

Detail of Standard Water Reduction Fixtures and Features

Standard water reduction fixtures were calculated in design flows. AS/NZS 1547:2012 Onsite Domestic Wastewater Management states in Table H3 Note 2 that "Standard water reduction fixtures include dual flush water closets, shower flow restrictors, aerator taps and water conserving washing machines".

No fixture flow rates are stated. For dwellings serviced by roof water the Standard refers to a water consumption of 145 litres/person/day and for bore water or reticulated supply a flow of 165 litres/person/day. A spring supply - no water reduction fixture dwelling is calculated to use 200 litres/person/day.

New Zealand uses the Water Efficiency Labelling Scheme (WELS) with a star rating system to show comparative water use. Most appliances that disperse or use water have a Star Rating listed for them.

NOTE: The calculations in this report are based on Standard Water Reduction Fixtures being used in the house. It is recommended that a note be added to property files held at Councils at the time of issue of consent to ensure that subsequent owners can be informed. If fixtures are replaced with more efficient fixtures, prior to installation of wastewater treatment system, a revised design means system size may be reduced. If any of these features are removed a new wastewater design may need to be completed.

Water reduction fixtures

The daily wastewater flow has been calculated based on the following water reduction features remaining in place in the house. If any of these features are removed a new wastewater design may need to be completed.

Standard Water Reduction fixtures include:

Toilets

- Dual Flush 11/5.5 toilets
Average flush = 6.6 litres (equals average of 4 half flushes and 1 full flush)

Bathroom / laundry

- Shower flow to be 12 litres/minute or less (refer Star Rating chart below).
- Any shower head with a WELS 2-star rating or greater, or any combination of shower head and flow restrictor that produces a flow of 12 litres/minute or less
- Aerator taps (kitchen/bathroom/laundry) any aerated mixer
- Any front loader or water conserving top loaders

Water Efficiency Labelling Scheme (WELS)

A WELS rating provides an average flow rate for a product when tested at various pressures. Similar to energy ratings on electrical appliances, this rating is displayed with a number of stars. The more WELS stars it has, the more water-efficient the product.

The WELS label displays three key pieces of information:

1. The star rating out of 6. All products except showers can achieve ratings up to 6 stars. Currently showers can only achieve a maximum of 3 stars. If a product fails any test or has a higher flow than the maximum rating, it can still be sold, but must carry a 0 (zero) star label.
2. The rated water consumption:
 - a) Litres per minute (for showers and taps)
 - b) Litres per wash (for clothes washing machines and dishwashers)
 - c) Litres per flush (for lavatories and urinals)
3. The pressure application (only applies to showers and tapware in NZ) – mains pressure and/or low/unequal pressure. All Methven products suitable for all pressure installations carry 2 labels.

Star Ratings for water efficiency

Star Rating	Showers	Tapware
6 Stars	Not applicable – see note 1 above	Less than 4.5 l/min
5 Stars	Not applicable – see note 1 above	More than 4.5 l/min but not more than 6.0 l/min
4 Stars	Not applicable – see note 1 above	More than 6.0 l/min but not more than 7.5 l/min
3 Stars	More than 7.5 l/min but not more than 9.0 l/min	More than 7.5 l/min but not more than 9.0 l/min
2 Stars	More than 9.0 l/min but not more than 12.0 l/min	More than 9.0 l/min but not more than 12.0 l/min
1 Star	More than 12.0 l/min but not more than 16 l/min	More than 12.0 l/min but not more than 16 l/min
0 Stars	More than 16 l/min or fails performance test criteria – See note 2	More than 16 l/min or fails performance test criteria