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## GENERAL EXTERIOR DOOR INSTALLATION INSTRUCTIONS

## **ROUGH OPENING**

Begin by checking the rough opening. It should be square, level, and no less than 1/2" wider and higher than the outside frame dimensions of the frame to be installed. The bottom of the rough opening must be level and cannot have a sag or crown. If necessary, the bottom of the rough opening must be modified to meet this specification prior to the installation of the door. Modify the bottom of the rough opening by planing the subfloor until it meets the above specifications.

If size adjustment is needed, block the rough opening on both the sides and the top. Blocking must be flush with the exterior sheathing of the home. Double studs should be used at all the openings. Jamb studs should fully extend from the floor to the header. The header should be supported on the jamb studs and be designed to ensure that no load is transmitted to the door unit. The header and jamb studs should also provide for adequate anchorage.

## **INSTALL THE UNIT**

Check the unit for any signs of damage. If damage is noted please notify your distributor before installation.

Place a liberal non-broken bead of silicone around the exterior face of the rough opening in a manner that will seal the brickmould, builders paper and exterior face of the rough opening against water infiltration.

Place several liberal non-broken beads of construction adhesive to the subfloor making sure that each completely bridges the gap between jamb studs. The bead should be placed so that contact at both the foot and the toe of the door sill is made. Be extremely careful as this is the primary seal at the floor to sill interface and any voids in this interface will allow water and air infiltration.

Place the door into the rough opening and tie the builders paper into the home's exterior wrap in a manner that will protect the opening against water infiltration.

Secure active hinge side first, making sure that the hinge stays plumb on face and edge and that the clearance between the door and jamb is even. Shim to keep the jamb at 90 degrees to the door. Shims are to be placed at each hinge location.

Shim at three locations on the lock side: one at the lock location and one opposite the top and bottom hinges. Since few doors are perfectly straight and up to 1/4-inch tolerance is allowable, you can always compensate for slight irregularities when shimming the side jambs by pushing in or out. (see: "Shim Instructions for Fitting Irregularities")

Please note when shimming, use two nails per shim and do not drive finish nails in all the way until the door hangs properly and all gaps are equal.

Finish immediately after installation.

On operating units, attach operating hardware and check that all units operate properly.

Place insulation loosely in the spaces between the jambs and the studs. The insulation should not exert pressure on the jambs. B.C. Door does not recommend the use of expandable foam insulators.

Apply a high-quality exterior caulk around the exterior casing to seal the unit to the siding, stucco or bricks.

Install a drip cap or head flashing above the head jamb brickmould by using roofing nails.

## **COMMON INSTALLATION ERRORS**

- 1. The rough opening for the prehung door has been made too small, making it impossible to get enough adjustment for proper fit.
- 2. Shimming the hinge jamb from one side only instead of both, thus not keeping the jamb at 90 degrees to the door will create a hinge binding problem. When this happens, the door will always want to spring back when pushed closed.
- 3. Exterior prehung doors with exterior brickmould are sometimes installed by nailing frame to studs directly through the brickmoulding, using no shims at all. This is fairly common in new house construction where the framer is responsible for installing the exterior doors and sometimes doesn't spend the time to install properly.
- 4. Not checking the margin, or gap, between the door and frame when shimming will cause the door to hit the frame on the side, top, and/or bottom when closing.
- 5. Setting the frame permanent with a temporary door.