



# Installation Manual

1615 Sliding Glass Door



#### Installation Recommendations for 1615 Doors

These installation recommendations are made available by MI Windows and Doors, LLC (MI) to assist with the integration of mounting fin or finless sliding glass doors into a typical wood-framed structure three or less stories in height. Installation into other structures and frame types are not addressed here.

Please contact MI or visit www.miwindows.com for additional information.

### **Important Design Considerations**

Read this entire document before proceeding with installation of MI's products. Responsibility for product selection and installation rests with the owner, architect, and installer. Do not proceed with installation unless all factors necessary to properly integrate MI's products into a building's water management system have been addressed.

MI makes no representation or warranty that these recommendations include all information necessary to ensure proper integration into every building. State and local code requirements may impose different or additional demands which will supersede these recommendations. For additional guidance regarding installation of door products, refer to applicable industry standards (e.g., AAMA 2400, AAMA InstallationMasters™. ASTM E 2112).

Failure to follow these recommendations, local requirements, or good building practices may affect the availability of remedies under MI's warranty. Provide a copy of these recommendations and the applicable MI warranty to the owner before installing. MI does not permit adoption of its installation recommendations into the contracts of others without its prior, written consent.

### Important Pre-Installation Considerations

- Door installation may disturb finish surfaces and paint in existing structures. Specific notice and work site precautions may be required. Additional information is available at www.epa. gov/lead. Comply with all applicable federal, state, and local requirements.
- Special disposal considerations may be necessary for materials used during installation. Materials removed from an existing structure may also have their own disposal or recycling requirements. Comply with all applicable federal, state, and local requirements.
- Job site and worker protections are recommended and may be required. Follow all manufacturers' instructions for appropriate and safe use of protective equipment, tools, materials, hardware and site protections necessary for installation. To avoid injuries and damage to the product, ensure appropriate personnel are available to move and secure the product into the building.
- Product specification sheets include important information regarding your product and may include additional installation recommendations, such as fastener use with impact resistant doors, finishing instructions, and appropriate use of low expansive foam insulation.

#### Inspect and Prepare the Product for Installation

- 1. Inspect the door product thoroughly before beginning installation.
  - □ Confirm the door matches the size needed for the opening; measuring ½" smaller than the rough opening dimensions in width and height.
  - □ Confirm the door's features match the requirements of the project, order, and opening; e.g., Low-E, color, code, rating, operating direction, egress.
  - ☐ Confirm there is no damage to the product and that all necessary pieces are in place for a complete installation; e.g., locks, labels, weather stripping.

Do not proceed with installation if there are any concerns about the condition or suitability of the product for installation or compliance with project, order, code, or opening requirements.

2. Keep the jambs plumb and square with the head and sill on the door throughout installation. Keep panels closed throughout installation. Avoid "crown up" or "bow down" conditions at both sill and head. Avoid "bowed out" installations by confirming equal jamb widths throughout installation.

#### Inspect and Prepare the Rough Opening

- 3. Make sure the rough opening is in good condition and it is plumb, level, and square. Confirm the opening measurements do not exceed the 1/4" nominal square tolerances for units of more than 20 sq. ft. as specified in ASTM 2112. Framing conditions at the rough opening must be sufficient to support the door unit, framing header above, and permit appropriate integration of the door into the building's water management system. Rough openings should be 1/2" larger than door frame in width and height.
- 4. If the building already has a weather resistant barrier (WRB) installed, it is necessary to prepare an opening in the WRB to accept the door. MI recommends the installer follows the WRB manufacturer's recommendation to prepare this opening. The installer must confirm rough opening preparation will not impact the WRB manufacturer's warranty or otherwise inhibit drainage before proceeding.

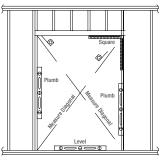
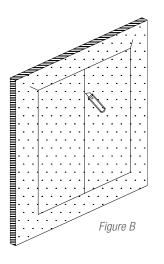
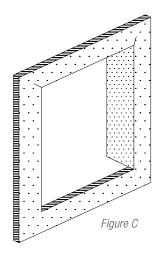


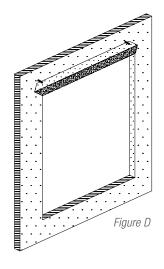
Figure A

Use a modified "I-cut" at the WBR.

- A) Begin with a horizontal cut across the entire width of the head and sill of the rough opening. See Figure B.
- B) Next, in the middle of the opening, make a vertical cut from head to the sill.
- C) Fold the WRB into the opening and secure, trimming excess as necessary. See Figure C.
- D) Finally, cut two slits in the WRB at the head corners that angle 45 degrees away from the center of the opening. Each cut should be long enough to ensure that the WRB will fold over the entirety of the laterapplied head flashing. Fold the WRB upward as shown and temporarily fasten with tape. See Figure D.







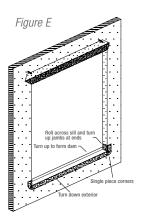
#### Inspect and Prepare the Rough Opening (Cont.)

5. MI recommends installers use sill flashing combined with a complete interior air dam around the interior of the product. See Figure E.

Many sill flashing systems are readily available. Choose one that best suits your construction application. Follow the instructions of the sill flashing supplier.

The fenestration product, WRB, flashings, anchoring, and sill flashing must be sealed to allow the system to inhibit air and water flow to the interior while allowing any incidental water to drain to the exterior of the building or to the drainage plane.

The ends of the sill flashing should be turned upward a minimum of 6" to prevent water from flowing off the flashing into the wall or other finishes. See Figure E.



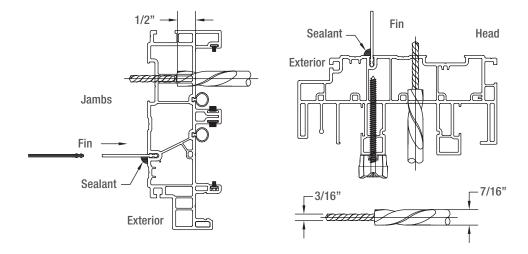
#### **Installation Hole Drilling**

#### Fasteners

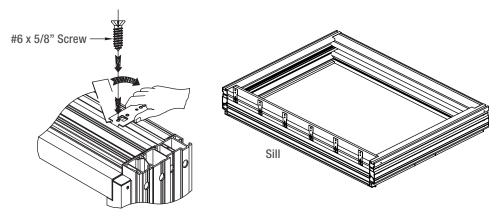
NOTE: Certain product features (e.g., impact) and installation areas (e.g., Florida and Texas), have specific requirements for the type, use, and placement of fasteners when installing this product. Following those specific fastening requirements is required. Information about these requirements is available online (floridabuilding.org or tdi.texas.gov) or by contacting MI Windows and Doors.

- 6. Mounting fin installation If applicable, install mounting fin in main frame as shown. Apply sealant between mounting fin and frame. Seal all fin joints.
- 7. Installation holes are required for fin and finless units.

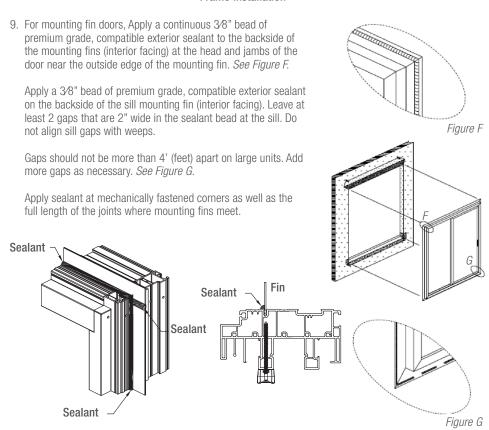
  Using a step drill bit, (not provided) drill installation holes in the head and jambs, spacing every 12" on center. Do not drill installation holes within 3" from any corner of the product. Drilling or anchoring through the sill is not recommended and can lead to water infiltration.



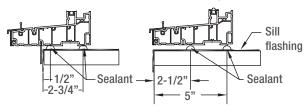
8. Metal anchors should be installed across the sill every 12" on center and secured with the supplied screws. Do not install metal anchors within 3" from any corner of the product. To prevent water infiltration, drilling and anchoring through the sill is not recommended.



#### Frame Installation



10. Apply 2 - 3/8" diameter beads of quality exterior grade sealant, as shown below, across the opening. When frame is installed, ensure the frame makes complete contact with the sealant across the entire sill. To avoid injuries and damage to the product, ensure appropriate personnel are available to move and secure the product into the building.





11. For finless frames (skip to step 12 for frames with mounting fin). Set the frame into the center of opening at sill first. Push up into place. Shim and install a fastener through the pre-drilled hole at the top of each jamb, no closer than 3" to either corner (A). Shim and install fasteners in the pre-drill holes at the bottom of each jamb (B). Measure the frame to confirm it has remained level, square, and is not bowed. Operate the panel and adjust as required to ensure smooth operation. Shim and install fasteners through the remaining pre-drilled holes in the head and both jambs. If metal anchors are installed across the sill. install #8 x 1-1/2" screws.

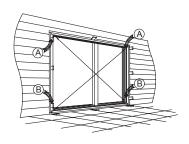


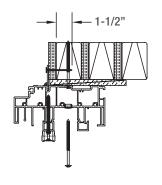
- 12. For mounting fin frames (skip this step for finless frames). Set the frame into the center of opening at sill first. Push up into place. Ensure the fin is tight against the WRB. Shim from interior and install a fastener through the pre-drilled hole at the top of each jamb, no closer than 3" to either corner (A). Shim and install fasteners in the pre-drill holes at the bottom of each jamb (B). Measure the frame to confirm it has remained level, square, and is not bowed. Operate the panel and adjust as required to ensure smooth operation. Shim and install fasteners through the remaining pre-drilled holes in the head and both jambs.
- 13. Secure the mounting fin with fasteners of a type appropriate for the frame and that penetrate the rough framing by a minimum of 1 ½" or as required by code. Take care to install fasteners straight, not angled. Do not distort the frame or mounting fin with the fasteners.

Note: Do not over-shim as it will cause the unit to bend and jeopardize performance of the door.

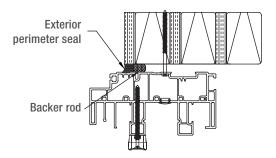
Note: Unless otherwise required by code, MI recommends its vinyl products have fasteners applied securely into every other prepunched slot on all sides of the door. Fastening in other locations may damage the unit. Do not fasten the door with staples.

Roller adjustment - if necessary adjust height and squareness of the operating panel with the adjustment screws from the wheels. (Clockwise to raise / Counter-clockwise to lower).

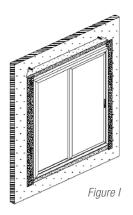


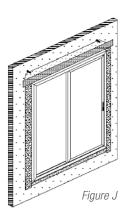


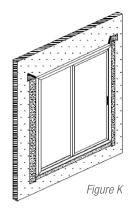
14. For finless products (skip to step 15 for frames with mounting fin), install backer rod from the exterior at the head and jambs then apply sealant. Apply sealant across the sill, leaving gaps that are 2" wide. Do not align sill gaps with weeps. Gaps should not be more than 4' (feet) apart on large units. Add more gaps as necessary. Follow sealant manufacturers instructions for bead size and backer rod rules.



- 15. For fin products (skip this step for finless frames), install flashing over the mounting fin per the manufacturers instructions.
  - A) Cut two pieces of self-adhered flashing for the jambs that extend a minimum of 1" above the head mounting fin and a minimum of 1" below the sill flashing previously installed. Apply flashing over jamb mounting fins. Use a J-roller to remove bubbles or creases. See Figure I.
  - B) Cut a piece of self-adhered flashing for application at the head of the door. Flashing must extend a minimum of 1" beyond the jamb flashing that was applied in the previous step. Apply flashing over the head mounting fin. Use a J roller to remove bubbles or creases. See Figure J.
  - C) Remove tape holding WRB flap and fold WRB downward covering the head mounting fin. Be sure the WRB does not affix to the head flashing or create a pocket at the head of the door. Seal the WRB to head flashing using WRB sealant tape to cover the entirety of the top cuts previously made. *See Figure K.*



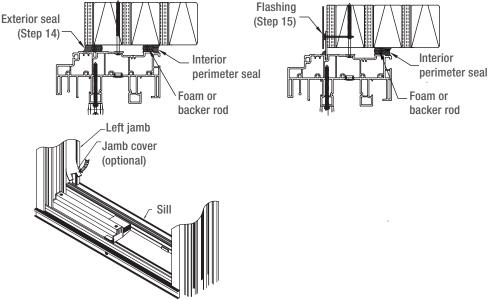




#### 16. Continuous Air Seal

Using backer rod, low pressure low expansion foam or loose batt insulation and sealant, create an air seal barrier on the interior between rough opening and door. Use caution when using foam to ensure frame is not distorted.

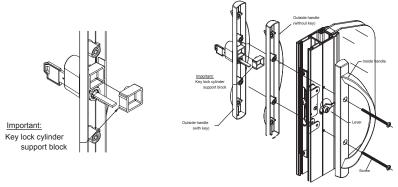
## 17. Install a jamb cover on both jambs. (Optional)



18. Handle set installation

Important: If you use a key lock handle, insert the cylinder in the outside handle and install the key lock cylinder support block.

- A) From the inside, adjust the inside handle making sure the actuator bar is well inserted into the slot of the lock.
- B) Position outside handle in place and secure from the inside with two (2) screws.
- C) Position the keeper into the jamb and fasten with No. 8 x 1-1/4" screws.



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