

Guidance for Converting Urinals to Low-Flushing

The recommended procedures for converting urinals to low-flushing are listed below. If you would like experienced Gentworks engineers to carry out the conversion, please call 0845 202 4535 for details.

For best results:

- The waste pipework should be clear of scale and debris (i.e. “descaled”). We recommend that the waste pipes are jetted or cleared using electrical pipe cleaning equipment, as used by drain maintenance companies. Alternatively, it may make sense to replace old waste pipes with new ones. This can be often be just as cost-effective.
- If there is an uneven flush volume across 2 or more bowls, the spreaders and flush pipes may require cleaning. The spreaders are usually the cause of the problem. They should be disconnected and cleaned with warm water, in the same way as a shower head.
- Ensure there is a reasonable fall from the urinals to the stack so the pipes can drain urine at a reasonable rate. Pipes running uphill will inevitably cause problems. The recommended minimum fall to the stack (main drain) from the urinals should be 1cm down for every 40cm length.
- Each urinal should have its own trap under the bowl. It is not advisable to have one trap shared by all urinals in a run.
- Install an access cap for rodding whenever pipes turn through a 90 degree angle. Such bends are potential problem that may require clearing in the future, whether are urinals are waterless or not. It is best to use a “tee” fitting rather than an “elbow” at these points.

Fitting the Urinal Maintenance Device receptacle and cartridge:

1. Place bucket under urinal
2. Remove existing waste outlet by undoing the holding nut that connects the outlet to the bowl.
3. Remove old sealing compound from around the drain of the bowl and clean surfaces. Also clean the underside of the bowl.
4. Apply suitable sealant (e.g. “plumbers mate”) to inner lip of new waste outlet provided by Gentworks, then push outlet into urinal bowl
5. Under the urinal bowl, secure the waste outlet with rubber sealing washer and then the backnut, both of which are provided by Gentworks. Thread backnut to bottom of bowl until hand tight.
6. Whilst holding the outlet stationary, tighten the backnut with suitable pliers one complete turn.
7. Remove excess sealant around the waste outlet from the inside of the bowl. Use a Stanley knife for plumbers mate, or a cloth for silicon sealant.
8. Fit trap (preferably new) to waste outlet and waste pipe.
9. Carefully pour two litres of warm water into the bowl, then check underneath for leaks.
10. If there is no need to rectify any leaks, insert waterless urinal cartridge. Note that there is a lug on the outlet that fits into a recess on the cartridge. The lug and the recess will have to be lined up for the cartridge to fit flush into the bowl.
11. Clean the bowl surfaces with the cleaning solution provided, including underneath the bowl and around the trap.



Installing a Flush Controller to regulate flushing to once every 4 to 12 hours:

A [Gentworks Low-Flush](#), or a controller with similar capabilities, should be fitted and set to flush approximately once every 4 to 12 hours. The Low-Flush unit typically takes 30 to 40 minutes to fit and calibrate.

1. Locate stop tap or other isolation device to stop water supply to Urinal cistern(s). Where this is not possible or the existing stop tap or other isolation valve is seized & cannot be shut down, then it will be necessary to stop water flow by temporarily freezing the inflow pipe. In the event that freezing becomes necessary then a replacement stop tap or other isolation device will be fitted.
2. Insert the solenoid valve in an appropriate position, as close to the cistern as possible, ensuring correct orientation of the solenoid valve as identified by the word IN or by a directional arrow stamped on the solenoid.
3. Cut the supply pipe and purge any debris or swarf.
4. Tighten all joints and check for leaks.
5. Restore water supply system.
6. Connect solenoid to the circuit board by means of the 2 pin connector, ensuring correct polarity.
7. Calibrate the FCV01 units in accordance with the instructions supplied.
8. Test operation.

