

## Ligature Resistant Flush Valve Cover: Installation Instructions #FV600

### Contents of Package

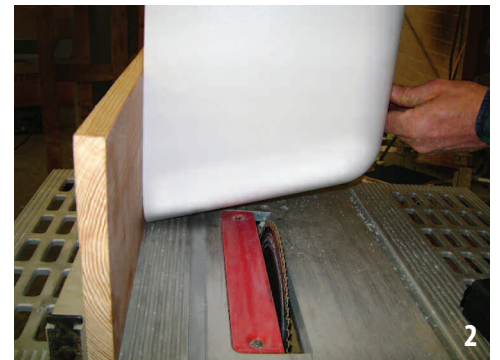
- Flush Valve Cover
- 2 angle brackets
- 20 white Torx security screws (#10XS/4TRX SECSMSSS) with 1 bit

### Items Needed

- Ratchet and deep well 9/16" socket to remove toilet seat
- Assortment of drill bits
- 1-7/8" hole saw
- #8 Lead tipped Zip-It inserts (or equal) metal wall anchors (10 qty)
- #8 x 1" long pan head Phillips sheet metal screws (10 qty)
- May need 90° drill adapter if working in tight space
- Reciprocating saw
- Portable Table Saw
- File
- Caulk

### Installation Instructions

- 1) Remove seat and cover toilet to prevent debris from entering. If planning to install push button in lieu of lever handle, do so at this time. **Note:** The following instructions are for using the existing flush valve lever handle, if using a push button, the offset dimensions will need to be altered accordingly.
- 2) Measure from the top of the bowl to the top of the flush valve. For the total height add 4" to allow for slope of the cover (example, total height of flush valve 15" add 4" = 19" total).
- 3) Measure the depth from the wall to the furthest point on the flush valve including the collar at the toilet. For cut depth add a minimum of 1" to allow for proper clearance (example, 4-3/8" measurement + 1" clearance = cut depth of 5-3/8").
- 4) Cut bottom of cover off if height adjustment of Flush Valve Cover is needed, do not discard (**Photo 1**). **Note:** We recommend that an 8" +/- plywood guard be added to the table saw (**Photo 2**) to allow straight cuts when holding the sloped portion of the cover—this requires approximately 10 minutes and will greatly aid in cutting multiple covers. Just drill 2-3 holes thru the adjustable slide on the table saw and screw thru to the plywood.
- 5) Cut cover to give total depth (**Photo 2**). After making cuts remove excess/loose material with a rasp file or light sanding. Cut the bottom cover for the same depth.
- 6) Before cutting cover for height, remember you will be placing the bottom back on. Set the bottom in the main cover until the edges abut and measure the total length (**Photo 3**). The cut for the height will be the total length needed less the height of the bottom cover (example, 17" less the height of the bottom cover). Set table saw and cut.



*continued...*

## #FV600 Installation Instructions, *continued...*

- 7) Now place the bottom cover into the top cover and pre-drill 3/32" holes thru both the cover and the bottom and attach the two pieces with security screws provided. Minimum: two in front and one on each side.
- 8) Set metal brackets next to the cover and cut to fit height.
- 9) Set assembled cover against flush valve. With back of cover abutted against lever handle, offset cover so approximately 2-1/4" of lever handle is protruding. Mark the edges of the collar on both sides of the bottom to cut out for the collar/riser pipe. Measure depth from wall to front edge of collar/riser and cut out opening. **Note:** If using a push button, offset the collar cut the necessary amount to allow push button protrusion.
- 10) Push cover against flush valve handle and:
  - a. Measure height from toilet to center of handle.
  - b. Measure distance from wall to center of flush handle—this mark can now be placed on the flush valve cover.
 Use a 1-7/8" hole saw to cut the hole for the flush valve lever handle or push button.
- 11) If using a lever handle, make a split in the side of the cover going to the hole so the cover can be placed against the wall.
- 12) Now mark and cut the depth of the filler patch. Hold the filler patch against the wall and pre-drill thru the filler patch and flush valve cover with a 3/32" drill and install 2-4 screws.
- 13) Now place the cover against the wall with the flush valve handle protruding enough to allow proper flush or the push button protruding through the cover. If using lever handle, test flush with the 2-1/4" protrusion. If this is not sufficient, offset to 2-1/2" or enough as necessary to allow proper flush action.
- 14) Plumb the cover against the wall with a level and mark it with a pencil at the top and sides. Remove the cover and move the sides (vertical lines) in approximately 1/8" and the top (horizontal line) down approximately 1/8".
- 15) Place the aluminum brackets on the new lines and mark the holes thru the brackets on the wall. **Note:** Lead tipped zipit inserts work best to install in 5/8" sheetrock (if you know the approximate location of pipes in the wall, obviously avoid these).

Install approximately 1-2 fasteners for the horizontal portion of each bracket and 2-3 for the vertical portion of each bracket. Now fasten the brackets on the wall (**Photo 4**).

- 16) Now as you hold the cover on the wall against the brackets, begin to pre-drill and place security screws provided in the top and sides of the flush valve cover. We recommend a minimum of 2 in the top and 3 on each side. **Note:** Use a 5/32" size drill to drill through the cover and the aluminum angle brackets. Use a right angle drill if necessary.

Install is complete (**Photos 5 & 6**)—caulk as necessary for any sidewall gaps.

