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250 SERIES DOUBLE WALL FLUSH FLANGE MULLION ASSEMBLY

Be sure to thoroughly read and understand all the steps before beginning the mullion assembly process. It is recommended this process be completed by a construction professional.

The processes described in this instruction were developed and tested for use with vinyl 250 Series window combinations manufactured by Pella Corporation using 250 Series H-Bar mullion 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.

FIELD MULLION RULES:

1. **DO NOT mull more than 3 windows in one combination.**
2. **Horizontal and Vertical mullions are not permitted in the same combination.**
3. **Mulled product combination cannot exceed:**
   - 50 ft² for 1/2" mullion system.
4. **The length of any mullion may not exceed 96".**
5. **Any window greater than 25 ft² may not be mulled horizontally above a fixed 1-wide product.**

FIXED UNDER MULLION RULES:

These rules apply AFTER all standard mullion rules are applied:

1. **Any window < 20 ft² may be mulled horizontally above a fixed 1-wide product.**
2. **Any window < 40 ft² may be mulled 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.**

REMEMBER TO USE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT.

YOU WILL NEED TO SUPPLY:

- Pella Window and Door Installation Sealant or equivalent high quality, multi-purpose sealant 

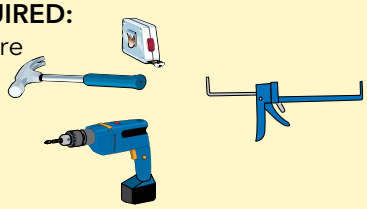
- Isopropyl Alcohol

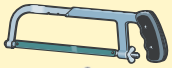
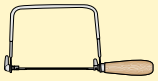
MULLION KIT, PARTS INCLUDED:

- Fabricated 250 Series H-Bar Mullion with pre-applied butyl tape
- Aluminum Extrusion Stiffener Bar
- 3/8" Diameter Backer Rod (10")
- Pella Color Matched Tape (14")
- Mullion Truss Plate (2)
- #6 x 3/4" Self Drilling Flat Head Screws (21)
- #6 Bonded Sealing Washers (21)
- 1/2" Dia. Hole Covers (21 white and 21 almond)
- VHB Tape (18")
- 3/8" Flat Head Screws (16)

TOOLS REQUIRED:

- Tape measure
- Hammer
- Sealant gun
- Drill



- 1/2" drill bit with drill guide 
- Clamps
- 1/4" wide chisel
- Utility knife 
- Scissors 
- Marker (fine point) or pencil
- Rubber mallet 
- Coping Saw or Hacksaw 

- Mini Circular Saw 

1 PREPARE THE WINDOWS:

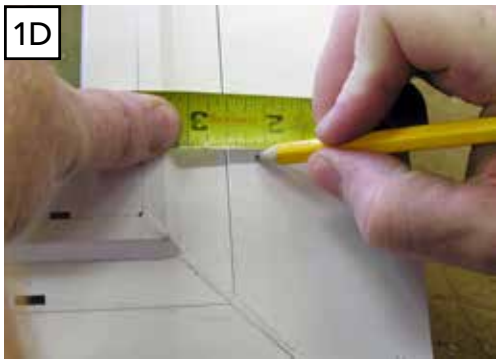
NOTE: Before starting, confirm the products when mulled together will fit the rough opening.

A. **Remove the packing material from the windows.** Inspect product; DO NOT mull or install damaged windows.

B. **If mulling venting windows, remove the venting sash from the windows.**

C. **Lay the windows on a flat surface** with exterior side up in the intended mullion assembly position.

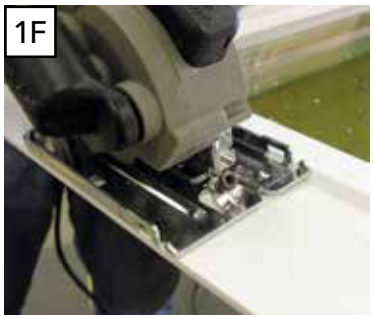
D. **On the sides of the windows to be mulled together;** Mark the window flange 2-1/8" from outside edge of flange.



E. **Use a chisel to clean corner flashing,** this will aid in saw travel in next step.

F. **Remove flanges from windows** using circular saw.







G. **Flip over units** so interior side is up.

H. **Remove weld flashing from the sides of the frame corners** to be mulled together using a chisel and snips. Clearance must be provided for the H-bar mullion and the mullion truss plates.





I. **Clean the frame surfaces** to be mulled using isopropyl alcohol.

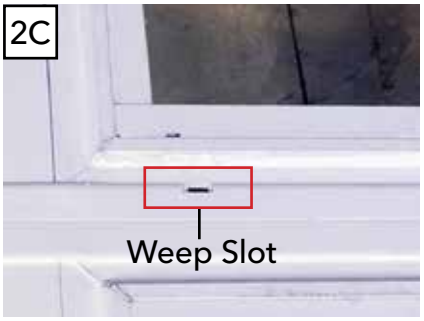
2 INSTALLING H-BAR MULLION AND REINFORCEMENT:

A. **Lay the windows (interior side up)** on a smooth, clean surface a few inches apart.

B. **Dry fit the H-bar mullion** to ensure it is the correct length.



C. **If mulling horizontally,** weep slots will need to be fabricated in the mullion corresponding to the weeps on the top unit of the mullion. Use a pencil to mark the location of the weeps and then trim out with snips.

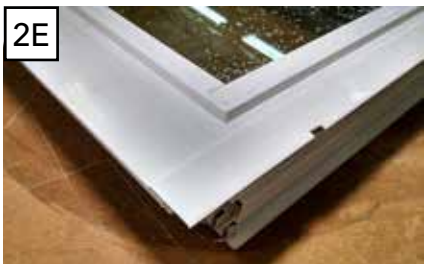


D. **Remove backing from butyl** (only on the side to be applied first).



E. **Slide the H-Bar Mullion onto the window frame.** Press down on the H-bar Mullion onto the lower unit to ensure good butyl tape compression.

NOTE: Make sure 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.





F. **Remove backing from butyl tape** on other side of H-bar mullion.

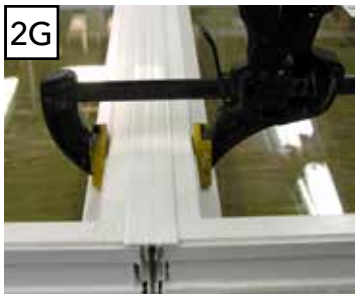


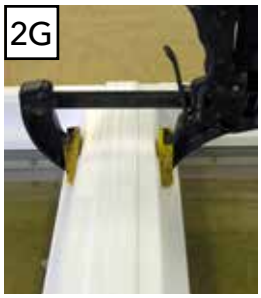
2 INSTALLING H-BAR MULLION AND REINFORCEMENT (CONTINUED):

G. **Slide the other window into the H-bar mullion.** Use clamps if necessary to compress butyl tape. Make sure the ends of H-bar mullion are aligned to the ends of the frame prior to fully seating.





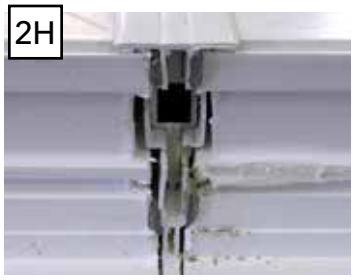




H. **Slide the aluminum reinforcement into the H-bar mullion.** Aluminum reinforcement should be located approx. 3/4" from the ends of the H-bar mullion.



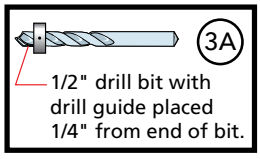




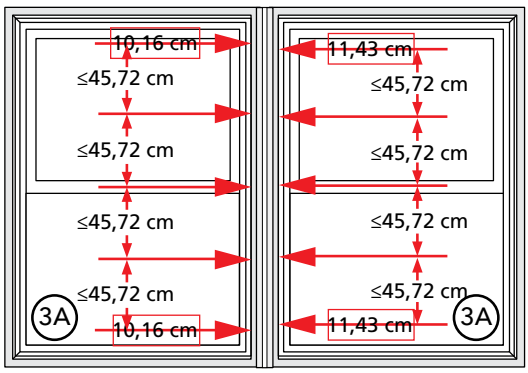
3 SECURING THE WINDOW TO THE MULLION AND REINFORMENT:

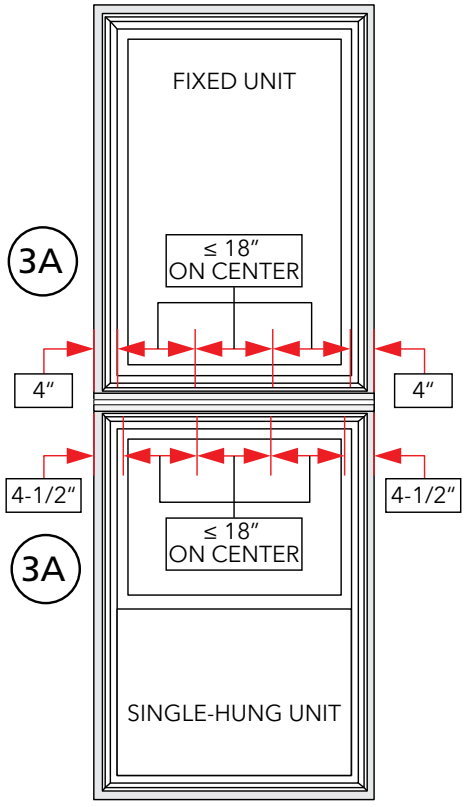
A. **If window frames have pre-drilled installation holes, those holes may be used**. If no existing holes; Drill 1/2" holes through the interior walls only in the sides of the window frames adjacent to the mullion as shown in the diagram below. Holes to be positioned approximately 4" from ends and maximum of 18" on center. Stagger the holes between the two sides of the mullion joint to avoid interference from the joining screws.

TIP: For fixed windows, existing 3/8" holes may be increased to 1/2" for ease of assembly of the mullion. Use a drill guide to make sure only drilling through the interior wall.



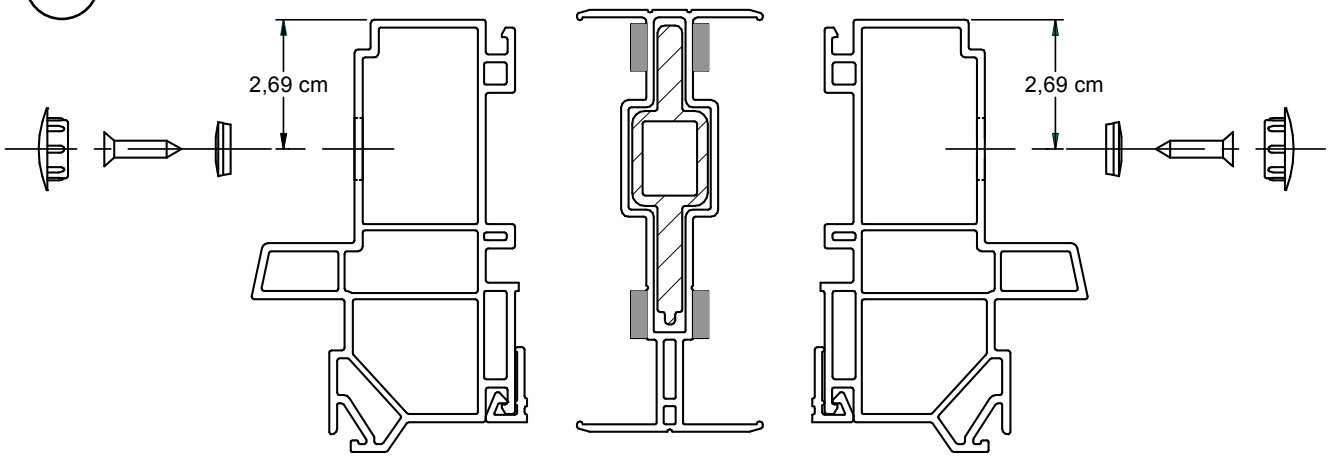






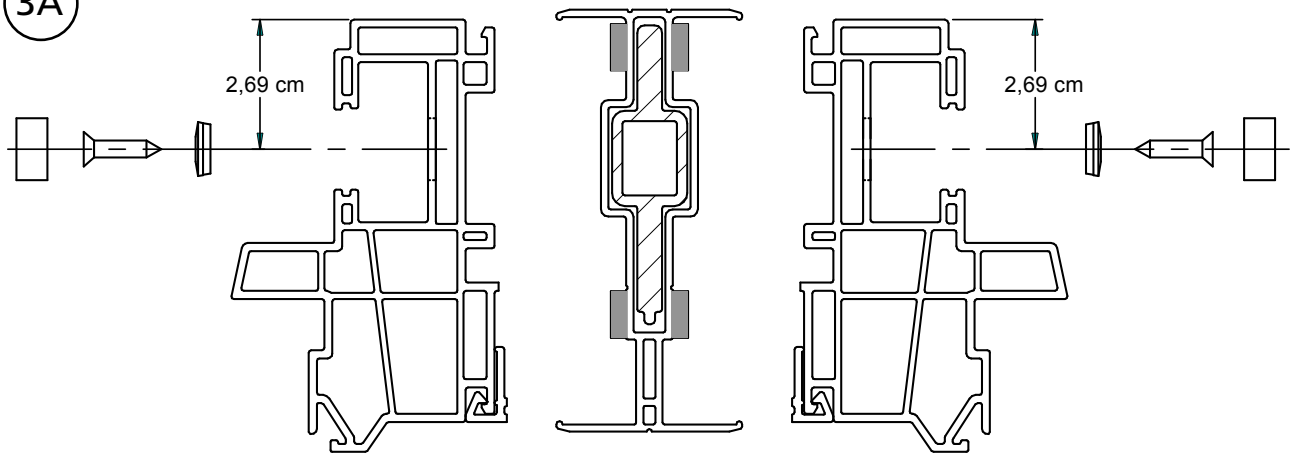
3 SECURING THE WINDOW TO THE MULLION AND REINFORMENT (CONTINUED):

3A



Fixed Jambs

3A



Single-Hung & Double-Hung Jambs

B. **Assemble washers to #6 x 3/4" flat head self-drilling screws** and drive into each hole, ensuring screws thread into the aluminum stiffener bars. Screws should be driven tight enough to compress rubber washer. Do not overtighten screws.

3B



3B



3B



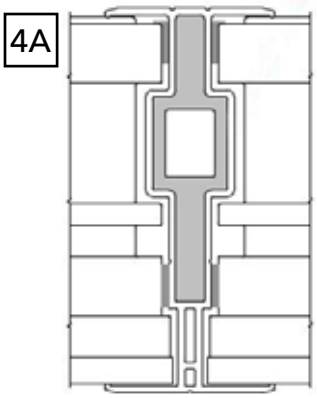
3 SECURING THE WINDOW TO THE MULLION AND REINFORMENT (CONTINUED):

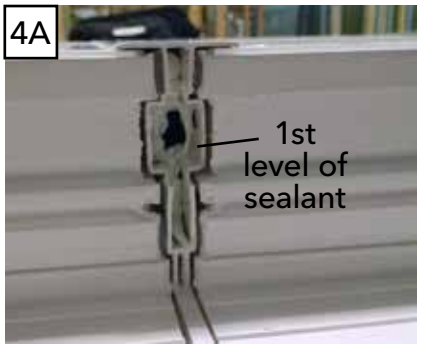
C. **Install hole plugs or foam.**



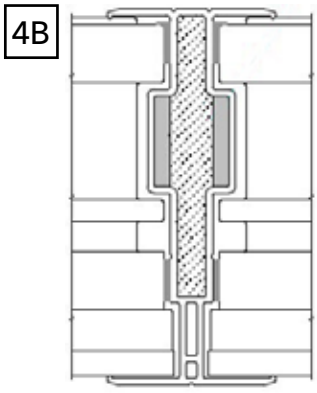
4 SEALING THE MULLION JOINT:

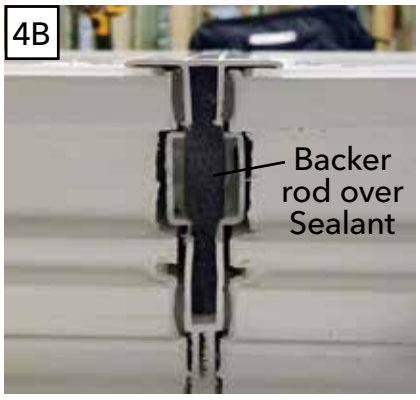
A. **Apply sealant over the aluminum stiffener,** in the H-bar.



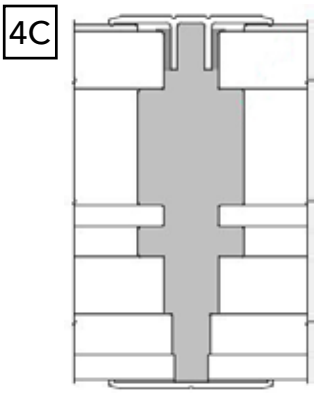


B. **Cut a piece of 3/8" diameter foam backer rod** to 2-3/4" and insert in the cavity of the H-bar mullion.





C. **Apply sealant over the foam backer rod** and cover the entire mullion joint filling entire area with sealant, including covering the joint between the two flanges.





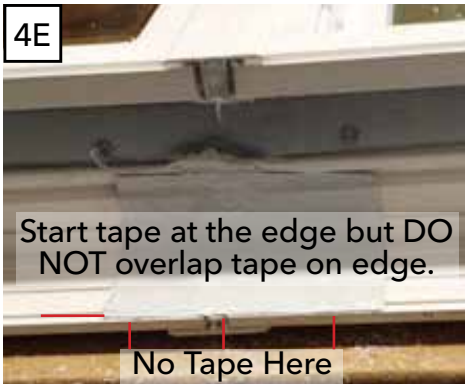
4 SEALING THE MULLION JOINT (CONTINUED):

D. **Center a truss plate over the mullion joint,** and install using 3/8" flat head screws. DO NOT over-tighten screws.

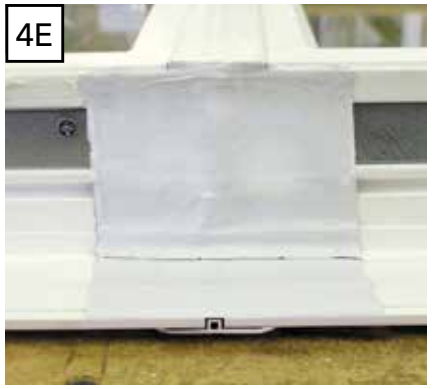
DO NOT SCREW TRUSS PLATE TO SILL!



E. **Apply color matched Pella tape,** starting at the top edge of the flange and moving towards the interior. Use 2 pieces of Pella tape to completely cover the mull joint. Press the tape to wet out and adhere thoroughly to the backside of the flange.







F. **Repeat 4A – 4E** on the other end of the mullion joint.

NOTE: On Vertical Mullions the sill truss plate is applied using VHB tape instead of screws. Apply VHB tape to the plate, remove release paper and apply to sill.

DO NOT SCREW TRUSS PLATE TO SILL!





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.

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