

Waterless Urinals and dual flush toilets

- Every year billions of liters of precious drinking water are wasted in the flushing of urinals. As the name suggests, the waterless urinal operates with absolutely no water, at the same time exceeding all of today's hygienic needs. The one way traps or seals are at the core of the composite or vitreous china waterless urinals. Together they function to allow urine to pass into traditional sewer systems whilst blocking any unwanted smells rising back up the waste pipe without wasting valuable water.
- The amount of water used in public amenities is often overlooked. Toilets alone can account for 15% to 40% of the total water usage, depending on the type of system. Installing water efficient devices in public areas is very cost effective due to the number of patrons and the corresponding high ratio of usage to fixtures.
- Toilets should all have a dual flush system. The dual system works by allowing the user to choose between a light flush, usually three litres, and a longer six litre flush. This can save between 30% and 50% of water used.
- Alternatives to the dual flush system would be to reduce the volume of the cistern by placing a hippo bag into it or an other displacement item. Although this does not allow a full flush anymore and might result in having to flush a second time. This is only recommended for older cisterns which have more the 6 litres.

Application: in all public toilets
Ease: 5/5
Availability: 5/5

Factors to consider:

Considering that many people on this earth don't have any clean water at all, and all of us will have that problem soon if we don't look after our resources, it is a ridiculous thought that we flush this precious water down the toilet.

It is often possible to retrofit the one-way seal of the waterless urinal to existing units lowering the cost considerably.

Cost: R300 - R1500

Payback: 2 months to 1 year

Requirements to meet criteria:

- All public urinals must be waterless
- All toilets to have multi-flush and/or reduced cistern capacity.



"Older toilets use up to 15 litres per flush, which is not necessary. New dual flush toilets use 3 or 6 litres per flush, which is totally sufficient."