



Vertical and Horizontal Mulling Procedures

CLAD WINDOWS & PATIO DOORS

Tools Required: Plastic Headed Hammer, Sealant/Caulk, Clamps, Stapler with 5/8" x 3/4" (1 x 3/8" corrugated staples may be used) Staples and Safety Glasses

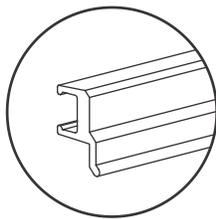
These instructions provide the recommended procedures for the field assembly of tight mulls and spread mulls for Lincoln windows & patio doors. Lincoln recommends installation of its product by experienced contractor personnel. More complex or multiple high/wide spread mulling configurations are too numerous to cover in this instruction sheet and may require additional steps not covered here. We recommend consulting with an engineer or architect in your area to ensure all codes and installation requirements are adhered to.

Note: All units to be mulled in the field should have been ordered with nail fin/drip cap equal to the width or height of the mulled assembly. Units exceeding 12' overall may require splicing of trim based on various trim components. When splicing is necessary, do not locate splice at mulls.

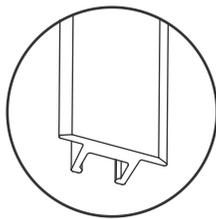
If you have questions regarding the mulling procedures, contact your Lincoln dealer, an experienced contractor or contact Lincoln at (800) 967-2461 prior to mulling and installation of product.

Tight Mulling Procedures

Vertical and Horizontal tight mulling procedures are identical. This instruction sheet illustrates the assembly procedure for a vertical tight mull on a clad in-swing doors. Tight mulls for windows are identical unless otherwise noted.



Horizontal Mull



Vertical Mull

Multiple High/Wide Mulling

Multiple high/wide mulling configurations are too numerous to cover in this instruction sheet. The following are general guidelines to follow when mulling multiple high/wide assemblies. Individual areas may have restrictions or requirements mulling and/or installation of mull or stacked units.

- Mull all multiple wide assemblies first (vertical mulls).
- Once all multiple wide assemblies are mulled together, proceed to mull other units to the top of your assembly (horizontal mulls).
- The horizontal mull cap has a drip edge and must be applied with the drip edge toward the bottom of the unit. All horizontal mull caps will be continuous and run the full width of the unit. All vertical mull caps will butt up to the top or bottom of the horizontal mull cap.
- Vertical mull caps may need to be cut shorter to allow room for horizontal mull caps at the intersections. This will need to be done before applying the vertical mull cap.
- The assistance of may be necessary when moving or maneuvering multiple high/wide mull assemblies.
- Always attach temporary bracing at the mulls prior to moving mullion assembly.

Exterior Mulling

1. For larger units, if possible, remove the sash or panels to make it easier to handle the product. For door panel(s), you should also remove the hinges and latch strike plate from frame and set aside. **Note:** Removal of hinges isn't necessary on out-swing doors.
2. Place units on a flat steady surface with the exterior side up. If the unit has a drip cap or nail fin applied, it will need to be removed where the units will be mulled. If you are mulling a unit to the latch/lock side jamb, the latch cups will also need to be removed.
3. Apply a 3/8" bead of sealant to one of the jambs where the unit will be mulled. The bead must run the width and full length of the unit and be a maximum of 1/4" away from the accessory groove. See Figure 1

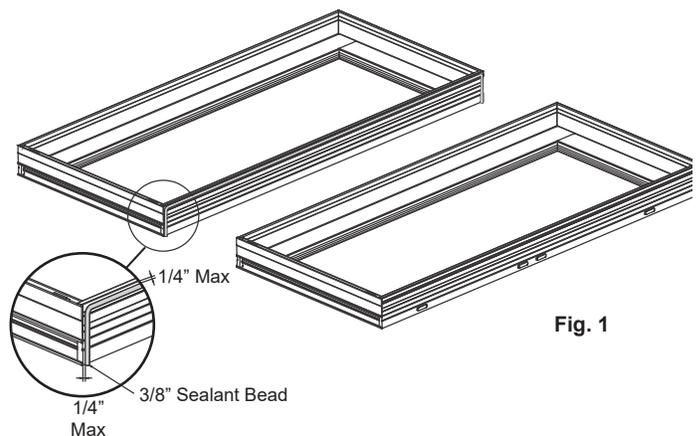


Fig. 1

4. Push the units together ensuring that the head and sill are aligned and that units are tight at the mull. If there is a gap at the mull, it may be necessary to clamp the units together.
Before applying the mull cap, run a bead of silicone compound along the length of the mull where the units come together.

- Starting at one end of the unit. Using a plastic headed hammer, pound the mull cap into the accessory grooves at the mull until it is seated firmly against the cladding. See Figure 2.

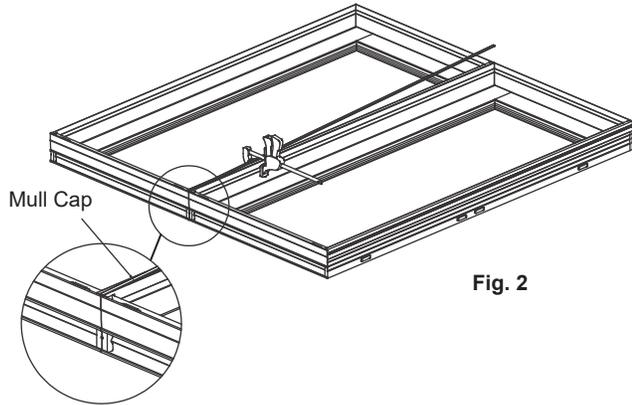


Fig. 2

- Making sure that the units are flush and tight together at the mull, fasten units together at the head and sill with 5/8" x 3/4" staples. For windows, use 4 staples at the sill and head (Figure 3). For patio doors, use 4 staples at the head and 3 staples at the sill (Figures 3 & 4).

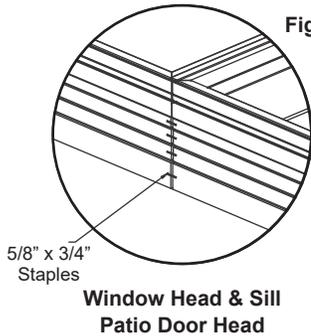


Fig. 3

Window Head & Sill
Patio Door Head

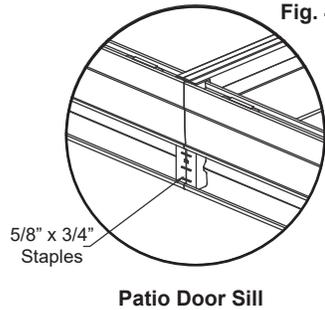


Fig. 4

Patio Door Sill

- For windows, attach the mullion reinforcement plate across the mull at the head jamb and sill using twelve 5/8" x 3/4" staples on each mull plate (6 on each side of the mull joint). For patio doors, attach the mullion reinforcement plate on the head jamb only. See Figure 5.

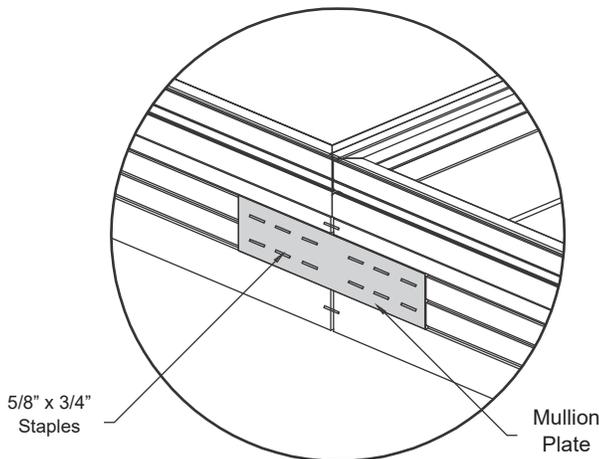


Fig. 5

Interior Mulling

- Carefully turn the assembly over so that the interior side is facing up. **Note: Larger assemblies may require additional bracing at the mulls before turning the assembly over.**
- Fasten units together at the mull with 5/8" x 3/4" staples. Place 3 staples on both ends approximately 2" from the edge of the frame and spaced 2" apart.

Space the remaining staples 6-8" apart. See Figure 6.

For patio doors, if the jamb at the mull joint has hinges or strike plates, use the 2-1/2" screws included with your unit to fasten the frames together at each hinge or strike plate location. The hinges have one screw hole left open. One of the screws will need to be removed at each strike plate location in order to use the 2-1/2" screw for fastening the units together.

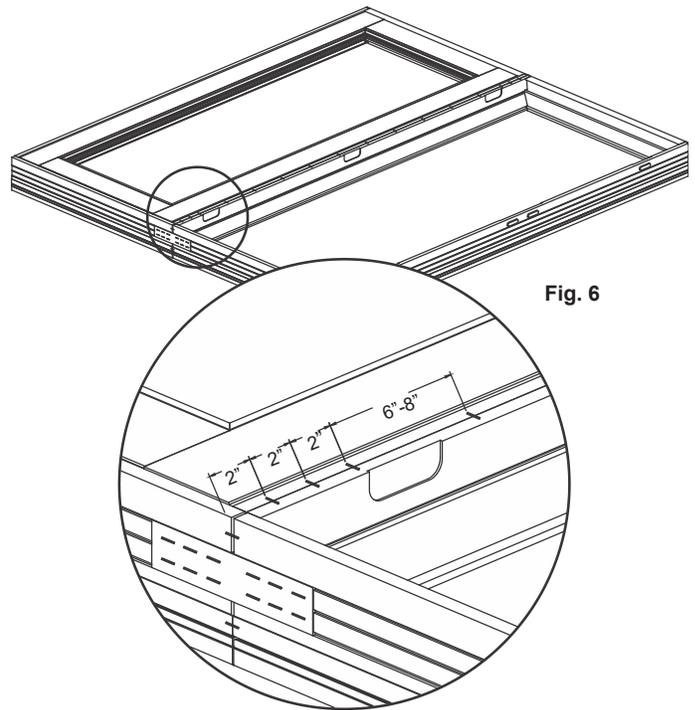


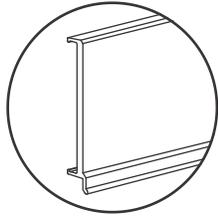
Fig. 6

- Remove any extra bracing, you may have applied for handling, and re-install any sash or panels, hinges and latch strikes.

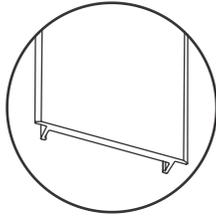
The drip cap nailing flange should be attached to the head jamb the rest of the nailing flange applied around the perimeter. **Note:** The drip cap must be a continuous piece equal to the width of the assembly. Your unit is now ready to install into the rough opening.

Spread Mulling Procedures

Vertical and Horizontal spread mulling procedures are identical. This instruction sheet illustrates the assembly procedure for a vertical spread mull on clad in-swing doors. Spread mulls for windows are identical unless otherwise noted.



Horizontal Mull



Vertical Mull

More complex or multiple high/wide spread mulling configurations are too numerous to cover in this instruction sheet and may require additional steps not covered here. We recommend consulting with an engineer or architect in your area to ensure all codes and installation requirements are adhered to.

Interior Mulling

1. For larger units, if possible, remove the sash or panels to make it easier to handle the unit. For door panel(s), you should also remove the hinges and latch strike plate from frame and set aside. **Note:** Removal of hinges isn't necessary on out-swing doors.
2. Mull any units that will not require a spread mull. Follow the procedures found earlier in this instruction.
3. Place units on a flat steady surface with the interior side up.
4. If applied, remove drip cap and nailing fin where units will be mulled. If you are mulling a unit to the latch/lock side jamb, the latch cups will also need to be removed.
5. The spread mull blocking, not supplied by Lincoln, must be equal to the width of the spread mull and within 1/4" of the jamb depth of the unit. The blocking should be cut 1/8"-3/16" shorter than the height of the vertical spread mull or width of the horizontal spread mull.
6. Apply a 3/8" bead of sealant to the jambs where the blocking will be attached. The bead must run the width and full length of the unit and be a maximum of 1/4" away from the interior. See Figure 7.

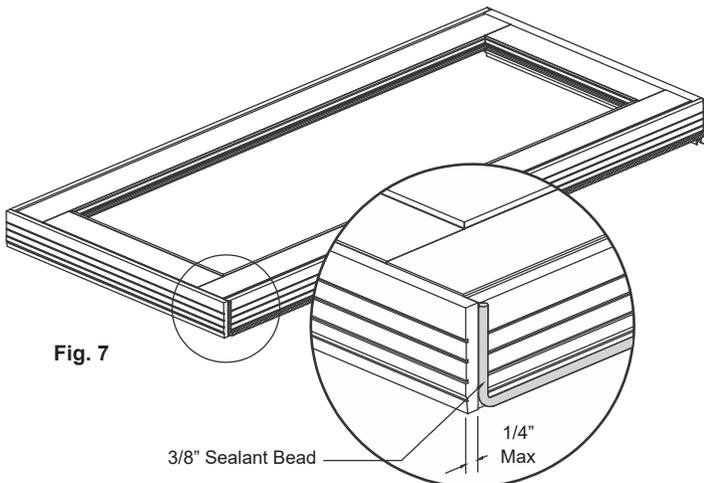


Fig. 7

3/8" Sealant Bead

1/4" Max

7. Clamp spread mull blocking to the jamb of one unit. Make sure blocking is flush with interior frame surfaces. Fasten the blocking to the jamb with 5/8 x 3/4" staples. Place 3 staples on both ends approximately 2" from the edge of the frame and spaced 2" apart. Space the remaining staples 6-8" apart. See Figure 8.

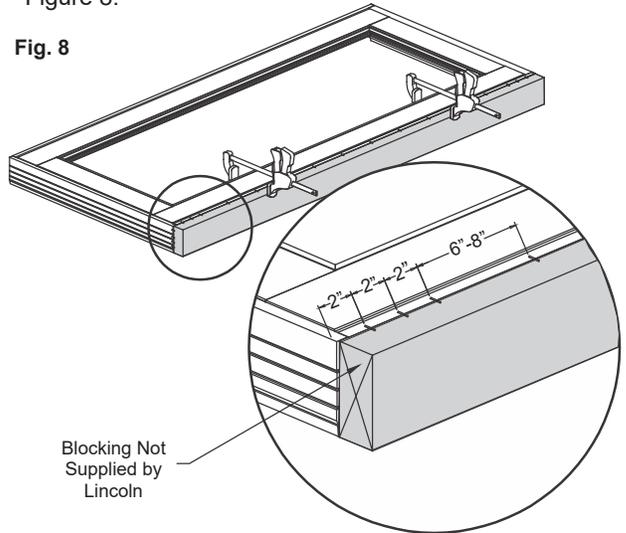


Fig. 8

Blocking Not Supplied by Lincoln

8. For windows, use 4 staples at the sill and head (Figure 9). For patio doors, use 4 staples at the head and 3 staples at the sill (Figures 9 & 10).

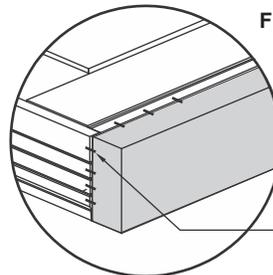


Fig. 9

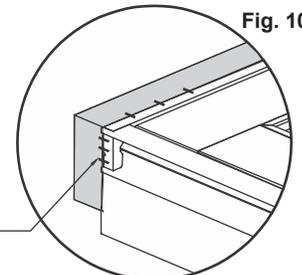


Fig. 10

Window Head & Sill
Patio Door Head

Patio Door Sill

5/8" x 3/4" Staples

9. Before clamping other product to the unit with the blocking now attached, apply a 3/8" bead of sealant as previously done in step 6, figure 7.
10. Clamp frames together making sure interior surfaces are flush and the units are even at the mull. See figure 11. Fasten blocking to the frame as previously outlined in step 8.

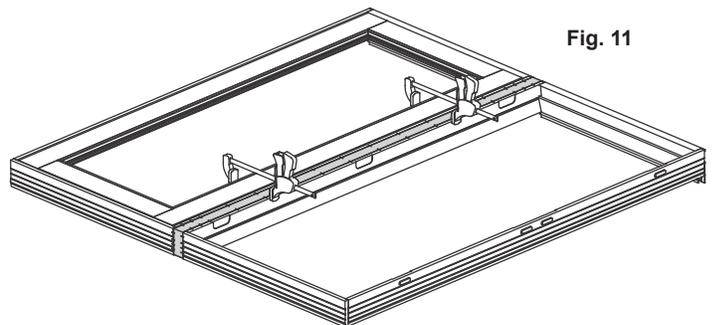


Fig. 11

- For windows, attach the mullion reinforcement plate across the mull at the head jamb and sill using twelve 5/8" x 3/4" staples on each mull plate (6 on each side of the mull joint). For patio doors, attach the mullion reinforcement plate on the head jamb only. See Figure 12.

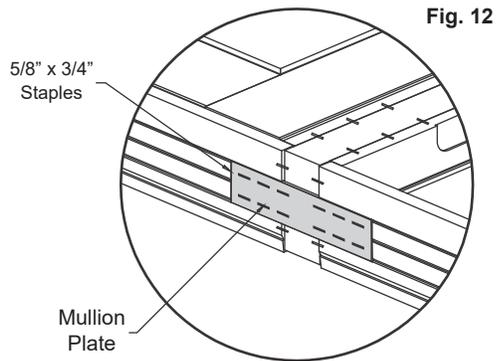


Fig. 12

Exterior Mulling

- Carefully turn the assembly over so that the exterior side is facing up. **Note: It may be necessary to attach bracing to the frames across the mull. This will reduce stress and prevent possible damage to the unit.**
- Apply two 3/8" continuous bead of sealant down the mull joint on the blocking near each accessory groove and across the top and bottom of the blocking. See Figure 13.

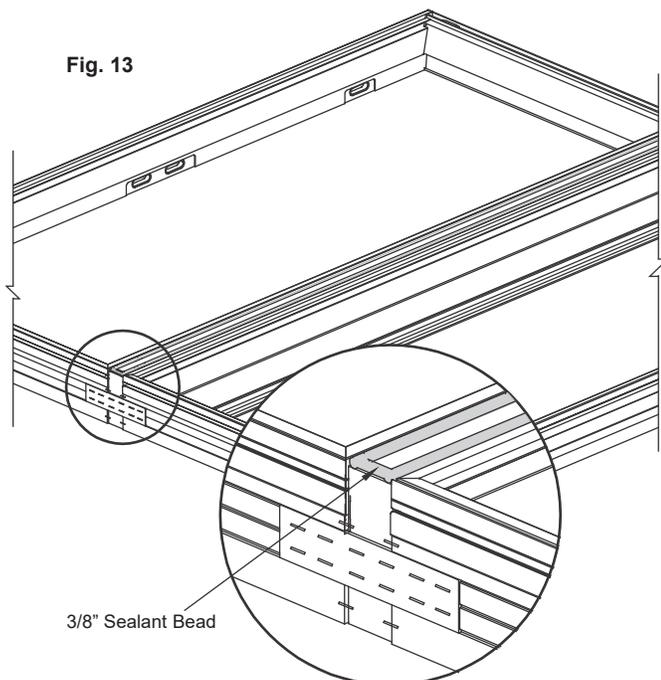


Fig. 13

- Apply the spread mull cap starting at one end of the unit. Using a hammer and a wood block, pound the mull cap into the accessory grooves at the mull until it is seated firmly against the cladding. See Figure 14.

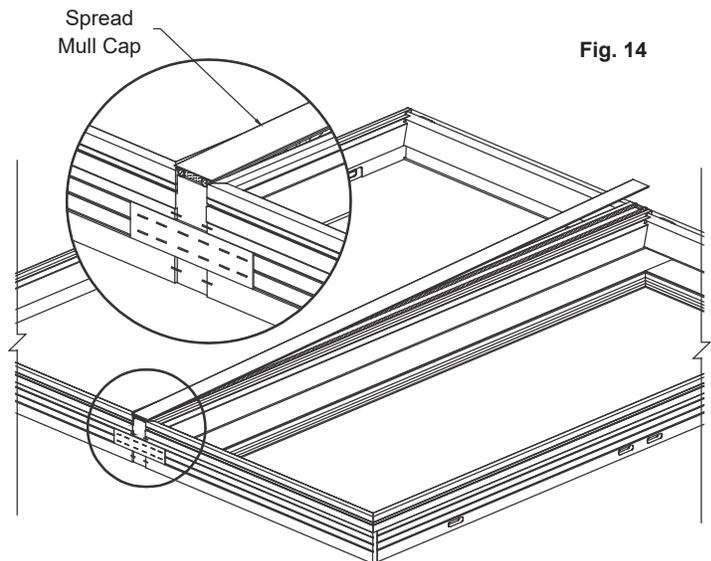


Fig. 14

- Remove any extra bracing, you may have applied for handling, and re-install any sash or panels, hinges and latch strikes.

The drip cap nailing flange should be attached to the head jamb the rest of the nailing flange applied around the perimeter. **Note:** The drip cap must be a continuous piece equal to the width of the assembly. Your unit is now ready to install into the rough opening.