



# F4000 WATERFREE URINAL

## RETROFIT CONSTRUCTION

### INSTALLATION INSTRUCTIONS

#### BEFORE STARTING INSTALLATION:

**IMPORTANT** Do not install on copper DWV due to copper's susceptibility to corrosion.

- Check rough-in height to achieve 24" rim height (17" rim height for ADA).
- Check slope. Downhill slope, per code, is essential because waterfree urinals depend on gravity flow.
- Check DWV material. Suitable materials include cast iron, PVC, ABS and galvanized steel.
- Shut off water supply and cap the nipple with 3/4" chrome cap (provided).

#### TUBE CUTTING CHART

- Measure drain nipple depth (inches) to find trim length (inches)
- 13 7/8" or more DO NOT CUT
- 3 3/4" or less DO NOT USE TUBE

OR LESS	TRIM	OR LESS	TRIM	OR LESS	TRIM
13 3/4"	1/4"	10 1/4"	3 3/4"	6 3/4"	7 1/4"
13 1/2"	1/2"	10	4	6 1/2"	7 1/2"
13 1/4"	3/4"	9 3/4"	4 1/4"	6 1/4"	7 3/4"
13	1"	9 1/2"	4 1/2"	6	8
12 3/4"	1 1/4"	9 1/4"	4 3/4"	5 3/4"	8 1/4"
12 1/2"	1 1/2"	9	5	5 1/2"	8 1/2"
12 1/4"	1 3/4"	8 3/4"	5 1/4"	5 1/4"	8 3/4"
12	2"	8 1/2"	5 1/2"	5	9
11 3/4"	2 1/4"	8 1/4"	5 3/4"	4 3/4"	9 1/4"
11 1/2"	2 1/2"	8	6	4 1/2"	9 1/2"
11 1/4"	2 3/4"	7 3/4"	6 1/4"	4 1/4"	9 3/4"
11	3"	7 1/2"	6 1/2"	4	10
10 3/4"	3 1/4"	7 1/4"	6 3/4"		
10 1/2"	3 1/2"	7	7		

#### CUSTOMER SERVICE

info@falconwatertech.com  
310-209-7250



**CAUTION** After removing any urinal from the drain line, it's normal for certain naturally occurring, but potentially hazardous sewer gases to escape through the opening until the waterless cartridge is installed properly into the waterless urinal. If you need to leave an open drain line unattended after removing the urinal from the wall, temporarily wedge paper towels or a rag into the drain hole to reduce any outflow of sewer gases, and remove the paper towels or rag prior to completing the urinal or cartridge installation. **Never smoke, have an open flame, or place your nose or mouth near open drain lines or waterless urinal housings into which a cartridge is not yet properly installed.** Use a respirator or earplugs and a mask when removing or installing any waterless urinal or cartridge to reduce potential exposure to any such gases.

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**1**

**USE UTILITY KNIFE TO CUT CAULK** then use a putty knife and mallet to remove the bowl. Remove hanger brackets, scrape off caulk, and clean the wall.

**2**

2" side cutter blade

**IMPORTANT:** Use a drain machine to remove build-up inside pipes. Clean up to 25 feet deep then flush with water to remove cutting debris. **Never install on copper DWV.**

**3**

**A.** Clean face of existing wall flange.  
**B.** Install the brass flange with the clear inspection disc.  
**C.** Slowly pour water into the drain.  
**D.** Use a flashlight to check the pitch/slope. No water should be present in the inspection disc or nipple.  
**E.** Remove flange and disc after inspection.

**4**

Cut away wall

Lift drain line & brace with mending plate

**ADJUST DRAIN TO ACHIEVE PITCH** only if standing water is present (code requires 1/4" drop per foot of drain line for proper pitch). Seal wall according to code.

**5**

14 1/4"

Install plastic anchor and screw here

**MEASURE & MARK THE ROUGH-IN** is in-wall carrier is not used. Use a 5/16" masonry bit to drill hole, then install the hanger bracket with one plastic anchor and screw.

**6**

**INCORRECT** Not centered  
**CORRECT** Centered

**A.** Hang the bowl on the bracket and check tail pipe alignment, then remove the bowl and adjust the bracket as needed. **Re-hang and re-check bowl** alignment with the drain line. Tail pipe should align with center of drain line.

**B.** Mark anchor holes then remove bowl without moving hanger bracket.

**7**

**DETERMINE THE DRAIN NIPPLE DEPTH** by measuring the distance between the back of the sanitary tee (or elbow) to the front edge of the nipple.

**8**

**A.** Find the drain nipple depth on the Tube Cutting Chart (left). Measure and mark the specified trim length on the insert tube at the nearest 1/4" groove.

**B.** Cut the tube at the groove using a sharp utility knife to ensure a square, flat cut.

**C.** Clean burrs from the cut end by using emery paper.

**D.** Apply lubricant to the outside of the rubber bushing and ribbed inside area.

**E.** Insert the tube and bushing with arrow tab at the top. Apply lubricant to tailpipe of housing. **IMPORTANT:** Be sure arrow tab is at 12:00 position.

**9**

**PLACE THE SEAL INTO THE FLANGE** with the ribs facing out. Install the flange with washers and hex nuts, but do not tighten completely.

**10**

**INSTALL THE HOSE CLAMP** with screw head at bottom, but do not tighten.

**11**

**DRILL HOLES** with 5/16" masonry bit for the lower anchor screws and mounting plate and insert plastic anchors where indicated.

**12**

**HANG THE BOWL**, inserting tailpipe into bushing, then install anchor screws with washers. **TIGHTEN FLANGE BOLTS AND HOSE CLAMP.**

**13**

**POUR 5 GALLONS OF WATER** as rapidly as possible into housing to ensure good flow and no leaks or standing water.

**14**

**CAULK THE BOWL TO THE WALL** if there is good flow and no leaks or standing water.

**15**

**INSTALL CARTRIDGE** per the cartridge instruction sheet.

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**1**

1/2" to 3/4"

standard 24" rim

10" for ADA installation

17"

finished floor

**SET DRAIN LINE HEIGHT 17"** from finished floor (standard 24" rim) or 10" for ADA installation. Threaded nipple should extend 1/2 to 3/4" from wall.

**2**

1 1/8"

2 1/4"

1"

14 1/4"

Drain

**CARRIER STUD PLACEMENT** If using in-wall carrier, set bearing rods as shown above.

**3**

**C**

**D**

**A. Clean face** of existing wall flange.  
**B. Install clear inspection disc** with compression nut.  
**C. Slowly pour water** into the drain.  
**D. Use a flashlight to check the pitch/slope.** No water should be present in the inspection disc or nipple.  
**E. Remove disc** and nut after inspection.

**4**

Cut away wall

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**6**

**INCORRECT**

**CORRECT**

**Not centered**

**Centered**

**A**

**B**

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**E**

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**D. Apply lubricant** to the outside of the rubber bushing and ribbed inside area.

**E. Insert the tube** and bushing with arrow tab at the top. Apply lubricant to tailpipe of housing. **IMPORTANT:** Be sure arrow tab is at 12:00 position.

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**9**

**PLACE THE HOSE CLAMP** and compression nut onto the housing tailpipe.

**10**

**DRILL HOLES** with 5/16" masonry bit for the lower anchor screws and mounting plate and insert plastic anchors where indicated.

**11**

**HANG THE BOWL**, inserting tailpipe into bushing, then install anchor screws with washers.

**12**

**TIGHTEN COMPRESSION NUT AND HOSE CLAMP.**

**13**

**POUR 5 GALLONS OF WATER** as rapidly as possible into housing to ensure good flow and no leaks or standing water.

**14**

**CAULK THE BOWL TO THE WALL** if there is good flow and no leaks or standing water.

**15**

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