
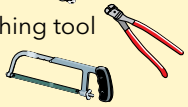











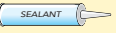






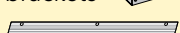


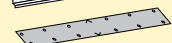
WINDOW WITH FIN COMBINATION ASSEMBLY INSTRUCTION USING WOOD BLOCKING MULLION REINFORCEMENT

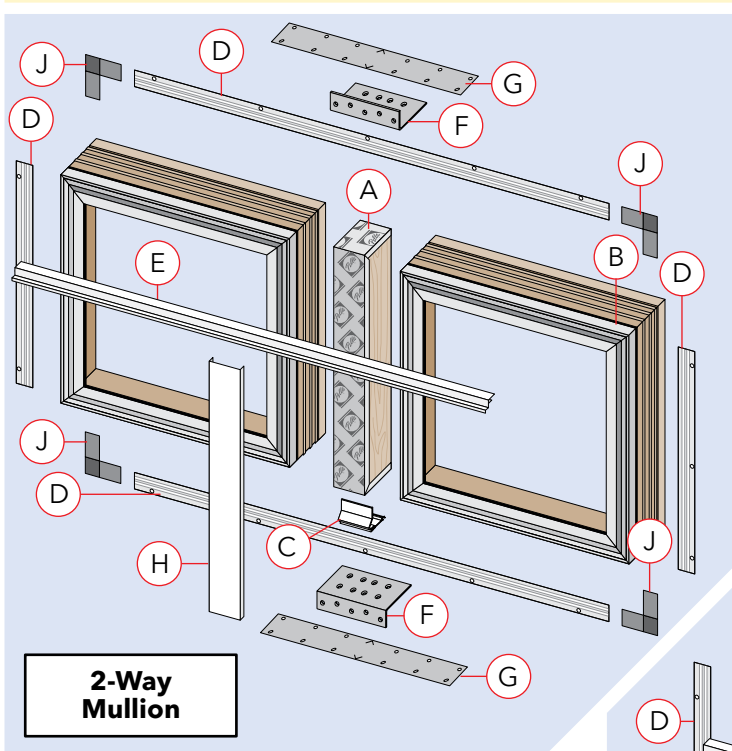
Note: This process is approved for combinations assembled by Pella Sales Branch professionals only.

TOOLS REQUIRED:

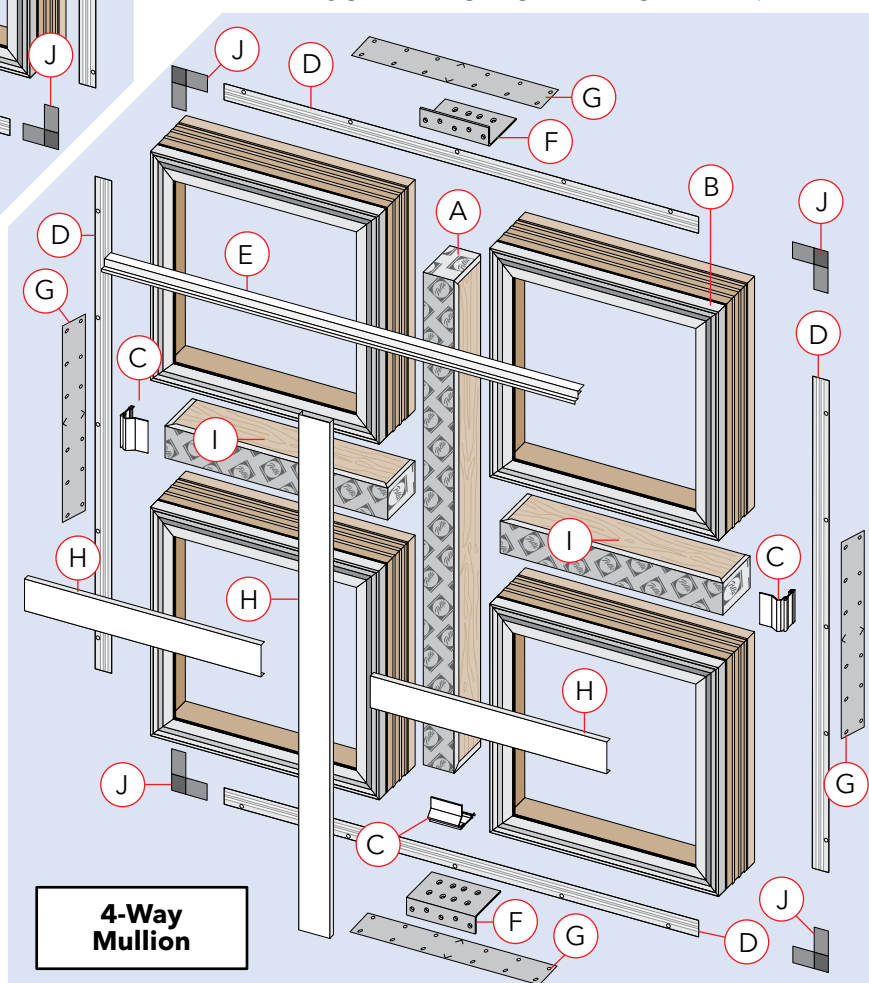
- Tape measure 
- Corner notching tool or hacksaw 
- Hammer or air staple gun 
- Rubber mallet 
- Drill 

YOU WILL NEED TO SUPPLY:

- Pella® SmartFlash™ foil backed butyl window and door flashing tape or equivalent 
- #8 x 3/4" pan head stainless steel screws 
- #8 x 2" finish head screws 
- #10 x 3" flat head stainless steel screws 
- High quality exterior grade polyurethane 
- 1" x 1/2" corrugated fasteners 
- 1-1/2" head sealant tape 
- Wood blocking, kiln dried to 12% water contents, for mullion reinforcement 
- Mullion covers 
- Mullion end splice 
- Mullion anchor brackets 
- Nailing fins 
- Fin corners 
- Head drip cap 
- Shipping plates 



REMEMBER TO USE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT.



LEGEND:

- A. Mullion reinforcement
- B. Fin groove
- C. Mullion end splice
- D. Nailing fin
- E. Head drip cap
- F. Mullion anchor bracket
- G. Shipping plate
- H. Mullion cover
- I. Intermediate mullion reinforcement
- J. Fin corner



Always read the Pella Limited Warranty before purchasing or installing Pella products. By installing this product, you are acknowledging that this Limited Warranty is part of the terms of the sale. See Limited Warranty for complete details at <http://warranty.pella.com>.

Note: For standard intermediate mullions (without reinforcement) refer to Standard Mullion Instructions. For reinforced intermediate mullions, proceed to Step 1 - Mulling Intermediate Combinations.

Note: If you are assembling a 2-way reinforced mullion (two units mullied together, either side by side or one above the other) proceed to Step 2 - Continuous Mullion Assembly.

1 MULLING INTERMEDIATE COMBINATIONS

A. **Cut the wood blocking mullion material** 1/4" shorter than the window.

B. **Cut flashing tape** 10" longer than the length of the mullion.

Note: Two pieces of flashing tape are required for mullions wider than 2".

C. **Remove the paper backing from the flashing tape** and apply to the mullion blocking. Ensure the ends of the mullion blocking are completely covered and the tape wraps over the sides.

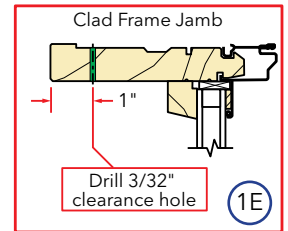
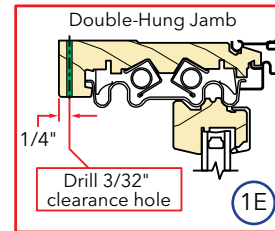
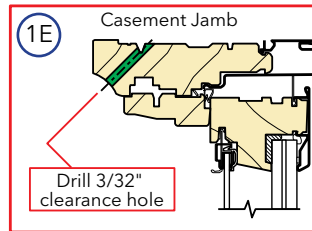
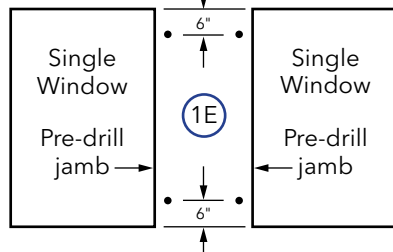
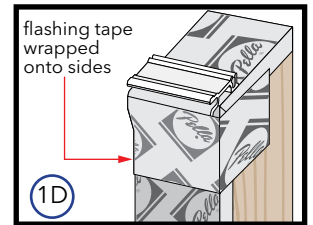
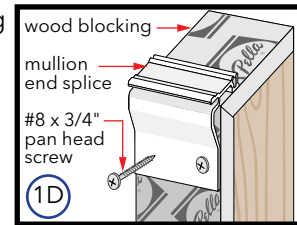
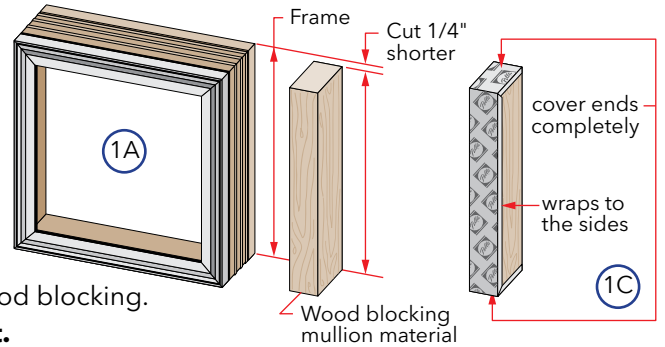
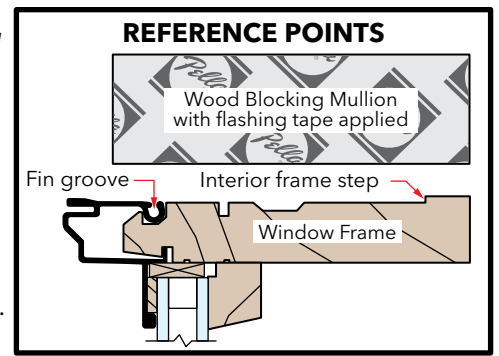
D. **Cut a mullion end splice to the width of the wood blocking** and attach to the face of the wood blocking with four #8 x 3/4" pan head stainless steel screws or 1 x 3/4" staples. Apply a piece of flashing tape over the mullion splice, wrapping the tape onto the sides of the wood blocking.

E. **Pre-drill clearance holes for ease of mullion attachment.**

Casement: On the room side of the window, drill two 3/32" diameter clearance holes through the jamb of the frame being mullied at a 45° angle. Position the clearance holes 6" from the top and bottom of the window.

Double-Hung and Clad Frame: On the room side of the window, drill two 3/32" diameter clearance holes through the jamb of the frame being mullied at the locations shown. Position the clearance holes 6" from the top and bottom of the window.

Note: Architect Series double-hung: Use the pre-punched holes in the jamb liner rather than drilling holes in the interior frame edge.



F. **Place a 3/8" continuous bead of sealant** down the interior frame step and fin groove of the window. At the point where there will be a mullion end splice, place a bead of sealant forming a triangle. Start at the end of the fin groove sealant, across the outer face edge of the window then at a 45 degree angle back to the original sealant bead.

G. **Place the wood blocking mullion on the window**, align the outer edge of the mullion splice with the exterior edge of the window frame.

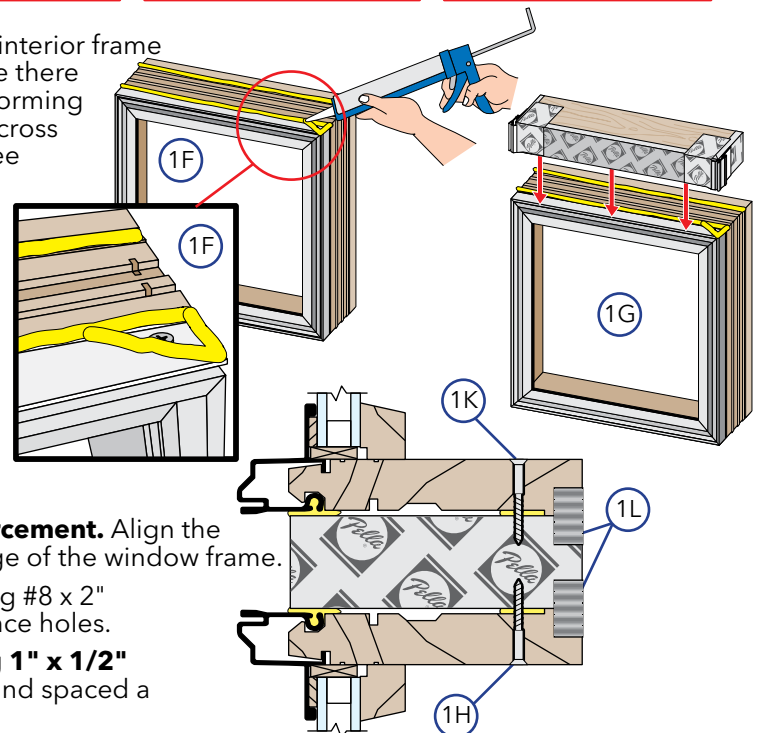
H. **Attach the window to the mullion** by driving #8 x 2" finish head screws into each of the pre-drilled clearance holes.

I. **Place a continuous bead of sealant** on the second window, down the interior frame step and fin groove. At the point where there will be a mullion end splice, place a bead of sealant forming a triangle.

J. **Place the second window onto the mullion reinforcement.** Align the outer edge of the mullion splice with the exterior edge of the window frame.

K. **Attach the second window to the mullion** by driving #8 x 2" finish head screws into each of the pre-drilled clearance holes.

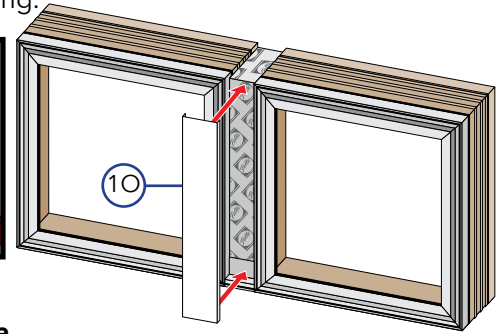
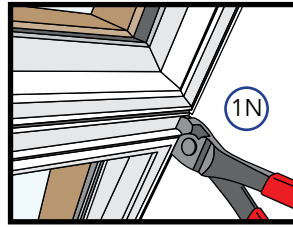
L. **Attach the windows together on the interior using 1" x 1/2" corrugated fasteners**, beginning 6" from each end and spaced a maximum of 16" on center.



M. **Tool the sealant lines** on both the interior and exterior at the mullion blocking.

N. **Using a corner notching tool or hacksaw, notch corners** wherever a mullion cover, head drip fin or frame expander will run through a joint.

O. **Cut a piece of mullion cover 5/8" shorter than the window**, center on combinations and use a rubber mallet to snap the mullion cover in place.



2 CONTINUOUS MULLION ASSEMBLY

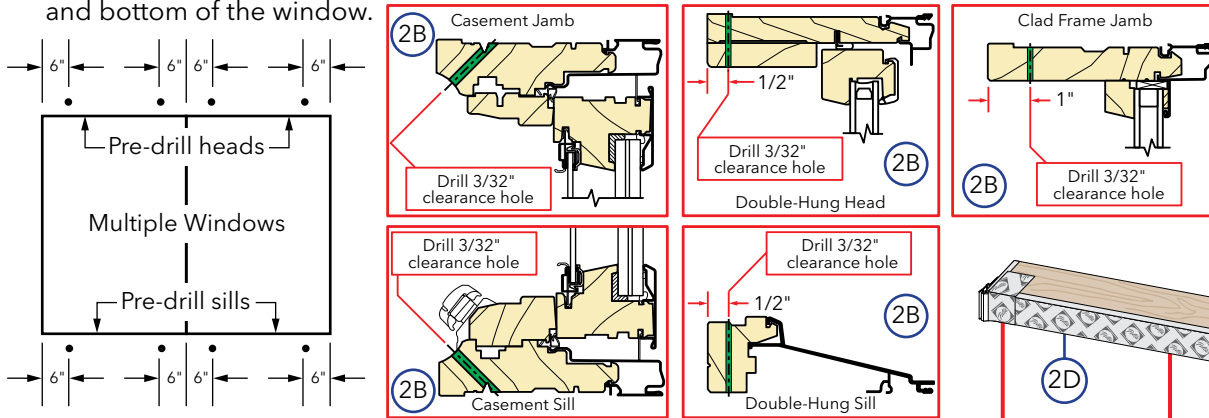
This step is for continuous mullion application, where sub-combinations or single windows are mullied together using continuous mullions.

A. **Prepare sub-combinations** according to the instructions in Step 1 - MULLING INTERMEDIATE COMBINATIONS.

B. **Pre-drill clearance holes for ease of mullion attachment.**

Casement: On the room side of the window, drill two 3/32" diameter clearance holes through the sill or head of the frame being mullied at a 45° angle. Position the clearance holes 6" from the top and bottom of the window.

Double-Hung and Clad Frame: On the room side of the window, drill two 3/32" diameter clearance holes through the sill or head of the frame being mullied at the locations shown. Position the clearance holes 6" from the top and bottom of the window.



C. **Place a 3/8" continuous bead of sealant** down the interior frame steps and fin grooves of the window. At the point where there will be a mullion end splice, place a bead of sealant forming a triangle. Start at the end of the fin groove sealant, across the outer face edge of the window then at a 45 degree angle back to the original sealant bead.

D. **Cut a piece of wood blocking mullion reinforcement 1/4" shorter than the window or sub-combinations.** Cut flashing tape 10" longer than the length of the mullion and apply to the mullion blocking. Ensure the ends of the mullion blocking are completely covered and the tape wraps over the sides.

E. **Cut a two mullion end splices to the width of the wood blocking.** Attach an end splice to each end face of the wood blocking with two screws. Apply a piece of flashing tape over the mullion splice, wrapping the tape onto the sides of the wood blocking.

F. **Place the wood blocking mullion on the window or sub-combinations**, align the outer edge of the mullion splice with the exterior edge of the window frame.

G. **Attach the mullion to the window or sub-combinations** by driving #8 x 2" finish head screws into each of the pre-drilled clearance holes.

H. **Place a 3/8" continuous bead of sealant** on the second window or set of sub-composites, down the interior frame steps and fin grooves. At the point where there will be a mullion end splice, place a bead of sealant forming a triangle.

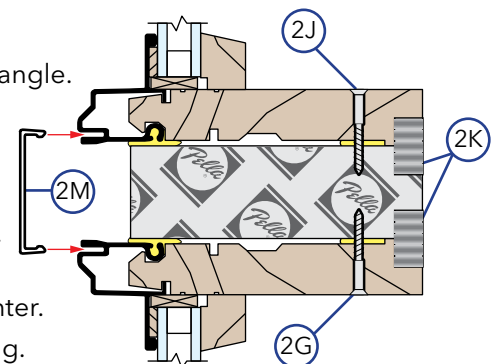
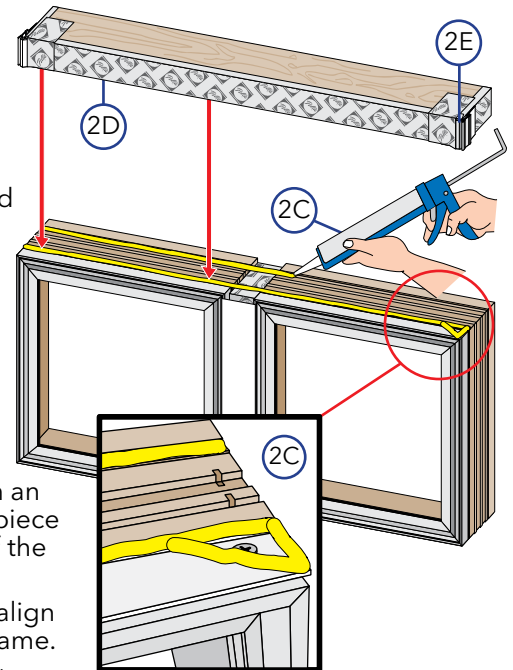
I. **Place the second window or set of sub-combinations onto the mullion reinforcement.** Align the outer edge of the mullion splice with the exterior edge of the window frame.

J. **Attach the second window or set of sub-combinations to the mullion** by driving #8 x 2" finish head screws into each of the pre-drilled clearance holes.

K. **Attach the windows together on the interior using 1" x 1/2" corrugated fasteners**, beginning 6" from each end and spaced a maximum of 16" on center.

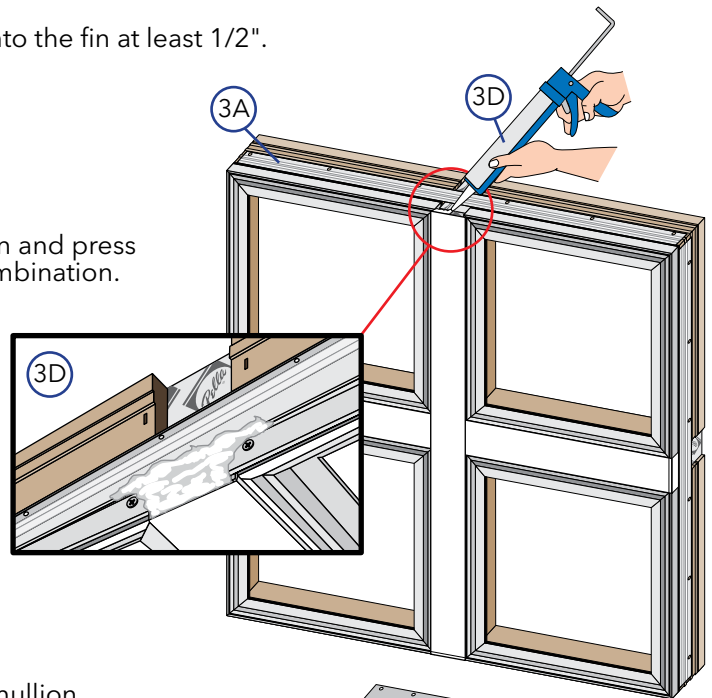
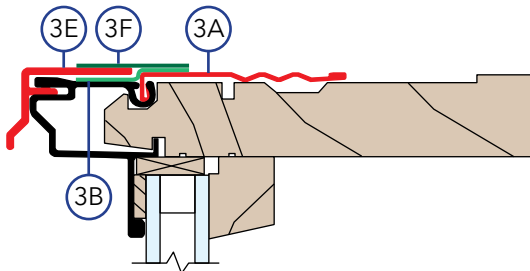
L. **Tool the sealant lines** on both the interior and exterior at the mullion blocking.

M. **Cut a piece of mullion cover 5/8" shorter than the combinations**, center on combinations and use a rubber mallet to snap the mullion cover in place.



3 COMPLETING THE COMBINATION ASSEMBLY

- A. **Install continuous nailing fins** around the combination.
- B. **Apply 1-1/2" head sealant tape**, lapping the tape onto the fin at least 1/2".
- C. **Attach the fin corners.**
- D. **Fill all head end joints with sealant.**
- E. **Cut the head drip cap** to the width of the combination and press the leg of the cap into the accessory groove of the combination.
- F. **Tape over the joint** between the head fin and head drip cap with 1-1/2" head sealant tape.



- G. **Fold the nailing fins up** and attach the head and sill mullion anchor brackets.
Mullion reinforcement 2" or wider: Center the anchor bracket on the mullion and drive four #10 x 3" flat head stainless steel screws through the bracket into the mullion reinforcement.
Mullion reinforcement less than 2" wide: Offset the anchor bracket where two of the screws will be centered on the mullion reinforcement and drive two #10 x 3" flat head stainless steel screws through the bracket into the mullion reinforcement.
- H. **Place a shipping plate over the anchor bracket.** Align the holes in the shipping plate with the holes in the anchor bracket and drive #10 x 5/8" pan head stainless steel screws (provided) through the shipping plate and bracket into the frame.
- I. **Drill or punch holes in the nailing fin** to align with the holes in the anchor bracket.
- J. **Attach shipping plates to the jambs of the mullion composite** by aligning the arrows on the plate with the mullion joints and driving #10 x 5/8" flat head screws (provided) to secure.
- K. **Package the combination assembly** for shipping and handling to the job sight.
Note: Wood blocking behind the fin is recommended to support the fin and prevent damage.

