



Water saving plumbing checklist for homes and small businesses

A guide to making plumbing fixtures and fittings more water wise.

Step 1: Find and fix leaks



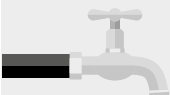
Stop all water use. Close all taps on the property and don't flush toilets.



Ensure the meter has stopped registering (numbers and dials not moving) and write down the meter reading.



Wait 15 minutes, without using any water, and take another reading. If the reading has gone up, it means there is a leak and action needs to be taken.



A registered plumber can find and fix the leak or, if it's a simple DIY job, residents can do it themselves. For advice, see the City's 'DIY Guide to finding and fixing leaks' at www.capetown.gov.za/thinkwater

Make potential leaks more visible



Toilets: Make any cistern overflow visible. Cistern overflow often goes into the toilet bowl where it cannot be easily seen. Overflows should be directed outside the building to be visible.



Geysers: Make any geyser overflow visible. Geyser overflows/leaks from expansion valves or pressure relief valves and drip trays are often hidden. They should be directed outside the building into a tank for collection and re-use. There must be a visible air gap between the overflow pipe and the tank so that if the overflow becomes excessive it will be clearly visible and action can be taken.

Step 2: Check efficiency of existing fittings

Efficient fittings which use less water are available at most hardware stores, retailers, and some online stores.

Step 3: Install efficient fittings

Toilets: Check toilet flush volume. Stop the water supply to the toilet cistern. Mark the level of the water in the cistern and flush. Then pour in water with a 1 or 2 litre jug up to the mark you made, to measure how many litres the cistern holds. Toilets should ideally flush with 3 litres for liquids and 6 litres for solids. While newer and dual flush models usually use around 3-6 litres per flush, older, larger cisterns use 9 to 11 (or more) litres.



Showers: Test the flow rate. Hold a bucket under the showerhead with a fully opened cold water tap for 12 seconds. If it collects more than 2 litres then it's inefficient. The City's Water By-law requires a flow rate of maximum 10 litres per minute.



Taps: Test the flow rate. Hold a 1 or 2 litre jug under a fully opened cold water tap for 10 seconds. If more than 1 litre is collected, the tap is inefficient. As per the City's Water By-law, an efficient flow rate is a maximum of 6 litres per minute for internal taps.



Water pressure: Check the pressure balance for hot and cold taps, which should be equal. For mixer taps and showerheads, if cold water pressure is higher than hot water pressure, it will take longer for hot water to arrive, and this wastes water. To test pressure balance, open the hot and cold tap separately and see if one tap has a stronger flow than the other. For a mixer tap (one spout), simply move the handle fully to the hot side and then the cold and compare the flow between the two. Collect that testing water and re-use it.



Toilets: Reduce the volume of each flush. Placing an object such as a filled glass bottle in the cistern reduces water use. The larger the object, the better. Fill the bottle with sand or water, cap it tightly and place the bottle in the cistern, ensuring it does not interfere with the mechanisms. Glass bottles are recommended because plastics can contain toxins and bricks can disintegrate. Older, bigger cisterns can handle 2 litre bottles (or two 1 litre bottles). Alternatively, there are displacement products available to reduce flush quantities, or install a cistern weight on the flush valve to ensure short flushes. In some cisterns the flush valve can be adjusted to reduce flush volume.



Showers: Install efficient showerheads, or fit water saving inserts or restrictors inside showerheads so that they use less than 10 litres per minute. Using less hot water also saves electricity.



Taps: Fit water saving inserts or restrictors to reduce flow rate. These should be pressure-compensating restrictors. Aerators don't necessarily reduce the flow, so use aerators with integrated flow restrictors.



Water pressure: Balance pressure of hot and cold water in the plumbing system. This is ideal, but can be expensive. If not affordable, install a non-return valve on the hot water supply which will reduce the push-back on the geyser's Pressure Relief Valve to avoid leaks.



For the LIST OF QUALIFIED, REGISTERED PLUMBERS in Cape Town, more ways to save water, information on water restrictions, water management devices, guidelines for the installation of alternative water systems and ways to voluntarily reduce the water flow rate by adjusting the property's stopcock, please visit: www.capetown.gov.za/thinkwater

Don't delay - report burst pipes, faulty meters and water restriction offences:

- Call **0860 103 089** (choose option 2: water-related faults)
- SMS **31373** (maximum of 160 characters)
- Email water@capetown.gov.za
- Online through our Service Requests tool at www.capetown.gov.za/servicerequests
- WhatsApp to **063 407 3699**

Check your water usage and provide your meter readings by registering on e-services at <http://cct.gov.za/sh505>

Further resources and information on the current status of our water system are available at www.capetown.gov.za/thinkwater

Produced by the Water and Sanitation Department of the City of Cape Town.

November 2017

Please note that this document may be updated from time to time. Visit www.capetown.gov.za/thinkwater to check for the most recent version as a free electronic download.