Title	Install and commission gas appliances and associated equipment		
Level	4	Credits	15

Purpose	This unit standard is for people who work in the gasfitting industry.
	People credited with this unit standard are able to: - install gas appliances and associated equipment; and - commission gas appliances and associated equipment.

Classification Plumbin	Plumbing, Gasfitting and Drainlaying > Gasfitting	

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;

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 standards, which are available at http://www.standards.govt.nz: AS/NZS 5601.1:2013 Gas installations – Part 1: General installations; NZS 3604:2011 Timber-framed buildings.

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 E2 External moisture,
- 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

Associated equipment refers to any equipment other than a gas appliance which must be installed as part of an appliance installation. This may include but is not limited to – flues, ventilation, connections, valves, regulators, pressure testing points, mounting and restraints.

Gas appliances refer to gas appliances that generally have an input rating below 250MJ/h and may be electronically or manually controlled.

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.

- 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

Two different gas cooking appliances which must include an oven or range, plus one other gas cooking appliance.

Two different gas heating appliances which may include but are not limited to – central heating appliance, natural draught, balanced flue, radiant panel heater, tube heater.

One gas water heating appliance which may include but is not limited to – continuous flow water heater, storage water heater, pool heater, spa pool heater, boiler.

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.
- 7 Credit for this unit standard does not entitle the candidate to legally perform certain electrical aspects of this work unless registered or supervised by a registered person under the provisions of the Electricity Act 1992.

Outcomes and performance criteria

Outcome 1

Install gas appliances and associated equipment.

Performance criteria

1.1 Confirm the selection of gas appliances, flues, and ventilation.

- 1.2 Confirm the location for gas appliances, flues, and ventilation.
- 1.3 Complete verification of gas supply.

Range gas type, supply pressure, adequate flow rate to meet anticipated maximum load.

- 1.4 Install gas appliances, flues, and ventilation.
- 1.5 Carry out gas tightness tests.
- 1.6 Purge gas supply system
- 1.7 Connect gas appliances and associated fittings to gas supply connection points.
- 1.8 Test final connections for gas tightness.

Outcome 2

Commission gas appliances and associated equipment.

Performance criteria

2.1 Commission gas appliances and equipment in accordance with manufacturer instructions.

Range may include but is not limited to – flue spillage test, flue gas

analysis, operation of safety equipment and devices, set gas

pressures, ventilation, correct operation of appliance.

2.2 Complete post installation documentation in accordance with job requirements.

Range documentation may include but is not limited to – Gas Safety

Certificates (GSC), Certificates of Compliance (CoC), Certificate of

Verification, warrantees, checklists, certified designs.

2.3 Instruct the consumer on the proper use of appliance and maintenance requirements on completion of installation and commissioning.

Planned review date 31 De	ecember 2029
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	25 July 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.

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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.