## Field Planning and Construction

## Review of *Plumbing* unit standards

Subfield	Domain	ID
Plumbing, Gasfitting and	Plumbing	23847, 23848, 30527,
Drainlaying		30542 – 30555, 30598, 30599,
		30603 – 30611, 30614, 30615

Waihanga Ara Rau Construction and Infrastructure Workforce Development Council has completed the review of the unit standards listed above.

Date new versions published May 2024

Planned review date December 2029

## **Summary**

Waihanga Ara Rau Construction and Infrastructure Workforce Development Council initiated a review of unit standards in the Plumbing domain which was triggered by the regular 5-year review cycle.

The unit standards in this application have been reviewed to update them in line with current industry practice, and to ensure they are fit for purpose.

A series of Technical Advisory Group (TAG) meetings were held between November 2022 and November 2023 to complete this review. The Technical Advisory Group consisted of industry and provider representatives with consent to assess, and representatives from industry stakeholder organisations including the Plumbing, Gasfitting, and Drainlaying Board and the Ministry of Business, Innovation and Employment.

Following the review, public consultation was held in November and December 2023. Feedback received was reviewed and decisions were made in consultation with the TAG group representatives resulting in the changes below.

## Main changes

- Guidance information, legislation, performance criteria and range statements were amended across the suite of unit standards to reflect the content and scope of the work, and in line with current industry practice.
- Minor wording changes were made across the suite for clarity and to meet current industry terms.
- Unit standard 23848 was designated to expire without replacement as this is no longer required by industry.
- Unit standards 30543, 30544, 30551, 30552, 30554, 30608 and 30615 were designated to expire and will not be replaced. This is due to maintenance not being completed at the time of installation and this was a barrier to completion.
- Nine new unit standards (33332 –33340) have been developed with separate installation and maintenance outcomes.
- Unit standard 23847 was moved up to level 4 to reflect the complexity of the outcomes required.
- Unit standard 30527 had a title change and credits were reduced to 3 to accurately reflect the notional hours required for learning and assessment completion.
- Unit standards 30545, 30598, 30599, 30605, 30606, 30609 and 30614 had titles amended to more accurately reflect the outcomes, and align with current industry terms.

- Unit standard 30555 was moved down to level 3 to more accurately reflect the level of performance required.
- Unit standard 30604 had the credit value increased to 6 credits to more accurately reflect the notional hours required for learning and assessment completion.
- Unit standard 30609 had an additional outcome added to cover on-site drinking water treatment in accordance with The Drinking Water Acceptable Solutions (Taumata Arowai).
- Unit standard 30611 had the credit value increased to 5 credits to more accurately reflect the notional hours required for learning and assessment completion.

Category D unit standards will expire at the end of December 2028.

The last date for assessment of superseded versions of Category B unit standards is 31 December 2028.

Detailed list of unit standards - classification, title, level, and credits

All changes are in **bold**.

Ke	y to review category
Α	Dates changed, but no other changes are made – the new version of the standard carries the
	same ID and a new version number
В	Changes made, but the overall outcome remains the same – the new version of the standard
	carries the same ID and a new version number
С	Major changes that necessitate the registration of a replacement standard with a new ID
D	Standard will expire and not be replaced

Planning and Construction > Plumbing, Gasfitting and Drainlaying > Plumbing

ID	Title	Level	Credit	Review Category
23847	Prepare to test, and inspect and test, water supply backflow prevention devices	3 <b>4</b>	4	В
23848	Describe suitability, installation, and testing of water supply backflow prevention devices, and fault identification	3	4	D
30527	Make as-built drawings and record variations to job specifications for plumbing jobs  Prepare as-built drawings and record variations to job specifications for plumbing jobs	4	<b>3</b>	В
30542	Demonstrate knowledge of foul water systems	4	9	В
30543	Install, secure, and maintain foul water systems in accordance with NZ Building Code G13 Acceptable Solution 1	4	6	D
30544	Install, secure, and maintain foul water systems in accordance with NZ Building Code G13 Acceptable Solution 3	4	6	D
30545	Demonstrate knowledge of profiled metal and translucent roofing  Demonstrate knowledge of the installation of profiled metal and translucent roofing	4	5	В
30546	Install profiled metal roofing and cladding	4	10	В
30547	Demonstrate knowledge of relevant profiled metal cladding installation methods, trade practice, and licensing	4	5	В
30548	Demonstrate knowledge of making and installing flashings for profiled metal roofing and cladding	4	5	В

ID	Title	Level	Credit	Review Category
30549	Demonstrate knowledge of the installation and maintenance of rainwater handling and harvesting systems	4	4	В
30550	Demonstrate knowledge of the installation, commissioning, and maintenance of hot water supply systems	4	10	В
30551	Position, install, commission, and maintain low pressure hot water supply systems	4	7	D
30552	Position, install, commission, and maintain mains pressure hot water supply systems	4	6	D
30553	Demonstrate knowledge of the installation and maintenance of sanitary appliances and fixtures	4	8	В
30554	Select, position, install, connect, commission, and maintain sanitary appliances and fixtures	4	6	D
30555	Install basic sanitary plumbing systems	4 3	5	В
30598	Demonstrate knowledge of the installation, testing, and maintenance of water supply backflow prevention devices  Demonstrate knowledge of selection, installation, testing, and maintenance of water supply backflow prevention devices	4	4	В
30599	Determine the position of water supply backflow prevention devices, and install, test, and maintain devices  Determine the position, install and commission water supply backflow prevention devices	4	3	В
30603	Demonstrate knowledge of plumbing aspects of domestic fire sprinkler systems	4	3	В
30604	Demonstrate knowledge of pumps used for water supply and disposal systems in plumbing	4	3 <b>6</b>	В
30605	Demonstrate knowledge of installing, securing, and maintaining water supply pipework in buildings  Demonstrate knowledge of installing, supporting, and maintaining water supply pipework in buildings	4	7	В
30606	Determine water supply requirements in buildings, and install, secure, and maintain pipework  Determine water supply requirements in buildings, install and support water supply pipework	3	6	В
30607	Demonstrate knowledge of the installation and maintenance of solid fuel space heaters and flues	4	3	В
30608	Position, install, and maintain solid fuel space heaters and flues	4	2	D
30609	Demonstrate knowledge of alternative water supply and water storage for sanitary plumbing  Describe alternative water supply, water storage, and on-site drinking water treatment systems for sanitary plumbing	4	3	В
30610	Demonstrate knowledge of the installation, testing, commissioning, and maintenance of solar water heating systems	4	5	В
30611	Carry out installation, testing, commissioning, and maintenance of solar water heating systems	4	4 5	В

ID	Title	Level	Credit	Review Category
30614	Demonstrate knowledge of the installation and maintenance of water mains and water supply systems  Demonstrate knowledge of the installation and maintenance of water main systems	4	4	В
30615	Install and maintain water mains and water supply systems	4	4	D
33332	Install and secure foul water systems in buildings in accordance with Building Code Clause G13 Acceptable Solution 1	4	4	NEW
33333	Maintain foul water systems and sanitary fixtures	4	2	NEW
33334	Install and secure foul water systems in buildings in accordance with Building Code Clause G13 Acceptable Solution 3	4	4	NEW
33335	Maintain hot and cold water supply systems	4	5	NEW
33336	Position, install, and commission low pressure hot water supply systems	4	6	NEW
33337	Position, install and commission solid fuel space heaters and flues	4	4	NEW
33338	Position, install, and commission mains pressure hot water supply systems	4	4	NEW
33339	Install, test, and commission water main systems	4	3	NEW
33340	Install and commission sanitary appliances and fixtures	4	5	NEW