

VINYL WINDOWS AND DOORS

Manufactured by Pella Corporation

VINYL 1/2" JOINING MULLION AND 1/2" STRUCTURAL MULLION ASSEMBLY

Be sure to thoroughly read and understand all the steps before beginning the mullion assembly process.

YOU WILL NEED TO SUPPLY:

- High quality, multi-purpose sealant
- Isopropyl Alcohol



TOOLS REQUIRED:

- Tape measure
- Hammer
- Sealant gun
- Drill
- 3/16" Drill bit
- Clamps
- 1/4" wide chisel
- Utility knife
- Scissors
- Marker (fine point) or pencil
- Rubber mallet
- Coping Saw or Hacksaw

MULLION KIT, PARTS INCLUDED:

- 1/2" Mullion Stiffener
- Foam Tape
- Mullion Clip (2)
- Foam Plug (2)
- Mullion Truss Plate (2)
- 3/8" Flat Head Screws (16)
- Color Matched Tape (14")
- Splice key (2)

REMEMBER TO USE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT.

FIELD MULLION RULES:

1. Mullled product combination cannot exceed: 50 ft² for 1/2" mullion system.
2. The length of any mullion may not exceed 96".
3. Any window greater than 25 ft² may not be mullled horizontally above a fixed 1-wide product.
4. 1/2" mullion not allowed on 5/8" or 2-1/4" flange frames.

FIXED UNDER MULLION RULES:

These rules apply AFTER all standard mullion rules are applied:

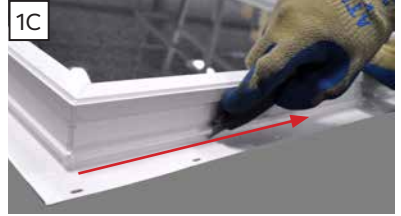
1. Any window < 20 ft² may be mullled horizontally above a fixed 1-wide product.
2. Any window < 40 ft² may be mullled horizontally above a fixed 2 or 3-wide product.
3. Max bottom unit FW must be < 48" for 1-wide bottom fixed, and < 96" for 2 or 3-wide bottom units.

Aluminum Reinforcement is required when the mull length is $>53.5"$ and optional when mull length is $\leq 53.5"$. (Mull length is the frame dimension in the direction of the mullion).

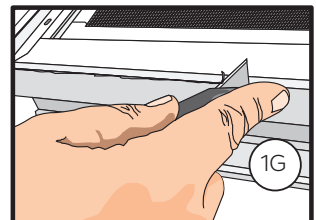
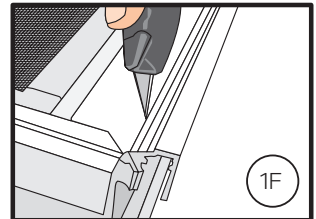
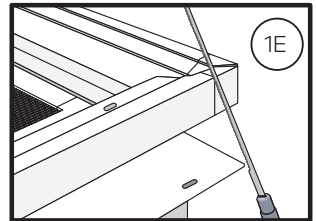
1 PREPARE THE WINDOWS:

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

- A. **Remove the packing material from the windows.** Inspect product; DO NOT mull or install damaged windows.
- B. **Lay out the windows on a flat surface with exterior side up** in the intended mullion assembly position. Place a mark on the jamb on the sides to be combined. If windows have nail fins, the fins on these sides of the windows will be removed. If block frame windows with no fins, proceed to step 1H.
- C. **Score along the length of the nail fin** with a utility knife 2 to 3 times on the jambs of the fins to be removed.
- D. **Bend the fin down and then up** to remove the fin from the frame.



- E. **Remove the J-mould (if applicable)** from the surfaces that will be mull together. Lay the product (with the interior surface down) on a smooth clean surface. Using a coping saw, make a horizontal and a vertical cut that align with the point where the J-mould meets the exterior face of the product. Cut until the blade reaches the point where the vertical and horizontal J-mould meet. Bend and remove the cut out section of the J-mould corner.
- F. **Using a utility knife, score (3 times) the point where the J-mould attaches to the exterior face of the product.** Beginning at one end of the J-mould, grasp the J-mould with pliers and bend the J-mould toward the interior of the product. Continue along the entire length of the product until the J-mould is removed from the product.
- G. **Using a utility knife, cut off any excess material** that does not break off the accessory groove.



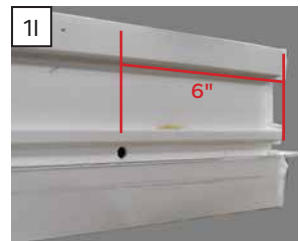
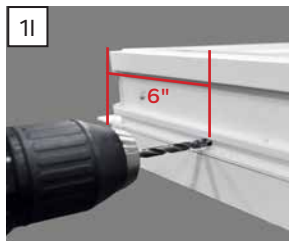
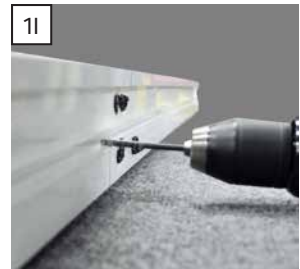
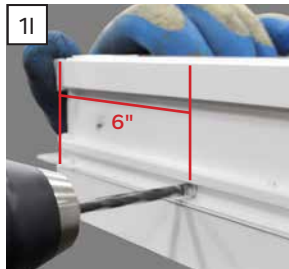
1 PREPARE THE WINDOWS (CONTINUED):

- H. **Clean excess vinyl weld from each corner.** Use a chisel to clean the corners adjacent to where the fin was removed. Excess vinyl must be removed so the structural mullion reinforcement and the end clip will fit flush against the frame.



I. **HORIZONTAL MULLIONS ONLY:**

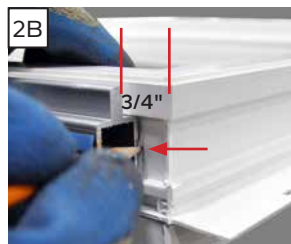
Drill three 3/16" diameter weep holes through the first outer vinyl layer of the frame on the top (head) of the bottom unit in the location shown. One 6" from each end and one in the center. Off set the center hole if mulling composite units.



2 INTERIOR MULLION ASSEMBLY:

A. Turn window units over so the interior side is up.

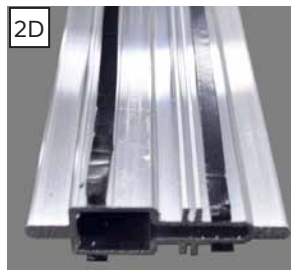
B. **Dry fit the mullion reinforcement;** there should be 3/4" on each end. Mark one end for correct placement. 1/2" aluminum stiffener is shown throughout instructions, but Vinyl Stiffener will be installed the same for the 1/2" joining mullion.



C. **If needed, trim** any left over nail fin to allow the mullion reinforcement to fit flush against the frame. Clean frame sides to be mullied with Isopropyl prior to attaching the mullion.



D. **Remove the tape backing paper** from both pieces of tape on the side of the mullion reinforcement to be placed against the frame.



E. **Place the mullion reinforcement** against the window with one end aligned with the mark made in step 2B.



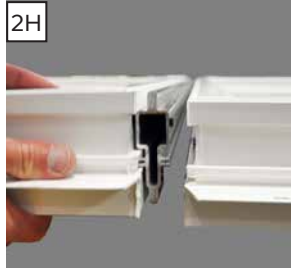
F. **Dry fit the second window** to the first window with the mullion reinforcement.

G. **Remove the tape backing paper** from both pieces of tape on the mullion reinforcement.



2 INTERIOR MULLION ASSEMBLY (CONTINUED):

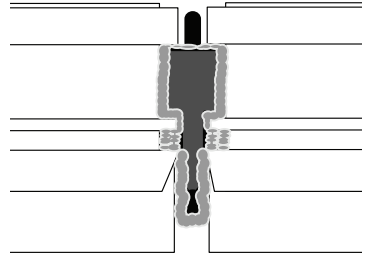
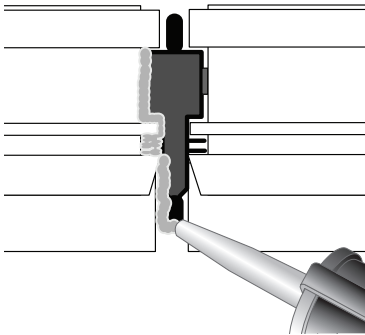
- H. Install the second window to the first window and the mullion reinforcement.



NOTE: Clamps may be used to help draw the windows together and ensure adequate tape adhesion.



- I. Outline each end of the mullion reinforcement with sealant, making sure the sealant touches the ends of all 4 pieces of tape.

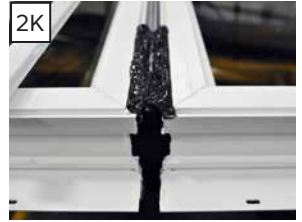


- J. Install a foam plug on each end of the mullion against the sealant.



2 INTERIOR MULLION ASSEMBLY (CONTINUED):

- K. Place 2 six-inch (6") lines of sealant on each end of the mullion. Sealant goes on each side of the mullion reinforcement. Tie together the two lines of sealant so the foam plug is completely covered with sealant.



- L. Install the mullion cover. Use a mallet to seat the cover into the window accessory grooves. Clamps may also be used to help draw the mullion joint together.



- M. Clean any excess sealant squeeze-out with Isopropyl Alcohol and a rag.

3 EXTERIOR MULLION ASSEMBLY COMPLETION:

- A. Carefully turn the combination over so the exterior side is up.
- B. Place 2 six-inch (6") lines of sealant on each end of the mullion. Sealant goes on each side of the mullion reinforcement. Tie together the two lines of sealant so the foam plug is completely covered with sealant.



- C. Install the mullion cover. Use a mallet to seat the cover into the window accessory grooves.



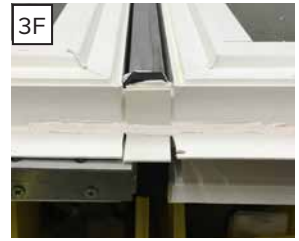
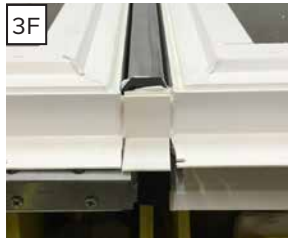
- D. Clean any excess sealant squeeze-out with Isopropyl Alcohol and a rag.

- E. Completely fill each end of the mullion with sealant.



3 EXTERIOR MULLION ASSEMBLY COMPLETION (CONTINUED):

- F. Place splice key on exterior edge between units and place bead of sealant as shown.



- G. Place a mullion truss plate centered on each end of the mullion and attach with the provided screws. Do Not over-tighten the screws. For vertical mullions, use VHB tape to attach truss plate at the sill.



- H. Apply two 6"-8" pieces of flashing tape over the sealant and end clip on each end of the mullion. Start one piece of tape 1/2" away from the exterior edge of the frames and overlap the clip. Start the other piece of tape flush with the interior edge of the frames and overlap the clip.

