

Title	Demonstrate knowledge of the installation and maintenance of sanitary appliances and fixtures		
Level	4	Credits	8

Purpose	<p>This unit standard is for people who work, or intend to work, in the plumbing industry.</p> <p>People credited with this unit standard are able to:</p> <ul style="list-style-type: none"> – demonstrate knowledge of regulatory requirements and selection of methods and materials as applied to the installation and maintenance of sanitary appliances and fixtures; – describe the selection of appropriate sanitary appliances and fixtures; – describe the positioning of sanitary appliances and fixtures; – describe the installation, connection, and commissioning of sanitary appliances and fixtures; and – describe the maintenance of sanitary appliances and fixtures.
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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;
 - Health and Safety at Work Act 2015;
 - Plumbers, Gasfitters, and Drainlayers Act 2006;
 - Plumbers, Gasfitters, and Drainlayers Regulations 2010.

The following standards, which are available at <https://www.standards.govt.nz>:
 AS/NZS 3500.1:2021 *Plumbing and drainage – Part 1: Water services*,
 AS/NZS 3500.2:2021 *Plumbing and drainage – Part 2: Sanitary plumbing and drainage*.

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 G1 Personal Hygiene,
 New Zealand Building Code Clause G2 Laundering,

New Zealand Building Code Clause G3 Food Preparation and Prevention of Contamination,

New Zealand Building Code Clause G10 Piped Services,

New Zealand Building Code Clause G12 Water Supplies,

New Zealand Building Code Clause G13 Foul Water,

New Zealand Building Code Clause H1 Energy Efficiency.

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

2 Definitions

Job requirements refer to specific requirements of the job at hand not covered by job specifications.

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.

Sanitary appliances and fixtures in this unit standard refer to the following:

- Sanitary fixture - any fixture which is intended to be used for sanitation.
- Sanitary appliance - an appliance which is intended to be used for sanitation and which is not a sanitary fixture. Included are machines for washing dishes and clothes.
- Soil fixture - a sanitary fixture constructed to receive solid and/or liquid excreted human waste. It includes bedpan disposal units, slop sinks, urinals, water closet pans, and water-flushed sanitary towel disposal units.
- Specialist appliances and fixtures found in – medical, hospitality, laboratory, and factory/industrial situations, which may include - ablution trough, autopsy table, bain-marie, bar sink, bedpan steriliser, bedpan washer, dental unit, drinking fountain, glass washing machine, potato peeler, sanitary napkin disposal unit, laboratory sink.

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 Range

Sanitary appliances and fixtures include but are not limited to the following:

- *Wastewater fixtures* – basin, shower, bath, laundry tub, sink, cleaner's sink, bidet;
- *Sanitary appliances* – dishwashing machine, washing machine, waste disposal unit;
- *Soil fixtures* – urinal, water closet pan;
- *Specialist appliances*, which may include - ablution trough, autopsy table, bain-marie, bar sink, bedpan steriliser, bedpan washer, dental unit, drinking fountain, glass washing machine, potato peeler, sanitary napkin disposal unit, laboratory sink.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of regulatory requirements and selection of methods and materials as applied to the installation and maintenance of sanitary appliances and fixtures.

Performance criteria

- 1.1 Describe applicable sections of legislation, standards, and codes in terms of their application to the installation and maintenance of sanitary appliances and fixtures.
- 1.2 Justify selection of methods and materials.
- Range job specifications, operation of the installed system and components, suitability and durability of materials; may include job requirements.

Outcome 2

Describe the selection of appropriate sanitary appliances and fixtures.

Performance criteria

- 2.1 Describe the selection of appropriate sanitary appliances and fixtures in accordance with job specifications.

Outcome 3

Describe the positioning of sanitary appliances and fixtures.

Performance criteria

- 3.1 Describe the positioning of sanitary appliances and fixtures to measurements in accordance with job specifications.
- Range must include at least one appliance and one fixture for users with a physical disability, and one other appliance and one other fixture.

Outcome 4

Describe the installation, connection, and commissioning of sanitary appliances and fixtures.

Performance criteria

- 4.1 Describe the installation of sanitary appliances and fixtures in accordance with job specifications and relevant standards and codes.

- 4.2 Describe the connection of sanitary appliances and fixtures to water supply connection and disposal service termination points in accordance with job specifications and relevant standards and codes.
- 4.3 Describe installation and commissioning tests in accordance with job specifications and relevant standards and codes.

Outcome 5

Describe the maintenance of sanitary appliances and fixtures.

Performance criteria

- 5.1 Describe the identification of faults in terms of causes and possible means of rectification.
- 5.2 Describe the rectification of faults in accordance with maintenance requirements, job specifications, and relevant standards and codes.

Replacement information	This unit standard and unit standard 30554 replaced unit standard 21885 and unit standard 21886.
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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@waihangaraarau.nz if you wish to suggest changes to the content of this unit standard.