

Title	Verify gasfitting installations and consider and select solutions for the installation		
Level	5	Credits	20

Purpose	People credited with this unit standard will be able to: <ul style="list-style-type: none"> – verify gasfitting installations; and – consider and select solutions to mitigate adverse effects of a gasfitting installation.
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Classification	Plumbing, Gasfitting and Drainlaying > Gasfitting
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Available grade	Achieved
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Guidance Information

- 1 This unit standard builds upon the pre-existing knowledge and skills held by a tradesman gasfitter. It reflects part of the increased knowledge and skill set that is required to become recognised as a certifying gasfitter. The competencies expected of a tradesman gasfitter have already been demonstrated and reassessment is not required.

- 2 References
 Building Act 2004;
 New Zealand Building Code;
 Construction Contracts Act 2002;
 Electricity Act 1992;
 Gas Act 1992;
 Gas (Safety and Measurement) Regulations 2010;
 Health Act 1956;
 Health and Safety at Work Act 2015;
 Plumbers, Gasfitters, and Drainlayers Act 2006;
 Plumbers, Gasfitters and Drainlayers Board (Gasfitting Registration and Licensing) Notice 2016;
 Resource Management Act 1991;
 The following standards, which are available at <http://www.standards.govt.nz>:
 NZS 3604:2011 *Timber-framed buildings*;
 NZS 4219:2009 *Seismic performance of engineering systems in buildings*;
 AS/NZS 5601.1:2013 *Gas installations – Part 1: General installations*;
 AS/NZS 5601.2:2013 *Gas installations – Part 2: LP Gas installations in caravans and boats for non-propulsive purposes*;
 The following guides, which are available at <http://www.worksafe.govt.nz>:
Health and Safety by Design: 2018;
 and all subsequent amendments and replacements.

- 3 Definitions
Compliance requirements – requirements of the New Zealand Building Code; the Gas Act 1992; Gas (Safety and Measurement) Regulations 2010; and any other relevant legislation, regulations, codes, or standards as applicable to gasfitting.
LPG – liquefied petroleum gas
- 4 Assessment
 Assessments requiring application or demonstration of skills and knowledge may be performed using workplace evidence or evidence derived from simulation or scenario-based activities.
 Includes application of trade calculations and science. Trade calculations and science may be demonstrated through the use of graphs, tables, software tools, or online or other electronic resources.
- 5 All tasks must be carried out in accordance with:
 Gas Act 1992;
 Gas (Safety and Measurement) Regulations 2010;
 Health and Safety at Work Act 2015;
 New Zealand Building Code; and
 any other relevant legislation, regulations, codes, or standards as applicable to drainlaying.

Outcomes and performance criteria

Outcome 1

Verify gasfitting installations.

Range includes a minimum of three installations;
 includes – one design for a natural gas installation and one design for an LPG installation;
 includes one installation of – a gas-fired appliances and equipment installation in a commercial, industrial, or multi-level residential setting; or an LPG installation for non-propulsive purposes in a mobile application;
 a minimum of two pipe materials must be used across the installations.

Performance criteria

- 1.1 Review gasfitting installations to confirm they comply with their designs.
- 1.2 Review gasfitting installations to confirm they comply with compliance requirements.
- 1.3 Review gasfitting installations to identify their potential adverse effects on structures.
- Range may include but is not limited to – structural integrity, weather tightness, seismic, fire rating, positioning of system in relation to other services.
- 1.4 Perform tests to confirm correct operation of gasfitting installations.

Outcome 2

Consider and select solutions to mitigate adverse effects of a gasfitting installation.

Range consideration may be based on but is not limited to – design of system, compliance requirements.

Performance criteria

2.1 Consider and select solutions to mitigate issues with an installation.

Range issues may include but are not limited to – not in accordance with the design, does not operate as intended.

2.2 Consider and select solutions to mitigate adverse effects of an installation on structure.

Range adverse effects of installation on structures may include but are not limited to – structural integrity, weather tightness, seismic, fire rating, positioning of installation in relation to other services.

Planned review date	31 December 2024
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	26 March 2020	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 The Skills Organisation reviewcomments@skills.org.nz if you wish to suggest changes to the content of this unit standard.