



Vertical and Horizontal Mulling Procedures

CLAD IN-SWING AND OUT-SWING PATIO DOORS

Tools Required: Safety Glasses, Plastic Headed Hammer, Sealant/Caulk, Clamps and Stapler with 5/8" x 3/4" and 5/8" x 1/2" Staples (If available, 1" x 3/8" corrugated staples may be substituted for 5/8" x 3/4" staples)

The following instructions detail the assembly of tight mulls and spread mulls for Lincoln In-Swing and Out-Swing Patio Doors. Part 1 outlines the assembly of tight mulls, part 2 details the assembly of spread mulls.

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.

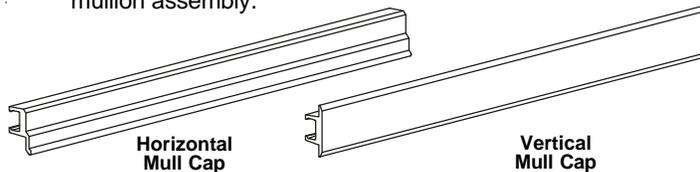
Vertical and Horizontal Mulling

Vertical and Horizontal mulling procedures are identical. This instruction sheet illustrates the assembly procedure for vertical mullion on a clad in-swing door.

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. If you have questions about mulling a multiple high/wide unit, consult your Lincoln Windows representative for further information.

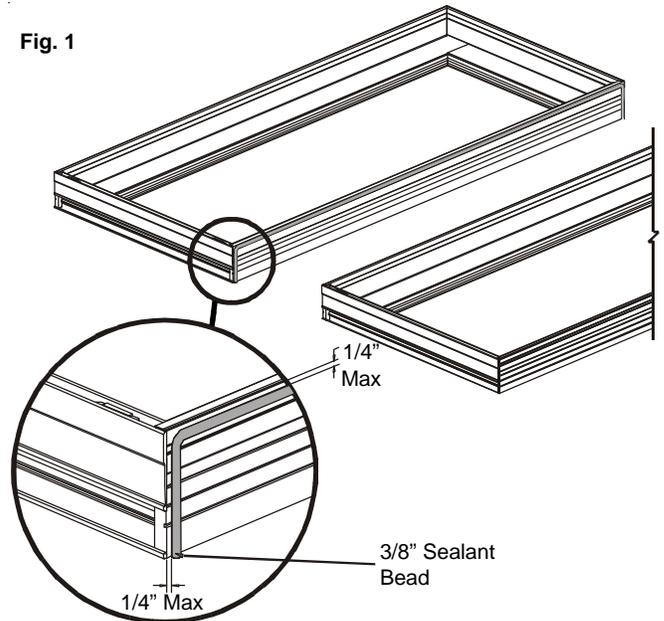
- Mull all multiple wide assemblies first (vertical mulls).
- Once all multiple wide assemblies are mulled together, proceed to mull other units to the top of your assembly (horizontal mulls).
- The horizontal mull cap has a drip edge and must be applied with the drip edge toward the bottom of the unit. 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 another individual may be necessary when moving or maneuvering multiple high/wide mull assemblies.
- Always attach temporary bracing at the mulls prior to moving mullion assembly.



Part 1 - Vertical / Horizontal Tight Mulling Procedure

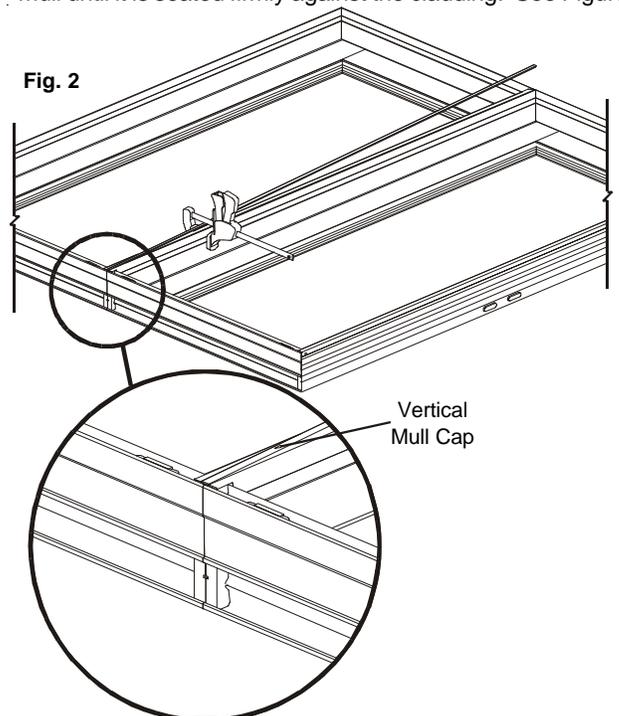
1. If possible remove door panel(s), hinges and latch strike plates from frame and set aside. This will make it easier to handle the unit. Removal of hinges isn't necessary on out-swing doors. Also remove any shipping material and corner braces.
2. Place units on a flat steady surface with the exterior 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 caps 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



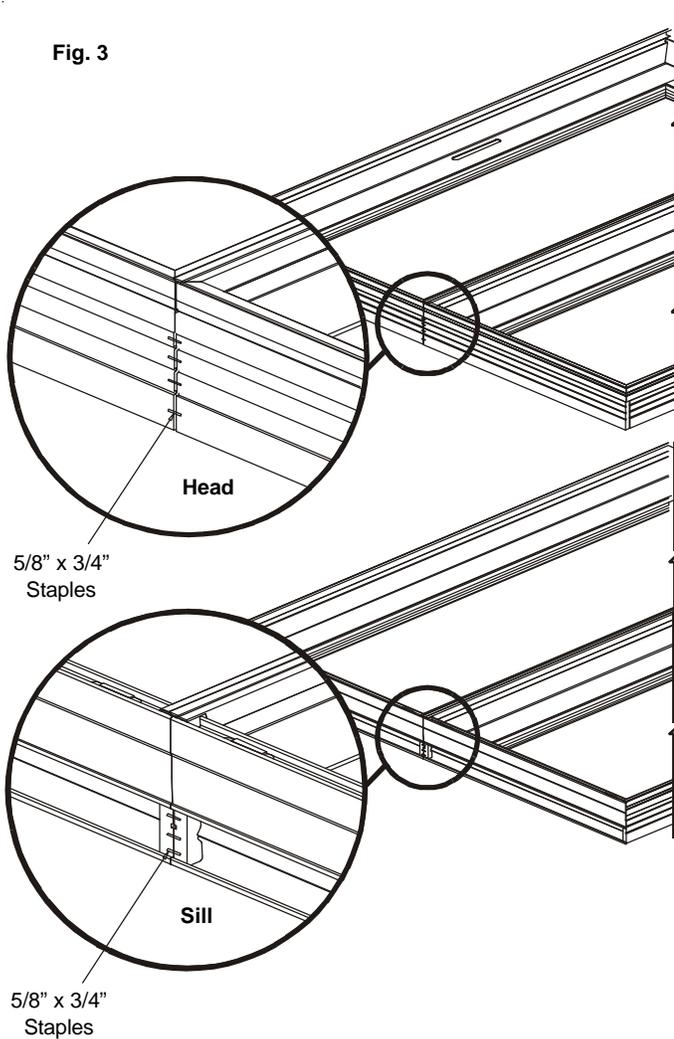
4. Push the units together ensuring that the head and sill are aligned and that units are tight at the mull. If there is a gap at the mull, it may be necessary to clamp the units together. Apply the mull cap starting at one end of the unit. Using a plastic headed hammer, pound the mull cap into the accessory grooves at the mull until it is seated firmly against the cladding. See Figure 2.

Fig. 2



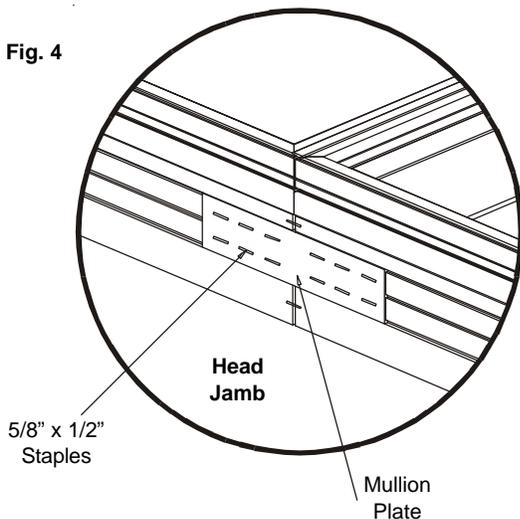
5. Making sure that the units are flush and tight together at the mull, fasten units together at the head and sill with 5/8" x 3/4" staples. Use 3 staples at the sill and 4 staples at the head. See Figures 3

Fig. 3



6. Attach the mullion reinforcement plate across the mull at the head jamb and fasten with twelve 5/8" x 1/2" staples. Use six staples on each side of the mull joint. See Figure 4

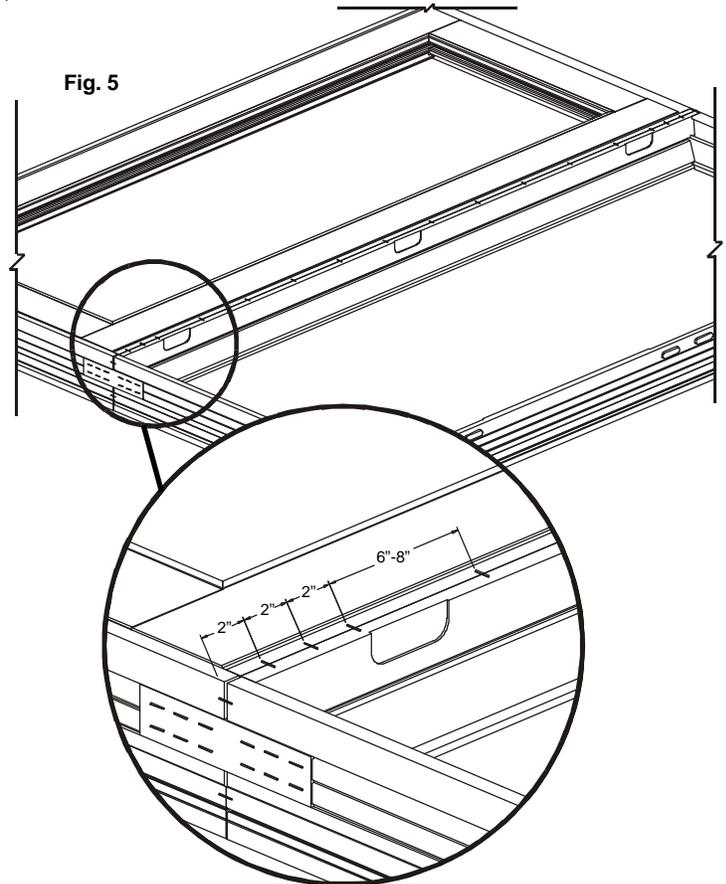
Fig. 4



7. 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 5.

Fig. 5



8. Remove any bracing and re-install panels, hinges, latch strikes, drip cap on head jamb and nailing fin around perimeter of unit. The drip cap must be a continuous piece equal to the width of the assembly.

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. **NOTE:** If mulling two operating door panels side by side 1-1/4" screws must be used.

YOUR UNIT IS NOW READY TO INSTALL INTO THE ROUGH OPENING



Vertical and Horizontal Spread Mull Procedure

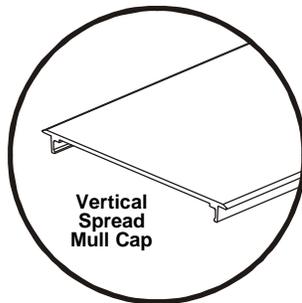
CLAD IN-SWING AND OUT-SWING PATIO DOORS

Part 2 - Vertical/Horizontal Spread Mulling Procedure

The following instructions detail spread mulling of two swing door products. 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. If you have questions regarding these types of mull assemblies, consult your Lincoln Windows representative prior to mulling.



Horizontal
Spread
Mull Cap



Vertical
Spread
Mull Cap

1. If possible, remove door panel(s), hinges and latch strike plate from frame and set aside. This will make it easier to handle the unit. Removal of hinges isn't necessary on out-swing doors. Also remove any shipping material and corner braces.
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 mullled. If you are mulling a unit to the latch/lock side jamb, the latch cups will also need to be removed.
5. Apply a 3/8" bead of sealant to one of the jambs where the unit will be mullled. 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
6. Cut spread mull blocking 1/8"-3/16" shorter than the height or width of the units being mullled together. Blocking size must be equal to the width of the spread mull and within 1/4" of the depth of the unit.
7. Clamp spread mull blocking to the jamb of the unit with silicone. 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. Fasten blocks at the head and sill with 5/8" x 3/4" staples. Use 3 staples at the sill and 4 staples at the head. If available, 1" x 3/8" corrugated staples may be substituted. See Figure 2.

Fig. 1

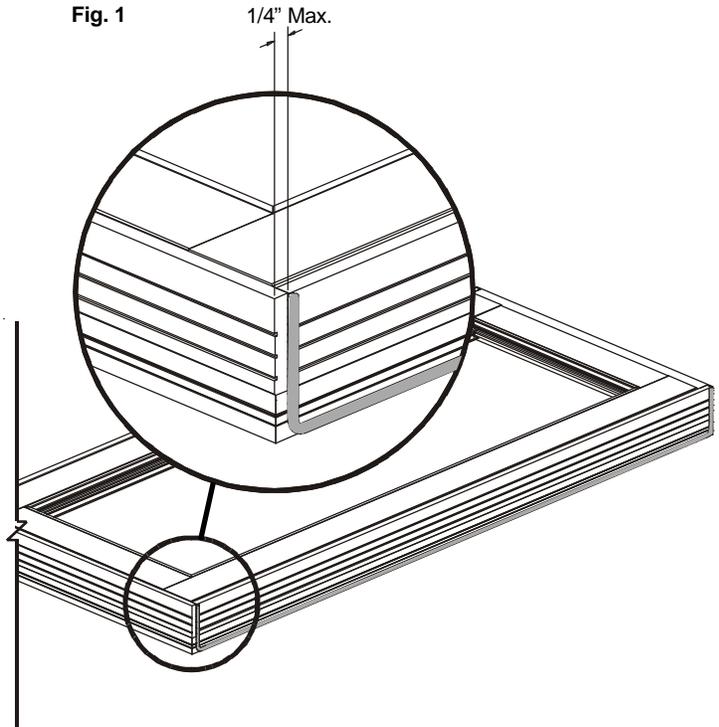
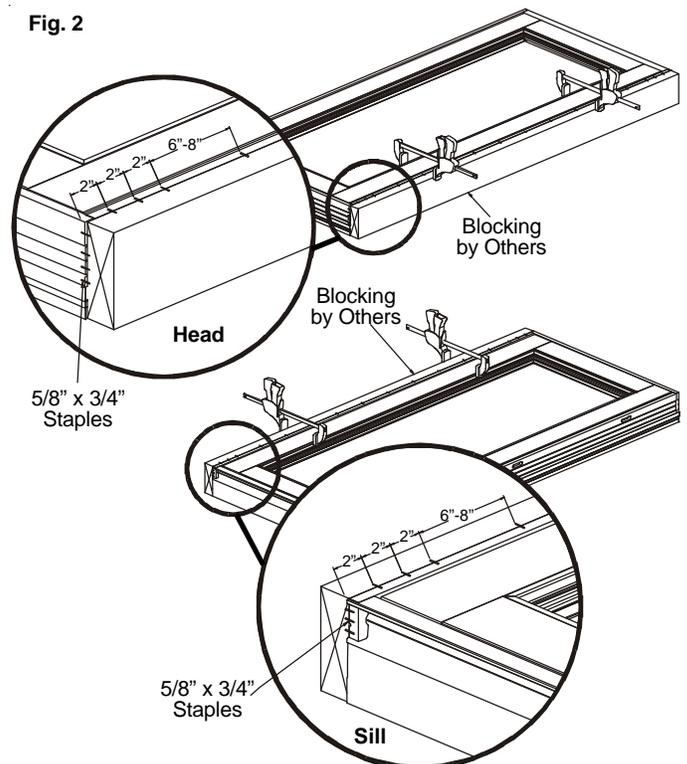
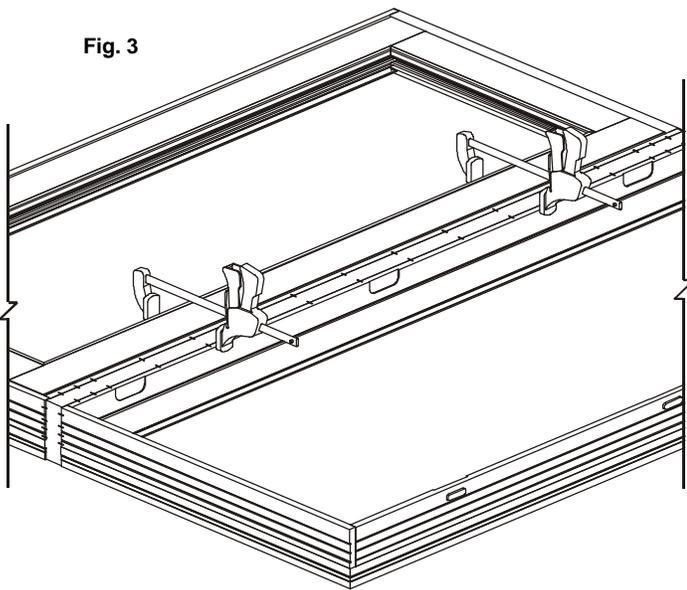


Fig. 2



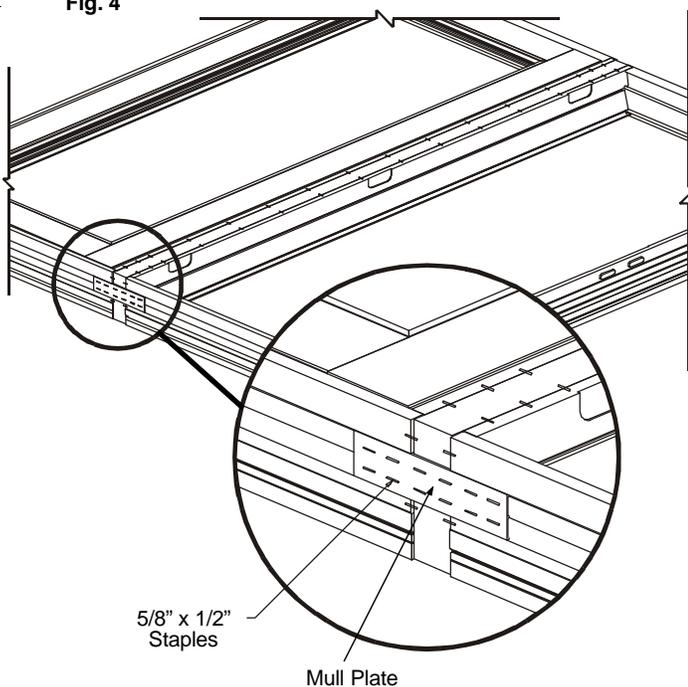
8. Apply a 3/8" bead of sealant to the second unit as described in step 5. Clamp frames together making sure interior surfaces are flush and the units are even at the mull. Fasten blocking to the frame as outlined in step 6. See Figure 3

Fig. 3



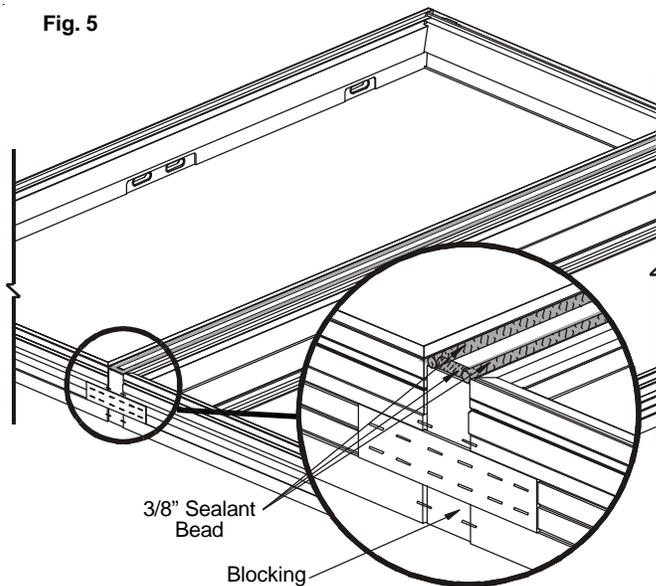
9. Attach the mullion reinforcement plate across the mull at the head jamb and fasten with twelve 5/8" x 1/2" staples. See Figure 4.

Fig. 4



11. 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 5.

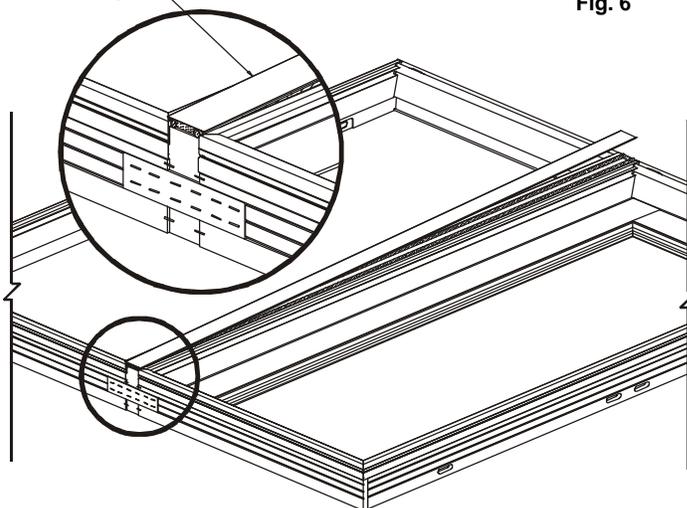
Fig. 5



12. 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 6.

Spread Mull Cap

Fig. 6



13. Remove any bracing and re-install panels, hinges, latch strikes, drip cap on head jamb and nailing fin around perimeter of unit. The drip cap should be a continuous piece equal to the width of the assembly.

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. **NOTE:** If mulling two operating door panels side by side, 1-1/4" screws must be used if the spread mull is less than 2".

10. 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.

YOUR UNIT IS NOW READY TO INSTALL INTO THE ROUGH OPENING.