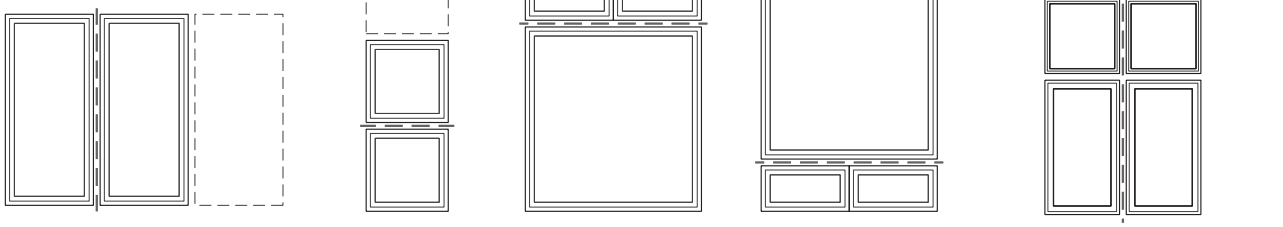
Field Joining Mullion Assembly of Aluminum-Clad Wood Windows

IMPORTANT **Determining and meeting the structural load requirements and design of the rough opening is the responsibility of the architect, engineer, and/or contractor. Windows, doors, and/or mullions are not designed to support additional elements or components of the building wall system. Refer to published technical recommendations for window and door combinations or your local distributor for more information. For applicable warranty and arbitration information, please refer to the product website. Field combinations not in accordance with the following parameters and/or the technical recommendations will void warranty.**

Parameters:

- Standard tight/direct joining mull span limitation for two-way mulls is 8 feet
- Three-way mullions with lower venting windows may require horizontal reinforcement to carry weight of upper windows
- All four-way mullion intersections require a reinforcement plate or 1/2" aluminum reinforced mullion in one direction
- Openings exceeding 10 ft are recommended to utilize 1/2" perimeter rough opening installation clearances
- Openings exceeding 20 ft are recommended to incorporate an expansion mullion design

Example Combinations:



Two-way vertical joining mullion (Horizontal row or ribbon)

Two-way horizontal joining mullion (Vertical column or stack)

Three-way horizontal thru mullion w/ intermediate joining mullion ***(thru mull may require reinforcement)***

Four-way vertical thru mullion w/ intermediate joining mullions ***(thru mull requires a reinforcement mullion)***

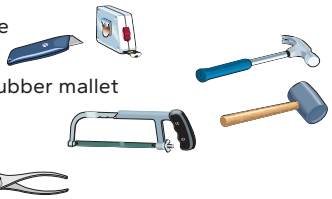
⚠ WARNING **Window combinations can be extremely heavy. Installation will require (2) or more persons for safety reasons.**
Remember to use personal protective equipment.
Read the entire instruction before proceeding.

You will need to supply:



- Cedar or impervious shims/spacers (2 - optional)
- Foil backed butyl window and door flashing tape or equivalent
- High quality exterior grade polyurethane or silicone sealant
- Corrugated fasteners
- Exterior mullion cover (#7217)
- Interior mullion cover (#260A / #26A9 / #2600)

Tools required:



- Tape measure
- Utility knife
- Hammer or rubber mallet
- Wood block
- Hacksaw
- Pliers

Note: See last page for assemble-within-opening option.

1 Remove the Installation Fin:

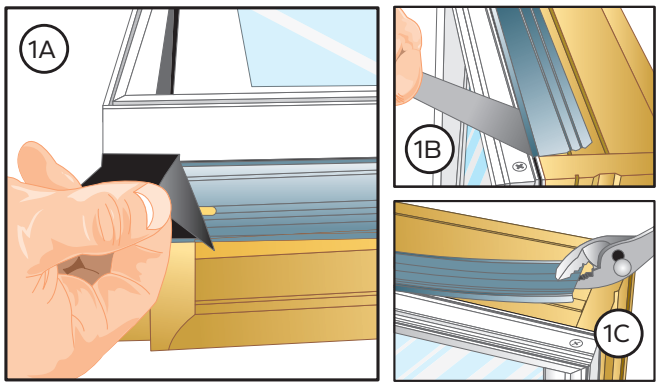
A. **Remove the flexible fin corners** from the joining sides of the products to be mulled together.

Note: You will remove two fin corners per product.

B. **Place the flat end of a pry bar against the front edge of the fin.** Strike the pry bar with a hammer and pry up.

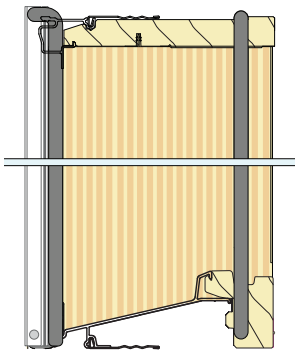
Note: Remove only the fin from the surfaces to be mulled.

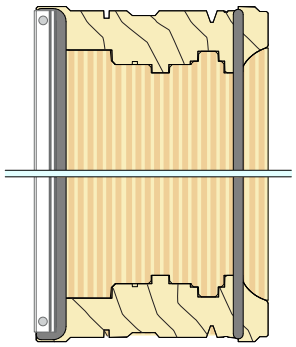
C. **Grasp the end of the fin with pliers or vise grips and pull up on the end of the fin.** Continue pulling up along the full length of the fin until it is completely removed from the product.



Note: For Steady Set™ windows, remove the flashing fin, fin corner(s), receiver bases, shim guide, or sill spacers from the sides of the products to be mulled together. Receiver bases can be re-attached six inches from each mullion end frame corner to be used as mullion end load anchors, if necessary.

2 Mull the Products Together:





A. **Place the products, exterior (clad) side up** on a clean flat surface.

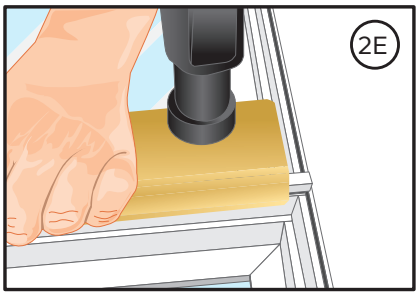
B. **Place a 3/8" bead of sealant from end to end as shown.** Place a 2nd bead of sealant 9/16" from the interior running bead from end to end.

Note: Placing shims or wedges under the outer edges of the products will help bring the mullion grooves together.

C. **Align the two products** and squeeze or clamp tightly together.

D. **For kits without pre-cut exterior covers:** Measure the frame dimension of the surface to be mulled when using lineal mullion covers. Using a hacksaw, cut the Mullion covers 3/8" shorter than the frame dimension.

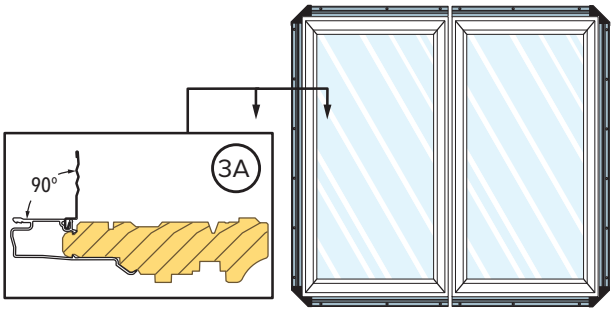
E. **Insert the end of the exterior mullion cover into the accessory groove** of both products. Drive the mullion cover into position with a rubber mallet or a rounded block of wood and a hammer.

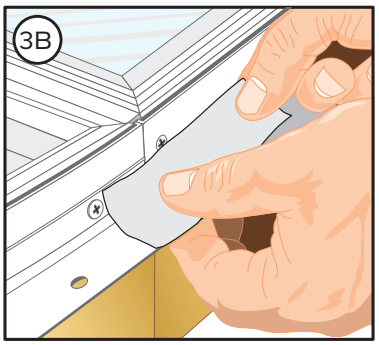


3 Join the Nail Fins:

A. **Fold out the installation fins** of the windows to at least 90 degrees.

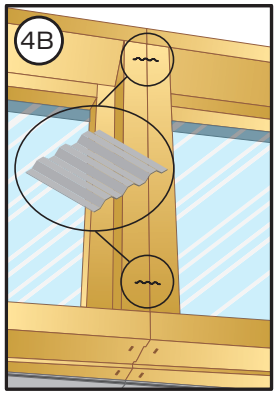
B. **Cut two 6" long pieces of flashing tape.** Remove the paper backing and apply the flashing tape over the gaps between the fins on both sides of the combination assembly.





Note: Not applicable for Steady Set™. Fins are folded up and taped after set in opening.

4 Interior Mullion Fastening:



A. **Turn the products over carefully,** making sure they stay together.

B. **Install the corrugated fasteners** on the interior beginning 2" from each end. Install additional corrugated fasteners not more than 12" on center.

5 Window Installation:

A. **Install the windows** as described in the installation instructions. Refer to the product website for installation instructions.

B. **Trim and install interior mull covers** after application of other interior trim materials.

Field Joining Mullion – Assemble-Within-Opening Option:

Note: This option may be helpful when there is limited job site space available to assemble combinations out of the opening, or to avoid large, heavy combination installation. This option requires sufficient rough opening clearance to allow room for the first window to be installed, then necessary sealants, followed by another window to be set in the opening and transitioned into the sealant and against the previously set window.

A. **Remove the fins or Steady Set™ components (if applicable)** from the side of the window that will have the mullion. Refer to step 1 above.

Note: For Steady Set™ units that do not include head or sill brackets, relocate the receiver bases being removed from the sides onto the head and sill of each window to be installed, 6" from each corner.

B. **Install the first window against one side of the opening.** Refer to other applicable installation instructions for installation and anchoring of the three sides against the opening framing. Do not complete head flashing tape application at this time, as that will be completed after all windows are set.

C. **Place two 3/8" beads of sealant,** as indicated in step 2B above.

D. **Set the next window into the opening,** being careful not to disturb the sealant. Slide the window against the previously installed window in B. Align the two windows and squeeze or clamp tightly together, pressing the window into the sealant. Anchor the sides that meet the opening framing.

Tip: Apply painter's tape along the interior (nail fin) or exterior (Steady Set) edge the window that will be joined against the first window to reduce sealant cleanup.

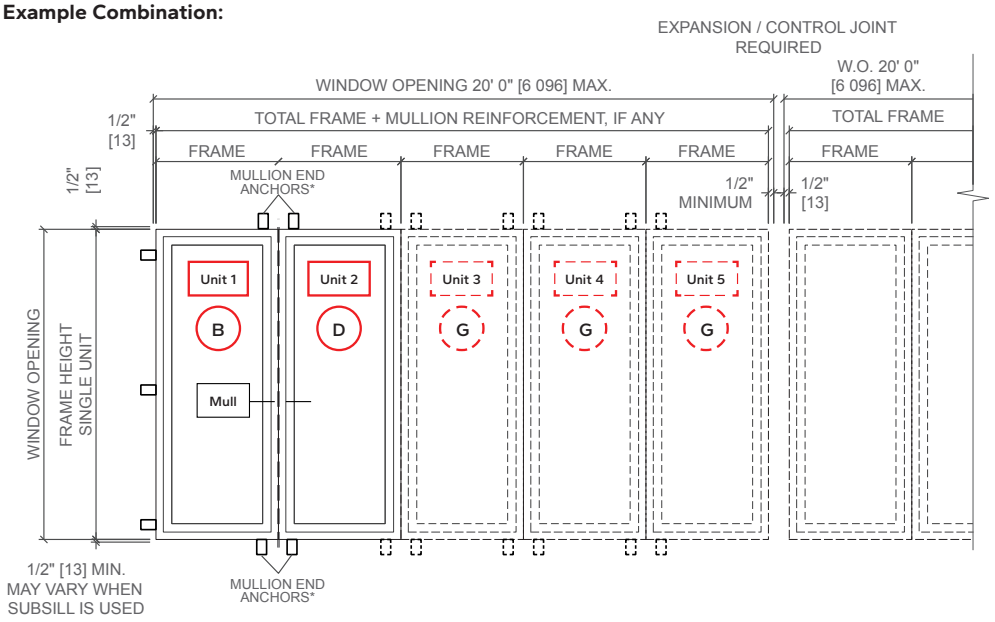
E. **Measure, cut, and apply** the exterior mullion cover(s) as indicated in step 2 above.

F. **Secure the window interior** together using corrugated staples as indicated in Step 4 above.

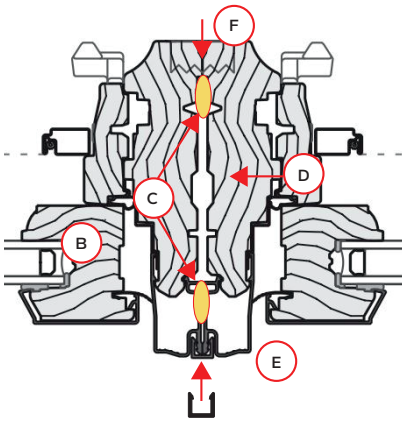
G. **Continue this procedure as necessary for any additional windows** (up to 20 ft. of overall opening size) to complete the ribbon or stack of two-way mullions.

H. **Finish installing and anchoring the combination** by driving anchors through the fins or Steady Set brackets, driving through frame screws at the mullion ends to carry mull end loads (if applicable), and applying flashing tape as indicated in the product installation instructions to integrate with the building's weather resistive barrier. It is recommended to utilize continuous head drip caps over field vertical mullions.

Example Combination:



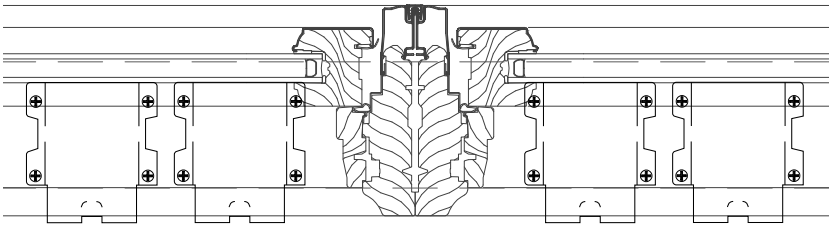
Mull Cross-Section



Mullion End Anchors*

Relocate Steady Set™ receiver bases or add through frame fasteners or installation clips spaced ~3" from mullion end and as necessary to carry applicable wind load forces on the field assembled window combination to the rough opening framing structure.

Relocated Steady Set™ Bracket Option



Through Frame Fastener Option
Do Not install through operator cutout

