

Backflow prevention requirements for toilet seat douche outlets and flexible hoses

Plumbing Advisory Note

Issued April 2016

The Office of the Technical Regulator (OTR) has identified a number of issues with toilet seat douche and flexible hose installations that do not comply with relevant plumbing standards.

The OTR has determined the cross-connection hazard rating as 'high hazard' for:

- toilet seat douches or bidets that are either integrated into or installed in conjunction with a toilet seat
- flexible hoses installed adjacent to a toilet.

Where a 'high hazard' reduced pressure zone (RPZ) backflow prevention device is required, it must be installed upstream of the toilet douche seat or flexible hose connection.

The RPZ must be fitted before connecting the property's water service to the water meter.

Toilet seat douches

A toilet seat douche or bidet must comply with AS/NZS 3500 Part 1 Water Services Clause 12.2.3.

A douche outlet installed at least 25mm above the overflow level of the pan, at any position, does not require a backflow prevention device.

If the douche outlet is less than 25mm above the overflow level of the pan, at any position, a 'high hazard' backflow prevention device must be installed (see figures 1 and 2). The device must comply with AS/NZS 2845.1 or AS 2845.2.

Legislative requirements

The National Construction Code Series Volume Three, Plumbing Code of Australia (PCA), Part B specifies performance requirements related to installing water services.

AS/NZS 3500.1.2015, Part 1 Water Services, Clause 4.2.2 states 'no device or system that may cause contamination of a water supply shall be connected directly or indirectly to any part of a water service without appropriate cross-connection or backflow prevention control suitable for the degree of hazard'.

Completed plumbing installations that comply with AS/NZS 3500.1.2015 are deemed to satisfy the performance requirements of the PCA in relation to water services.



Figure 1: Example of 20mm reduced pressure zone (RPZ) device valve assemblies installed upstream of a flexi-spray outlet in a domestic setting.

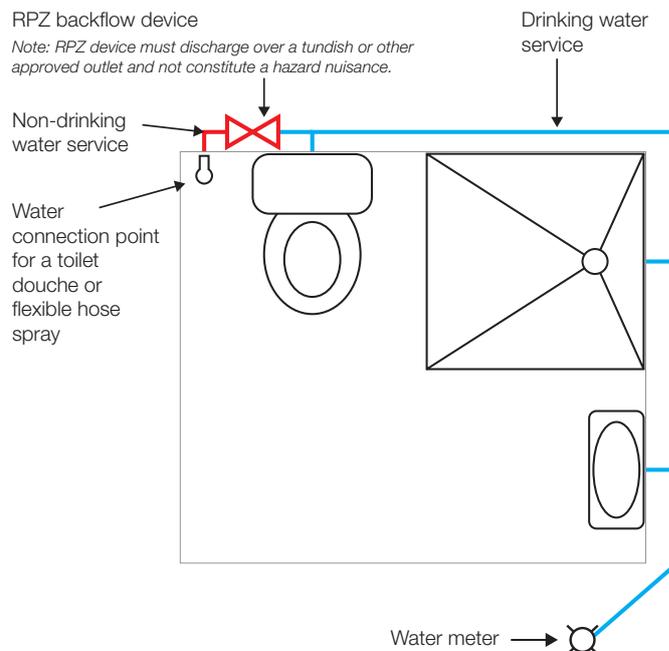


Figure 2: Example of an individual backflow prevention device fitted upstream of a water connection point servicing a toilet seat bidet/douche or a flexible hose adjacent to a toilet.



Figure 3: Example of a toilet seat douche outlet below the rim of the pan



Figure 4: Example of a water connection point installed in a toilet room adjacent to a toilet.

Flexible hoses adjacent to toilets

Where a water connection point is installed adjacent to a toilet for the purpose of supplying water to a flexible hose, a 'high hazard' RPZ backflow device must be installed upstream of the hose connection (see figures 1 and 2). The device must comply with AS/NZS 2845.1 or AS 2845.2.

Testing and commissioning backflow prevention devices

All new installations of backflow prevention devices must be tested and commissioned by a licensed plumber. Results must be recorded in the OTR's official 'Commission, inspection and maintenance' report.

All testable backflow prevention devices must also be tested annually by a licensed plumber and the results recorded in the OTR's official 'Commission, inspection and maintenance' report.

Reports must be completed and forwarded to the OTR within seven days of testing.

Completed reports can be emailed to otr.plumbbackflow@sa.gov.au or posted to:

Office of the Technical Regulator – Plumbing
GPO Box 320
Adelaide SA 5001

Bidettes

A bidette is a sanitary fixture equipped with a douche, but with over rim type water outlet that provides an airgap. Bidettes can be installed as an alternative to toilet seat douches and flexible hoses. The water outlet of all bidettes is at least 25mm above the overflow level of the fixture and does not require testable backflow devices to be fitted to the water supply to the fixture (please refer to Figure 5).



Figure 5: Example of a bidette with an outlet more than 25mm above the rim of the fixture.

Contact the Office of the Technical Regulator for more information

Online sa.gov.au/otr

Email otr.plumbregulator@sa.gov.au

Phone 1300 760 311

