Loewen

FIELD MULLING INSTRUCTIONS

Note: This is a modified compilation of the current work instructions in manufacturing as of the revision date.

Note: Initial position prior to mulling is exterior up.

Note: If a Marvel operator or fixed unit is part of combination ensure to complete the sash drop prior to proceeding with mulling.

1. Remove integral nailing flange on sides that get mulled.

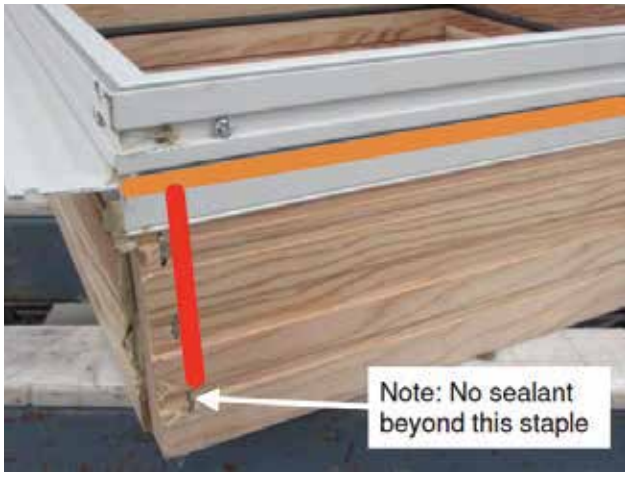
2. Cut off miter on integral nailing flange on all corners that require.

Note: Ensure cut edge is straight with OSM of frame.

Note: If applicable, also remove nailing flange on side(s) that get field mulled.

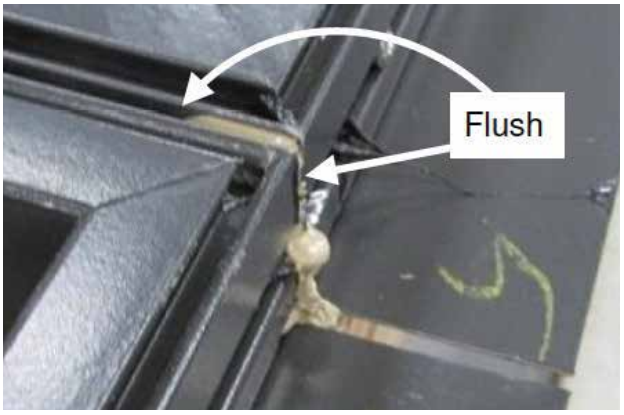
3. Apply 10mm continuous bead of Dymonic FC Buff (#297837) along entire length of mull. (orange line shown)

4. Apply 10mm vertical bead of Dymonic FC Buff approximately 25mm from both ends to prevent corner gapping.
(red line shown)



5. Bring units together, clamp as required.

Note: Ensure metal is flush on face and both ends.



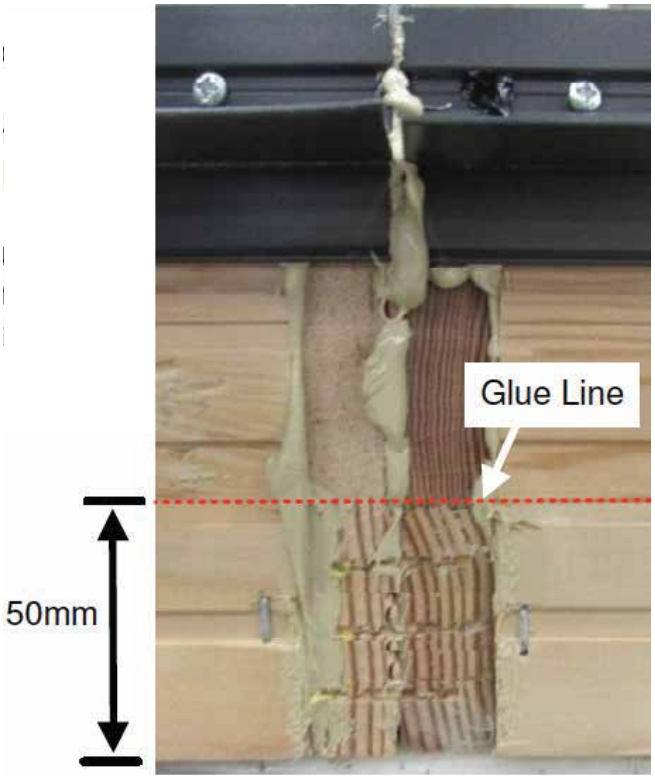
6. If casing is required or more units are required to be part of combination (e.g. 3 wide); apply temporary pieces of mull cover or clamps to hold units together.

Note: Ensure wood is flush on interior.

7. Fasten units together with three ½" x 1" corrugated staples (#70069) on each end.

Note: For TD outswing and all A/C units, keep staples within 50mm from interior face of units as shown (between glue line and interior).

8. For multiple unit combinations repeat steps 1- 7 for other mulls.



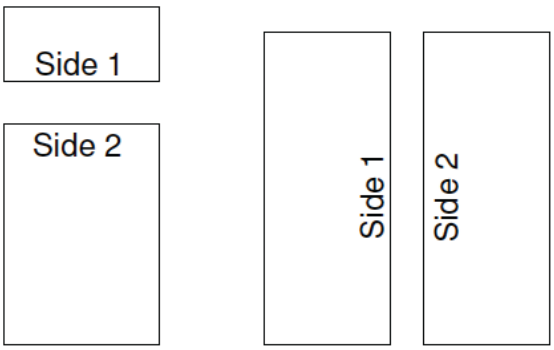
Note: Initial position prior to mulling is exterior up.

Note: If a Marvel operator or fixed unit is part of combination ensure to complete the sash drop before mulling.

1. Remove integral nailing flange on sides that require. Refer to chart and diagram examples.

Note: For multiple unit combinations refer to shop pac for spreadmull orientation.

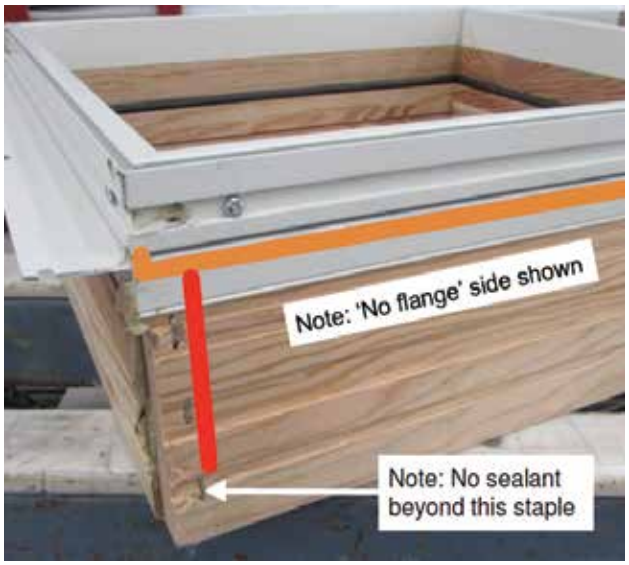
Spreadmull Option	Mull Side 1	Mull Side 2
1”	no flange	no flange
1.5” or 2”	flange	no flange
3”, 4” or 6”	flange	flange



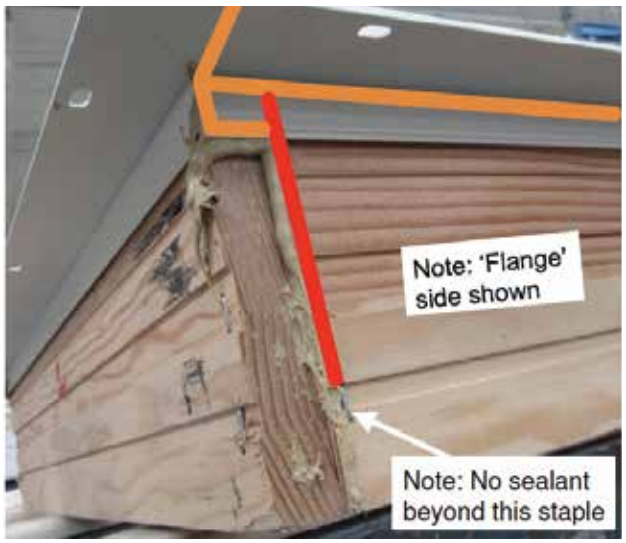
2. Cut off miter of nailing flange on all ends that require.

Note: Ensure cut edge is straight with OSM of frame.

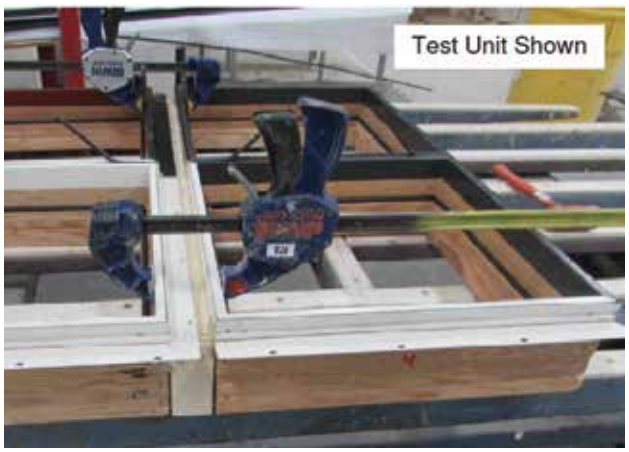
3. Apply 10 mm continuous bead of Dymonic FC Buff (#297837)) along entire length of mull and mitre joint. (orange line shown)



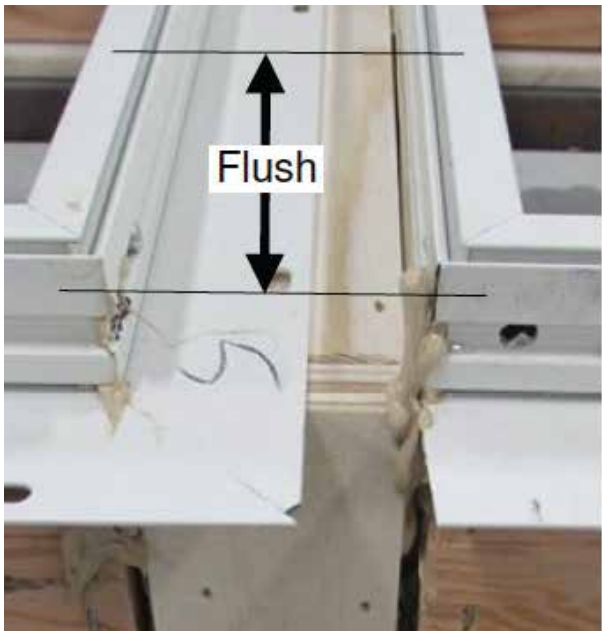
4. Apply 10mm vertical bead of Dymonic FC Buff approximately 25mm from both ends to prevent corner gapping. (red line shown)



5. Bring units together, clamp as required to ensure OSM.



Note: Ensure metal is flush on face and both ends.



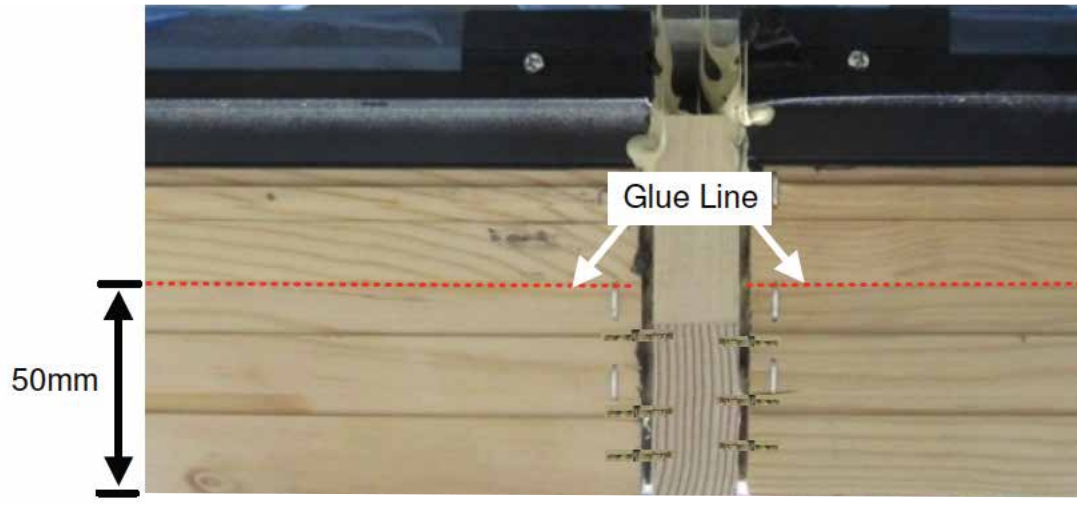
Note: Ensure spread mull and both units are flush on ends and interior face.

6. For frame side(s) with flange, apply #6 x 1/2 SS PH SQ (#320456) through each hole on the flange into spread mull.

7. For multiple unit combinations repeat steps 1-6 for all mulls.

8. Fasten units together with three ½ x 1" corrugated fasteners (#70069) on each side of spread mull.

Note: For TD outswing and all A/C units, keep staples within 50mm from interior face of units as shown (between glue line and interior).



1. For frame side(s) with flange, apply #6 x 1/2 SS PH SQ (#320456) through each hole on the flange into spread mull.

2. Apply appropriate pre-cut rubberized flashing tape between frames on top of spread mull (& integral nail flange as applicable).

Note: For 1.5” spreadmulls use 2 strips of 1” tape, overlapped down the center. For 2.5” spreadmulls use 2 strips of 2” tape, overlapped down the center.

Spreadmull	Tape Width	Part #
1”	23mm	49813
1.5”	23mm	49813
2”	48mm	49815
2.5”	48mm	49815
3”	74mm	49816
4”	100mm	49817
6”	152mm	49812

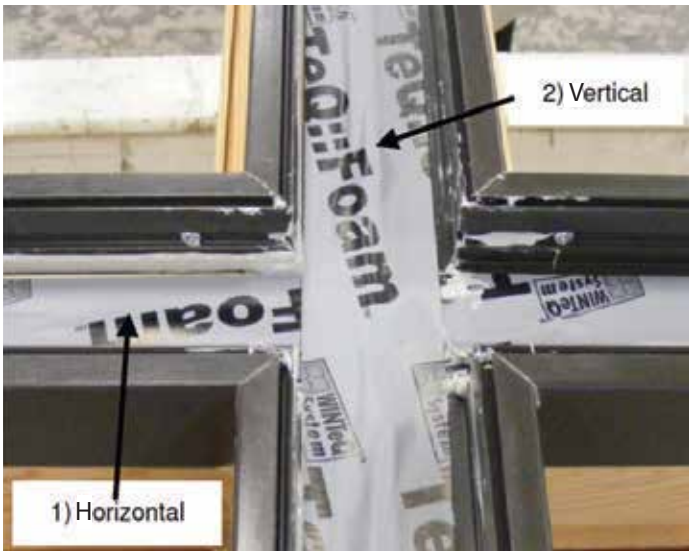
Note: Run tape full length of mull, wrapping onto end of spreadmull or around flange at both ends.

Note: Ensure tape edges do not lap up side of frame metal.

Note: For multiple unit combinations with horizontal and vertical spreadmulls in between:

1)Run continuous horizontal tape first.

2)Run continuous vertical tape second.

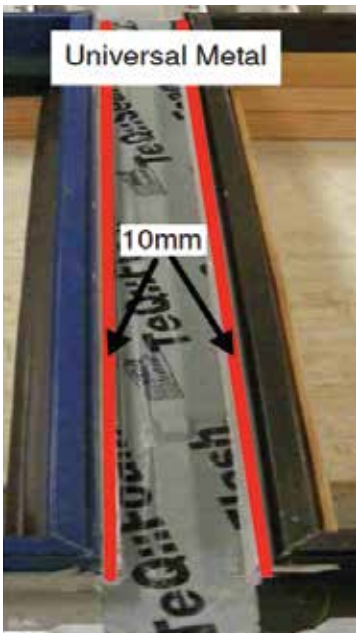


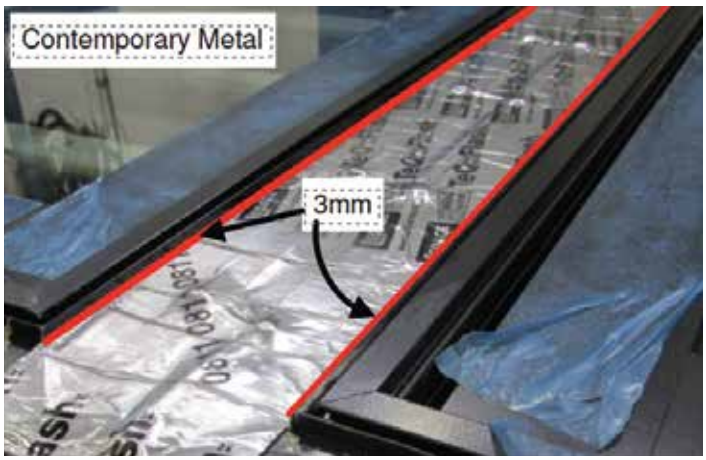
Note: Vertical tape must overlap horizontal tape. This applies regardless of spreadmull orientation.

3. Apply a continuous bead of Dymonic FC Buff (#297837) along entire length of mull covering tape and frame joint on both sides of mull.

Note: 10mm bead for universal frame metal, 3mm bead for contemporary frame metal.

Note: Apply sealant to end of frame only.





Note: For multiple unit combinations with horizontal and vertical spreadmulls:

1) Vertical beads run through covering edge of tape overlap.

2) Horizontal beads butt up to vertical

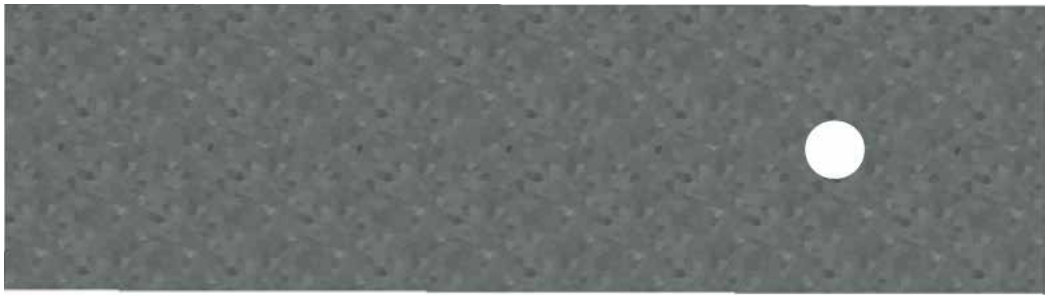
Note: Steps 1 –are if unit has marvel operator cord at gusset plate location.

1. Drill 11/16" hole in gusset plate where cord will run through.

Use template to hold gusset plate in place when drilling.

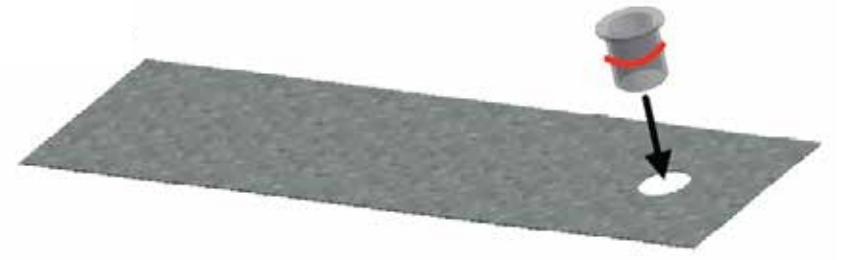
(Picture Uses T180703, A/C uses T180702)

Note: Ensure the gusset plate will be centered over mullion joints.

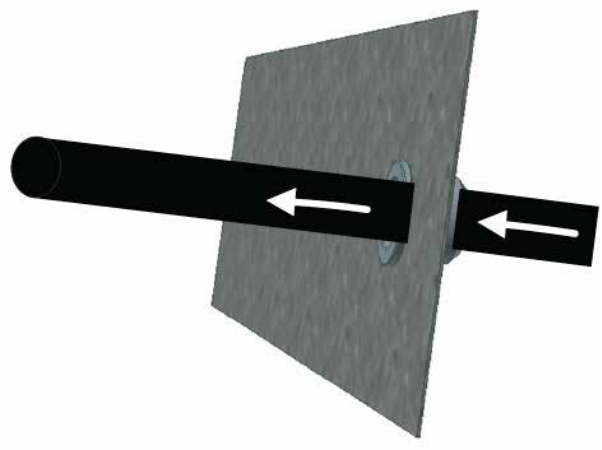


2. Apply Hexion XB-90LT-LF glue (#318568) around bushing (#13313).

3. Insert bushing as shown.



4. Feed cord through bushing.



5. Attach warning label (#49950), bag (#88043) and bushing (#13313) onto cord as shown.

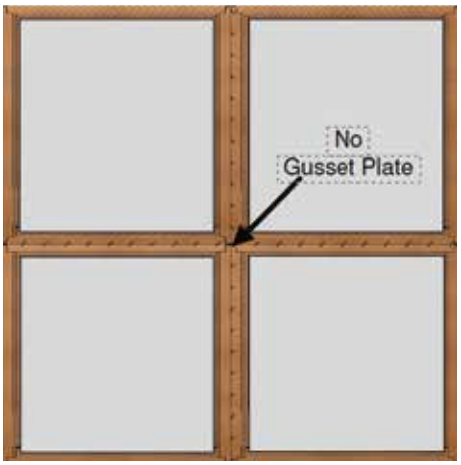
Note: Warning label, bag and bushing are found taped onto frame.

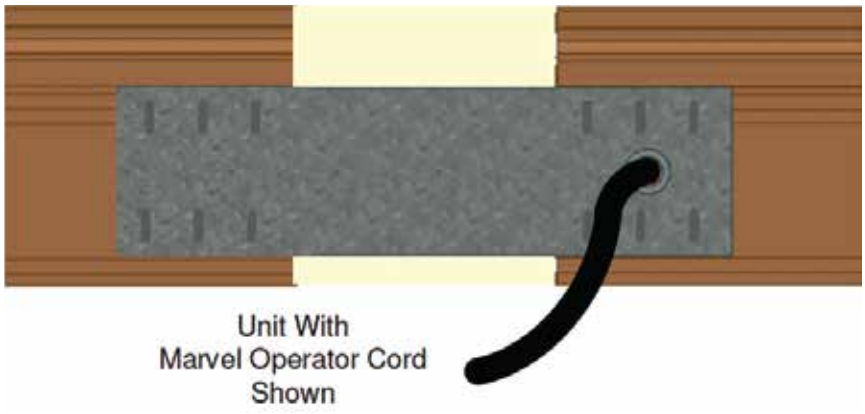
6. Center gusset plate (#298972) over mullion end joints.

7. Secure gusset plate with 12mm staples (#70098), 6 staples on each side as shown.

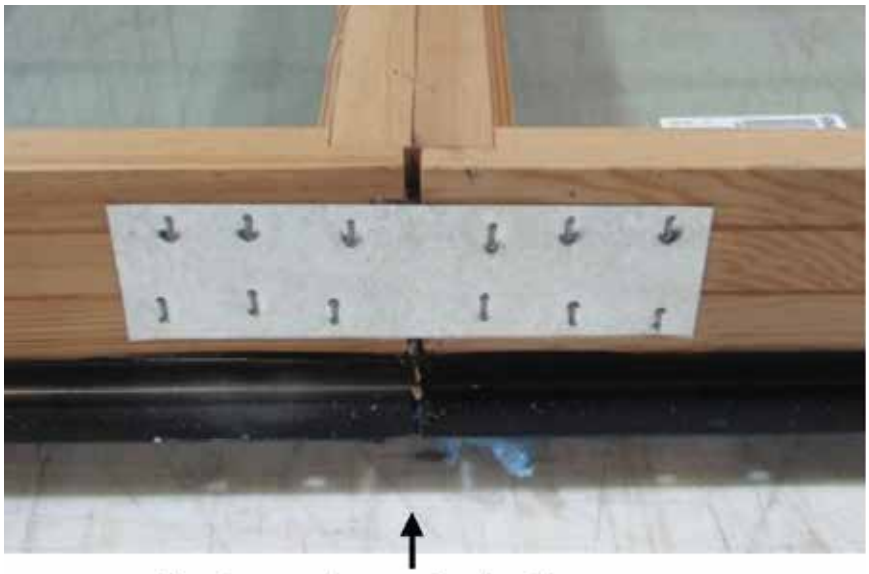
Note: If factory mulled unit gets another unit mulled to it in the field; do not apply gusset plate(s) to the field mull side(s).

Note: Attach gusset plates on perimeter joints only.





Unit With
Marvel Operator Cord
Shown



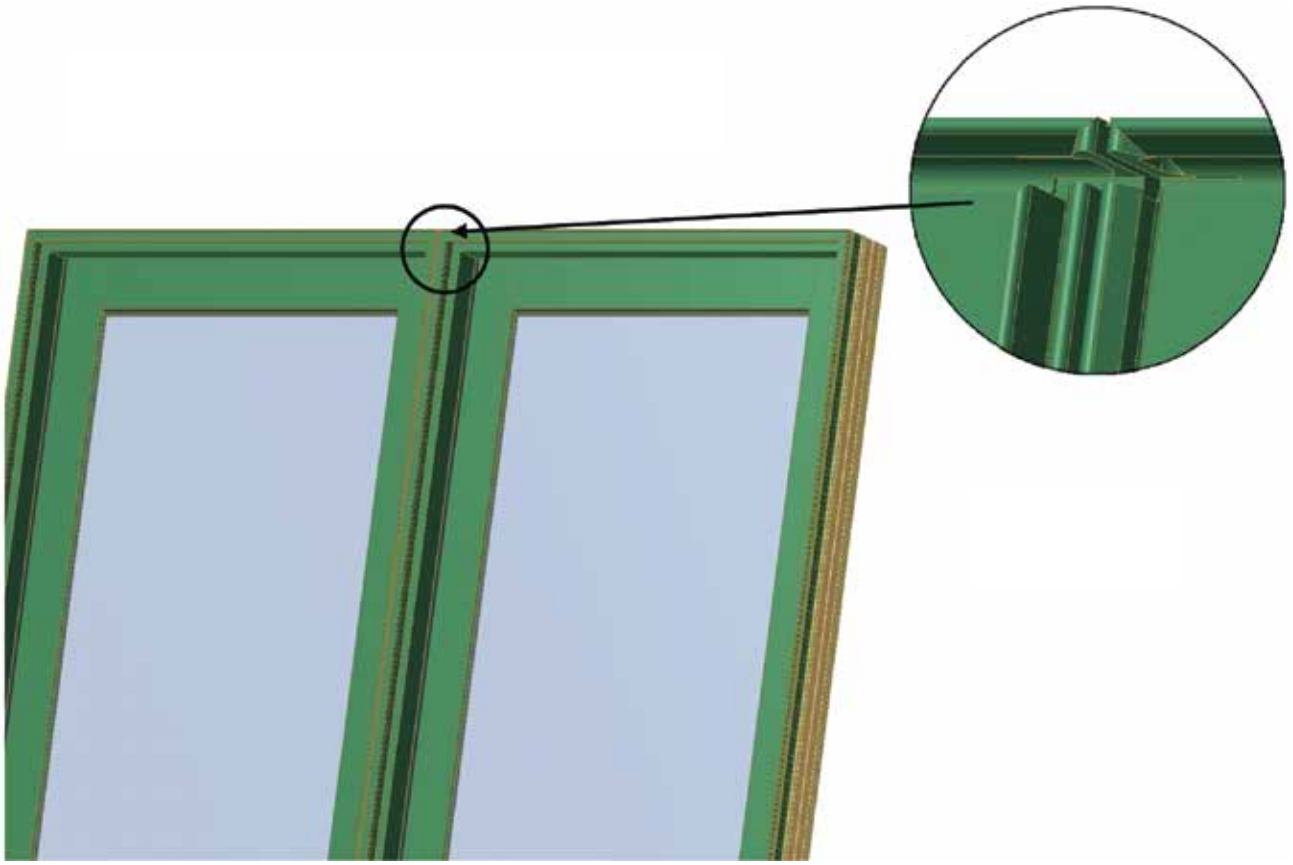
Note: Images shown are interior side up.
Process is exact same if units are exterior side up.

Unit With
Spreadmull
Shown

Terrace Door Combination Shown

Note: This is required for frame accessories and where mull covers run through.

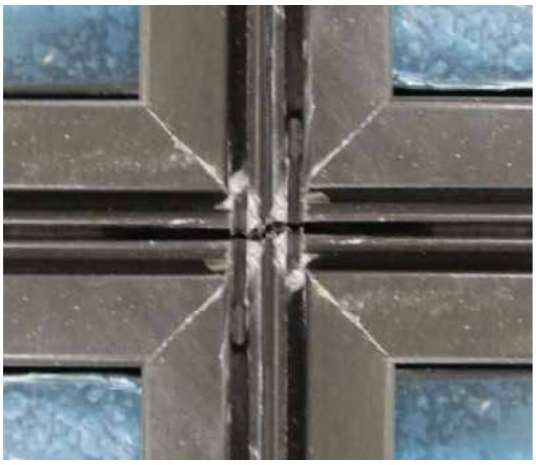
1. Use disc grinder to create a continuous kerf between any two units.

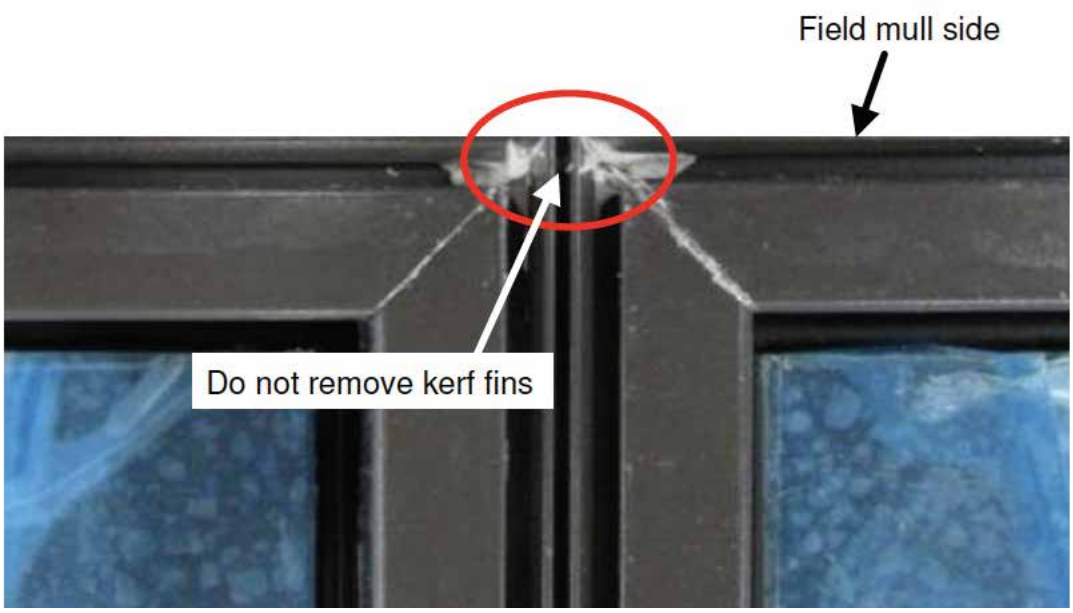


1. Where required, remove accessory kerf fins with a grinder to allow fins of mullion cover to run through. Refer to previous page.

Note: See page 19 for applying mullion covers on different combinations.

Note: Treat all field mull units the same as a standard unit. The site technician will grind as required.





Note: All mullion parts for any configuration not displayed or listed in the following step require the BOM team to review and provide sizes of the mullion covers.

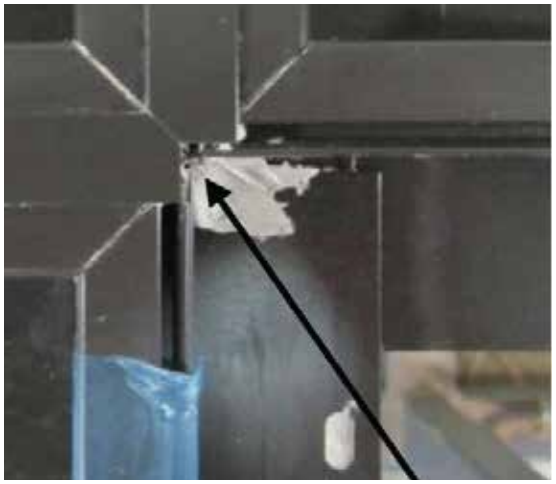
2. Cut mullion cover to size.
See examples below of how mullion covers should fit.

3. Notch mullion cover fins 10mm back, as shown, on ends where mullion joint cover will be applied. Refer to MI-2666-01.

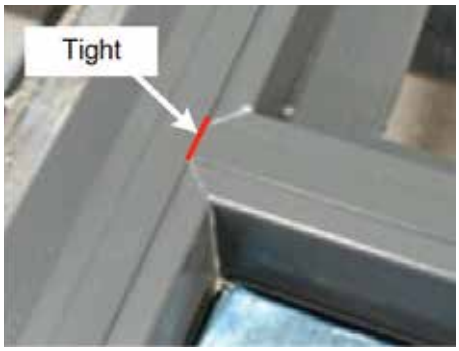
Note: Jamb to jamb mullion covers should come to exterior leg of accessory kerf as shown.

Note: Mullion covers with spread mull should come flush to exterior edge as shown.

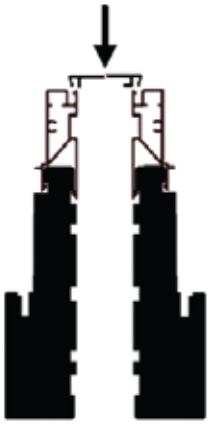
Note: For 'L' shaped combinations cut tips of mullion covers to butt together as shown.



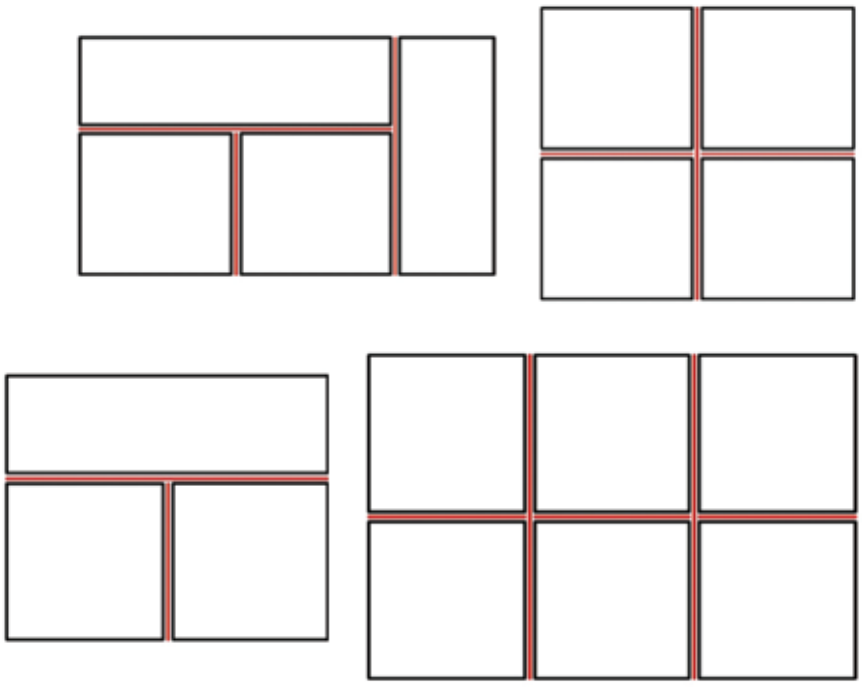
Note: If applicable ensure mullion covers fit tight to any sill or sill nose, another mullion cover or casing as shown.



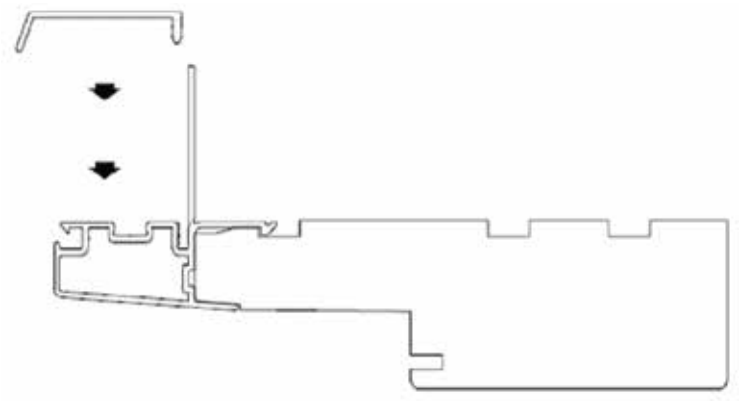
4. Use a rubber mallet and a vinyl block or wood block to snap mullion cover into kerf as shown.



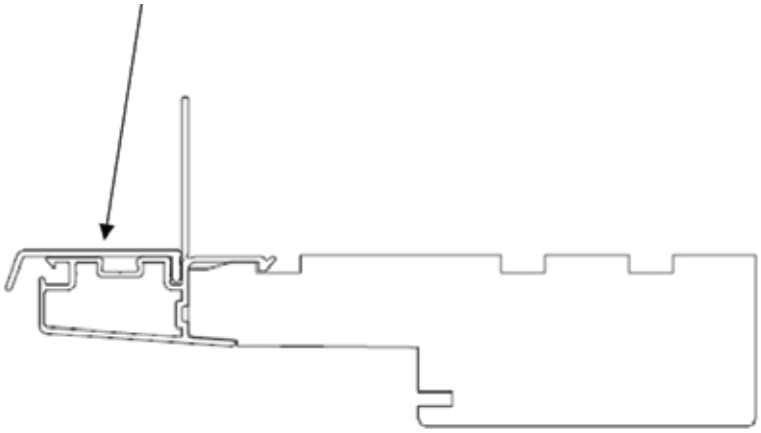
Note: Where ever possible vertical bullnose always runs from top to bottom as shown.



1. Line up drip cap back lip with frame groove.



2. Apply drip cap onto frame cladding.



Note: Drip cap should be centered on head and equal OSM width, with a tolerance of ±.25mm.

Note: For Specialty shaped units tolerance is -.25mm +3mm.

Note: If factory mulled unit gets another unit mulled to it in the field do not apply mullion joint cover to the field mull side(s).

Note: If there is a drip cap, casing or sillnose, there is no need to apply a mullion joint cover on the side that has these parts.

1. Apply appropriate mullion joint cover as shown.

1" (#49251)

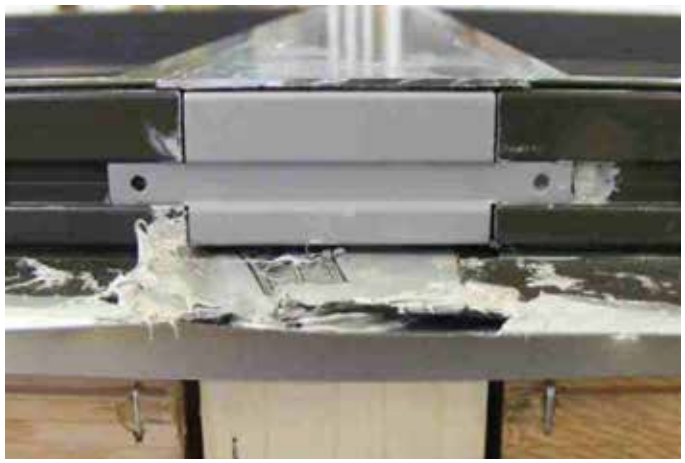
1½" (#49256)

2" (#49252)

3" (#49253)

4" (#49254)

6" (#49255)

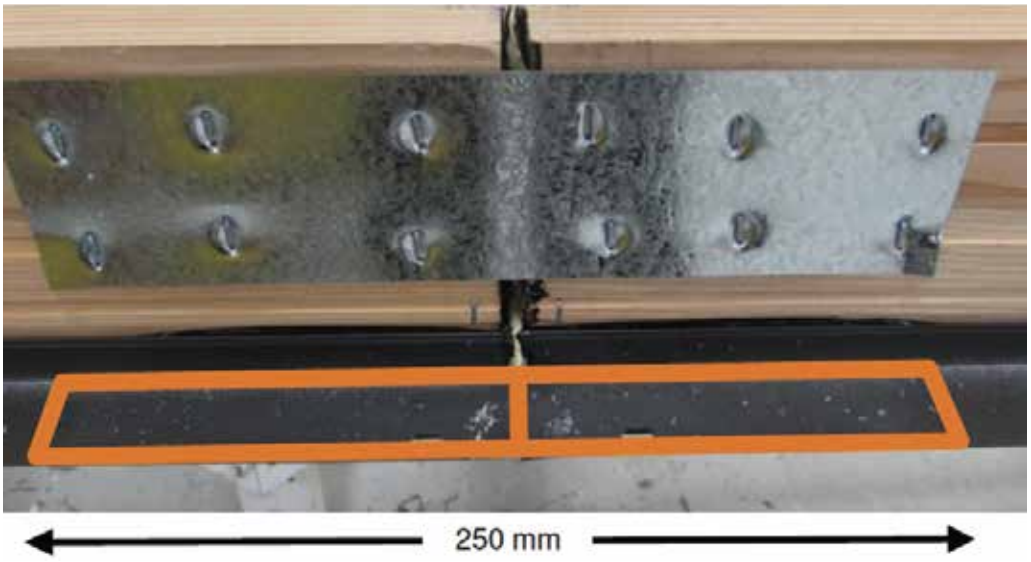


2. Secure mullion joint cover with two 6 X ½ screws (#305632).

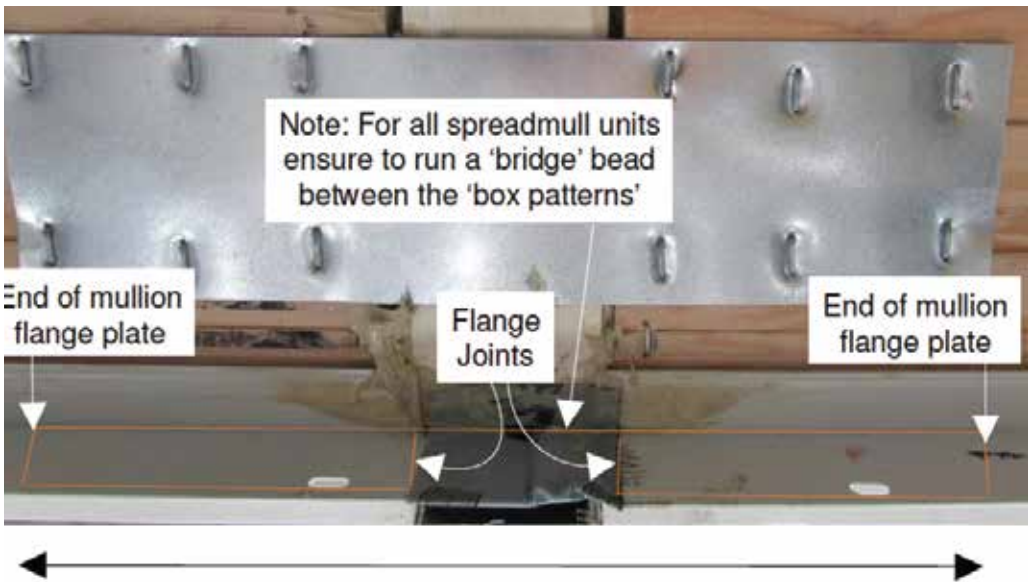
3. Repeat steps 1 and 2 for all required mullion joint covers.

1. Apply a 5mm bead of Bostik Pro MS50 (#49819) on nailing flange, in a box pattern as shown, and along the flange joint on both interior and exterior sides.

Note: Mulling jamb to jamb shown.



Note: Mulling with spreadmull shown.

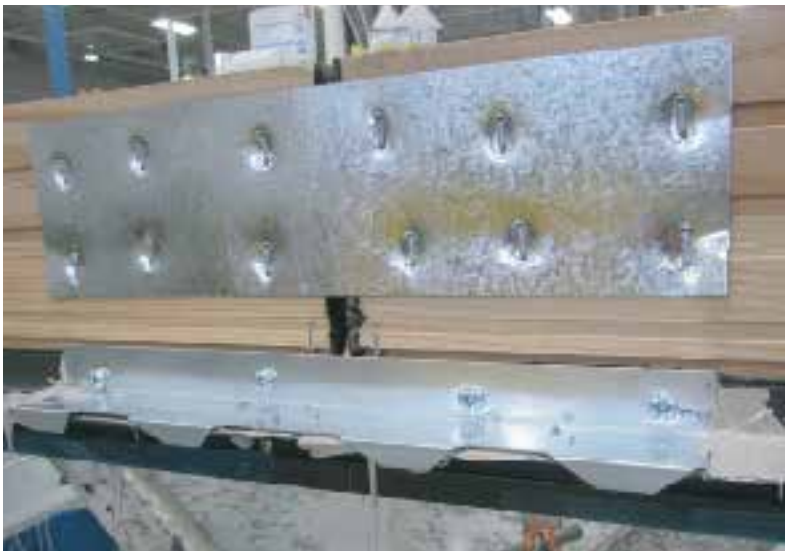


Note: Mullion flange plates are 250mm long centered across the mullion joint.

2. Center mullion flange plate (#320400) across mullion joint.

3. Fasten mullion flange plate with 4 - #8 x ½ panhead screws (#308723).

For DH sill mullion flange plates only: use #6 x 5/8” screw (#71461).



4. Crimp all 4 tabs minimum 3 times each to ensure the mullion flange plate is completely flush with nail fin.

5. Clean off excess sealant.

Note: For basic units this process is done after mulling.

1. Apply a continuous 5mm bead of Dymonic FC (Buff #297837 or Dark Bronze #312633) in mitered corner and along the sides as shown.

Note: Refer to PI-0788 for correct type of Dymonic FC to use.

2. Repeat step 1 for each corner.

3. Apply Chevron gasket (#87206) over top of miter joint and sealant, pressing down firmly.

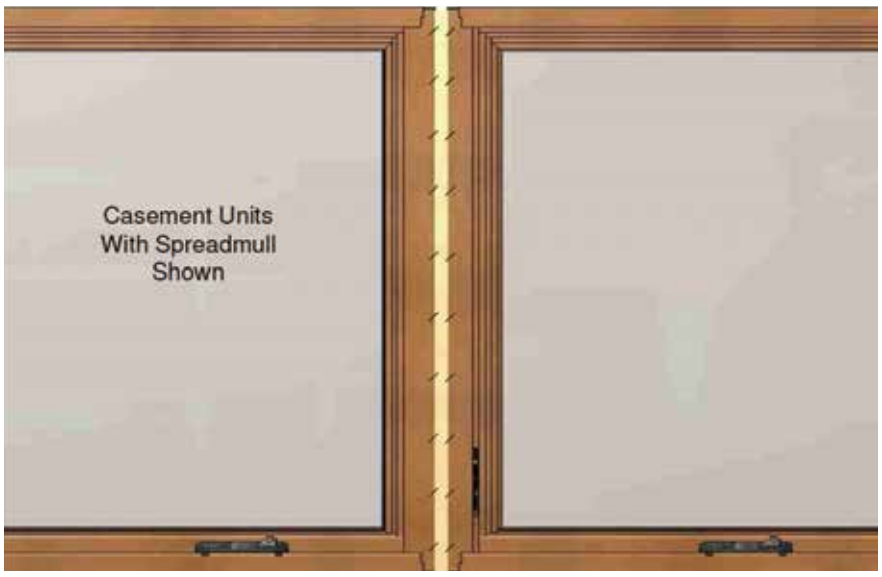
4. Remove any excess sealant.

Note: Repeat steps 3 and 4 for each corner.

1. Clamp as required to ensure joint is tight.

2. Fasten joint together with ½" x 1" corrugated staples (#70069) 50mm from each end and then evenly spaced every 150mm.

Note: Ensure each staple is centered over joint and angled 45°, as shown, so they will be covered by bull nose.



Note: This process applies to all Loewen window and door combinations.

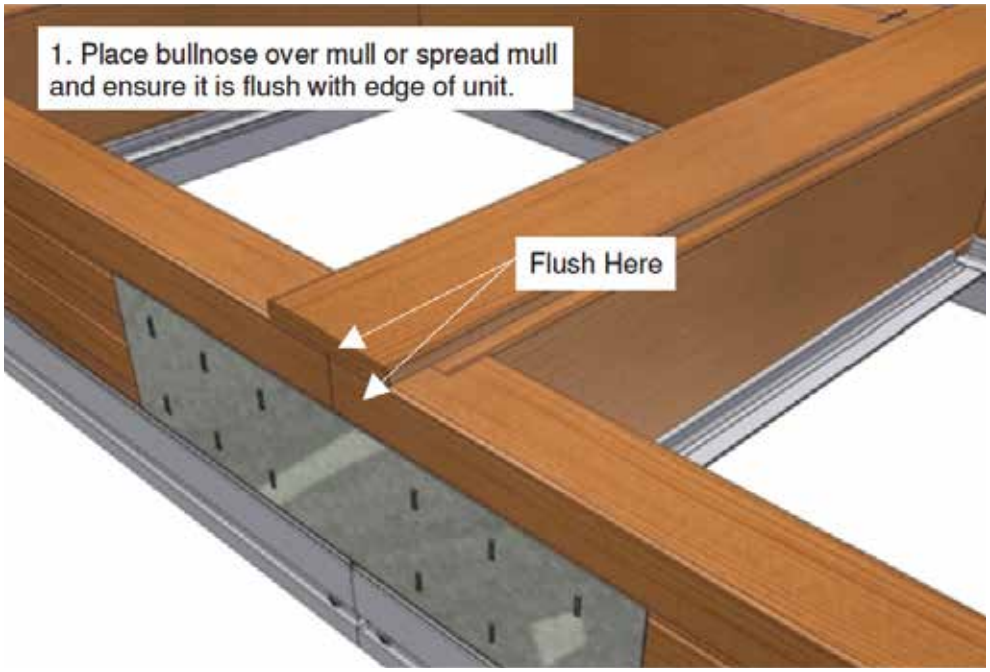
Note: Picture combination without extensions shown.

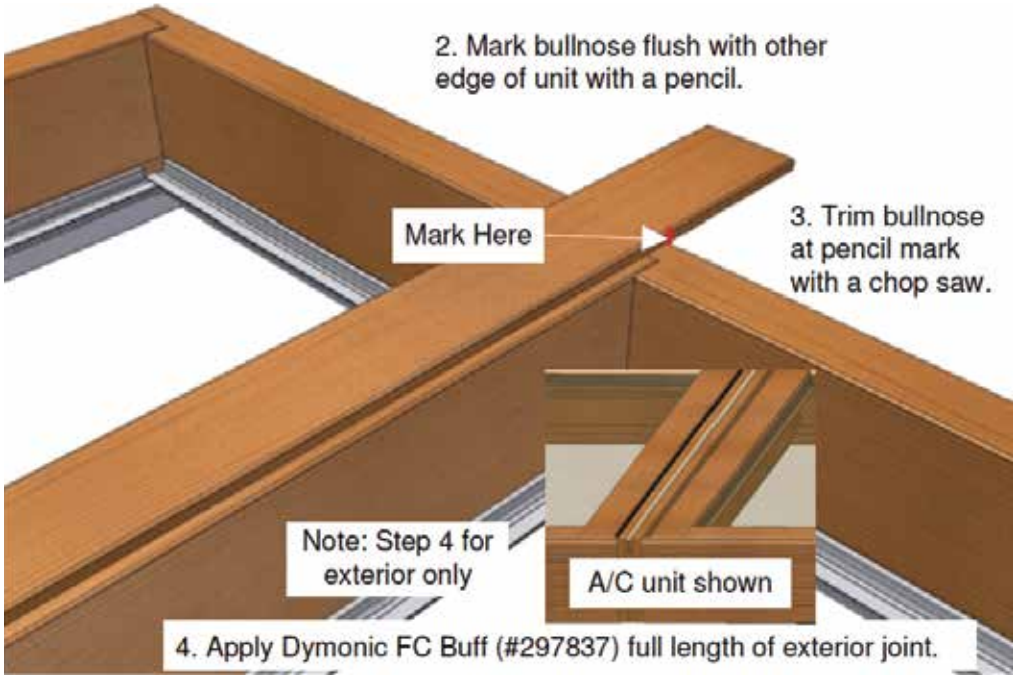
Note: For units with extensions, ensure ends of bullnose is tight against extensions.

Note: For doors ensure bullnose is tight against sill.

Note: Page 1 of 5. Refer to page 5 (pg 30 in document) for correct orientation of bullnose.

Note: All mullion parts for any configuration not displayed or listed in the following steps require the BOM team to review and provide sizes of the mullion covers.





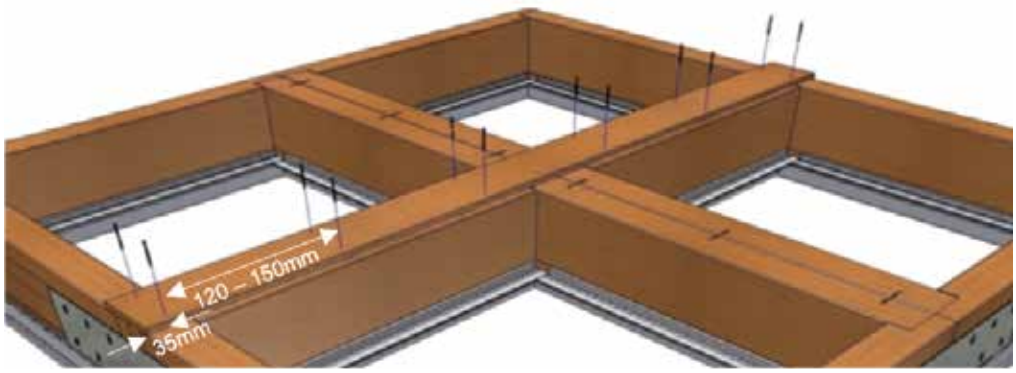
5. Center bull nose over mull ensuring all corrugated staples are covered.

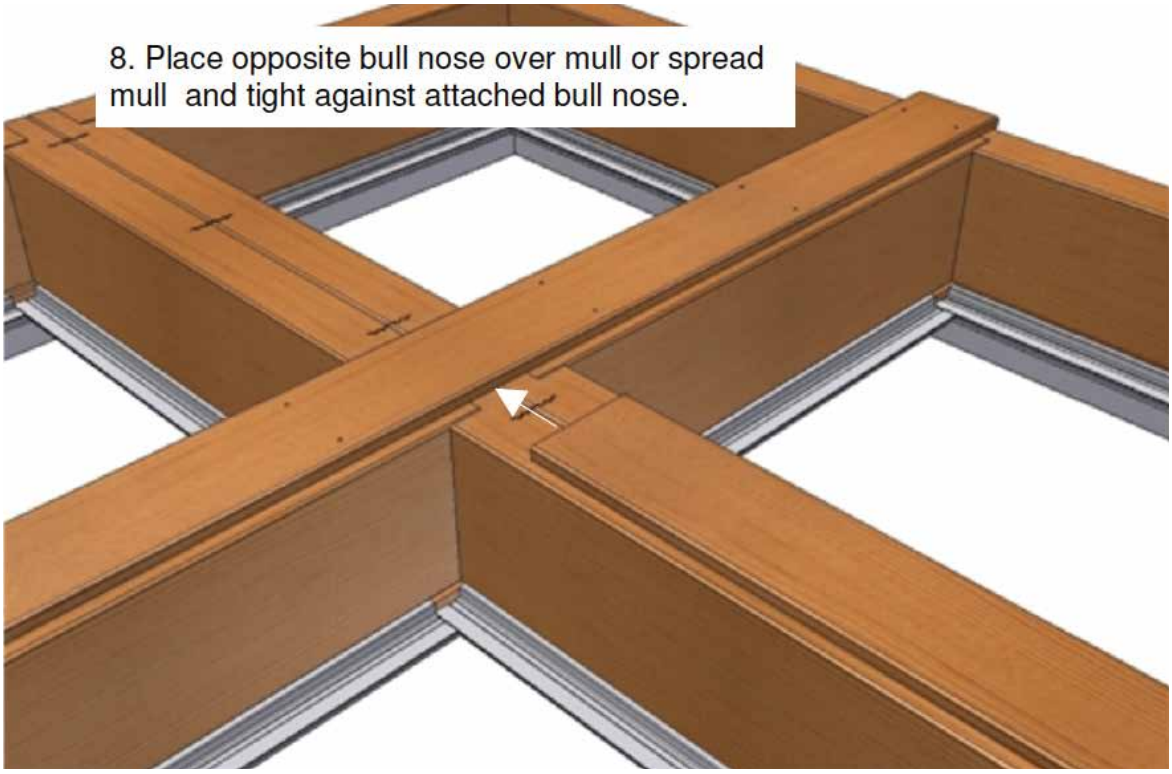
6. **Note:** For units without jamb extensions:

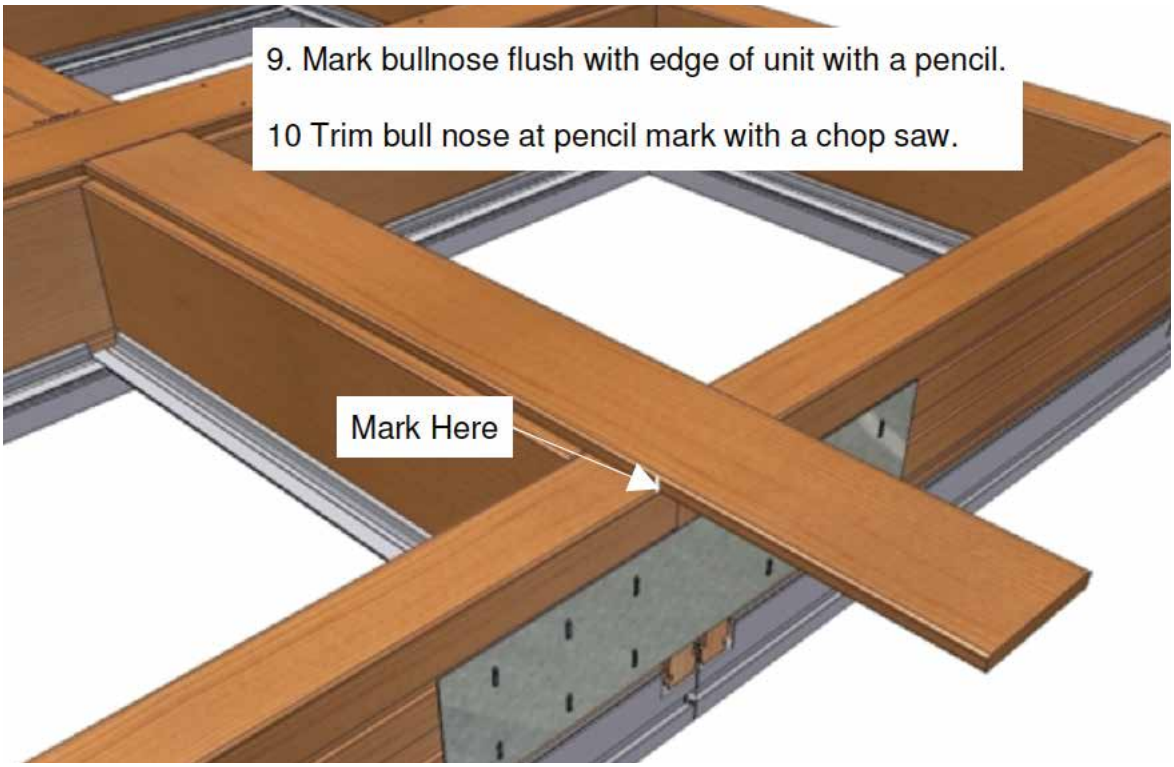
Tack bull nose onto mull with one 1" x 18ga SS nail (#311976) staggered every 120mm to 150mm, 10mm from edge and 35mm from each end.

7. **Note:** For units with jamb extensions:

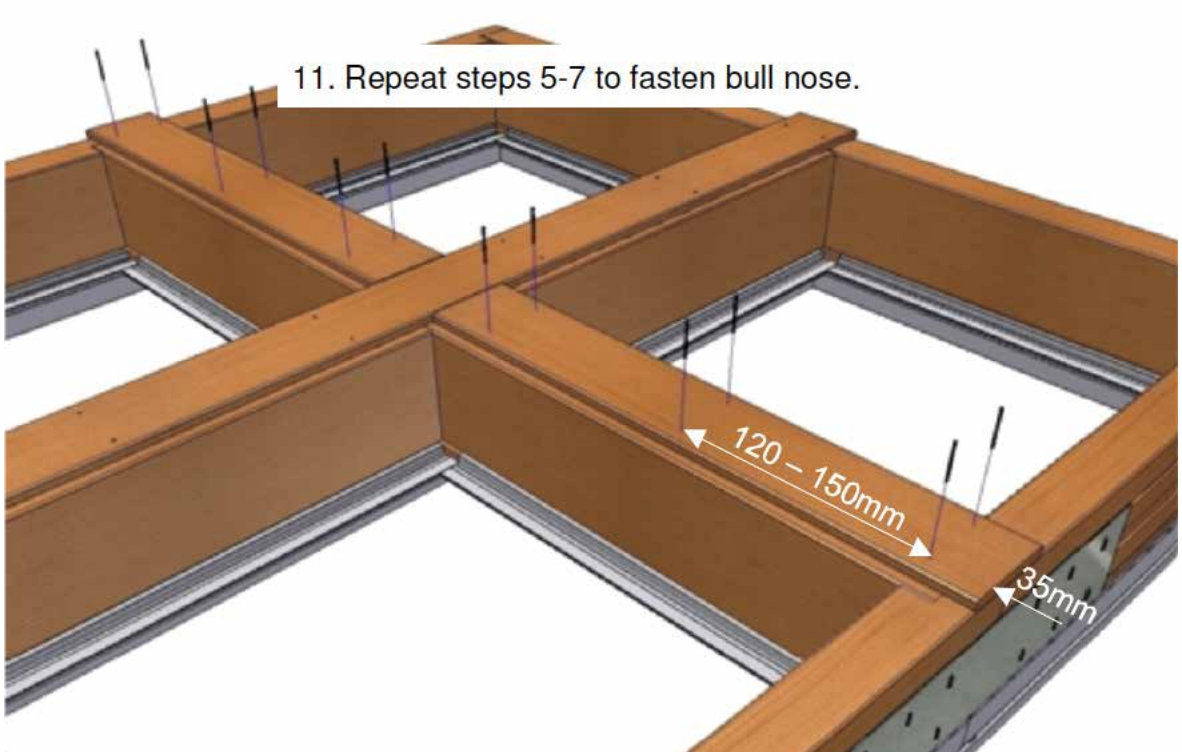
Fasten bull nose onto mull with 1" x 18ga SS nail (#311976) in two rows 10mm from edge and 35mm from each end then evenly spaced 120mm to 150mm apart.




8. Place opposite bull nose over mull or spread mull and tight against attached bull nose.


9. Mark bullnose flush with edge of unit with a pencil.
10 Trim bull nose at pencil mark with a chop saw.
Mark Here

11. Repeat steps 5-7 to fasten bull nose.

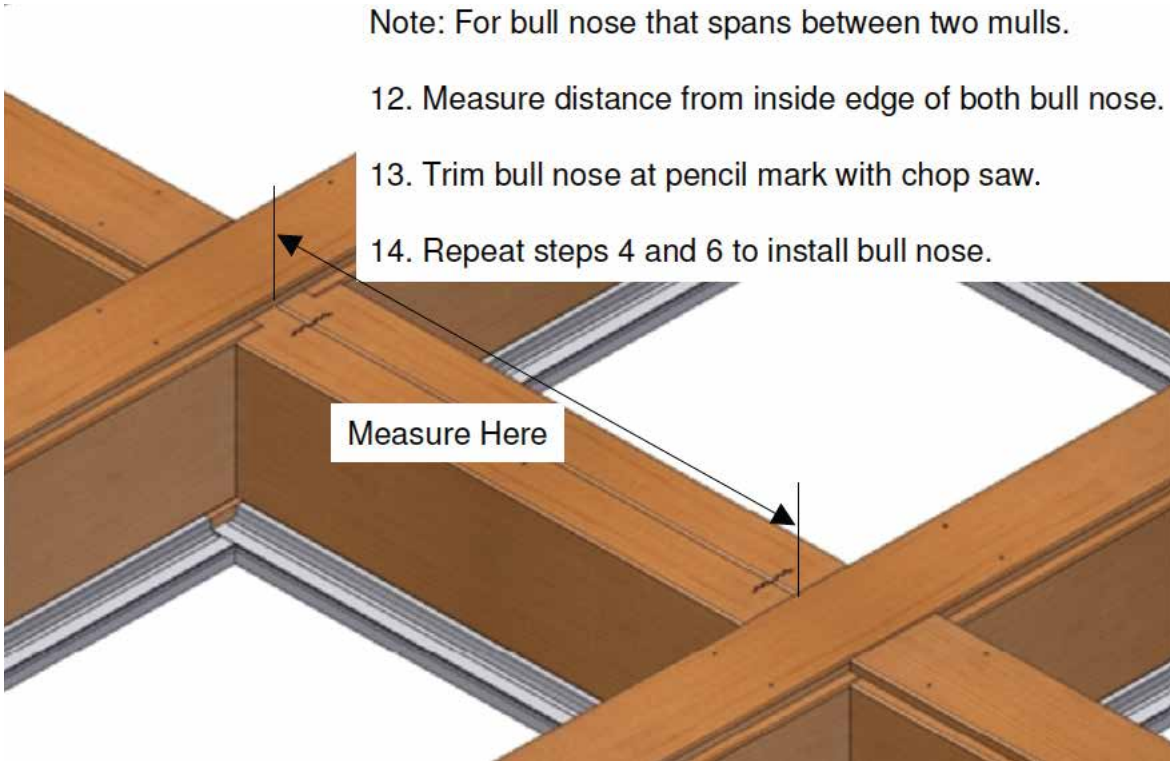


Note: For bull nose that spans between two mulls.

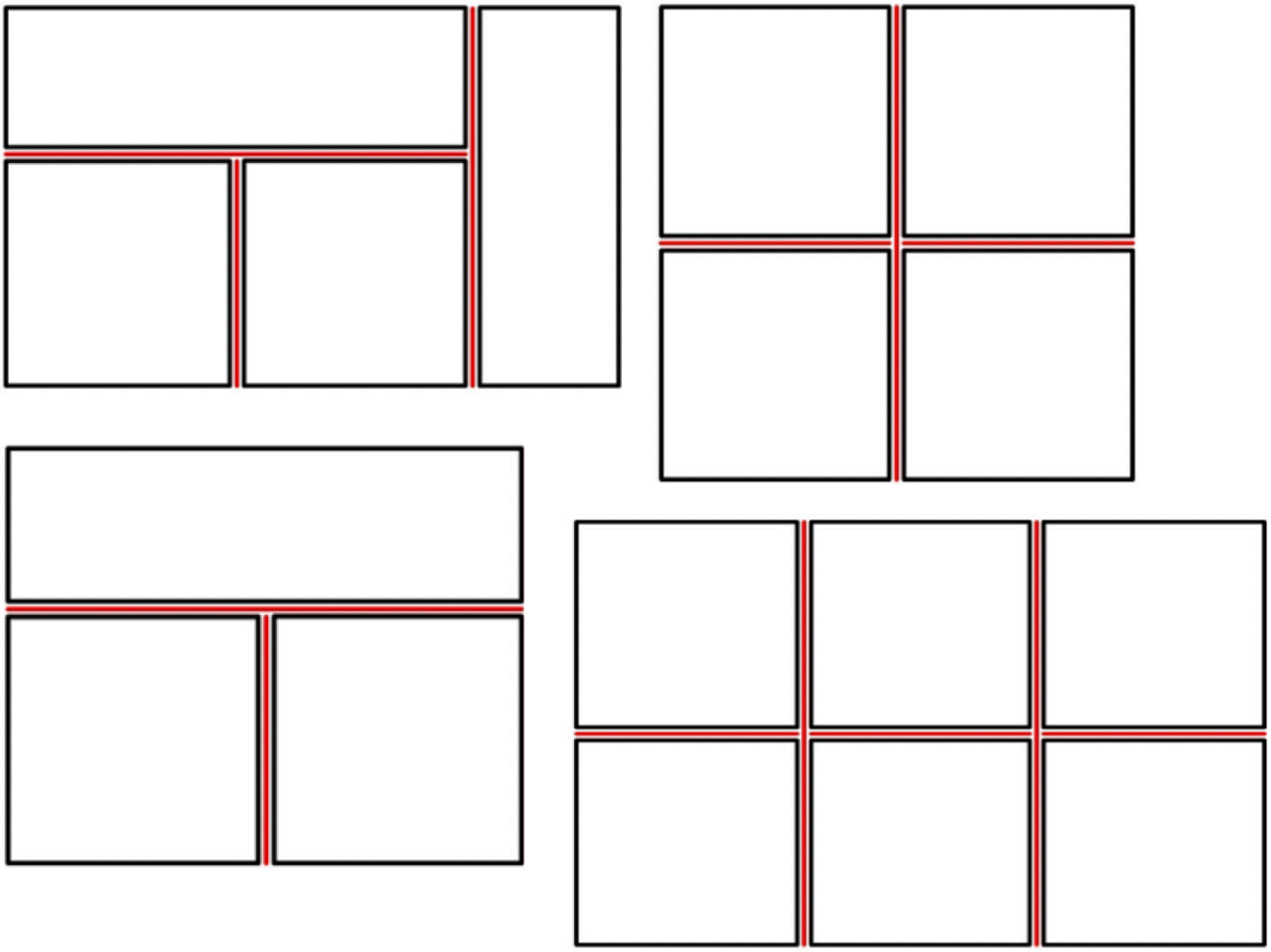
12. Measure distance from inside edge of both bull nose.

13. Trim bull nose at pencil mark with chop saw.

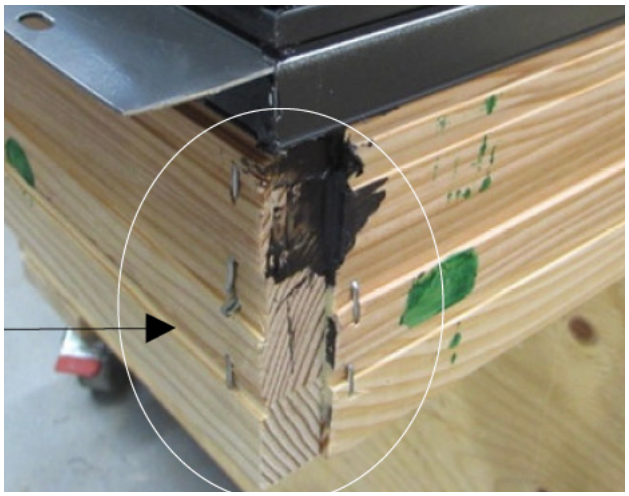
14. Repeat steps 4 and 6 to install bull nose.



Note: Where ever possible vertical bullnose always runs from top to bottom as shown.



1. Ensure frame staples are all fully inserted, on each corner.



2. Install first unit as per standard process, with shims on bottom, level and square.

3. Apply sealant on mull side as per standard process. Refer to pages 4-7.

4. Install the next unit as per standard process, with shims on bottom, level and square.

Note: Bring units together carefully, without moving (smearing) the sealant bead locations.

5. Clamp units together, as required, from interior and exterior.

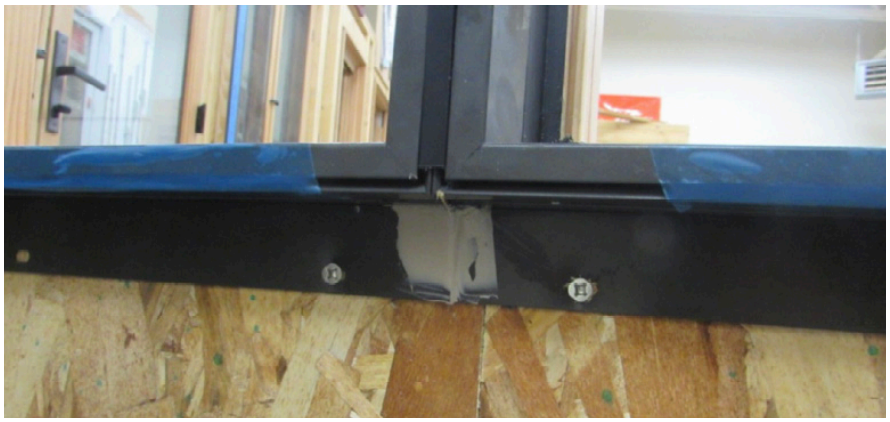
6. Cut short pieces of exterior mull cover and use to hold metal together at top, bottom, and mid way of exterior.

7. Corrugate interior. Refer to page 25.

8. Repeat steps 3 - 7 for all additional units.

9. Seal gap at each flange joint with Bostik Pro MS50 (#49819).

10. Flatten all sealant beads as shown.



11. Apply flange tape over face side of each bottom flange joint.

Note: For top and sides follow the standard install process.


Loewen