



Water using appliances

This technical note has been issued to advise the plumbing industry of the installation requirements for water using appliances in domestic and commercial applications. It covers connection of water supply with the appropriate backflow prevention devices and the certification of water using appliances as they fall under the WaterMark Certification Scheme. A list of these products can be found in the 'WaterMark Schedule of Products' on the Australian Building Codes Board's (ABCB) website www.abcb.gov.au.

WaterMark certification

The WaterMark Certification Scheme (WMCS) has a list of Australian Standards and WaterMark Technical Specifications (WMTS) to which products used in plumbing installations shall be certified against including water using appliances in commercial applications.

Under the scope of WMTS 5200.101-2016 Appliances (low hazard rating), appliances such as dish, clothes and glass washing machines are included, although not for domestic applications. Further information about the WMCS, can be found in the Plumbers Licensing Board technical note 'The WaterMark Certification Scheme'.

Manufacturer's backflow obligations

The type of backflow protection device to be installed serving glass washing machines in particular can be found in WMTS 5200.101, clause 8.2 which states:

Appliances shall either:

- ▶ comply with the backflow prevention requirements of IEC 61770 Electrical appliances connected to the water mains;
- ▶ comply with the back-siphonage test of AS 2845.2 Air gaps and break tanks; or
- ▶ be supplied with a backflow prevention device complying with AS/NZS 2845.1:2010, Water supply-backflow prevention devices and of a type required in AS/NZS 3500.1:2018, Water services standard.

When the manufacturer chooses the last option, they must supply the appropriate backflow prevention device with the appliance and include any installation instructions.



Photo 1: Typical dishwasher installation

This essentially means that the installing plumber is not required to supply a backflow device if the product is manufactured to WMTS 5200.101 and the instructions indicate a device is included. As it is the manufacturer's obligation to supply the device, licensed plumbing contractors should contact the supplier and request the device rather than leaving the water supply unprotected.

The number of the WMTS (WMTS 5200.101) should be marked on the product along with the WaterMark logo and licence number. A check of the ABCB's 'WaterMark Product Database' will determine which Australian Standard or WMTS a product must be certified against.

Water filters

AS/NZS 3497:1998 Drinking water treatment units or WMTS 5200.103 Water treatment systems are the standards for water filters and water treatment appliances such as ultra violet sanitisers.

These standards specify backflow requirements although, unlike the standards previously mentioned, it is the installing plumber's responsibility to supply and install a backflow device on the inlet to the product if it is directly connected to the drinking water supply.

The Plumbing Code of Australia, part 5.3 lists a non-testable and low hazard device, such as a dual check valve as being suitable for backflow prevention on water filters.

As water filters may often be installed on the inlet to any of the water using appliances mentioned, consideration should be given to the best location of these backflow prevention devices.

Licensed plumbing contractors should note that when leaving a stop valve for a water filter, a dual check valve must also be installed to meet regulatory compliance.

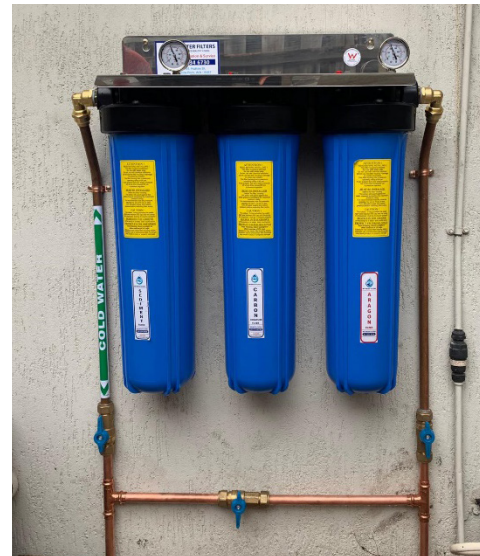


Photo 3: Domestic water filter installation



Photo 2: Commercial water filter installation

Notes

The technical note series is issued by the Plumbers Licensing Board to assist the plumbing industry to comply with the Plumbers Licensing and Plumbing Standards Regulations 2000 (the Regulations) applicable to plumbing work in Western Australia.

Each technical note is to be read in conjunction with Part 6 of the Regulations that currently adopt the Plumbing Code of Australia (PCA) and the deemed to satisfy provisions of AS/NZS 3500:2018, parts 0, 1, 2 and 4 but modified in certain matters to suit the State's building approach and other local conditions.

Feedback

The Plumbers Licensing Board welcomes your feedback. If you have any questions on this technical note or any suggestions on any areas of plumbing work that the technical notes should cover, please contact the Board's Senior Technical Officer on (08) 6251 1377.

Copies

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