

<b>Title</b>	<b>Demonstrate knowledge of trade science for gasfitting</b>		
<b>Level</b>	<b>4</b>	<b>Credits</b>	<b>3</b>

<b>Purpose</b>	<p>This unit standard is for people who work in the gasfitting industry.</p> <p>People credited with this unit standard are able to demonstrate knowledge of:</p> <ul style="list-style-type: none"> <li>– properties of gasses commonly encountered in gasfitting work; and</li> <li>– applications of gasses commonly encountered in gasfitting work.</li> </ul>
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<b>Classification</b>	Plumbing, Gasfitting and Drainlaying > Gasfitting
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<b>Available grade</b>	Achieved
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### Guidance Information

- 1 References
 

Building Act 2004;  
 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>:  
 AS/NZS5601.1:2013 *Gas installation*;  
 The following clause, and any related compliance documents, which are available at <https://www.building.govt.nz/>:  
 New Zealand Building Code Clause G11 Gas as an Energy Source;  
 and all subsequent amendments and replacements.
- 2 Range
 

Gasses include manufactured gas, natural gas, LPG.  
 LPG refers to butane, propane and general product.
- 3 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.
- 4 Candidates must hold a current limited certificate or exemption under supervision as issued under the Plumbers, Gasfitters, and Drainlayers Act 2006.

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## Outcomes and performance criteria

### Outcome 1

Demonstrate knowledge of properties of gasses commonly encountered in gasfitting work.

#### Performance criteria

- 1.1 Describe characteristic of gasses used.  
 Range includes density, upper and lower explosive limits.
- 1.2 Describe composition of gasses used.
- 1.3 Describe Boyle's Law and Charles' Law in relation to gasses.

### Outcome 2

Demonstrate knowledge of applications of gasses commonly encountered in gasfitting work.

#### Performance criteria

- 2.1 Describe common uses of gasses.
- 2.2 Describe safe storage requirements of gasses used.
- 2.3 Describe output resulting from use of gasses.  
 Range changes of state and vaporisation rates, heat values, products of combustion.

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<b>Planned review date</b>	31 December 2022
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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	N/A

<b>Consent and Moderation Requirements (CMR) reference</b>	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 The Skills Organisation [reviewcomments@skills.org.nz](mailto:reviewcomments@skills.org.nz) if you wish to suggest changes to the content of this unit standard.