

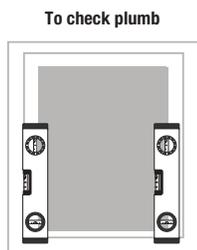
# Installation Instructions: New Construction Patio Doors

The following must be done to insure warranty coverage. All vinyl replacement windows are designed to be installed plumb, square and level. If the installer does not meet these simple requirements, the appearance, operation and weatherability of the unit will be affected.

**HANDLING INSTRUCTIONS:** Care must be taken in the storage and handling of your patio door. Store patio doors at a slight angle against a wall on a flat, level surface under cover. Do not store your door under plastic, in direct sunlight as this will cause severe heat buildup and may create distortion and improper operation of the unit. Make sure that the full width of the door is supported. If your Patio Door came with nailing fin, be sure to set the door on blocks to prevent the nailing fin from becoming damaged; blocks should be placed at each end and at the meeting rail. When moving and installing the patio door provide full support underneath frame, do not lift by head only. Rough openings must provide enough clearance for door to be installed without force or twisting the patio door.

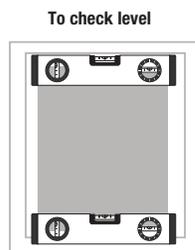
- Make sure the opening is suitable to allow a level, plumb and square installation. **The sill must be level.** If the opening is not suitable, make adjustments NOW to prevent problems during installation.
- Draw a continuous line 1 1/2" in from the surface of the exterior sheathing where the nailing fin is attached, this will be your caulk line location. Apply a 3/8" bead of silicone along the line for the entire length of the sill and continue that bead approximately two inches up both jambs of the rough opening before setting your frame in place. This will assure a water and air barrier to prevent entry under the sill of the door.
- Lay the frame on the ground with the interior of the frame facing up, you will apply a 3/8" bead of caulk around the entire nailing fin. This bead of caulk should be a continuous bead around the nailing fin, directly over the pre-punched nail holes in the fin.
- Begin by setting the sill into position over the line of caulk and then pivot the frame into position to bring the nail fin into contact with the sheathing. At this point the caulk that was applied should be coming through the pre-punched holes in the fin.
- Make sure the frame is centered and square before your start nailing the frame into place. Start at either the top right or top left side of the frame. After applying the first nail, make sure your installation is level, plumb and square (**See Figure 12**). Then go to the opposite side and apply your second nail near the bottom, diagonally opposite your first nail, again checking for level, plumb and square. At this point, nail the other two corners and the entire length of both jambs checking for plumb and straight conditions. After making sure that the frame header is level, continue the nailing process across the header-nailing fin.
- Shim the frame as required to ensure that it remains plumb and square. **NOTE:** Door must be shimmed at the center point location of each jamb.
- The nails should be applied through the holes and caulk to form a water-tight seal between the nailing fin, the nail and the building's sheathing.
- Apply self-adhesive flexible flashing a minimum of 4" wide which has a self-adhering surface on side, approved for use on vinyl, wood & other substance such as house wrap (**See Figure 13**).
- On the interior, loosely stuff insulation between door frame and stud opening to fill void. **Do not over pack insulation**, doing so may distort door jamb. **DO NOT** use expandable foam, this may cause the frame to bow, causing difficult operation. Check installation and door operation before trimming exterior. The patio door will not operate smoothly if the unit is out of square, is over-shimmed or rough opening has been over-insulated.

**FIGURE 12**



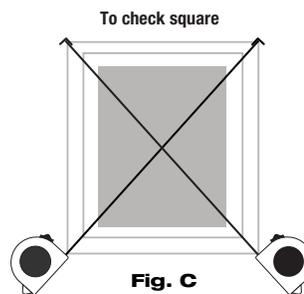
**Fig. A**

Using a four-foot level, check the jambs in both directions.



**Fig. B**

Using a four-foot level, check the the head and sill, both inside and outside the house.



**Fig. C**

Using a measuring tape, check diagonals in the frame. If they are the same the unit is square.

**FIGURE 13**

