

Backflow prevention - containment protection

Plumbing Advisory Note

Revised July 2023

Containment protection must be provided at the property boundary to protect the network utility operator's water supply. No branches are to be taken between the network utility operator's connection or water meter and the Backflow Prevention Containment Device.

Where a site is served by a Network Utility Operator's drinking water supply, appropriate containment protection must be selected by using Specification 41 in the Plumbing Code of Australia (PCA) and installed in accordance with Section 4 of AS/NZS 3500.1 – Table 4.4.1 Suitability of devices.

Understanding the NCC – Building classifications

The National Construction Code (NCC) sets out the minimum technical requirements for new buildings (and new building work in existing buildings) in Australia.

In doing so, it groups buildings by their use. These groups are assigned a classification which is then how buildings are referred to throughout the NCC. This information is crucial for all NCC users.

More information about building classifications can be found on the [Australian Buildings Codes Board website](https://www.australianbuildingscodesboard.gov.au/)

Legislative requirements

The **National Construction Code Series - Volume Three, Plumbing Code of Australia (PCA)** sets out the cross-connection hazards and corresponding Hazard Ratings in Specification 41.

This specification only prescribes Hazard Ratings for a limited list of known hazards. It does not cover every potential cross-connection that may arise from time to time.

Where a situation arises which is not listed in this specification, the appropriate Hazard Rating may be determined as a Performance Solution, such as a Performance Solution developed using Verification Method B5V1.



Understanding the NCC
Building classifications



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Containment protection

(1) The following are Low Hazard for the purpose of containment protection:

(a) A water service provided to a Class 1, Class 2, Class 7a or Class 10 building where - (i) not more than 12 persons reside; and (ii) the building may only use non-commercial amounts of cleaning products.

(b) Premises served by a rainwater harvesting system, not including any rainwater storage tanks that are buried tanks.

(c) A water service where there are no non-drinking water services within the property.

Exemptions - Clause (1)(c) does not apply to a non-drinking water service provided to the property by a Network Utility Operator (1) as part of a dual water supply.



Low Hazard – Dual-check valve (DUAL CV)

(2) The following are Medium Hazard for the purpose of containment protection:

(a) A water service provided to a Class 3, Class 4, Class 5, Class 6 or Class 7b building where chemicals are not stored.

(b) A water service provided to a property that has - (i) other non-drinking water services; or (ii) a separate fire water service.

Exemptions - Clause (2)(b)(i) does not apply to a non-drinking water service provided to the property by a Network Utility Operator.



Medium Hazard – Double-check valve (DCV)

(3) The following are High Hazard for the purpose of containment protection:

(a) A water service provided to a Class 7b building where chemicals may be stored

(b) A water service provided to a Class 8 or Class 9 building

(c) A water service provided to a property used for commercial agriculture, farming, turf irrigation, industrial, (c) processing or chemical industries.

(d) A water service provided to a property that has non-drinking water services from multiple sources with potential (d) for health-related contamination.



High Hazard – Reduced pressure zone device (RPZD)

Class 1a domestic dwellings

Class 1a buildings (domestic dwellings) require a minimum low hazard containment device.

Water meters supplied and installed by the water entity (SA WATER) may contain an integral dual check valve (Dual CV) that has been tested and conforms to the backflow product standard (AS2845.1). This means that when no other hazards exist on the premises no additional backflow is required.

Plumbers must confirm that the water meter installed does contain the integral Dual CV. If not, a low hazard device must be installed immediately downstream of the water meter.

Contact the Office of the Technical Regulator for more information

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**Government of
South Australia**