

Connections: Backflow Prevention Requirements for Water Connections

The Office of the Technical Regulator Plumbing (OTR) manages backflow prevention to meet the AS/NZS 3500

Plumbing and Drainage Standards. For further information, please visit

www.sa.gov.au/otrplumbing or call OTR on 1300 760 311. The information in this fact sheet provides an overview of SA Water and customer obligations to protect the public water supply.

20mm metered water connections

For new water connections, or when alternate water supplies have been reticulated to or within the property, the owner of the property, or responsible entity, must engage a qualified contractor to assess the proposed use and potential hazard level of the proposed on-site activities, in compliance with AS/NZS 3500.1 (e.g. low, medium or high hazard). Based on the assessed hazard rating, a suitably rated backflow prevention device must be installed immediately downstream of the drinking water connection. The device will need to be supplied and installed by a licensed plumber. SA Water's new 20mm drinking water meters contain a low hazard (containment) backflow prevention device (dual check valve) installed in the meter assembly.

25mm and larger water metered connections

For drinking water connections 25mm or larger a plumber must assess the hazard rating of onsite activities and install a suitably rated backflow prevention device. The backflow prevention device needs to be situated at the property boundary adjacent to the water meter. For maintenance and testing purposes, isolation valves must be located either side of a testable backflow prevention device. A line strainer is also required to be installed upstream of the device (except on fire service installations). Isolation valves installed on services of 80mm and larger must be gear activated.

Existing property water connection

The hazard rating and backflow prevention requirements for a property may change if another water supply is present or there is a change in the onsite activity. The level of protection will need to be assessed by a licensed plumber.

Fire hydrants or sprinkler services

Fire services must have a single spring-loaded testable check valve installed with certified resilient seated gear activated isolating valves installed either side of the check valve to permit maintenance and testing. The valve must be installed on the internal pipe work within 3 metres of the property boundary in accordance with plumbing installation standards. Fire hose reels may also require backflow protection dependent upon the risk rating as assessed by the plumbing contractor or qualified person.