

Title	Demonstrate knowledge of the installation and maintenance of gas pressure and control devices		
Level	4	Credits	8

Purpose	<p>This unit standard is for people who work in the gasfitting industry.</p> <p>People credited with this unit standard are able to:</p> <ul style="list-style-type: none"> – demonstrate knowledge of gas pressure and control devices and their operation; – explain the testing and commissioning of gas pressure and control devices; and – demonstrate knowledge of the maintenance of gas pressure and control devices.
----------------	--

Classification	Plumbing, Gasfitting and Drainlaying > Gasfitting
-----------------------	---

Available grade	Achieved
------------------------	----------

Guidance Information

- 1 Legislation, regulations and/or industry standards relevant to this unit standard include but are not limited to the:
- Building Act 2004;
 - Electricity Act 1992;
 - Gas Act 1992;
 - Gas (Safety and Measurement) Regulations 2010;
 - Health and Safety at Work Act 2015;
 - Plumbers, Gasfitters, and Drainlayers Act 2006;
 - Plumbers, Gasfitters, and Drainlayers Regulations 2010.

The following standard, which is available at <http://www.standards.govt.nz>:
 NZS 5601.1.2013 *Gas installations – Part 1: General installations*.

The following Building Code clause, and any related Acceptable Solution and Verification Method documents, which are available at <https://www.building.govt.nz/>:

- New Zealand Building Code Clause G11 Gas as an Energy Source.

Any new, amended or replacement referenced standards, codes of practice, guidelines, Building Code Acceptable Solutions and Verification Methods, or authority requirements 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: manufacturers' 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.

Maintenance may refer to all or any of – repair, upgrade, alter, remove, replace.

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 This unit standard applies to gas pressure and control devices used in gas installations between the point of supply and the appliance.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of gas pressure and control devices and their operation.

Range pressure and control devices must include but are not limited to – regulators, pressure-raising devices, under and over pressure cut offs, isolation valves, solenoids, excess-flow valves, filters, relief valve, seismic shutdown, flashback protection, gas leakage detection devices, interlocks (including fire).

Performance criteria

1.1 Identify and describe gas pressure and control devices and their application.

1.2 Explain working principles of gas pressure and control devices including the operation and function of their components where applicable.

1.3 Describe the positioning and installation requirements of gas pressure and control devices in accordance with job specifications and relevant standards and codes.

Outcome 2

Explain the testing and commissioning of gas pressure and control devices.

Range interlocks, excess flow devices, over-pressure protection, regulators.

Performance criteria

2.1 Explain how gas pressure and control devices are tested and commissioned in accordance with job specifications and relevant standards and codes.

Outcome 3

Demonstrate knowledge of the maintenance of gas pressure and control devices.

Range interlocks, excess flow devices, over-pressure protection, regulators.

Performance criteria

- 3.1 Describe the process for assessing the correct operation of gas pressure and control devices and their maintenance requirements.
- 3.2 Explain how to identify faults in terms of the nature of the fault and possible means of rectification.
- 3.3 Explain how faults are rectified in accordance with maintenance requirements of gas pressure and control devices.
- 3.4 Describe the recommissioning and retesting processes of gas pressure and control devices in accordance with maintenance requirements and relevant standards and codes.

Replacement information	This unit standard and unit standard 30714 replaced unit standard 21898.
--------------------------------	--

Planned review date	31 December 2029
----------------------------	------------------

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	23 November 2017	31 December 2028
Review	2	25 July 2024	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 Waihanga Ara Rau Construction and Infrastructure Workforce Development Council qualifications@waihangaararau.nz if you wish to suggest changes to the content of this unit standard.