

650.650 SGD – Field Installation Manual

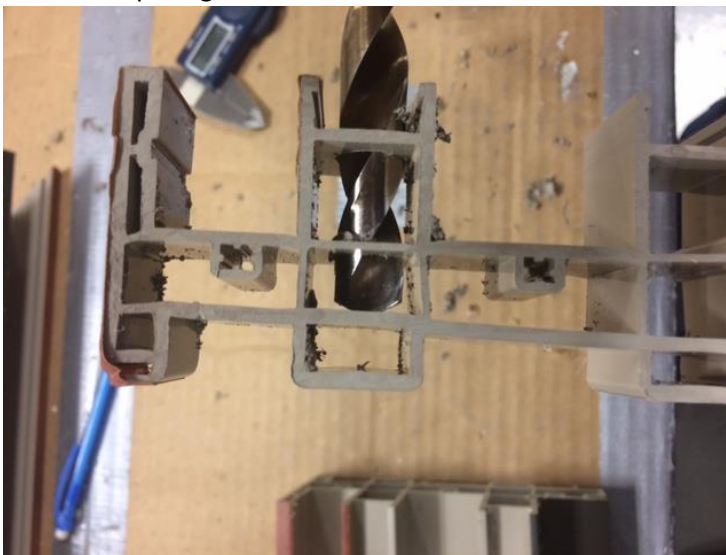
Items needed to complete installation:

- Drill / Impact / Screw Gun
- Hammer Drill (tapcon installations)
- Standard 3/16" Drill Bit
- Standard 1/2" Drill Bit
- Standard 1/8" X 6" Drill Bits
- Standard and 6" #2 Phillips Screw Driver Bits
- Medium Rubber Mallet
- Tape measure
- Level
- 2 tubes of waterproof caulk and hand caulk gun
- Flathead Screwdriver
- #3 Philips head Screwdriver
- 5/16" Hex Head Driver Bit
- Shims
- Mortar mix (optional) for dressing up, leveling or "wet set" applications in a concrete recess

Frame Build:

Note: SGD orientation for Moving / Fixed Panels is always from Exterior of building. X = MOVING; O = FIXED

1. Lay Frames on flat surface, using a 1/2" bit, drill installation pilot holes through the first track along the head, sill and jambs. (Tracks are the sections the panels straddle over), continue this until all tracks have been drilled. Jambs are drilled 6" from each end and 21" maximum on center in field. Head and sill is drilled 5" from each end and 12 3/4" maximum on center in field. When assembled, these will measure 6" overall from the end of the frame in each corner.
2. The depth of the holes is through is through 2 walls.
 - a. Drilling of the pilot holes on shall start 6" from top and bottom corners on the jambs with 21" maximum on center spacing in field.



- b. Drilling of the pilot holes on the head and sill shall start 5" from the ends and with 12 3/4" maximum on center spacing in field.

IF ADDITIONAL TRACKS ARE REQUIRED.

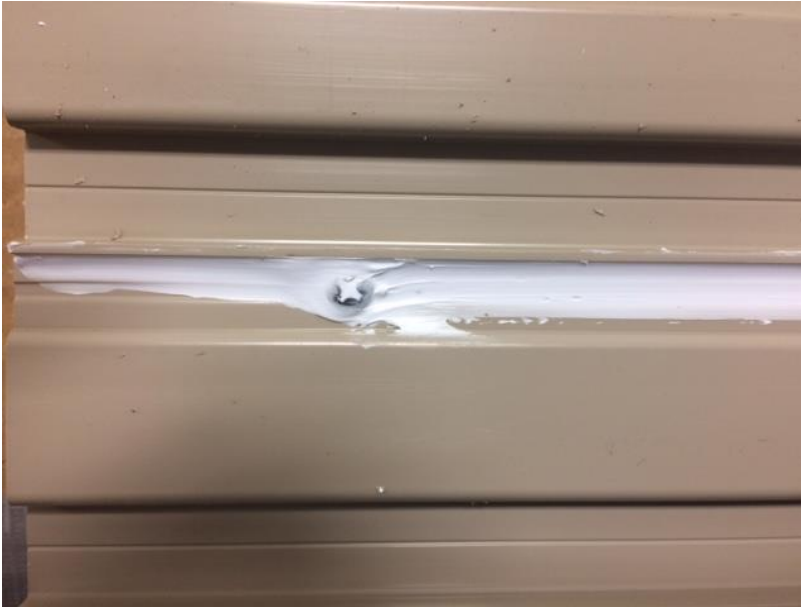
3. If track is extended using frame adaptors, repeat steps 2a and 2b on all tracks.
 - a. Take the Frame adaptor and slide the adaptor to the main frame, making sure the snap condition is interlocked, until the 2 parts are now equal in length.



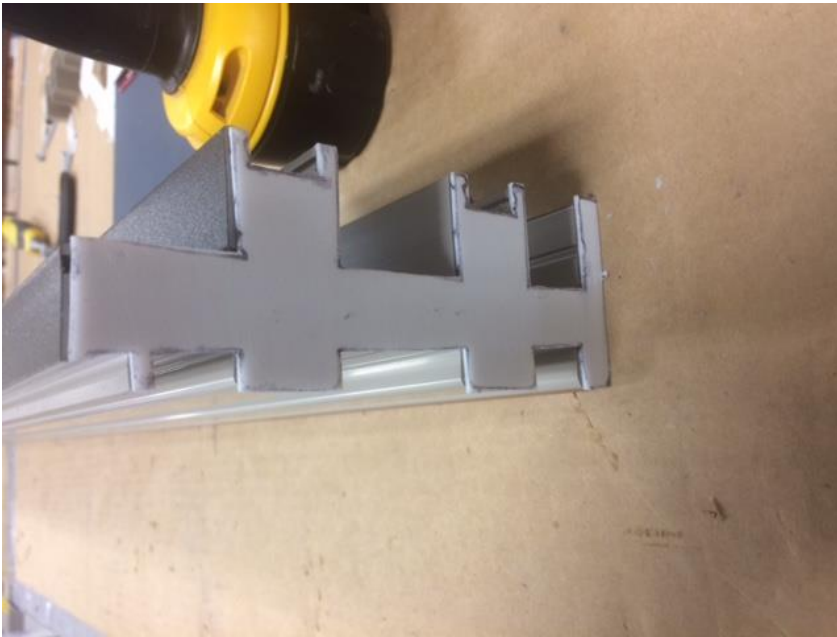
- b. Rotate to where the tracks are facing down, and attach adaptor to main frame with (#8 x 3/4") PPH Screws, starting at 2" from each end and spacing the screws 12" on center.
 - c. The location of these screws is in the ridge of the snap in leg.



- d. On the sill of the frame, at the intersection of the snap in and screwed leg apply a bead of silicone the entire length of frame, to cover the gap of the intersection of the vinyl and the screw heads of the screws. This is to help secure the frame from any water leaks.



4. Rotate frame on a level surface with the exterior facing up and line up all four corners
5. Validate gaskets are applied to the ends of the head and sill.



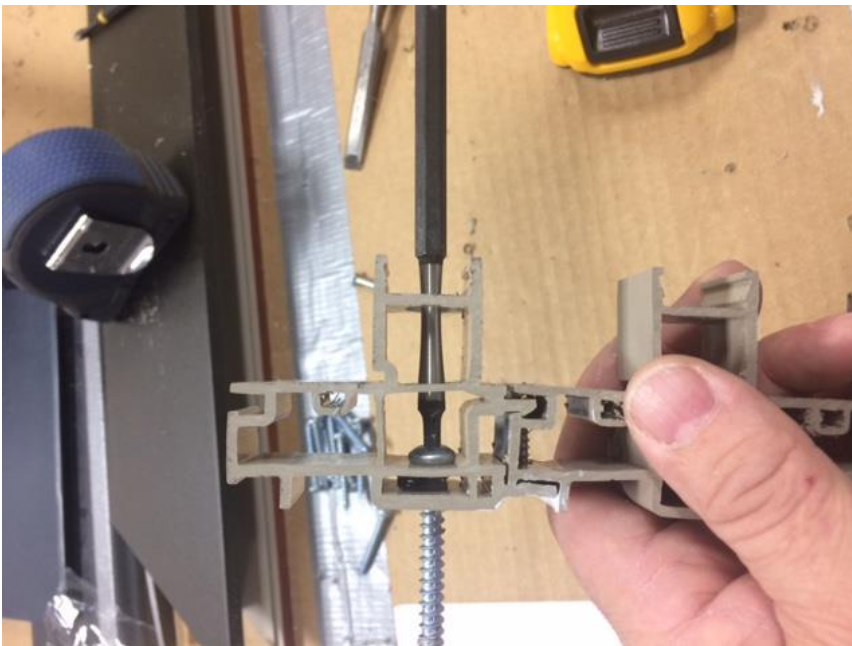
6. Secure the head, sill and jambs with the pilot holes using (#8 x 3") Truss Head screws. (Pilot holes should be pre-fabricated)



7. Once frame is assembled and the rough opening is prepared, lift the frame into place.

Frame Installation: – (CAUTION – INSTALLER MUST ENSURE CORRECT ORIENTATION):

8. Tack the frame in place using a #14 x 2 1/4" PPH screw for wood frame installation, one in each corner (also one in the center of 12' or wider to eliminate sag) of the head. Using a framing level, set plumb and level. Shim and tack each corner into place. Continue to install shims and fasteners, checking frequently with level or straight edge to ensure true sightlines. Take care to eliminate humps or dips in the sill and sags or crowns in the header. NOTE: Sills that are not true will result in undesirable sightlines and panel operation. If in a masonry opening, holes must be pre-drilled using a 3/16" X 6" masonry bit with a hammer drill. Use 1/4" x 3" tapcon (minimum 1 1/2" embedment for typical masonry with 1X wood buck) and 6" Phillips Bit, secure the frame to the building through the pilot holes in step 2.a, b
 - a. Ensure you use a long enough driver bit to secure the screws through the tracks and securely on the third wall. Use shims at penetrations as needed to ensure straight, level and plumb sightlines.



- b. Apply Silicone to the heads of the installation screws in the sill to insure water cannot penetrate through the frame.



Panel Install:

Panels are shipped with interlocks that must be attached prior their installation.

CAUTION – INSTALLER MUST ENSURE CORRECT ORIENTATION WHEN INSTALLING INTERLOCKS.

Interlocks:

Orient and snap interlock onto the jamb stile of the panel so as to properly interlock with its adjacent panel. Attach with the supplied #10 X 1" hex head tek screws, 6" from top and bottom, then center, then in between center and top and bottom, 5 screws total. On the end of the panel attach with supplied #10 x 2' hex head tek screws, 6" from each end, in the center and the center of top and bottom, 5 screws total.

Fixed panel installation (for OX, XO, OXO, OXXO, etc.):

- c. Retrieve the Jamb Fixed Panel Riser and secure it to the jamb side of the fixed panel that will connect to the frame jamb. Please note that moveable X panels ride on the interior track(s) and fixed O panels are set last, outboard of all X panels. Using (#8 x 1 ¼") PPH screws secure the adapter to the jamb at 6" from each, then center, and top and bottom, 5 screws total.



9. Retrieve the fixed panel sill frame adapter(s). These are identified with a weep hole. Place the adapter on the sill where the fixed panel will be located (*remembering the SGD build is with the exterior perspective*). The adapters are free floating and do not get secured to the sill or head.



10. Locate Fixed panel, and Install the 1" adhesive dust plug on all 4 corners of the fixed panel, the location of the Plugs are at the end of the L-Brackets and where sash straddles the sill and head tracks.



11. Take the fixed Sill panel Riser and place over the floating frame adapter on the sill
12. Push the fixed panel completely against the frame jamb,(there may need some adjustments to the sill Panel Riser after pushing the sash into the Jamb, these adjustments should be made prior to securing fixed panel into jamb, (**BE SURE NOT TO COVER THE WEEP HOLE**), **make sure panel rest on Sill panel riser**, and then secure the jamb side frame adapter to frame jamb using #10 x 1 ¼" PPH screws secure the adapter to the frame jamb at 6" from top and bottom, then center, then in between center and top and bottom, 5 screws Total



- 13.** Retrieve the head fixed panel Riser for the head and insert through the panel so that it rests between the frame and the panel. It should also be located equally between the ends of the sash.
- 14.** Install 1.35" Adhesive dust plugs on the head and sill of the frame where the interlocks of the panels will rest when the panels are fully closed. The end of Panel riser should be 2.75" from the end of the sash. You can insert the pad for the fixed panel and the operating panel at this time, for easier installation or install operating dust plugs later.



- 15.** Repeat steps 9 – 15 for any other fixed panels

Operating Panel Installation: – (CAUTION – INSTALLER MUST ENSURE CORRECT ORIENTATION):

- 16.** Install roller track using a hammer and flat head screw driver to ensure it snaps into the vinyl grooves. Repeat this step for all tracks that will have operating panels.



17. Install the 1" adhesive dust plug on all 4 corners of the moving panel. The location of the Plugs, are at the end of the L-Brackets and where sash straddles the sill and head tracks. If there are more than 1 operating panel this needs to be done to all panels.



18. Adjust the rollers into the lowest position, turning screw driver counterclockwise. If rollers are not in the lowest position the panels will be harder to install. Ensuring the correct orientation, insert the moving panels into the frame on top of the roller track.
19. Using a #3 Phillips screwdriver adjust the rollers through the side adjustment hole on the moving panel, into the highest position (DO NOT use an impact driver/screw gun). It is helpful to use a suction cup or a flat bar to lift or lever the panel to relieve the weigh on the rollers while adjusting them. Final adjustments will be made later.

20. Operate the moving panel to validate smooth transition and engagement into the interlocks. (Repeat steps 19 – 22 for all operating panels)

Hurricane Clips:

21. Install the Hurricane Clips at the top and bottom of each interlock, Ends of the clips should be level with end of the panels.

a. Align Clips to where they are .1875" to .250" Beyond the ends of the panels.



b. Attach with (2) #10x1" Hex Head screws.



c. Ends of the Clips should touch the height of the Dust Plugs, do not allow the clips to dig into the plugs, because the clips will remove the plugs during operation if they are too far into plugs.



Lock / Keeper Install:

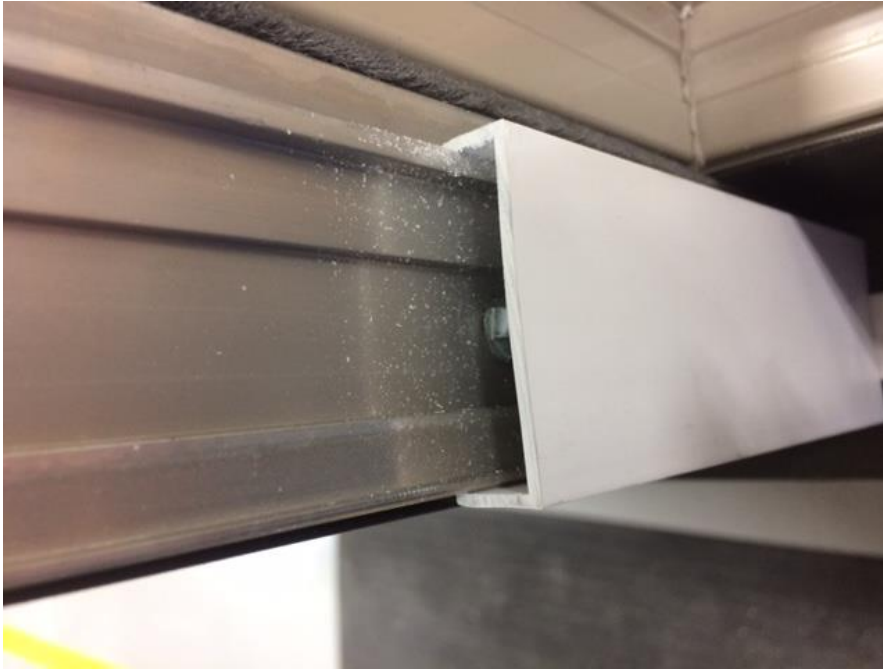
22. Using the supplied Lock/Keeper set install within the standards of written instructions supplied with the kit.
Note: Keeper installs with WHITE to the inside of the jamb and the Stainless portion facing out.
23. Check for positive locking and make adjustments to keeper to ensure the lock engages.
24. Keeper is installed using PPH Screws.

Vinyl Capping:

25. Apply the vinyl capping to the sill, head and jambs. The capping snaps in all of the tracks to cover the install holes.



26. Apply the Vinyl Capping to the interlocks. The Capping snaps in over the interlock and hurricane clips.



Roller Adjustment Hole Covers

27. If positive results, apply the caps to cover the roller adjustment holes

OPTIONAL ATTACHMENTS:

P-Hook Operating Panel Installation: – (CAUTION – INSTALLER MUST ENSURE CORRECT ORIENTATION):

28. If a P-Hook is used, close the panels and set the Lock and Keeper prior to the install of the P-Hook. Ensure reveals are satisfactory and in their FINAL adjusted position before proceeding.
- a. With the lock and keeper engaged, push all the doors to their closed / interlocked position. Make final panel adjustments to ensure proper sightlines and interlock operation.
 - b. Insert p-hook between exterior of opening and interlock on the last panel. Make sure that the interlock and p-hook are engaged. .
 - c. Push the p-hook to ensure that the doors are tight. Mark the p- hook at the top and bottom or measure the gap at the top and bottom of the p-hook and wall.
 - d. Unlock the doors and push completely open, passed the P-Hook. (Be careful not to open to far as doors can disengage the frame. They can also be removed if needed)
 - e. Install the P-Hook into the 2x4 with (12 x 2) PPH at 6" from top and bottom, then the remaining fasteners 12" maximum on center in field. Shim as needed. Do not twist P-Hook so as to interfere with proper operation. They must not bind and should operate freely up until they are fully interlocked.
 - f. Ensure engagement of the last panel with the P-hook. At this point, adjust (as necessary) the rollers for each panel to ensure proper fit. Working from P-Hook to Lock Panel. Re-adjust lock / keeper if necessary.
 - g. Apply Silicone around Top and bottom of p-hook where it intersects with vinyl and Sill Extension. Apply Silicone the entire height of p-hook on both interior and exterior to stop Air / Water leaks.
 - h. Apply (2) 1.35" Dust plugs one on top of the other the height of the sill extension, and butting up against the p-hook. (See attached photo.)



- i. Apply (1) 1.35" Dust Plug at bottom and top of interlock area. Slide pad into interlock area to where half the pad is not seen and the back half is seen.



From the p-Hook to the end of the lineal, apply Silicone liberally at the top edge of frame.

Screen Track: (Optional)

29. Install the screen track into the Head of the Frame and Sill of the Frame and then insert Screen if purchased by customer.
 - a. Put a small bead of silicone on the back of the screen track.
 - b. First insert the nub on screen track into accessory groove, then roll track flat with lineal and push in until part snaps into place.

Sill Riser: (Optional DP 60 & DP 80)

30. Install the sill riser with a rubber mallet to ensure that it is not dented.
 - a. Once installed put a small bead of caulk vertically between Sill Riser and Jambs. Also Seal the Sill at the P-Hook it is used. (See Previous p-Hook Pics)

Dust Plugs for more than 2 panel or if The Astragal is being used. (Optional)

- 31.** Install the 1.35" adhesive dust plug on the head and sill of the frame where the interlock of the panel will rest.
 - a. Close and lock door. Take a pencil and mark the ends of the panels on both, the interior and exterior of the door, head and sill between the tracks. (The line only needs to be half way across)
 - b. Remove backing a place at edge of pencil lines against the track. (The back of pads will be between the lines)

Panel Stops: (Optional)

- 32.** These are typically field installed and installation is usually provided by panel stop vendor.

33. Astragal installation (Optional)

- a. If the Astragal is supplied it will be attached to the non-lock operating (Female) panel.
- b. The orientation of the part is that the Flat edge is towards the interior and the tube part towards the exterior.
- c. **It is easier if you apply any vinyl cladding to this part prior to installation.**
- d. Use your 3/16" drill bit, lay it under the groove of the astragal straddling the track on the sill. Between the astragal and the track itself. This will keep the Astragal from rubbing against the track during operation.
- e. It is attached by using #10x2" Hex Head screws. The distance is 6" from each end and using the same spacing as the screws on the back of the interlocks.
- f. The keeper is attached in the track

34. Screen jamb installation (Optional)

- a. When installing a screen panel (optional), it will be necessary to attach the provided screen jamb retainer to the door frame on the outermost portion of the frame jamb.
- b. Orient the part with the open end of the "U" shaped channel facing the screen.
- c. Align the outer edges of the retainer and the frame jamb, and fasten with the supplied WHT, #8 x 1" PPH Tek screws 5" from each end and 2-3 more, evenly spaced in field.
- d. Measure and mark the keeper location on the screen jamb retainer and fasten with the supplied screws.