

Tools Required

- Phillips Head Screwdriver
- Flat Head Screwdriver
- Caulk Gun
- Exterior Grade Sealant
- Putty Knife
- Drill

CAUTION! POWER TOOLS MAY STRIP OUT THE SCREW HOLES.

Kit Contents

- (1) Tubular Mullion - 1x4 (230295)
- (2) Mullion H-Clip (230301)
- (4) #8 x 3/4" Phillips FH self-drilling (441080)
- (6) #12 x 3/4" Phillips FH self-drilling SMS (441079)

Note - the #12 screws are only used for 2-way mullions



IMPORTANT: READ ALL INSTRUCTIONS BEFORE BEGINNING INSTALLATION.

- Please confirm that you've received all required parts before proceeding with the installation.
- For proper operation, the parts must be installed in the sequence shown.
- Please note that the installation photos were taken with sample components.



WARNING: This 1" Tubular Mullion system can accommodate windows with flanges up to a 1/2" wide. If the flanges are wider than this, the flanges will cause interference on the tube mullion face. **The HVHZ Tubular H-mullion must be installed per Florida Product Approval #6067.**

1. Check opening to ensure that it is plumb, level and square prior to installing the mullion and windows. **(Fig. 1)**

Verify the rough opening height is sized per the window manufacturer's requirements. Example: window height plus shim spacing. If the mullion is too long, cut it down to proper size.

Verify the rough opening width is sized per the window manufacturer's requirements. Example: the sum of the interior widths of all the windows to be installed plus 1 inch for each mullion used plus shim spacing.

Example: If you intend to mull two windows together that are 36" wide, the rough opening would need to be 73-1/2" with a manufacturer requirement for 1/4" shim spacing at the jambs.

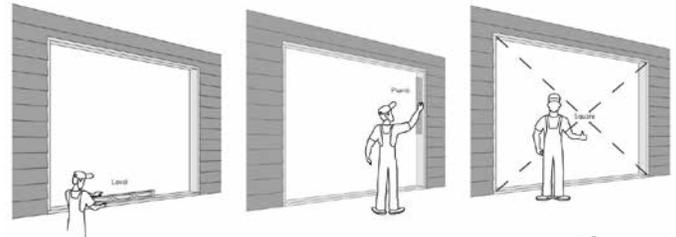


Figure 1

2. The next step is to locate and mark the center of the mullion on both the rough opening of the sill and head (for two windows that will be mulled together).

2a. Measure the width of one window that is intended to be mulled and shim spacing (mentioned in step 1), and 1/2" for the mullion (half the 1" mullion width)

2b. Starting from the jamb of the opening of which the window will be positioned, use the measurement from Step 2a and mark both the head and sill (**Fig. 2**).

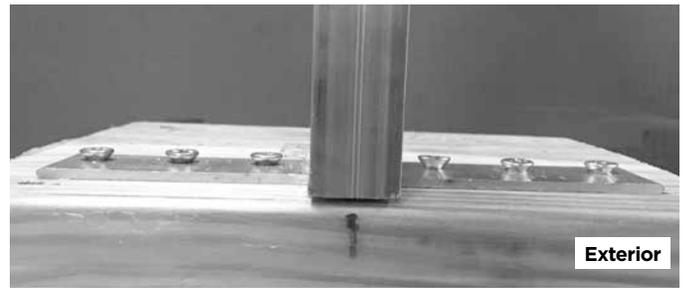


Figure 2

Note: These steps are for two windows. If multiple units are mulled together, the mullion location marks must be stacked from one end and measured so that the center to center locations of the mulls account for only the window width and no clearance for shims. The window jambs must be butted up against the mullions.

3. Slip the mullion anchor clips into the top and bottom of the mullion and slide the mullion assembly into the opening (**Fig. 3a**). The "V" groove extruded into the mullion **MUST** be positioned to the exterior of the opening (**Fig. 3b**).

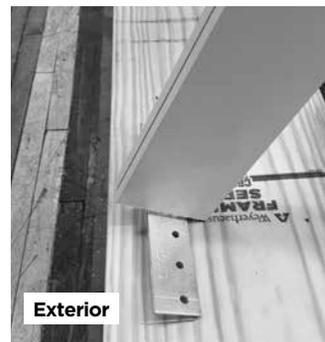


Figure 3a

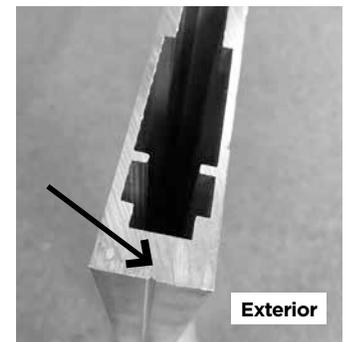


Figure 3b

4. Align the mullions with the marks from Step 2 at the head, sill and the exterior of the substrate (**Fig. 4a**). The H-clip must be positioned with the stamped word "OUT" and arrow pointing towards the exterior of the opening (**Fig. 4b**).

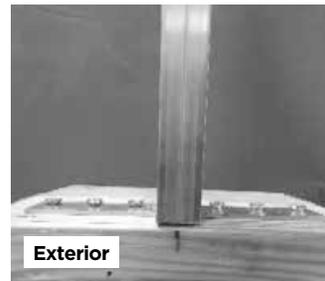


Figure 4a

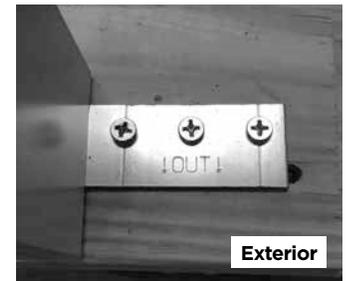


Figure 4b

5. Position the H-clip approximately 1-1/4" from the exterior edge of the rough opening so that the exterior face of the mullion is flush with the opening. (**Fig. 5a**). Install the anchor clips per Florida Product Approval #6067 depending on the substrate being used (**Fig. 5b**).

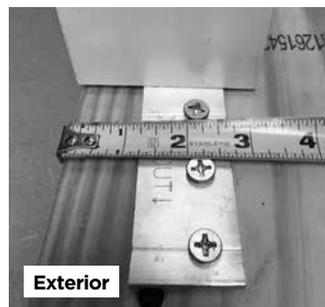


Figure 5a



Figure 5b

- Shim the H-mullion in the opening so that the clearance between the H-mullion and the rough opening is equally split between the head and the sill. **(Fig. 6)**



Figure 6

- The H-mullion must be secured to the H-mullion clip per Florida Product Approval #6067 by using the supplied #8 self-drilling screws. For reference, the detail from FL #6067 is shown in **(Fig. 7a)**.

CAUTION: Inspect the windows to be installed in the sill and head ends of the jamb for extrusion walls **(Fig. 7b)** that would cause interference with the #8 screws **(Fig. 7c)** resulting in a gap between the window jamb edge and the mullion **(Fig. 7d)**. The location of the #8 screws may need adjusted to avoid interference and ensure that the window jambs are butted against the edge of the tubular mull after anchors are installed **(Fig. 7e)**.

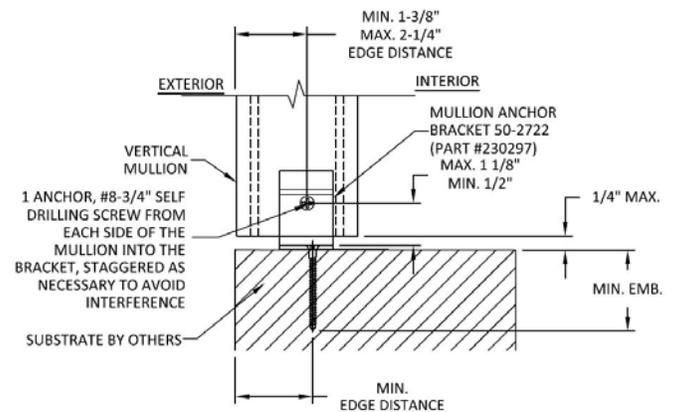


Figure 7a

Note: The images in **Figures 7b-7e** show the Ply Gem 4700 series Aluminum windows. Other windows would need to be checked in a similar fashion.

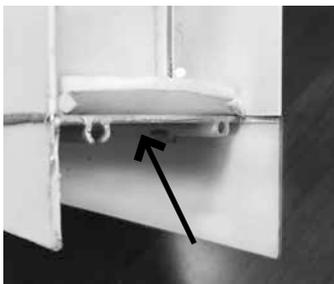


Figure 7b

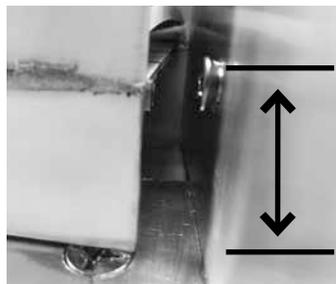


Figure 7c

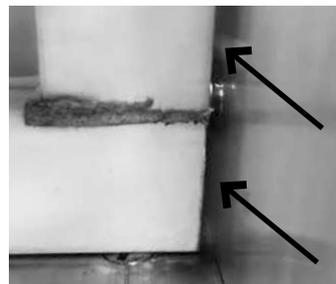


Figure 7d

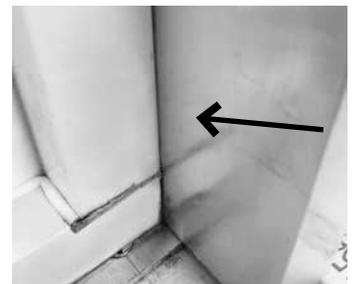


Figure 7e

- Once the four #8 screws are installed per Step 7 **(Fig. 8a)**, run a 1/2" diameter bead of silicone caulk starting at the H-clip and continuing along both sides and across the exterior of the H-mull at both the head and sill ends of the H-mull **(Fig. 8b)**.



Figure 8a



Figure 8b

9. Apply a ½” diameter bead of silicone exterior grade sealant in the center of the exterior H-mullion face (indicated by the BOLD line in the photos) running the full length from the head (**Fig. 9a**) to the sill (**Fig. 9b**).



Figure 9a



Figure 9b

10. Prior to installing aluminum windows, apply a ½” bead of exterior grade sealant on the back side of the flange in the corners to ensure a water resistant installation. (**Fig. 10**)

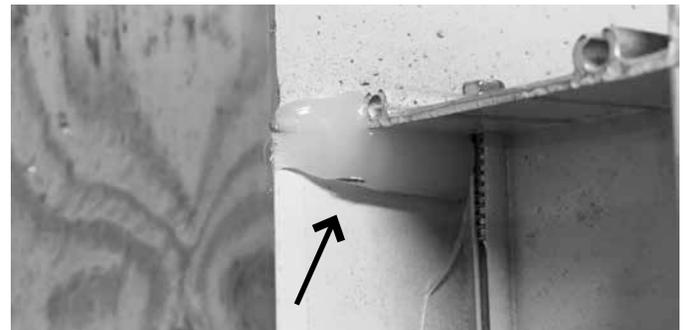


Figure 10

11. When installing the windows, be aware the #8 screw heads protrude slightly above the surface of the tubular mullion (**Fig. 11a**) and it will be necessary to manipulate any interior flanges of the window past them which can be facilitated by setting the mullion jamb side of the window in first and rotating the opposite jamb of the window inward so that there is no gap along the mullion-window jamb edge (**Fig. 11b**). Install the window anchors into the tubular mullion per the window installation instructions.



Figure 11a



Figure 11b

CAUTION: Ensure that the window jambs are butted against the edge of the tubular mullion after anchors are installed.

12. Finish the installation by sealing the windows per their installation instructions and the vertical seam created by the window flanges on the H-mullion.