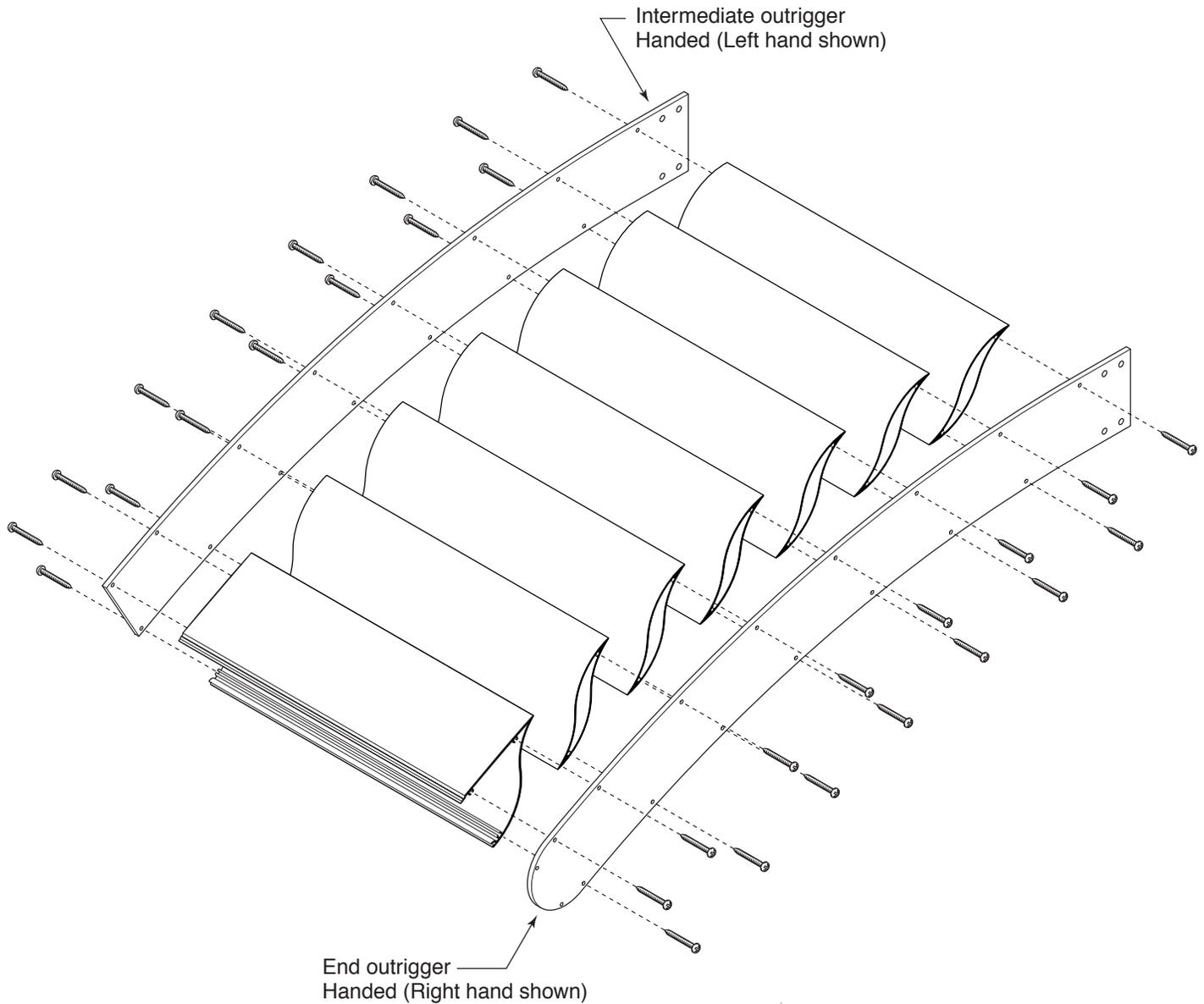


DETAIL D

ASSEMBLY

1. Assemble Sunshade Panels. Position louvers between outriggers and attach with FH SMS. See **DETAIL E**.
2. Attach end cap base to end outriggers using two **ST251** #10 x 1" HWH SMS.

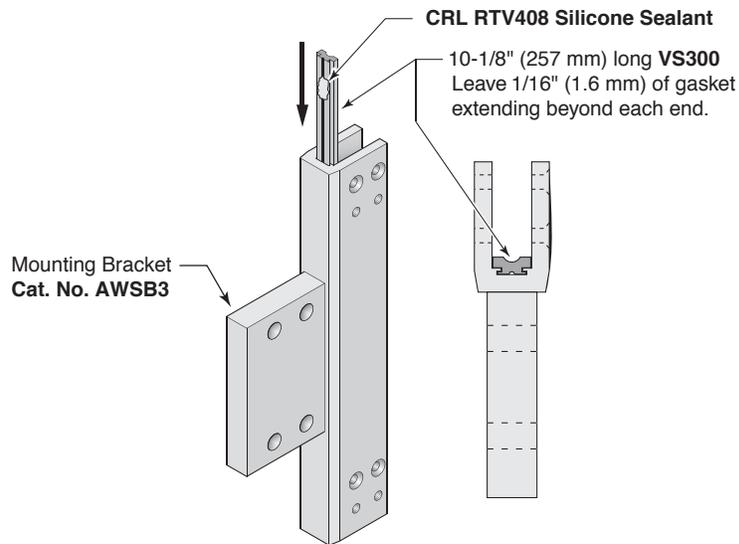
NOTE: Install end cap after Sunshade System has been installed and after face cover has been attached. See **DETAIL M** on Page 13.



DETAIL E

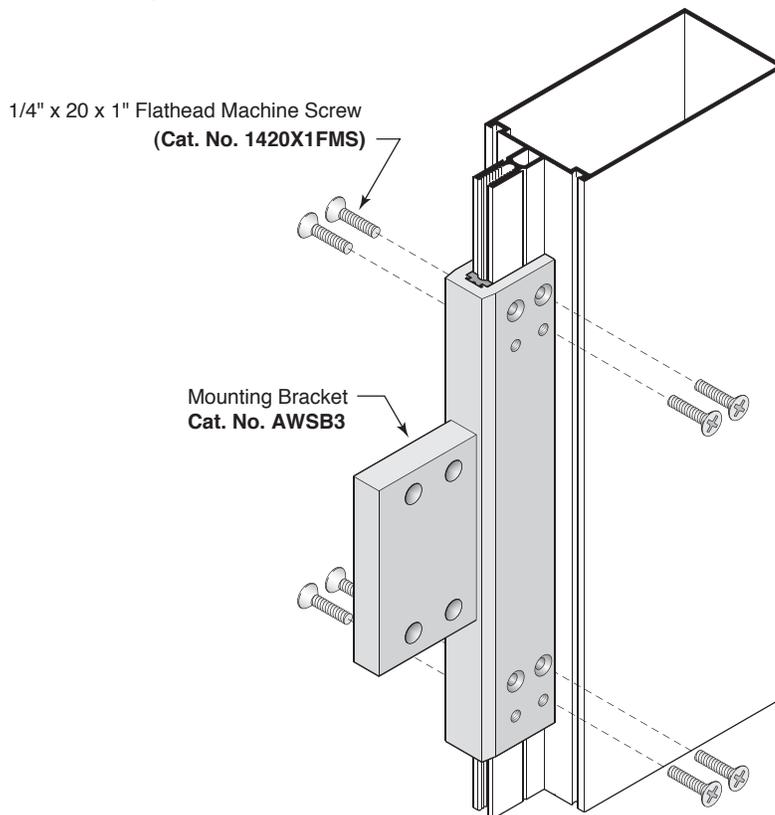
INSTALLATION

1. Lace in 10-1/8" (257 mm) long piece of **VS300** spacer gasket into **Cat. No AWSB3** Mounting Bracket. **See DETAIL F.** Leave 1/16" (1.6 mm) of space extending beyond each end of bracket. A small amount of **RTV408 Silicone Sealant** may be used to hold in place until attaching to mullion.



DETAIL F

2. Attach mounting bracket to mullions using (8) 1/4" x 20 x 1" Flathead Machine Screws. (**Cat. No. 1420X1FMS**) as shown in **DETAIL G.**



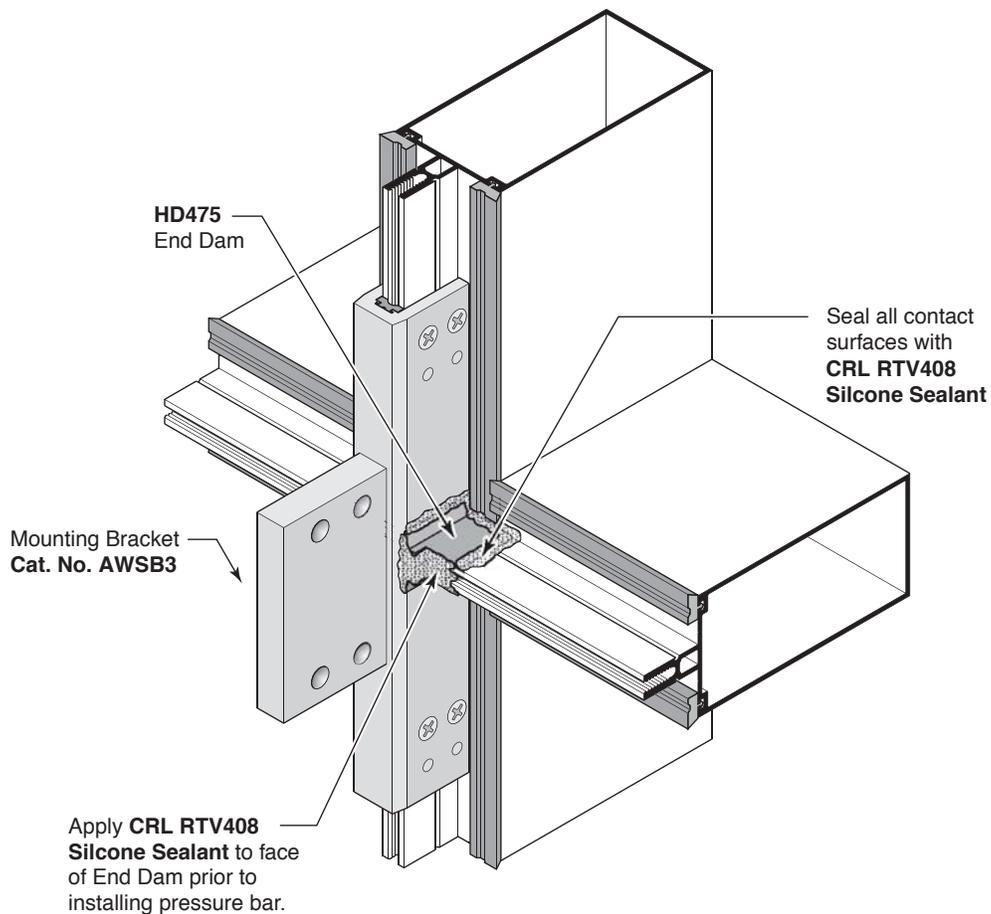
DETAIL G

INSTALLATION (CONTINUED)

3. If Sunshade System occurs at horizontal location, apply **CRL CAT. NO. RTV408 Silicone Sealant** to **HD475 End Dams** and install. See **DETAIL H**.

Refer to Series 3250 Installation Instructions for additional end dam sealant procedures.

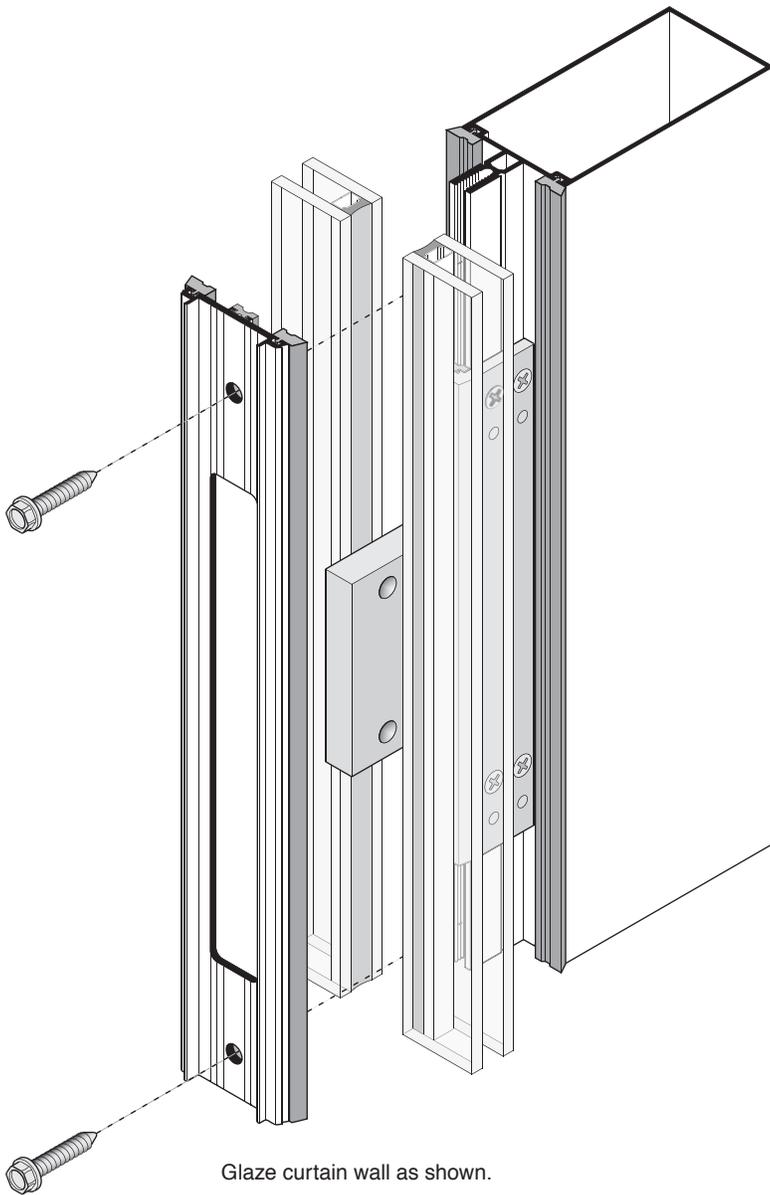
NOTE: HD475 only occurs at mounting brackets. (Typical End Dams for Series 3250 are **HD975**)



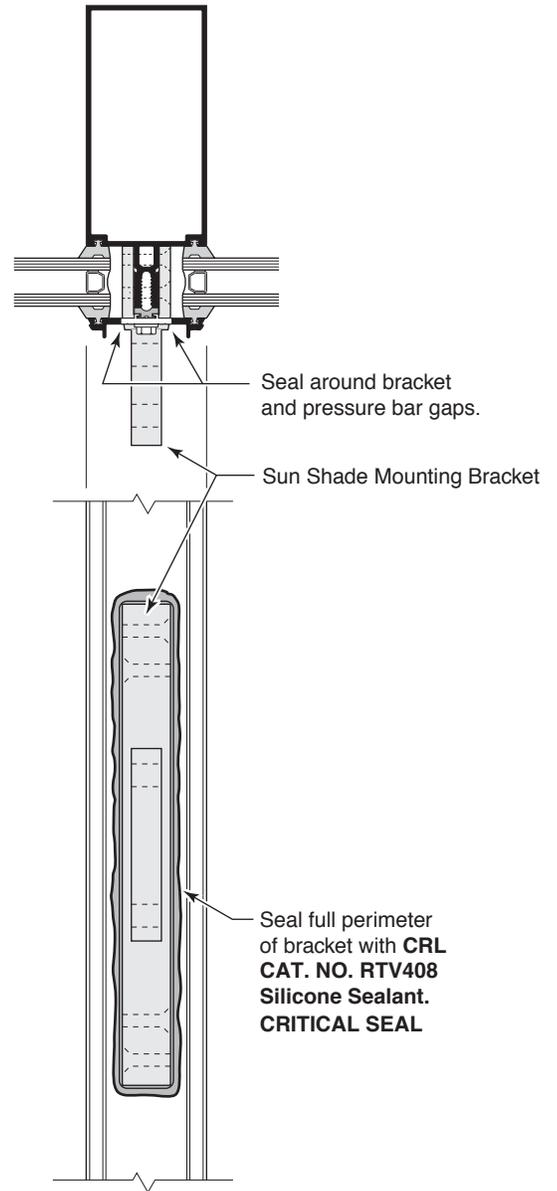
DETAIL H

INSTALLATION (CONTINUED)

4. Glaze the Series 3250 Curtain Wall System as directed in the Installation Manual.
5. After pressure bars are installed, seal around notch and anchor bracket gaps as shown in **DETAIL J**.



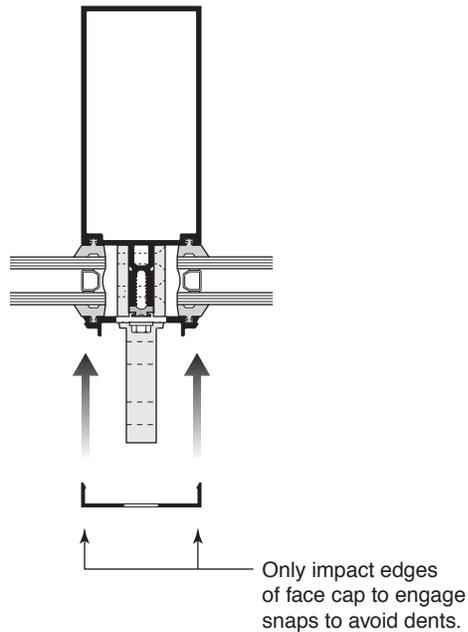
DETAIL I



DETAIL J

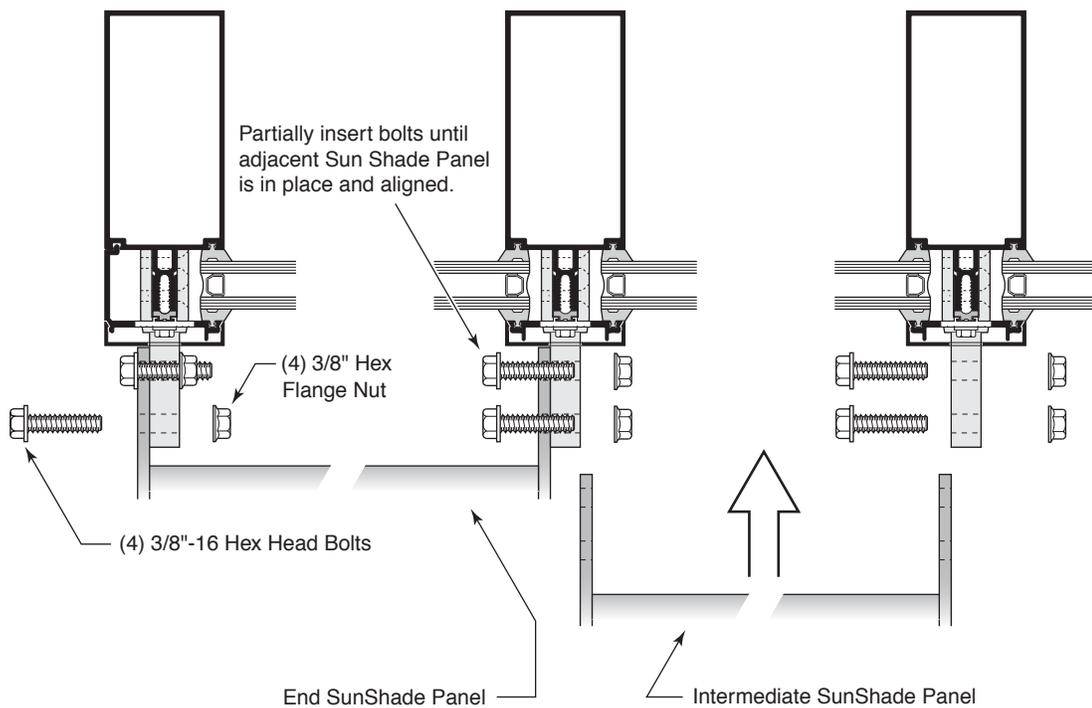
INSTALLATION (CONTINUED)

6. Install face caps as shown in the Series 3250 Curtain Wall System Installation Instructions. See **DETAIL K**.



DETAIL K

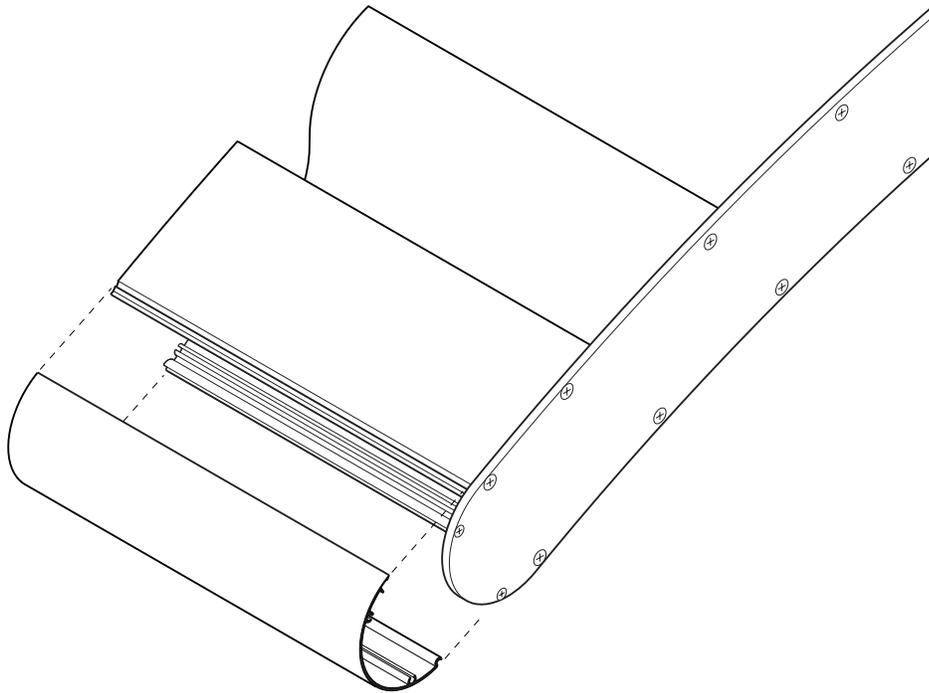
7. Install Sunshade Panels. Mount panels to brackets with 3/8"-16 x 1-3/4" Hex Head bolts as shown in **DETAIL L**. Bolts should be partially inserted at intermediate connections to allow next panel installation.



DETAIL L

INSTALLATION (CONTINUED)

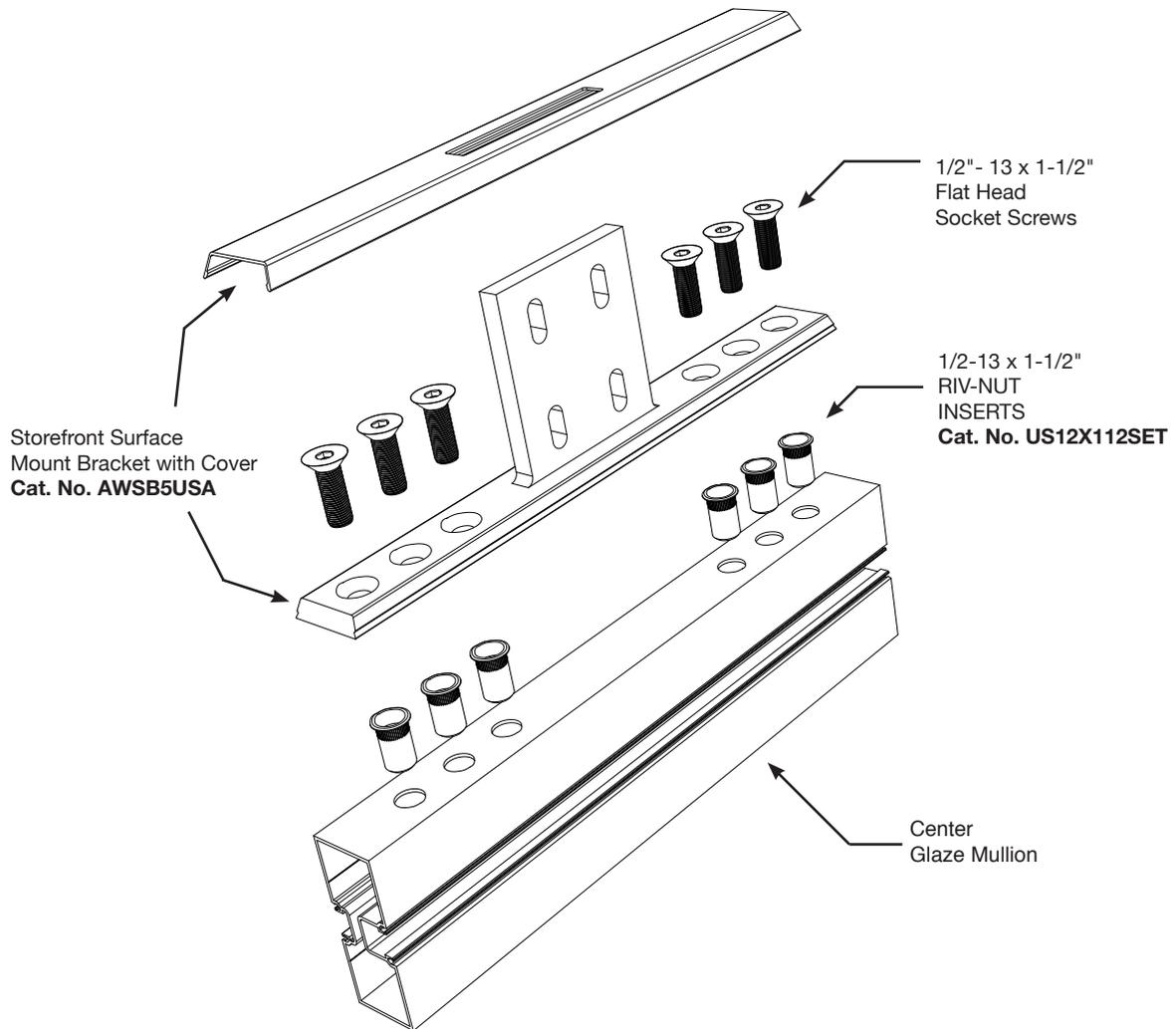
8. Attach end cap base to end outrigger with (2) **ST251** #10 X 1" HH SMS.



DETAIL M

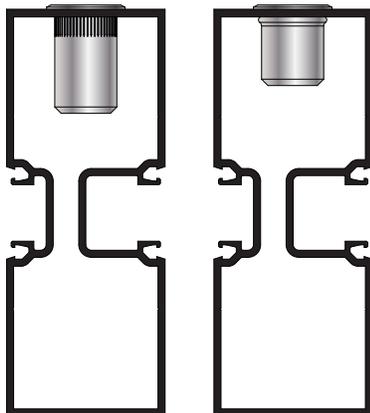
OPTIONAL CENTER GLAZE BRACKET INSTALLATION

Use bracket **AWSB5USA** when mounting a Sunshade System to a center glazed system. It is designed to mount to a flat surface and engineered to withstand the load generated by the outriggers.



UNCOMPRESSED

COMPRESSED



When using a **Cat. No. 34604** rivet nut compression tool, make sure that the insert is pushed completely into the prepared hole before compressing. (1/2" Mandrel for tool **Cat. No. M34614**)
The shoulder of the insert should be flush and straight against the mating surface.
The compressed rivet nut will bulge from below, pulling it tight against the work piece.

(See compression tool operating instructions for details.)



JOB SITE ESSENTIALS

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



CRL 95C Silicone Building Sealant



CRL RTV408 Neutral Cure Silicone



CRL33S Silicone Sealant



CRL M64 Modified Smooth Polyurethane Construction Sealant



CRL M66 Modified Grainy Polyurethane Construction Sealant



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



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



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



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



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



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



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



JOB SITE ESSENTIALS

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



CRL Bond Breaker Tape
CAT. NO. 827T2



CRL Glass Cutter
CAT. NO. TC17B



CRL Running Pliers
CAT. NO. PPG1



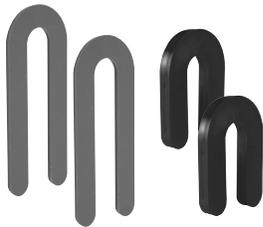
CRL Gasket Roller
CAT. NO. VR10



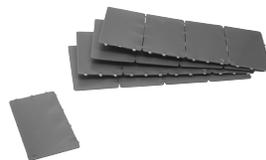
CRL Gasket Cutter
CAT. NO. MC80N



CRL Gloves
CAT. NO. KF1TL



CRL Plastic Horseshoe Shims



CRL 1/16" PBS Series Plastic Bearing Shimstrips
CAT. NO. PBS06



CRL Tape Measure
CAT. NO. 54125



CRL Utility Knife
CAT. NO. K82



CRL Utility Knife Blades
CAT. NO. 1992C



CRL Cordless Driver/Drill
CAT. NO. LD147