

Keltic Series

Series 7620 Family of Inside Sliding XO 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
- Power drill
- .171 Dia. drill bit
- Utility knife
- Putty knife
- Caulking
- Measuring tape
- Carpenter's square
- Phillips head screwdriver
- Level (6' recommended)
- Shim material
- Caulking (One that's gun appropriate for your job)
- Hack saw

Before you start: Read instructions thoroughly and double check the parts lists to make sure all necessary parts are present.

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 Window Openings

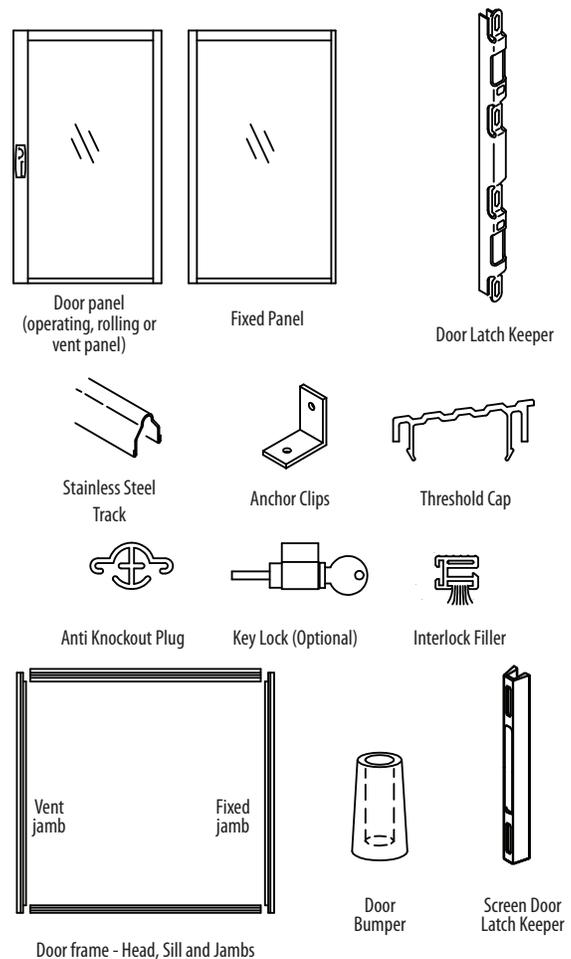
Check your opening for plumb and squareness. Check floor for flatness. Correct any problems with the rough opening or floor flatness before proceeding with the installation.

Measure rough opening vertically and horizontally at the corners and center. See **Fig. 1**. The opening should be 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

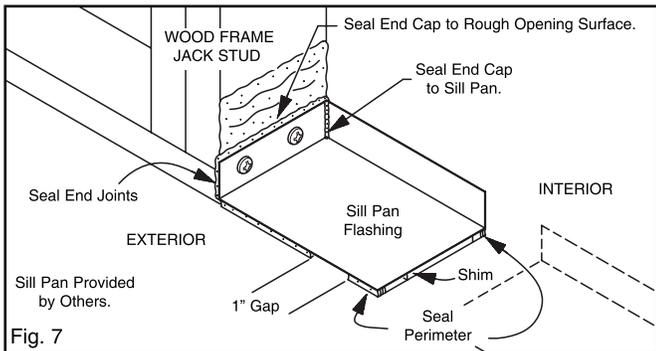
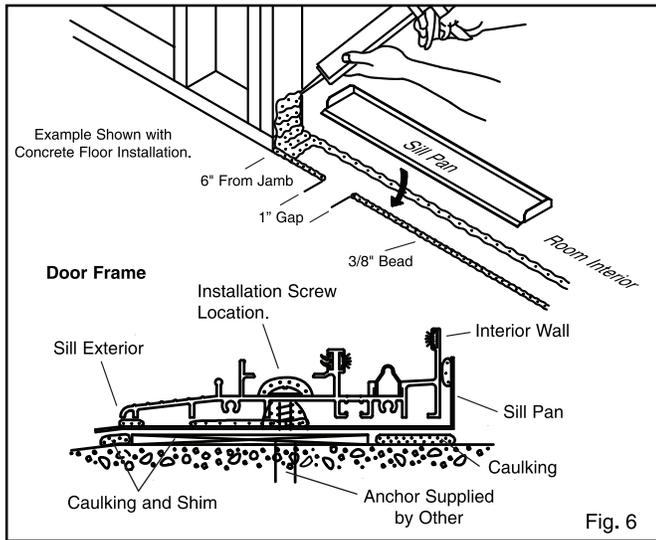
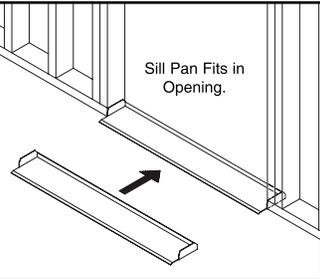
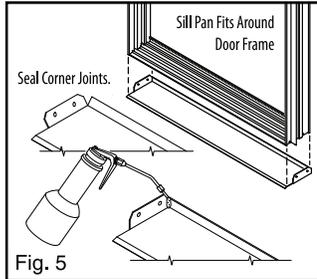
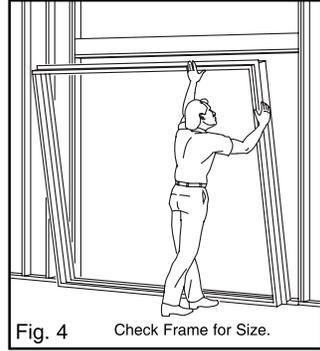
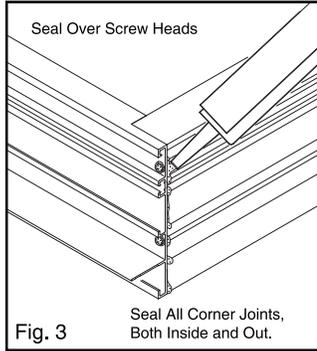
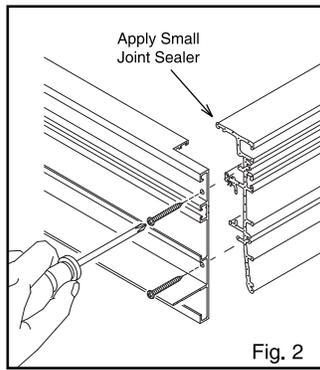
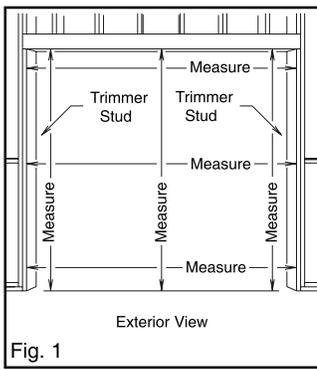
Before assembling the frame, it is very important to use the recommended sealant for your job. Assemble frame by applying a "Small Joint Sealer" to all contact surfaces of the corner joints prior to assembly, see **Fig. 2**. While the sealant is wet, align the screw holes in the jamb with the slotted ones on the head or sill. Fasten join with #8 X 1" Ph. Pan Hd SMS. For best results, do one corner at a time. After the frame is assembled, run a bead of sealer along both sides (inside and out) of each corner joint, see **Fig. 3**. It is important that the corner joints are fully sealed to prevent water leakage. Seal over the screw heads with an appropriate sealant.

Door Frame and Hardware Package Supplied Includes:



QUANTITY	DESCRIPTION	USAGE
10 Each	 #8 x 1/2" Square Dr Pan Hd Tek	Anchor Clip: Sill
8 Each	 #10 x 1" Phil. Hex Washer Hd	Frame Assembly
28 Each	 #8 x 1/2" Phil. Flat Hd SMS "A"	Installation, Bumper
4 Each	 #10 x 3" Phil. Pan Hd SMS	Door Latch Keeper

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



3. Preparing the Sill

Check the rough opening for plumb, level and square. Ensure that the sill condition provides a continuous, solid and level support along the entire length of the opening. Surface should be free of voids, holes, chipping or other conditions that might prevent sealant from maintaining continuous contact with the door or sill pan flashing. Dry fit the door frame to make sure the frame will fit into the rough opening, see **Fig. 4**. 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 material and fasteners are provided by others. When fabricating the sill pan, it must be formed to fit around the bottom of the door frame and fit snugly into the rough opening, see **Fig. 5**. Side end dams would make a good surface for attaching the sill pan to the opening. Allow enough room in the sill pan for the new door frame to be installed without damaging the flashing. 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.

For Concrete Floor Installation Only

If your rough opening should have a concrete or masonry floor, it would be necessary to dry fit the door frame and sill pan. This is done to accurately align the installation screws in the sill with the masonry screw anchors that will be installed in the concrete floor. No sealant or fasteners are used at this point, but the frame should be checked for level, square and plumb. Use shims at the sill, jambs and head to get an accurate placement of the frame in the rough opening. If installation holes have not been pre drilled in the sill, determine the number and location of the fasteners to be used on the sill. Installation screws will be installed in the sill channel closest to the interior of the room, see **Fig. 6**. The sill needs a minimum of 4 fasteners, based on a maximum of 16" apart, on center. One fastener will be installed about 4" from each jamb corners. Installation holes should have a .171 diameter, big enough for a #8 screw. Once the frame has been evenly spaced in the opening, MARK the installation hole locations through the sill and onto the sill pan and concrete floor. Remove the frame and sill pan from the opening. Install masonry screw anchors into the concrete floor for all sill fasteners. Use 1" long metal anchors inserts or concrete anchor screws, 1 1/2" or longer.

4. Installing the Sill Pan

Remove the door frame from the opening and check the frame sill for installation holes. If screw holes have not been pre drilled in the sill, determine the number and location of fasteners to be used and drill the holes. Installation screws will be installed in the sill channel closest to the interior of the room, see **Fig. 6**. The sill needs a minimum of 4 fasteners, based on a maximum of 16" apart, on center. One fastener will be installed about 4" from each jamb corners. Installation holes should be .171 in diameter, big enough for a #8 screw. Check the sill pan in the rough opening to see if it is flat and level. If the pan is not level, use shims under it to correct this. Once leveled, remove the sill pan from the opening but do not disturb any shims used.

Determine the proper sealant to use for the materials and building condition you are working with. Lay a sealant bed at both corners of the sill opening where the floor and framing studs meet, see **Fig. 6**. Run sealant up both studs about 6 inches. Run a generous, continuous bead of sealant between the two jambs, along the Interior edge of the sill where the sill

pan will sit. Then 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 any shims. Apply even pressure to the pan to ensure good contact. Check pan for level and square. Secure sill pan to the rough opening with fasteners (supplied by others) through the end dams. Seal over fastener heads and all joints between the sill pan and the wall condition, see **Fig. 7**.

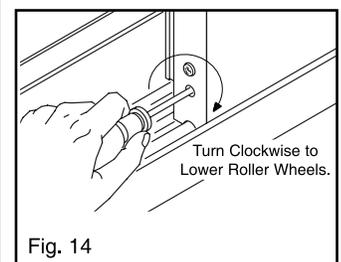
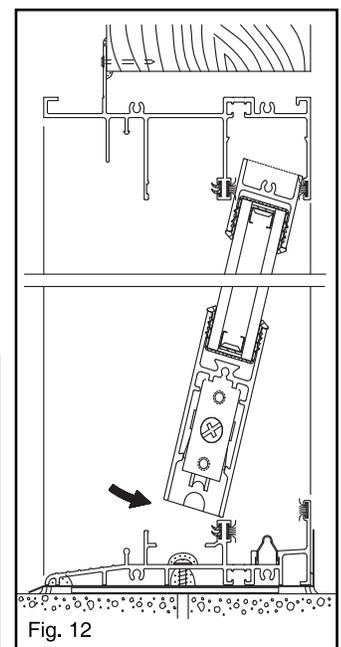
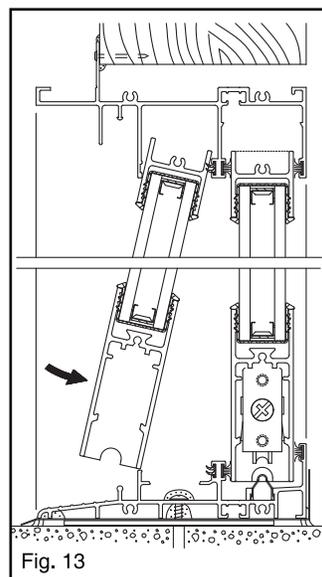
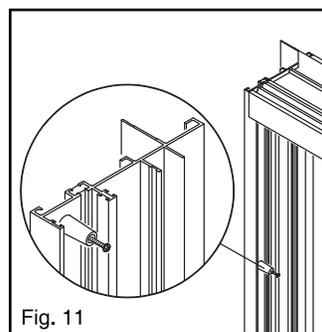
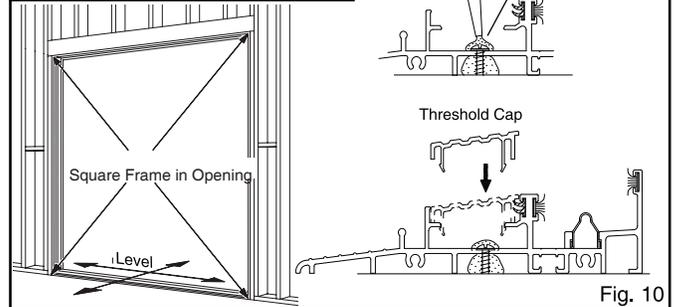
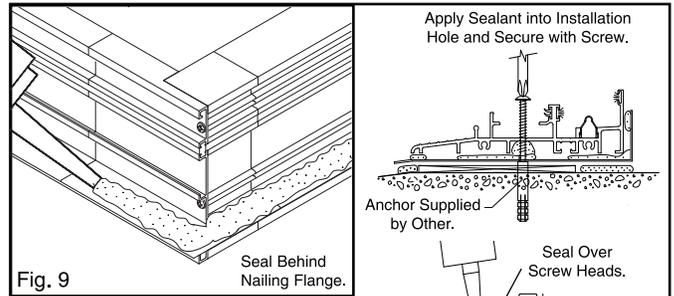
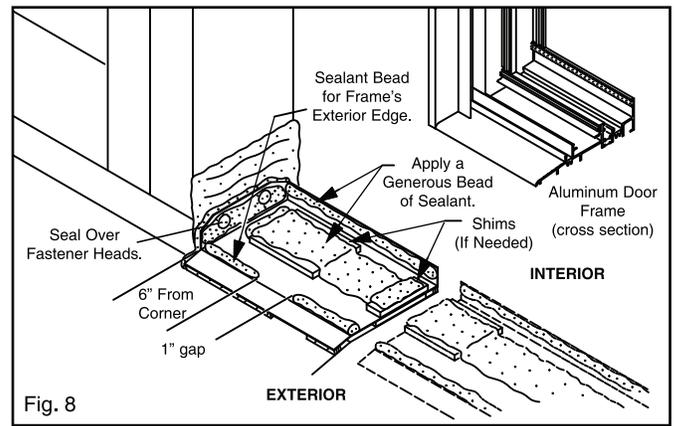
5. Installing the Door Frame

With sill pan secured, dry fit the door frame in the opening and check for level, square and plumb. If frame sill is not level, insert shims between the sill pan and new frame. Once leveled, remove frame from opening, but leave shims in position. Apply a generous, continuous bead of sealant along the top of the rear, upright wall and side end dams 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 exterior edge of the sill pan where the exterior leg of the door frame will come in contact. Leave two 1" gaps, approximately 6" from each jamb for drainage, see **Fig. 8**. Now lay a bed of sealant down the center of the sill pan and over any shims.

A door frame with a nailing flange needs to be sealed in the rough opening. With an appropriate sealant for the materials you are working with, apply a generous, continuous bead to the back side of the nailing flange at the head and jambs, see drawing **Fig. 9**. If installation is on a concrete floor, prior to setting the frame in the opening, inject sealant into any installation holes in the sill pan. Set the door frame into the rough opening on top of the sill pan. Align any installation holes in the sill with the holes in the sill pan and masonry anchors. If installing the frame to a wood floor, drill pilot holes through the sill into the sill pan below. Inject sealant into the installation holes. Secure sill with #8 X 1 1/2" Phil. flat head screws. Check frame for level, square and plumb and shim where needed. Square the frame in the opening by measuring diagonally across the corners and adjust the frame until the measurements are equal, see **Fig. 10**. Once the frame is square, secure one of the upper jamb corners first with a #8 X 1 1/2" Phil. flat head screw. Check frame again for square and plumb. With the remaining installation screws, secure the frame's head and jambs. Position shims as close to installation screws as possible. Attach the cone door bumper, mid way up the fixed jamb, with one of the installation screws, see **Fig. 11**. When installing the fasteners to the head section of the frame, caution should be taken not to over tighten and distort the frame. The head should be level and not bowed. Leave about a 1/2" space between frame head and rough opening for deflection. Once the frame is secure, apply sealant over installation screw heads.

6. Installing the Rolling Panel (Vent Panel)

Door panels are installed from the exterior side of the frame. Determine which direction the door will close and lock. See exploded view of door for orientation. Hold the rolling panel with the rollers at the bottom and the interlock flange facing to the outside. Stand in front of the frame opening about mid way and lift the panel into the frame's head. The rolling panel will go into the channel closest to the interior of the room, see **Fig. 12**. Swing the bottom in and tuck the panel down into the sill channel. If panel does not clear the 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. If wheels are NOT fully retracted into bottom rail, use a Phillips head screwdriver and turn the adjustment screw through the holes at the bottom of the panel counter clockwise, see **Fig. 14**. Tuck panel into channel and make sure roller wheels are resting on the roller track.



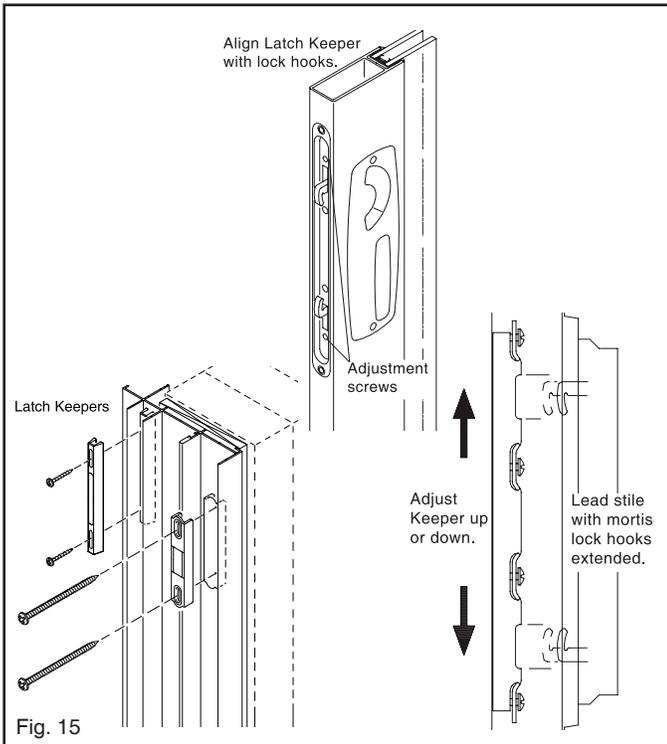


Fig. 15

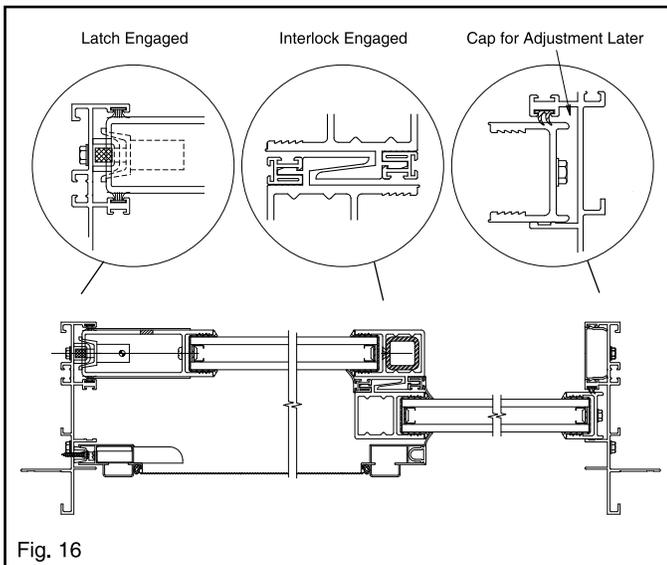


Fig. 16

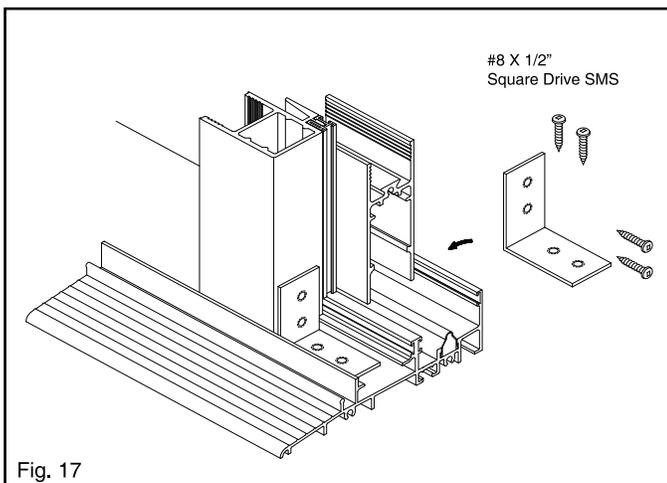


Fig. 17

Note: Relieve pressure on roller cam by lifting the panel while turning the adjustment screw.

With the vent panel now installed, adjust both rollers by turning the adjustment screws at the bottom of the panel. Turn the adjustment screw clockwise a few turns with a Phillips head screwdriver until door moves freely. Close the door and check the alignment of the panel with the vent jamb. Both should meet evenly from top to bottom. If not, adjust rollers, one at a time, up or down until panel aligns. Install interlock filler so that it just clears the head & sill.

7. Installing the Fixed Panel

Hold the fixed panel with the interlock flange in the center of the door opening facing inward. Lift the panel up into the center channel of the frame. Swing the bottom in and lower it into the sill's channel, see **Fig. 13**. Push the panel into the fixed jamb as far as it will go. Leaving approximately 1/8" gap for adjustment later.

8. Latch Keeper Installation

The Lead panel(s) should already have the door handle installed. Determine the correct location for the Latch Keeper in track 1, see **Fig. 15**. Use shims behind frame at latch keeper location. Install the Latch Keeper to the vent jamb with four #10 X 3" Phillips pan head screws. Note the elongated holes allow room for strike adjustment. It is important that the latch hooks fully engage the keeper.

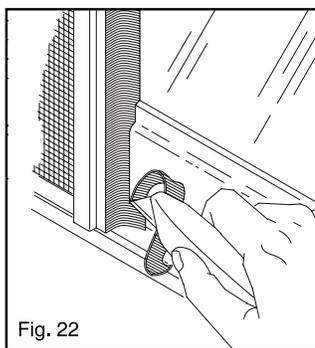
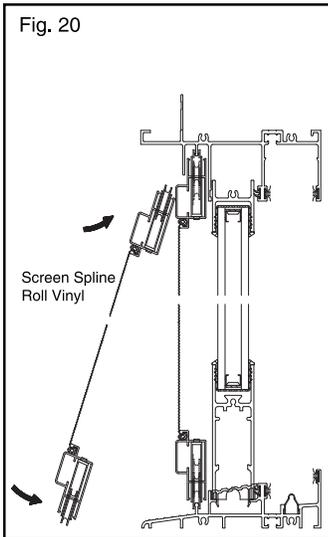
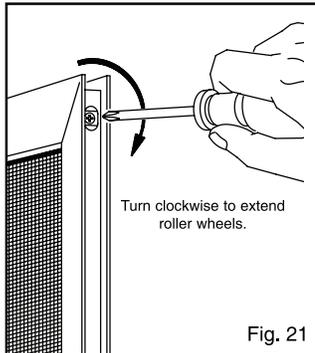
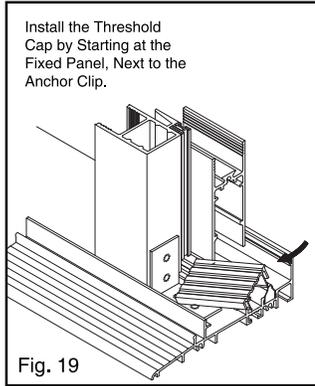
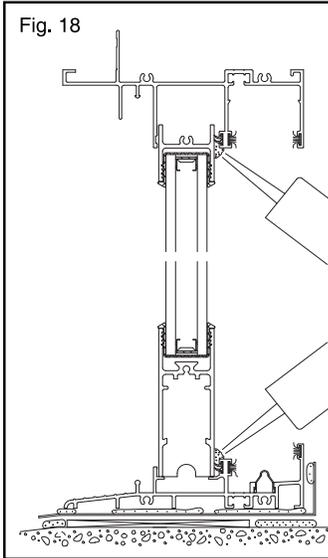
9. Secure the Fixed Panel

Space the panels in the door frame so that the door latch on the vent panel engages the keeper on the jamb. The two interlock stiles should engage and meet evenly in the center of the door opening, see **Fig. 16**. Secure the fixed panel to the door frame with two anchor clips. Place one anchor clip at the sill and fixed panel and use the holes in the clip as a guide to drill pilot holes. Inject sealant into sill holes. Use the #8 X 3/4" square drive pan head screws to go into the sill and the #8 X 1 1/2" square drive flat heads into the fixed panel, see **Fig. 17**. Repeat the anchor clip procedure at the head section but use four #8 X 1 1/2" screws. 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. 18**. Seal over screw heads on anchor clips. Install fixed panel interlock filler and seal to head & sill.

Install the threshold cap into the center channel of the sill along side the fixed panel, see **Fig. 19**. The cap should slope to the exterior of the door. Check the length of the threshold cap, it may need to be trim to fit the opening. Start at the fixed panel and work down towards the vent jamb. A rubber mallet may be needed to set the cap.

10. Screen Door Installation

Hold the screen door with the screen spline facing the outside. Lift the screen frame into the screen channel in the head of the door frame. Swing bottom of screen frame up onto the sill track. Roller wheels must ride on sill track to operate properly, see **Fig. 20**. Push wheels up into the frame with a flat screw driver or putty knife and guide them onto the screen track. The rollers can be adjusted by taking a Phillips screw driver and turning the adjustment screws through the holes in the frame, see **Fig. 21**. Turning the screws clockwise will extend the rollers. Don't over tighten, screen door should operate smoothly. Check the alignment of the screen door with the



vent jamb. Both should meet evenly from top to bottom. If not, adjust bottom rollers one at a time until the screen frame and vent jamb are vertically parallel.

11. Screen Door Strike

Install the screen door strike on the vent jamb with one #6 X 1/2" Phillip pan head Tek screw, see **Fig. 15**. Do not tighten screw, allow strike to move up and down to determine full latch engagement with the screen door. Once latch and strike operate smoothly, secure strike with a second Tek screw.

12. Trimming the Bug Seal

A bug seal is installed on the screen door to close the gap between the screen door and fixed panel. You have the option of trimming this vinyl for cosmetic purposes or a better fit. If you decide to trim, use a sharp utility knife or blade to trim the excess vinyl around the contours of the fixed panel, see **Fig. 22**. Care should be taken not to scratch any painted surface with the blade.

- 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.
- Muller windows require special treatment. Please consult instructions for your muller 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.

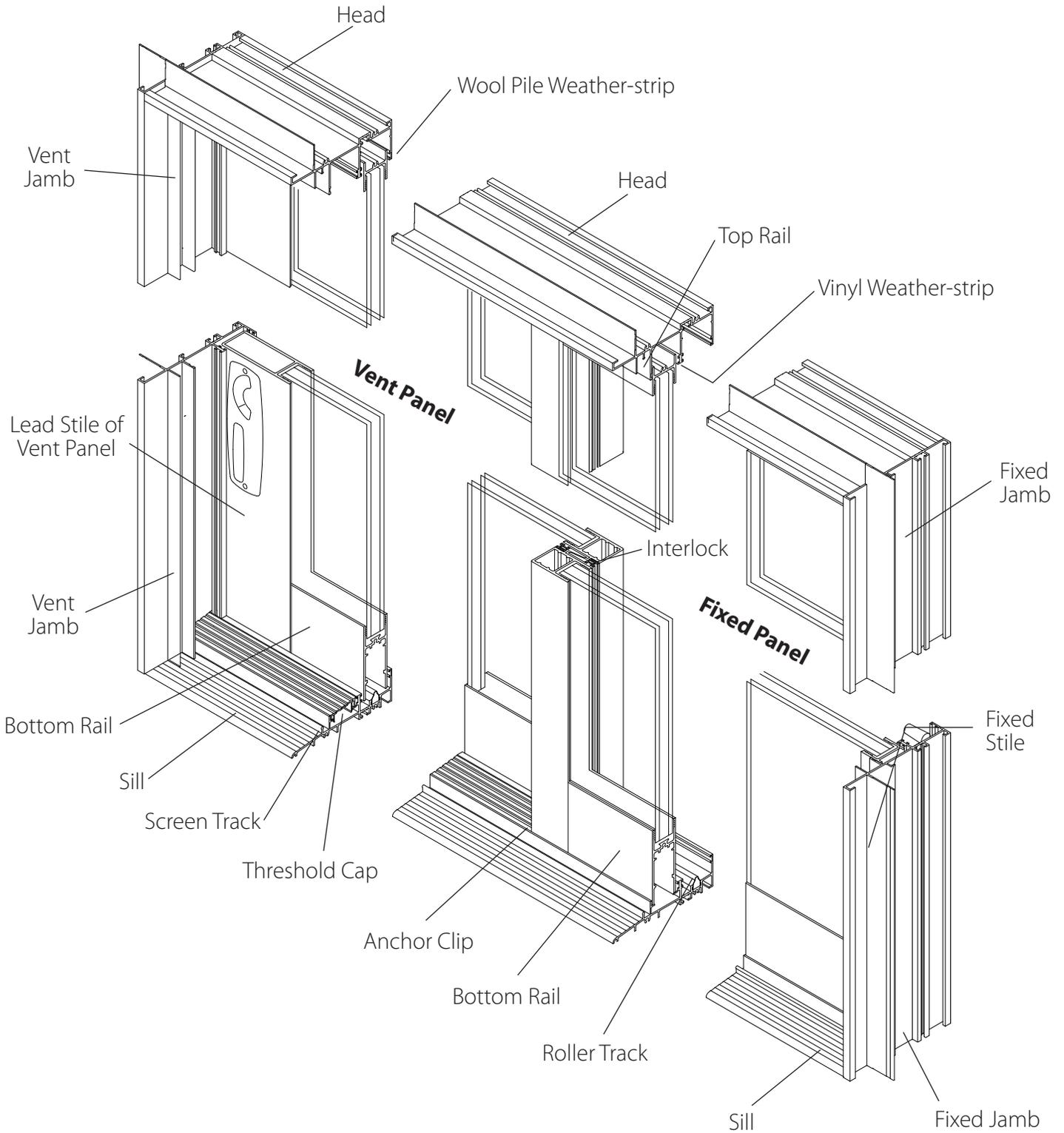
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Southern California
1.800.477.4032

Visit our website at www.intlwindow.com

EXPLODED VIEW OF THE 7620 SLIDING PATIO DOOR



VIEW FROM THE OUTSIDE