# **INSTALLATION INSTRUCTIONS – EXTERIOR DOORS**

Tools Required: 6' Construction Level Claw Hammer Power Screw Gun and Bits Hand Screwdriver Caulk Gun Framing Square Tape Measure Drill Safety Glasses Supplies Required: Wood Shims 3 Tubes of Elastomeric or Polyurethane Caulk 12 #8 x 3" Exterior Grade Flathead Screws 12 #10 Galvanized Finish Nails Length of Aluminum Flashing (same width of door)

## Step #1 – Rough Opening Preparation

- a) Check the rough opening correct size. The rough opening needs to be 1/2" wider and 3/4" taller than the outside jamb dimension of the unit.
- b) Check the wall framing for plumb and square. Use a 6' level to check both the inside and outside of the opening top to bottom and right to left to ensure that the opening is plumb and square. Check the sub floor for level. Correct any out of square/plumb conditions before proceeding to the next step.

Note: Out of square/plumb wall framing conditions are one of the most common reasons for door units that leak air or water.





### Step #2 - Setting and Fastening the Unit

- a) Temporarily fit the unit into the opening to check for proper fit. After fit has been verified remove the unit from the opening and pre-drill a 1/8" hole at each hinge location on the exterior side of the unit centered in the frame.
- b) Caulk the sub floor by applying three 3/8 beads of a high quality elastomeric or polyurethane caulk.
- c) Apply a 1/2" bead of high quality elastomeric or polyurethane caulk to the back side of the brickmould.
- d) Insert the unit into the opening from the exterior side of the building. Set the unit, bottom first into the opening and tip the unit up into the opening. This method will prevent the caulk from being pushed out from under the unit.



- e) Center the unit into the opening to allow clearance for shimming. Install a #8 x 3" exterior grade flat head screw into the pilot hole (see step 2a) at each hinge location. Do not fully set the screws at this time.
- f) From the interior side of the unit, install shims at each hinge location between the frame and stud wall. Adjust the shims to plumb and square the unit into the opening. After the unit is plumb and square in the opening, the screws in the hinge side of the frame can be set. Units with sidelites will be fastened through the sidelight frame on the hinge side of the unit in the same manner.

Note: Proper frame shimming and fastening are critical to the long term trouble free operation of your unit. Composite frame components are not as rigid as wood and may require extra shimming and fasteners, especially on 8' doors.



- g) Remove the shipping plug and carefully open the door. Install the two #8 x 2 1/2" security screws (provided) into the top hinge. Open and close the door to check for proper operation.
- h) Pre-drill 1/8" pilot holes in the strike side of the frame across from each hinge. Install shims between the frame and stud wall and adjust the shims to achieve a consistent margin around the entire perimeter of the door. Check for an even contact between the door panel and weatherstrip. Secure the strike side of the frame with three #8 x 3" exterior grade flathead screws through the pre-drilled pilot holes into the wall stud. Units with sidelites will be fastened through the sidelight frame on the strike side of the unit in the same manner.
- i) Shim sidelight units above each mull post and secure with a #8 x 3" exterior grade flat head screw through the sidelight frame head.
- j) Shim double door units at the frame head centerline of each door panel. Secure with two #8 x 3" exterior grade flathead screws.



Shim above mull post or jambs separating doors and sidelites. Screw through the frame into the Header, adjacent to the shims

k) Check the spacing between the bottom of the door and sill. The sweep should be slightly compressed against the top of the sill riser. If an adjustment is necessary remove the plastic screw covers on the sill riser and turn the adjusting screws clockwise to raise the sill riser.



- I) Nail through the brickmould into the wall sheathing using #10d galvanized finish nails evenly spaced around the perimeter of the unit. A minimum of 12 nails must be used.
- m) Open the unit and install a second #8 x 3" screw behind the weatherstripping at each of the fastening locations (3) in the strike and hinge frame.

### Step #3 – Sealing and Weatherproofing

- a) Install aluminum or vinyl flashing across the top of the brickmould header. Seal both ends of the flashing to the top of the brickmould and to the wall with caulking.
- b) Apply a bead of caulk around the brickmould where it meets the exterior wall.
- c) Apply a bead of caulk on the inside edge of the brickmould where the brickmould meets the frame.
- d) Apply a bead of caulk at the junction where the sill meets the frame on the exterior side of the unit out to the face of the brickmould.
- e) On a sidelight unit caulk the exterior junction where the mull post meets the sill.
- f) If a sill extender is installed apply a bead of caulk at the seam where the extender meets the sill.

Note: 100% silicone sealant is the most durable, but it cannot be painted. Use polyurethane sealant if painted. Follow sealant manufacture's instructions for proper application and curing time.





Caulk at the corner where the aluminum of the sill meets the frame components. Do not caulk on top of the adjustable threshold cap.



3e







## **INSTALLATION INSTRUCTIONS – INTERIOR DOORS**

Tools Required: 6' Construction Level Hammer Hand Screwdriver Framing Square Tape Measure Nail Set Safety Glasses Supplies Required: Wood Shims #10 Finish Nails

#### Step #1 – Remove Packaging and Inspect Door Unit

- a) Remove all packaging materials from door unit.
- b) Inspect the unit to ensure correct size, swing and style.
- c) Inspect the door unit for any handling damage.

### Step #2 – Rough Opening Preparation

- a) Temporarily fit the unit into the opening to check for proper fit. The opening size should be 1/2" larger than the door unit, both height and width.
- b) Check the wall framing for plumb and square. Use a 6' level to check both the inside and outside of the opening top to bottom and right to left to ensure that the opening is plumb and square. Check the floor for level. Correct any out of square/plumb conditions before proceeding to the next step.

Note: Out of square/plumb wall framing conditions are one of the most common reasons for door problems.





### Step #3 - Setting and Fastening the Unit

- a) Position the door unit into the opening and level the hinge side of the jamb. Shim the hinge jamb behind each hinge location. Recheck for plumb and square. Temporarily secure the hinge jamb into the opening using #10 finish nails. Nail through the stop, jamb and shims at each shim position. Do not set the nails at this time.
- b) Level the strike side of the jamb and temporarily fasten in the same manner as the hinge jamb.
- c) Shim and temporarily fasten the jamb head in the same manner.
- d) Recheck the door unit for plumb and square. Check for an even margin between the door slab and jamb. Check operation. Nail securely in place through the stop, jamb and shims every 12 inches using #10 finish nails.
- e) Install door casing and secure with #10 finish nails every 12 inches. Set and fill all fastener holes.

The door is now ready for finishing.

Note: Proper frame shimming and fastening are critical to the long term trouble free operation of your unit.