

Window Mulling Instructions (Non-Reinforced Mullion)

These instructions will cover the field mulling of aluminum windows that are not reinforced. See separate instructions for reinforced mullions.

NOTES FOR INSTALLER

These instructions are a supplement to the window installation instructions. Prior to prepping the windows for field mulling, the wall rough opening must be properly prepared for the window to be installed.

Please read entire instruction completely before beginning.

Safety Alert Symbol Reference: These symbols are intended to alert you to potential injury hazards and information. Obey all safety messages.

COULD

Result in:



COULD

Result in:



COULD

Result in:



COULD

Result in:



WARNING

Windows and doors can be extremely heavy. To avoid injury, use appropriate lifting techniques and an adequate number of people to carry and install the product. Mechanical lifting assistance may be needed for larger panels and glass. Failure to do so can result in injury or damage to product or property.

CAUTION

Always wear appropriate gloves and eye protection for all procedures. Follow manufacturers' instructions for hand and power tools.

TOOLS AND MATERIALS NEEDED

Tools:

- Measuring tape
- Level (4' minimum recommended)
- Hammer
- Power driver
- 90 Degree Driver attachment
- Caulk gun
- Pry bar
- Rubber Mallet
- Multiple Squeeze Clamps (medium to large)
- Utility Knife
- Metal Grinder or File

Installation Materials (not included)

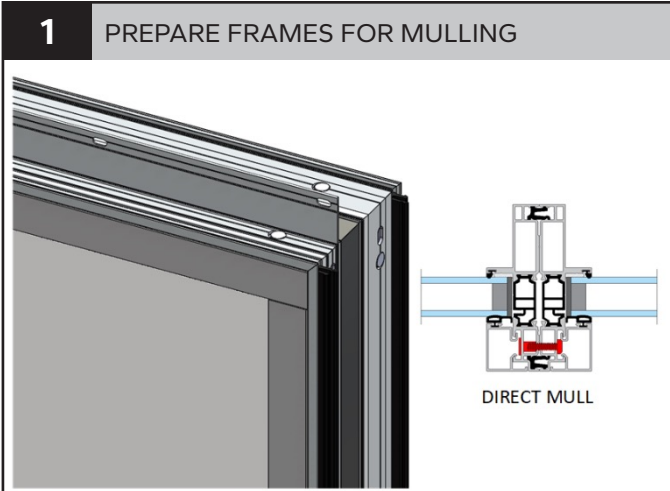
- Flashing tape (4" Minimum)
- Formable self-adhering sill flashing (or rigid pan)
- #8 x 2" flat head screws (or 2" Galvanized Roofing Nails)
- High-quality sealant
- Shims (moisture-proof)
- Low-expanding foam
- Backer rod

Materials Included in the Job Box

- Through Frame Connectors
- 1/8" Hex Drive Bit for Connectors
- Drip Cap (vertical mull units only)
- 3" x 3" Self-adhering Flashing Tape Squares
- Tube(s) of Silicone Sealant (for mull connection not install)

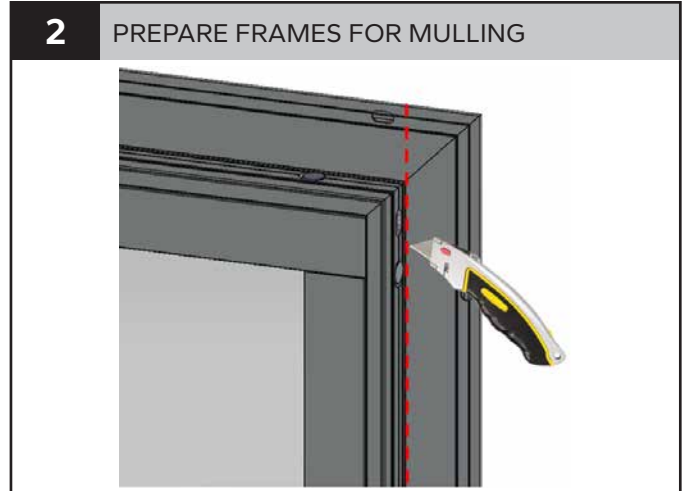


Window Mulling Instructions (Non-Reinforced Mullion)

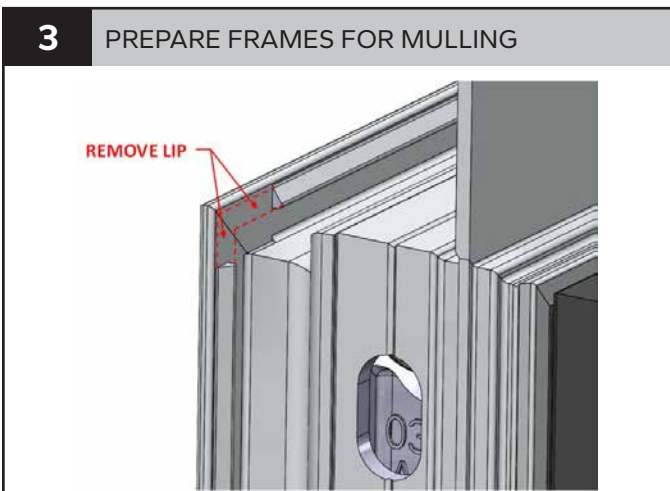


Windows prepared at the factory for field mulling will have the nail fins removed and the vinyl connector strips applied.

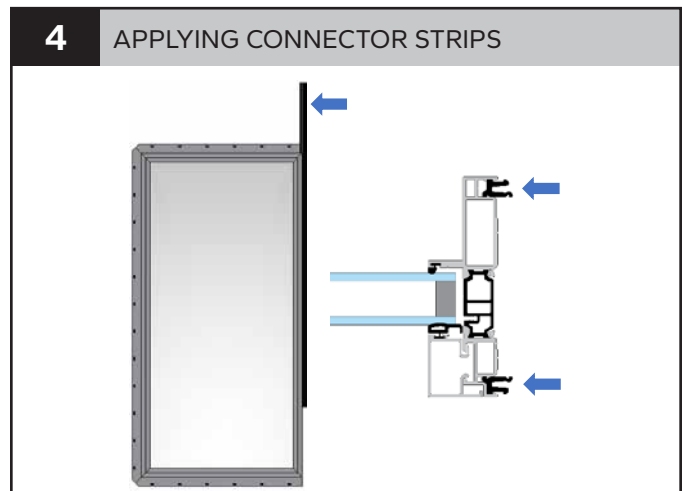
****Proceed to Step 6 if windows are factory prepped.****



Aluminum nailing fins will need to be removed on the sides that are being joined. Score the fin several times where it intersects the frame using a sharp utility knife. Fold the fin several times until it snaps off. Make sure to also remove the overhanging portion of the adjacent fin.



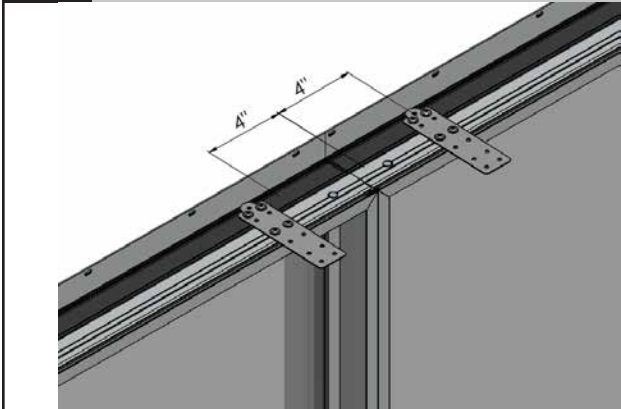
For the concealed connector strips to be applied, a small lip needs to be removed from the inside and outside channels in the jamb. A metal file or grinder can be used to remove a portion of the lip at the corner so the connector can be slid into place.



From the top of the window slide the vinyl connector strips into the channels on the jamb. Slide all the way until it is flush with each end of the frame.

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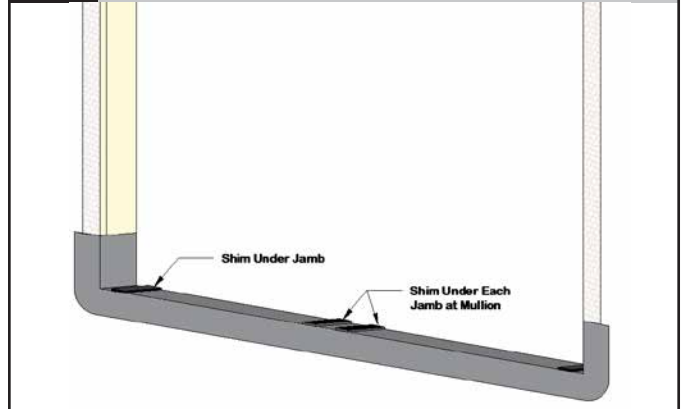
5 MULLION REINFORCEMENT CLIPS



INTERIOR

Mullion reinforcement clips will need to be applied to each end of the mullion 4" in from the edge of the jamb (head and sill). Position clip against the back of the nail fin and secure to the frame using (4) #8 x 9/16" truss head screws. Position screws in the hole locations shown in the diagram above.

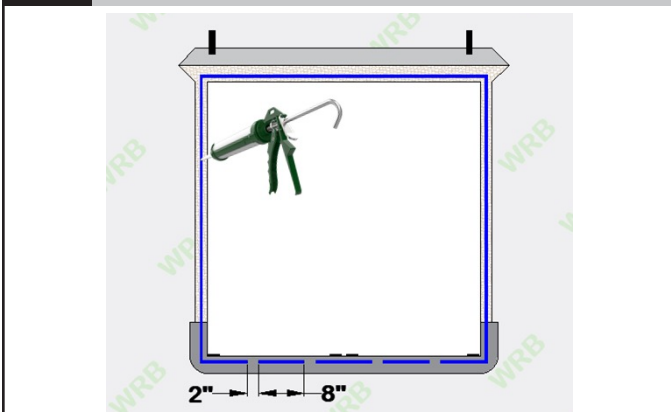
6 SHIM SILL



EXTERIOR

With the sill properly flashed, place shims at the sill. Shims should be located under each jamb corner including the corners at the mullion. It is critical that each window is shimmed to keep proper alignment of the frames.

7 APPLY SEALANT



EXTERIOR

Apply a continuous 3/8" bead of sealant to the jamb and head sheathing. Keep sealant in line with the where the nailing fin will be positioned.

Apply an intermittent 3/8" bead of sealant to the sill to allow for incidental water drainage.

8 POSITIONING THE FIRST WINDOW

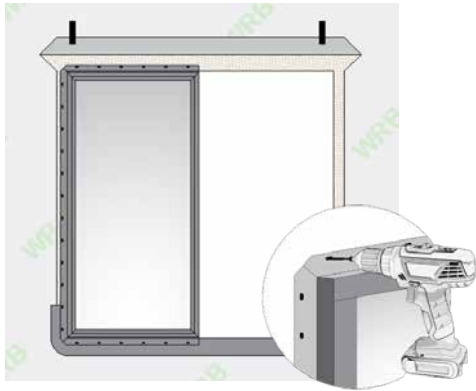


EXTERIOR

If joining the window within the opening, start by placing the first window in the opening and positioning it tight to the rough opening. This will be positioned temporarily until the combination is completed.

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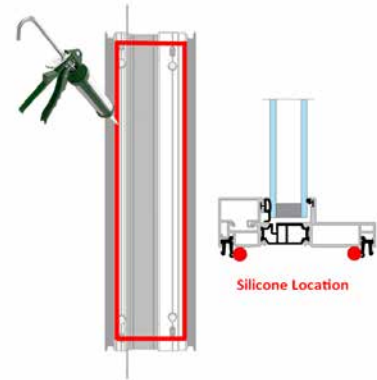
9 TEMPORARILY FASTENING WINDOW



EXTERIOR

Temporarily fasten the window at 3-4 locations to stabilize the window during the joining process.

10 SEALANT APPLICATION



SIDE VIEW

Apply a continuous 3/8" bead of silicone along the mull connector strips, using the edge of the strips as a guide. Across the top and bottom apply a generous amount of silicone approximately 1/4" from the top and bottom edge of the frame. Silicone should squeeze out when frames are joined.

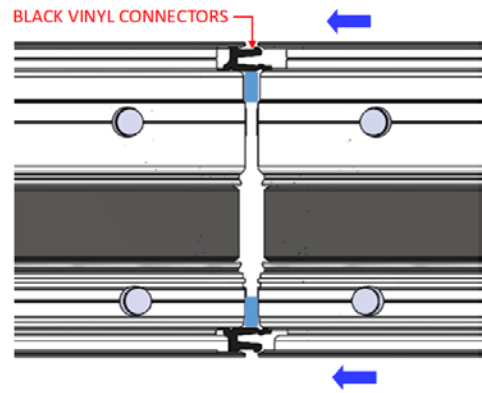
11 CONNECTING THE WINDOWS



EXTERIOR

Place the second window in the combination into the opening. Slide together until the connector strips start to connect.

12 CONNECTING THE WINDOWS

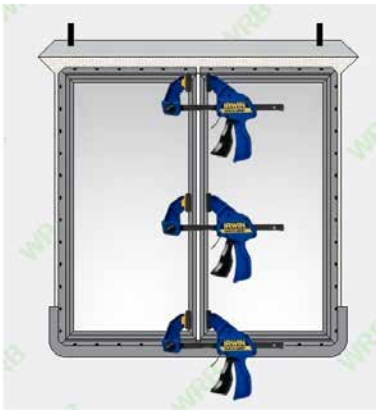


FRAME VIEW FROM TOP DOWN

Black vinyl connectors must be in line with the receiver on the other jamb before moving to the next step.

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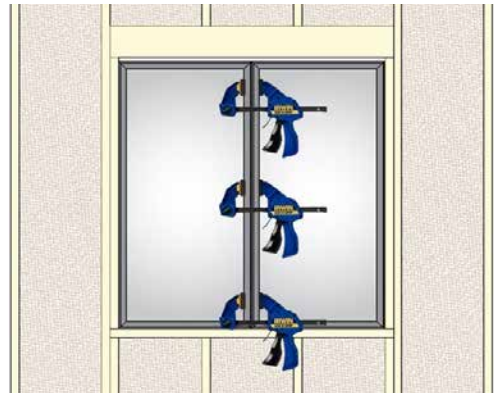
13 CONNECTING THE WINDOWS



EXTERIOR

Using squeeze type clamps, draw the frames together until you hear the snap of the connector strip locking into place. Take care not to scratch the aluminum with the clamps. Glazing beads may need to be removed for the clamp to grab properly.

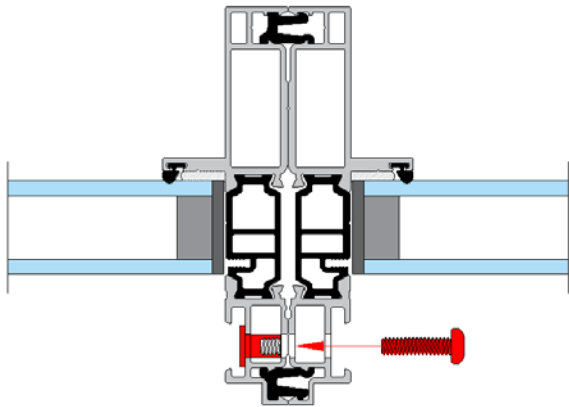
14 CONNECTING THE WINDOWS



INTERIOR

When the door is plumb, level, and square, continue fastening through the nailing fin holes. Place fasteners 4" from each corner and spaced every 4" - 8" on center.

15 CONNECTING THE WINDOWS



SECTION VIEW

Units factory prepped for mulling will have the glazing bead left off so windows can be screwed together. Along the side of the mull there will be pre-drilled holes for fasteners. A threaded receiver will be preinstalled on the opposite jamb.

16 CONNECTING THE WINDOWS



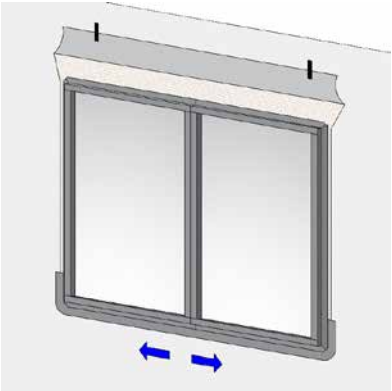
EXTERIOR

With the frames snapped together, apply the provided threaded bolt to the pre-drilled holes along the side of the mullion.

NOTE: Frames must be aligned for the bolt to engage the receiver on the opposite jamb. Start threading by hand and finish with a driver. A 90-degree driver adapter may be needed at this time.

Window Mulling Instructions (Non-Reinforced Mullion)

17 INSTALLING WINDOW



EXTERIOR

With the windows joined together, the combination can now be permanently installed. Remove the temporary fasteners and center the combination in the opening.

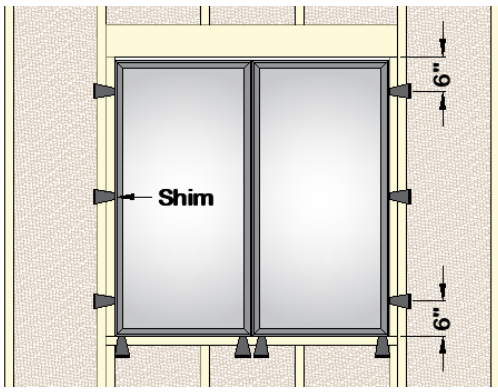
18 TEMPORARILY SECURE WINDOW



EXTERIOR

With the window centered in the opening, secure one side top corner with either a rust-proof roofing nail or a #8 steel screw. Fasteners must be long enough to penetrate the framing material by at least 1-1/2".

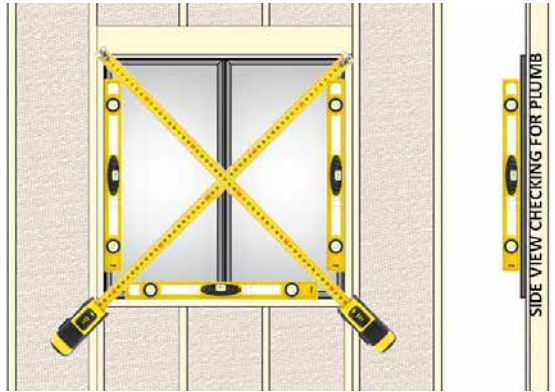
19 SHIM WINDOW



INTERIOR

Add shims 4"-6" in from the corners at the side jambs and 16" intervals on the center as needed to ensure the window is positioned in the opening plumb, level, and square.

20 VERIFY PLUMB, LEVEL, AND SQUARE



INTERIOR

Check the unit is plumb, level, and square. Diagonal measurements must be within 1/8". Adjust shims as needed.

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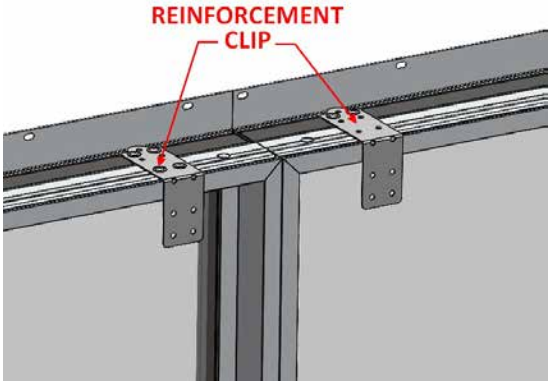
21 SECURE WINDOW



EXTERIOR

When the window is plumb, level, and square, continue fastening through the nailing fin holes. Place fasteners 4" from each corner and spaced every 4" - 8" on center.

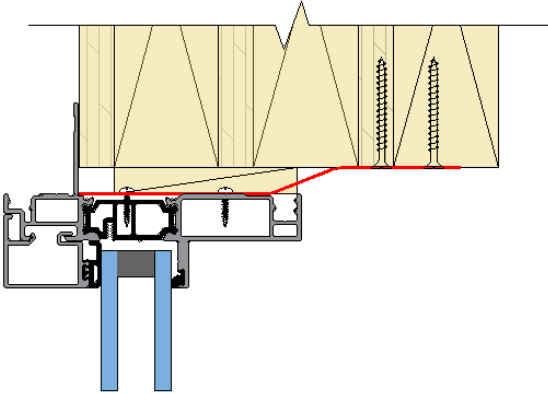
22 MULLION REINFORCEMENT CLIPS



INTERIOR

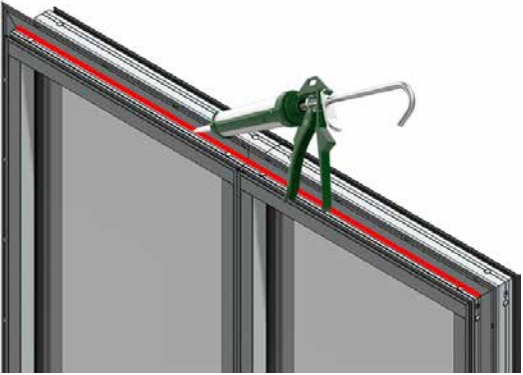
Units that are factory prepped for mulling will come with mullion reinforcement clips applied to the frame. Clips are bent down for shipping.

23 MULLION REINFORCEMENT CLIPS



Straighten clips and attach to the framing member using (2) #8 x 1-5/8" Flat head, non-corrosive screws. Use the same procedure if perimeter clips are used in lieu of nailing flange.

24 DRIP CAP INSTALLATION

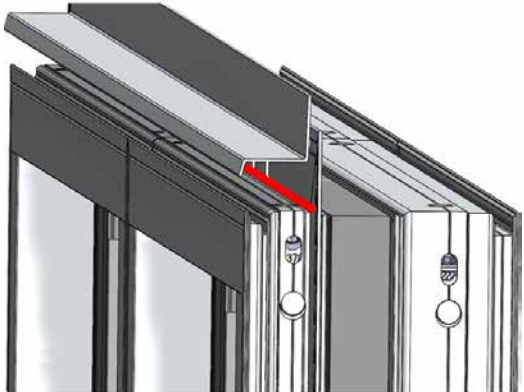


EXTERIOR

A continuous aluminum drip cap will be provided as part of the field mulling kit. This part should be the same width as the combined frames (minus the nailing fins). To install, apply a continuous 3/8" bead of silicone using the corner of the nail fin to jamb as a guide.

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25 DRIP CAP INSTALLATION



EXTERIOR

Center the drip cap at the head of the frames. Push the barb legs of the extrusion into the accessory channel of the frame. Using a wood block and a hammer, gently tap the drip cap into place.

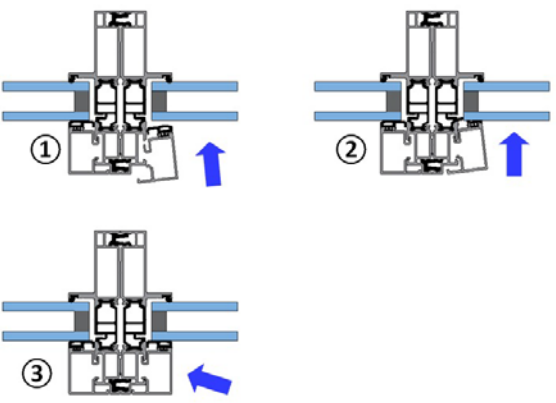
26 FLASHING NAIL FIN JOINT



EXTERIOR

Using the provided 3" x 3" self-adhering flashing tape, evenly cover the joint between the nail fins folding the tape 1/2" on to the frame of the window. Press the tape firmly against the exterior wall and removed any gaps or air pockets.

27 FINAL FLASHING AND INSULATING



EXTERIOR

Glazing beads left off during the mulling of the units will now need to be installed. Pushing the bead at an angle into the glass, engage the hook into the frame. Roll the bead into place pushing inward to the glass and down to snap into place. A rubber mallet can be used carefully if needed.

28 FINAL FLASHING AND INSULATING

Finish off the installation by properly flashing and insulating the window combination using the methods outlined in the installation instructions available on the product website.