PREHUNG CENTER HINGE PATIO DOOR
INSTALLATION INSTRUCTIONS

REQUIRED TOOLS
Safety Glasses • Gloves • 48”-72” Level • Hammer • Tape Measure • 24” Square • Screw Gun • #2 Screw Driver • Putty Knife
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.
Note: These instructions are recommended installation methods and not a substitute for local building codes. Please consult your local building codes prior to any door installation.

1) Preparation of Rough Opening

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 will be 72” wide x 80” tall.

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.

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).

2) Preparation of the Door Unit

Remove the door handles from the door unit (fig.5).
3) Setting the Door Unit

a) Apply three beads of Silicone caulking to the sub-floor of the rough opening (fig. 6).

b) Apply a second bead of caulking around the perimeter of the door sill (fig. 7).

c) Apply a bead of caulking around the backside perimeter of the door’s brickmould (fig. 8).

d) Using two people, set the sill into the rough opening. Center the frame into the opening and tip the unit into place (fig. 9).

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 the first set of shims directly behind inactive door jamb directly in alignment with the bottom hinge. (fig. 11).

Add shims to the bottom hinge location until the margin across the top of the active door becomes even across the top of the door unit (fig. 14).

Once the margin is even across the top of the door, place shims behind the strike jamb directly across from the middle and lower hinges and also in the remaining two hinge locations behind the jambs and the inactive door (fig. 15).

b) Shim the three remaining head jamb locations until the margin between the door and the head jamb is even and the margin between the door and the lock jamb is even. The margin should equal about 1/8”. (fig. 14 & 15).

NOTE: An even margin across the top of the header and down the center 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.

5) Fastening the Lock Jamb

a) Open the door carefully and re-check for plumb (fig. 16). Finish screwing the lock jamb into place installing one 2½” wood screw at the remaining two 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 with wood putty for a more finished look.
6) Fastening the Inactive Door Jamb

a) Re-check for plumb on the inactive side of the door (fig. 18). Using a ¼" drill bit, predrill a ¾" hole at a 45° angle, through the jamb and into the shim location (fig. 19).

b) Using a countersink bit, countersink the holes drilled in figure 20 in order to allow the screw heads to sit flush with the jamb (fig. 20).

c) Install one 2½" wood screw into each of the predrilled locations. Be careful not to overtighten the screws so that you do not crack the jambs (fig. 21).

d) Repeat this process for the three corresponding head jamb shim locations.

7) Adjusting the Frame

a) Close the door 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.

b) If your patio 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. 22). 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. 23 & 24). 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.

c) Install a 2½" bore hole set at either a 2⅛" or a 2¾" backset (depending on door size). All corebores 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 (fig. 25).

d) Repeat this process for the three corresponding head jamb shim locations.

e) Install one 2½" wood screw into each of the predrilled locations. Be careful not to over tighten the screws so that you do not crack the jambs (fig. 21).

d) Repeat this process for the three corresponding head jamb shim locations.

e) Install one 2½" wood screw into each of the predrilled locations. Be careful not to over tighten the screws so that you do not crack the jambs (fig. 21).

d) Repeat this process for the three corresponding head jamb shim locations.

e) Install one 2½" wood screw into each of the predrilled locations. Be careful not to over tighten the screws so that you do not crack the jambs (fig. 21).

d) Repeat this process for the three corresponding head jamb shim locations.

e) Install one 2½" wood screw into each of the predrilled locations. Be careful not to over tighten the screws so that you do not crack the jambs (fig. 21).

8) Installing the Lockset

a) All Mastercraft doors are set up with a 2⅛" bore hole set at either a 2⅛" or a 2¾" 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 (fig. 25).

b) To install the backset as a drivepoint system, simply follow the lock manufacturer’s instructions for converting to a drivepoint. Hammer the drivepoint into place making sure the angled portion of the backset faces the jamb (fig. 26).

c) Using the manufacturers instructions, install the lockset (fig. 27).

d) Install the strike plate on the jamb (fig. 28). 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 included with the door. (fig. 29).
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. 30).

10) Final Installation

It is very important that you finish your door system properly. To ensure maximum efficiency, please caulk at the following locations:

- **a)** Where the frame contacts the sill. From the nose of the sill on the exterior of the house, over the crown, and to the edge of the sill heel on the interior of the house (fig. 31).
- **b)** Where the brickmould contacts the frame (fig. 32).
- **c)** Where the brickmould contacts the exterior wall (fig. 33).
- **d)** At the nose of the sill, where it contacts the sill plate (fig. 34).

- **e)** Make sure the corner seals are in place. If they have been removed during finishing, please make sure they are replaced (fig. 35).
- **f)** Remove all excess shimming material by first scoring the shims and then breaking them off with a hammer (fig. 36).
- **g)** Apply casing to the unit as desired (fig. 37).

11) Disposal of Waste Materials

For proper handling and disposal of construction waste materials please consult your local building codes. Additional disposal and recycling recommendations can be found on the EPA website at www.epa.com.

12) 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 rinse 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.

Note: Prefinished steel door products are produced using a protective film over the steel. This film must be removed within 48 hours of installation.

Questions or Concerns: For guest assistance contact MASTERCRAFT® by sending an email to: MastercraftDoorHelp@MidwestManufacturing.com For more information, including troubleshooting help and videos, please visit: www.MastercraftDoors.com