

Title	Install LPG cylinder systems for gas installations for buildings		
Level	4	Credits	5

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"> – select appropriate LPG cylinder systems for gas installations for buildings; – install LPG cylinder systems for gas installations for buildings; and – commission LPG cylinder systems for gas installations for buildings.
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Classification	Plumbing, Gasfitting and Drainlaying > Gasfitting
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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:
- Gas Act 1992;
 - Gas (Safety and Measurement) Regulations 2010;
 - Hazardous Substances and New Organisms Act 1996;
 - Health and Safety at Work Act 2015.

The following standards, which are available at <http://www.standards.govt.nz>:
 AS/NZS 1596:2014, *The storage and handling of LP Gas*,
 AS/NZS IEC 60079.10.1:2009 *Classification of areas - Explosive gas atmospheres*
 NZS 5601.1:2013 *Gas installations – Part 1: General installations*.

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 G10 Piped Services,
- New Zealand Building Code Clause G11 Gas as an Energy Source.

The following code of practice, which is available at <http://www.gasnz.org.nz/lpg-association-of-new-zealand/lpga/codes-of-practice/>:
 GasNZ Code of Practice No. 2 *Installation and maintenance of twin 45kg LPG cylinder systems*.

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 Definition

LPG cylinder systems refer to cylinders and associated fittings including pigtailed, regulators, manifolds, and condensate trap/drain.

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

LPG cylinder systems may include – single cylinder system, multiple cylinder system, manifold cylinder system. This includes vapour withdrawal systems and does not include liquid withdrawal systems.

Evidence is required for installation of two different system types.

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.

Outcomes and performance criteria

Outcome 1

Select appropriate LPG cylinder systems for gas installations for buildings.

Performance criteria

1.1 Determine the adequate LPG cylinder system to meet the requirements of the intended application.

Range considerations – vaporisation, load, cylinder type availability, delivery frequency, maximum HSNO requirements.

1.2 Select system components that are appropriate for the intended system.

Range may include but is not limited to – LPG cylinders, changeover regulators, excess flow valves, flexible hoses, test points, seismic restraints, single and two stage regulation, condensate trap, cylinder connections, relief valves, relief pipes, over-pressure shut off (OPSO).

Outcome 2

Install LPG cylinder systems for gas installations for buildings.

Performance criteria

2.1 Establish the location of the systems.

2.2 Determine the required physical protection of systems.

2.3 Install LPG cylinder systems.

2.4 Secure and provide physical protection of installed systems in accordance with relevant standards and job specifications.

2.5 Perform gas tightness tests and purging prior to the regulator.

Outcome 3

Commission LPG cylinder systems for gas installations for buildings.

Performance criteria

3.1 Commission LPG cylinder systems.

Range includes – checking and adjusting pressure control and safety devices.

3.2 Complete required documentation.

Range may include but is not limited to information required for – gas certificates, guarantees, checklists, site certification, location test certificate, photographic evidence of compliant installation.

3.3 Complete the consumer instruction process to be followed on completion of installation and commissioning.

Replacement information	This unit standard, unit standard 30720, unit standard 30722, and unit standard 30723 replaced unit standard 21897.
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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	23 November 2017	31 December 2028
Review	2	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>.

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.