

Installation of non-drinking water (recycled water)

Plumbing Advisory Note

Revised December 2023

The Office of the Technical Regulator (OTR) regulates onsite non-drinking (recycled) water installations.

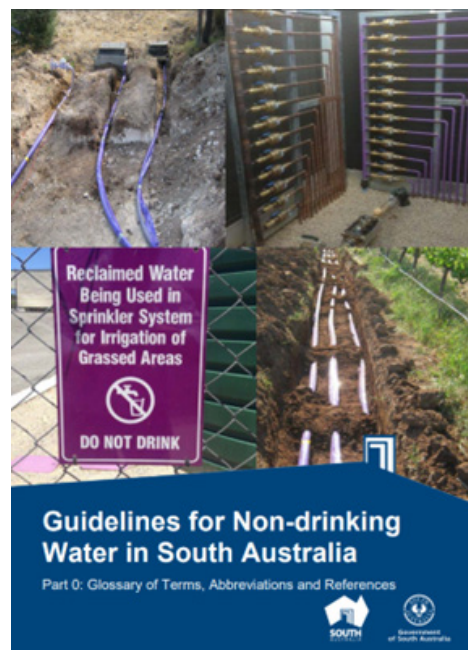
The *National Construction Code (NCC), Volume 3 - Plumbing Code of Australia (PCA)* sets out the requirements for design, construction, installation, replacement, repair, alteration and maintenance of any part of a non-drinking water service (recycled water).

Plumbing and appropriately licensed irrigation contractors carrying out work on non-drinking water services (recycled or reclaimed water) for residential, commercial, industrial and recreational properties/areas in South Australia **must**:

- Ensure all work complies with the PCA and AS/NZS 3500.1
- Use non-drinking water service pipework that is a purple colour no darker than P24 Jacaranda or P12 Purple and not lighter than P23 Lilac.
- Ensure all underground pipework has marking tape that conforms to AS/NZS 2648.1. The tape must be run above the pipe longitudinally and attached to the pipework every 3 meters.
- **Marking tape should be labelled:**
RECYCLED OR RECLAIMED WATER - DO NOT DRINK.
 - When purple coloured pipework is not installed underground (eg blue line PE) the pipe must be easily identified by additionally installing close fitting durable purple sleeving, netting or spirally wrapped tape completely covered.
- Book an audit with the OTR for:
 - All above ground, in-wall and in-ground non-drinking water installations.
 - If making an authorised connection to a non-drinking water meter.
 - Non-drinking water supply pipework for irrigation purposes, including backflow prevention requirements.
 - Drinking water supply pipework for irrigation purposes, including backflow prevention requirements.

Booking an audit with the OTR

- You can book an audit by calling 1300 884 055 or online at plumbbooking.sa.gov.au no later than 3pm the day before the audit is required.
- You must ensure the property is accessible at the nominated inspection time for in-wall and in-ground pipework.
- If the work is not inspected within 20 minutes of the booking time, plumbers may proceed backfilling or concealing pipework within the walls or ceilings.
- You must also provide the OTR and the owner/occupier of the property with an electronic Certificate of Compliance (eCoC) within seven days of completing the work.



Guidelines for non-drinking water installations can be found by visiting the following link and selecting the non-drinking water tab:
[Plumbing trades \(otr.sa.gov.au\)](http://Plumbing%20trades%20(otr.sa.gov.au))

Temporary bypass adjacent to meters

When the non-drinking water has not been activated by the water industry entity, a temporary bypass must be installed for the purpose of testing and commissioning.

This bypass must be adjacent to the water meters and in an accessible location. Examples of the temporary bypass can be seen in Figure 1. The bypass must be removed when the non-drinking water service is activated. This can only occur upon confirmation that there are no cross-connections within the property by following and verifying the non-drinking water commissioning procedure detailed in *AS/NZS 3500.1* and with the network utility operator's authorisation.

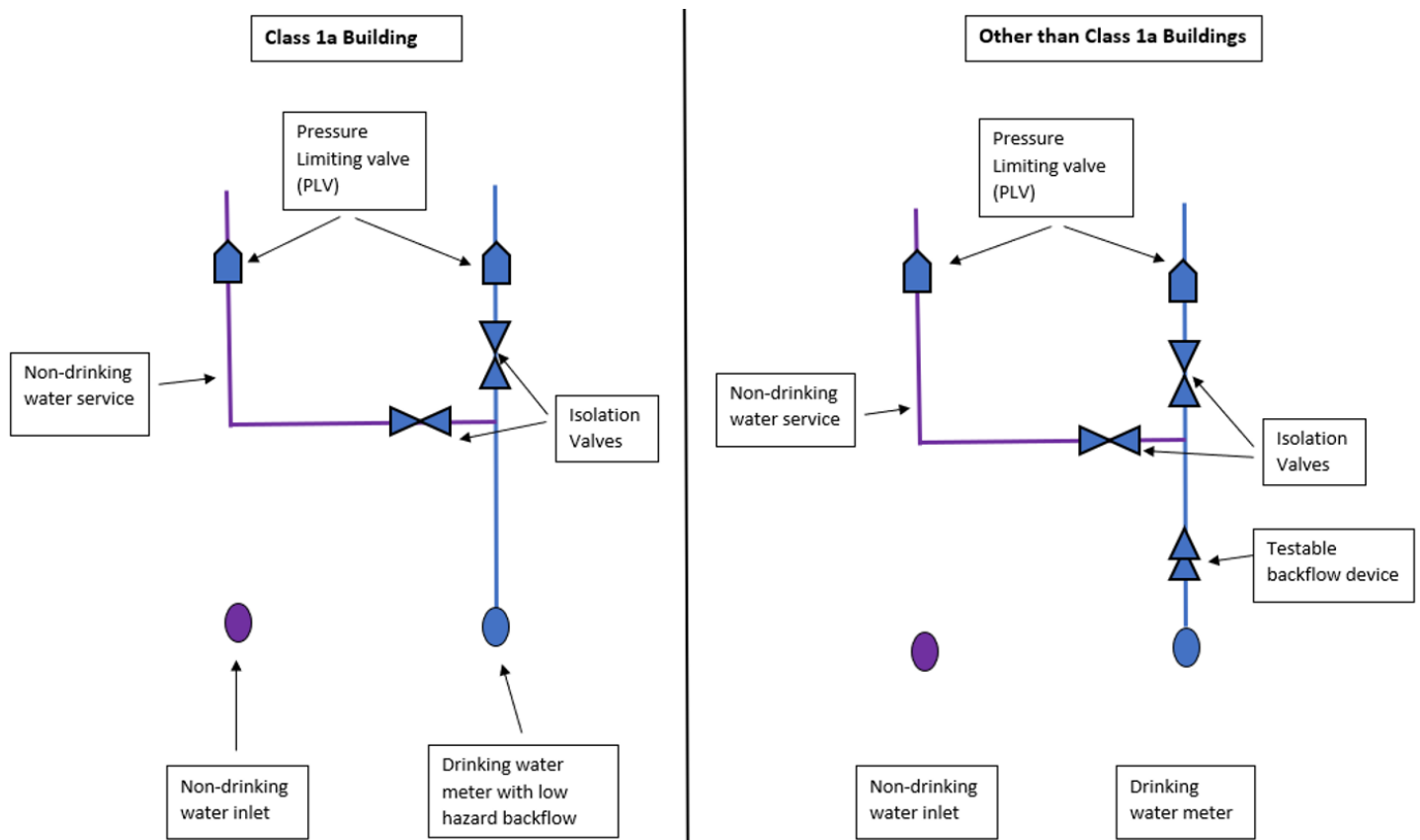


Figure 1: Examples of connection between non-drinking water and drinking water services

Temporary bypass in a secondary alternative location

As building envelopes will sometimes cover the entire boundary of the property, the temporary bypass may have to be installed in a secondary alternative location. This may happen when the water meters are located in the footpath and there is no available garden bed to facilitate a temporary bypass adjacent to the meters. In situations where the temporary bypass cannot be installed adjacent to the water meters, it can be installed in a secondary alternative location as follows:

- Attached above ground to an external wall of the building, or
- Inside a garage, or
- In an accessible location that will not cause nuisance or undue damage.

Figure 2 on the next page provides an example of a temporary bypass in cases where it cannot be provided at the meter locations.

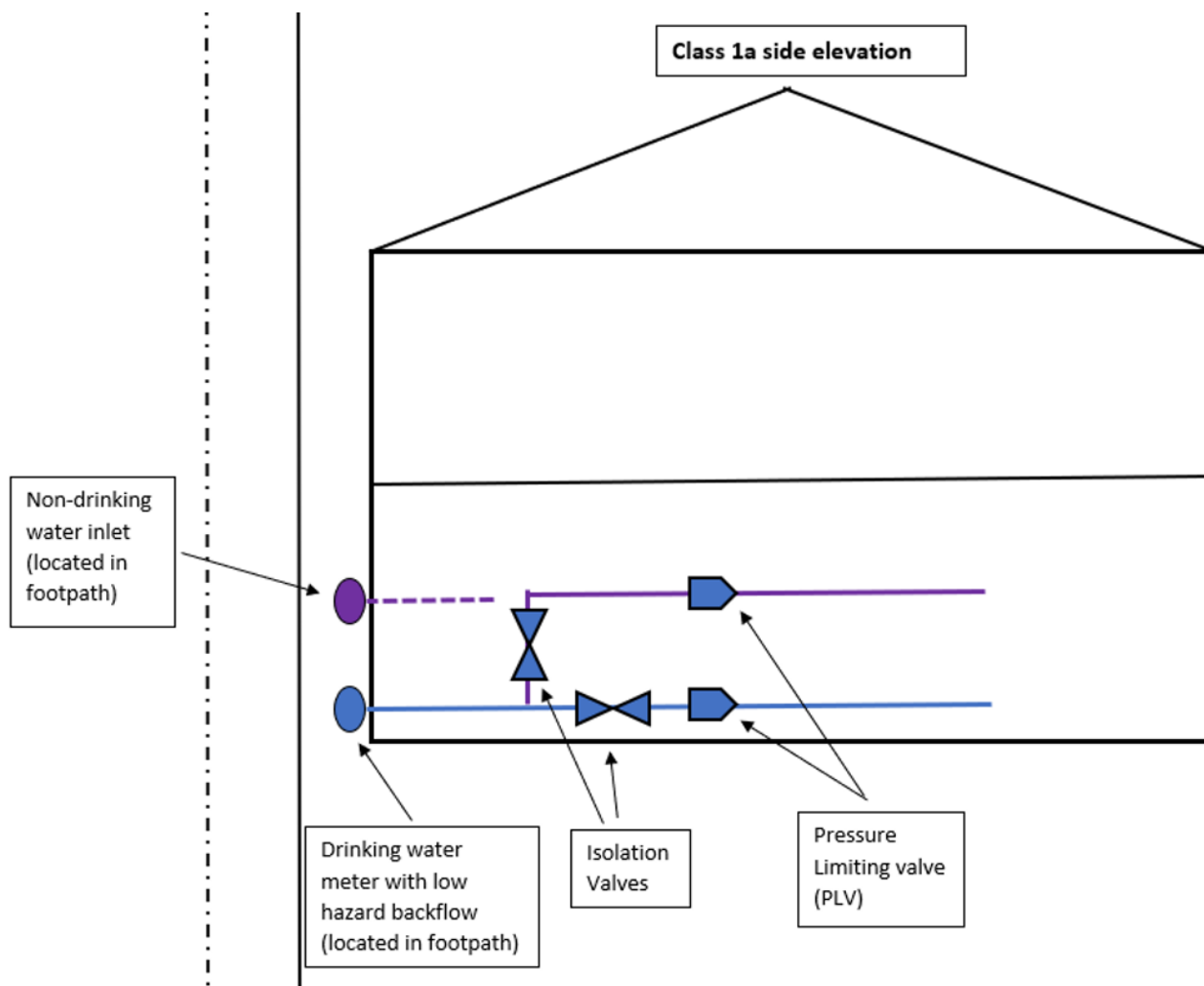


Figure 2: Connection between non-drinking water and drinking water services in secondary alternative location.

Cross-connection test (SA Water sites)

A cross-connection test must be conducted by the plumbing contractor who installs the non-drinking water system. In addition, plumbing contractors are required to book a cross-connection test with SA Water by calling 7424 1360 by 3pm the day before the test is required.

Cross-connection test (other water entity sites)

A cross-connection test must be conducted by the plumbing contractor who installs the non-drinking water system. An additional cross-connection test is to be performed by the water entities plumbing contractor at the time the non-drinking water meter is installed. It is the responsibility of the plumber, builder or owner to contact the developer to arrange for the cross-connection test.

An eCOC for the non-drinking water (in-wall or in-ground) and cross-connection test is forwarded to the owner/developer of the property and the OTR within seven days of completing the work.

Plumbers are required to:

- Install a temporary bypass to ensure that only drinking water is used to conduct the cross- connection test.
- Install compliant signage and taps (as per Figure 3 on next page)
- Ensure all pipework, including the risers to garden taps, is identified as non-drinking water
- Ensure all exposed plastic pipework is protected from direct sunlight.



Figure 3: Non-drinking (recycled) water signage and tap

Maintenance

Property owners with non-drinking water (recycled) services are required under the *Water Industry Act 2012* (S69) to ensure that those services are maintained in operational compliance.

Compliance

The OTR conducts audits of non-drinking water installations including final inspections. The *Water Industry Act 2012* has provisions for the OTR to expiate/prosecute plumbers for non-compliant plumbing installations and or for not booking the appropriate inspections.

For more information, please contact the OTR Plumbing trades team using the details in the footer below.

Contact the Office of the Technical Regulator for more information

Online otr.sa.gov.au

Email otr.plumbregulator@sa.gov.au

Phone 1300 760 311