P.N.1168 Rev. 9/25/2006

INSTALLATION GUIDE FOR 3100/3700/4100 SERIES PREHUNG DOORS

This door is designed for installation in all types of construction, with or without a nailing fin or the E-Z Fit option. The door is factory prehung and can be used for 4-way installation.

BEFORE STARTING:

<u>CAUTION:</u> If this product is being installed next to a copper based wood preservative, a barrier <u>must be</u> installed between the treated lumber and this product to prevent a reaction between the metal and the preservative.

ATTENTION: These series doors have been tested, per ASTM E330, to meet the structural requirements of Coastal Building Codes. For installation in coastal building zones, see the special instructions, found at the end of these instructions.

- 1. Read these instructions completely before starting to install the door.
- 2. The rough opening into which this door is to be installed, should be ½" wider and ½" higher than the O.S.M. of the door frame.
- 3. Check the rough opening to be certain that it is plumb and square. This will help ease the installation of the door assembly. Pre-drilling pilot holes into the wood frame of the rough opening where the installation screws are to be used will make it much easier to install them also.
- 4. We recommend that fiberglass insulation be placed between the metal door frame and the wood rough opening to prevent possible air infiltration between the components.
- If the slide-on flat nailing fin or E-Z Fit installation options are being used, apply them to the frame prior to starting the installation. Separate, illustrated, instructions are included with the EZ Fit package.

TOOLS REQUIRED:

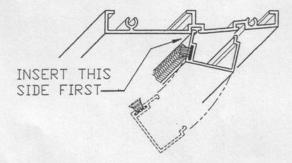
Tape measure, square, level, drill, 1/8" drill bit, hammer, two (2) saw horses, #2 Phillips screwdriver, straight screwdriver, some thin shimming material and at least seventeen nails or screws to attach the nailing fin or EZ Fit to the wood frame, if either of those options are being used.

DOOR INSTALLATION:

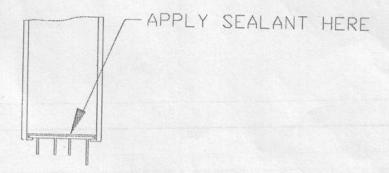
- Remove the door from the carton and lay it on the saw horses with what will be the outside of the door facing up and the hinges in the proper position for the handing and swing desired.
- Remove the screw pack, containing seventeen installation screws, the weather-stripped header parting stop
 and the optional lock set from the carton. The appropriate style of installation screw for your application
 can be found on the installation drawing.
- 3. From the outside of the building, set the door assembly into the rough opening with the hinge jamb tight against the wood rough opening.
- Open the door and install one of the installation screws into the center hole of the top hinge.
- 5. Check the aluminum frame to be certain it is plumb and square. If so, install a wood screw into the center hole of the bottom hinge and then into the center hole of the center hinge. Install two screws in the holes in the lower surface of the jamb.
- Check the aluminum frame for squareness again and shim if necessary.
- 7. Install shimming material between the lock jamb of the metal frame and the wood rough opening, especially in the areas where the six (6) installation screws will be placed and in the lock area.
- 8. Install one of the installation screws in the top installation screw hole in the lock jamb and then

one in the bottom hole. Proceed with the second hole from the top and then the bottom. While installing these screws, check the space between the door panel and the metal frame and maintain it at 5/32". Shim as necessary. **Do not** distort the frame. Install two screws in the holes in the lower surface of the jamb.

- Install the remaining installation screws in the installation screw holes in the hinge jamb, following the same sequence as those installed in the lock jamb.
- Check the aluminum frame for squareness again and adjust the screws and shim as necessary.
- 11. Install the snap-in parting stop onto the frame header by:
 - A. Swing the door completely open to allow sufficient working area.
 - B. Hook the leg of the parting stop containing the weatherstrip into the slot in the frame header. Remember to keep the weatherstrip toward the door, the same as in the jambs.
 - C. Swing the parting stop up and press it against the frame until the other leg of the parting stop snaps into the other groove in the frame header. <u>NOTE</u>: Due to Standard Aluminum Commercial Tolerances, it may be necessary to gently tap the parting stop into place with a hammer. If so, use either a soft faced hammer or place a block of wood between the hammer and the parting stop to avoid damaging the extrusion or the painted finish. See the illustration below.



- 12. Remove the adhesive backed cardboard spacers from the lock side of the door.
- 13. Install the lock set as per the lock manufactures' instructions except, use the strike plate furnished with the door. Use the two (2) #8-32 x ¾" combination thread screws found in the lock bolt area of the door perimeter to attach the lock bolt to the door. Apply a thread locking solution to the screws prior to installing to help insure that they do not work loose as the door is used.
- 14. Apply caulk across each end of the sweep to help prevent water infiltration at this area. See the illustration below.



Additional instructions for the door installation to meet structural Coastal Building Zones.

- 1. A Grade 2, or better, lockset must be used.
- 2. Remove the machine screws and locknuts that attach the strike plates to the jamb.
- 3. Carefully shim between the lock jamb and the wood rough opening at the strike area, being careful not to bow the frame.
- 4. Reattach the strikes using the #10x3½" screws provided, going through the strike, jamb and into the wood rough opening, again taking care <u>not</u> to bow the frame. If a dead bolt is not used, the two additional #10x3½" screws must still be used (a total of 8 on the lock jamb). On some door models it may be necessary to drill holes for these screws.
- 5. Refer to the detail drawing for proper fasteners for steel, concrete, and masonry installations. These fasteners are not included with the door, and must be provided by others.