

# ElementShield Vinyl 7700 OUTSWING DOORS INSTALLATION INSTRUCTIONS

NOTE: Read instructions completely before attempting any installation.

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.

### **Notices**

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 <a href="https://www.epa.gov/lead">www.epa.gov/lead</a>.

CGI reminds you to recycle whenever possible and recycle responsibly. To properly dispose or recycle products being removed, please contact your local authorities.

### Tools & materials for install

- Impact Screw gun w/ Phillips P2 and P3 tips
- Hand drill
- Hand screw driver (Phillips)
- Caulk gun
- Rubber mallet
- Plastic shims (breakaway type horseshoe shims are ideal)
- Silicone for mulling (Dow 899 or equal)
- Perimeter caulk, urethane based is recommended.
- Glass cups for hanging panels

#### Installation Kit

Base Kit Consists of:

- (8) #10 x 2" Phillips flat head screws SS (frame assembly)
- (12) single door (24) double door, #10 x 1" stainless steel deck type screws
- (4) single door (8) double door 3/16" x 2 3/4" Concrete fasteners
- (4) Frame Screw snap covers
- Handle/trim set

Mull Kit (for sidelight/transom assembly)

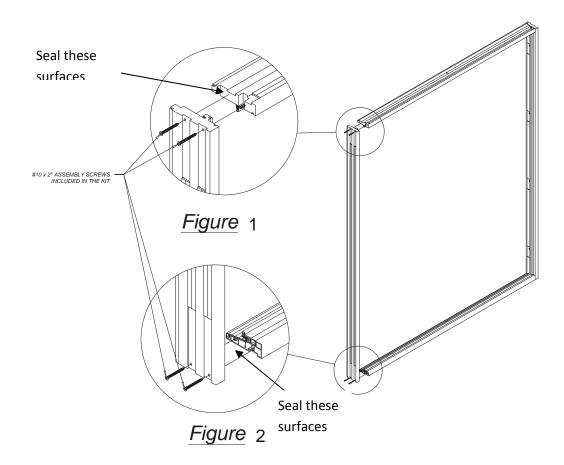
- 1 per sidelight/transom mull bar
- 2 per mull bar Trim snap cover
- 4 per mull bar #10x 2" Phillips flat head screws

# **Shipping Information**

- Frames are shipped KD (assembly screws provided in "kits")
- Panels shipped separate with hinges pre-attached
- Hardware box consists of "Installation kit" and optional handle/trim set

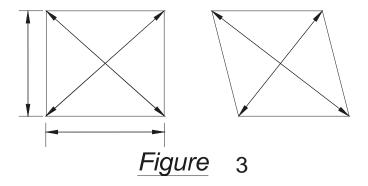
# **Frame Assembly**

The frame members are shipped KD. Assembly holes are pre-drilled in the jamb sections. #10 x2" flat head sheet metal type screws are furnished in the Installation kit. See the views in **figure 1 and 2** to establish proper assembly between the head/jamb and sill/jamb assemblies. Place sealant on mounting surfaces before assembly for water tight joint.



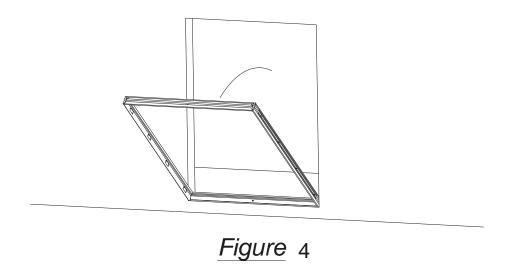
### **Opening Preparation**

Check installation opening for plumb and square. Making sure there is sufficient clearance to fit the frame and will allow proper shimming. Check cross dimensions to ensure the opening is square. **See figure 3** 



## **Installing the frame**

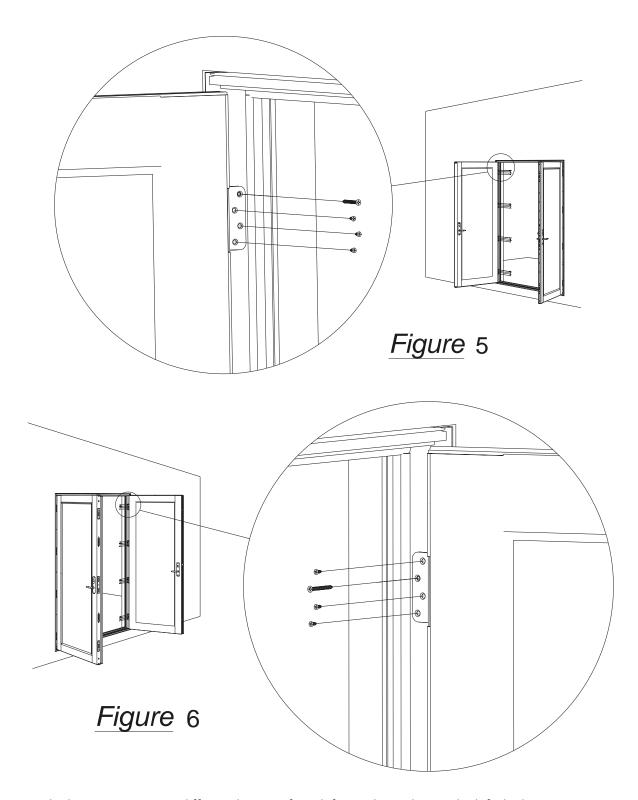
When proper fit is established prepare the opening for setting the frame. It is recommended that fasteners are not fully tightened when presetting the frame. Final adjustment may be necessary after hanging the panels. **See figure 4** 



Note: To ensure proper fit it is advised that the frame be dry fit into the opening before caulking and fastening. When initially fastening the frame (inside holes) try not to over tighten the screws. There may be some additional adjustment needed after hanging the panels.

# Hanging the panels

The product is shipped with the hinges pre-installed on the panels. When preparing to hang panels glass cups can make manipulating the panels much easier. Prepare a block (possibly 2X lumber) to rest the panels while fastening into the frame. The screws used for attaching each hinge to the jamb is (3) #10x1" SS deck type screws and (1) 3/16" concrete anchor (or Tapcon) through each hinge for additional hinge support. It is preferable to first hang the panel using the #10X1" screws then after one or both panels are hung fasten using the concrete anchors. See figure 5& 6 below



**Please Note:** the larger screw is in a different location from left panel to right. On the left the hinge supporting screw (concrete screw) goes in the top hole of each hinge. The right panel screw is in the 2<sup>nd</sup> hole from the top of the hinge. All hinge anchors are furnished in the "Installation kit". See note below when screwing into mullions.

Notes for Doors with sidelight: If you are attaching the door frame to a sidelight, use the #10 x 2" screws also used for frame assembly through the hinge instead of the concrete fasteners included in the kits. See **figures 7&8 below** showing typical mounting details. **The fastener covers fit tightly. Do not install until inspection is complete.** 

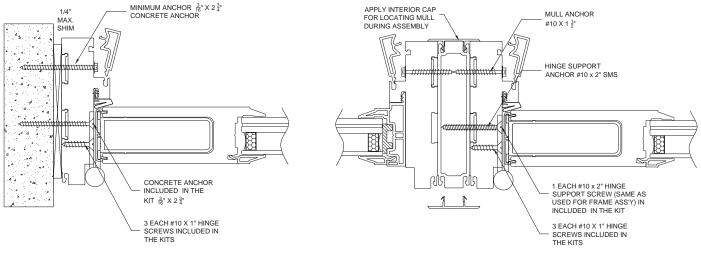
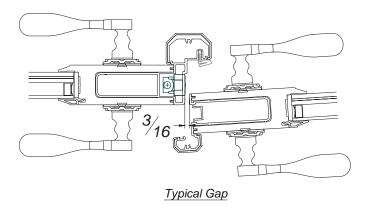


Figure 7

Figure 8

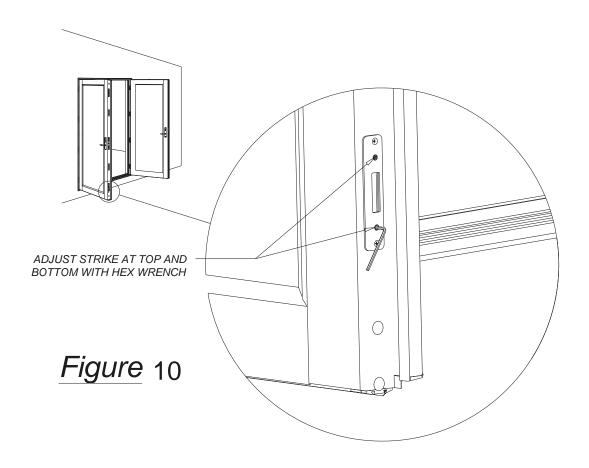
### Final Fit and activate locks.

After the panels are hung, first attach the handle sets according to manufacturer's instructions. Next close and latch the flush bolts in the inactive panel, then gently close the active panel to check for fit. Make sure the panels aren't clashing or there isn't any excessive space between them. There should be about 3/16" showing with the active panel slightly ajar **See figure 9** below.

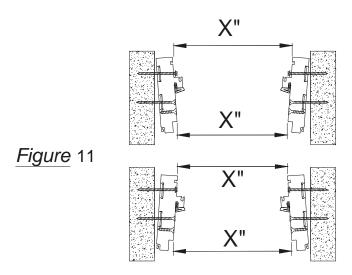


# *Figure* 9

Close the active panel against the weatherstrip until the latch is engaged. Turn the thumbturn to engage the deadbolt. This will allow you to lift up on the handle to engage the rhino hooks (located at both ends of the active panel). If the hook will not engage, there is an adjustment cam located on the hook strike plates. Using an 1/8" hex wrench (not included, adjust the upper and lower screw in each strike so the secondary plate moves to the exterior **See figure 10**.



If the panels are crashing or too far apart the jambs may have rotated during fastener installation. Measure inside to outside to make sure jambs are parallel and straight. This condition can be corrected by adjusting shims from inside to out. Over tightening fasteners can result in jamb rotation as well. Be sure and provide sufficient shim support at each anchor. **See figure 11** for jamb conditions.



# Doors with sidelights/transoms

Below **figures 12&13** are details showing the typical assembly of a sidelight or a transom to a door. Make special note of the location for sealant to create a sufficient barrier between interior and exterior. Be careful not apply excessive sealant between the mullion and the frame members; this will cause the frame to rotate during assembly. This can also result in the door crashing into the jamb. Clamping the assembled system and temporarily fastening the #10 x 2" screws through the predrilled hinge holes into the mull assembly will aid in a good parallel assembly (Note: the mull is not predrilled and will require a 9/64" drill bit, not included). **Note:** The fastener covers fit tightly. Do not install until inspection is complete.

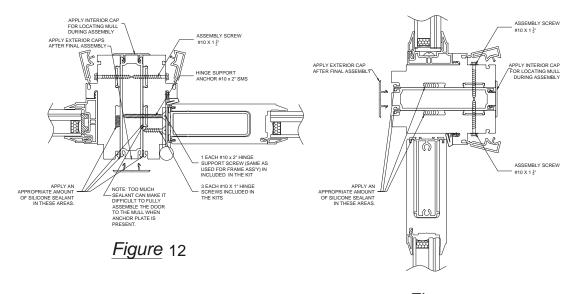


Figure 13

### **Finish Assembly**

After all panels are working correctly and all installation screws are installed, trim covers and installation screw covers can be installed. See figure 14 & 15 below for details showing trim attachment. Note the arrow type point on the screw cover should first be pushed into the groove in the door stop, see step 1, then using a mallet strike the cover diagonally to finish snap the cover into the base, see step 2 below. Note: The fastener covers fit tightly. Do not install until inspection is complete. After all assemblies are complete, perimeter sealing can be completed to create a weather tight assembly.

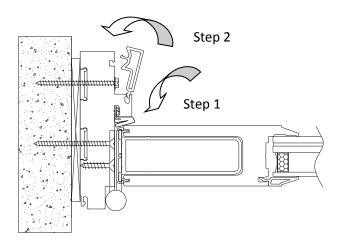


Figure 14

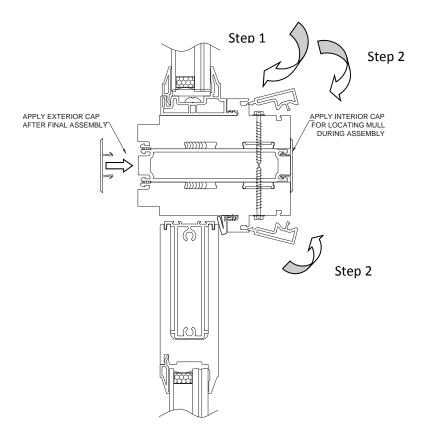


Figure 15

# Mullions using CGI 2" x framing

General notes concerning door& sidelight framing w/CGI mulling systems. To ensure a good product fit, fully install plastic trim covers after anchoring mull clips and prior to installing the products. See Figures 16 & 17.

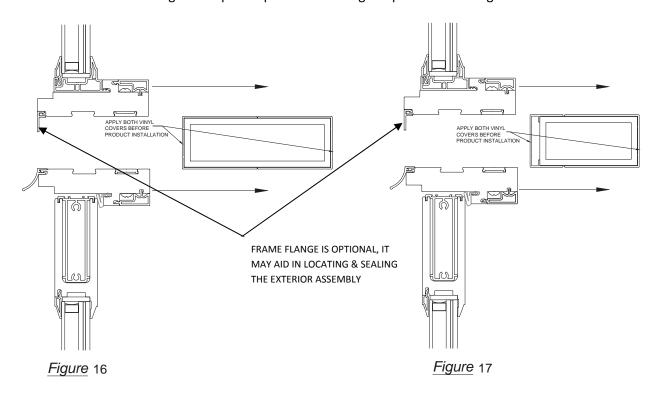


Figure 18 below shows products installed so that they are flush to the exterior. This will allow the door panels to swing open fully without mullion interference.

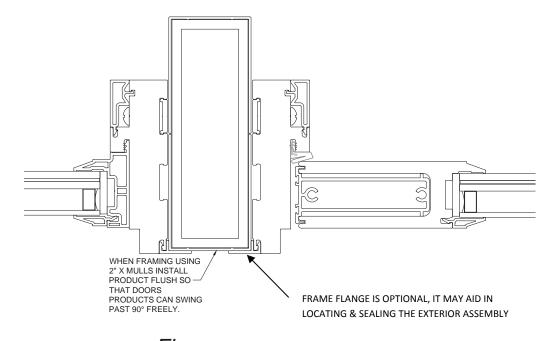
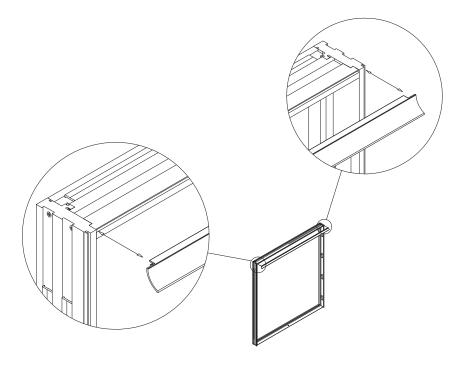


Figure 18

# **Drip Cap installation**

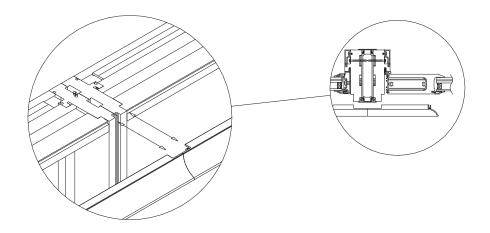
After all panels are working correctly and all installation screws, trim covers and installation screw covers are installed. Drip caps can be installed. Field notching will be necessary at the drip cap ends for a continuous run. See figure 19 below for details showing notch cap.



*Figure* 19

# Drip cap over mulled units

When doors are mulled with sidelights the drip cap should run the entire length. Field notching will be necessary to fit around the mull bars assembly. Mull cap can be installed after drip cap is installed. See figure 20 below.



*Figure* 20

### 7700 Lock bracket

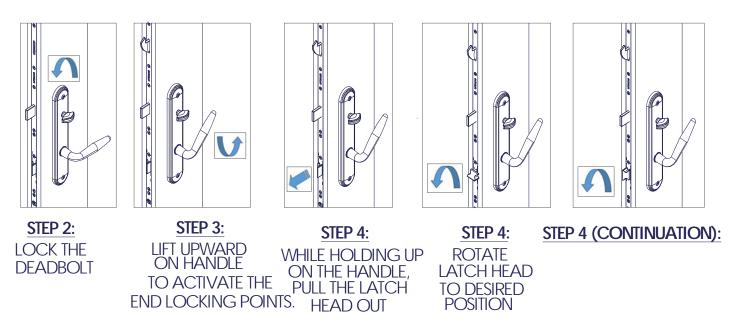
Door is shipped with a bracket covering latch and deadbolt for protection during shipment and assembly. Remove bracket after or during installation of the door. The two M4 x .7 x 10mm screws removed must be reinstalled into the lock assembly after bracket has been removed.



### Latch Head Reversing Procedure

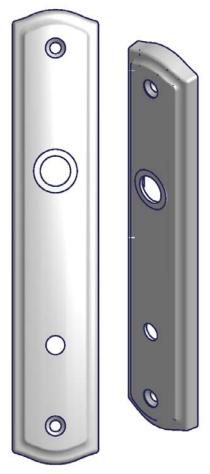
If the direction of the latch head is not oriented correctly for the handing direction for the door, the latch head direction can be easily changed by the following procedure.

- Step 1: Door must be open
- Step 2: Rotate deadbolt to full throw
- Step 3: Rotate handle upwards to engage locking points at each end
- **Step 4:** While holding handle up, pull latch head outwards and rotate to desired position
- Step 5: Retract Deadbolt first then rotate handle down to retract all locking points

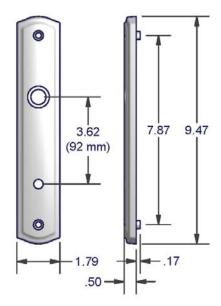


# **Handle/Trimset Information**

Below is a graphic depiction of the trimset CGI can provide as an option on the ElementShield Vinyl 7700 Swing Door. Included are standard dimensions CGI prefabricates all doors. These dimensions can be used to source alternate hardware.



"C" PLATE



SWING DOOR (7700 SD) HARDWARE KIT PARTS				
ITEM	PART No. & DESCRIPTION	PARTS BAG QTY.	COMMENTS	
	#10 x 2" Flathead Phill	4/8	Screw used to assemble the Main Frame	
	Frame Assembly Screw		Also: used to attach door frame at hinge to mull bar	
	Hinge Mull Assembly Screw			
	#10 x 1-1/2" Panhead	6/side	Screw used to attach the Sidelites & door	
NOT INCLUDED	Mull Bar Assembly		frame to the Mull bar	
	#10 x 2 ¾" Concrete anchor	4/8	anchor used for	
	Hinge Assembly		supporting hinges at frame	
	#10 x 1" Deck screw	12/24	Screw used for	
	Hinge Assembly		attaching hinges to frame	
NOT INCLUDED	#10 x 2-3/4" Concrete fastener	4 Dbl	Concrete anchor used to fasten all	
	Interior Mounting Screw NOT INCLUDED		frames at interior to concrete substrate	
	Handle	1 EA	Metal square handle used temporarily to	
	Temporary Handle For Latch Operation		operate the hardware of the door prior to installation of hardware trim set	
OPTIONAL	Handle	1 EA	Active trim set used	
	Dummy and Active trimset		on all door and dummy set for inactive panel	
	OPTIONAL ITEMS			