



element**SHIELD**<sup>TM</sup>

VINYL

## 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 [www.epa.gov/lead](http://www.epa.gov/lead).

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)

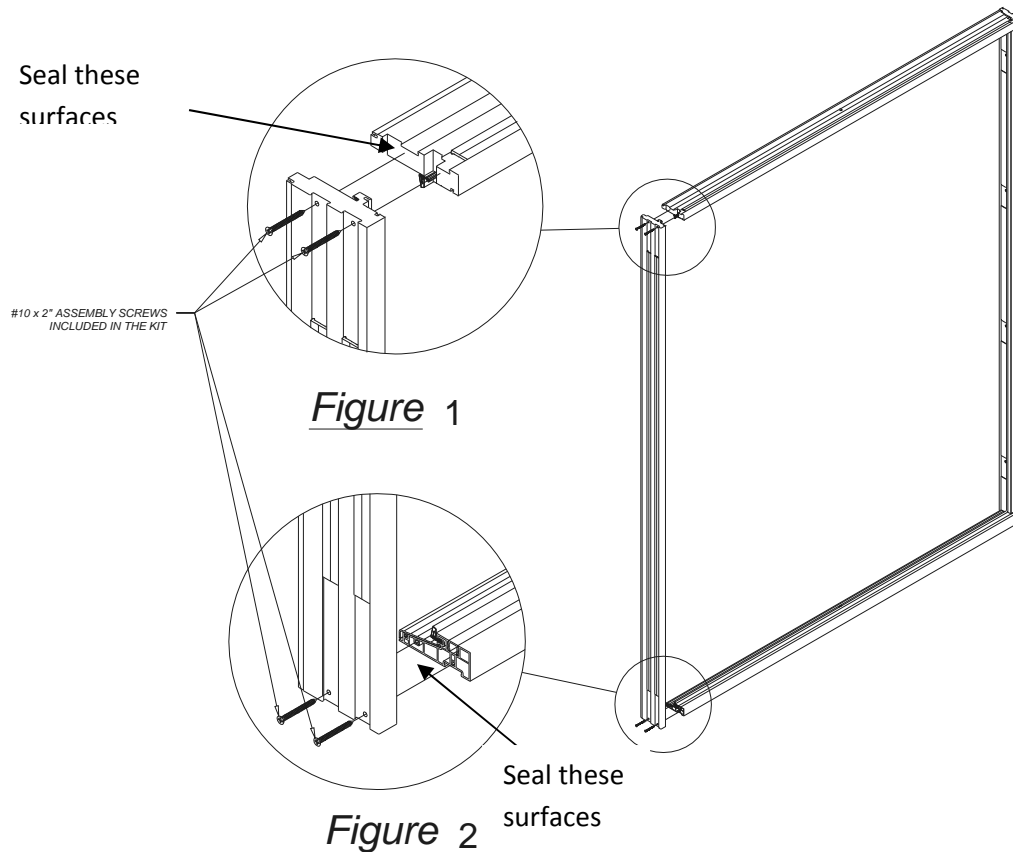
- 1 per sidelight/transom mull bar
- 2 per mull bar Trim snap cover
- 4 per mull bar #10x 2" Phillips flat head screws

## 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

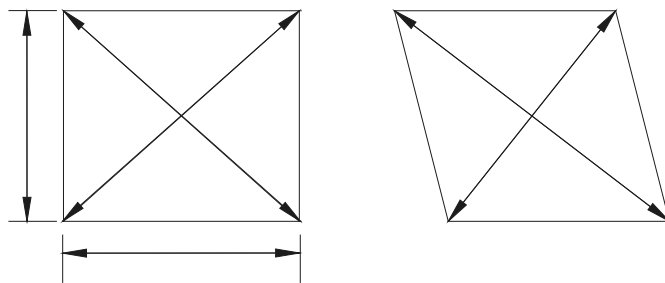
## Frame Assembly

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

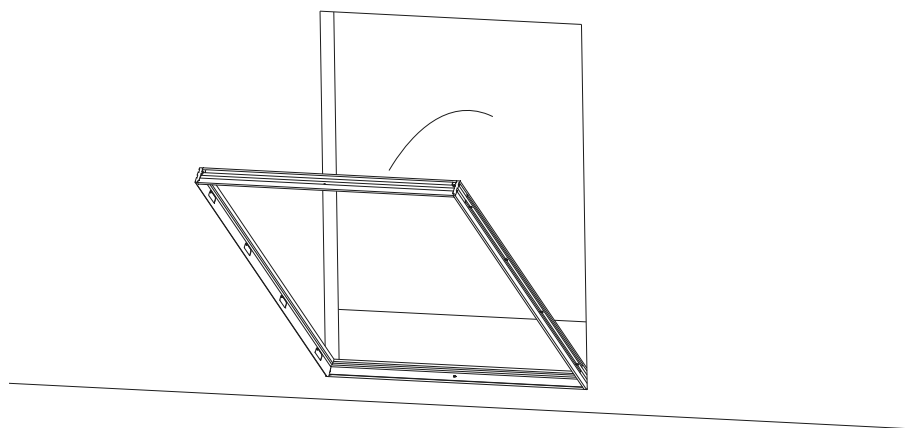
Check installation opening for plumb and square. Making sure there is sufficient clearance to fit the frame and will allow proper shimming. Check cross dimensions to ensure the opening is square. **See figure 3**



*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**

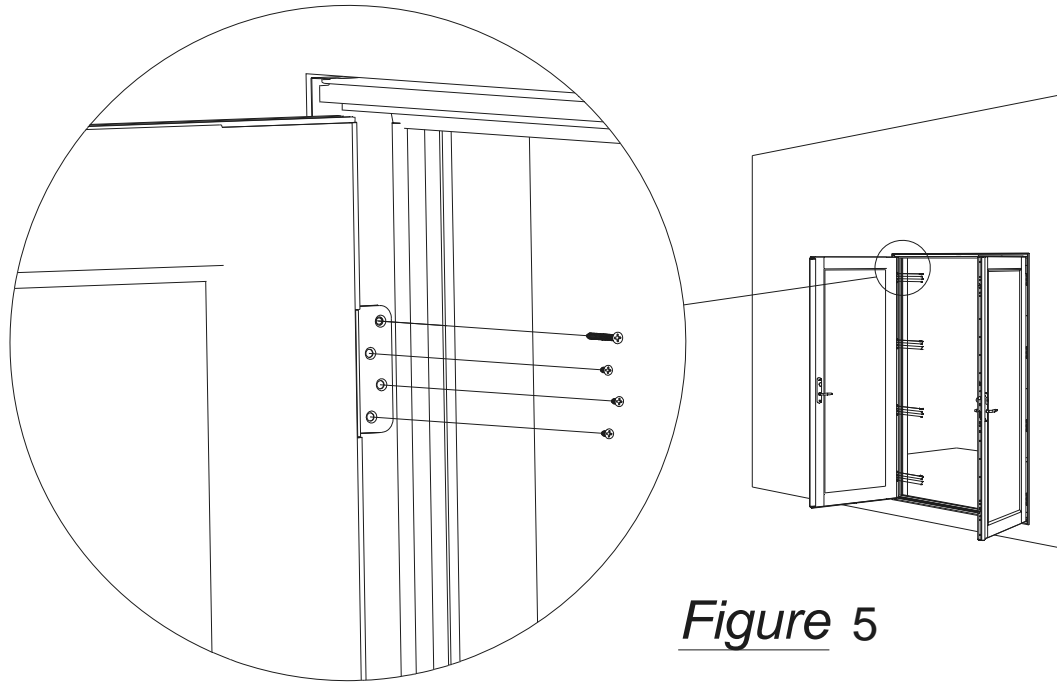


*Figure 4*

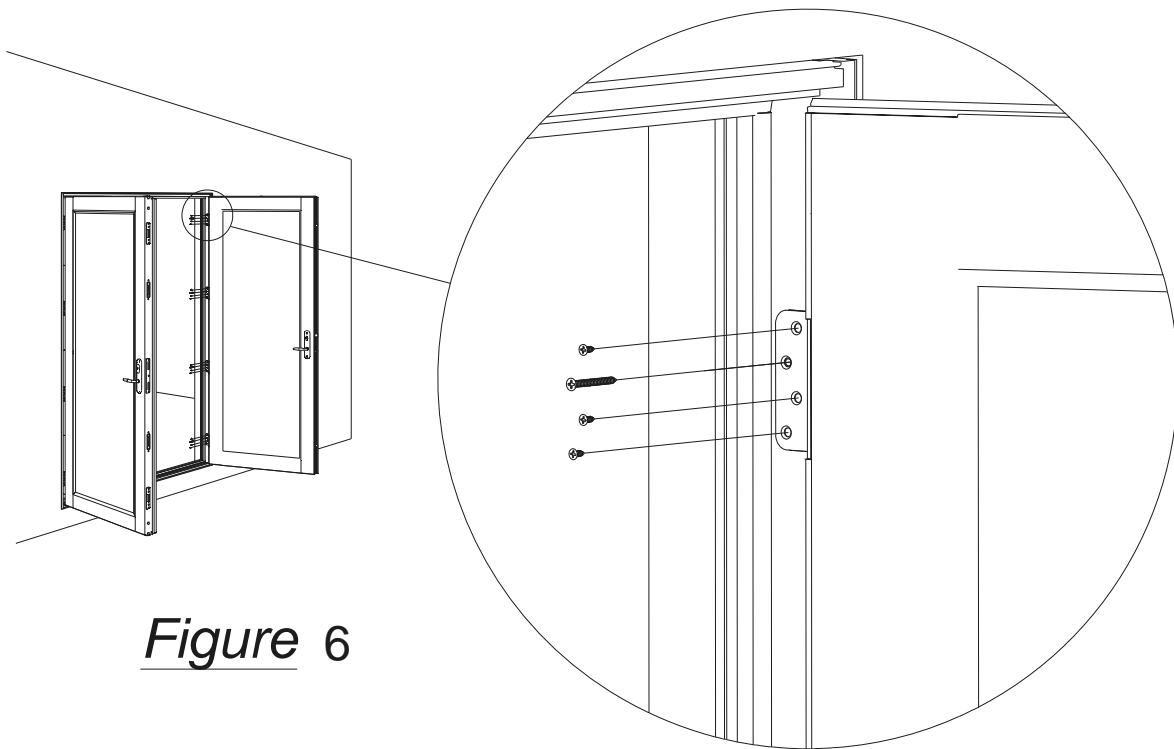
Note: To ensure proper fit it is advised that the frame be dry fit into the opening before caulking and fastening. When initially fastening the frame (inside holes) try not to over tighten the screws. There may be some additional adjustment needed after hanging the panels.

## 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**



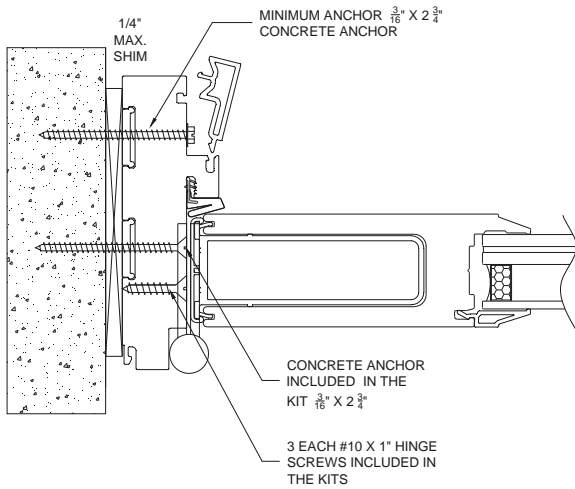
*Figure 5*



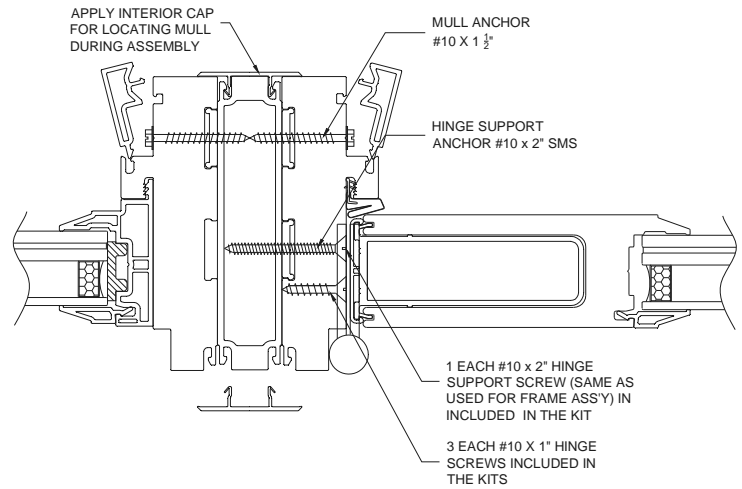
*Figure 6*

**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.**



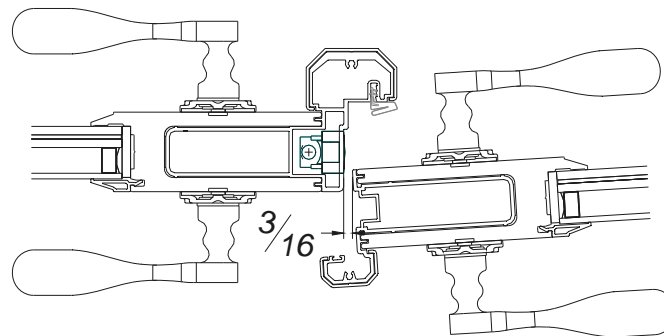
**Figure 7**



**Figure 8**

**Final Fit and activate locks.**

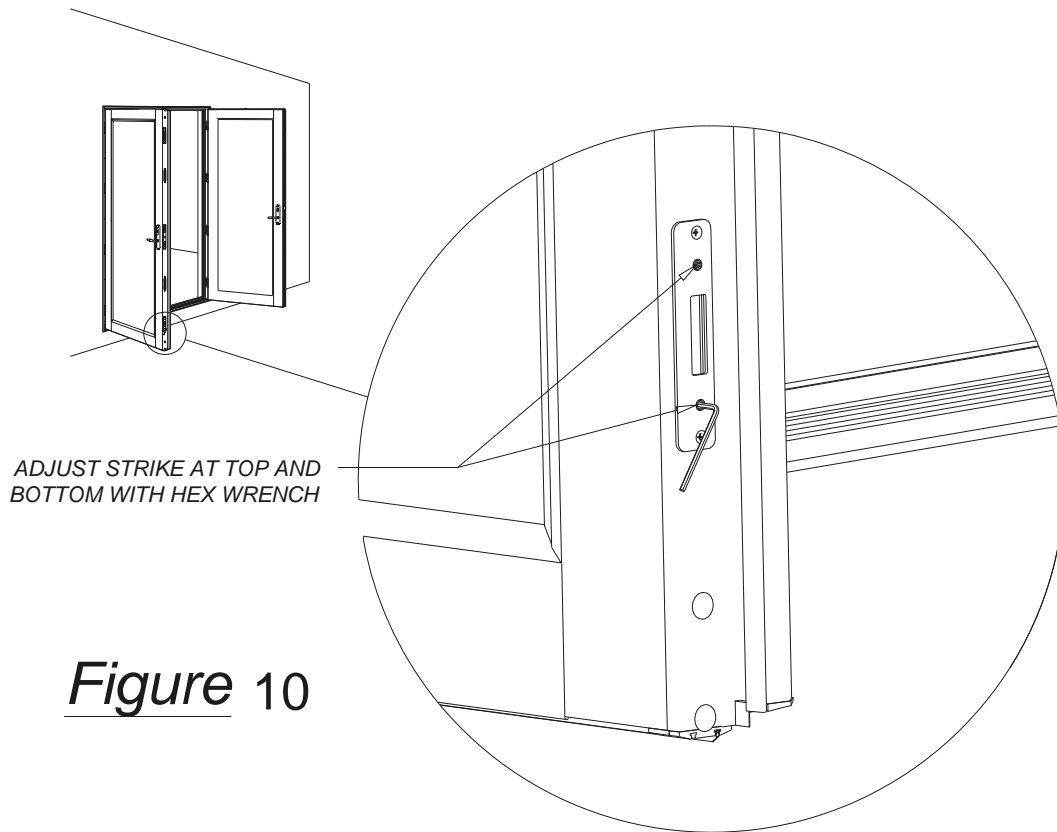
After the panels are hung, first attach the handle sets according to manufacturer’s instructions. Next close and latch the flush bolts in the inactive panel, then gently close the active panel to check for fit. Make sure the panels aren’t clashing or there isn’t any excessive space between them. There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



*Typical Gap*

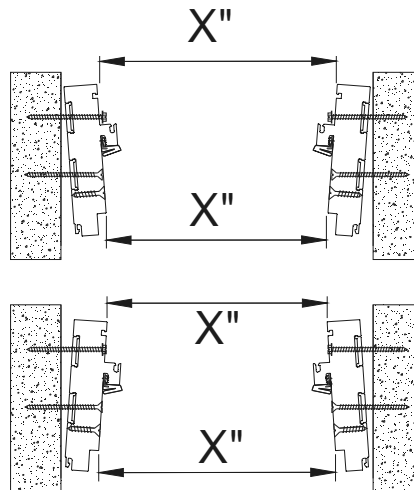
**Figure 9**

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.



**Figure 10**

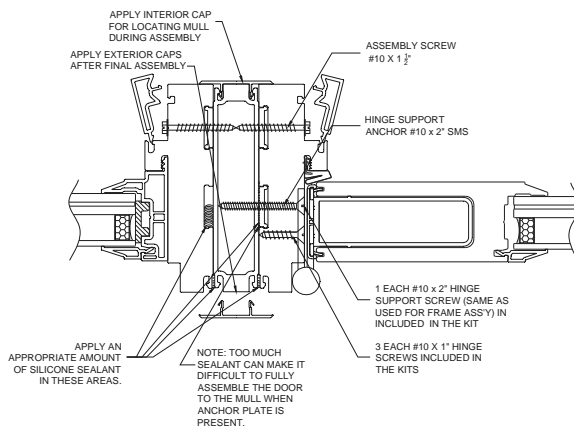
If the panels are crashing or too far apart the jambs may have rotated during fastener installation. Measure inside to outside to make sure jambs are parallel and straight. This condition can be corrected by adjusting shims from inside to out. Over tightening fasteners can result in jamb rotation as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



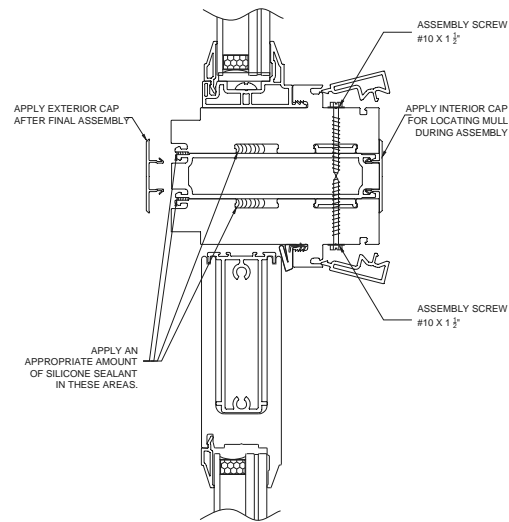
**Figure 11**

## 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 pre-drilled and will require a 9/64" drill bit, not included). **Note:** The fastener covers fit tightly. Do not install until inspection is complete.



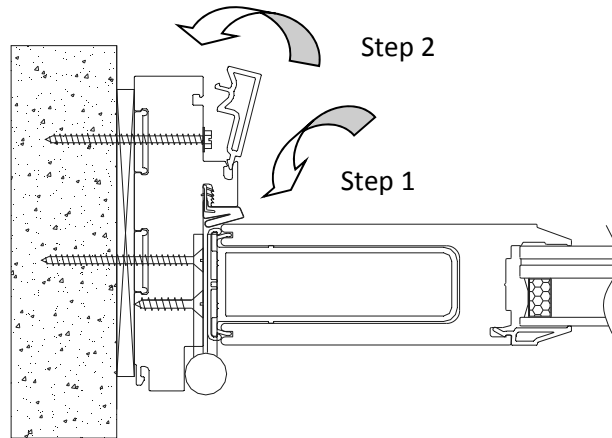
*Figure 12*



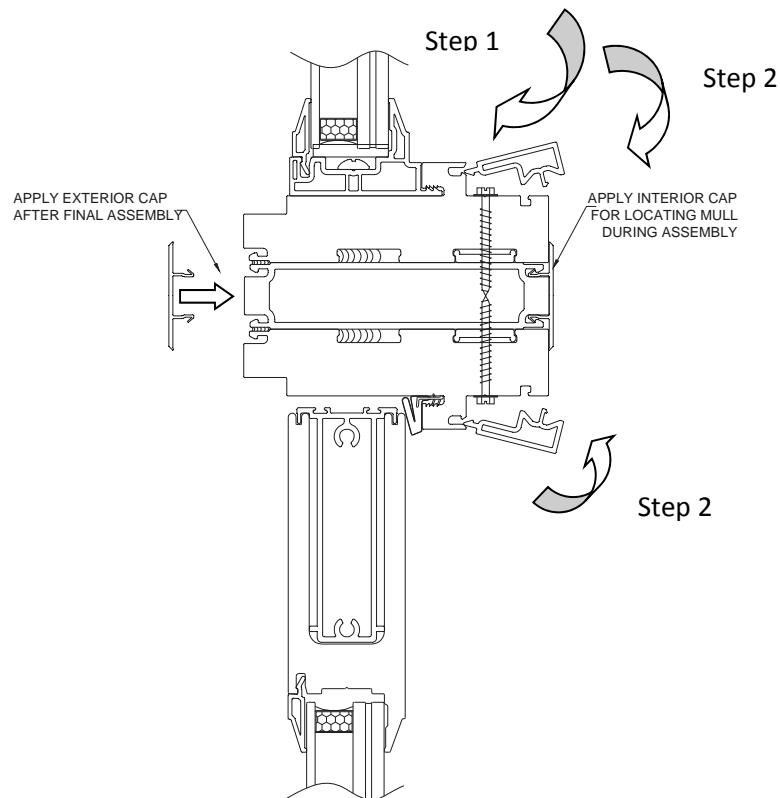
*Figure 13*

## 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.

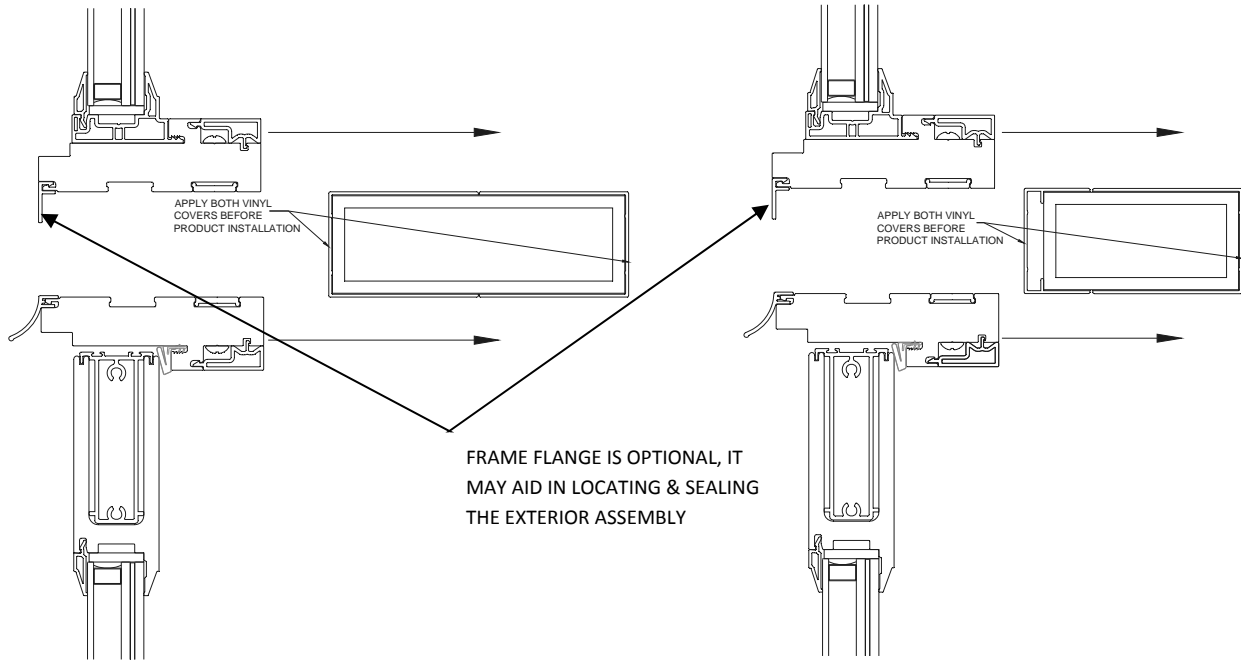


Figure 16

Figure 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.

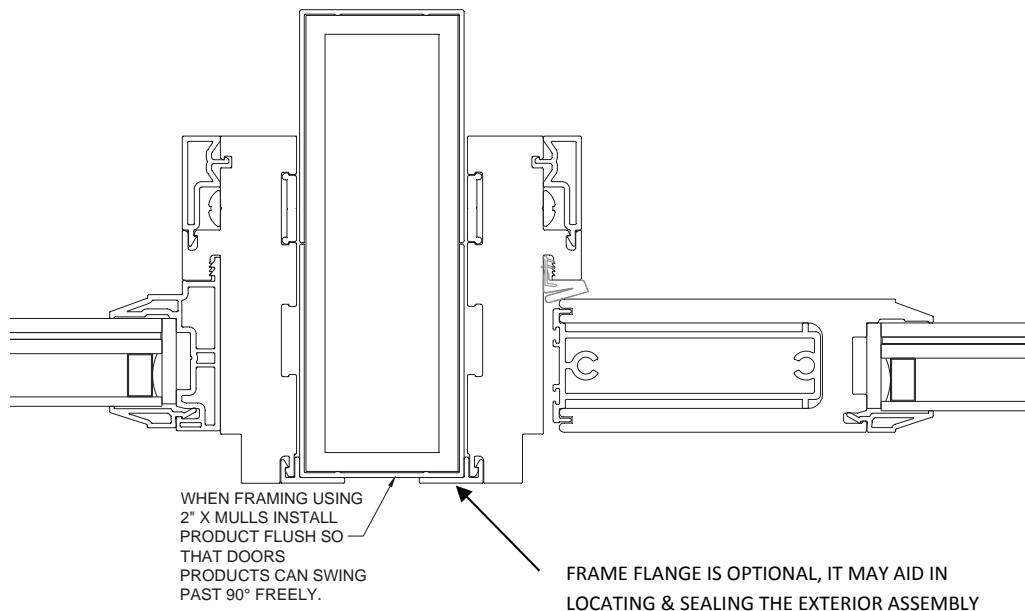


Figure 18

## **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.

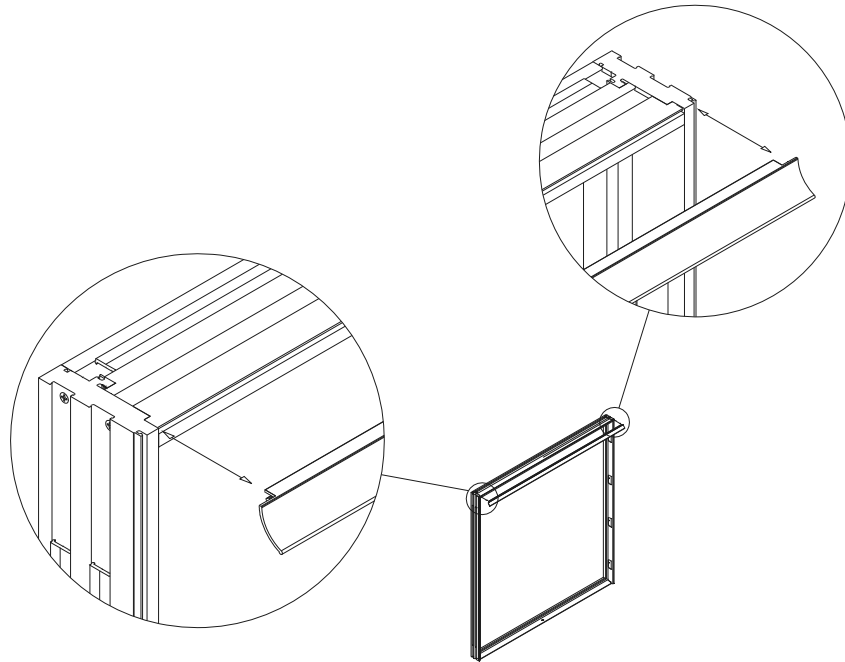


Figure 19

## **Drip cap over mullled units**

When doors are mullled 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.

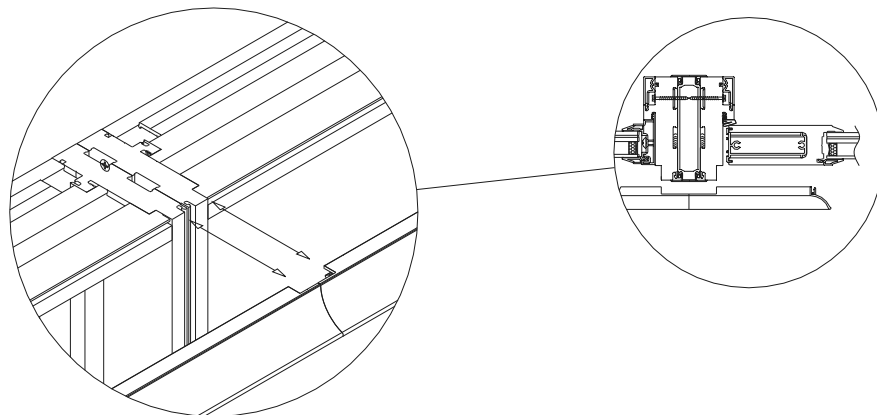


Figure 20

## 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.

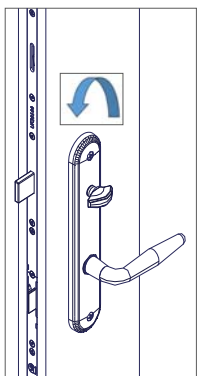
**Step 1:** Door must be open

**Step 2:** Rotate deadbolt to full throw

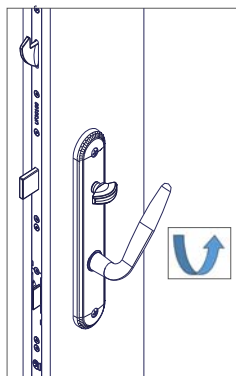
**Step 3:** Rotate handle upwards to engage locking points at each end

**Step 4:** While holding handle up, pull latch head outwards and rotate to desired position

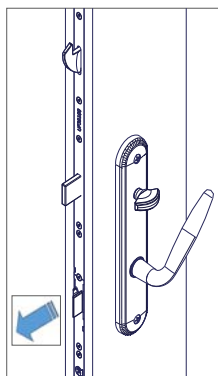
**Step 5:** Retract Deadbolt first then rotate handle down to retract all locking points



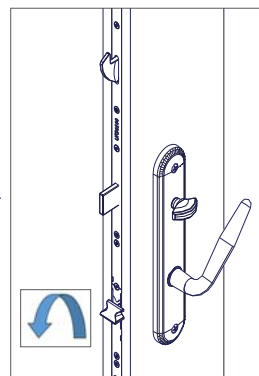
**STEP 2:**  
LOCK THE  
DEADBOLT



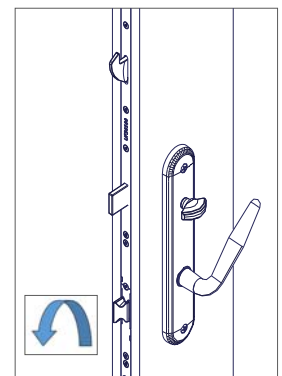
**STEP 3:**  
LIFT UPWARD  
ON HANDLE  
TO ACTIVATE THE  
END LOCKING POINTS.



**STEP 4:**  
WHILE HOLDING UP  
ON THE HANDLE,  
PULL THE LATCH  
HEAD OUT



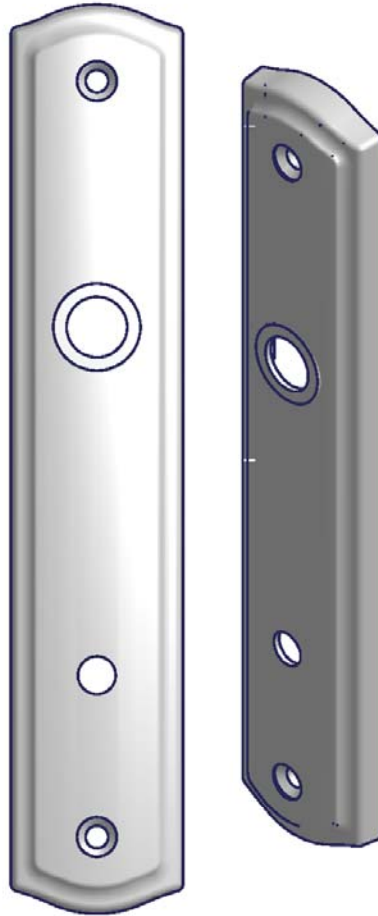
**STEP 4:**  
ROTATE  
LATCH HEAD  
TO DESIRED  
POSITION



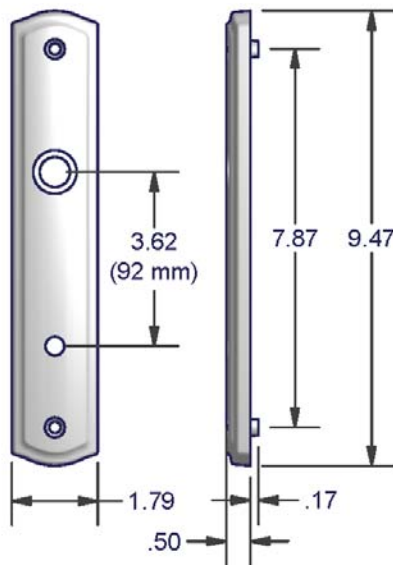
**STEP 4 (CONTINUATION):**

## Handle/ Trimset Information




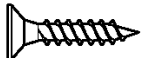
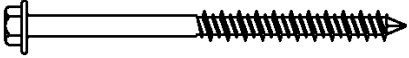

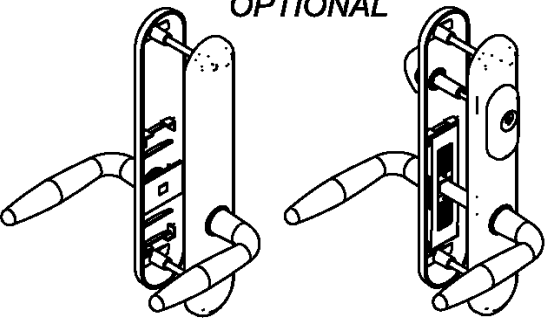
Below is a graphic depiction of the trimset CGI can provide as an option on the ElementShield Vinyl 7700 Swing Door. Included are standard dimensions CGI prefabricates all doors. These dimensions can be used to source alternate hardware.



**"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 Also: used to attach door frame at hinge to mull bar
	Frame Assembly Screw Hinge Mull Assembly Screw		
 NOT INCLUDED	#10 x 1-1/2" Panhead	6/side	Screw used to attach the Sidelites & door frame to the Mull bar
	Mull Bar Assembly		
	#10 x 2 3/4" Concrete anchor	4/8	anchor used for supporting hinges at frame
	Hinge Assembly		
	#10 x 1" Deck screw	12/24	Screw used for attaching hinges to frame
	Hinge Assembly		
 NOT INCLUDED	#10 x 2-3/4" Concrete fastener	4 Dbl	Concrete anchor used to fasten all frames at interior to concrete substrate
	Interior Mounting Screw NOT INCLUDED		
	Handle	1 EA	Metal square handle used temporarily to operate the hardware of the door prior to installation of hardware trim set
	Temporary Handle For Latch Operation		
 OPTIONAL	Handle	1 EA	Active trim set used on all door and dummy set for inactive panel
	Dummy and Active trimset  OPTIONAL ITEMS		