Vinyl Windows and Doors
Manufactured by Pella Corporation

Part Number: V986042
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H-BAR VERTICAL MULLION INSTALLATION INSTRUCTIONS

IMPORTANT: Read this entire instruction prior to attempting the process.

REMEMBER TO USE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT

The processes described in this instruction were developed and tested for use with vinyl single-hung or sliding window combinations manufactured by Pella Corporation using H-Bar mullion based on the following parameters. Mulling products together that fall outside these parameters will void the Limited Lifetime Warranty. Determining the appropriate mulling process is the responsibility of you, your architect, or building professional.

Parameters:

- **DO NOT mull more than three windows in one combination.**
- **Maximum single unit frame height 84".**
- **The mulled product combination cannot exceed 108" x 84" or 54 square feet in rough opening area.**
- **This mullion may be used in vertical applications only.**

YOU WILL NEED TO SUPPLY:

- High quality exterior grade polyurethane or silicone sealant



TOOLS REQUIRED:

- Tape measure
- Sealant gun
- Utility knife
- Rubber mallet
- 1" wide wood chisel
- Coping saw
- Stiff blade putty knife
- Pliers
- 7/64" Drill bit
- #2 x 2" Phillips bit for drill/driver
- Drill/driver
- Miter saw with plywood blade
- Hacksaw
- Short straight blade screwdriver

***NOTE:** Before starting, verify the products when mulled together will fit the rough opening.*

1 PREPARING WINDOWS FOR MULLING

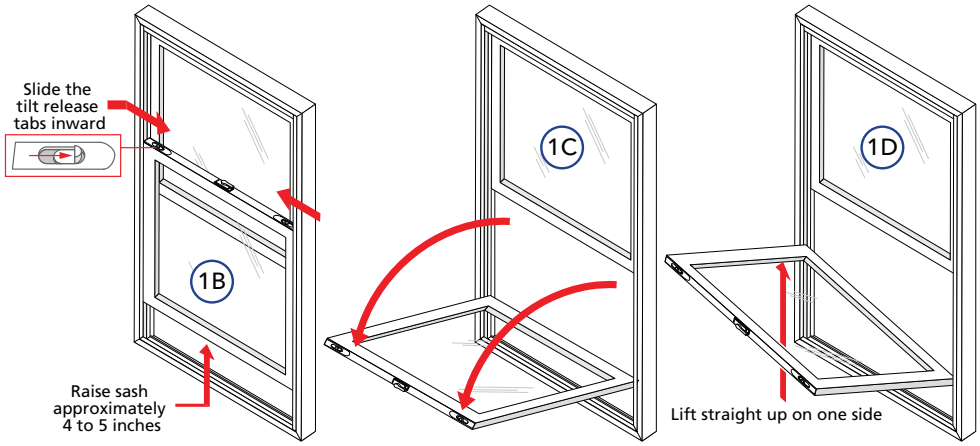
A. **Remove the packaging from the window.** Inspect the frame, fixed and vent panels for damage. **DO NOT** install damaged units.

***NOTE:** Steps B-D apply to single-hung windows only. Steps E-G apply to sliding windows only.*

B. **Single-hung window only:** Unlock the window and raise the lower sash approximately 4 to 5 inches. Slide the tilt release tabs inward; these are located at the top of the sash. **Caution:** Sash may be heavy.

C. **Pull the top of the sash toward you until the sash is perpendicular to the frame.**

D. **Grasp the sash near the frame,** and lift straight up on one side until the locking pivot bar of the sash can be released from the bottom of the sash balance. Continue to lift the sash up until the locking pivot bar is released from the opposite side of the sash and can be removed from the bottom of the balance. Lift the sash up and out of the window frame. Set it aside in a safe location.



E. **Sliding window only:** Unlock the window and slide the operable sash to the fully open position.

F. **Grasp the front and back of the operable sash** and lift up until the bottom of the sash clears the sill of the window frame.

G. **Tilt the bottom of the sash to the interior until it clears the bottom frame member,** and lower the sash until it is removed from the head of the window. Set the sash aside in a safe location.

H. **Remove the screen from the window.**

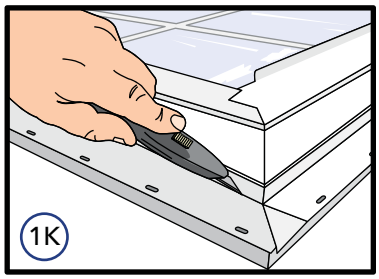
I. **Determine which surfaces of the products will be mulled together.**

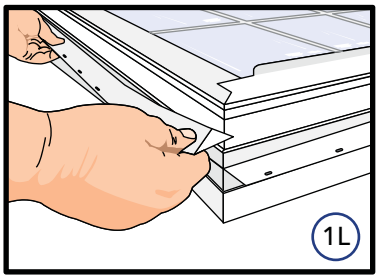
J. **Remove the nail fin from the surfaces to be mulled.** Lay the products, exterior surface down on a firm, clean flat surface.

1 PREPARING WINDOWS FOR MULLING (CONTINUED)

K. **Using a utility knife,** score the fin three to five times at the point where the fin meets the frame. Be careful not to gouge frame.

L. **Bend the fin back and forth two to three times,** and peel it off the unit.

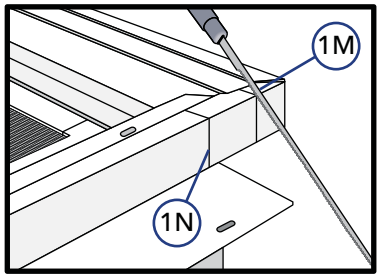


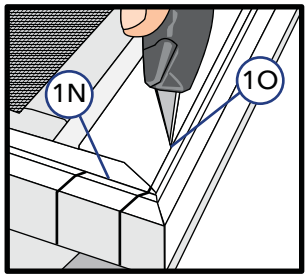


NOTE: *If the product does not have J-channel proceed to Step 1Q.*

M. **Remove the J-channel (if applicable)** from the surfaces that will be mulled together. Lay the product (with the interior surface down) on a smooth clean surface. Using a coping saw, make a horizontal cut until the blade reaches the point where the vertical and horizontal J-channel meet.

N. **Using a coping saw make a horizontal cut in the J-channel approximately 1" back** from the side to be mulled. Cut until the blade reaches the point where the J-channel attaches to the exterior face of the product.





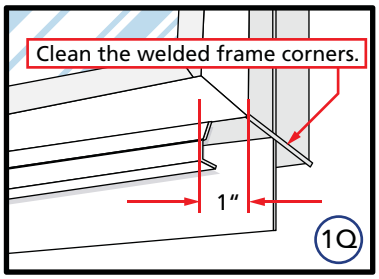
O. **Using a utility knife,** score (three times) the point where the J-channel attaches to the exterior face of the product. Begin at one end of the J-channel, toward the interior of the product and continue along the entire length until the J-channel is removed.

P. **Using a utility knife,** score (three times) the 1" piece where the J-channel attaches to the exterior face. Begin at the coping saw cut and continue back to the side to be mulled until the J-channel is removed.

Q. **Using a 1" wide wood chisel,** cut off any excess material that does not break off the edge of the frame. Clean the welded frame corners so they are as smooth as possible.

NOTE: *The edges of the window frame and the frame corners must be smooth to ensure proper adhesion of the butyl tape.*

P. **Repeat the previous Steps for the second unit.**

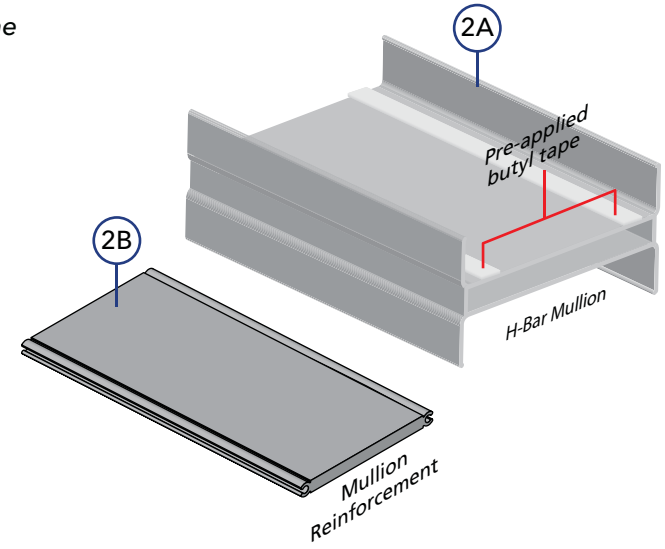


2 PREPARING THE H-BAR MULLION AND MULLION REINFORCEMENT

NOTE: *The length of the H-Bar Mullion must be within 1/16" of the window frame height to ensure a proper seal to the end caps.*

A. **Cut a piece of H-Bar Mullion** to the same length as the window frame height.

B. **Using a hacksaw,** cut mullion reinforcement to the length of the H-Bar Mullion - 5/8".



3 INSTALLING H-BAR MULLION AND REINFORCEMENT

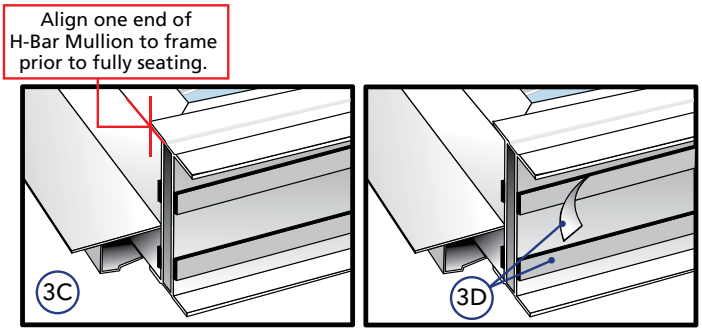
A. **Lay the windows (interior side up) on a smooth,** clean surface, approximately 2" apart.

B. **Remove backing from butyl tape pre-applied to H-Bar Mullion** (side to be applied first only).

C. **Slide the H-Bar Mullion onto one of the window frames.**

NOTE: *Ensure the end of the H-Bar Mullion is aligned to one end of the frame prior to fully seating. It will be extremely difficult to shift the H-Bar Mullion after it has been fully seated.*

HINT: *Use a stiff blade putty knife to assist starting the H-Bar Mullion legs onto the window frame.*

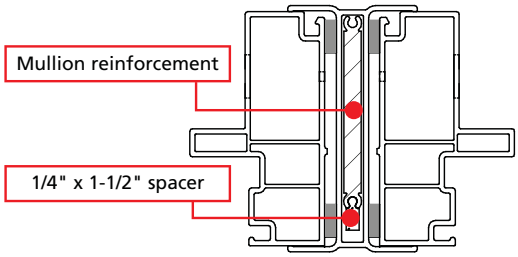


D. **Remove remaining backing from exposed butyl tape pre-applied to mullion.**

E. **Slide the other window into the H-Bar Mullion.**

F. **Slide the mullion reinforcement into the H-Bar Mullion.**

G. **Insert a spacer (provided) into each end of the H-Bar Mullion,** below the mullion reinforcement.

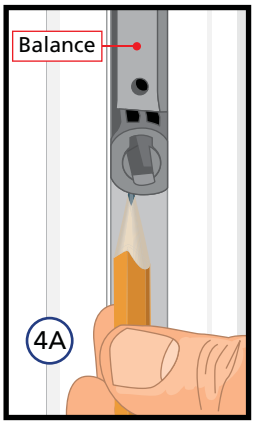


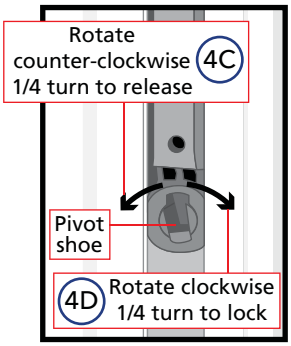
4 SECURING THE WINDOW TO THE MULLION AND REINFORCEMENT

NOTE: *It will be necessary on many single-hung windows to move the balance to be able to position the pilot holes and screws correctly.*

CAUTION: *The balance is spring loaded - be sure to keep a firm grip on the screwdriver while moving the balance.*

NOTE: *Steps 4A thru 4E pertain to the moving of the balance on single-hung windows. Proceed to Step 4F for sliding windows.*





A. **Mark the location of the bottom of the balance using a pencil or pen.**

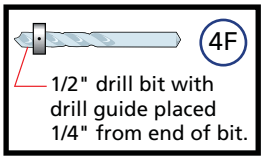
B. **Insert a stubby flat blade screwdriver into the pivot shoe** located at the bottom of the balance.

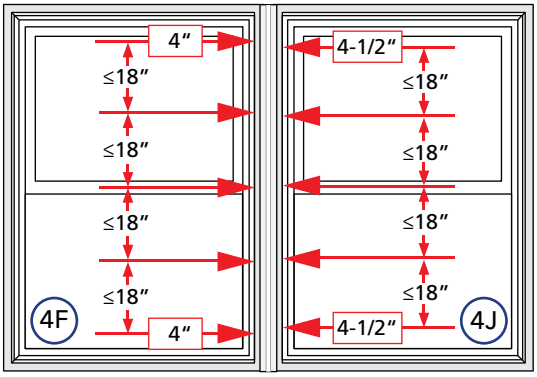
C. **While pushing downward on the balance,** rotate the screwdriver counter-clockwise 1/4 turn and slide the balance up or down as required.

D. **Rotate the screwdriver clockwise 1/4 turn** to lock the balance into position.

E. **After completing the steps in Step 4,** return the balance to its original location, marked with a pencil.

F. **Drill a pilot hole approximately 4" from the bottom track of the jamb,** using a 7/64" drill bit. Counter drill using a 1/2" bit with a drill guide located 1/4" from the end of the bit.





G. **Drive a #6 x 3/4" flat head screw into this hole.** This will prevent movement of the reinforcement while drilling additional holes.

H. **Drill additional holes in the jamb, beginning 4" from the top of the window,** then drill additional holes spaced so that there is no more than 18" between holes. Counter drill using a 1/2" bit with a drill guide located 1/4" from the end of the bit.

NOTE: *Single-hung window only: Be careful to avoid drilling or cutting the balance cord.*

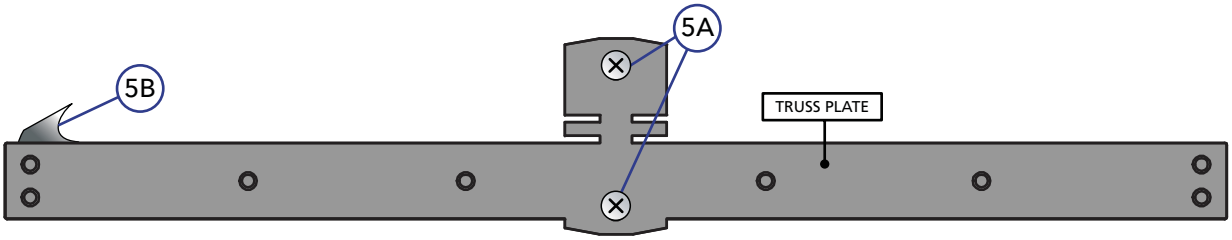
I. **Drive a #6 x 3/4" flat head screw into each hole.**

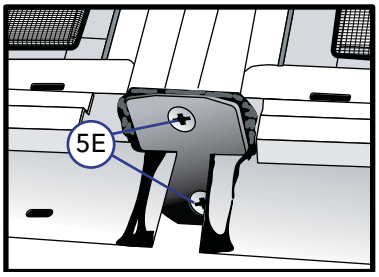
NOTE: *The head of the screw must be flush or slightly below flush with the vinyl surface.*

J. **Repeat on second window with the exception of drilling 4-1/2"** from each end in the track of the jamb. Equally space additional holes no more than 18" on center between the initial two holes.

NOTE: *The screw locations are staggered to ensure the screws for the two windows are not directly in line.*

5 INSTALLING END-CAP





A. **Insert #6 x 1" flat head screws (provided)** into the truss plate holes. Push the screws through the butyl and paper to make it easier to align with the mullion reinforcement screw bosses.

B. **At the sill;** remove backing from pre-applied tape on truss plate.

C. **Slide slotted grooves of truss plate over nail fin** (butyl side towards frame).

   NOTE: *Slots are not centered. Ensure shorter side of truss plate is oriented to the exterior of the unit.*

D. **Align the truss plate screws with the screw bosses** in mullion reinforcement.

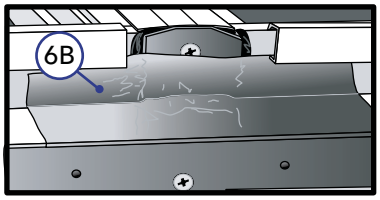
E. **Tighten screws down to seal the end of the mullion.**

F. **At the Head only;** install #8 x 3/8" provided flat head screws into the remaining truss plate holes.

6 FINISHING DETAILS

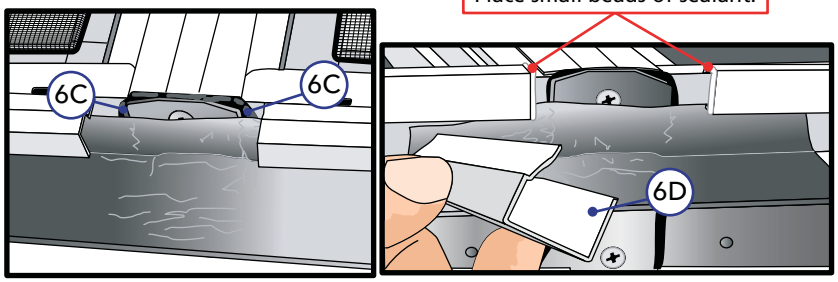
A. **Turn the assembly over** so the exterior side of the windows are facing up.

B. **Beginning 1/2" from the exterior of the window frame,** apply a 6" long piece of flashing tape along the nail fin bridging across the gap. Press the tape onto the window frame, then up and over the exterior nail fin.



C. **Cut off any butyl squeeze out on the exterior.**

D. **J-channel products:** Install the J-channel joint cover (provided). Place a small bead of sealant on each cut edge of the J-channel and snap the joint cover into position. Repeat for opposite end.



E. **Repeat for Steps A thru E for opposite end.**

F. **Reinstall the screen.**

G. **To reinstall the sash, reverse Steps 1A thru 1C (single-hung) or 1E thru 1G (sliding window).** Check for smooth operation by operating the sash and locking.

PROCEED TO INSTALL ACCORDING TO THE INSTALLATION INSTRUCTIONS PROVIDED WITH THE PRODUCT.

IMPORTANT: *When shimming between the sill of the window and the rough opening, place shims under each window jamb at the mullion joint.*