

# MIRA Aluminum-Clad Wood Single, Center-Hinged, and French Door Installation Instructions

## Recommended Tools & Accessories

- Tape Measure
- Level (3' or longer)
- Hammer
- Power Screwdriver
- Load Bearing Shims
- Sealant
- Flashing (recommended)
- Drill with 1/2" drill bit (French Units Only)

## Approved Fasteners

- All fasteners must be corrosion-resistant

## For the Door Nailfin:

### Wood Framed Construction:

- #8 Pan Head Wood Screw which penetrates framing member at least 1 1/2", or
- Nail with 3/8" min head diameter, which penetrates framing member at least 2"

### Steel Construction:

- #8 Sheet Metal Screw which penetrates the framing member at least 3 threads.

## For the Mull Gusset Plates:

### Wood Framed Construction:

- #8 Pan Head Wood screws, which penetrate the framing member at least 2"

### Steel Construction:

- #8 Sheet Metal Screw which penetrates the framing member at least 3 threads.



## READ ALL INSTRUCTIONS BEFORE BEGINNING INSTALLATION

These instructions cover how to install Single Inswing & Outswing, French Inswing & Outswing, and Center-Hinged Inswing doors. **Not all steps are required for your door combination. Please note the bold text at the beginning of each step to see if that step applies to your door.**

## Separately Packaged Hardware



(30) #8 x 3" Wood Screw (full scale)



(8) #9 x 2 1/4" Hardware-Finish Screw (full scale)



(2) #8 x 2" Wood Screw (full scale)



Inswing Operating Panel Cover



Inswing Stationary Panel Cover



Outswing Security Flange

Check doors thoroughly for possible transit damage. Follow your local building codes, customs and building practices for additional installation requirements. The manufacturer warrants this product only when installed according to these instructions. These instructions are general in nature, and a design or building professional may be consulted. **Ply Gem Windows will accept no responsibility for air or water leakage above, under, or around the door unit.**

## Before Door Installation

**1a) (Required)** The Rough Opening should be level, plumb, and square, including the subfloor. Dimensionally, it should be 1/2" taller and 1" wider than the frame dimension of the door, excluding the nailing fins (See figure 1). Note that each horizontal mull adds 1" to the vertical dimension, and each vertical mull adds 1" to the horizontal dimension of the combination.

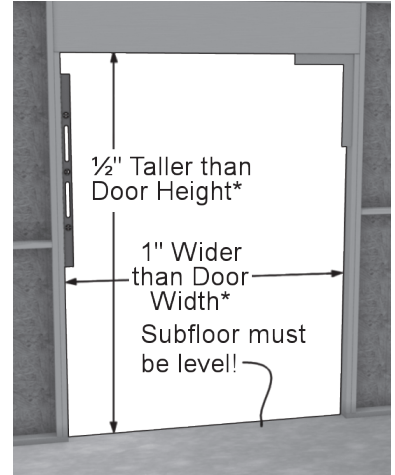


Figure 1



## For Florida installation:

Refer to the Florida Building Code for Florida-specific installation requirements that may differ from what is shown here.

**1b) (Recommended)** If a weather resistant barrier is used, follow the barrier manufacturer's recommendations for treatment of window and door openings.

**Before you begin, it is recommended that you familiarize yourself with the packaged hardware contents (below left) and the different components that make up the door assembly (see figure 2).**

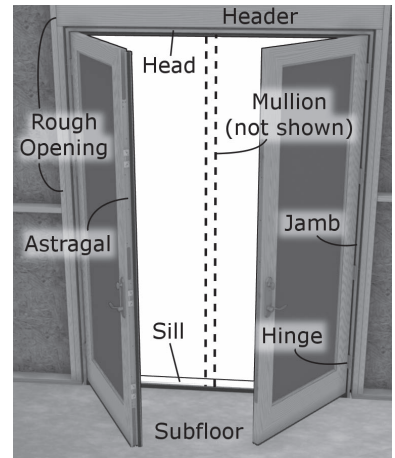


Figure 2



**For Doors that have a transom mulled over them, please begin on page 3.**

**1c) (Required)** Apply four (4) evenly-spaced continuous beads of sealant (at least 1/4" diameter) to the sill sub-floor as shown in figure 3, completely spanning the opening. Note: Sill is a representation only. Refer to local building codes for actual opening requirements.



Figure 3

**1d) (Required)** Apply a generous continuous bead of sealant (at least 1/4" diameter) along the top and sides of the rough opening exterior (figure 4) to ensure an adequate seal between the back of the nailing fin and the exterior surface of the rough opening.

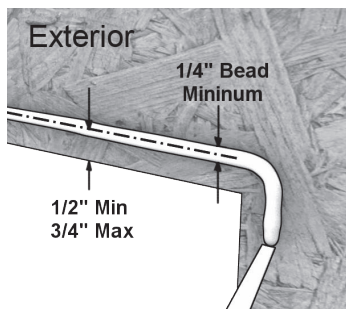


Figure 4

**1e) (Required)** With the door(s) closed, place the door unit into the rough opening. Center it from side to side. With an approved fastener (listed on page 1), fasten the door through the nailfin through a hole nearest the top center. (See figure 5)

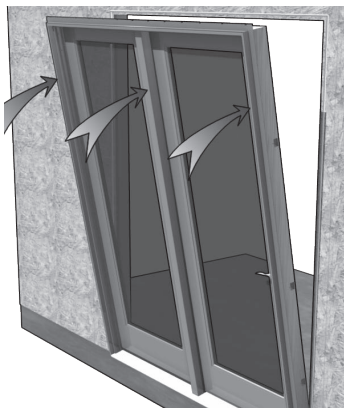


Figure 5

**1f) (Required)** Check the unit to make sure it's plumb and square, then place a few fasteners through the provided nailfin holes, anchoring the unit to the wall. (figure 6)



Figure 6

**⚠ Do NOT open the doors at this point!**

**1g) (Required)** You should see a nominal 1/8" gap between the door and frame on any non-hinged edge. If the gap varies, then the frame is not square. Shim and adjust as needed to achieve a square frame, then complete the nailfin fastening by placing fasteners in the provided nailing fin holes, spaced a maximum of 12" apart and 2" from the ends. (figure 7) **Refer to Step 2g for fastening Transom Gusset Plates.**

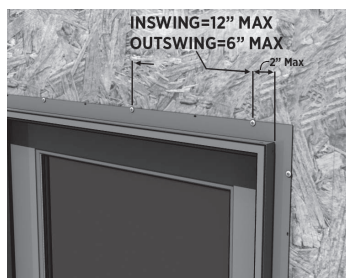


Figure 7

**1h) (Required)** Place shims along the jambs and head on the interior of the unit (figure 8 & 10) **behind each hinge, strike plate and all through jamb fastener points.** For Florida installation, the shims must be the full depth of the jamb. **Tip:** Apply some sealant to the shim contact surface and this will hold it in place until the door is secured.

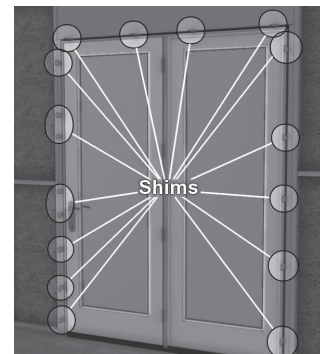


Figure 8

**⚠ NOTE:** If the sill is not level, shim low spots beginning at the side jambs and mullion. **The sill must be level or the doors may bind when opened.** If sill shims are needed, go back and make sure there is a full seal between the sill and the subfloor at the interior and exterior edges.

**1i) (Required - French Inswing & Outswing Only)** Place shims on either side of the Astragal Head Plate as shown in figure 9.



Figure 9

**⚠ NOTE:** Shims should be held in by light pressure, not tightly wedged or the door may not operate properly (sealant may be applied to hold into place).

**1j) (Required)** Fastener holes have been pre-drilled in the exterior cladding of the Inswing doors, and on the wood jambs of the Outswing doors. Locate each hole on the side jambs and head and shim behind it to prevent jamb distortion and binding. (figure 10, inswing door shown) Use a provided #8 x 3" wood screws to anchor the jambs and head to the rough opening.

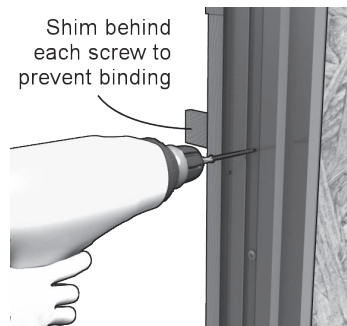


Figure 10

**1k) (Required)** If our door unit has hinges on a side jamb (instead of having hinges on a mullion), use the provided 2 1/4" long screws to replace the top two screws in the top hinge and the top screw for the rest of the hinges (figure 11).

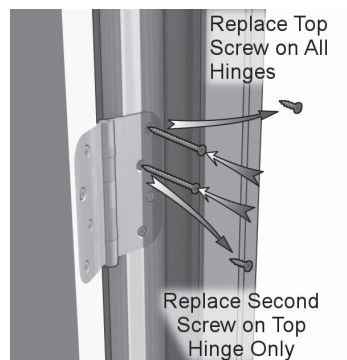


Figure 11

**1l) (Required)** If your door unit has strike plates on a side jamb (instead of having hinges on a mullion), press back the weatherstrip to reveal an unused hole in the strike plate. After confirming that the jamb is shimmed, drive a 2 1/4" long screws into the hole. (figure 12, inswing door shown)

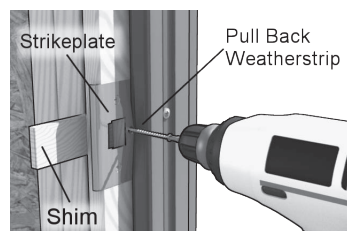


Figure 12

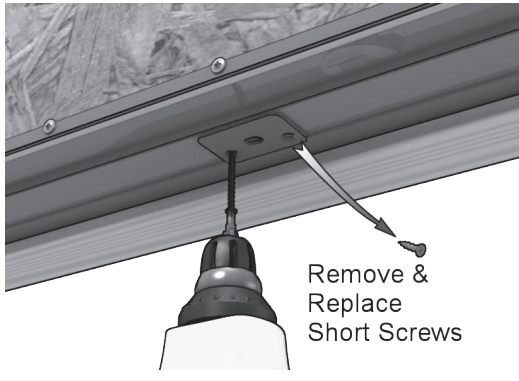


Figure 13

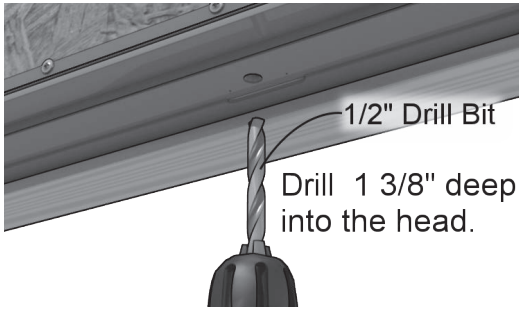


Figure 14

**1m) (Required- French Inswing & Outswing Only)** Remove the screws from the head plate, and replace them with the #8 x 3" screws provided. (figure 13, French outswing door shown) For Outswing, refer to the next step before installing the plate with the longer screws.

**1n) (Required- French Outswing Only)** This step is only required if there is less than a 1/2" gap between the door frame and the rough opening header. You will need to drill into the rough opening header where the astragal lock bolt goes through. While the head plate is off, use a 1/2" drill bit to drill 1 3/8" deep into the head. (figure 14) Then, replace the head plate and fasten it with #8 x 3" screws (see previous step).

**1o) (Required- Inswing Doors Only)** The packaged hardware included with the door includes clad cover panels. There are different profiles for the operating panel covers and stationary panel covers. (figure 15) The panels snap into grooves and cover the installation screws. Make sure to verify how the panels overlap at the corners, then gently tap the covers into the grooves.

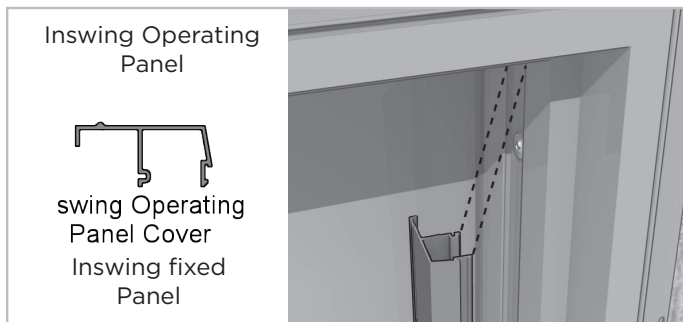


Figure 15

**1p) (Required)** After fastening the window unit, apply sealant to the mitered corners of the nailfin as shown in figure 16. Make sure to apply it all the way into the corner of the unit. Check all the unit joints (corners and mullions) making sure that none of the joints have gaps or that the sealant is cracked. If there is a visible crack width, use a clear 100% silicone and reseal the joint(s).

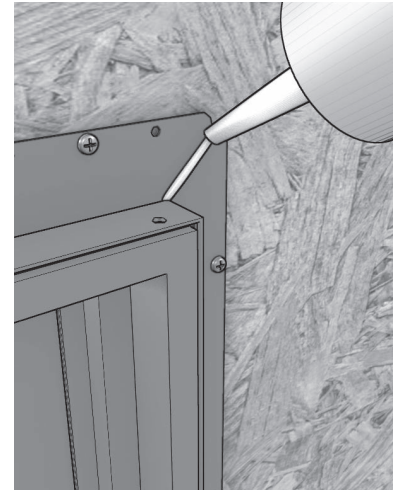


Figure 16

**1q) (Recommended)** Following the flashing manufacturers' recommendations, apply flashing to the nail fins and surrounding wall surface starting with the sides, then the top, creating a shingle effect (figure 17).

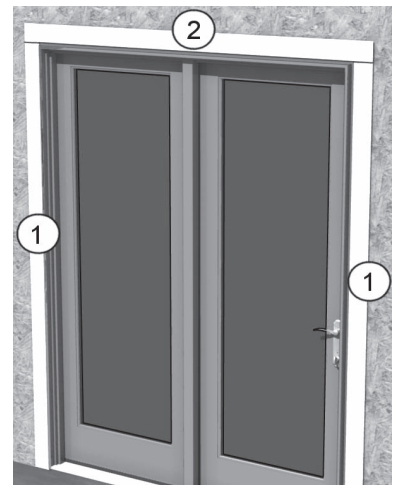


Figure 17

**1r) (Required- French Outswing Only)** Snap security flange over the bracket as shown in figure 18.

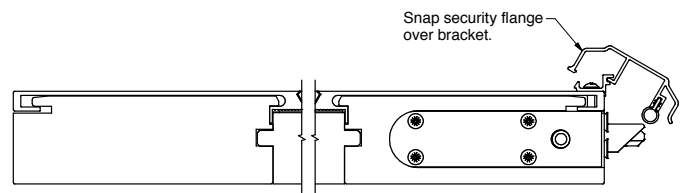


Figure 18

**Door installation is complete!**  
**Please read the Precautionary Notes on Page 4.**

## Precautionary Notes:



- **Store windows and doors oriented in upright position (not laying horizontally) in a dry, well-ventilated location not to exceed 6 deep and should be of similar size.**
- **Keep window and door units out of direct sunlight exposure during storage and remove protective films immediately after installation.**
- If exterior is brick or masonry, you must leave a  $\frac{3}{8}$ " gap between the bottom sill of the door and the masonry to avoid "brick binding".
- Follow the siding manufacturer's requirements for sealing between the siding and door frames.
- Drilling through the frame of the door in ways not specified in these instructions could cause a leakage problem which would not be covered by the warranty.
- Use of low-expansion foam insulation is allowed (see manufacturer's requirements), but any binding of door caused by the insulation will not be covered under warranty.
- Use of high-expansion foam insulation voids the warranty of the window unit.
- Altering the exterior color of these door units may void the warranty.

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