# **Series 5600 Vinyl Sliding Patio 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.

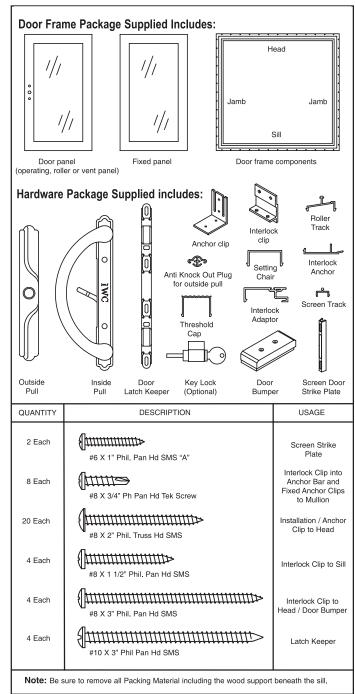


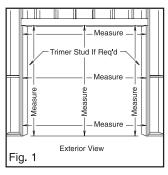
# **Tools Required**

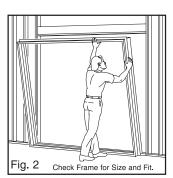
- Hammer
- Carpenter's square
- Power drill
- · Phillips head screwdriver
- .171 Dia. drill bit
- Level (6' recommended)
- Utility knife
- Shim material
- Putty knife
- Jillili illateria
- Carillian anna
- Caulking (One that's appropriate for your job)
- Caulking gun
- #8 Masonry Anchors (2)
- Measuring tapeFlashing Material

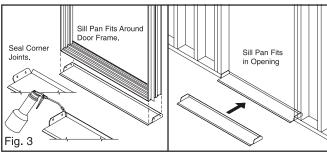
#### Before you start:

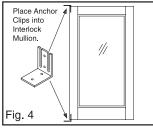
- Read instructions thoroughly and double check the parts lists to make sure all necessary parts are present.
- Door panels can be heavy. Two men are required to lift the panels.
- Responsibility for protecting any flashing material from damage caused by weather, other trades or vandalism and properly 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.
- 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.
- Caution shall be used to avoid damage to doors before, during and after installation. Doors should be stored in a near vertical position in a clean area protected from exposure to weather elements.
- Any damage to the door frame joint seals or mounting flange must be repaired by the installer. Before installation, the sill track must be able to hold water for 15 minutes without leaking to the interior.
- Use sealant that conforms to AAMA 800-92 or sealant ap-proved by the sealant manufacturer for the appropriate application.
- Field applied protective coatings can damage insulated glass, sealants, vinyl and gaskets. These are not recommended and will void the warranty. Stucco or concrete left on frames and glass will damage these surfaces. Remove all material from surfaces before any curing action takes place.
- Flashing material shall be barrier coated reinforced and shall provide twenty-four (24) hour minimum protection from water penetration when tested in accordance with ASTM D-779. Flashing material shall carry continuous identification.

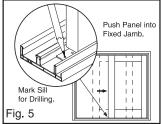


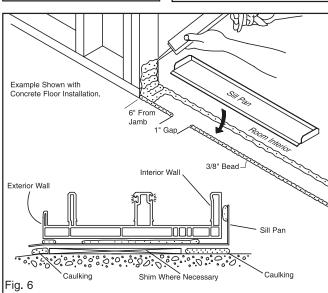


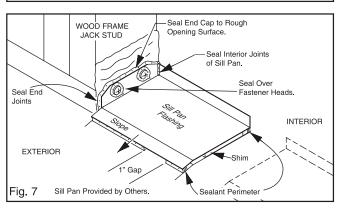












- Steps should be taken to protect the aluminum frame from the decomposing effect of electrolysis. Aluminum products must be isolated from dissimilar or corrosive materials with a nonconductive coating or sealant material.
- Sealing/caulking required between the door and the flashing can be approved by the sealant/flashing manufacturer. Following their printed application procedures.

# 1. Measuring Door Openings

Check your opening for plumb and squareness. Check floor for level of flatness, this is important for proper water drainage. Correct any problems with the rough opening or floor flatness before proceeding with the installation.

Measure the rough opening at the corners and center points, see *Fig. 1*. Opening should read 1/2" larger than the actual door height and width. You need this extra space between the frame and rough opening to level, square and plumb the frame. With new construction, trimmer studs on each side of the opening should remain loose until the door frame is installed.

# 2. Preparing the Opening

Dry fit the door frame to make sure the frame will fit into the rough opening, see *Fig. 2.* 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.

A sill pan is a rigid piece of flashing with an interior wall and side end dams. A sill pan prevents water from flowing into the wall or interior finishes. The sill pan flashing and fasteners are provided by others. Sill pan must be formed to fit snugly into the rough opening, allowing plenty of room for the new door frame to be installed without damaging the flashing, see *Fig. 3*. After fabricating the sill pan, dry fit the pan in the sill opening to check for size and fit. Dry fit the door frame on the sill pan also for size. Remove frame from opening and make any adjustments. Seal corner joints of sill pan with sealant.

#### 3. For Concrete Floor Installation Only

If your rough opening should have a concrete or masonry floor, it would be necessary to dry fit the entire door including the door panels. This is done to accurately align the anchor clips used on the fixed panel with the masonry screw anchors that will be installed in the floor. The anchor clips secure the fixed panel to the frame at the head and sill. Install both door panels to ensure proper engagement of the interlock and proper penetration of the vent panel into the vent jamb, see exploded view of door for parts identification. Follow the installation steps as if you were permanently installing the door, but do not use sealant or fasteners. Use shims at the sill, jamb and head to get a true measurement and accurate placement of the anchor clips. Fixed panel anchor clips should be inserted into the fixed panel mullion prior to it's installation, see Fig. 4. Clips can be held in place temporarily with masking tape. Refer to the section on installing the panels. Once the panels have been installed and properly spaced in the frame, MARK the hole locations on the sill through the anchor clip, see Fig. 5. With the shims still in position around the frame, remove the panels and drill pilot holes for the anchor clip in the frame sill and sill pan. Mark hole locations on the concrete floor and remove the frame and sill pan from the opening. Install two masonry screws anchors for a #8 X 2" screw.

# 4. Installing the Sill Pan

The sill condition must be level. If not level, use shims under the sill pan to correct this. Determine the proper sealant to use for the materials and building condition you are working with. Remove the sill pan but leave any shims used in position. Lay a sealant bed at both ends of the sill opening where floor and frame studs meet, see *Fig. 6*. Run sealant up both studs

about 6 inches. Run a generous bead of sealant between the two jambs, along the Interior edge of the sill where the sill pan will sit. 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. Line up anchor clip installation holes (if drilled) and apply even pressure to sill pan and sealant to make full contact. Check pan for straight and level. Secure sill pan to frame studs with small screws, supplied by others. Seal over the fastener heads. All joints must be sealed between the sill pan and the wall condition, see *Fig. 7*.

#### 5. Installing the Door Frame

With sill pan secured, dry fit the door frame in the center of the opening and check for level, square and plumb. If sill is not level, insert shims between sill pan and frame. Once leveled, remove frame from opening, but leave shims in position. Lay a bed of sealant down the center of the sill pan and over any shims. Then apply a generous, continuous bead of sealant to the rear, upright wall of the sill pan. This bead will make contact with the door frame to create an air seal along the back side of the frame and sill condition. Apply a 3/8" diameter bead of sealant to the top of the sill pan where the exterior edge of the door frame will come in contact. Leave two 1" gaps, approximately 6" from each jamb for drainage, see **Fig. 8.** 

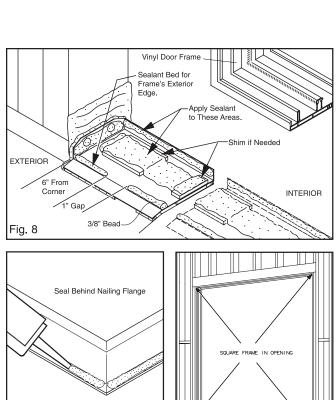
Depending on your order, the door frame may or may not have a nailing flange. The nailing flange gives the installer the option of temporarily securing the frame during installation. If your frame should have a nailing flange, prior to installing, apply a generous bead of sealant to the back side of the flange, see **Fig. 9.** Set the door frame into the rough opening and align anchor clip installation holes in the sill (if predrilled for concrete). Check frame for level, square and plumb and shim where needed. Square the frame by measuring diagonally across the corners and adjusting the frame until the measurements are equal, see Fig.10. Secure one of the upper jamb corners first with a #8 X 2" Phil. Truss head screw. Check for level and plumb again. Secure the frame with the remaining installation screws. Install fasteners through both channels in the head and jambs of the frame. Insert shims around installation screw locations. When installing fasteners to the head section of the frame, caution should be taken not to over tighten and distort the frame. Leave about a 1/2" gap between frame head and rough opening for deflection. Special attention should be given to wider door frames or multi panel doors like OXXO configurations. It's important to keep the head and sill level with each other. Any bowing or sagging of the frame will interfere with the vent panel operation.

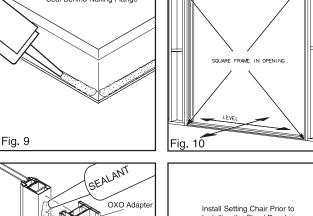
#### 6. Installing the Fixed Panel

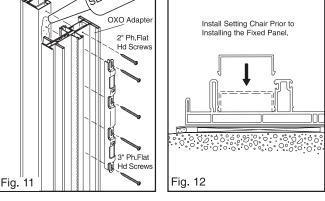
For Optional OXO Configuration only - Before installing the strike fixed panel, remove the OXO Adapter from the panel. Once the panel is installed and adjusted for propare spacing in the frame and there is NO reason to remove it from the frame, reinstall the adapter with sealant and screws, see *Fig.* 11.

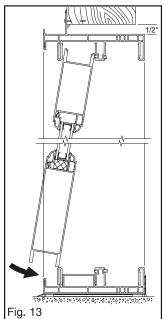
As per your door order, determine which side of the frame will house the vent panel and which side the fixed, the stationary panel. Check the exploded view of the door for parts orientation. A metal setting chair (supplied) will have to be installed prior to installing the fixed panel, see *Fig. 12*. The fixed panel will rest on the setting chair that run the full length of the panel. In the center channel of the sill, install the setting chair bar so that one end touches the fixed jamb. When the panel is installed on top of it, the setting chair must not interfere with the fixed panel clip taped to the bottom of the interlock mullion. The setting chair has a snap fit, so you may need a hammer and a block of wood to set it.

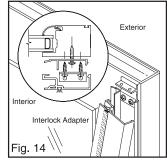
With the setting chair in place, install the fixed panel from the exterior, see

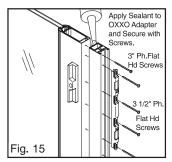


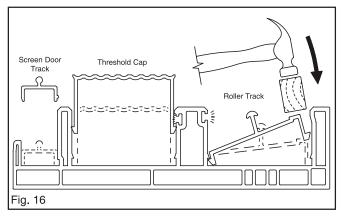


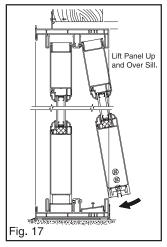


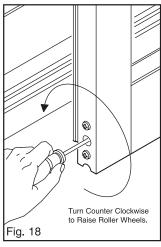


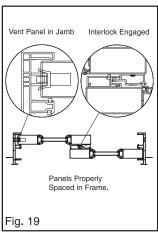


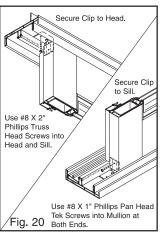


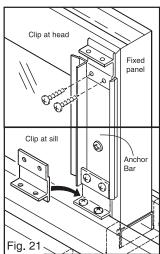


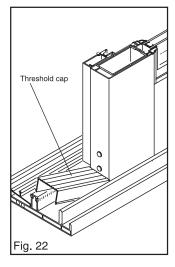












**Fig. 13.** Hold the panel so that the Interlock side of the panel is in the center of the door opening and facing into the room. Lift the panel up into the center channel in the head of the frame, swing the bottom over the sill and lower it onto the setting chair. Push the panel into the fixed jamb as far as it will go. Snap on the interlock adaptor over the interlock anchor on the fixed panel, see **Fig. 14.** The fixed panel will be secured later.

#### 7. Installation of Vent Panel

For Optional OXXO Configuration only - Before installing the strike vent panel into the frame, remove the adaptor from the panel. Once the panel is installed and adjusted for propare spacing in the frame and there is NO reason to remove it from the frame, reinstall the adapter with sealant and screws, see *Fig.* 15.

Prior to installing the vent panel, the roller track bar will have to be installed, see Fig. 17. The roller track has a snap fit, so you may need a hammer and a block of wood to set it. Install the vent panel from the interior. The vent panel will have holes in the lead stile for the handles and rollers at the bottom. Roller wheels should be fully retracted and out of the way. Stand at the mid point of the door opening. Hold the vent panel with the lead stile facing the vent jamb. Lift the panel up into the channel in the head closest to the interior of the room. Swing the bottom of the panel over the sill and lower it into the channel, see *Fig. 17.* If panel does not clear sill, the rollers may be dangling below the bottom edge of the panel. Roller wheels must be tucked into the bottom rail of the panel to clear the sill. With a Phillips head screwdriver, turn the adjustment screws through the holes at the bottom of the panel counter clockwise to retract the wheels, see *Fig. 18.* When panel is installed, make sure roller wheels are resting on the roller track.

Close the vent panel and check both panels for spacing and alignment, make sure the interlock fully engages. The lead stile on the vent panel should penetrate the vent jamb 5/8" for proper engagement of the locking system, see *Fig. 19.* Move panels if any adjustments are necessary. With both panels now properly spaced in the frame, mark the hole locations of the two Anchor clips at the sill and head. Remove the vent panel from the frame. Try not to disturb the fixed panel. Secure the fixed panel with the Anchor clips taped to the interlock mullion. If the fixed panel has not moved from its mark on the sill, fasten the clip to the sill first with two #8 X 2" Phillips Truss head screws, see *Fig. 20.* Then secure the clip to the mullion with two #8 X 1" Phillips pan head Tek screws. Repeat the procedure at the head section.

Next, install an interlock clip at both ends of the fixed panel's interlock anchor. With a putty knife or a flat screw driver, carefully remove the interlock adaptor from the interlock anchor. With the anchor now exposed, position the clips over the anchor bar at the head and sill, see *Fig. 21*. Note that different size screws are used to fasten these clips. At the sill, fasten the clip to the frame with two #8 X 1 1/2" Phillips pan head screws. Use two #8 X 3/4" Phillips pan head Tek screws to secure clip to anchor bar. Fasten the other clip to the head of the frame with two #8 X 3" Phillips pan head screws and two #8 X 3/4" Phillips pan head Tek screws to the anchor bar. Seal over screw heads at the sill with a sealant. Reinstall the interlock adapter over the interlock anchor. A threshold cap fills the remaining gap in the sill beside the fixed panel. Check the length of the threshold cap for size and trim if needed. Install the cap by starting at the interlock and work down towards the vent jamb, see *Fig. 22*. A hammer and a block of wood may be needed to set the cap.

With an appropriate sealant, seal the fixed panel to the door frame by following the interior perimeter joint, along the head, jamb and sill, see *Fig.* **23.** Reinstall the vent panel and adjust the rollers. With a screwdriver, turn the adjustment screw clockwise a couple of turns until door moves freely, see *Fig.* **24.** Relieve pressure on roller cam by lifting the panel while turning

the adjustment screw. Close the door and check the vertical alignment of the panel with the frame jamb. Both should meet evenly, if not, adjust rollers up or down to align panel.

# 8. Installing Hardware

The lead stile of the door will have holes for hardware installation and a mortise lock installed. Two handles are provided for the vent panel. The large "C" shape handle is for the interior and the lower profile one for the exterior. Start from the interior by guiding the flat thumb turn tab into the hub slot of the mortise lock. Insert the anti knock out plug into the outside handle. This is used if a lock cylinder is not installed. Attach both handles to the lead stile with two gaskets and two #8-32 X 2 1/4" Ph.Oval Hd. screws, see *Fig. 25*.

The optional keylock is installed in the exterior handle. Knock out or drill out the center hole impression on the outside handle. Secure lock cylinder in handle with the metal collar and two #6 X 1/2" screws provided, see *Fig.* 26. Notice that both flat metal tabs from the thumb turn and cylinder lock will be inserted into the hub slot of the mortise lock. Trim the tabs, if needed, so that both will fit mid way into the lock when assembled. Align the two handles with the assembly screws and secure them to the lead stile.

#### 9. Latch Keeper Installation

Install the latch keeper to the Vent jamb with four #8 X 3" Phillips Pan Head screws, see *Fig. 27*. Use shims between frame and rough opening at latch keeper location. The elongated holes on the keeper allows for strike adjustment. Do not tighten screws completely. Close the door and turn the lock lever to extend the strike hooks. Adjust the latch keeper up or down to the proper height for full hook engagement. Tighten screws on keeper to maintain correct height.

#### 10. Screen Door Installation

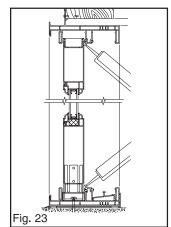
Install the screen track bar into the sill as shown in *Fig. 28*. Hold the screen door with the screen spline to the outside. Lift the panel into the screen channel in the head of the door frame. Swing bottom of panel in to rest on sill. Wheels must rest on screen track in order for screen door to operate properly. Push bottom rollers up over the frame and guide them onto the sill's screen track. This can be done with a flat screw driver or putty knife. Adjust bottom rollers so panel is vertically parallel with door jamb. Adjust the top rollers of the panel to create enough tension to keep the panel from jumping the track. Turning the adjustment screw clockwise will extend the rollers, see *Fig. 29*. Don't over tighten, screen door must operate smoothly.

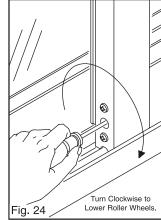
#### 11. Screen Door Strike

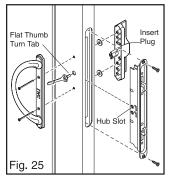
Install the screen door strike onto the vent jamb with two #6 X 1" Phillips pan head screws, see *Fig. 30*. Do not tighten screws yet. Adjust the strike by moving it up or down until it engages the screen door latch hook properly. The reach on the screen door latch hook can also be adjusted slightly with a turn of a screw driver. When both the latch hook and strike engage and operate smoothly, tighten both strike screws.

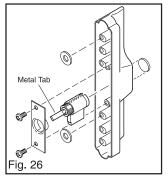
#### 12. Door Bumper

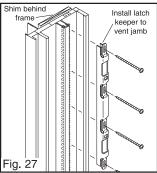
The door bumper block is installed in the upper corner, where the frame head and the Fixed jamb meet. Use two #8 X 3" Ph Pan Hd screws to secure the bumper to the head, see *Fig. 31*.

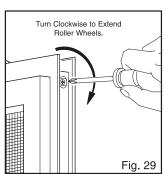


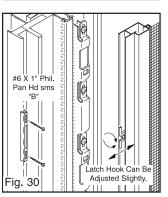


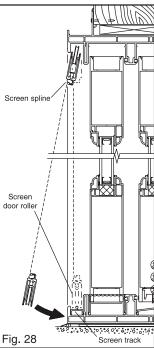


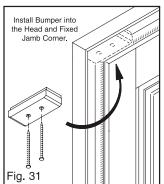




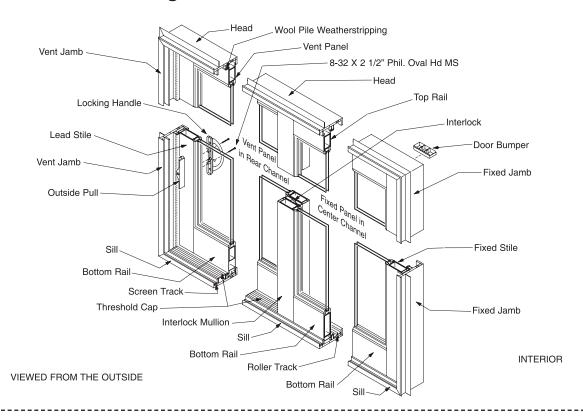








# Parts of the 5600 Sliding Door



- 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.



Southern California 1.800.477.4032

Visit our website at www.intlwindow.com

(Installer's signature)

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