Vinyl Windows and Doors

Manufactured by Pella Corporation

Part Number: V986043

H-BAR HORIZONTAL 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 fixed, 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.

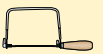
Parameters:

- DO NOT mull more than three windows in one combination.
- Horizontal and Vertical H-Bar Mullions may not be used together in the same window combination assembly.
- Maximum mullion length is 108".
- Top unit of combination must be < = 18 square feet.
- Maximum height of combination is 107-1/2".

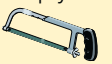
YOU WILL NEED TO PROVIDE:

- 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
- 1/2" drill bit with drill guide
- #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.

1 PREPARING WINDOWS FOR MULLING (CONTINUED)

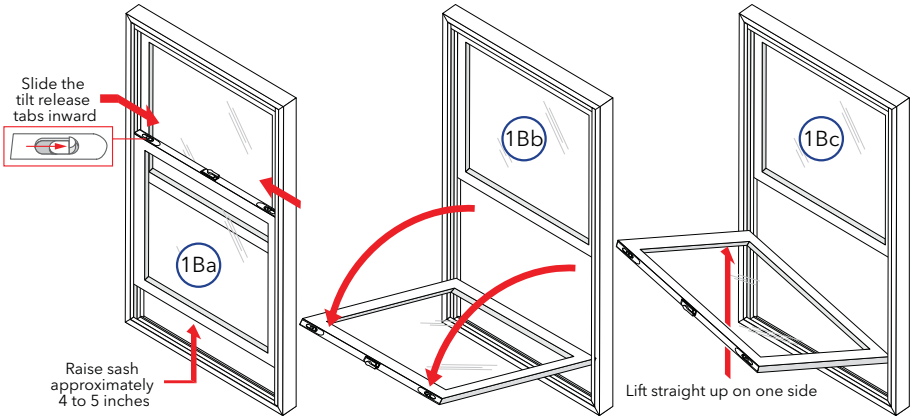
B. **Single-hung window only:**

a. **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.

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

c. **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.



C. **Sliding window only:**

a. Unlock the window and slide the operable sash to the fully open position.

b. 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.

c. 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.

D. **Remove the screen from the window.**

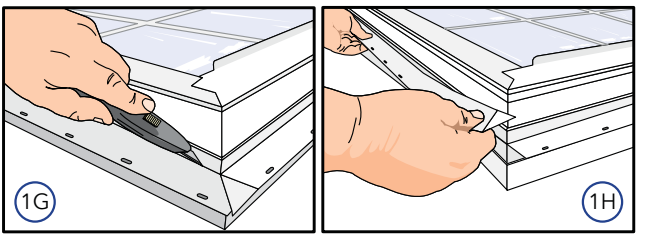
E. **Determine which surfaces** of the products will be mulled together.

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

G. **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.

H. **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 1N.

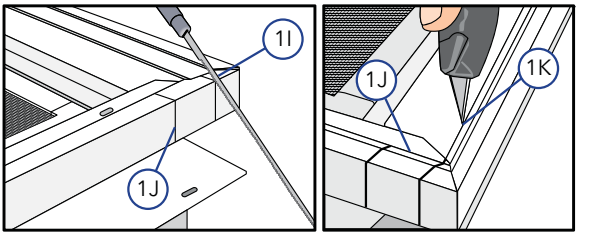


1 PREPARING WINDOWS FOR MULLING (CONTINUED)

I. **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.

J. **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.

K. **Using a utility knife,** score (three times) the point where the J-channel attaches to the exterior face of the product and also the interior leg of the J-channel. 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.

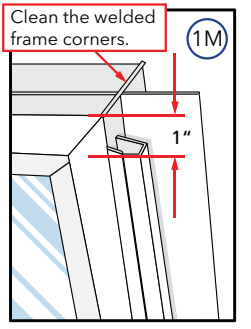


L. **Using a utility knife**, score (three times) the 1" piece where the J-channel attaches to the exterior face and also the interior leg of the J-channel. Begin at the coping saw cut and continue back to the side to be mulled until the J-channel is removed.

M. **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.

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

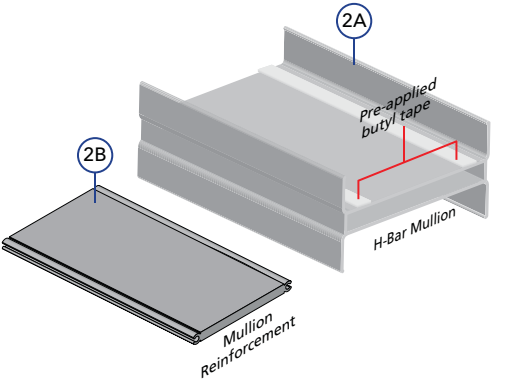


2 PREPARING THE H-BAR MULLION AND MULLION REINFORCEMENT

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

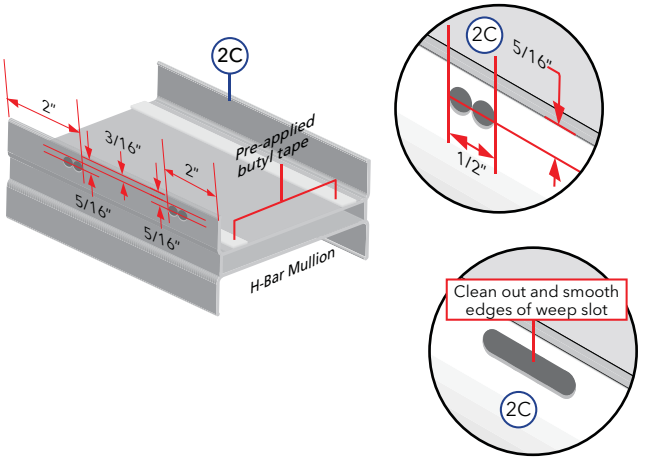
A. **Cut a piece of H-Bar Mullion** to the same length as the window frame width.

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



2 PREPARING THE H-BAR MULLION AND MULLION REINFORCEMENT (CONTINUED)

C. **Create weep slots in the H-Bar Mullion for the upper unit.** Determine which leg of the H-Bar Mullion will be applied to the exterior of the sill of the upper window. Measure and mark 2" over and 5/16" down from the top on each end. Measure and mark 1/2" over from your first mark and a 5/16" down from the top. Drill two consecutive 1/4" diameter holes to form a 1/2" line of holes on each end. Use a utility knife or chisel to clean out and smooth the edges of the weep slot.



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).

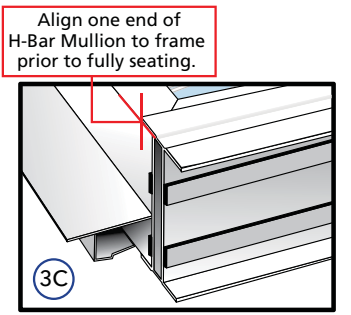
Note: Apply the H-Bar Mullion to the lower unit first.

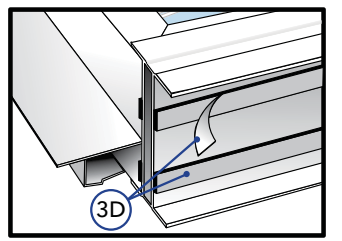
C. **Slide the H-Bar Mullion onto the window frame.** Press down on the H-bar Mullion onto the lower unit to ensure good butyl squeeze out.

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.



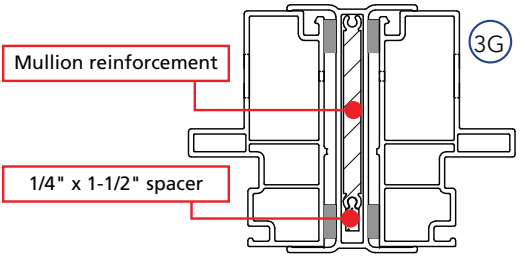


3 INSTALLING H-BAR MULLION AND REINFORCEMENT

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

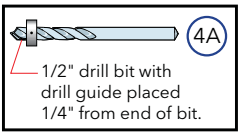
F. **Slide the mullion reinforcement into the H-Bar Mullion.**

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

A. **On the interior of the top window drill a pilot hole** approximately 4" from the jamb of the window and 3/4" from the window interior, 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.



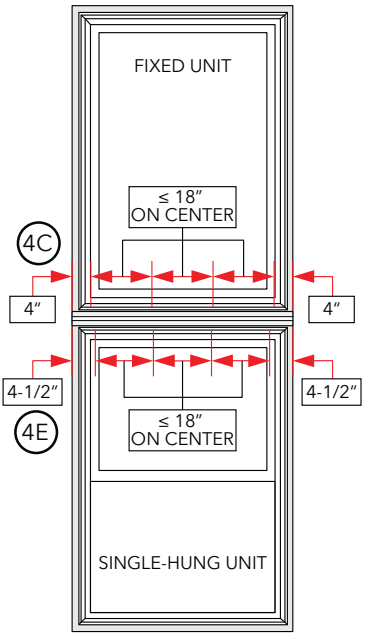
B. **Drive a #6 x 3/4" flat head screw into this hole.** This will prevent movement of the reinforcement while drilling additional holes.

C. **Drill additional holes in the sill,** beginning 4" from the opposite jamb of the window, then drill additional holes spaced so that there is no more than 18" between holes.

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

E. **Repeat on the lower window with the exception of drilling 4-1/2" from each end of the window frame and 3/4" from the window interior.** Equally space additional holes no more than 18" on center between the initial two holes.

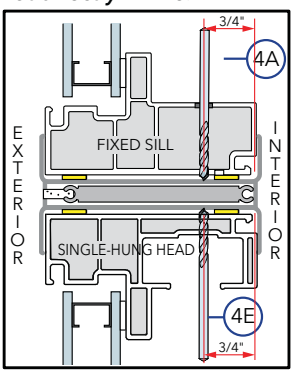
Note: The screw locations are staggered to ensure the screws for the two windows are not directly in line.

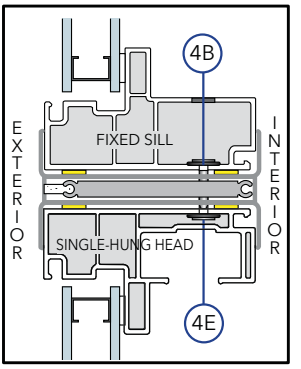


F. **Drive a #6 x 3/4" flat head screw (provided) into each hole.**

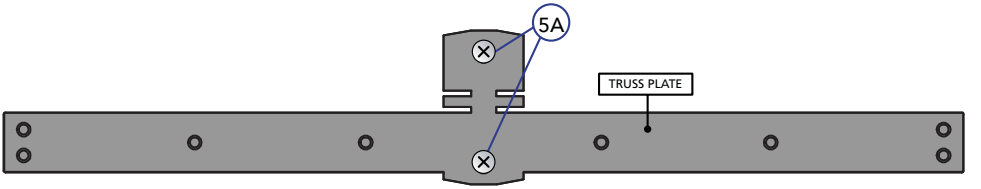
Note: The head of the screw must be flush or slightly below flush with the vinyl surface.

G. **Turn the windows over** so the exteriors of the windows are facing up.





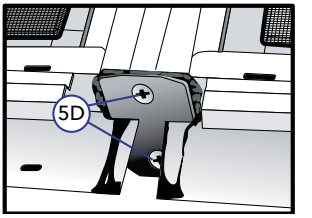
5 INSTALLING END-CAP



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. **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.



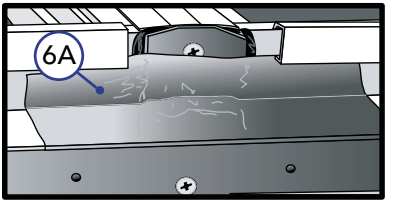
C. **Align the truss plate screws** with the screw bosses in mullion reinforcement.

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

E. **Install #8 x 3/4" provided flat head screws** into the remaining truss plate holes.

6 FINISHING DETAILS

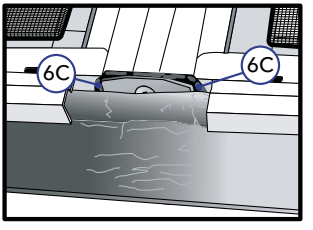
A. **Beginning 1/2" from the exterior of the window frame, apply a 6" long piece of flashing tape along the nail fin** bridging across the gap. Press the tape onto the window frame, then up and over the exterior nail fin.

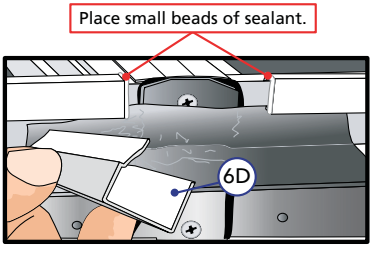


B. **Cut off any butyl squeeze out on the exterior.**

C. **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.





6 FINISHING DETAILS (CONTINUED)

D. **Repeat for Steps A thru B for opposite end.**

E. **Reinstall the screen.**

F. **To reinstall the sash, reverse Steps 1C thru 1F (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.