Series 5000 French Vinyl Hinge Door Installation Instructions

Installation Requires Knowledge of:

- AAMA Installation Instructions.
- Applicable Federal, State, Local Codes and Regulations.
- An Understanding of the Fundamentals of Residential Construction.
- A Working Knowledge of the Tools, Equipment and Methods Required for Installation.
- A Familiarity with Caulking, Sealing Procedures and Glass Handling Procedures.

Tools Required

- Hammer
- Power drill
- Carpenter's square
- Measuring tape
- Level (6' recommended)
- Caulking gun
- Flashing material and fasteners
- Standard Phillips screwdriver

Small Phillips screwdriver

- .171 Dia. drill bit for #8 screw
 Masonry drill bit and anchors
- for #8 screw
- Shim material (12-20 pieces)
 Caulking (One that's appropriate
- Caulking (One that's appropriate for your job)



Inspect the new door and frame. Any damage to the welded corners of the door frame joint seals must be repaired. The threshold must be able to hold water for 15 minutes without leaking to the interior. Perimeter flashing and/or an appropriate method of sealing shall be designed as a part of an overall weather resistive barrier system. It is not the responsibility of the door manufacturer to design or recommend a flashing system appropriate to each job condition. Responsibility for protecting any flashing material from damage caused by weather, other trades or vandalism and properly integrating the flashing system into the weather resistive barrier for the entire building will be the responsibility of the general contractor or his designated agent.

1. Measuring Door Openings

Check the floor of your rough opening for flatness and squareness, see *Fig. 1*. Correct any problems with the rough opening floor before proceeding.

Measure the rough opening for height and width near the corners and center of the opening, see *Fig. 2*. Opening should read 5/8" larger than the actual door frame height and width. Sill, jambs and head MUST BE level, square and plumb. It is very important, for a proper installation, that the opening have these qualities. Correct any problems prior to setting the door frame in the opening. With new construction, trimmer studs on each side of the opening should remain loose until the door frame is installed. Note that the door has been packed with spacers around the sash panels for shipping purposes. Do not remove them until frame is set in rough opening.



International Window



2. Preparing the Sill

A sill pan is recommended for door installations. Sill pan flashing is used to ensure that incidental water that penetrates the building envelope will be collected and allowed to drain to the exterior of the opening.

A sill pan is a rigid piece of flashing with an interior wall and side end dams. The sill pan prevents water from flowing into the wall or interior finishes. The sill pan flashing and fasteners are provided by others. The sill pan must be formed to fit around the door frame at the sill, see *Fig. 3*. The flashing should also fit the sill condition, sloping if needed to the exterior, see *Fig. 4*.

3. Installing the Sill Pan

After fabricating the sill pan, dry fit the pan in the sill opening to check for size and fit. The sill condition must be level. If not level, use shims under the sill pan to correct this. Determine the number and location of fasteners to be used on the sill pan. The sill pan needs a minimum of 3 fasteners, based on a maximum of 16" apart, on center. Special attention should be taken as to the placement of the fastener on the sill pan. To keep the frame from rocking on the fastener heads once the frame is installed, it would be recommended that the screws be installed in line with the larger channel on the underside surface of the door frame. Approximately 1" set back from the integral fin, see **Fig. 5**. Predrill the installation holes in the sill pan big enough for a #8 screw, use a .171 diameter drill bit. If the door is being installed on a concrete floor, drill and install masonry anchors at this point. Do not install fasteners at this time.

Determine the proper sealant to use for the materials and building condition you are working with. Remove the sill pan and caulk the rough opening sill at the wood frame corner joints. Cover both corner with sealant and continue up the jambs about 3 inches, see *Fig. 6*. Run a generous bead of sealant between the two jambs, along the interior edge of the sill where the sill pan will set. Apply a 3/8" diameter bead of sealant to the exterior edge of the sill. Leave two 1" gaps approximately 6" from each jamb. This will allow any water entering underneath the sill pan to drain to the exterior. Replace sill pan in the opening, on top of sealant and shims (if needed). Line up installation holes and check for straight and level. Apply sealant to each hole and secure sill pan to sill condition with fasteners. Seal over the fastener heads. All joints must be sealed between the sill pan and the wall condition, see *Fig. 7*.

4. Installing the Door Frame

When installing the door frame, especially on wider frames or multi panel doors like IAS2A configurations, it's important to keep the frame straight and square. Avoid any bowing, sagging or racking of the frame. Any distortion in the frame will interfere with the sash panel's ability to seal and operate properly. The exterior wall at the rough opening MUST be plumb, flat and free of any irregular surface. Installing the new frame to a "bad" surface will only cause problems later in the installation.

With the sill pan secured and leveled, apply a generous, full length, continuous bead of sealant to the rear, upright wall of the sill pan. This bead will make contact with the frame to create an air seal along the back side of the frame and sill condition. Apply sealant to the bed of the sill pan following the configuration prescribed in *Fig. 8*. A generous 1 1/2" wide application of sealant along the rear is recommended. Prior to being set in the rough opening, the door frame will need sealant applied to the underside of the integral flange, where it make contact with the wall condition, see *Fig. 9*.

With sealant on the underside of the integral flange, set the door frame into the rough opening, on the sill pan and center it. DO NOT slide the bottom of the door frame into the opening and disturb the sealant bed. Place one edge of the frame at the bottom of the opening and tilt the top into position, see *Fig. 10*. Check frame for level, square and plumb. Use shims where needed. The frame must

be plumb so when the door panel(s) is in the open position, it will remain motionless through entire swing range. Position shims between door frame and framing studs, close to installation screw holes in jambs, hinges and lock strike (for single panel door only). On center latching (double) doors, place shims at the top of the frame near the center strike plate.

With the door frame centered, leveled, square, plumb and shimmed, begin to secure the frame by driving a few nails 1/2" above the head flange and bending them over the flange. This small amount of play will allow for any head expansion. Do Not drive nails through the head flange. Make certain the door frame is square by taking diagonal measurements. If these measurements are not equal, adjust door frame accordingly. Continue securing the frame by attaching fasteners through the integral flange at the jambs only. Start at one of the upper jamb corners. Check frame again for square and plumb. If all is fine, secure the remaining integral flange at the jambs only.

Now, with the door frame partially secured, remove the shipping spacer from around the door panels. Upon opening the door panels, support the panels and frame so that the weight of the panels do not pull the frame out of the opening or twists the frame. Check for even contact between the door panel and the weatherstrip at the head and jambs. If the door panel does not meet the weatherstrip uniformly, the frame may be bowed or twisted as a result of an uneven or out of plumb wall condition. Correct any problems before proceeding any further.

Installation screws will be installed through the frame's weatherstrip channel in the jambs and head. Removal of the weatherstrip from the head and jambs is recommended to avoid damaging it during installation. Pull the weatherstrip out by beginning at the corners. For reinstallation purpose, note which direction the weatherstrip is facing. With the weatherstrip out of the way, secure the frame with #8 X 3" Phillips Pan head screws, see *Fig. 11*. When installing the fasteners to the head portion of the frame, caution should be taken not to over tighten and distort the frame. Leave about a 1/2" space between frame and rough opening for deflection. Once frame is secured, reinstall the weatherstrip.

5. Installing Doors with Sidelights

The procedure for installing doors with sidelights is the same as above, installation screws will go through the sidelight jambs and head. Crank the sidelight open and remove the weatherstrip from the jamb and head. The sidelight will need to be open fully in order to install fasteners. Disconnect the operator arm from the sash by moving the arm to the center position on the sash. Line up arm with arrow on the sash operator track and depress arm to remove, see **Fig. 12**.

6. Door Operation and Hinge Adjustment

From the exterior, open and close the door(s) to check for proper operation. Door panel should remain motionless through entire swing range. Try the lock to see if it latches correctly. Close the door(s) and check if the reveal around the door(s) is equal. On double doors, make sure that the active panel meets the inactive panel squarely and evenly. Panels should be even across the bottom and have approximately an 1/8" clearance between panels. The hinges have adjustment screws for making slight alterations, you will need a 5/32" and a 1/4" Hex Allen wrench, see *Fig. 13*. The screw through the slotted hole in the hinge will adjust the panel(s) horizontally. The screw in the hinge pin will adjust the panel vertically. Relieve pressure on the hinge by lifting up the panel while turning the adjustment screw.





PARTS OF THE 5000 SWING OUT DOOR



• Wood trim, plant-ons, and pot shelves all require special precautions. When necessary under these conditions use metal flashing. Use metal flashing on any surfaces where water may not drain promptly.

• Seal all holes in the building paper including those caused by staples or nails.

• Interfaces between our products, flashing and the building's weather resistive barrier must be sealed with a sealant recommended for this application. We cannot recommend a particular type or manufacturer of sealant.

Mulled windows require special treatment. Please consult instructions for your mulled conditions.

• Holes drilled for alarms may not be placed on sills or heads and must be sealed.

• Extreme weather conditions may cause water intrusion into your home and subsequent water damage. Consult a licensed engineer for an appropriate rating for expected local weather conditions.

 \bullet Do not apply film or tints to the surface of the glass. These products can cause insulated unit failure.

• To avoid the effects of electrolysis and chemical reaction to an aluminum sill, apply bituminous paint to raw masonry or concrete. You may also use a PVC liner to separate the metal frame from the substrate.

SEMI-ANNUAL MAINTENANCE

• Improperly maintained products will reduced the performance of any window or door. The sills and weeps must be cleaned regularly to allow for drainage. Water in the sill during a rainstorm is normal.

• Weather-strip should be cleaned and fluffed on a regular basis. Wearing of the wool pile is normal. Wool pile should be replaced if gaps between the weather-strip and frame appear.

• Harsh abrasive cleaners should never be used on frames or glass surface.

• If products are within 10 miles of the coast, metal surfaces should be cleaned with

a fresh water rinse every one to three months. Car wax on the surface will provide some protection. Anodized or painted surfaces will help prolong the life and enhance appearance. Clean and lubricate hardware components with corrosion resistant spray or lubricant monthly to ensure proper performance. Silicone lubricant spray can be used on all operable components.

REMOVAL OF OLD WINDOWS OR DOORS Some things to keep in mind when removing old products.

• Follow the EPA's Lead Renovation, Repair and Painting Rule (RRP Rule) which requires that firms performing renovation, repair, and painting projects that disturb lead-based paint in homes, child care facilities and pre-schools built before 1978 have their firm certified by EPA (or an EPA authorized state), use certified renovators who are trained by EPA-approved train providers and follow lead-safe work practices. For more information visit www.epa.gov/lead.

• When removing products from a building IWC recommends that you follow local rules and regulations for disposal. Whenever possible, take window and door products or components to reuse or recycling centers and avoid disposing them in the landfill. Consult with your local recycling center for more information on programs in your area.

Installation Instructions: IWC provides installation instructions for common new construction and replacement applications found at www.intlwindow.com. Some IWC products have specific installation instructions which are also available on the website. For variations of these installation instructions or questions regarding alternative installation practices, call 1.800.477.4032 for more information.

Disclaimer: EPA makes no warranties, expressed or implied, nor assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of the contents of installation instructions, or any portion thereof. Further, EPA cannot be held liable for defects or deficiencies resulting from the proper or improper application of installation instructions.

PLEASE KEEP THESE INSTRUCTIONS IN YOUR HOME OWNER'S PACKET.

I have read the above instructions and understand the manufacturer's recommendations.

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Southern California 1.800.477.4032

Visit our website at www.intlwindow.com