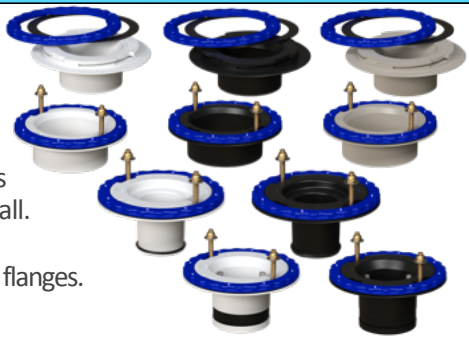
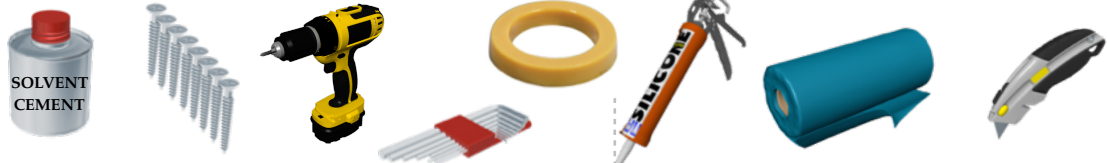


Culwell® Flange models attach to the sanitary piping system using conventional means that are standard in the industry. All Culwell® Flange models are backed by Culnat, LLC's exclusive **LIMITED LIFETIME WARRANTY**.

- **Glue-In Flanges** attach to the sanitary piping using a solvent cement ("glue"), with a primer applied first if required by code or otherwise. PVC flanges weld to PVC Schedule 40 DWV pipe. ABS flanges weld to ABS Schedule 40 DWV pipe. Available sizes: 4 in. x 3 in. Hub & 4 in. Hub
- **3 in. Compression O-Ring Flanges** fit into 3 inch Cast Iron, Schedule 30 or Schedule 40 DWV pipe and are provided with two (2) O-Rings to accommodate different inside pipe diameters. Choose the O-Ring that fits inside the pipe and still makes contact with the inside pipe wall. (Smaller size O-Ring generally fits inside 3 inch Schedule 30 DWV and most 3 inch Cast Iron pipes.)
- **4 in. Compression Drop-Fit Flanges** easily drop into 4 inch Cast Iron or Schedule 40 DWV pipe and can be used in the replacement of Cast Iron flanges. Hand-tighten the three (3) stainless steel bolts with a 3/16" Allen wrench until the gasket is firmly compressed against the side walls of the pipe.



TOOLS AND MATERIALS NEEDED



FLANGE INSTALLATION:

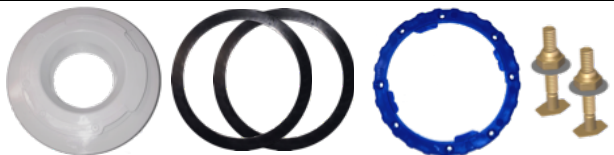
- SOLVENT CEMENT
 - (8) #10 x 1-1/2" FLAT-HEAD WOOD SCREWS or 3/16" x 1-3/4" FLAT-HEAD CONCRETE SCREWS
 - DRILL
 - 3/16" ALLEN WRENCH (4 in. Compression Flange only)
 - WAX RING (or alternative)*
- * Select the appropriate type and thickness of ring or gasket to ensure proper seal between toilet and flange.

SEALING to the FLOOR:

- 100% SILICONE SEALANT/CAULK**
 - IMPERMEABLE FLOOR-COVERING MEMBRANE (30 to 100 mils thick CPE, PVC, or alternative water-barrier surface/liner)
 - UTILITY KNIFE
- ** There are a variety of 100% Silicone Sealants/ Caulks that are designed to adhere to various materials. Please select the one most suitable for your application.

FLANGE ASSEMBLY

Fig. 1



■ FLANGE BODY

■ (2) BLACK ELASTOMERIC SEALING GASKETS

Installation with Membrane:

- Over wood subfloor, only one (1) gasket will be used.
- Over concrete, both gaskets will be used - one (1) during pre-drilling (which will be discarded) and the other during final assembly.

Installation without Membrane:

- Two (2) gaskets will be used together.

■ (1) BLUE NYLON CLAMPING RING

■ CLOSET BOLT KIT (5/16")

■ (2) O-RINGS - Included with 3 in. Compression Flange only. (NOT SHOWN)

INSTRUCTIONS

IMPORTANT:

PLEASE READ ALL INSTRUCTIONS CAREFULLY PRIOR TO INSTALLATION.

For complete water-leak-proof protection of the subfloor, the Culwell® Flange must be sealed to a floor-covering membrane that is **30 to 100 mils thick** and be installed in accordance with the following instructions.

NEW INSTALLATION OR REMODEL WITH MEMBRANE:

- 1 Remove the blue clamping ring and both of the black sealing gaskets, shown in Fig. 1.
- 2 Verify that the sanitary pipe is cut flush with the subfloor. See Fig. 2.
- 3 The flange has two guidance points on the main body that are directly across from one another. Install the flange so that one of the guidance points is closest to the wall that will be behind the toilet. The second guidance point will automatically be aligned across from the first, positioned toward the front of the toilet (furthest from the rear wall). See Fig. 3.

Guidance Point

Install with one point facing rear wall (behind toilet)

- 4 Insert the flange into the opening in the floor and attach it to the sanitary piping in accordance with all applicable plumbing and building codes. **The flange should be installed so that the base of the flange sits flat on the subfloor or concrete board surface that tile is installed over.** See Fig. 4.

- 5 Install a new impermeable floor-covering membrane (between 30 and 100 mils thick) over the flange. Cut the floor-covering membrane with a utility knife around the base of the raised portion of the flange. See Fig. 5a. The flooring-covering membrane must lie flat on the flange base and not ramp up the vertical sides of the raised portion of the flange. See Fig. 5b.

If installing over CONCRETE, **DO NOT** apply Silicone Caulk at this point. Install one (1) black elastomeric sealing gasket then go to **STEP 9**.

- 6 Apply a 3/8" thick bead of 100% Silicone Caulk under the floor-covering membrane completely around the base of the flange as shown in Fig. 6.

- 7 Apply additional 100% Silicone Caulk around the top edge of the Culwell® Flange, covering the rough cut area of the membrane.
- 8 Embed one (1) black elastomeric sealing gasket into the Silicone Caulk, as shown in Fig. 8.
- 9 Set the blue nylon clamping ring in place over the black elastomeric sealing gasket by aligning the guidance points and notches. See in Fig. 9. If installing over CONCRETE, do not insert closet bolts at this point. Go to **STEP 11**, then follow the instructions in **STEP 13**.
- 10 Insert 5/16" closet bolts under the clamping ring and into the recessed areas of the flange body where indicated: **BOLT** This is accomplished by lifting one side of the clamping ring up and sliding the head of the closet bolt into the slot provided. Repeat the same insertion process on the other side. See Fig. 10b

- 10b When properly aligned, the arrows on the clamping ring and flange point to the closet bolt locations, as shown in Fig. 10c.
- 10c

- 11 Hand-tighten the clamping ring clockwise until it is snug and cannot be rotated further (approx. 20 lb_f). Then adjust and center the closet bolts.

When installing screws into a WOOD SUBFLOOR, follow **STEP 12**. For CONCRETE SUBFLOOR, follow **STEP 13**.

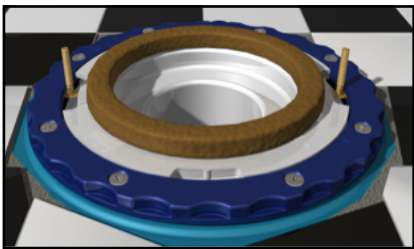
- 12 **WOOD SUBFLOOR** Install #10 x 1-1/2" FLAT-HEAD WOOD SCREWS into all eight (8) hole locations around the clamping ring to secure the flange to the subfloor.

- 13 **PRE-DRILLING CONCRETE**
 1. Leave the gasket in place and pre-drill all eight (8) hole locations with the appropriate size bit according to the screw manufacturer to accommodate a 3/16" x 1-3/4" FLAT-HEAD CONCRETE SCREW.
 2. Unscrew the clamping ring and dispose of the black elastomeric sealing gasket that has now been compromised by the pre-drilling process.
 3. Clean off all debris on flange and floor-covering membrane.
 4. Go to **STEP 6**. Then complete **STEPS 6 through 11**. In **STEP 8**, utilize the second black sealing gasket for final install.
 5. Complete the installation by utilizing 3/16" x 1-3/4" FLAT-HEAD CONCRETE SCREWS to secure the flange to the floor.

14 FINISHING THE JOB

You can now:

- Complete the new tile installation or remodel
- Set the wax ring (or wax alternative) and toilet in place

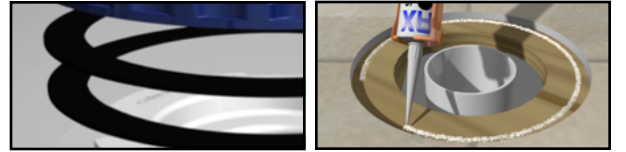


... with Peace of Mind!

REPLACEMENT FLANGE INSTALLATION WITHOUT MEMBRANE:

Follow these instructions and install as a premium alternative to the standard toilet flange in retrofit/replacement applications when the existing flange is recessed below the finished floor and needs to be replaced.

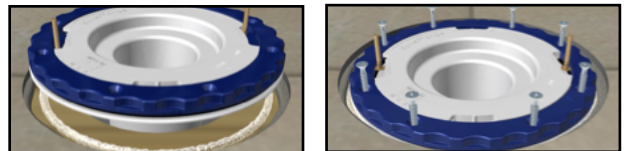
- STEP 1** Remove old flange and clean the existing floor surface. Make sure the surface is smooth, level and free of debris or residue.
- STEP 2** Clean the pipe onto or into which the Culwell® Flange will be installed and verify that sanitary pipe is flush with the floor.
- STEP 3** Fully assemble the flange with 2 elastomeric gaskets and with closet bolts in place. See Fig. 10-11. **The elastomeric sealing gaskets should lay flat on the flange base and not ramp up**



- STEP 4** Apply a thick bead of 100% Silicone Caulk around the floor opening, area upon which the flat sealing surface of the flange base will sit.
- STEP 5** Insert the Culwell® Flange into the opening in the floor and attach it to the sanitary piping (using conventional means in the industry), compressing the caulk under the flat surface of the flange to create a seal with the floor. **Flange should be completely flush with floor.** When pressed against the floor, excess caulk should be visible around the entire perimeter.

Install so that one of the guidance points is closest to the wall that will be behind the toilet. See Fig. 3 under New Installation or Remodel with Membrane instructions.

- STEP 6** Wipe away the excess Silicone Caulk around the perimeter of the flange.
- STEP 7** Complete the installation by anchoring the flange to the subfloor with wood or concrete screws into all eight (8) hole locations around the clamping ring.



Once you complete these steps, then you are ready to set the wax ring (or wax alternative) and toilet in place for added seal protection

