

Ambassador Series

Series 8900 Sliding Patio Doors

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.



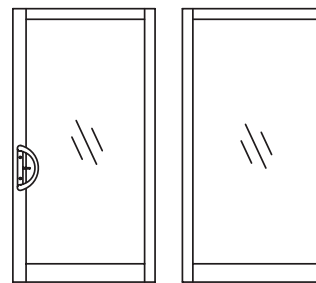
Tools Required

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

Before you start:

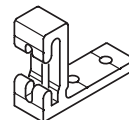
- Read instructions thoroughly and double check the parts lists to make sure all necessary parts are present.
- Door panels can be heavy. Two men are required to lift the panels.
- Responsibility for protecting any flashing material from damage caused by weather, other trades or vandalism and properly 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.

Door Frame Package Supplied Includes:



Door panel
(operating, roller or
vent panel)

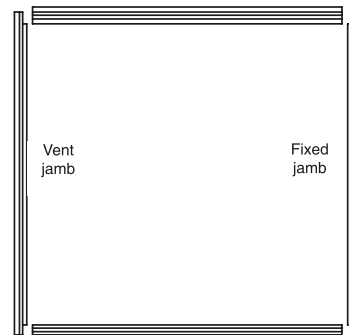
Fixed Panel



Anchor Clips

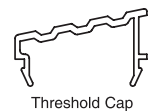


Door
Latch Keeper



Door frame - Head, Sill and Jamb

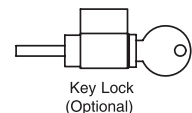
Hardware Package Supplied includes:



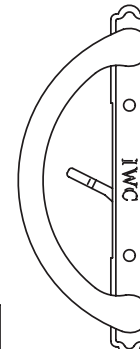
Threshold Cap



Anti Knock
out Plug



Key Lock
(Optional)



Inside
Pull






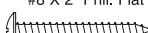
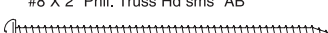
Outside
Pull



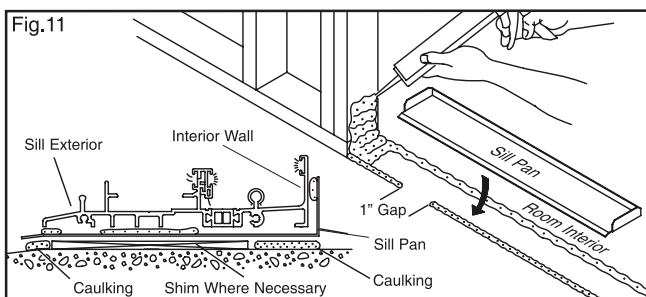
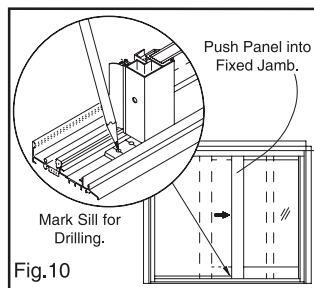
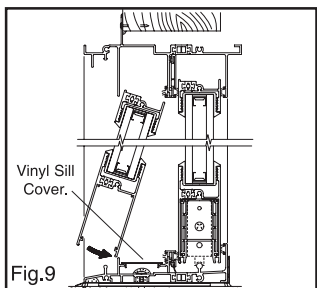
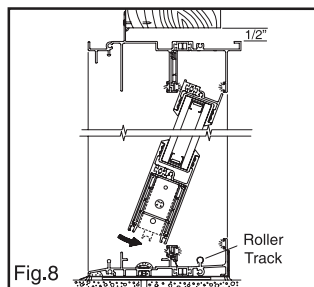
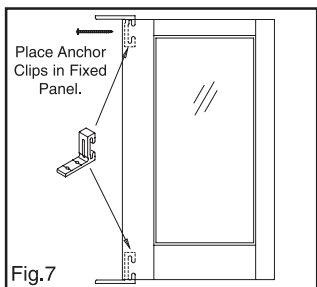
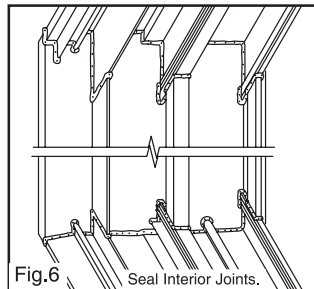
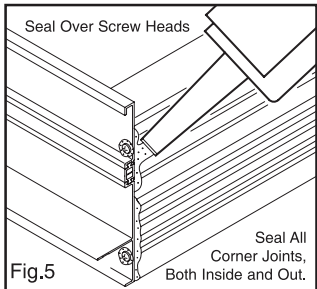
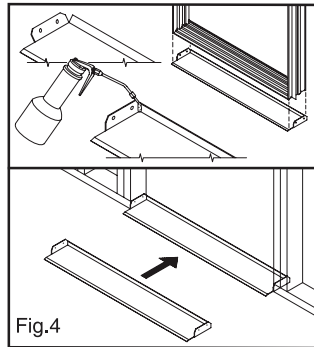
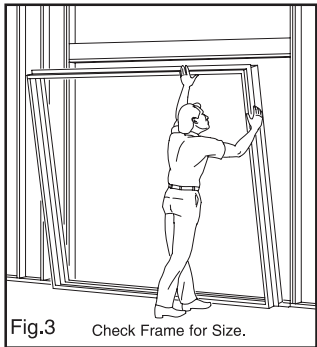
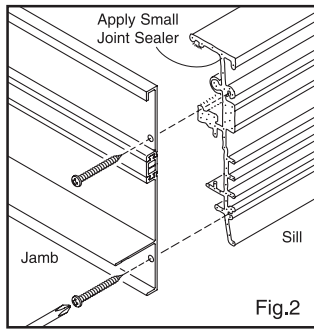
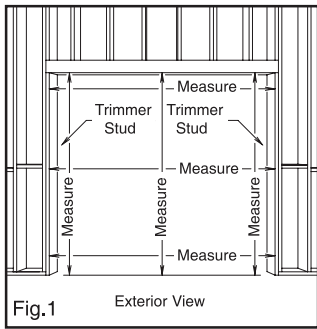
Door
Bumper



Screen Door
Latch Keeper

QUANTITY	DESCRIPTION	USAGE
2 Each	 #6 X 5/8" Phil. Pan Hd sms "B"	Screen Door Keeper
8 Each	 #8 X 1" Phil. Pan Hd sms "AB"	Frame Assembly
20 Each	 #8 X 2" Phil. Flat Hd sms "AB"	Frame Installation and Bumper
4 Each	 #8 X 2" Phil. Truss Hd sms "AB"	Anchor Clips
2 Each	 #8 X 3 1/2" Phil. Pan Hd sms "AB"	Door Latch Keeper

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



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 rough opening at the corners and center points. See **Fig. 1**. 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.

2. Frame Assembly

Before assembling the frame, it is very important to use the recommended sealant for your job. Assemble frame by applying a "Small Joint Sealer" to all contact surfaces of the corner joints prior to assembly, see **Fig. 2**. While the sealant is wet, align the screw holes on the jamb with the slotted ones on the head or sill. Fasten joint with #8 X 1" Ph. Pan Hd SMS. For best results, do one corner at a time. After the frame is assembled, dry fit the frame into the center of the rough opening, see **Fig. 3**. There should be about a 1/4" gap behind both jambs and 1/2" at the head. You need this extra space between the frame and rough opening to level, square and plumb the frame. If your condition looks fine, go on to sealing the corner joints. Otherwise, take the necessary steps for a proper installation.

Run a bead of joint sealer along both sides (inside and out) of each corner joint and seal over the screw heads, see **Fig. 5**. It is important that the corner joints are fully sealed to prevent water leakage. Do not leave gaps in the sealant bead, see **Fig. 6**.

3. 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. A sill pan prevents water from flowing into the wall or interior finishes. The sill pan flashing material 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. 4**. 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 sealer.

4. 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 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. 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. Anchor clips should be installed on the fixed panel prior to its installation, see **Fig. 7** and refer to the section on installing the panels. 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 identification. Once the panels have been adjusted in the frame, MARK the hole locations on the sill through the anchor clip, see **Fig. 10**. With the shims still in position around the frame, remove the fixed panel 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 masonry screws for a #8 X 2" screw.

5. 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. 11**. 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 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 anchor clip installation holes (if drilled) and apply some 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. 12**.

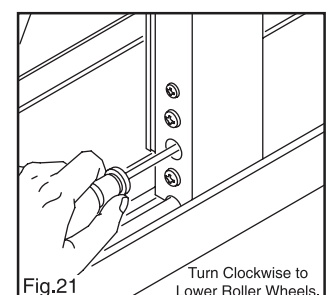
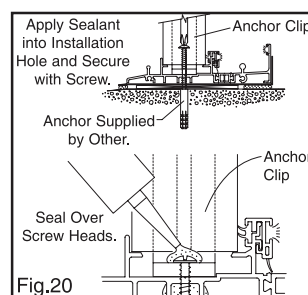
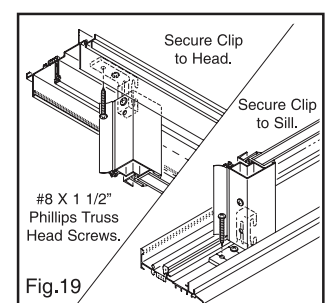
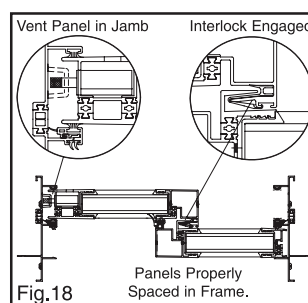
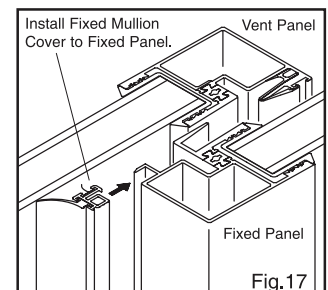
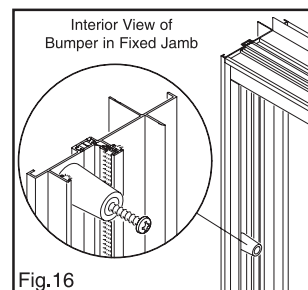
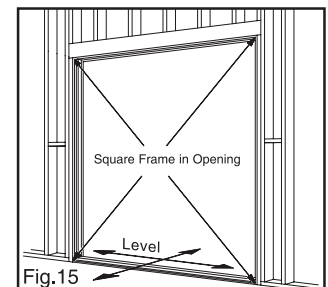
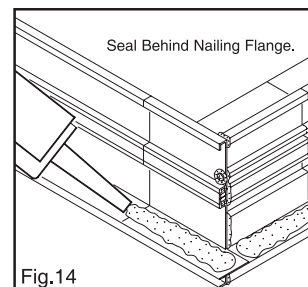
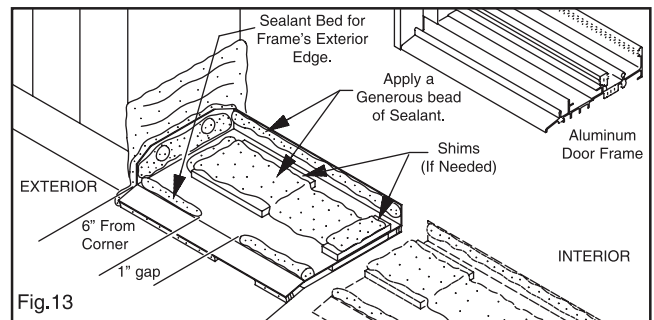
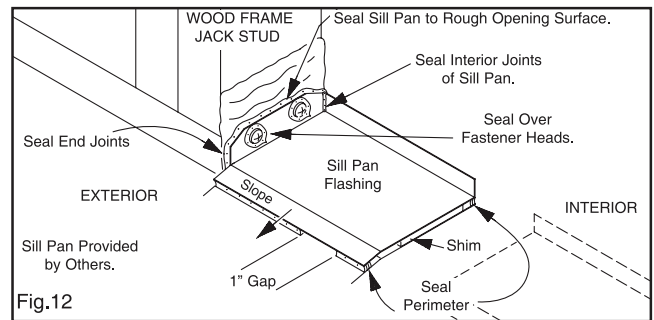
6. Installing the Door Frame

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. 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 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. 13**. Lay a bed of sealant down the center of the sill pan and over any shims.

Apply a generous bean of sealant to the back side of the nailing flange on the frame, see **Fig. 14**. 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. 15**. Insert shims at installation screw locations. Secure one of the upper jamb corners first with a #8 X 2" Phil. Flat head screw. Check for level and plumb again. Secure the frame with the remaining installation screws. The Vent Panel Bumper will be installed on the fixed jamb with one of the installation screws, see **Fig. 16**. Install the bumper mid way up the channel closest to the interior of the room. When installing fasteners to the head portion of the frame, caution should be taken not to over tighten and distort the frame. Use shims at screw locations and leave about a 1/2" gap between frame and rough opening for deflection.

7. Installing the Door Panels

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. Before the fixed panel can be installed, anchor clips will need to be attached to the interlock mullion of the fixed panel. This is done by backing out the assembly screw at the top of the interlock mullion, inserting one of the anchor clips and reinstalling the assembly screw, see **Fig. 7**. The top clip should be able to slide up and down. Installing the bottom clip into the interlock mullion can be done without removing the assembly screw. The bottom clip can be held in place temporarily with masking tape. The door panels will be installed from the exterior side of the door. The vent panel goes first. 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. To retract wheels, turn the adjustment screw at the bottom of the panel counter clockwise. The rollers have a detent to keep wheels up. 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 closest to the interior of the room. Swing the bottom over the center of sill and lower into the last channel, see **Fig. 8**. 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. Turn the adjustment screw through the holes at the bottom of the panel counter clockwise to retract the wheels. When panel is installed, make sure roller wheels are resting on the roller track for operating ease. Push the panel into the closed position. Before installing the fixed panel, place the vinyl sill cover provided, on the sill channel where the panel will rest. Take the fixed panel, with the anchor clips attached and install it into the center channel in the same fashion, see **Fig. 9**. Push the panel into the fixed jamb as far as it will go, see **Fig. 10**.



If there is no further need to remove the fixed panel from the door frame, install the fixed mullion cover to the fixed panel. The fixed mullion cover contains the bug strip and a weather strip. Snap the cover onto the fixed mullion with the help of a hammer and a block of wood or use a rubber mallet, see **Fig. 17**.

Check the panels for spacing to ensure proper engagement of the interlock and the correct penetration of the vent panel into the vent jamb, see **Fig. 18**. With the panels properly spaced in the frame, secure the fixed panel using the anchor clips. Drill pilot holes in the sill for a #8 X 2" Phillips Truss Head screws. With an appropriate sealant for the job, fill the hole with sealant and install the two screws through the anchor clip, see **Fig. 19** and **20**. The anchor clip at the head should slide up to the frame. Drill pilot holes and secured with two more #8 X 2" Phillips Truss Head screws. Seal over screw heads at the anchor clips.

Adjust vent panel height by turning the roller adjustment screw at the bottom of both ends of the panel. Turn the adjustment screw clockwise a couple of turns with a Phillips head screwdriver until door moves freely, see **Fig. 21**. 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 panel.

Note: When adjusting vent panel, relieve pressure on roller cam by lifting the panel while turning the adjustment screw.

8. Door Handles and Latch Keeper Installation

A mortise lock is included with the door, it may be installed. If not, see **Fig. 22** for installation. 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 extension 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 1 5/8" Ph.Oval Hd. screws.

The optional keylock is installed into the exterior handle. Knock out or drill out the center hole impression on the outside handle. Notice that both flat metal extensions from the thumb turn and cylinder lock will be inserted into the hub slot of the mortise lock. Trim the extensions, if needed, so that both will fit mid way into the lock when assembled. Secure lock cylinder in handle with the metal collar and two #6 X 1/2" screws provided, see **Fig. 23**.

Install the latch keeper to the Vent jamb with two #8 X 3 1/2" Phillips Pan Head screws, see **Fig. 24**. 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. Adjust the latch keeper up or down to the proper height for full hook engagement. Tighten screws on keeper to maintain correct height.

9. Seal the Fixed Panel

Before sealing the fixed panel, install the threshold cap into the center channel of the sill along side the fixed panel, see **Fig. 25**. Check the length of the threshold cap before installing and trim if needed. The shape of the cap should slope to the exterior of the door. Start at the interlock mullion and work across towards the vent jamb. With and appropriate sealant, seal the fixed panel to the frame from the interior, see **Fig. 26**. Run a continuous bead of sealant along the perimeter of the fixed panel. Seal over screw heads of installation screws in the jambs and head.

10. Screen Door Installation

Hold the screen door with the screen spline to the outside. Lift the frame into the screen channel in the head of the door frame. Roller wheels must ride on track in the head to operate properly, see **Fig. 27**. Swing bottom of screen frame onto sill track. Push bottom rollers up into 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 screen frame is vertically parallel with door frame. The roller can be adjusted by taking a Phillips screw driver and

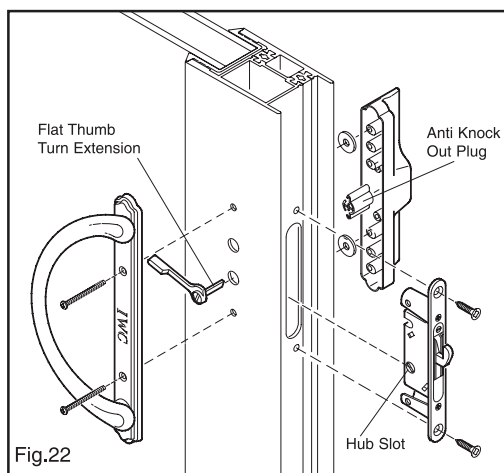


Fig.22

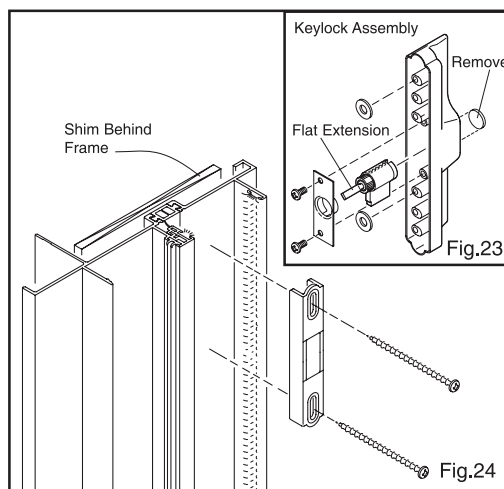


Fig.23

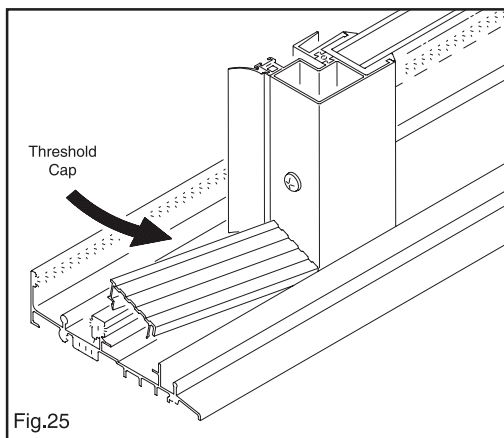


Fig.25

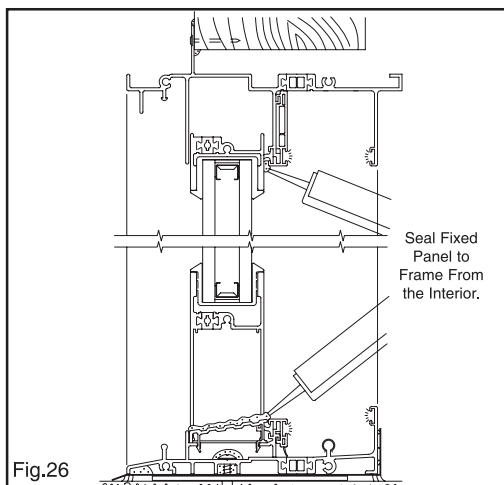
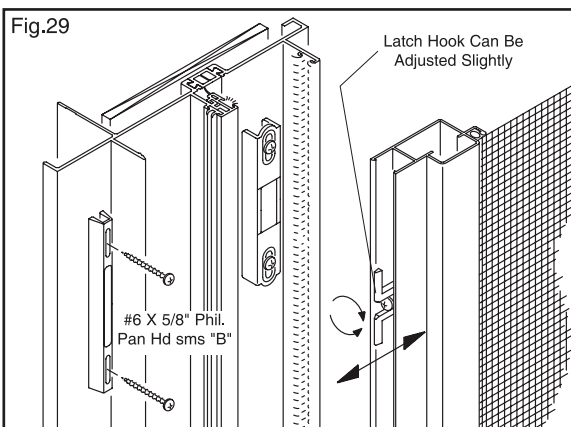
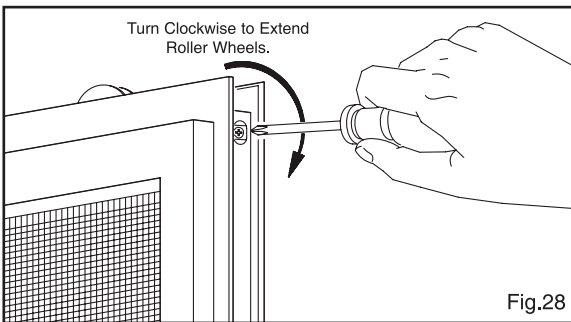
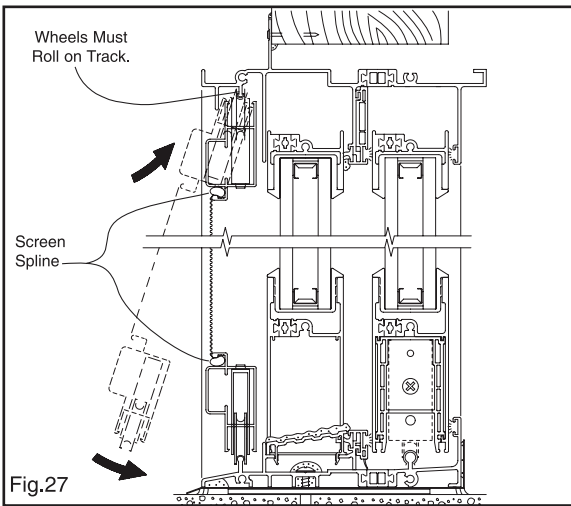


Fig.26



turning the screws through the holes in the frame, see **Fig. 28**. Turning the screws clockwise will extend the rollers. Don't over tighten, screen door must operate smoothly.

11. Screen Door Strike

Install the screen door strike to the vent jamb with two #6 X 5/8" Phillip Pan Head screw, see **Fig. 29**. Adjust the strike height by moving it up or down until it engages the screen door latch properly. Tighten both screws to secure. The screen door latch can also be adjusted slightly with a turn of the screw driver. Once latch and strike operate smoothly, tighten both strike screws.

- 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.
- Muled windows require special treatment. Please consult instructions for your muled 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.

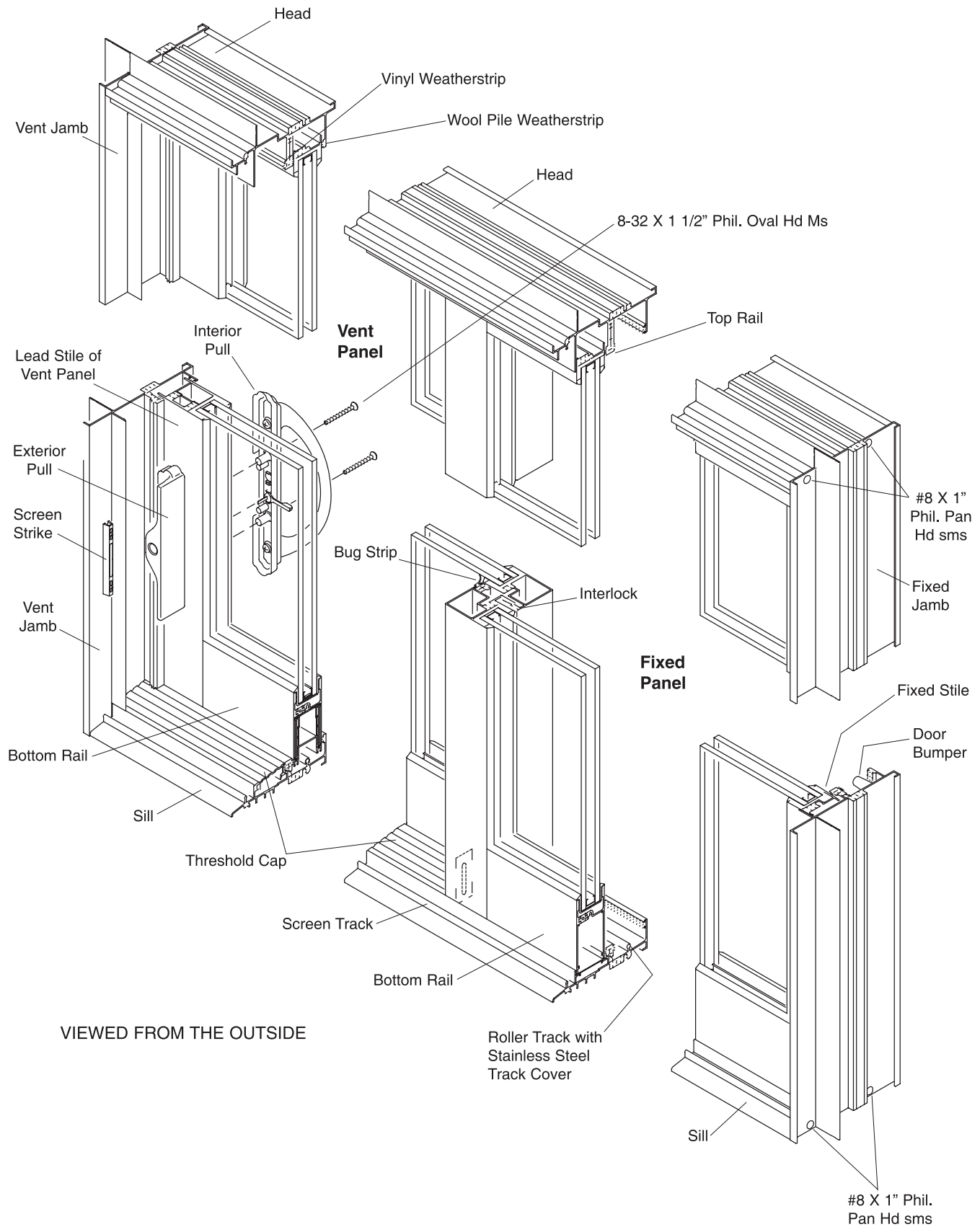
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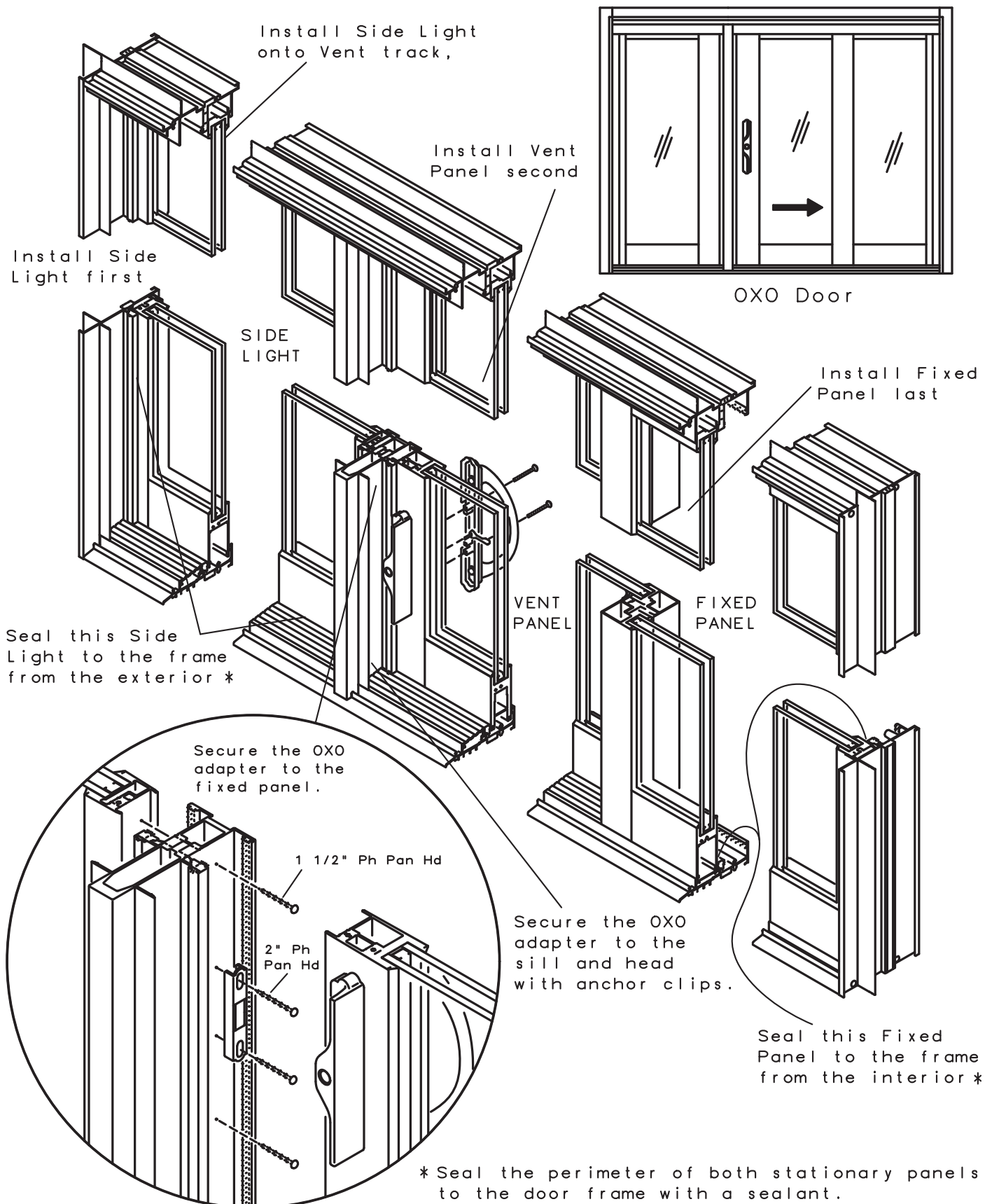
Southern California
1.800.477.4032

Visit our website at www.intlwindow.com

EXPLODED VIEW OF THE 8900 SLIDING PATIO DOOR



Exploded View of the 8900 3 Panel Sliding Patio Door



Exploded View of the 8900 4 Panel Sliding Patio Door

