Series 5900 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
- Power drill
- .171 Dia. drill bit
- Utility knife
- Putty knife
- Caulking gun
- Measuring tape
- Locking pliers

- Carpenter's square
- Phillips head screwdriver
- Level (6' recommended)
- Shim material
- Blocks of wood
- Caulking (One that's appropriate for your job)

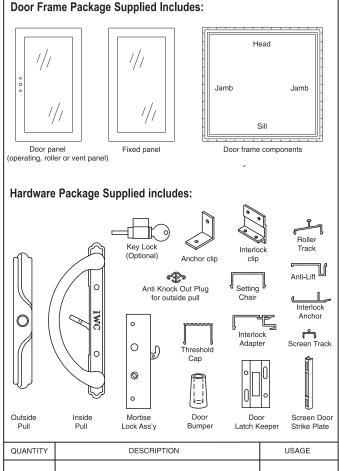
Before you start: Read instructions thoroughly and double check the parts lists to make sure all necessary parts are present. Our Series 5900 Door is available with a welded corner frame or in a KD version, depending on your needs.

Inspect the new door. With a welded corner frame, any damage to the door frame joint seals must be repaired. The sill track must be able to hold water for 15 minutes without leaking to the interior. 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

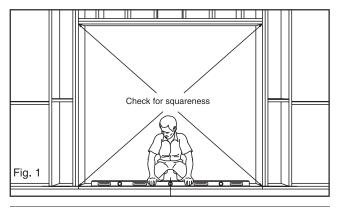
Check your opening size: 5'-0",6'-0" or 8'-0" wide by 6'-8" or 8'-0" high, check for squareness, see *Fig. 1.* Check floor for flatness. Correct any problems with the rough opening or floor flatness before proceeding.

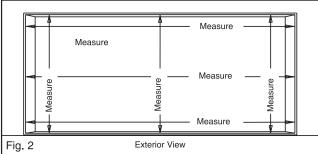
Measure the rough opening at both ends and center, see **Fig. 2.** Opening should read 1/2" larger than the actual door height and width. With new construction, trimmer studs on each side of the opening should remain loose until the door frame is installed.

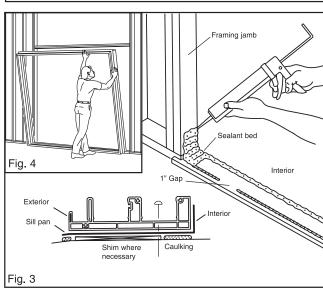


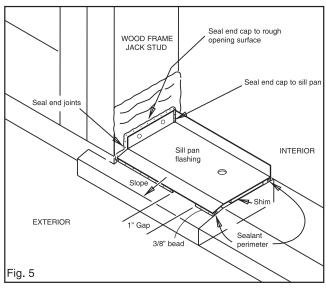
QUANTITY	DESCRIPTION	USAGE
2 Each	{ 	Screen Strike Plate
6 Each	#8 X 3/4" Ph Pan Hd Tek screw	Interlock Clips to Interlock Anchor, Anchor Clips to Interlock
22 Each	#8 X 2" Phil. Truss Hd SMS	Installation Screws, Anchor Clip to Head
3 Each	#8 X 1 1/2" Phil.Pan Hd SMS	Interlock Clip to Sill, Anchor Clip to Sill
2 Each	{ 111111111111111111111111111111111111	Interlock Clip to Head
4 Each	#10 X 3" Phil. Pan Hd SMS	Latch Keeper
Note: Be sure to remove all Decking Metarial including the wood support beneath the sill		

Note: Be sure to remove all Packing Material including the wood support beneath the sill.









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.

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. Sill pan must be formed to fit around the door frame at sill. The flashing should also fit the sill condition, sloping if needed to the exterior, see *Fig. 3*.

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. Dry fit the door frame on the sill pan also for size and fit, see *Fig. 4*. Center frame in rough opening. If frame sill is not level, shim between frame and sill pan. Also check the rest of the frame for square and plumb. Installation screws will be installed through the frame's interior channel. Remove the roller track from the sill if it is already installed. The track has a snap fit, to remove it, pry the track back away from the rear sill wall with a flat screwdriver. Determine the number and location of fasteners to be used on the sill. The sill needs a minimum of 3 fasteners, based on a maximum of 16" apart, on center. Predrill the installation holes in the sill big enough for a #8 screw, use a .171 diameter drill bit. Do not install fasteners at this time. Note the location of the installation holes on the sill pan below. Remove door frame from opening to expose the sill pan.

Predrill installation holes for the sill pan. If installing the door frame to a concrete floor, mark the hole locations on the concrete and install masonry anchors at this point.

Determine the proper sealant to use for the materials and building condition you are working with. Remove the sill pan and lay a sealant bed at both corners of the sill opening where the floor and framing meet. Apply sealant up both frame jambs about 6 inches, see *Fig. 3*. Run a generous bead of sealant between the two frame 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. Line up installation holes and check for straight and level. Apply even pressure to the pan to make good contact with the sealant. All joints must be sealed between the sill pan and the wall condition, see *Fig. 5*.

Note: If sill pan moves easily while positioning door frame, secure pan with small screws through the end cap walls.

4. Installing the Door Frame

When installing the door frame into the opening, especially on wider frames or multi panel doors like OXXO configurations, it's important to keep the head and sill level with each other. Avoid any bowing or sagging of the frame that will interfere with the vent panel operation.

With the sill pan secured, lay a bed of sealant down the center of the sill pan. Next, 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 a 3/8" diameter bead of sealant along the exterior edge of the sill pan. Leave two 1" gaps, approximately 6" from each jamb, see *Fig. 6*.

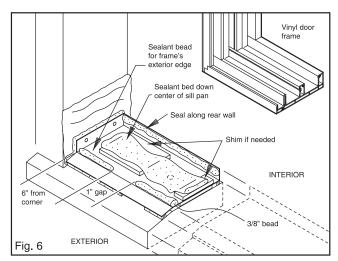
Depending on your order, the door frame may or may not have a nailing flange. The nailing flange gives the installer the option of securing the frame to the structure by going through the flange or through the jambs. Prior to being set in the rough opening, frames with a nailing flange will need an appropriate sealant applied to the under side of the flange, where it make contact with the wall condition, see Fig. 7. Set the door frame into the rough opening and align installation holes in the sill. Check frame for level, square and plumb and shim where needed. Apply sealant to installation holes and secure sill with #8 X 2" Phillips Truss head screws. With the remaining installation screws, determine the location of the other fasteners in the head and jambs of the frame, but save one screw for the anchor clip. Fasteners should be no closer than 3" from the corners and no farther apart than 18". The Vent Panel Bumper will be installed on the fixed jamb with one of the #8 X 2" Phillips Truss head installation screws, see **Fig. 9.** Secure the frame by starting with one of the upper jamb corners. Check for level and plumb again. Position shims as close to installation screws as possible and secure the remainder of the frame. Be sure to shim behind frame at door latch keeper location. This is for strength and security, see Fig. 23. 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. Frames with a nailing flange should not have fasteners installed through the flange at head section. Instead, drive nails 1/2" above the head flange and bend them over the flange. This allows for head expansion. After installing sill fasteners, apply sealant over screw heads. Install the roller track into the sill channel. You may need a hammer and a block of wood to firmly seat the roller track into position, see Fig. 8.

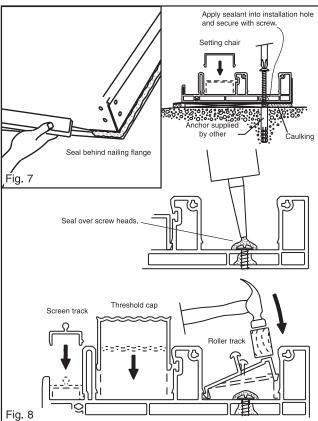
5. Installing the Fixed Panel

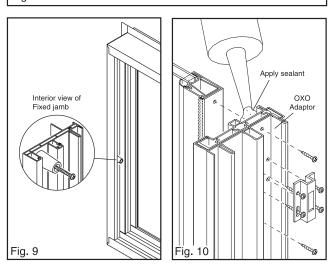
For Optional OXO Configuration ONLY - Before installing the strike fixed panel, remove the OXO Adapter from the panel. Once the panel is installed, reinstall the adapter, see **Fig. 10.**

The fixed panel will rest on a metal setting chair that run the full length of the panel for support. Insert the setting chair bar into the center channel of the sill where the fixed panel will be installed, see *Fig. 8.* The setting chair has a snap fit, you may need a hammer and wood block to set it.

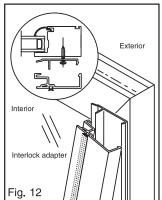
With the setting chair in place, install the fixed panel from the exterior, see *Fig. 11*. Hold the panel so that the side of the frame with the Interlock Anchor is in the center of the door opening and facing into the room. Lift the fixed panel up into the center channel in the head of the frame and lower it onto the setting chair. Push the panel

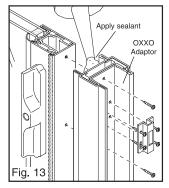


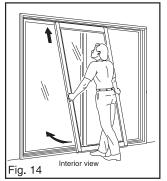


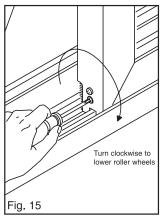


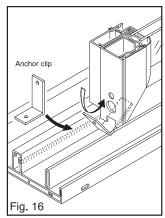


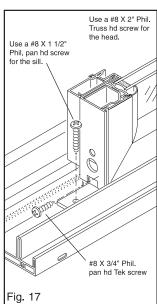


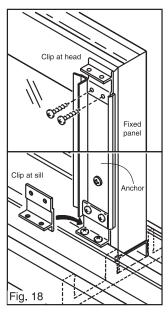












into the channel in the fixed jamb as far as it will go. For centering purpose, snap on the interlock adapter to the interlock anchor on the fixed panel, see *Fig. 12*. The fixed panel will be secured later.

6. Installation of Rolling Panel

For Optional OXXO Configuration only - Before installing the strike vent panel, remove the OXXO adapter from the panel to ease the installation. Once the panel is installed, reinstall the adapter, see **Fig. 13.**

Centering the vent and fixed panels are essential. Install the operating panel from the interior. With the weather strip side of the vent panel facing to the outside, stand in the middle of the frame opening and lift the panel into the head channel in the frame, see *Fig. 14.* Swing the bottom in and tuck the panel down into the sill channel. If panel does not clear sill, the rollers may be dangling below the bottom edge of the panel. Roller wheels must be horizontal with frame to clear sill. When panel is installed, make sure rollers are resting on the roller track.

Close the operating panel and check both panels for centering and alignment, making sure the Interlock fully engages. Check lead stile of door to make sure it fits snug against the vent jamb, see Exploded View on back page. Make any adjustments necessary. Lower the door rollers only if the panel is hard to move. The roller adjustment screws are at the bottom of both ends of the panel. Turn the lower screw clockwise a couple of turns with a Phillips head screwdriver until door moves freely, see *Fig. 15*. Relieve pressure on roller cam by lifting the panel while turning the adjustment screw.

With both panels now centered, secure the fixed panel by slipping two "L" shape anchor clips into the interlock at the sill and head, see Fig. 16. Fasten the anchor clip to the sill with a #8 X 1 1/2" Phillips pan head screw, then secure it to the Interlock a #8 X 3/4" Tek screw. Install the Tek screw where it will go through the interlock surface and into the clip, see **Fig. 17.** Repeat the procedure at the head section but use a 2" screw instead of the 1 1/2" screw. Installing the interlock clips is the next step and in order to do this, the vent panel has to be removed. Move the door to the center of the opening, make sure the rollers are retracted back into the bottom rail by turning the adjustment screw counter clockwise. Lift the panel out and set it aside. If the panel does not clear the sill, use a putty knife to quide the rollers over the sill. With a putty knife or a flat screw driver, carefully remove the interlock adapter from the fixed panel. With the adapter out of the way, position the interlock clips over the anchor bar at the head and sill, see *Fig. 18*. The ends of the anchor bar fit behind the clips. Fasten one interlock clip to the sill of the frame with two #8 X 1 1/2" Phillips pan head screws. Fasten the clip to the anchor bar with two #8 X 3/4" Phillips pan head Tek screws. Fasten the other clip to the head of the frame with two #8 X 3" Phillips pan head screws. Fasten the clip to the anchor bar with two #8 X 3/4" Phillips pan head Tek screws. Seal over screw heads at the sill with a sealant. Reinstall the interlock adapter to the fixed panel. A threshold cap fills the remaining gap in the sill beside the fixed panel. Install the cap by starting at the interlock and work down towards the vent jamb, see Fig. 19. 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. 20*. Reinstall the vent panel and adjust the rollers. Close the door and check the alignment of the panel with the frame jamb. Both should meet evenly, if not, adjust rollers up or down to align.

7. Installing Hardware

Locate the predrilled holes for the handles on lead stile of door. Start by aligning the interior handle to the door stile using the two #8 - 32 X 2 1/2" Phillips oval head screws. With the mortise lock in the locked position, hold the latch hook and insert the assembly into the opening provided, see *Fig. 21*. Be sure that the interior lock lever passes through frame and into lock assembly. Pass screws through handle, stile and lock assembly.

For installation with a keyed lock cylinder, knock out the hole in the center of the outside pull prior to installing. Insert cylinder lock into handle and align with screws. Be sure the cylinder pin is inserted into the mortise lock assembly.

8. Latch Keeper Installation

Determine the correct location for the latch keepers, see *Fig. 21*. Use shims behind frame at latch keeper location. Install the latch keeper to the vent jamb with two #10 X 3" Phillips pan head screws. Note the elongated holes allow room for strike adjustment. It is important that the latch hook fully engage the keeper, see the figure for proper clearance.

9. Screen Door Installation

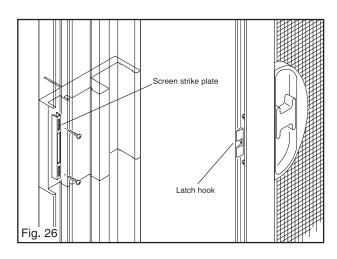
Install the screen track bar into the sill as shown in *Fig. 25*. Hold the screen door with the screen spline to the outside. Lift the panel into the screen channel in the head of the door frame, see *Fig. 24*. Swing bottom of panel in to rest on sill. Wheels must rest on screen track in order for screen door to operate properly, see *Fig. 25*. Adjust bottom rollers so screen panel is vertically parallel with door frame. Adjust the top rollers of the screen panel to create enough tension to keep the panel from jumping the track. Don't over tighten, screen door must operate smoothly.

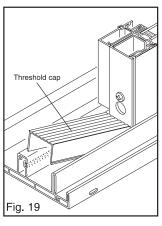
10. Screen Door Strike

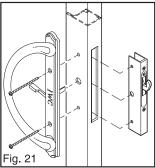
Install the Screen Door Strike Plate to the vent jamb with two #6 \times 5/8" screws. Allow room for adjustment, see **Fig. 26.** Use the lever in the screen door handle to move the latch hook to the upper most position. Adjust the screen strike plate 1/4" below the latch hook. Tighten the strike plate screws in position.

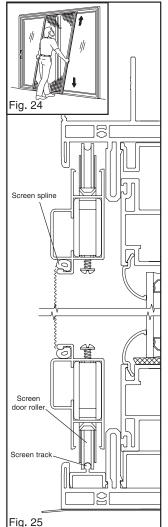
11. Install the Anti-Lift

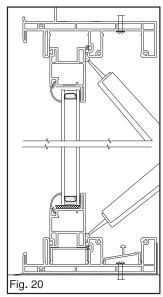
The Anti-Lift is installed in the head portion of the door frame above the operating panel. This is a security precaution to avoid intruders from lifting the panel out while in the locked position. Slide the door to the full open position. Snap the vinyl anti-lift piece into the head section, approximately a foot from the jamb as shown in *Fig. 27*.

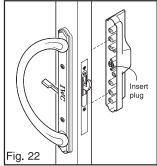


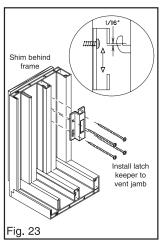


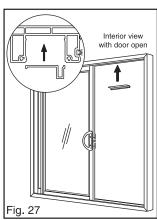




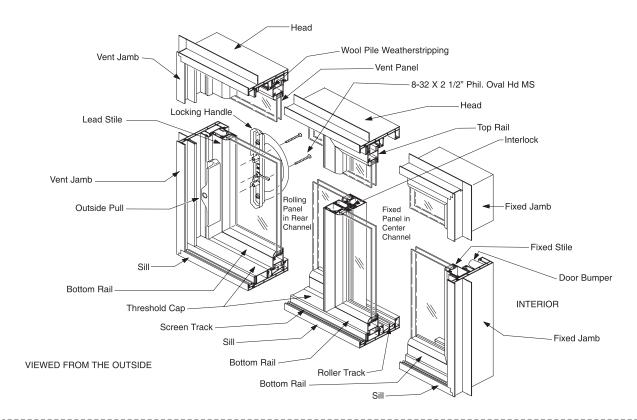








PARTS OF THE 5900 SLIDING PATIO DOOR



- 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.
- 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

