

DOOR INSTALLATION INSTRUCTIONS

Required Tools and Materials

- Level (for sub-sill only)
- Shims
- Hammer
- Drill
- #2 Flat and Philips Screw Driver
- Low-expansion foam (or fiberglass) insulation

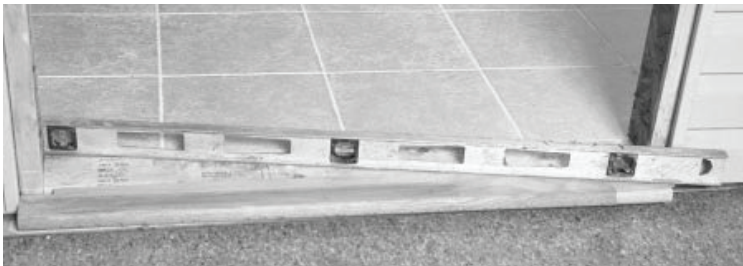
- C** + **Important Point:** Although all steps are critical, this symbol identifies procedures requiring extra attention.
Check Your Work: This symbol identifies when the work should be checked for correctness before continuing with installation.

STEP 1: PREPARE ROUGH OPENING

Ensure the following conditions are met:

- The rough opening is ideally 1" wider and ½" taller than the outside frame dimensions of the door system.
- The RO is plumb, square and level
- The old frame has been completely removed in retrofit installation
- The existing sub-sill is at least 6" deep for 4 5/8" frames and at least 8 ¾" deep for 7 ¼" frames.

+ Because a solid, level sub-sill is absolutely essential for proper door system installation, do not proceed with the until the sub-sill is both solid and level.



STEP 2: CAULK THE SUB-SILL

Apply three ¼" lines of caulk (acrylic caulk is recommended) along the length of the sub-sill, the first line starting approximately 1" from the inside edge. The lines should be about 1" apart.



STEP 3: REMOVE PACKAGING MATERIALS

- C** Remove all packaging materials such as nails, staples and screws
 Make sure the door swings freely in the frame.

STEP 4: PLACE DOOR IN ROUGH OPENING

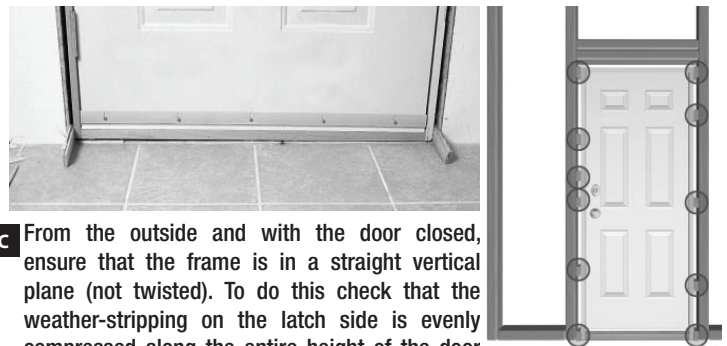
Stand on the outside of the doorway. With the door facing out, tilt the door back toward the outside. Place the sill in the RO and tilt the door up and into the opening.

- + **Do not leave the door wide open during installation.**
 The weight of the door may cause it to fall and cause injury.

STEP 5: SHIM AND FASTEN

Stand on the inside of the door and center the door in the opening. Shim tightly at the bottom corners of the door unit. This will keep the door centered and the frame tight against the sill. Shim the top of the door on the latch side. Install shims until there is a consistent 1/8" gap between the top of the door slab and the frame header.

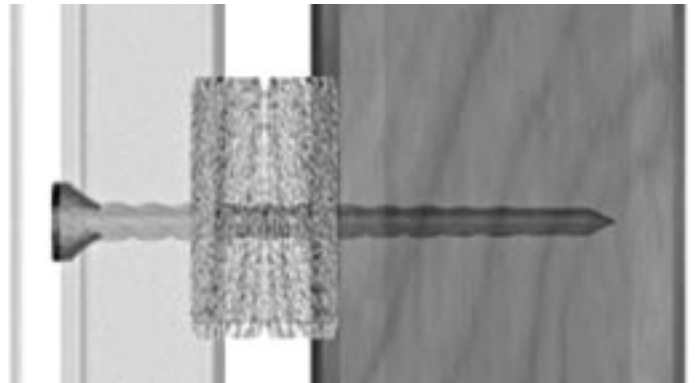
Shim the hinge side of the frame. This will hold the door tight in its position relative to the frame. The door should operate freely with nothing but shims holding it in place.



- C** From the outside and with the door closed, ensure that the frame is in a straight vertical plane (not twisted). To do this check that the weather-stripping on the latch side is evenly compressed along the entire height of the door slab without any pinching or gaps.

Remove the top screw from each hinge.

With the door closed and from the inside shim directly behind the vacant hinge screw hole in each hinge, until there is a consistent 1/8" gap between the hinge-side jamb and the door slab edge along the entire height of the door. There should be a 1/8" gap between the latch-side jamb and the door slab edge at the top and bottom of the door only. Drive a 3" installation screw through the vacant hole in each hinge, through the jamb, shims and into the stud.



C When the shims are properly installed, the frame should not move or twist at all when the screws are tightened and counter-sunk thereby maintaining the 1/8" gap. If there is any movement, loosen the screws and shim tighter to maintain the 1/8" gap, and then re-tighten the screws.



Shim behind the latch-side jamb approximately 8" from the top and bottom of the frame. Install shims until there is an even 1/8" gap between the jamb and the edge of the door slab along the whole length of the door. Shim behind the latch-side jamb just above and below the dead bolt hole, maintaining the 1/8" gap. Pull the weather-stripping away from the jamb and screw 3" installation screws through the jamb and shims and into the stud.



STEP 6: INSTALL DEAD BOLT AND STRIKE PLATES

Install the dead bolt strike plate in the proper location, depending on door style. If the plates are being installed on an exterior jamb, use 3" screws. If the plates are being installed on a mullion or sidelite use 1 3/8" screws.



STEP 7: INSULATE

Score the shims with a utility knife and then snap where scored. Trim any excess. Insulate around the top and the side of the door unit in the cavity between the frame and the wall studs. Use either a low-expansion foam or fiberglass insulation.

+ Important Point: The use of foam that does not have a low expansion may cause door frame to warp; this may leave the door inoperable.



STEP 8: CAULK DOORWAY

Caulk all four corners and all around the brick or siding in the following order:

- Caulk the top corner where the header and sill meet, starting at the weather-stripping and working to the face of the molding.
- Caulk the perimeter.

If the door is center-hinged or has a sidelite; caulk around the mullions where they contact the sill and header.

STEP 9: ADJUST THE SILL OR SWEEP

Most of our door units are supplied with a U-channel adjustable sweep, and these may be raised or lowered to form a tight seal with the fixed sill. Lower or rise according to desired fit and if needed fix in place with a screw (not supplied).



STEP 10: INSTALL THE LATCH AND DEADBOLT

Following the manufactures installation guide for the handle you purchased install the latch and dead bolt.

