

ElementShield Vinyl 7600 SLIDING GLASS DOORS

INSTALLATION INSTRUCTIONS

NOTE: Read instructions completely before attempting any installation.

VINYL

These instructions are provided as a general guide in the installation of CGI products. Applicable approval documents should be used in conjunction with these instructions. Only experienced installers familiar with these or similar products should attempt to install these units. Incorrect installations could void warranty. Contact CGI technical support at 1-866-846-5335.

- If installing CGI products into renovated buildings, be aware that older paints may contain lead. For more information on the specific building or structure and the proper and safe handling requirements, please contact your local authorities or visit <u>www.epa.gov/lead</u>.
- CGI reminds you to recycle whenever possible and recycle responsibly. To properly dispose or recycle products being removed, please contact your local authorities.
- Protect mainframe only with light coating of oil, grease or soap. Action of lime in plaster can destroy finish.
- Sill must be smooth ... buff edges and fill any valleys left by mason. A ridge or lump could cause latching problems.
- If installed in wood surround, measure assembled doorframe, add shim space and make surround to these dimensions.
- Before installing any sliding glass door it is recommended that you read through this document, identify all of the parts being used and verify that you are not missing any before attempting to install the product. This will keep you from having to board up an opening if any parts are damaged or missing.
- Once all parts are accounted for and are viewed as being in good condition, only then should you follow the instructions step by step.

FRAME ASSEMBLY

If the unit being installed is a pocket door, follow instructions below to the extent that it applies to a pocket frame, i.e. there are no jambs in the pocket.

FRAME ASSEMBLY BY-PASS and POCKET DOOR

- 1) Be sure to install sill tracks before frame assembly
- Gather the main frame header, sill and jambs. Trace the frame ends with sealant. (See Figure 1)
 Note: It is good practice to seal the outside of all four corners heavily after the frame is assembled.



1) Set the track on an even, flat, fully supported surface and then connect the sill riser to the sill. Apply small bead of sealant to top of sill. (figure 2a)

Important: Be careful not to apply too much sealant on the sill, this will make the riser difficult to fully seat on the sill.



Pocket Door Note: Sill riser butts up against the p-hook in a Pocket door and may require trimming. (See Figure 2b above) It is recommended that this riser be applied after frame assembly and installation on pocket doors.

Note: Risers can be applied at the end of the installation if panels need to be set from the inside. It is recommended risers be installed prior to frame assembly to avoid jamb damage.

2) Again, be sure to install sill tracks before frame assembly

 Assemble mainframe head, jambs, and sill using the supplied # 8 x 1 Philips pan head screws at each assembly hole. (See Figure 3)



4) Make sure the opening which the door is to be installed to is clean and clear of debris. Dry fit the frame into the opening.

Note: Do not force the frame into the opening. If the frame is tight then clear away obstructions.

5) Once the frame fits into opening freely, seal under entire length of sill and all frame seams. Make sure to include where the frame sill and head meet the main frame jambs. (See Figure 4)



Figure 4

6) Set frame in opening and shim as necessary to make frame plumb, level and square. Shim behind all frame jamb and header installation screws and near mortise keeper to prevent frame distortion when installation screws are tightened.

Important: Frame head and track must be level, square and plumb at frame jambs. Measure at head, sill and midpoint horizontally to be certain that frame is not bowed, also measure from top to bottom across the entire frame from left to right to make sure there are no rises in the

sill or dips in the header. Rises in the sill or dips in the header could prevent the panels from being installed. Do not over tighten frame installation screws as this could warp the frame. (See Figure 5)



Helpful Tip: Use a short torpedo level across the sill (without setting it on the riser) and at the head to verify the sill and head are level from inside to outside. If the track at sill or head are not level from inside to outside it could cause stiff panel operation. It is important to make sure that the tracks align at the head and sill in order for the panels to roll correctly. Use a plumb bob to make sure the head and sill are in alignment, this is especially important in pocket conditions.

- 7) Attach frame to opening per CGI specifications and in compliance with all local code requirements, Miami-Dade NOA or test reports.
- 8) Once the frame is secured and is plumb, level, and square, seal installation screws.
- 9) After installation screws are sealed, install the mid sill inserts and open cell foam in sill ends as shown in 6b. Install track covers in the head (shown 6c below) and place 2 dust plugs in alignment with each header block (6c below).
- 10)Additional ½" round hole plugs are include in the kit bag to help seal sill anchorage holes.



Figure 6a



Note: For main frame screw covers.

Snap the screw cover in on one side at head then slide the cover over all the way into the jamb (past the jamb track), do the same with the other side. The material may need to be arched to get it in tight (See Figure 7)



Note: Main frame *jamb* screw covers in tracks where keepers or fixed panel clips will be installed should be installed at the end of installation. This allows for proper placement and adjustment of keepers and clips.

If unit is not a pocket door continue on to panel installation.

1) Next attach the P-hook.

Note: Pocket doors will only assemble at head, jamb and sill if single pocket. Double pocket main frame is not assembled as there are no jambs supplied with the unit.

 Hook strip P-hook will attach interior panel to substrate. Attach frame and hook strip to opening as per CGI specifications and in compliance with all local code requirements, Miami-Dade NOA or test reports. (See Figure 14)



- The P-hook is notched so that the exterior side projects into the head and sill. The notched area sits on top of the sill and just under the header. Below is a P-hook assembly (See Figure 15 below)
- To set the location of the p-hook relative to the opening, align it against the riser. If the riser was already installed before assembly. If not locate the interior edge of the p-hook even with the opening or edge of recessed wall. (See Figure 15)



- 5) Once the frame is secured and is plumb, level, and square; seal installation screws.
- 6) Next install the main frame head screw covers and P-hook screw covers.

Note: For pocket doors with main frame jambs - the main frame jamb screw covers conceal where the keepers will be mounted and should be installed at the end of installation. This will allow for proper placement and adjustment of keepers. The main frame jamb screw covers will need to be trimmed to size once keepers have been adjusted.

PANEL INSTALLATION

CGI offers many sliding glass door configurations, please see the panel orientation sheet to make sure the correct panels are on the correct tracks.

 Shipping labels on panels will have the panel # and letter name on them; they will be installed in order from left to right. Please see the configuration page for the proper track the panel goes onto. (See Figure 16)



 Position panel so that the top of panel slips over track frame header. Swing bottom of panel in until bottom of panel is aligned over sill and set panel on roller spline. (See Figure 17)



Important: Panels must be inserted at specific locations. There is a slot in the panel head that corresponds to the location of the header block (see Figure 17b above)

- 3) Repeat procedure, with next outer panel until all panels are installed.
- Panels are always installed with roller adjustment holes to the exterior Figure 18a.
 - To adjust rollers on panels use a Phillips head screwdriver to turn adjustment screws located on the bottom outside of panel. Screw guns can strip the adjustment and therefore are not recommended. (See Figure 18b)



5) To raise panels, pick up the panel at the edge to relieve the weight pressure on the wheels and then adjust by turning adjustment screw clockwise. To lower panels turn adjustment screws counter clockwise then use weight pressure on the panel to set the wheels to the new adjustment level. (See Figure 19a)



WARNING: When raising and lowering the wheels, if you feel pressure do not continue as this could cause the adjustment screw to strip. Adjust each panel until all panels roll freely and all panels' stiles and frame jambs are parallel when in the closed position.

6) Once all panels are set into place and have been adjusted properly, check the reveals and operations to verify that everything is in proper working order. Place hole plugs over adjustment holes You are now ready to start to install the hardware.

It is recommended to install the locking hardware BEFORE attaching any of the fixed panel hardware.

LOCKING HARDWARE

Door to Jamb Connection shown Astragal attachment is the same (See Figure 20)



Figure 20

HANDLE SET INSTALLATION

- 1) On the interior of door panel, place the E-plate with posts aligned into fabricated holes.
- 2) On exterior of door panel, place the exterior handle with posts aligned into fabricated holes.
- 3) Attach E-plate and exterior handle using the two longer flat head screws provided.
- 4) Align the lever with tail piece into the slot of the mortise assembly.
- 5) Place the interior handle with posts aligned into the E-Plate; lever should be between handle and E-plate.
- 6) Fasten on the side of the handle set with two short flat head screws provided.

Notes:

• Latch may not be operated unless the safety pin (located between the two mortise cams) is depressed.

KEEPER INSTALLATION

- 7) Attach keeper to frame jamb using four (4) #10 X 2" flat head screws. Pre-drill holes using a #18 or 11/64 (.170"-171" dia.).
- 8) Locate & preliminary mount: Transfer a pencil mark from the center of the panel mortise lock (or between the mounting holes) to the jamb track. Center the keeper directly on pencil mark and fasten into slotted hole first for location. Check the door for locking operation before mounting remaining screws.
- 9) With the mortise lock latch extended, adjust the keeper to maximize bite with the latch. Check operation of the lock and adjust the keeper up or down if required.

HELPFUL TIP: There is adjustment on the latch to move the cams in or out. Adjust the cams independently to remove play or add play to the latch engagement in the panel. If the unit has fixed panels it is recommended to adjust the cams in tight until the fixed panel is secured. Once the fixed panel(s), fixed panel clip, have been completely installed readjust cams to allow for a little bit of play in the operating door(s). (See Figure 21)



1) If the door has the recessed hardware or any secondary lock hardware, follow the same procedures listed above.

FIXED PANEL HARDWARE

- 1) Each fixed panel has one 6" fixed panel clip.
- 2) The fixed panel clip will push into the center of the panel as shown below. Glide the panel against the jamb and anchor thru jamb using installation screws. (same screws used to install frame into opening).



3) Once the clip is fastened to the frame jamb positioned to the inside of the house, lock the operating panels to the main frame jamb with the mortise lock cams adjusted all the way in.

- 4) The fixed clip can be hidden view on the exterior by driving one of the standard screw covers between the panel and frame on the exterior.
- 5) There is an optional trim that will be available to hide the clip from view on the interior as well. The trim is installed on the interior of the home and will fit between the stile of the door and the main frame jamb leg. This trim runs the full height of the panel.

Be sure to reference the test report or Miami-Dade NOA for proper quantity and placement of the fixed panel clips.

SCREEN FRAME INSTALLATION (Box Screen)

Note: Screen main frame will be separate from panel main. If the unit does not have screens, please skip to the next section.

Screen Frame Assembly

- 1) The screen frame add-on head, jambs, & sill must be installed into the main frame.
- 2) Start with the screen sill and head; it will connect into the main frame sill accessory groove. (See Figure 23)
- 3) Insert tail piece straight into the utility groove. (See Figure 27)
- 4) Last, connect the screen frame jambs to the main frame jambs. The jamb piece is square cut and is located between the head and sill notched areas.
- 5) Insert tail piece and push straight into accessory groove locating (See Figure 27)



Note: There are not any anchorage requirements for the screen frame so attach as needed to hold the screen frame into place.

- 6) Seal under entire length of sill and all frame seams and also apply a small amount of sealant where screen mainframe and glass door main frame meet.
- 7) Shim as necessary to make screen frame plumb, level and square. Shim behind all frame jamb and header installation screws and near keeper to prevent frame distortion when installation screws are tightened.

SCREEN PANEL INSTALLATION (Box screen)

• Position panel so that top of panel slips into frame header fin. Swing bottom of panel in until bottom of panel is aligned over sill add-on track and set panel roller on track. (See Figure 24)



- 1) Repeat procedure, with next in line screen until all screens are installed. Please see the configuration page for the track the screens go on to.
- 2) Make sure to adjust screen rollers (end adjust) before adjusting final screen keeper.





2) Please see figure 25 above, box keeper must be installed with screen spacer provided. This will prevent the screen from extending too far into the jamb. This keeper is attached using the 10x1" Phillips head pan tek screw include in the kit bag.

Note: Frame head and track must be level and frame jamb must be plumb at jambs. Measure at head, track and latch to be certain that frame is not bowed. Do not over tighten frame installation screws this will warp the frame and prevent the screen(s) from operating properly.

Notes:

- The screen panel has a ½" clear bumper adhered to the edge of the latch hole. This is to silence contact between the jamb and panel. If this bumper is not in place attach a new one from the parts kit.
- If unit is an OXO then the screen astragal adapter and screen astragal will need to be installed. It will be installed at the end of the installation and is in the parts and pieces section of this Assembly Instruction Manual.

SCREEN FRAME INSTALLATION (Standard Screen)

If the unit does not have screens, please skip to the next section. The standard screen rides on the same mainframe as the glass panels with the addition of one sill screen/finishing rail.

1) Attach the standard screen track in place as shown below. (See Figure 26)



Figure 26

Note: If unit is an OXO then the screen astragal adapter and screen astragal will need to be installed. It will be installed at the end of the installation and is in the parts and pieces section of this assembly instruction manual.

SCREEN PANEL INSTALLATION (Standard screen)

 Position panel so that top of panel slips onto frame header fin. Swing bottom of panel in until bottom of panel is aligned over sill add on fin and set panel roller on fin. (See Figure 27)



- 2) Repeat procedure, with next in line screen until all screens are installed. Please see the configuration page for the track the screens go on to.
- 3) Make sure to adjust screen roller before attaching keepers.
- 4) Attach screen keeper to jamb using #6x1" screw shown in figure 28 below.



PARTS AND PIECES

After the above steps have been completed, the unit is operating properly, and is set in place you are ready for the final parts and pieces.

High Pile Dust Plugs

Dust plugs are used to fill any voids where interlocking panels are set in the closed position and require a weather seal. If dust plugs haven't already been inserted during assembly, place them now. Position two dust pads in the head above the interlocking section of the doors. To do this, insert them in between the tracks so that they align with the header blocks.(see figure 29 below)



Figure 29

Note: Pocket doors will also require a dust plug added to the sill facing the interlocking panel. (see Figure 30) Also note: riser butts against and is sealed to p-hook.



Note: The pads should be applied to a dry clean surface; therefore it may be necessary to clean the surface before applying the adhesive high pile dust pads.

Door Stop

Door stops are required so panels do not run past other panels or interfere with handles. The door stops are typically located at the top of the panel. See Figure 31.



For pocket configurations or 3-track configurations, the door stop will need to attach to both sides of the interior panels. This will act as a come-a-long for the other panels. As each panel moves, the door stop will catch the other panel and push it along the track.

Steps to install door stop:

- 1) Drill 5/16" pilot hole for bumper housing at door stop location.
- 2) Insert metal housing so that rubber portion faces opposing panel.
- 3) Fasten metal housing to panel with a #8x3/4 FH self-drilling screw.
- 4) Attach rubber portion to metal housing as shown in Figure 32.



Figure 32

Adjustment Hole Plug

Once the doors are installed and working properly, install the roller adjustment hole plugs. There are two per operable panel and should be located on the outside face of the door. (See Figure 33)



OXO Screen Astragal Adapter

If the unit has screens and is an OXO configuration, then the screen astragal and screen astragal adapter will need to be installed. Take the OXO adapter and install it onto the astragal base. This is applied to the exterior of the stationary panel's astragal base as shown in figure 34a and 34b below.

Use five $\#10 x^{3/4}$ " self drilling screws to attach the astragal adapter to the glass panels astragal base. This can be predrilled using a #18 or 11/64" drill size.

Once installed latch keepers may be installed and raised or lowered to make proper contact with latch P-cam. Caulk any seams where the astragal adapter and astragal meets head or sill. (See Figures 33 below)



Figure 34a

Figure 34b

Final Screw Covers

Once the installation is complete, install any remaining screw covers. This includes screw covers that need to be cut to size that fit above and below the frame jamb keepers or astragal keepers. If the unit is a pocket door, there will also be a screw cover for the screws on the P-hook. Figure 34



Figure 35

Special Feature Note:

This door has unique features that allow for versatility in the field. Here is an additional feature for the advanced user.

Changing the Stack:

The interlock design used on this product allows the panels to move from interior tracks to outer tracks thus reversing the stack of the unit without requiring the glass to be deglazed from the product. Not all units are capable of stack reversal. See Configuration Drawings to verify.

Steps to reversing the stack:

- 5) Remove the panel from the opening
- 6) Lay the panel down on a saw horse or supported surface
- 7) Slide off small interlock plate cover
- 8) Remove the screws attaching the interlock plate to the stile
- 9) Unsnap the interlock off the top or bottom, notice that there are two barbs that snap below the weather-strip groove
- 10) Flip the interlock so that it is now facing the other direction
- 11) Slide the interlock back into place making sure the barbs are in the weather-strip groove.
- 12) Re-snap the interlock
- 13) Reattach the interlock plate and cover
- 14) Reinstall the panel
- 15) Provisions must be made to cover small hole left from interlock plate removal. Perhaps the "1/2 roller hole plugs could be used to conceal and enhance the drilled hole.

Note: Last, changing the stack will not change a fixed panel to an operable panel (an XO will be still be an XO).

If you require additional help in reversing the stack or changing the configuration, please contact a CGI Sales or Customer Service Representative.

OPERABLE - PANEL TYPES						
PANEL LETTER						
K	SINGLE INTERLOCK			LOCKSTILE		
U (BOX OUT)	ASTRAGAL OUT			LOCKSTILE		
U (BOX IN)	ASTRAGAL IN	<u> </u>		LOCKSTILE		
A	SINGLE INTERLOCK			LOCKSTILE		
D	LOCKSTILE			SINGLE INTERLOCK		
J (BOX OUT)	LOCKSTILE			ASTRAGAL OUT		
J (BOX IN)	LOCKSTILE			ASTRAGAL IN		
M	LOCKSTILE		`_	SINGLE INTERLOCK		
INTEF	RMED	IATE	- PANEL T	YPES		
PANEL LETTER						
(BOX OUT)	SINGLE INTERLOCK			ASTRAGAL OUT		
LR (BOX OUT)	ASTRAGAL OUT			SINGLE INTERLOCK		
(BOX OUT)	ASTRAGAL IN		``]	SINGLE INTERLOCK		
(BOX IN)	SINGLE INTERLOCK			ASTRAGAL IN		
В	SINGLE INTERLOCK			SINGLE INTERLOCK		
F	SINGLE INTERLOCK		`_ _	SINGLE INTERLOCK		
E	SINGLE INTERLOCK			SINGLE INTERLOCK		

FIXED - PANEL TYPES							
PANEL LETTER							
Р	SINGLE INTERLOCK		FIXED LOCKSTILE				
R	FIXED LOCKSTILE		SINGLE INTERLOCK				
Т (вох оит)	ASTRAGAL OUT		FIXED LOCKSTILE				
(BOX IN)	ASTRAGAL IN		FIXED LOCKSTILE				
S (BOX OUT)	FIXED LOCKSTILE		ASTRAGAL OUT				
S (BOX IN)	FIXED LOCKSTILE		ASTRAGAL IN				

CONFIGURATIONS WITH BOX SCREENS









PARTS									
DESCRIPTION		PARTS BAG QTY.	DESCRIPTION		PARTS BAG QTY.				
	FRAME ASSY SCREW #8 x 1" LONG	16 per bag		SCREEN LATCH KEEPER	1 per operable screen				
	Screw used to assemble the main frame.			Screen latch keeper is used with the standard panel pull on the box screen. Attaches to the main frame jamb to allow the screen to lock in to the jamb.					
	DOOR STOP SCREW #8 x 3/4* LONG	1 per bumper		ROLLER ADJUST HOLE PLUG	2 per panel				
	Screw used to attach the stop to panel.		Ø	Round plug used to fill the hole for the adjustment screw on the rollers.					
	KEEPER SCREW #10 x 2" LONG	4 per Keeper		DUST PLUG (HIGH)	2 at each interlock connection				
	Screw used to attach the Aluminum K the jambs.	eeper to		Used on the main frame at the top of every operable panel interlock connecti	on.				
	SCREEN KEEPER SPACER	1 per scrøøn køøpør		FRAME HEADER BLOCK	1 at each interlock				
	Shim used to raise screen keeper off of for addictional adjustment.	of frame		6					
	FIXED PANEL CLIP		Ĭ	FRAME HEADER SCREW #12 x 3 1/2" LONG	2 per Block				
	HEAVY DUTY DOOR STOP Screw used to attach the stop is #8 x To be fastened to top of door panels.			FIXED PANEL CLIP SCREW #12 x 1 1/2" LONG					
	1° ALUMINUM KEEPER	1 per Mortise latch		CLEAR BOX SCREEN BUMPER 718521	1 per LOCKSTILE				
	The lock keeper is placed on the main or the astragal. This allows the panel to lock into the m lock into the astragal panel.	-	Round bumper applied to the slot at the edge of the screen latch hole. Several will be included in kit bag as well. BAG MAY BE SENT WITH EXTRA PARTS TO ACCOUNT FOR LOSS OR MISPLACEMENT OF SMALL PIECES.						