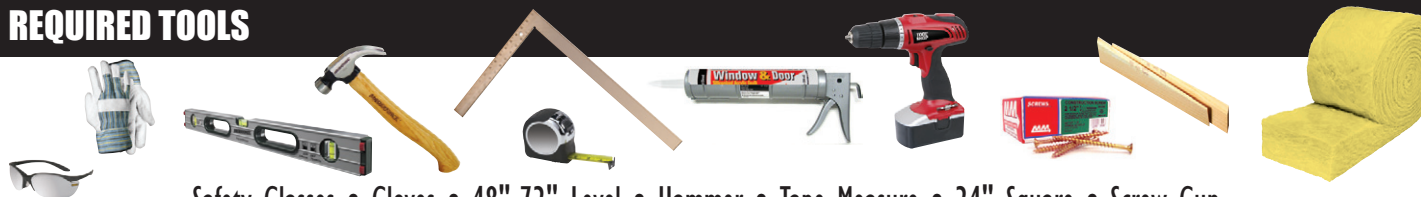


PREHUNG SINGLE-SWING EXTERIOR DOOR INSTALLATION INSTRUCTIONS

REQUIRED TOOLS



Safety Glasses • Gloves • 48"-72" Level • Hammer • Tape Measure • 24" Square • Screw Gun
Exterior Caulk (Paintable Silicone Recommended) • 2-½" Wood Screws Qty: 6 • Wood Shims (1pkg.) • Fiberglass Insulation

WARNING

Door Units Are Heavy! Use an adequate number of people to set the unit and prevent injuries or damage to the door.

1) Preparation of Rough Opening and Door Unit



fig. 1

a) Clean the floor area around the door opening. If necessary, scrape off mortar or plaster spills (**fig.1**).

Double check the rough opening dimensions. The rough opening should be roughly ½" taller and ¾" wider than the outside frame dimensions of the door unit.



fig. 2

b) Make sure the floor is level (**fig.2**). If the sub-floor is not level it will adversely affect the rest of the installation.



fig. 3

c) Check the opening for plumb and square. Check both walls for plumb and all four corners for square in the rough opening. Make the necessary corrections prior to installing the door unit (**fig.3 & 4**).

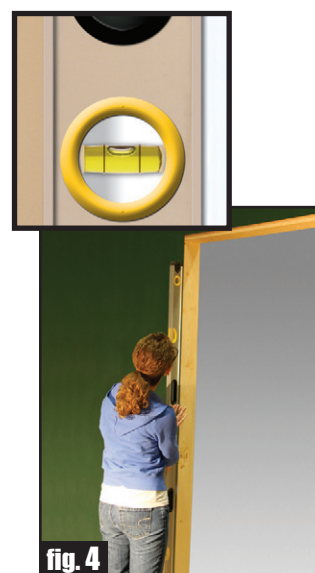


fig. 4

2) Preparation of the Door Unit

a) Remove all packaging materials from the door unit. This includes all cardboard and banding materials.

b) Remove the installation plug (**fig.5**) or shipping nails (**fig.6**) from the door unit. These will not be able to be removed once the unit is installed.



fig. 5

OR



fig. 6

3) Setting the Door Unit



a) Apply a triple bead of Silicone caulking to the sub-floor of the rough opening (fig.7).



b) Apply a second bead of caulking around the perimeter of the door sill (fig.8).

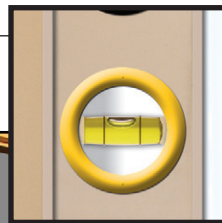


c) Apply a bead of caulking around the backside perimeter of the door's brickmould (fig.9).



d) Using two people, set the sill into the rough opening. Center the frame into the opening and tip the unit into place (fig.10).

e) Open the door and plumb the hinge side of the unit with a 6' level (fig.11).
NOTE: A door that is installed "Out of Plumb" is the most common reason for a door unit to leak air or water.



f) Place shims behind the top hinge (fig.12) and tack the unit into place by removing one hinge screw from the top hinge and installing a 2-1/2" wood screw through the top hinge and into the rough opening (fig.13).
NOTE: We recommend the use of screws when installing your prehung unit. Screws allow you the opportunity for easy removal if adjustments need to be made to the installation.

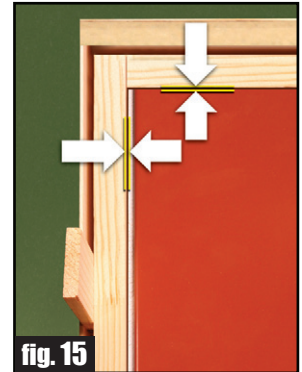


4) Shimming the Door Unit

a) Moving the door frame as little as possible, carefully close the door unit. Once the door is closed, begin shimming the door unit. Place shims behind the middle and lower hinge locations and each of the three corresponding strike locations. (fig.14).

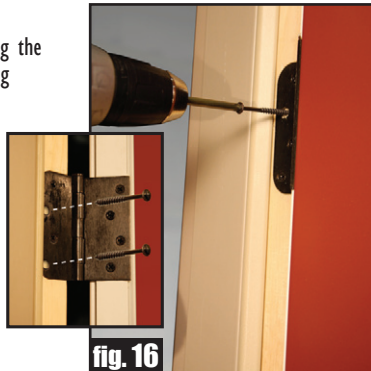
NOTE: An even margin across the top of the header and down the strike side of the door will ensure that the door unit is square in the opening. Uneven margins will result in the door unit being out of square.

b) Shim the door unit until the margin between the door and the head jamb is even and the margin between the door and the strike jamb is even. The margin should equal about 1/8" (fig.15).



5) Fastening the Hinge-Side Frame

a) Open the door carefully and re-check for plumb. Finish screwing the hinge jamb into place by removing one screw from the middle and bottom hinges and installing a 2-½" drywall screw into those hinges at the shim locations into the rough opening. Install a second 2-½" screw into the top hinge to prevent the door from sagging (**fig. 16**).


fig. 16

6) Fastening the Lock-Side Frame

a) Re-check plumb on the lock jamb. Install one 2-½" drywall screw at the three corresponding shim locations along the lock jamb into the rough opening. Carefully, fold back the weatherstrip to conceal the screw head (**fig. 17**). The screw hole can be filled for a more finished look.

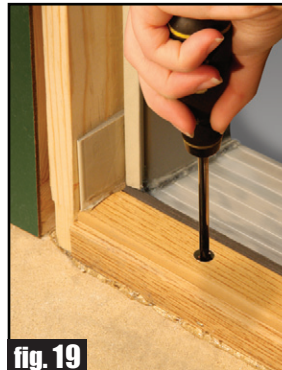
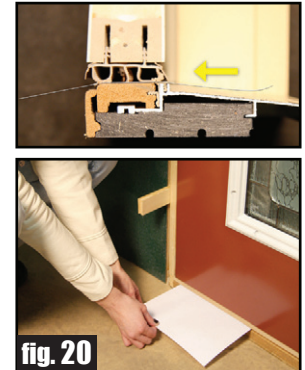

fig. 17

7) Adjusting the Frame

a) Close the door unit and re-check the margin around the door unit, it should be even horizontally across the top of the header and vertically from the header to the sill. Make adjustments to the shimming as needed (**fig. 18**).


fig. 18

b) If your prehung unit has an adjustable sill: Using a #2 phillips screw driver, adjust the set screws on the top of the sill crown to allow your door to operate properly (**fig. 19**). A good test for the compression of the sweep on the sill crown is to 1.) Close the door on a piece of paper. 2.) Pull the paper from between the sweep and the threshold (**fig. 20**). If the paper tears, the threshold is adjusted too high and it will prematurely wear out the sweep. If there is no tension on the paper, then there will be potential for water leakage.


fig. 19

fig. 20

8) Installing the Lockset

a) All Mastercraft doors are set up with a 2-1/8" bore hole set at either a 2-3/8" or a 2-3/4" backset (depending on door size). All crossbores are set for a 1" drivepoint latch. This is done to allow installers to utilize drive point latch systems, radius plate systems, or square plate systems.

b) To install the backset as a drive-point system, simply follow the lock manufacturers instructions for converting to a drivepoint. Hammer the drivepoint into place making sure the angled portion of the backset faces the jamb (**fig. 21**).

c) Using the manufacturers instructions, install the lockset (**fig. 22**).

d) Install the strike plate on the jamb (**fig. 23**). Our jambs are mortised for a ¼" radius strike plate. If the lock manufacturer has supplied a square plate, use a chisel to remove the excess wood material from around the corners of the plate.

e) For doors that are bored for a deadbolt, install the deadbolt strike plate. If the door does not have a deadbolt, install a plastic deadbolt cover plate (**fig. 24**).


fig. 22

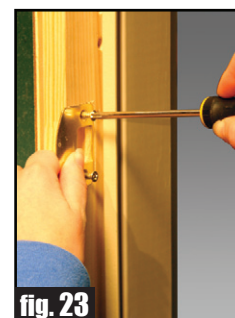
fig. 21

fig. 23

fig. 24

9) Insulating the Door Unit

Before applying casing to the interior of your door unit you will need to insulate around the frame opening. We recommend using "Fiberglass Blanket Insulation". Do not use expanding foam, it will affect the margin around the door unit (**fig.25**).


fig. 25

10) Final Installation

It is very important that you finish your prehung unit properly. To insure maximum efficiency, please caulk at the following locations:


fig. 25

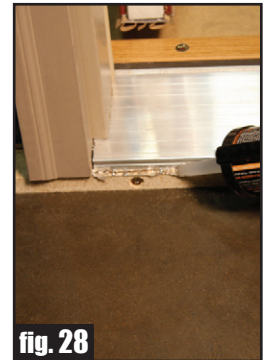
a) Where the brickmould contacts the exterior wall. (**fig.25**).


fig. 26

b) Where the brickmould contacts the frame. (**fig.26**).


fig. 27

c) Where the frame contacts the sill. (**fig.27**).


fig. 28

d) At the nose of the sill, where it contacts the sill plate. (**fig.28**).

e) Make sure the corner seals are in place. If they have been removed during finishing, please make sure they are replaced (**fig.29**).

f) Remove all excess shimming material by first scoring the shims and then breaking them off with a hammer (**fig.30**).

g) Apply casing to the unit as desired (**fig.31**).


fig. 29

fig. 30

fig. 31

11) Finishing Recommendations

Remove all dust and debris from the surface of the door. Lightly sand the door surface with a fine sand paper. Wash the door with a mild detergent and rise very well. Allow the door to dry completely. Apply a finishing coat of a high quality latex paint. Carefully follow all paint manufacturers' preparation and finishing instructions. Do not paint the weatherstrip. Do not close the door unit until the paint is completely dry. Please see door window for finishing instructions for the window frame.

12) Troubleshooting Help

For more information, including troubleshooting help, please visit

www.midwestmanufacturing.com