

Title	Prepare to test, and inspect and test, water supply backflow prevention devices		
Level	3	Credits	4

Purpose	<p>This unit standard is for people who work in the plumbing or water industries.</p> <p>People credited with this unit standard are able to:</p> <ul style="list-style-type: none"> – prepare to test water supply backflow prevention devices; – inspect and test water supply backflow prevention devices; and – report results of water supply backflow prevention device testing.
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Classification	Plumbing, Gasfitting and Drainlaying > Plumbing
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Available grade	Achieved
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Guidance Information

1 References

Health Act 1956;

Health and Safety at Work Act 2015;

Health (Drinking Water) Amendment Act 2007;

Local Government Act 2002;

The following standards, which are available at <http://www.standards.govt.nz>:

AS/NZS 2845.1:2010 *Water Supply – Backflow prevention devices – Materials, design and performance requirements*, or alternative relevant ASSE (American Society of Sanitary Engineers) standards,

AS/NZS 3500.1:2015 *Plumbing and Drainage – Water services*,

NZS 5807:1980 *Code of practice for industrial identification by colour, wording or other coding*;

The following clauses, and any related compliance documents, which are available at <https://www.building.govt.nz/>:

New Zealand Building Code, Clause G10 Piped Services,

New Zealand Building Code Clause G12 Water Supplies (Section 9.0 Equipotential bonding);

The following code, available from New Zealand Water

https://www.waternz.org.nz/Article?Action=View&Article_id=48:

Boundary Backflow Prevention for Drinking Water Suppliers Code of Practice, 2013;

The following reference, available from United States Environmental Protection

Agency at <https://www.epa.gov/dwcapacity/distribution-resources-small-drinking-water-systems-0>:

Cross Connection Control Manual, February 2003, Chapter 5, EPA 816-R-03-002; and all subsequent amendments and replacements.

- 2 Definitions
IANZ refers to International Accreditation New Zealand
Other services – any existing installed services.
 - 3 All practical activities are to be carried out in a way that avoids harm to people and damage to property, environment, other services, materials, tools, and equipment.
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Outcomes and performance criteria

Outcome 1

Prepare to test water supply backflow prevention devices.

Performance criteria

- 1.1 Identify site location in accordance with on-site requirements.
- 1.2 Identify site access requirements in accordance with local authority by-laws, and legislative requirements.

Range may include but is not limited to – permission to enter, notification to other service providers.
- 1.3 Identify requirements relating to accessing water supply, and meet requirements prior to testing.

Range may include but is not limited to – permission to enter, notification to other service providers.
- 1.4 Complete documentation for access in accordance with the, site safety, legislative, and local authority requirements.
- 1.5 Ensure testing equipment has a current IANZ endorsed pressure calibration certificate.
- 1.6 Prepare testing equipment in accordance with test requirements.

Range includes but is not limited to – test kit, test nipples, appropriate tools, safety equipment.

Outcome 2

Inspect and test water supply backflow prevention devices.

Performance criteria

- 2.1 Inspect backflow prevention devices to determine integrity in accordance with legislation, regulations, New Zealand industry standards, and manufacturer's instructions.
- Range atmospheric vacuum break (AVB), pressure vacuum breaker (PVB), spill proof vacuum breaker (SPVB), registered air gap, double detector check, double check valve (Dual check), hose connection vacuum breaker, reduced pressure zone device, vacuum break, vented dual check.
- 2.2 Test backflow prevention devices to determine integrity in accordance with legislation, regulations, New Zealand industry standards, and manufacturer's instructions.
- Range pressure vacuum breaker (PVB), spill proof vacuum breaker (SPVB), double check valve, reduced pressure zone device.
- 2.3 Describe test procedure outcome requirements for backflow prevention devices.
- Range atmospheric vacuum break (AVB), registered air gap, double detector check, hose connection vacuum breaker, vacuum break.
- 2.4 Identify faults in terms of causes and possible alternatives for rectification.
- 2.5 Rectify faults in accordance with manufacturers' instructions.

Outcome 3

Report results of water supply backflow prevention device testing.

Performance criteria

- 3.1 Complete reports in accordance with legislation, regulations, and codes of practice.
- 3.2 Submit reports in accordance with legislation, regulations, and codes of practice.
- 3.3 File reports and associated documents in accordance with legislation, regulations, and codes of practice, good business practice.

Planned review date	31 December 2022
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	25 October 2007	31 December 2022
Review	2	23 November 2017	N/A

Consent and Moderation Requirements (CMR) reference

0003

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact The Skills Organisation reviewcomments@skills.org.nz if you wish to suggest changes to the content of this unit standard.