

New Construction Patio Door Installation Instructions

The following instructions are intended to be a guide for the most common new construction applications. All applications are unique, and consideration should be given to the specific application of this product. Accessories are available, but not required, from WeatherBarr to ease the installation and finishing of the product. For more information on accessories, call customer service at (800) 829-BARR (2277).

CAUTION: Please consult your local building code official to identify and confirm compliance to local building code requirements.

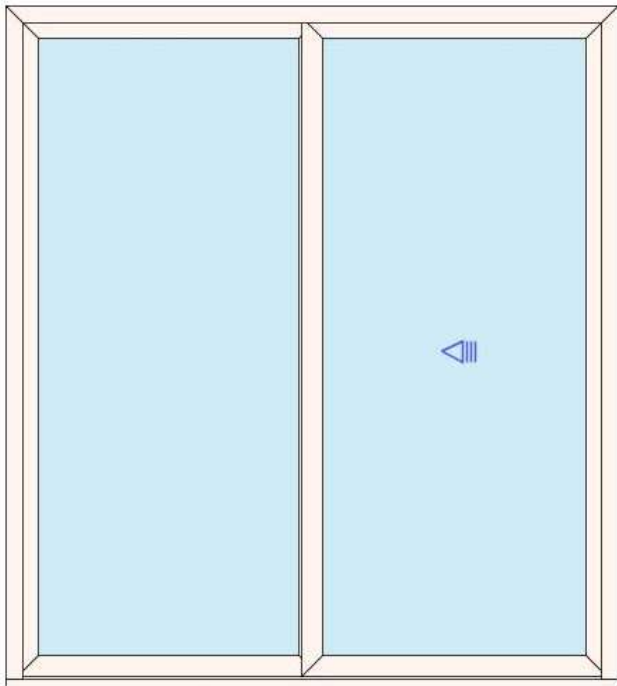
NOTE: Read all instructions thoroughly before beginning the installation of the product. Improper installation can result in air or water infiltration, restricted operation, difficulty locking, and potential damage to the unit.

Warnings/Cautions:

- Follow manufacturer’s instructions for hand or power tools. Always wear safety glasses.
- Do not work alone. Two or more people are required to properly carry and install. Use safe lifting techniques.
- Follow instructions of foam, sealant and flashing manufacturer regarding safety, application, and compatibility with this product.
- Do not drill or fasten through the door sill. Do not cover weep holes. Do not over drive screws or nails.

Parts included

- Patio Door



** Example: O-X as viewed from exterior

Tools needed

- Safety glasses
- Tape measure
- Level
- Putty knife
- Utility knife
- Hammer
- Staple gun
- Screw gun
- Caulk gun

Supplies needed

- Flexible self-adhesive flashing
- 4”, 6”, or 9” wide self-adhesive straight flashing. We recommend DuPont Tyvek Flashing tape
- House wrap tape
- Patio Door Sill Pan flashing kit (recommended)
- Shims (waterproof)
- 1 3/4” galvanized roofing nails or #8 x 1 1/2” corrosive resistant pan head screws
- Substrate specific sealant/caulking. OSI QUAD Max Sealant or equivalent is recommended
- Fiberglass insulation or spray foam insulation (must meet AAMA 812 specifications)

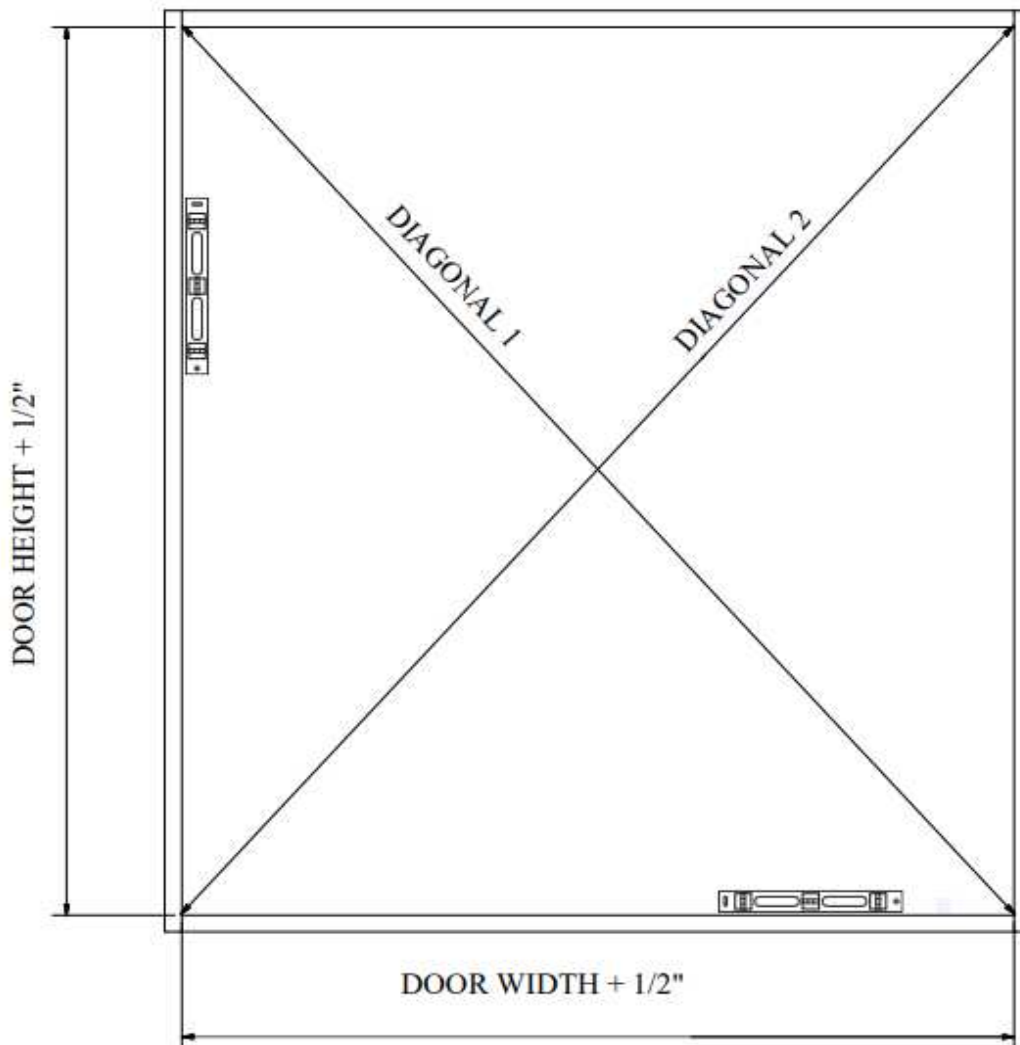
1. Inspect the unit for correct size and type, or for damage.

Be sure to verify the correct rough opening intended for the product to ensure that any special glazing features, such as tempered glass, are installed in the correct location. If a problem exists, contact customer service at 800-829-2277.

2. Inspect the rough opening.

Check the opening for plumb and square, and check the rough sill for level. The Patio Door should have 1/2" to no more than 3/4" around the width and height of the door. Patio Door unit and should be installed plumb, level, and square, even if the opening may not be any of these.

- To check for plumb: Place a level vertically on both the interior and face of the left and right jambs. If the bubble indicator is centered, the unit is plumb.
- To check for level: Place a level along the rough sill, make sure the sill of the Rough Opening is flat and level with no humps. If the bubble indicator is centered, the unit is level.
- To check for square: Measure door frame diagonally. Measure from the top left corner of the frame to the bottom right corner and from the top right corner to the bottom left corner. If the measurements are equal, the unit is square.



3. Prepare the building wrap at the jambs.

Use a utility knife to cut a slit down the center of the house wrap covering the rough opening. Then cut the house wrap along the top and bottom edge of the opening. Next, fold the cut house wrap into the opening and staple it to the interior.

4. Prepare the building wrap at the head of the opening

Cut the house wrap about 6" at a 45 degree angle at the corners of the opening. Next, tape the loose house wrap flap up over the opening. Later, you will tape and seal this flap over the nail flange over the top of the patio door frame (**step 15**).



5. Prepare the sill.

Install a preformed sill pan at the bottom of the Rough Opening using the sill pan manufacturer's instructions.

OR

Build a sill pan using flexible flashing product to create a seamless seal pan. (**See Sill Pan Construction note, Page 8**)

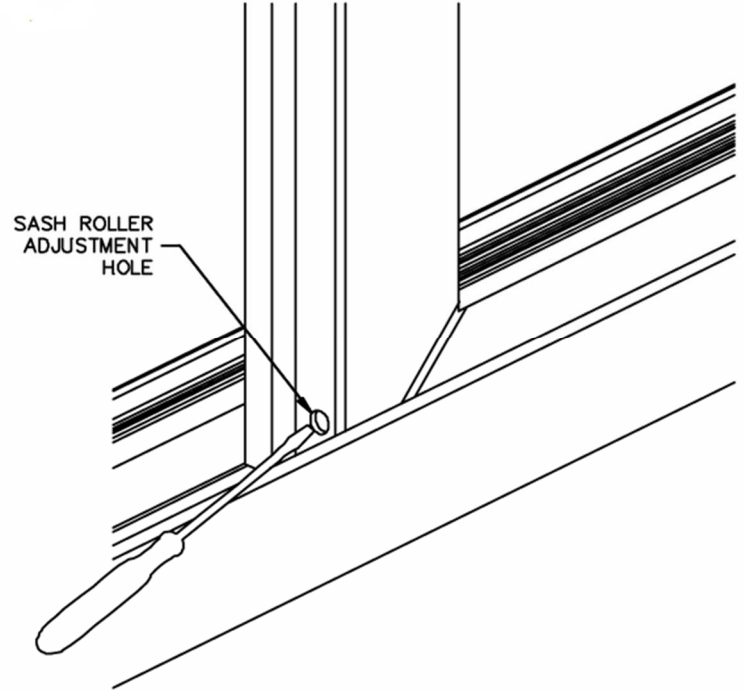
6. Prepare to place the Patio Door in the opening.

First, remove the operable panel from the main frame. Slide the panel to the open position.

Locate the adjustment screws for the sash roller assembly. They are located along the bottom rail of the panel on the interior. Using a manual Phillips screwdriver turn the screw counterclockwise to lower it. Adjust the rollers to lowest setting.

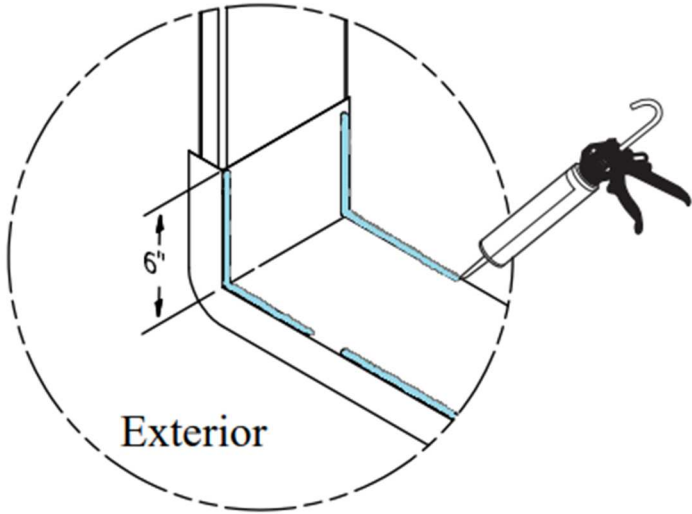
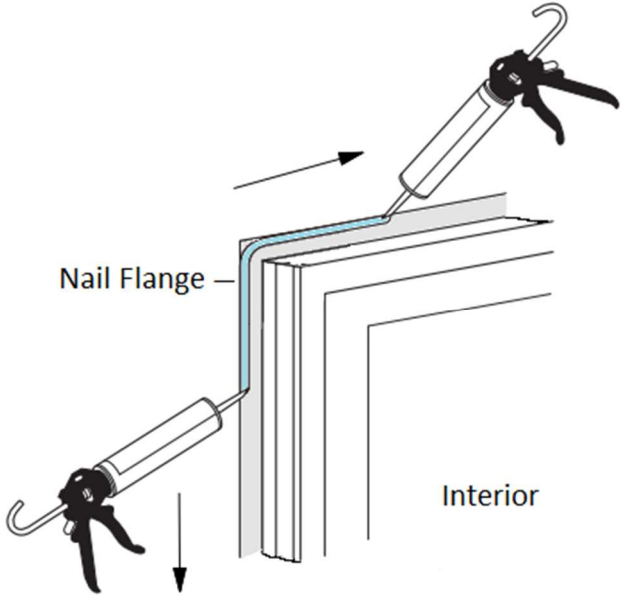
Lift the panel out of the lower track and tilt the bottom of the panel away from the door frame. Then, lower the panel out of the top track.

Carefully set the panel in a safe place.



With the operating panel out of the frame, you will now prepare the sill opening and the nail flange by applying sealant.

The sill of the opening and interior facing side of the nail flange of the patio door must be sealed with a proper grade of sealant and flashing per building code specifications, to prevent air and water infiltration around the door. The proper grade will depend on the surface the flange will be sealed against. Always make sure that the material used is compatible.

 <p>Exterior</p>	 <p>Nail Flange</p> <p>Interior</p>
<p>For the sill, apply two beads of silicone. The first shall be applied at the exterior facing edge of the opening starting 6" from the sill. Leave a 2" gap every 8" along the sill from one edge to the other and up 6" along the opposite starting side. The second bead is continuous and applied at the innermost surface of the opening.</p>	<p>For the nail flange, run a continuous nominal 3/8" bead of sealant around the inside perimeter of the nailing flange aligned with the pre-punched holes.</p>

7. Install the door

1. From the exterior, set the door into the rough opening, pressing the nail flange against the rough opening and bonding the sealant into the framing member.
2. Secure the top corner on the stationary side using a 2" fastener into the head nailing flange. Use a weather resistant fastener with a head or cap larger than the holes in the nailing flange.
3. Measure the diagonals of the door. When equal the door is square.
4. Secure the lower operator side of the door with a fastener near the bottom corner of the jamb nail flange.
5. Make sure the door sill is making continuous contact with the sill pan.
6. Re-install the operator panel.

8. Corrections for out of square

1. Check again for squareness.
2. If the diagonal measurement is longer from the bottom of the stationary side to the top of the operator side, shim above the operator side first.
3. Shim between Rough Opening and operator side jamb towards the top. Check for square again.

4. If the diagonal measurement is longer from the bottom of the operator side to the top of the stationary side, shim above the stationary side first.
5. Shim between RO and stationary side jamb toward top. Check for square again.

9. Check for bow or sag

1. Check the head and jambs to make sure there is no bow or sag.
2. Shim and adjust fasteners as necessary to obtain straight jamb and head members.
3. Complete fastening on the exterior through the nailing flange. Use 2" fasteners approximately 12" apart.

10. Securing the Door

1. Make sure the door nail flange is pulled tight to the sheathing and that it stays plumb. Use a level to check for plumb.
2. Remove the screw from the strike plate and replace with a longer screw to reach the framing stud. Place a shim between the Rough Opening and the door to screw through.
3. Install a 2" screw through the jamb in each corner of the door. Be sure to have a shim behind each screw. You can drill a 3/8" hole in the first wall of vinyl in the jamb to set the screw below the first wall.

11. Adjust the operating panel.

1. Locate the adjustment screws for the roller assembly. They are located along the bottom rail of the panel on the interior. Using a manual phillips screwdriver turn the screw clockwise to raise it.
2. Check the vertical reveals between the handle side of the door panel and the jamb of the frame. Adjust until the gap is even from top to bottom.

12. Finish flashing the exterior of the door.

Flashing applications vary greatly with respect to the wall type and region. We recommend DuPont Tyvek flashing materials and have provided a link to their installation instructions on our website at www.weatherbarr.com/installation-instructions. The instructions provided here are basic guidance for most new construction applications.

13. Prepare the flashing material.

Measure and cut two pieces of 4" self-adhesive straight flashing for the side jambs 8" longer than the jamb (if you are using 6" straight flash, then cut the strips 12" longer than the jamb). Measure and cut one piece of 4" self-adhesive straight flashing for the header 10" longer than the header (if you are using 6" straight flash, then cut the strips 14" longer than the header).

14. Apply the jamb flashing to the exterior of the door.

Apply the side pieces, starting 3" above the header, and overlap the flashing on the sill. It is important to keep the edge of the self-adhesive flashing as close to the door frame as possible and apply over the nail flange.

15. Apply the header flashing to the exterior of the door.

Center and apply the header piece of flashing tape over the header, making sure to overlap the side pieces of flashing. Release the house wrap from above the header (this was taped in place in step 4) and overlap the header flashing. Seal the ends of the over header flap with self-adhesive flashing or building wrap tape. Seal the top corners of the door to the flashing material with a 3/8" bead of sealant.

16. Finish off the exterior of the door.

Be sure to leave a ¼" gap around the perimeter to allow for proper expansion and contraction. Be sure to use the proper grade of sealant to seal any gaps where water can penetrate the home. Seal all areas prone to air or water infiltration. Make certain weeps remain open so that water can drain from the sill and out of the weeps.

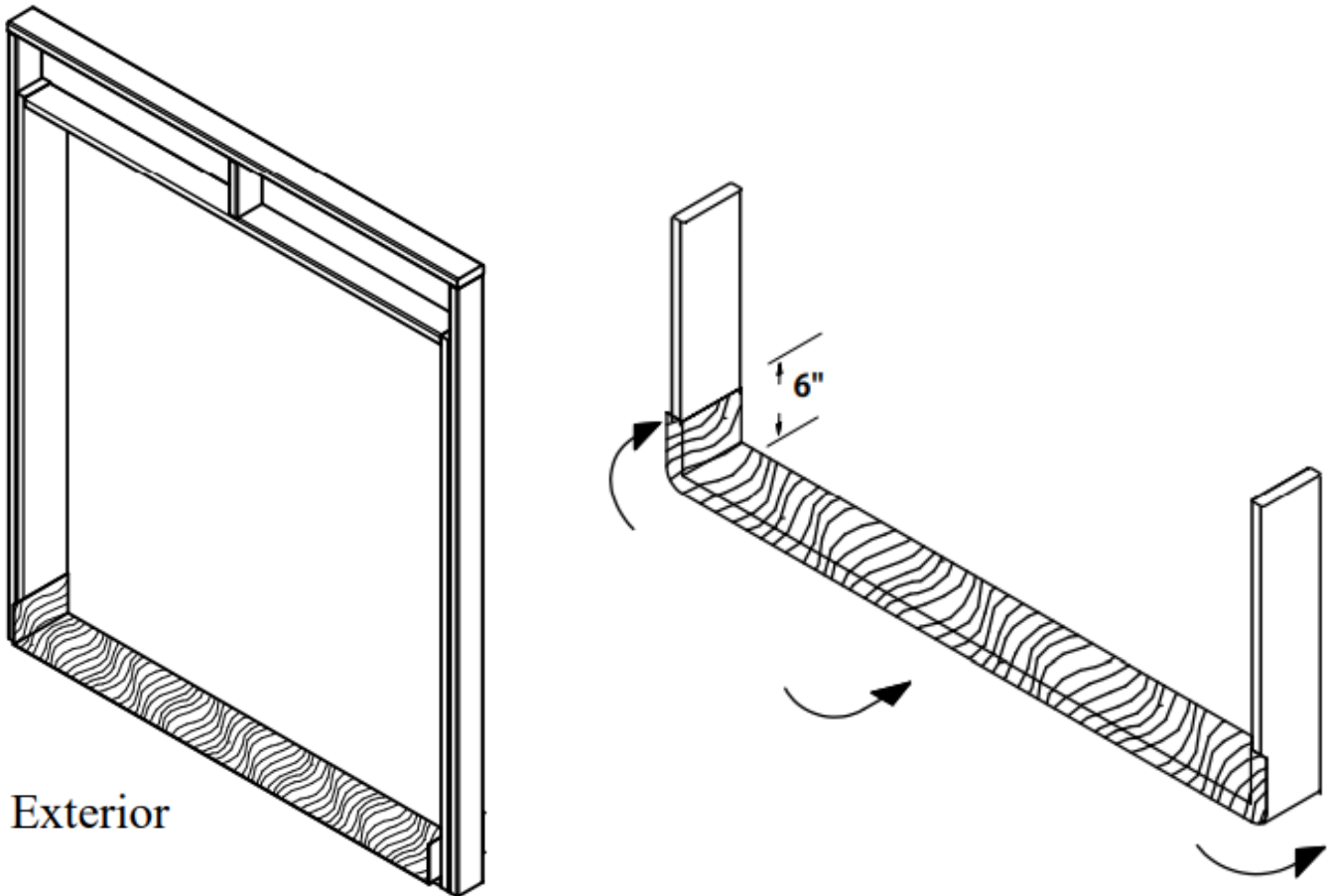
17. Insulate around the door frame.

Loosely pack insulation around the door frame, on the interior, between the frame and the opening. Spray foams are acceptable as long as they meet AAMA 812 specifications.

18. Check the door for proper operation and locking. Finish off the interior of the door. From the interior, seal the joint between the door and the rough opening across the full width of the sill and 6" up each jamb. Use 100% silicone, OSI Quad Max, or equivalent.

Sill Pan Construction

In the absence of a preformed sill pan purchased separately from the Patio Door, build a sill pan using flexible flashing product to create a seamless seal pan. Use the self-adhesive flashing to waterproof the sill. The flashing must have at least 2" of visible material below the nail fin.



1. Cut a length of the flashing material at least 12" longer than the width of the sill rough opening.
2. Cover the horizontal sill by aligning the inside of the sill and adhere into the rough opening across the sill and up the jambs at least 6" on each side.
3. Make sure there are no wrinkles or voids.
4. Fold the flashing down onto the sheathing and fasten the corners down with staples, tape, or nails if necessary.