

Title	Determine the position, install and commission water supply backflow prevention devices		
Level	4	Credits	3

Purpose	<p>This unit standard is for people who work in the plumbing industry.</p> <p>People credited with this unit standard are able to:</p> <ul style="list-style-type: none"> – determine the position of water supply backflow prevention devices; and – install and commission testable water supply backflow prevention devices in accordance with job specifications and relevant codes and standards.
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Classification	Plumbing, Gasfitting and Drainlaying > Plumbing
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Available grade	Achieved
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Guidance Information

- 1 Legislation, regulations and/or industry standards relevant to this unit standard include but are not limited to the:
- Building Act 2004;
 - New Zealand Building Code (Building Regulations 1992 – Schedule 1);
 - Health and Safety at Work Act 2015;
 - Local Government Act 2002;
 - Plumbers, Gasfitters, and Drainlayers Act 2006;
 - Plumbers, Gasfitters, and Drainlayers Regulations 2010;
 - Water Services Act 2021.

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

- AS/NZS 2845.1:2022 *Water Supply – Backflow prevention devices, Part 1: Materials, design and performance requirements*,
- AS/NZS 2845.3: 2020 *Field testing and maintenance of testable device*,
- AS/NZS 3500.1:2021 *Plumbing and Drainage, Part 1: Water services*, Section 5.2,
- NZS 3604:2011 *Timber-Framed buildings*.

The following codes available at <https://waternz.org.nz>

- New Zealand Water and Wastes Association, *Boundary Backflow Prevention for Drinking Water Suppliers Code of Practice*, 2019,
- New Zealand Water and Wastes Association, *NZ Backflow testing standard 2019 - Field testing of backflow prevention devices and verification of air gaps*.

The following Building Code clauses, and any related Acceptable Solution and Verification Method documents, which are available at <https://www.building.govt.nz>:
New Zealand Building Code Clause B2 Durability,
New Zealand Building Code Clause G10 Piped Services,
New Zealand Building Code Clause G12 Water Supplies.

Any new, amended or replacement Acts, regulations, referenced standards, codes of practice, guidelines, Building Code Acceptable Solutions and Verification Methods, authority requirements or conditions affecting this unit standard will take precedence for assessment purposes, pending review of this unit standard.

2 Definitions

Job specifications refer to instructions (oral, written, graphic) and may include any of the following – manufacturer instructions; design drawing detail specifications; specifications from a specialist source such as an architect, designer, engineer, or a supervisor; and site or work specific requirements.

Other services refer to any existing installed services.

3 Candidates must hold a current limited certificate trainee authorisation or exemption under supervision as issued under the Plumbers, Gasfitters, and Drainlayers Act 2006.

4 Assessment information

All work must be completed in accordance with job specifications and relevant standards and codes.

5 Range

Three testable backflow prevention devices, which may include but are not limited to – Reduced Pressure Zone Device (PPZD), double check valve (DCV), pressure vacuum breaker (PVB), spill-proof vacuum breaker (SPVB).

6 Level of performance

To achieve this standard the candidate must be capable of consistently performing the requirements:

- to current and relevant legislation, standards and codes (including safety);
- in an environmentally sustainable manner;
- within an acceptable timeframe;
- in the workplace;
- in different and unfamiliar contexts.

Outcomes and performance criteria

Outcome 1

Determine the position of water supply backflow prevention devices.

Performance criteria

- 1.1 Position water supply backflow prevention devices and associated drains, if required.

Outcome 2

Install and commission testable water supply backflow prevention devices.

Performance criteria

- 2.1 Install water supply backflow prevention devices.
- 2.2 Protect water supply backflow prevention devices.
- 2.3 Commission and test water supply backflow prevention devices.
- 2.4 Complete documentation to record test results in the required format.

Replacement information	This unit standard and unit standard 30598 replaced unit standard 2117.
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Planned review date	31 December 2029
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	26 October 2017	31 December 2028
Review	2	30 May 2024	N/A

Consent and Moderation Requirements (CMR) reference	0003
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact Waihangara Ara Rau Construction and Infrastructure Workforce Development Council qualifications@waihangaararau.nz if you wish to suggest changes to the content of this unit standard.