



Swing Door Installation Instructions for New Construction

ATTENTION! Read and understand all installation instruction steps before installing this product.

All products manufactured by Sun Windows must be properly installed following Sun's installation instructions. They must be properly flashed and integrated into a vapor/moisture barrier system. These installation instructions were developed for use in new construction applications with typical wood frame walls. The wall system must be designed to manage water. It is the responsibility of the consumer, architect or construction professional to verify the installation method for your application.

Proper management of water and moisture is an essential part of any structure. All structures must have a functional, engineered drainage system as part of their exterior finished wall system.

Most window and door products are heavy and require caution when handling. Always use safe lifting methods. If necessary, have additional help in carrying/handling the product.

Do not store products in direct sunlight. Most Sun products are shipped wrapped in a packaging designed to protect the product from dirt, dust and minor debris while being shipped, handled and stored. Because of the characteristics of this packaging, do not sit or store the product (with the protective clear wrap packing) in direct sunlight. Keep uninstalled products in a safe place, out of direct sunlight and exposure to the weather.

Do not stack or store window and door products flat on top of one-another. Products may be stacked or stored leaning against a vertical support.

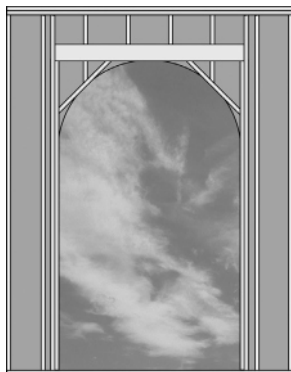
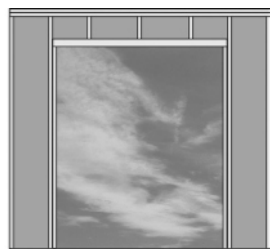
Do not stack or store directly against the glass surface or allow any glass surface to bare weight.

Remove the clear wrap packing before installing the product. Remove the protective plastic wrap and any other packaging materials from the product.

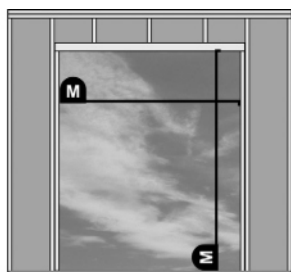
Be careful not to cut the screen cloth (if applicable) or damage the product surfaces. Leave the products in the closed and locked position until later.

1 Prepare the Rough Opening

ATTENTION! Applications that include Radius and Special Shape windows require special framing to conform to the shape of the unit. The rough opening should be prepared for the over-all width and height of the unit. Additional framing support should be added once the product has been received and precise dimensions can be determined. Add framing members that provide support to all sides of the unit as well as the exterior wall sheathing.

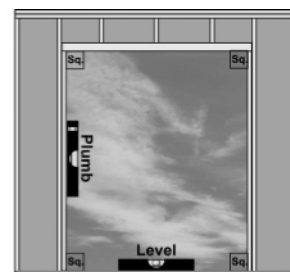


a) Verify rough opening size. The rough opening should provide approximately 1/4" clearance between the sides and top of the product and the framing.



b) Verify that rough opening sill (bottom) is level. The rough opening sill must be level and free of irregularities as the product must sit flush on this when installed.

c) Verify that sides are square and plumb. Rough opening sides that are not square and plumb can prevent the product from being install correctly.



d) Check the exterior sheathing surface. The exterior sheathing surface should be smooth and free from any uneven areas, raised nail heads, protrusions, or any obstruction that could keep the product nailing fin from seating evenly around the opening.

e) Test Fit the Unit. Test fit the unit in the opening to verify that it will fit.

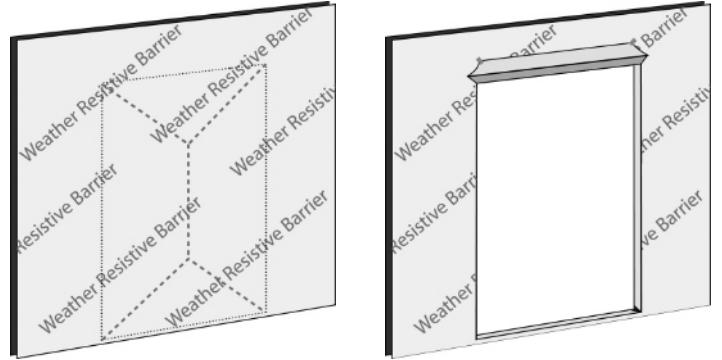
ATTENTION! Correct any problems with the rough opening before proceeding.

2

Preparing a Weather Resistive Barrier

Even if a weather resistive barrier is not used, follow all the steps that incorporate flashing tape.

- a) **Cut weather resistive barrier.** Find the edges of the door opening and mark a vertical center line at the middle of the opening. Cut a line diagonally from each corner to the vertical center line. Finally, cut the vertical center line between the top and bottom diagonal cut meeting points. (See illustration).
- b) **Fold weather resistive barrier** into the sides. Fold side flaps into the opening and staple in place.
- c) **Fold top weather resistive barrier.** Fold the top flap outward and up and temporarily tape out of the way. This will be used when finishing flashing the unit.



3

Prepare the Sill

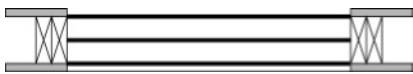
Note: Prior to completing this step, test fit the door unit in the opening to verify that it will fit.

Install Sill Pan

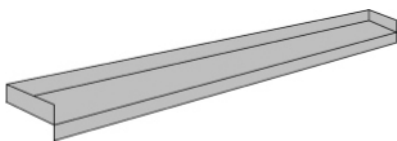
The use of a "sill pan" will help ensure that water cannot leak in underneath the door threshold. A pan can be fashioned from heavy flashing material or can be purchased from other manufacturers. Contact your building materials dealer for product availability.

Instructions:

- a) **Apply sealant to sill.** Apply three 3/8" beads of polyurethane window & door sealant along the entire length of the sill. One toward the outer edge, one toward the inner edge, and one down the middle. Also apply sealant to the sides of the framed opening where the sill pan will make contact.



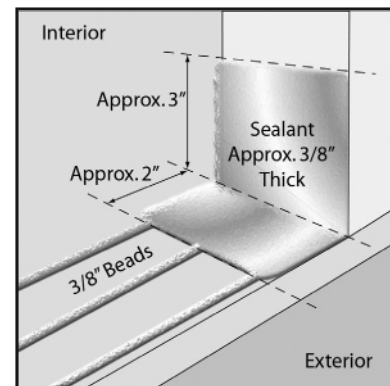
- b) Set sill pan in sealant. (For purchased sill pan, follow sill pan manufacturers instructions.)



- c) **Apply sealant to sill pan.** Apply three 3/8" beads of polyurethane window & door sealant along the entire length of the sill. One toward the outer edge, one toward the inner edge, and one down the middle.

- d) **Apply sealant to sill ends.** Apply a solid bed of polyurethane window & door sealant (2" x the width of the sill x 3/8" thick) at each end of the sill.

- e) **Apply sealant to jambs.** Apply a solid covering of polyurethane window & door sealant from the sill to about 3" up both side jambs.

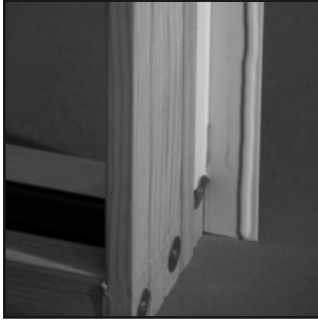


4 Setting the Door

ATTENTION! These steps may require 2 or more people. Doors and windows are heavy objects and can cause serious injury if not handled with caution. Use safety precautions and have plenty of help.

Note: Step 3 must be completed prior to performing the following.

a) Apply sealant to nail fin. Move the door unit close to its framed opening. With the unit standing in its upright position and supported so that it will not fall, apply a continuous bead of polyurethane window & door sealant to the back side of the nailing fins.

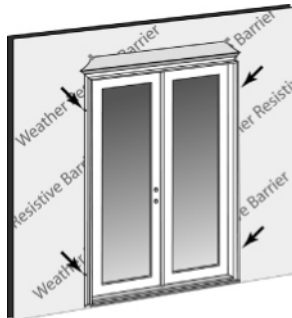


b) Place the door into opening.

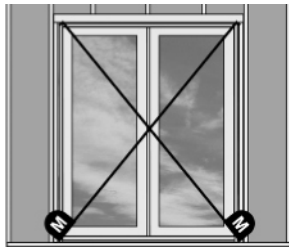
From the exterior, place the door into the opening by first setting the bottom edge into position while the top is leaning out. Carefully align the bottom to the opening before standing the unit all the way upright. This is to minimize the amount of shifting of the unit once it is upright, to prevent excessive displacement of the sill polyurethane window & door sealant (see Step 3). Once, bottom is aligned, stand the door unit upright in the opening.

Note: The door threshold (bottom) MUST sit flush on the floor in the opening. It must not be shimmed, and it must have polyurethane window & door sealant properly applied. See Step 3.

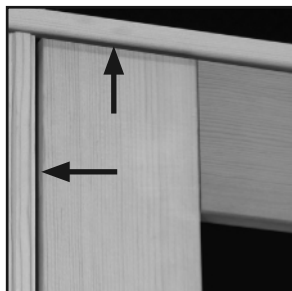
c) Temporarily fasten. To temporarily hold the door in the opening, hammer a couple of nails on each side of the unit and bend them over the nail fin. Leave them loose enough to allow the door frame to be shifted (sideways).



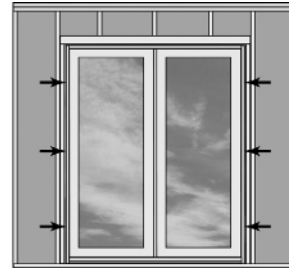
d) Square the sides. Working from the interior side of door, measure diagonally from one top corner of the door frame to the opposite bottom corner. Next, measure the other corners. These measurements should be equal. If they are not, the door frame is not square. Shift the top of the door sideways until these measurements are the same.



e) Check the reveal. From the inside, carefully examine the reveal (the gap between the door panel and the frame). The gap should be uniform across the top, the bottom and down the strike side (the side opposite the hinges). If it is not, shift the top of the unit sideways until the reveal is uniform.



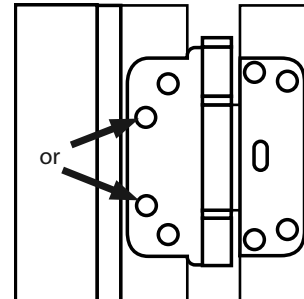
f) Shim the sides. Use a level or good straight edge to check the sides for plumb. Apply shims behind the hinges on the hinge side and near the top, the bottom and at the strike on the other side.



ATTENTION! Do not over or under shim the sides. Do not shim above the door or the beneath the threshold. Proper shimming is required for correct operation and optimum performance of the door.

g) Fasten the nail fin. Fasten through the nail fin, applying a nail at least every 12".

h) Apply Long Screws to hinges. Open the door and replace one of the screws on the top hinge with a 3" long screw (supplied). This is to anchor the hinge through the jamb into the wall stud. This should pull-tight the upper weight of the door panel to help it hang balanced.



h) Check operation. Check the operation of the door. The door panel should open and close freely. It should not rub against the jamb or the wood portion of the threshold. If it doesn't follow the hinge adjustment instructions (see Step 6) to fine-tune the door panel adjustment.

Note: the adjustable hinges are designed to make small adjustments to the operating door panel. If the door was properly set, level and plumb following the steps above, small adjustments to the hinges should be all that is necessary to fine-tune the door operation.

5

Installing the Handle Set

Follow the Handle Set Assembly Instructions that are included in the hardware kit.



6

Adjusting the Hinges

Follow the Hinge Adjustment instructions that are include in the hardware kit.

Note: Hinge adjustment requires 1/8" clearance between the barrel of the hinge and the interior door trim. Failure to provide this clearance will prevent hinge adjustment as well as cause a squeaking noise when the door is operated.



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