

# 2 1/2" SERIES 5600, 5900, 5500XT CENTER TONGUE SUNSHADE CLIP INSTALLATION MANUAL



Part NO. YSSS

February 2013

WHERE WINDOWS ARE JUST THE BEGINNING®



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**NOTE: THESE INSTALLATION INSTRUCTIONS ARE A SUPPLEMENT TO THE APPROVED SHOP DRAWINGS AND ARE TO BE USED IN CONJUNCTION WITH THOSE DRAWINGS.**

### Minimizing Condensation

Note: Please reference EFCO's "Understanding Condensation" brochure which can be obtained through your EFCO representative.

Condensation will form on any surface when unfavorable conditions (interior temperature and relative humidity and exterior temperature) are present. When the formation of excessive condensation is a concern, it is highly recommended that a design professional is utilized to perform an analysis of the shop drawings to recommend the best possible installation methods. Please contact your EFCO representative for information on EFCO's Thermal Analysis Services.

Many current installation practices lead to an increase in the possibility of the formation of condensation. Though not all inclusive, the list of examples below illustrates conditions under which condensation is likely to occur:

1. Bridging system thermal break with non-thermally broken metal flashing or lintels that are exposed to the exterior
2. System exposure to cold air cavities
3. Interior relative humidity levels not maintained at recommended levels, see EFCO's "Understanding Condensation" brochure
4. Inadequate separation between system and surrounding condition at perimeter
5. Product combinations during the shop drawing stage that result in bridging thermal breaks of one or all products involved

## **SECTION I: GENERAL NOTES**

- I HANDLING / STORING / PROTECTING ALUMINUM-** The following precautions are recommended to assure early acceptance of your products and workmanship.
- A. HANDLE CAREFULLY-** Store with adequate separation between components so the material will not rub together. Store material off the ground. Protect materials against weather elements and other construction trades.
  - B. KEEP MATERIAL AWAY FROM WATER, MUD, AND SPRAY -** Prevent cement, plaster, and other materials from coming into contact with and damaging the finish. Do not allow moisture to be trapped between the finished surface and the wrapping material.
  - C. PROTECT MATERIALS AFTER ERECTION-** Wrap or erect screens of plastic sheeting over material. Cement, plaster, terrazzo, and other alkaline materials are very harmful to the finish and need to be removed with soap and water before hardening. Under no circumstances should these materials be allowed to dry or permanent staining will occur.
- II GENERAL GUIDELINES-** The following practices are recommended for all installations:
- A. REVIEW APPROVED SHOP DRAWINGS –** Become thoroughly familiar with the project. Shop drawings govern when conflicting information exists in these installation instructions.
  - B. INSTALL ALL FRAMING MATERIAL PLUMB, LEVEL, AND TRUE –** Proper alignment and relationships to benchmarks and column centerlines, as established by the architectural drawings and the general contractor, must be maintained.
  - C. THE SEQUENCE OF ERECTION SHOULD BE COORDINATED WITH THE PROJECT SUPERINTENDENT TO PREVENT DELAYS AND MINIMIZE THE RISK OF MATERIAL DAMAGE. NOTE: IF PRESET ANCHORS ARE REQUIRED, COORDINATE AND SUPERVISE ANCHOR PLACEMENT WITH THE GENERAL CONTRACTOR.**
  - D.** Verify that all job site conditions and accompanying substrates receiving the installation are in accordance with the contract documents. If deviations occur, notification must be given **IN WRITING** to the general contractor and differences resolved before proceeding further with the installation in the questionable area.
  - E.** Prevent all aluminum from coming in direct contact with masonry or dissimilar materials by means of an appropriate primer
  - F.** Follow the EFCO framing installation and glazing instructions.

## **SECTION I: GENERAL NOTES CONTINUED**

- G.** Verify contents of all material shipments received upon arrival. Verify quantity and correct finishes. **NOTIFY EFCO IMMEDIATELY OF ANY DISCREPANCIES OR DAMAGE, THAT MAY HAVE OCCURRED.**
- H.** Throughout these instructions the term "**SEALANT**" will appear. For the purposes of these instructions, sealant is to be defined as the following:

SEALANT - A weather resistant, gunnable liquid filler which when dry provides a resilient, flexible ( $\pm$  50% movement capability) air and water seal between similar and dissimilar materials.

All sealant must meet **FEDERAL SPECIFICATION TT-S-001543A, TT-S-00230C, AND ASTM C 920, CLASS 25.**

**BUTYL SEALANT-** A nonskinning, nonhardening material (**NAAMM Reference Standard 5C-1**)

**NOTE:** All sealant must be compatible with all surfaces on which adhesion is required, including other sealant surfaces. All frame surfaces should be clean, dry, dust, and frost free. If a primer is required, it must be applied to clean surfaces. All perimeter substrates shall be clean and properly treated to receive sealant.

This system is designed and has been tested to utilize butyl or silicone sealants at all internal joineries, i.e., joint plugs, gasket intersections, etc.

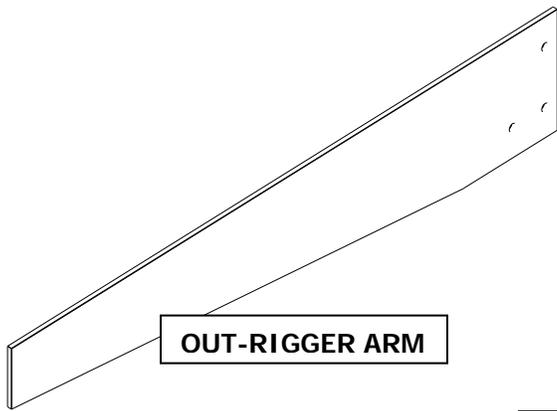
Regardless of the sealant used, the customer should contact the sealant manufacturer to determine compatibility and adhesion. Follow sealant manufacturer's proper application procedures and quality assurance programs for weather sealing.

Maintain caulk joints as shown in the approved shop drawings. Unless specified otherwise, most sealant manufacturers recommend a 3/8" minimum perimeter caulk joint. A 3/4" minimum joint is recommended at the head condition to accommodate thermal expansion and contraction. A 3/4" minimum joint is required at the jamb conditions to accommodate installation.

Anchoring surfaces of perimeter construction must be level and plumb within the adjustable limits of the head, jamb, and sill framing.

- I.** The sunshade has been designed to allow 3/16" spacing between the sunshade clip and the sunshade arm. This will allow for tolerance and clearance between the clip and the arm.
- J.** The sunshade clip is designed to use 3/4" tall covers as a standard and as a minimum.

# **SECTION II: PARTS IDENTIFICATION**



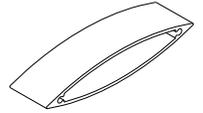
**OUT-RIGGER ARM**



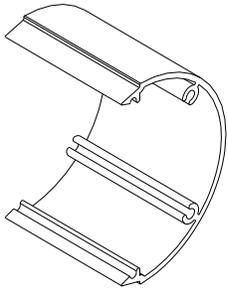
**SUNSHADE CLIP**



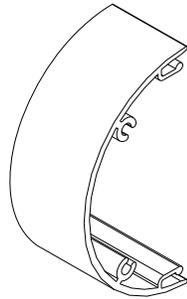
**SUNSHADE PRESSURE PLATE**



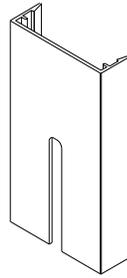
**AIR-FOIL BLADE**



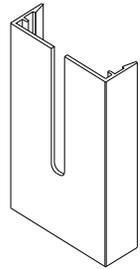
**BULLNOSE BASE**



**BULLNOSE COVER**



**UPPER COVER W/ NOTCH**



**LOWER COVER W/ NOTCH**



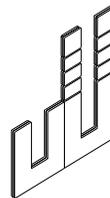
**PRESSURE PLATE SCREW**



**OUT-RIGGER ARM ATTACHMENT BOLT**

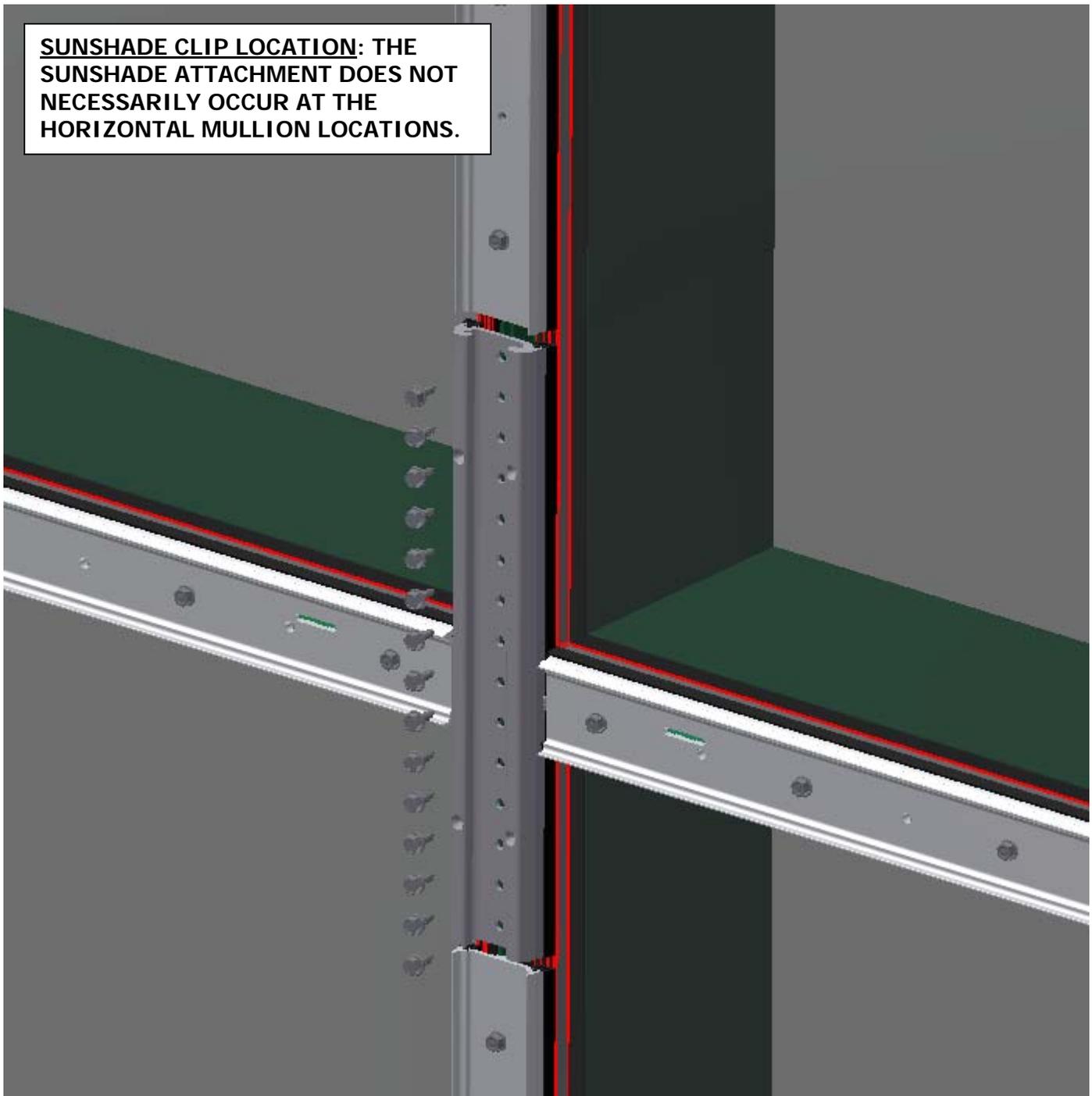


**SUNSHADE CLIP ATTACHMENT SCREW**



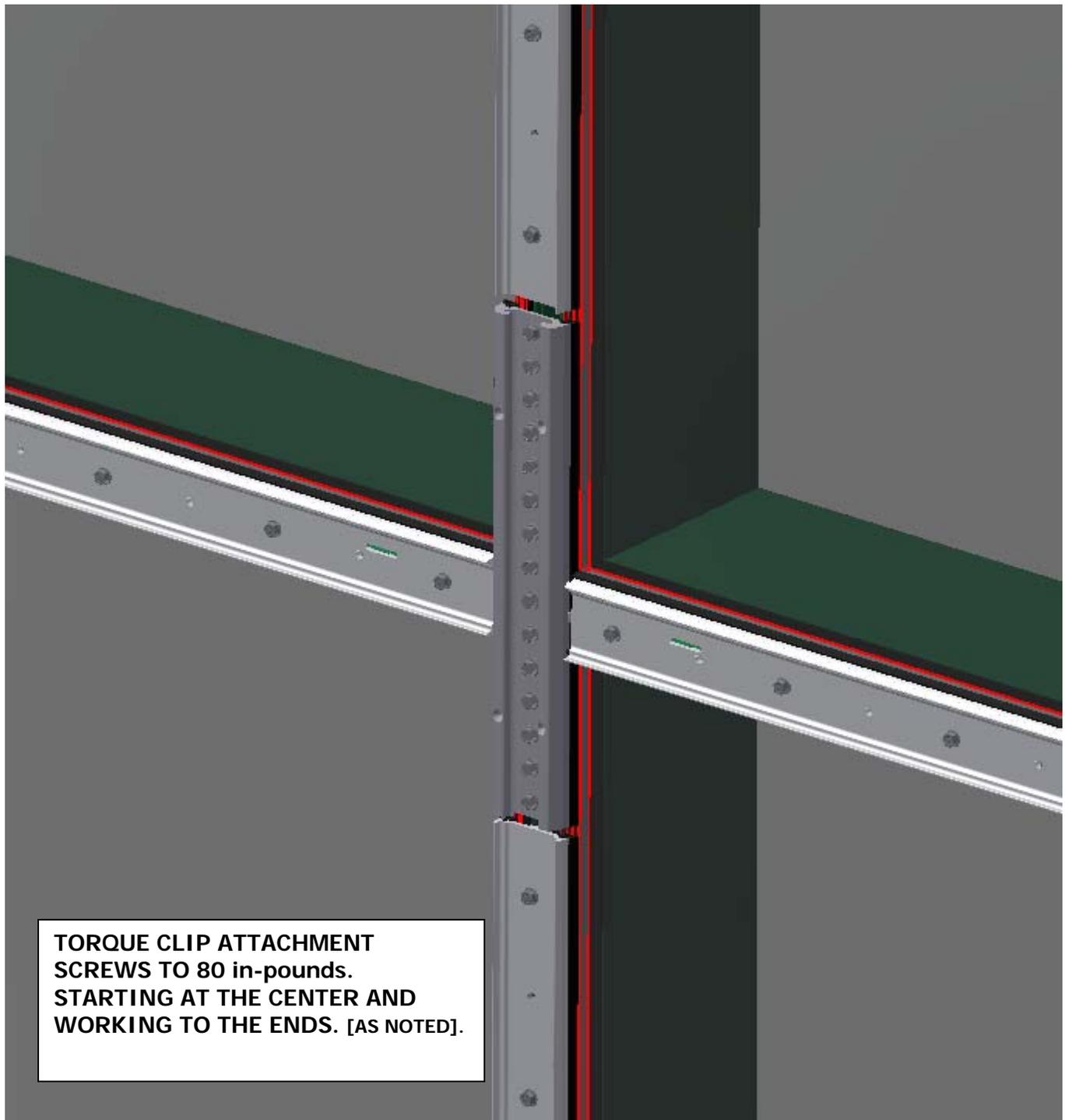
**1/16" POLY-SHIM**

## **SECTION III: SUNSHADE PRESSURE PLATE** **ATTACHMENT**



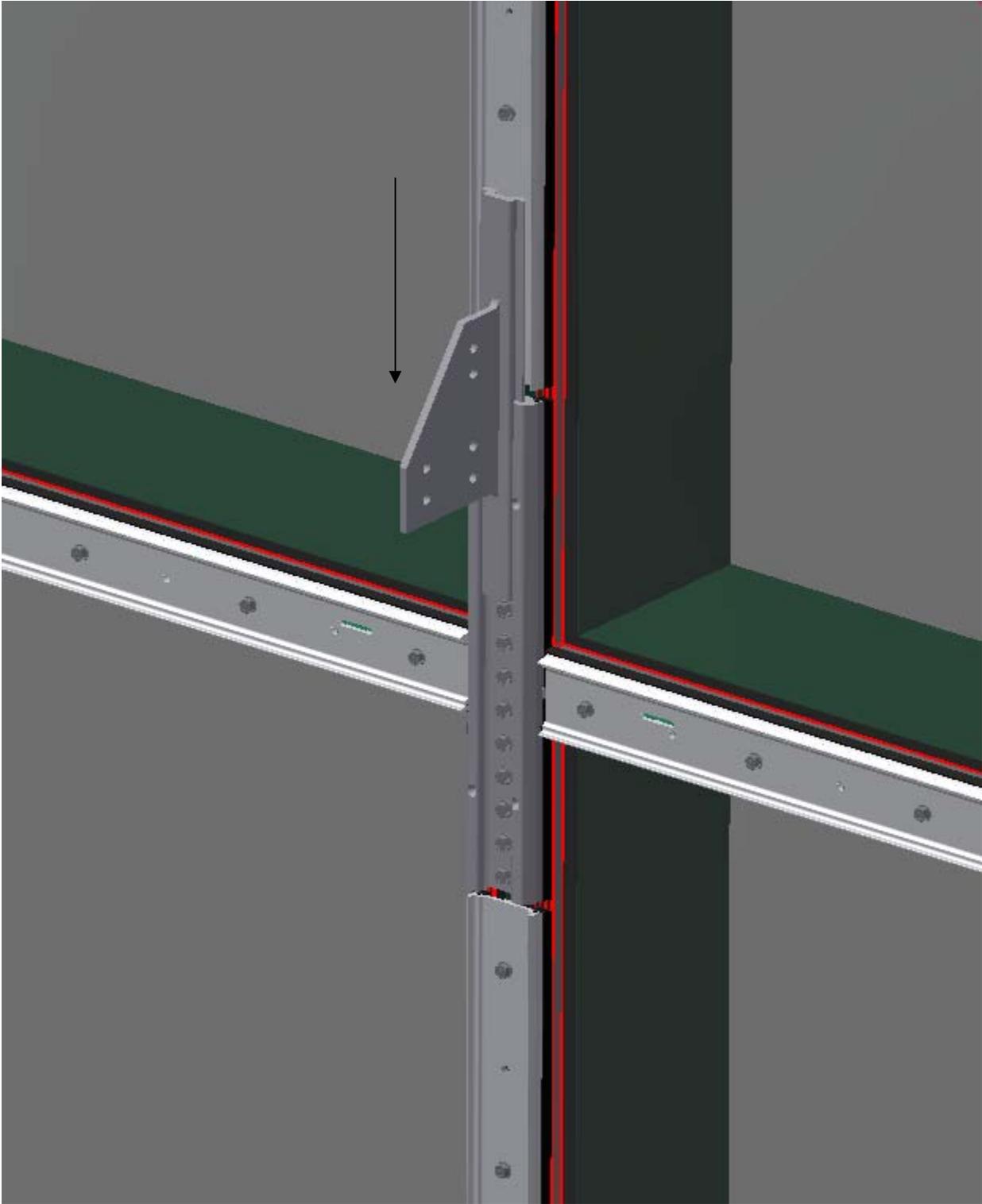
Locate the sunshade pressure plate and install with all the adjacent pressure plates. It is crucial that the sunshade pressure plate be located properly. Half of the pressure plate height will be the centerline for the sunshade clip. The sunshade pressure plate is 15" in length. Fasten the sunshade pressure plate with the appropriate fasteners as recommended (Based on structural review and shop drawings). It is recommended to leave 1/8" to 1/4" gap between the sunshade pressure plate and the adjacent vertical pressure plate. This gap will be sealed with silicone.

## **SECTION III: SUNSHADE PRESSURE PLATE** **ATTACHMENT**



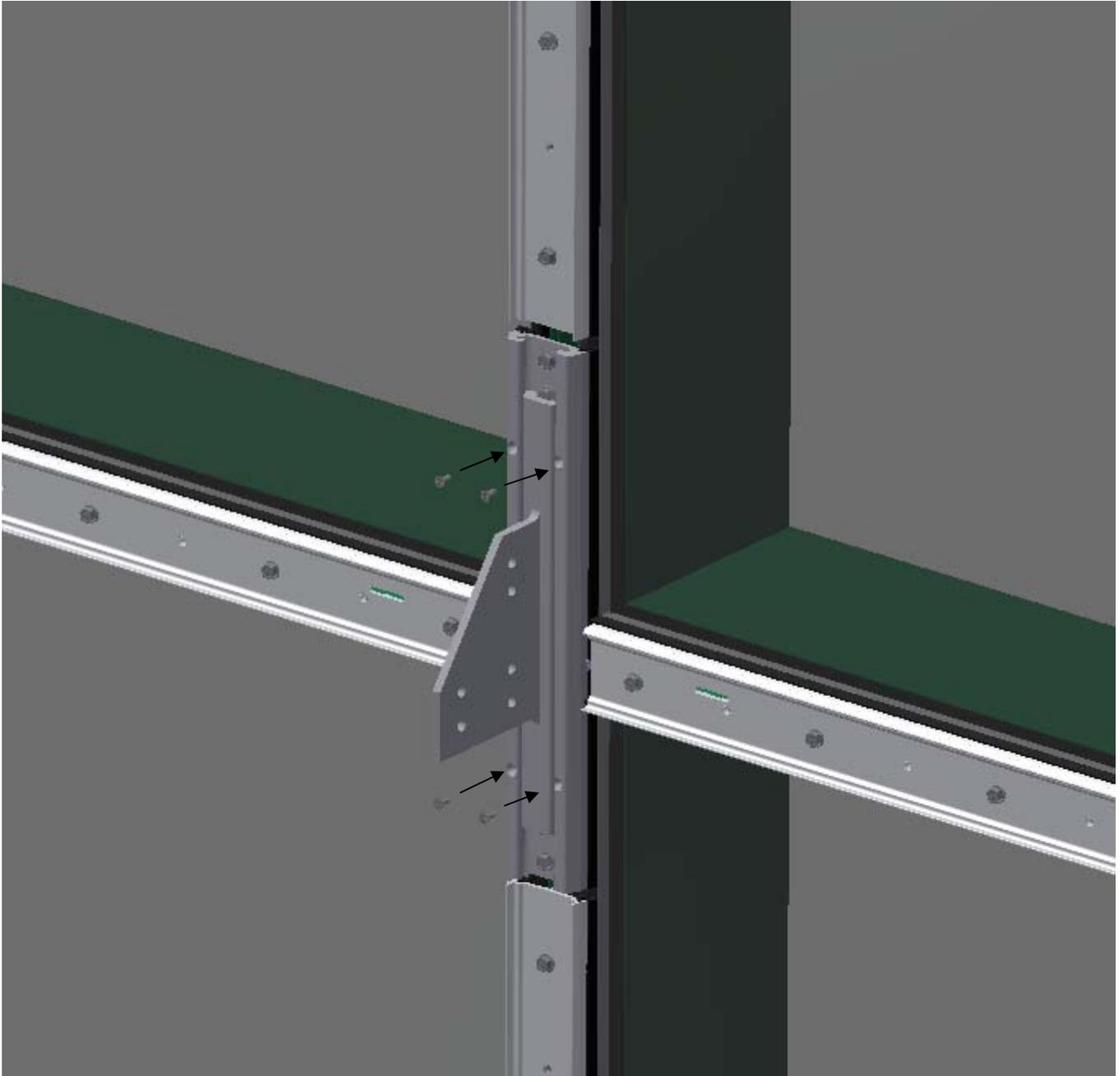
The sunshade pressure plate is now ready to have the sunshade clip slid in place. This may be done now or at a later time of assembly, but prior to the cover installation.

**SECTION IV: SUNSHADE CLIP ATTACHMENT**



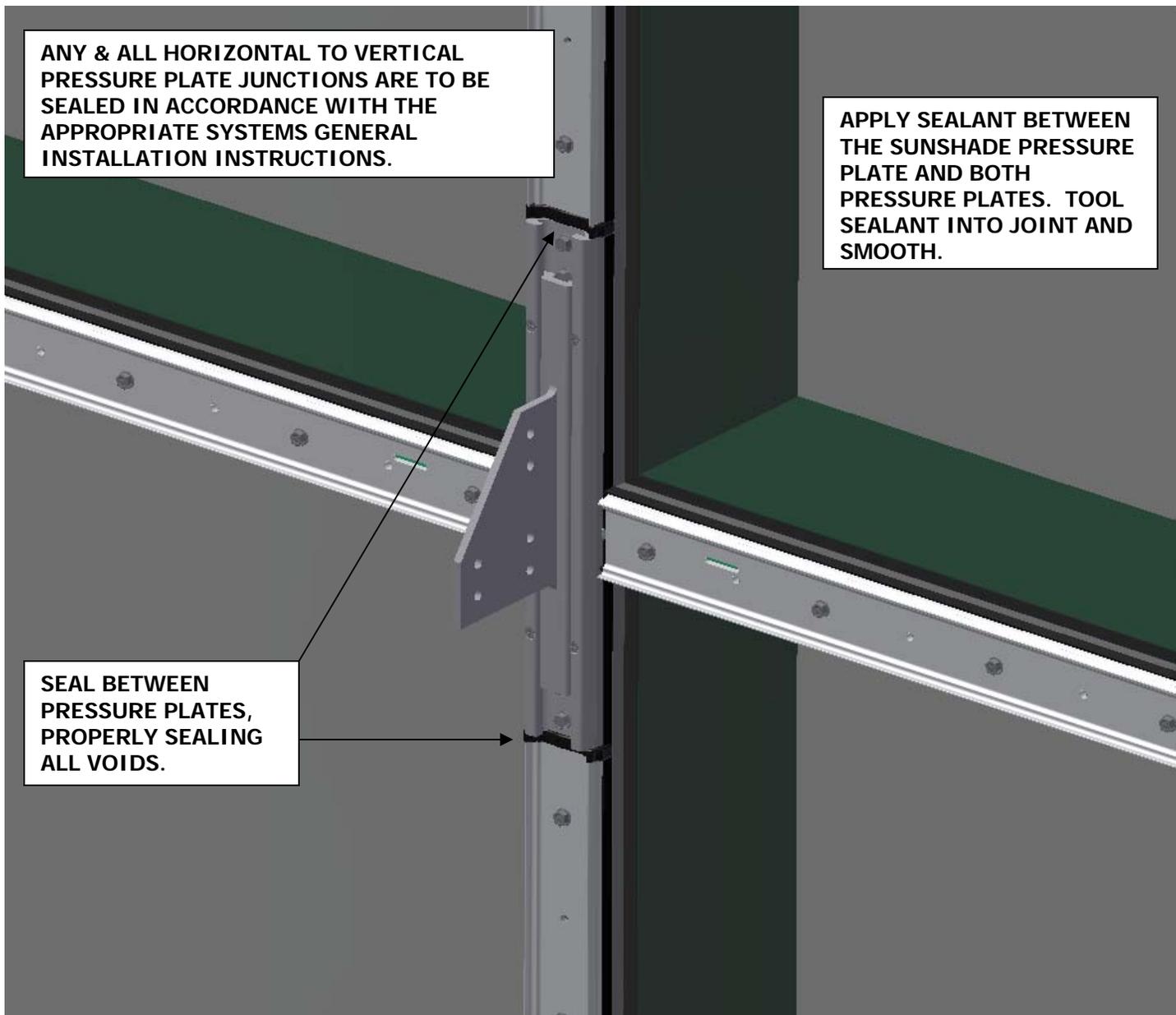
Slide the sunshade clip into place.

## **SECTION IV: SUNSHADE CLIP ATTACHMENT**



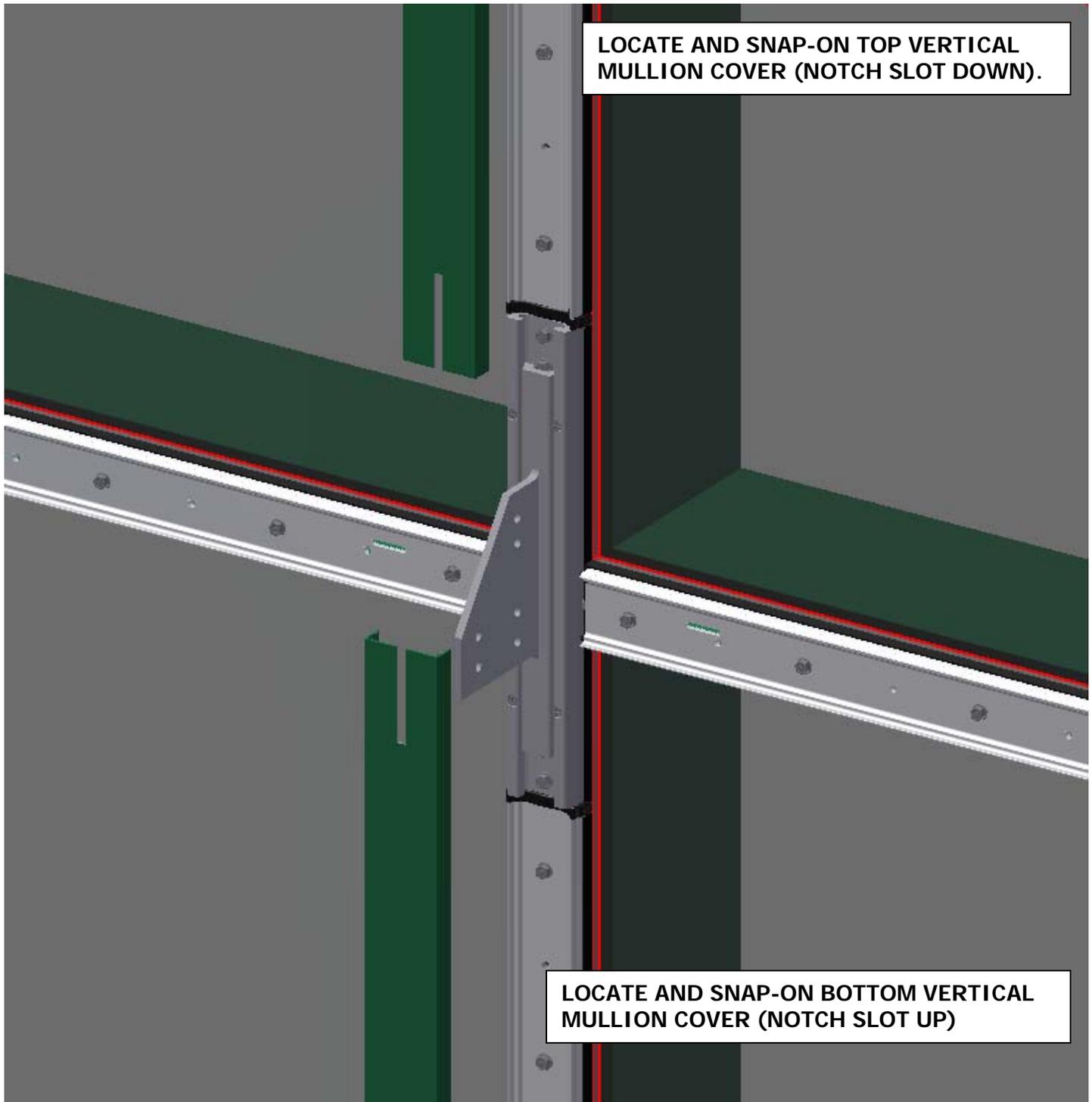
Once located, match drill ( 9/64" dia.) through the four holes in the face of the sunshade pressure plate into the sunshade clip and attach with SFZ8 fasteners (#8 x 1/2" F.H. SMS). Do not drill through the pressure plate into the glazing pocket.

## **SECTION V: SUNSHADE CLIP SEALING**



Sealant must be applied between the pressure plates. Applying sealant after the sunshade clip is in place insures that the sunshade clip will slide into place.

## **SECTION VI: SUNSHADE COVER INSTALLATION**

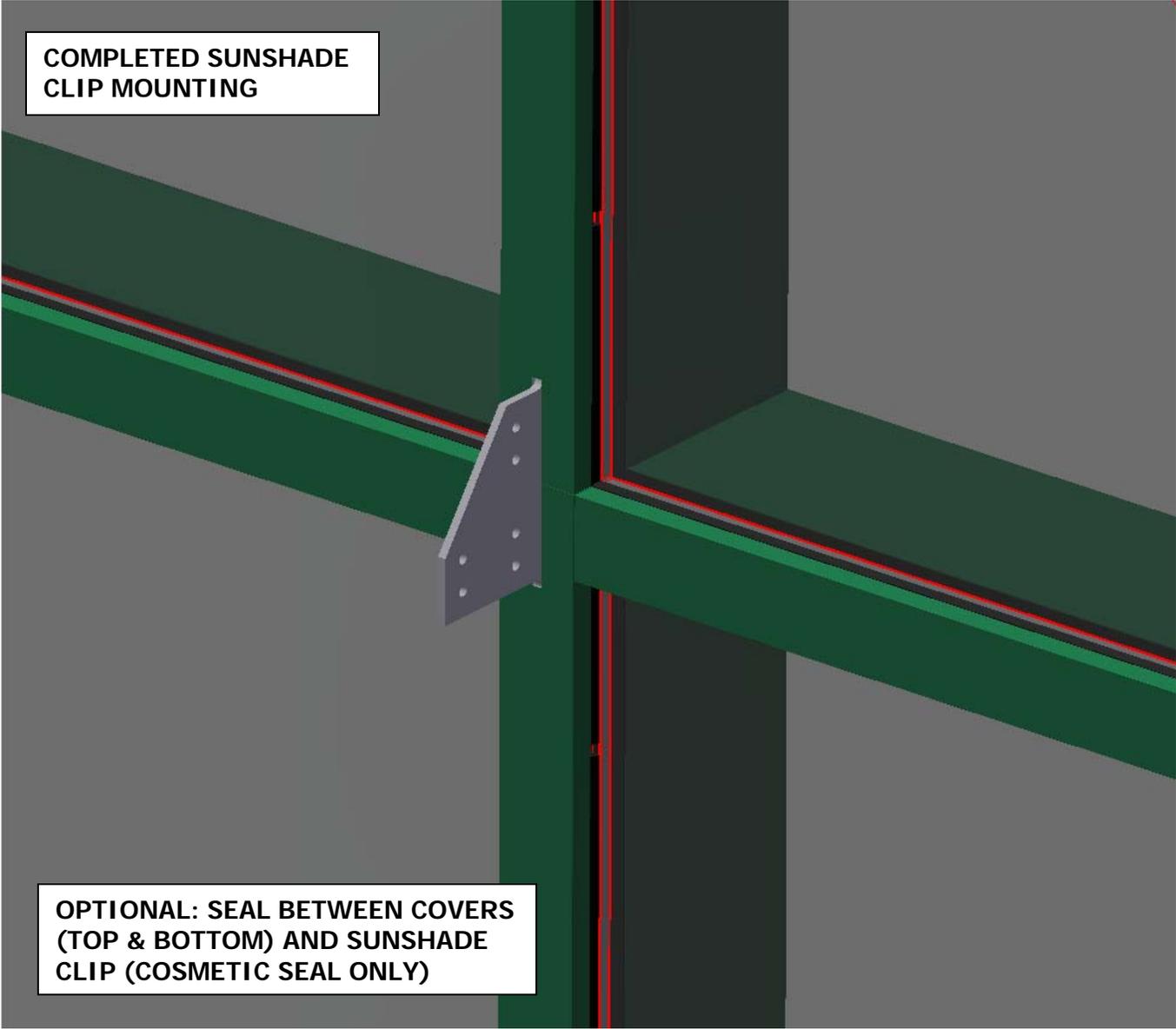


Locate and fabricate covers to fit over sunshade clip as shown. Snap-on the bottom cover. Then snap-on the top cover.

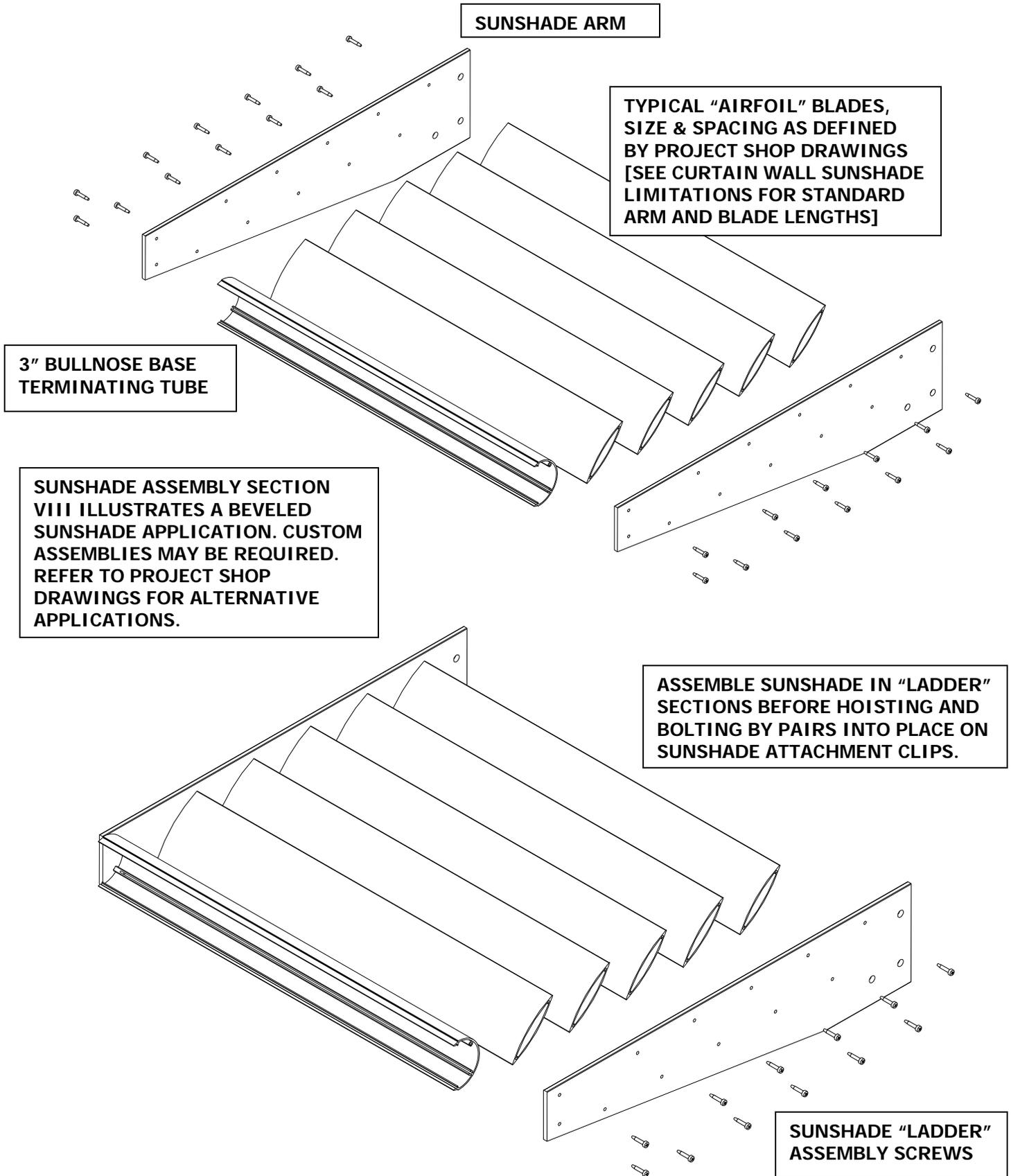
Continue to snap on the horizontal covers per individual installation instructions.

Note: This sunshade clip design is to be used with  $\frac{3}{4}$ " tall covers as a standard and as a minimum.

**SECTION VII: COMPLETED SUNSHADE CLIP ATTACHMENT**



## **SECTION VIII: SUNSHADE ASSEMBLY**



**SUNSHADE ARM**

**TYPICAL "AIRFOIL" BLADES,  
SIZE & SPACING AS DEFINED  
BY PROJECT SHOP DRAWINGS  
[SEE CURTAIN WALL SUNSHADE  
LIMITATIONS FOR STANDARD  
ARM AND BLADE LENGTHS]**

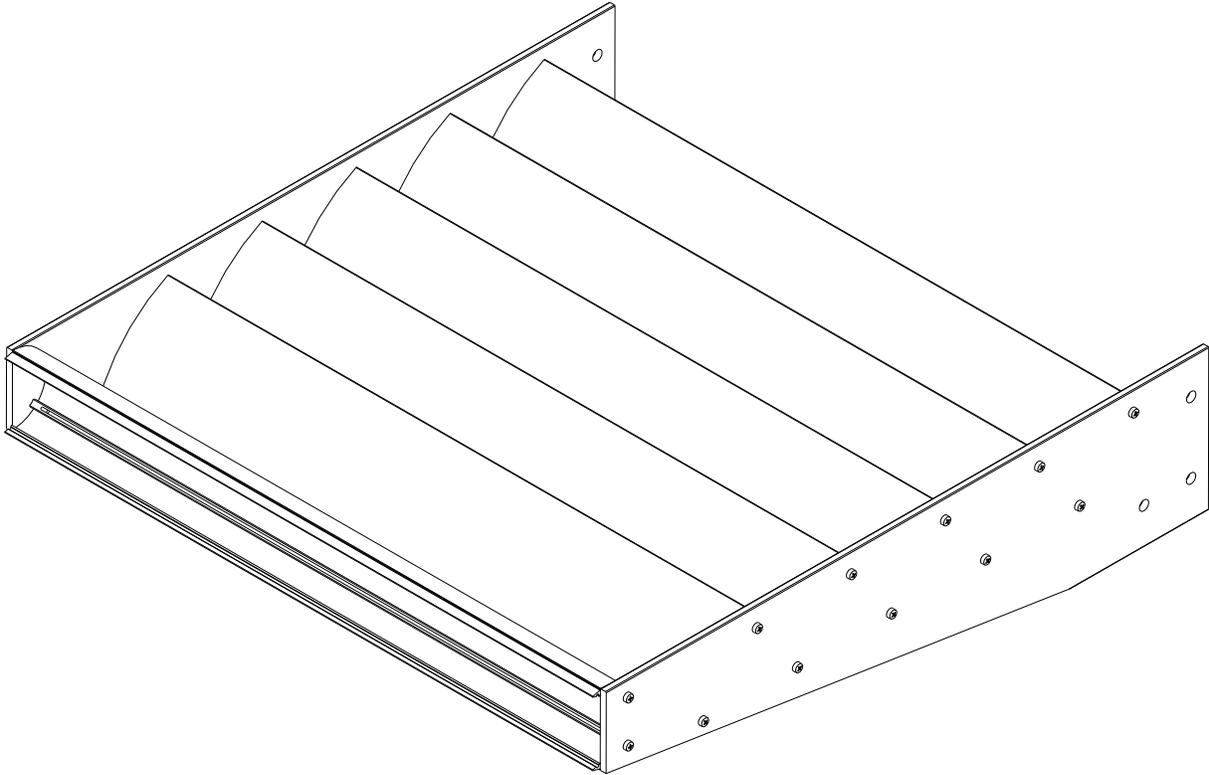
**3" BULLNOSE BASE  
TERMINATING TUBE**

**SUNSHADE ASSEMBLY SECTION  
VIII ILLUSTRATES A BEVELED  
SUNSHADE APPLICATION. CUSTOM  
ASSEMBLIES MAY BE REQUIRED.  
REFER TO PROJECT SHOP  
DRAWINGS FOR ALTERNATIVE  
APPLICATIONS.**

**ASSEMBLE SUNSHADE IN "LADDER"  
SECTIONS BEFORE HOISTING AND  
BOLTING BY PAIRS INTO PLACE ON  
SUNSHADE ATTACHMENT CLIPS.**

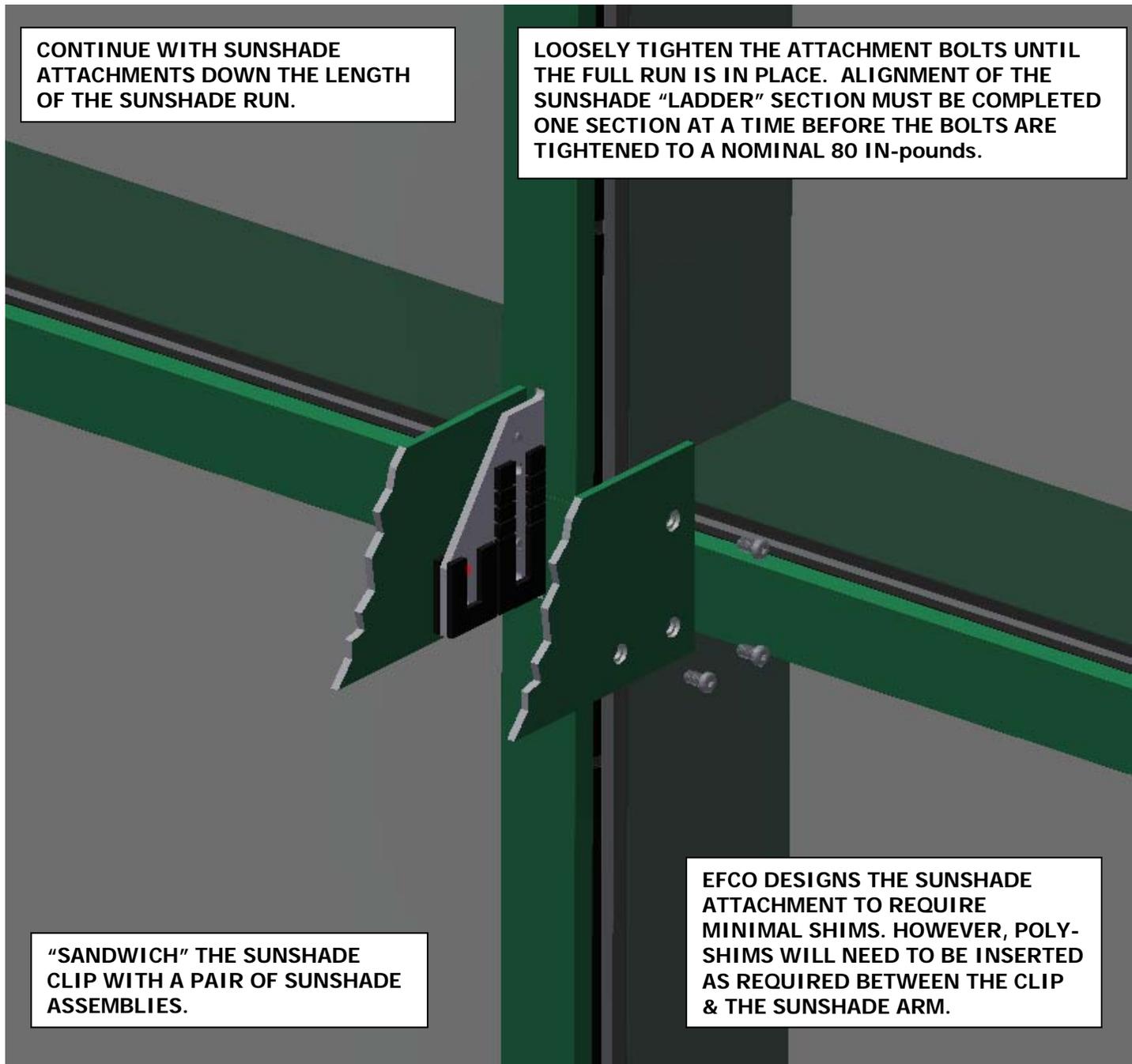
**SUNSHADE "LADDER"  
ASSEMBLY SCREWS**

**SECTION VIII: SUNSHADE ASSEMBLY**



**COMPLETED SUNSHADE "LADDER" SECTION**

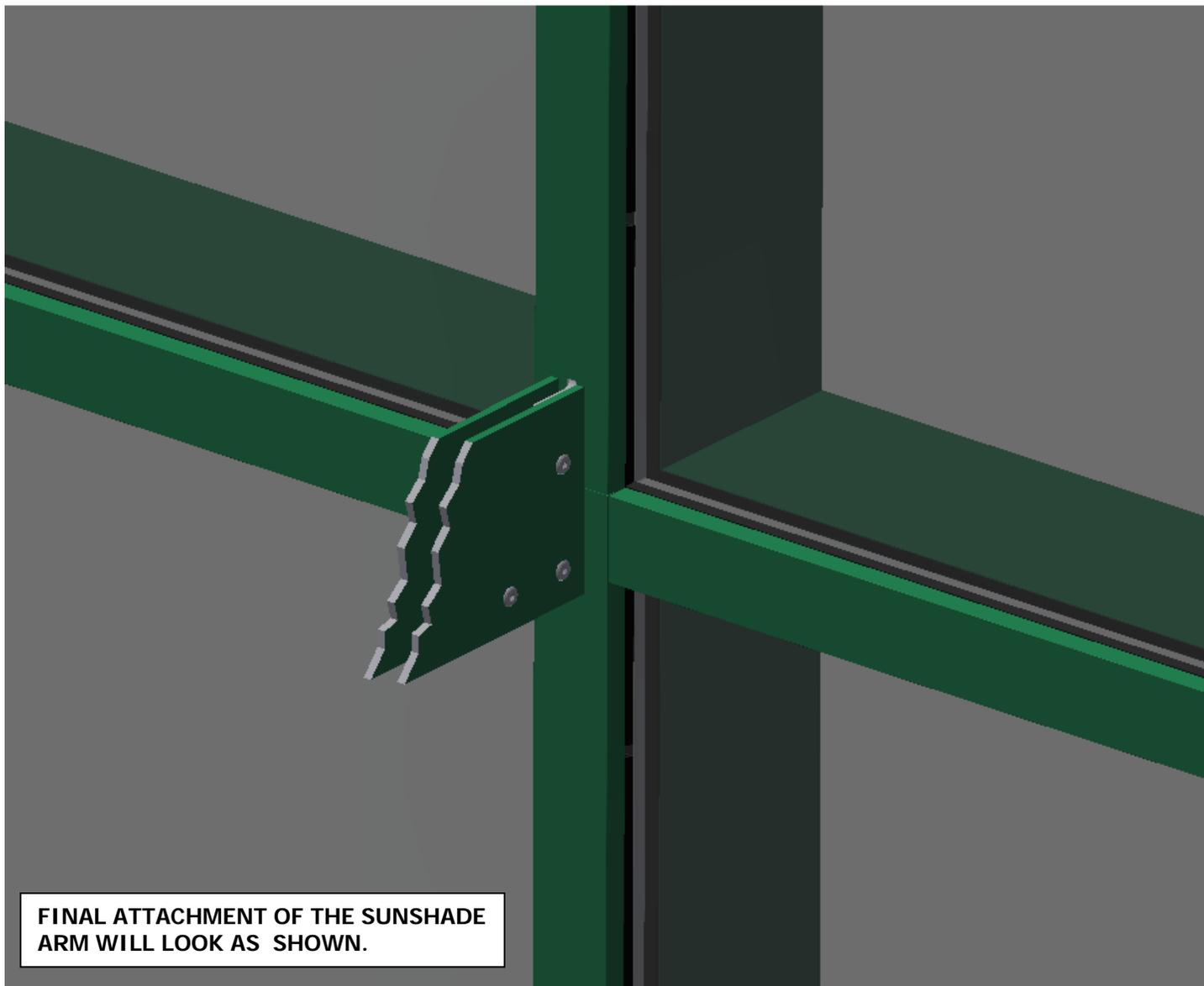
## **SECTION IX: SUNSHADE ATTACHMENT**



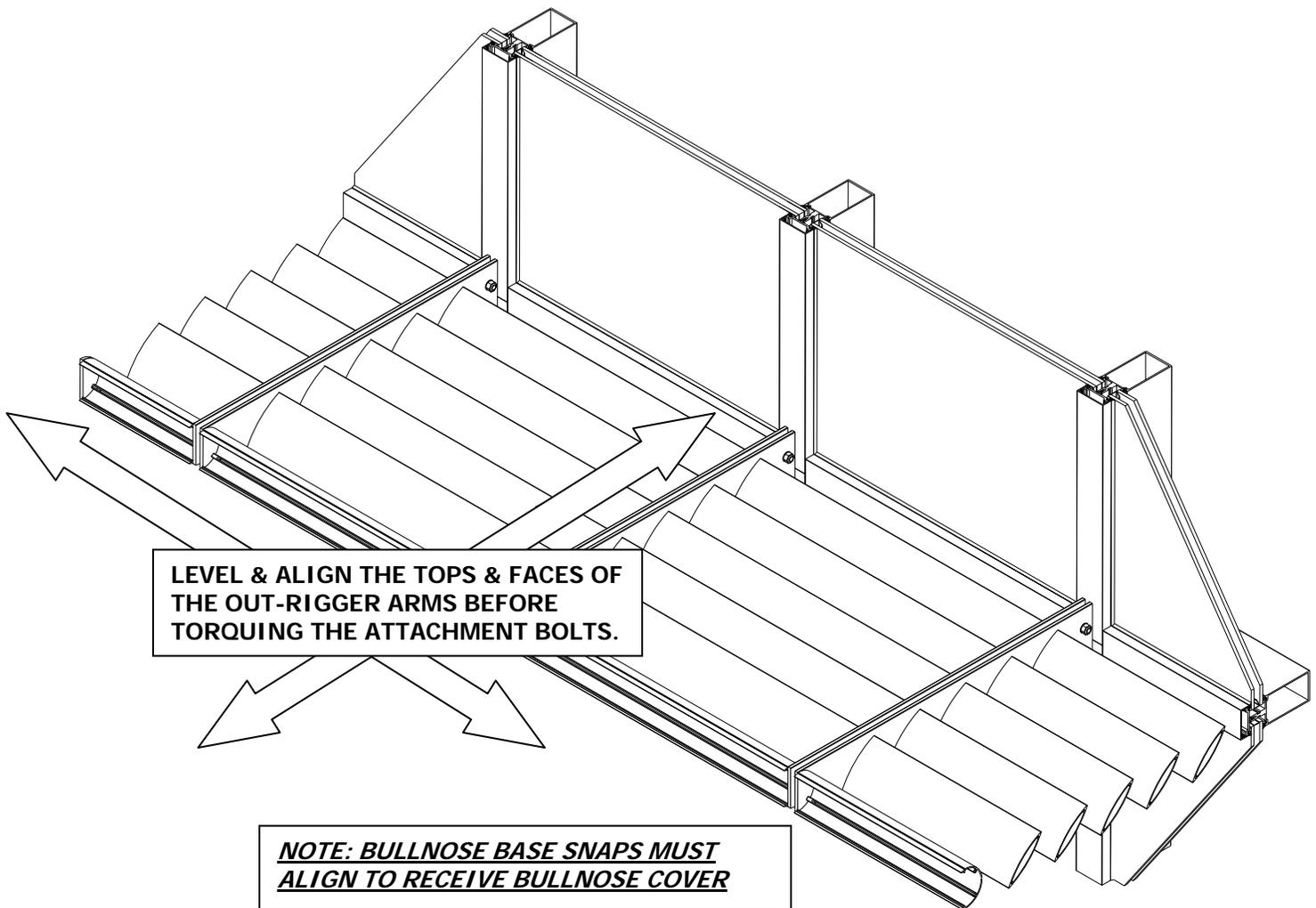
This particular sunshade is designed to attach one sunshade at a time. Continue with the sunshade attachment down the sunshade run.

There will be six sunshade arm attachment holes in the sunshade clip. Be sure that the three holes in the sunshade arm are in the correct location with the sunshade clip for proper alignment of the sunshade arms.

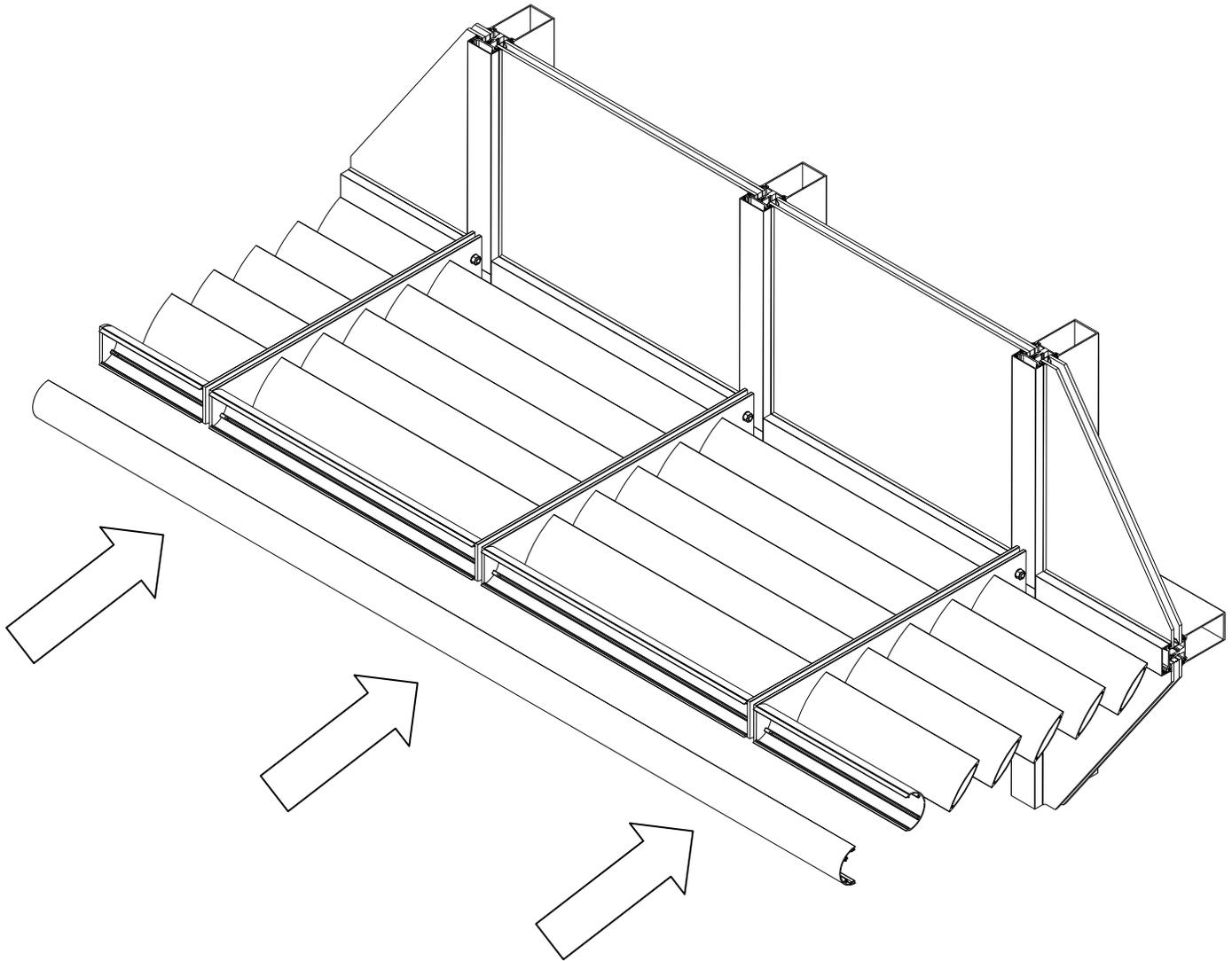
## **SECTION IX: SUNSHADE ATTACHMENT**



## **SECTION X: SUNSHADE LEVELING & ALIGNMENT**

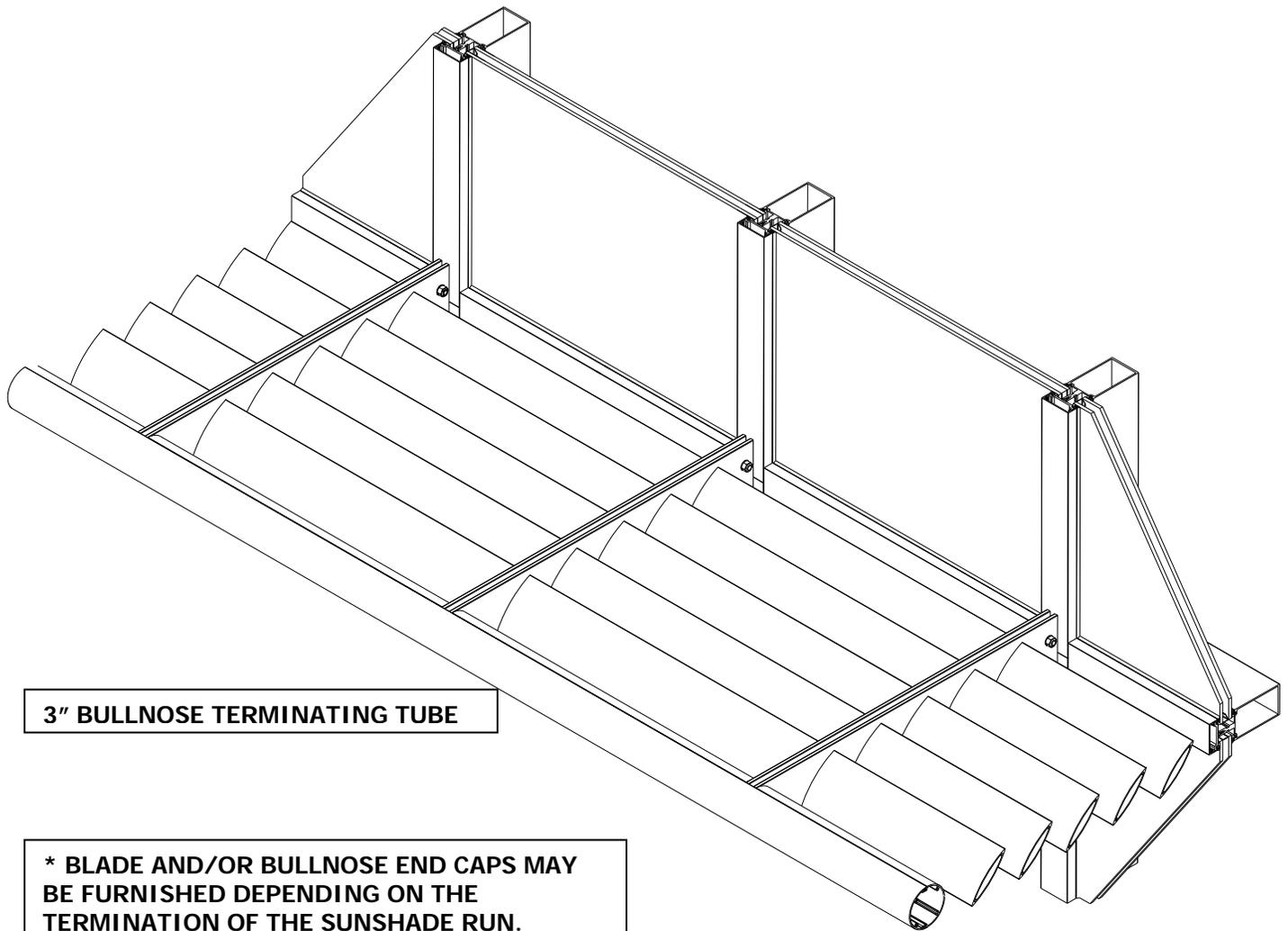


## **SECTION XI: SNAP-ON CONTINUOUS BULLNOSE COVER**



**SNAP-ON THE BULLNOSE COVER: DEPENDING ON THE LENGTH OF THE RUN AND THE ACCURACY OF SUNSHADE LADDER LEVELING ALIGNMENT; USE OF "C" CLAMPS MAY BE NECESSARY. BE CAREFUL TO PROTECT THE FINISH FROM BEING MARRED BY THE "C" CLAMPS AS THEY ARE TIGHTENED TO ENGAGE THE SNAP. ON LONG RUNS, IT IS HIGHLY RECOMMENDED TO PIN THE COVER BY MATCH DRILLING THROUGH THE TOP-SIDE SNAP AND RUNNING A COUPLE OF #6 SCREWS NEAR THE MID-POINT OF THE RUN.**

# **SECTION XI: SNAP-ON CONTINUOUS BULLNOSE COVER**



**3" BULLNOSE TERMINATING TUBE**

**\* BLADE AND/OR BULLNOSE END CAPS MAY BE FURNISHED DEPENDING ON THE TERMINATION OF THE SUNSHADE RUN. TYPICALLY THESE CAPS ARE SCREW APPLIED LAST TO DRESS THE EXPOSED ENDS OF THE SUNSHADE BLADES / BULLNOSE. REFER TO THE PROJECT SHOP DRAWINGS FOR SPECIFIC SUNSHADE TERMINATING DETAIL (S).**

**END CAPS OPTIONAL \***

**END OF INSTRUCTION**