

The performance and proper operation of a door is only as good as the installation. By following these instructions, the probability of a good installation greatly increases.

Please read and understand all instructions before beginning. These instructions cover impact and non-impact aluminum French Door 650/750.

Notice / Important / Warning

Due to structure design, construction methods, and the variety of products that can be assembled and installed, PGT strongly recommends consultation with an architect or structural engineer prior to the installation of any PGT product. PGT disclaims any and all liability associated with the use and /or provision of these instructions.

For sealant type and application see job specifications for individual job.

These instructions were developed for the use of PGT Independent Distributors and other industry professionals working with PGT products. PGT strongly recommends homeowners consult with a PGT Independent Distributor for the installation of any PGT product.

Flashing and/or sill pan methods shall be determined by the contractor or engineer, and should be incorporated into the following instructions.

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SAFETY

To avoid personal injury when working with windows, PGT recommends at least two people for installation.

- Use caution when handling glass. Broken or cracked glass can cause serious injury.
- Wear protective gear as necessary.
- Read and fully understand ALL manufacturers' instructions before beginning.

INSPECTION OF PRODUCT

1. Inspect the product and take inventory of all parts and pieces prior to installation. (ex. slabs, paint, glass, sidelites, etc.)

NOTE:

If there is any damage to the product, or missing parts, an assessment should be made as whether or not to install the product.

OPENING INSPECTION AND PREPARATION

If bucks are installed, inspect for the following:

- Ensure bucks are of proper material according to job specifications.
- Block openings should be a clean surface, free of dust and debris.
- Bucks shall be attached and sealed to job specifications.
- If bucks are already installed inspect bucks for damage and replace as needed. (ie. split or rotting wood)
- Bucks shall be continuous. If gaps are present in corners and greater than 1/8", they will need to be replaced. (See figure 1)
- Bucks shall be at least as wide as the main frame width, providing full support for the frame. (See figure 2)
- Inspect concrete for cracks. Cracked or damaged concrete should be repaired prior to installation.
- Sill must be smooth and consistently level. Correct any imperfections prior to installation.



Figure 1

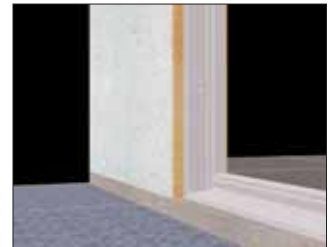


Figure 2

Note:

Contact your local building department regarding buck anchorage. If your local building department does not provide specifications on buck attachment, then you may have to provide appropriate engineering.

MAIN FRAME ASSEMBLY

Note:

Single & double door main frame units will need to be assembled.

1. Layout main frame parts so jambs align with the head & sill.
2. Assemble main frame using 8"x1" sheet metal screws. (See figures 3 & 4)

Note:

Ensure foam corner gasket sticks out from assembly joint after fastening screws. (See figures 3 & 4)

3. Snap I-beam on to door jamb or sidelite (whichever is more convenient). This is done by hooking the frame on to heavier I-beam side at exterior frame and snap into place as shown. Be sure I-beam is centered on jamb leaving ¼" recess at each end of frame. (See figure 5)

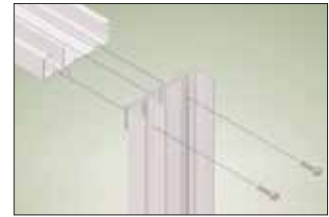


Figure 3

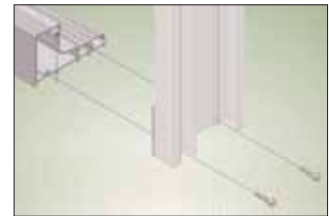


Figure 4

IF SIDELITE I-BEAM (MULL) ASSEMBLY

4. After snapping the mull bar in place, insert 10-24 x 2 ½" machine screws with 10-24 lock nut through inside jamb install holes. (See figure 6)

Note:

The screws are best inserted using your screw gun to thread through the holes. Be sure that the screw head is on the sidelite side (there is more space for the threaded end on the operating door side). (See figure 7)



Figure 5



Figure 6

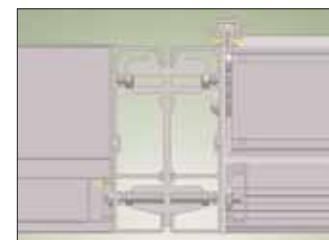


Figure 7

IF SINGLE DOOR JAMB AT I-BEAM MULL

5. Jamb backup cup must be removed when attaching to I-beam. Remove three #8 undercut screws. Remove backup cup and replace the strike plate using the same undercut screws, taking care not to strip the holes. (See figure 8)

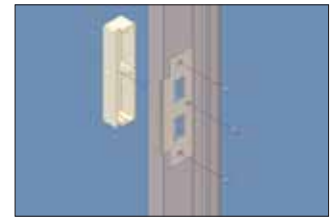


Figure 8

INSTALLATION PLATE ASSEMBLY

1. Installation plates are snapped into the jamb full length. The slots in the install plate should align with the install screw locations. In some cases, the install screw locations may have to be drilled through the plate after it is snapped into the main frame jamb. (See figure 9)



Figure 9

Note:

Check for jamb leg projection inbetween two barbs as shown in installation plate. (See figure 10)

2. Dry fitting the door before applying sealant to opening is necessary. Check that the reveal is uniform and no greater than 1/4" at head, jambs or sill. (See figure 11)

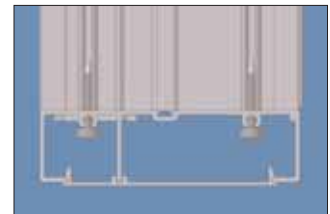


Figure 10

Note:

A fenestration product should never be forced into an opening.



Figure 11

MAIN FRAME INSTALLATION

1. After the main frame is dry fitted and there is proper clearance, run two (2) beads of approved caulk in alignment with the 2nd and 3rd groove in the bottom of the sill on the concrete. (See figure 12)

Note:

Be sure that the amount of sealant will fill the 2 cavities underneath the sill. Always clean the concrete and mainframe before sealant is applied.



Figure 12

4. Shim and level sill first, then plumb, level, square, and true the main frame. Start fastening sill and tacking jambs into place. Attach enough anchors to secure the main frame. (See figure 18)



Figure 18

Notes:

- Do not over tighten the jamb, this may cause it to twist. Thus, pushing the doors together causing them to hit. Review "hinge support screws" section below before fully tightening the jambs.
- Plastic shims work best for frame installation.
- At sill, remove debris and fill holes with caulk before attaching remaining screws. Seal fastener heads on all screws.
- Shim behind each screw as needed. Fasten head following jambs and sill.
- Be sure to install "hinge support screws" before fully tightening jambs.
- It is acceptable to use counter- sink screws for both hinge support and installation.

HINGE SUPPORT SCREWS

1. These screws are not included. Use countersink fasteners the same size as the install screws. These screws are installed to counter balance the installation screws on the opposite side. These screws will support the hinges and keep the door frame stable during operation. (See figures 19 & 20)

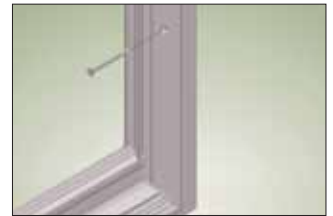


Figure 19



Figure 20

Note:

Do not fasten all concrete or wood fasteners prior to hanging the door slabs. It should be a general practice to tack approximately 4-6 first, then after clearance and good alignment is ensured, attach remaining screws.

HANGING DOOR

1. Position the door slab as shown. Holding the slab in this position using glass cups will allow manipulation and engagement of the hinge leaf into the jamb. (See figure 21)



Figure 21

Note:

The weight of the door will bend the projecting sweep. Place blocks or other material under door slabs to protect the sweep from damage during install.

- a. When maneuvering the door panel in place, be sure the edge of the hinge fully engages with the frame before installing #12 x 3/4" assembly screws. (See figure 22)
- b. This cross section view shows how the jamb hinge leaf intersects frame. (See figure 23)
- c. #12 x 1 1/2" screws are provided and will tie into the assembly I-beam or wall substrate where necessary for more hinge support.

2. After all hinge screws are fastened, insert a #12 x 1" Philips pan tek (self-tapping) screw at the top of hinge on the jamb side. This will prevent the hinge from flexing away during door operation. (See figure 24)

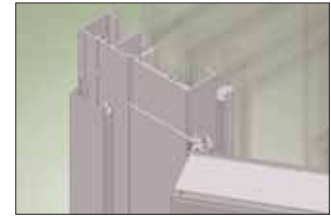


Figure 22

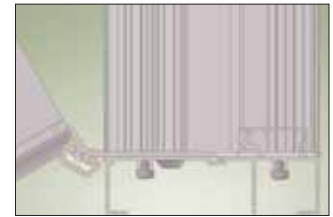


Figure 23



Figure 24

FINAL HINGE ADJUSTMENT

1. After remaining installation fasteners have been installed and all hinge screws are in, final adjustments can be made by adding and removing shims and loosening and tightening installation screws, both interior and exterior. (See figures 25 & 26)



Figure 25



Figure 26

FINAL TRIM I-BEAM (MULL) ASSEMBLY

After completing sidelite assembly, the joint where the I-beam is visible must be sealed full length as shown. After applying sealant full length, a trim piece is applied running the full length of the joint. (See figure 27 & 28)

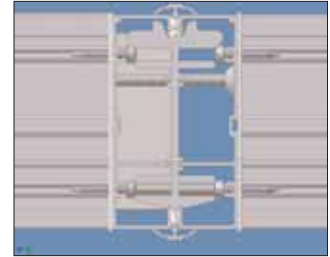


Figure 27

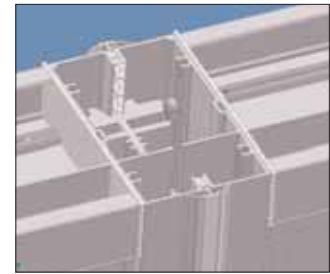


Figure 28

SILL COVER INSTALLATION

Place cover into sill so that the rounded edge is hooked under the rounded leg protruding from the sill. After sill cover is hooked, swing cover toward exterior and snap into place. (See figure 31)

Note:

A mallet or hammer with a wood block will assist in snapping the cover in place.



Figure 31

SCREW COVER AT HEAD

The cover is seated into the interior leg and then snapped in place at the middle leg. (See figure 32)

Note:

The cover rests on the notch before snapping in place.



Figure 32

SCREW COVER AT JAMBS

First set the cover into the interior leg, then snap into the center leg as shown. (See figure 33)

Note:

Holding a short 2x4 (18") at one end and hitting it uniformly against the screw cover will snap it into place without damage. The cover runs full length and sits on top of notch before snapping in place.



Figure 33

SCREW COVER AT NARROW SIDELITE JAMBS

Start at one end, head or sill, fitting the channel into the pocket shown and drive the full length using a soft mallet or hammer and block. (See figure 34)



Figure 34

REVERSING LATCH LEVER

If the latch is beveled on the wrong side, the gear latch assembly has a switch for reversing the lock. Feed a hard wire with a pre-bent hook or large paper clip down through the oval hole and hook into switch and pull.

SHOOT BOLT GUIDE ADJUSTMENT

1. Loosen screw approximately 1/4" to 3/8". Be careful not to back screw out completely. If this happens, reinsert to a couple of threads. Grab pin using needle nose pliers or similar tool. (See figures 36 & 37)

Note:

The door slab may need to be taken off if there is not enough space under the slab. The active slab is at its loosest setting. To loosen inactive panel, three serrations in the shootbolt guide must face opposite astragal. To tighten the active slab, the serrations must face opposite astragal.

2. Rotate pin 1/2 turn (180 degrees). Slide back into square slot while re-aligning the rod with the hole. (See figure 38)
3. Allow the guidepin to project slightly (1/16") from the sweep and re-tighten screw. (See figure 39)



Figure 36



Figure 37



Figure 38



Figure 39

Note:

The lock is designed with a safety trigger (black button above the latch bolt). The door must be closed to engage this button before the deadbolt or shoot bolts can be engaged.

The dead bolt can be engaged prior to lifting the handle and engaging the shoot bolts.

Lifting the handle upwards engages the shoot bolts into the head and sill of the door frame.

The deadbolt is engaged by rotating the thumb turn on the interior or the key on the exterior of the door.

Rotation of one quarter turn engages the dead bolt. When the shoot bolts and the deadbolts are properly engaged, the handle will not rotate until the dead bolt is disengaged.




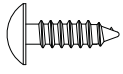
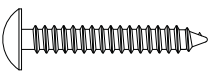

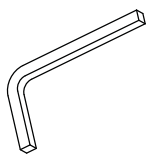

FINAL WORK NOTES

Note:

When hanging the door slab, be careful not to over torque hinge screws. Stainless steel alloys are softer than conventional steel screws and the heads are prone to breakage.

Plastic shims work best for frame installation.

When sidelites are installed, seal the joint at the mull between the jambs, both interior and exterior.

SWING DOOR (FD 650/750) HARDWARE KIT PARTS			
ITEM	PART No. & DESCRIPTION	PARTS BAG QTY.	COMMENTS
	#8 x 1" Panhead Quad	10	Screw used to assemble the Main Frame Jamb to the Main Frame Header and Sill
	Frame Assembly Screw		
	#10-24 x 2-1/2" Panhead	10	Screw used to attach the Sidelites to the I-Beam
	Machine Screw for I-Beam Assembly		
	#10-24 Nut	10	Nut used in combination with a #10-24 x 2-1/2" Screw for the attachment of the I-Beam
	Nut for I-Beam Assembly		
	#12 x 3/4" Truss Head	20	Screw used to hang prehung slab onto the mainframe jamb
	Gear Hinge Mounting Screw		
	#12 x 1-1/2" Truss Head	6	Screw used in attaching the slab into the Main Frame through the Gear Hinge during a wood fram installation
	Gear Hinge Mounting Screw		
	#12 x 1-1/2" Panhead Tek	2	Screw used at the top of the Gear Hinge leaf to add additional support into the frame
	Gear Hinge Upper Support Screw		
 NOT TO SCALE	Handle	1	Metal square handle used temporarily to operate the hardware of the door prior to installation of hardware trim set
	Temporary Handle For Latch Operation		
 NOT TO SCALE	Plug	20	Vinyl plug used to cover the installation holes in the hinge leaf 10 WHITE 10 BRONZE
	Hinge Hole Plug At Jamb		