



INSTALLATION INSTRUCTIONS FOR TEUTONIC™ ENTRANCE DOOR

RECOMMENDATIONS FOR COMMON INSTALLATION OF ENTRANCE DOORS.

Installer: DO NOT DISCARD Please leave the Installation Guide with the owner.

Please read and follow the Installation Instructions completely before installing. If you have any questions about this or any of our products, please call your local Kolbe & Kolbe dealer.

Proper Installation

Proper installation and maintenance of this product is essential to its performance. The following instructions are to be used as guidelines only. Kolbe recommends consulting a local Kolbe supplier or an experienced contractor, architect, or structural engineer since every installation is different. Installation of this door is the sole responsibility of the architect, contractor, building owner, or consumer and Kolbe has no responsibility in this regard.

- CAUTION: Lead-based paint may be present in older homes, and the removal of windows may cause this paint to be disturbed. In order to minimize exposure to lead-based paint dust, please consult www.epa.gov/lead for more information.
- Care must be taken to properly recycle or dispose of old materials. Any recyclable materials should be separated from non-recyclable or hazardous materials. Please consult with local or state authorities regarding proper disposal of non-recyclable or hazardous materials.

Job Site Tools for door Installation

- Steel Toe Footwear
- Hard Hat
- Safety Glasses

- Cordless or Pneumatic Reversible Driver
- P2 Phillips Head Bits (6 inches long)
- Cordless or Pneumatic Caulk Gun
- Level
- Tape Measure
- Construction Pencils
- Tap Con screws
- 4mm & 6mm Allen Wrenches
- Shims
- P2 & P3 Philips Screw Driver

STEP #1: PREPARE ROUGH OPENING

1. The material/lumber quality and the fasteners must be structurally adequate for design load requirements.
2. Typically, the rough opening should be 1/2" (13mm) wider and 1/2" (13mm) higher than the outside measurement of the door frame.
3. The rough opening must be plumb, square, level and in plane.
4. Individual construction members should not be twisted.
5. The floor beneath the unit must be solid and level for proper unit operation.

STEP #2: PRELIMINARY PREPARATION

Remove the shipping packaging, skid plates or factory applied bracing. Make sure the unit is not damaged and the dimensions are appropriate for the rough opening. Check that you have all necessary hardware.

CAUTION: Before applying sealant, make sure the area to be sealed is clean, dry, and frost-free. Use color-matching or transparent sealant.

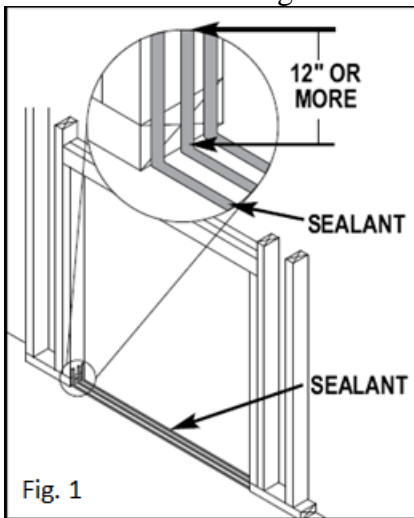
STEP #3: SEALANT AND FLASHING

Kolbe recommends following ASTM E 2112-01 guidelines for sealing and flashing exterior doors.

Maintain a gap of at least 1/4" (6mm) between the door frame and the rough opening structure. Create a proper seal between the door and the building exterior. For more details, see our pamphlets *Sealant Information* and *Flashing Information*. These publications are available from your Kolbe Window and Door supplier or visit our website to download a copy.

See Fig. 1.

Apply three beads of 3/8" (10mm) diameter beads of sealant across the entire width of the subfloor between the rough opening framing. Allow some sealant to pool in the corners and carry the bead at least 12" (305 mm) up the side of the framing.



STEP #4: SELECT YOUR INSTALLATION TECHNIQUE

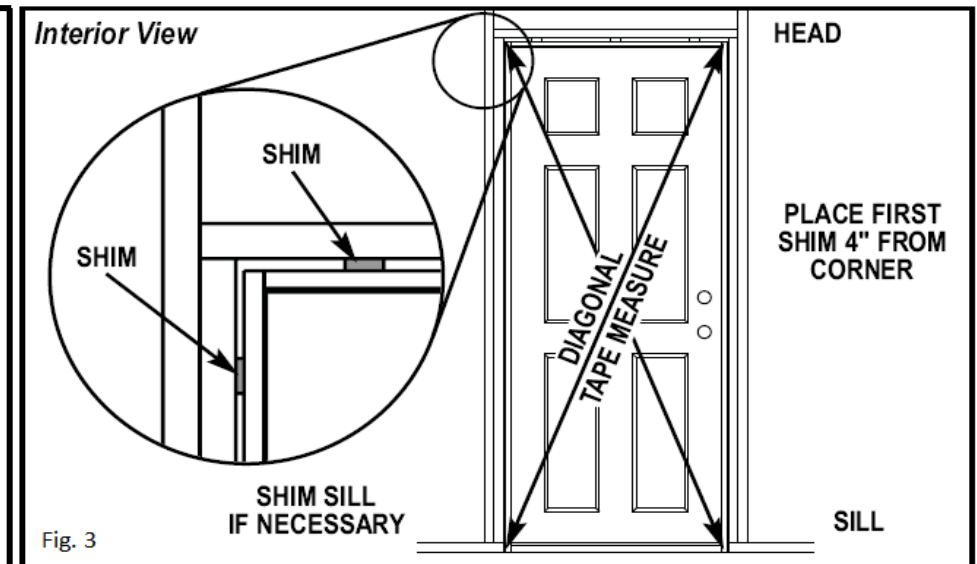
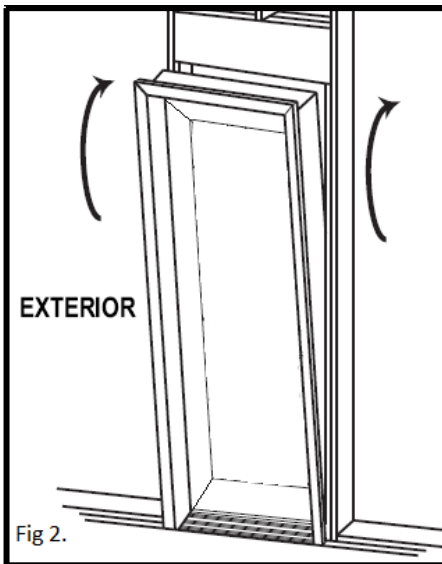
These techniques are general guidelines only, and may not be appropriate for all performance requirements. Kolbe recommends two installation types.

1. Installation clip method
 - a. Installation clips are not factory applied and are installed in the field. If using installation clips, the installation clips are installed by turning the clip catches into the frame. Attach the clips to the frame with one #8x1" self drilling screw. The clips are to be placed 4" from each corner and 14" on center. Use a #10 x 2" screw to attach the unit to the opening.
2. Screw through frame method
 - a. From the factory when choosing drill for installation the frame head, sill and jambs will have 3/8" pilot holes drilled into the frame at 4" from each corner and 14" on center. Shims are required to be placed at the same locations as the fasteners to prevent bowing of the frame. Use a #10 x 2" screw to attach the unit to the opening.

STEP #5: GENERAL INSTRUCTIONS FOR BOTH INSTALLATION TECHNIQUES

See **Fig 2**. From the exterior, carefully tilt unit, sill first, into the rough opening. Center the unit in the frame. See **Fig. 3**. Shim along the head and side jambs at 4" (102mm) from the corners/ends. Also, shim at the fastener spacing. Use one shim at each screw location if screwing through the frame; use two shims per installation clip—one on each side of the clip. Aluminum sills require additional shimming at the sill jamb where the vinyl jamb is attached to the aluminum sill.

Measure the distance from the interior upper left frame corner diagonally down to the lower right frame corner, and then measure the other two corners. These measurements must be within 1/16" (2mm) of each other. See **Fig. 3**. In addition, the height of the frame at the center must be the same as the height at each end. The margins around the door should be even on all sides.



Technique #1: Kolbe Installation Clips

See **Fig. 4**. Double-check to ensure the sill is straight and level. Plumb the side jambs and level the head jamb. Shim on both sides of every installation clip to prevent the frame from bowing. Starting with an interior upper corner, bend clips to the rough opening frame and fasten using #10 x 2" (51mm) Phillips flat head screws or 2" tapcons. Continue around the perimeter, making sure the jambs are straight and the unit is square.

See **Fig 5**. Doors with an ADA thermal broken aluminum sill require fasteners to be used in each hole. Screws supplied by Kolbe. If your door has the taller thermally broken sill, drill a hole and countersink the screw head. Fasteners at the sill are placed at 4" from each corner and 14" on center when using the taller thermally broken sill. Silicone is to be used at each fastener.

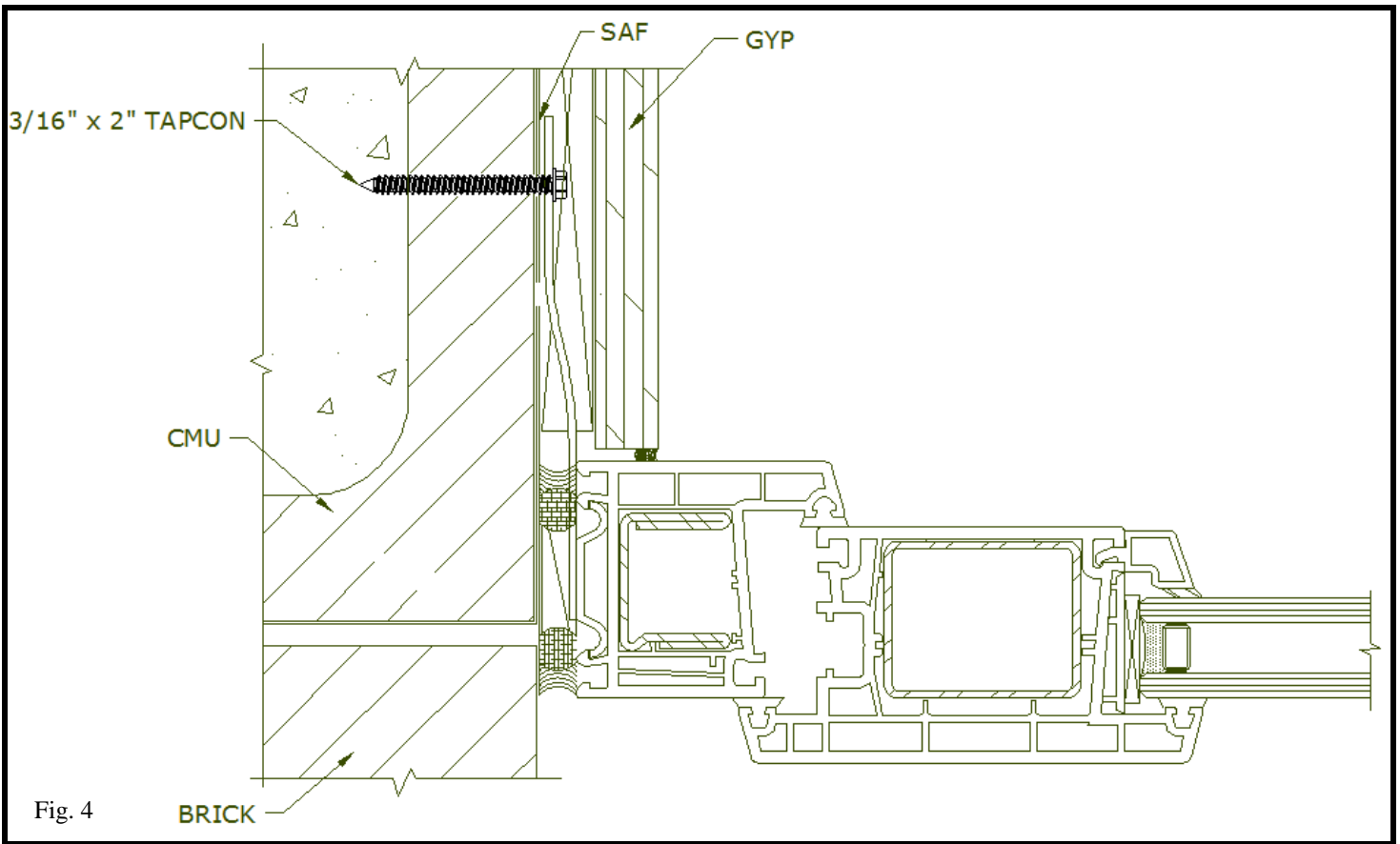


Fig. 4

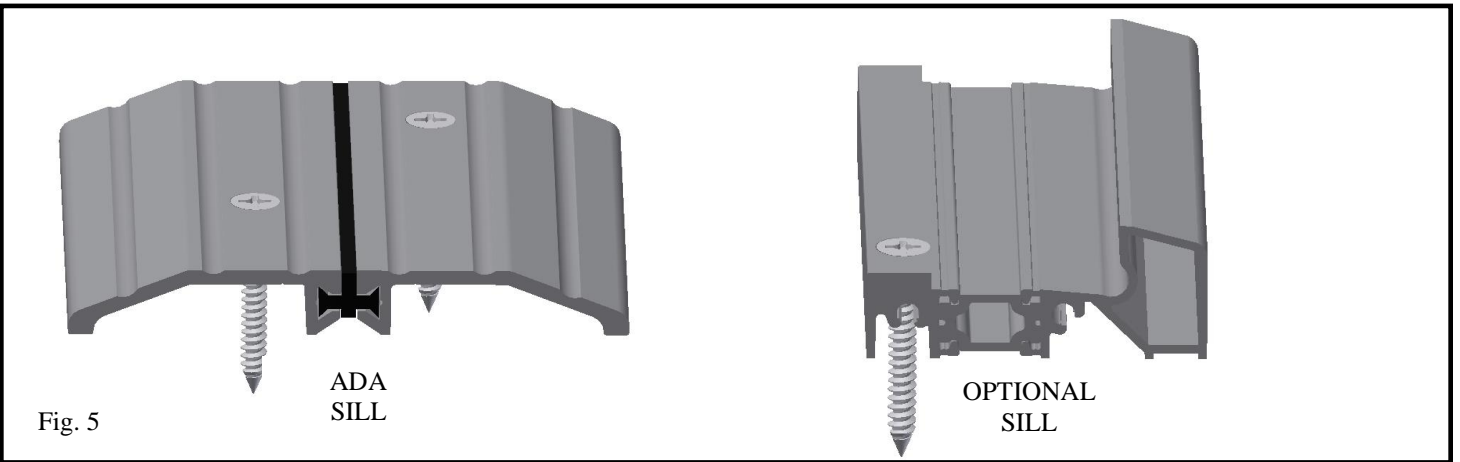


Fig. 5

Technique #2: Screw Through The Frame

Double-check to ensure the sill is straight and level, and plumb the side jambs. Level the exterior head jamb. Adjust the shims if necessary. **See Fig. 6.** Following the recommended fastener spacing of 4" from the edge and 14" o.c. and also shimming underneath each fastener. Check to ensure the unit is still level. Drill a 9/64" (4mm) diameter hole at each screw location in the head, & both side jambs.

Use a #10 x 2-1/2" (64mm) Phillips flat head or tapcon screw, fasten through the jambs, shims, and into the rough opening framing. When all fasteners are installed apply silicone and insert the 3/8" plugs into each fastener location to seal out water.

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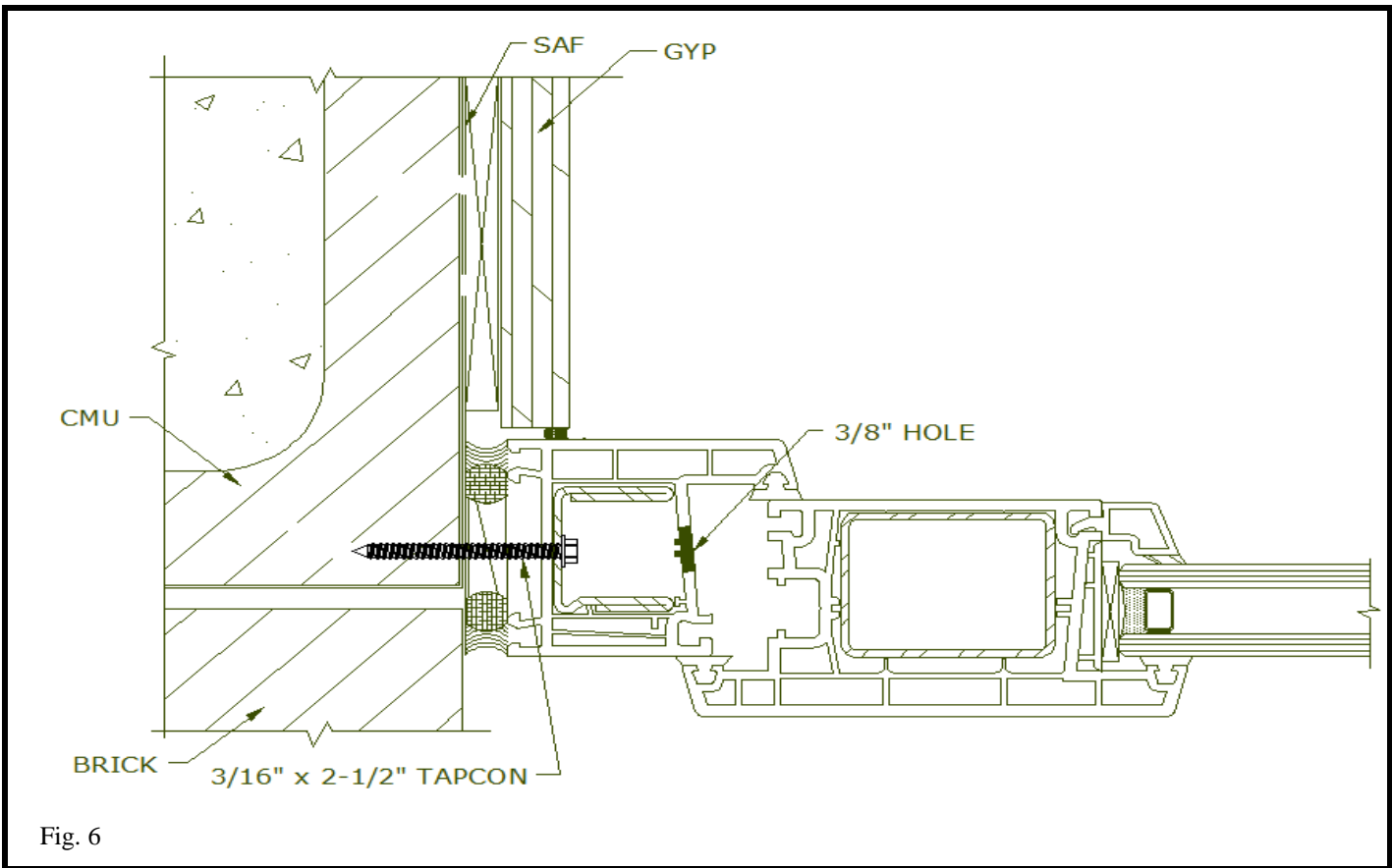
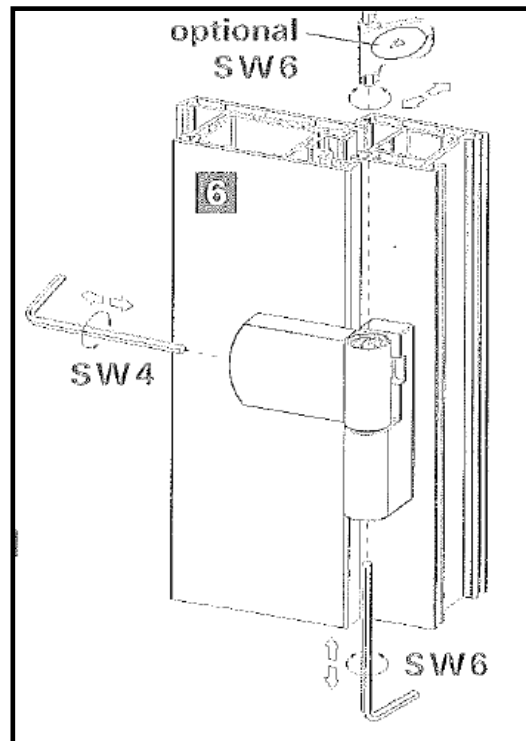
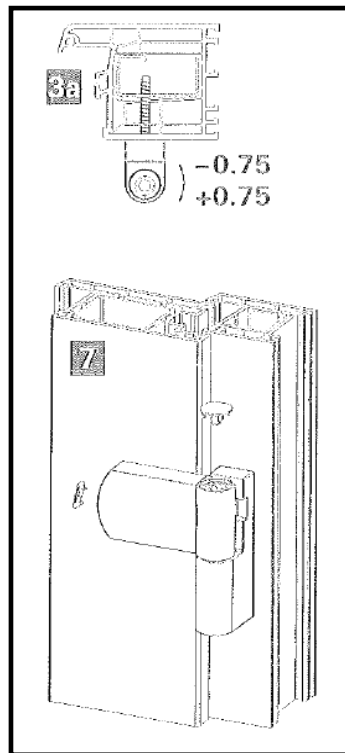
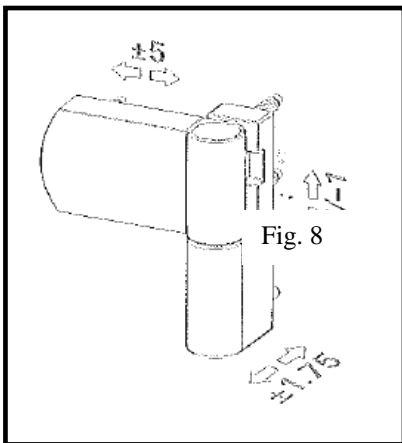


Fig. 6

STEP #6: ADJUSTING HINGES

See figures below. Once the door is installed open and close the door to check function. If adjustments are needed use a 4mm and 6mm Allen wrench to adjust the door until it operates and seals properly.



STEP #7: COMPLETE THE EXTERIOR

Install backer rod and silicone around the interior and exterior perimeter of the frame. Both components are required to seal the door to the self adhering flashing. Also a drip cap must be installed to direct water away from the door and lessen the chance of water seepage. Seal the side edges of the drip cap to the door. Seal between the drip cap and the exterior sheathing.

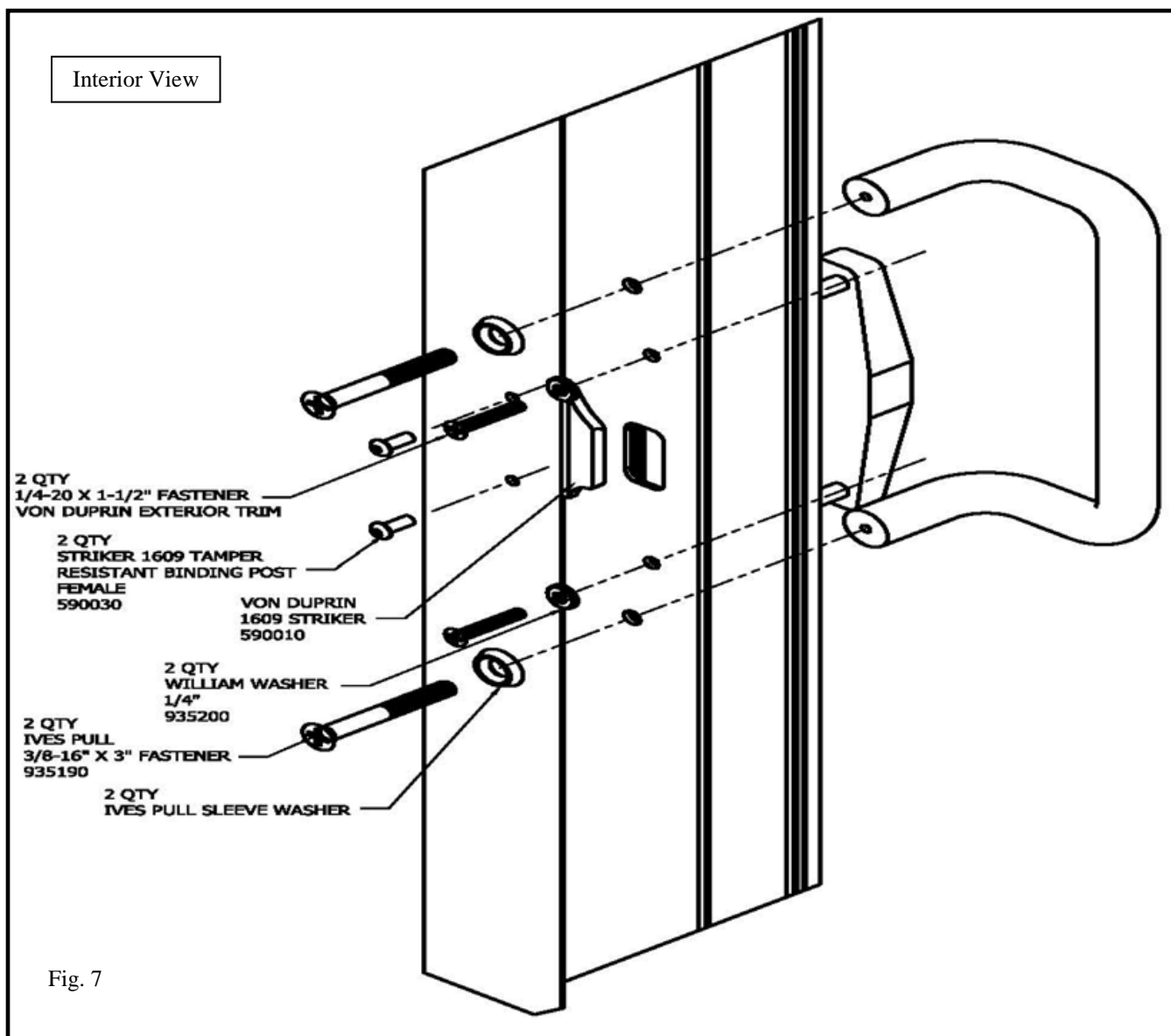
STEP #8:

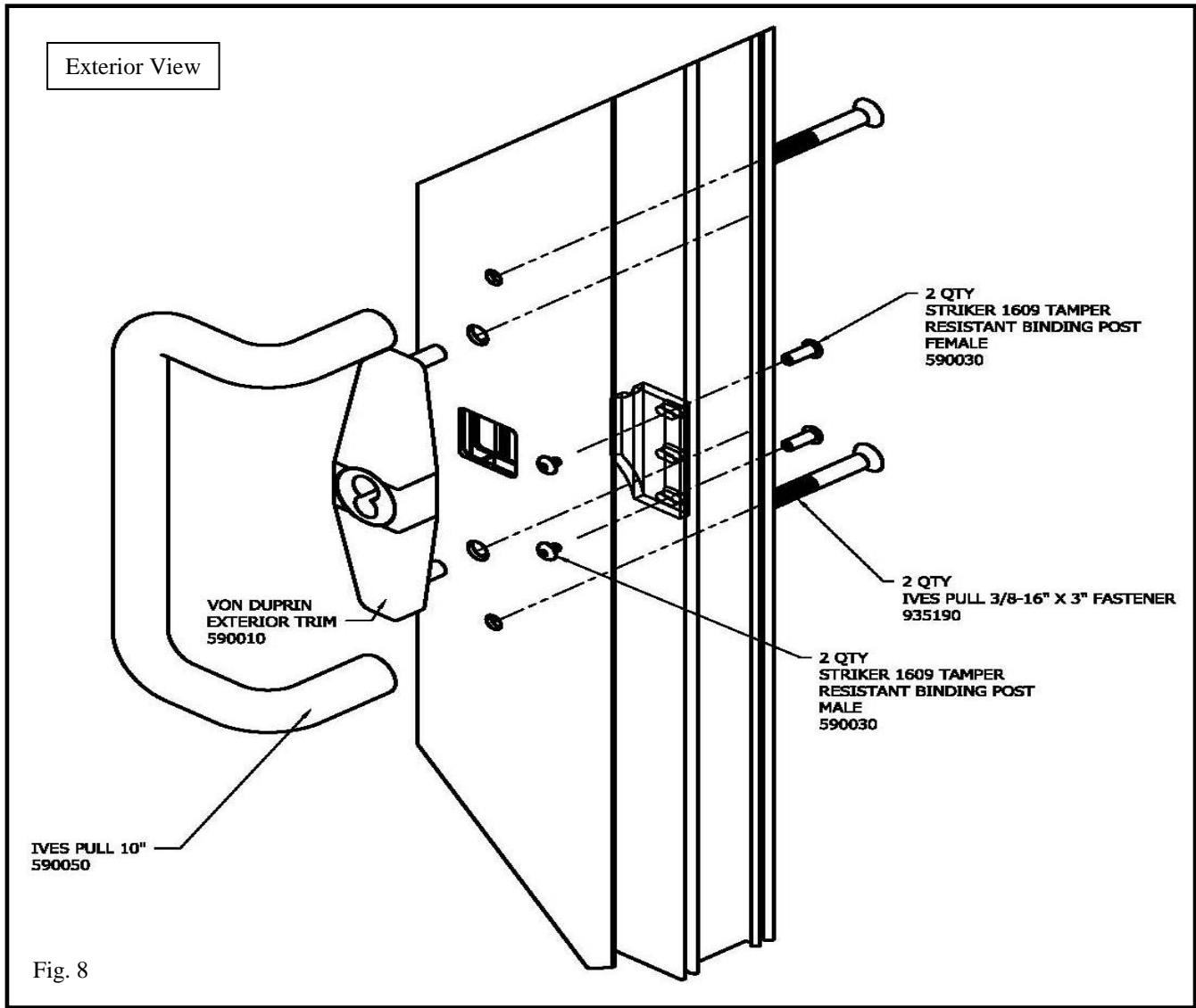
Read the Von Duprin installation instruction that is packaged with the panic device. The frame and sash are prepped for placement of the panic hardware for your entrance door.

Also use the templates that are placed in your hardware box to locate either your heavy duty (LCN closer) or the light duty (Norton closer)

Please see Fig. 7 & 8 below before moving on and read below.

When you install the panic device to the door you will need to use place one 1/4" Williams washers on the 1/4-20 bolts placing them behind the device to shim it away from the sash. This will shim the device away from that sash and if this is not done your door will not lock.





STEP #10: MAINTENANCE TIPS AND PROCEDURES

Inspect your Kolbe products periodically/yearly to see if the exterior sealants and/or finishes have any gaps, cracks, or signs of damage and deterioration. Caulk any cracks immediately with a high quality sealant to maintain the seal integrity and to prevent air and water infiltration.

THANK YOU
FOR PURCHASING KOLBE PRODUCTS.