

# CONSERVATION INITIATIVE OR SUSTAINABILITY GONE TOO FAR?

PROVE STANDARDS & ENGINEERING INVESTIGATE AND DISSECT THE LATEST INSTALMENT OF WATER EFFICIENCY PRODUCT STANDARDS.

Showers have suffered the highest restriction for star ratings of all products contained with the WELS scheme since its inception. Currently three stars has been the highest attainable rating regardless of how low the actual flow rating is. The cap on the three star rating has been in place until such times where additional research could substantiate whether flow rates lower than 7.5L/m could provide a proper shower for bathing. However, there have been some recent developments to shower performance standards which may have filled this void.

CSIRO has been developing additional tests to prove showers can be effective at flow rates traditionally thought impossible. These methods have been years in the making and include additional optional comfort tests to compliment the current list of tests required by showers for WaterMark and WELS. A shower able to successfully demonstrate compliance with the mandatory tests, as well as the optional comfort tests is said to deliver adequate performance.

Australia has enjoyed abundant water reserves for many years which has burdened the WELS scheme with a long uphill challenge to alter our traditional water usage habits. Even though the WELS scheme has had a great impact on our mindset, for many of us the concept of bathing under showers designed for low flow rates still remains foreign. The slow trickle of water discharged from a showerhead makes it difficult to rinse off soap, and in particular shampoo within long hair. This can often work against water

conservation as it takes longer to bathe under an inadequate shower. Thus more water could be used overall even at reduced flow rates.

The difference is that the latest shower heads have been specifically engineered for low flows, and what many Australians do not understand is the difference between low flow, and low pressure. Although the two are commonly used as synonyms, this is not technically correct. "Low flow" literally refers to the water consumption of the showerhead, whereas "low pressure" could be better

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described as the comforting feel of the water as it falls on the recipient. As unusual as it sounds, it is possible that a "low flow" shower head can still provide the feel of adequate pressure.

Many manufacturers have looked at reducing flow rates by simply swapping to a lower rated flow controller within their existing shower range. The problem is that some of these showers were never designed to operate at such low flow rates. The critical balance is maintaining a strong flow of water pressure whilst using less water.

An analogy can be drawn between showers and high pressure water cleaners. These cleaners can offer high cleaning pressure whilst using much less water than a traditional garden hose. The latest optional test methods for showers aim to verify that a required flow pressure is achieved over a particular flow area, and the shower has been properly designed for operating under low water flow.

AS 3662:2013 has been published by Australian Standards and is seeking to be adopted by the Australian Building Codes Board (ABCB) for official inclusion under the WaterMark scheme. Once AS 3662:2013 is accepted, and the new draft of AS/NZS 6400 is released manufacturers will have the ability to register showers as 4 star products. Some shower manufacturers who have properly engineered low flow showers will enjoy the benefits of the higher rating, driven by architects looking at increasing their total building performance by decreasing flow rate from plumbing fixtures. It is important to note that the WELS scheme intends only to advise of a product's water consumption and the new wave of low flow rate showers intended for Australia are not in any way a mandatory requirement. Instead it will provide means to grant recognition to these showers for marketing to the many Australian's looking at decreasing their overall water consumption. ■

*For more information regarding low flow showers, or the test methods used to test them, please contact PROVE Standards & Engineering. [www.proveng.com.au](http://www.proveng.com.au)*