Title	Determine supply requirements and install, commission, and maintain consumer gas pipework		
Level	4	Credits	10

Purpose	This unit standard is for people who work in the gasfitting industry.	
	<ul> <li>People credited with this unit standard are able to:</li> <li>determine consumer gas supply requirements;</li> <li>install, commission, and test consumer gas pipework; and</li> <li>maintain consumer gas pipework.</li> </ul>	

Classification	Plumbing, Gasfitting and Drainlaying > Gasfitting

Available grade	Achieved	·S

#### **Guidance Information**

1	References Building Act 2004;
	Health and Safety at Work Act 2015;
	Gas Act 1992; Cas (Safety and Massurement) Begulations 2010;
	Gas (Safety and Measurement) Regulations 2010; Plumbers, Gasfitters, and Drainlayers Act 2006;
	Plumbers, Gasfitters, and Drainlayers Regulations 2010;
	The following standards, which are available at <u>http://www.standards.govt.nz</u> :
	NZS 3604:2011 <i>Timber Framed Buildings</i> ,
	AS/NZS 5601.1:2013 Gas installation,
	NZS 5807:1980 Codes of practice for industrial identification by colour, wording or
	other coding;
	The following clauses, and any related compliance 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;
	and all subsequent amendments and replacements.
2	Range
	Disputer includes but is not limited to associated fittings and/or fixtures: conner

Pipework includes but is not limited to – associated fittings and/or fixtures; copper, mild steel, stainless steel, polyethylene, polypropylene, a proprietary system. Jointing methods are determined according to the material being joined and may include but are not limited to – brazed, tapered thread, compression type fitting, flange, proprietary system.

3 This unit standard requires the application of theory as included in the Plumbers, Gasfitters, and Drainlayers Regulations 2010.

4 Definitions

Job specifications – 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. Where job specifications are in conflict with applicable legislation, standards, and/or codes, such legislation, standards, and/or codes shall take precedence for the purpose of assessment *Maintain* may refer to all or any of – repair, upgrade, alter, remove, replace. *Other services* refers to any existing installed services.

- 5 Candidates must hold a current limited certificate or exemption under supervision as issued under the Plumbers, Gasfitters, and Drainlayers Act 2006.
- 6 All practical activities are to be carried out in a way that avoids harm to people and damage to property, other services, materials, tools, and equipment.

# Outcomes and performance criteria

# Outcome 1

Determine consumer gas supply requirements.

# Performance criteria

- 1.1 Verify gas supply in accordance with AS/NZS 5601.1:2013.
- 1.2 Determine pipe size for copper or steel pipe to comply with AS/NZS 5601.1:2013, and with reference to supply pressure, gas type, and consumption needs.
- 1.3 Determine pipe size for a proprietary pipe system to comply with manufacturer instructions, and with reference to supply pressure, gas type, and consumption needs.

# Outcome 2

Install, commission, and test consumer gas pipework.

# Performance criteria

- 2.1 Install copper or steel gas pipework to the requirements of AS/NZ 5601.1:2013, Gas (Safety and Measurement) Regulations 2010, and job specifications.
  - Range includes appropriate jointing methods, correctly spaced supports, proper protection, and any required identification.

- 2.2 Install a proprietary system of gas pipework to the requirements of the manufacturer's instructions, Gas (Safety and Measurement) Regulations 2010, and job specifications.
  - includes appropriate jointing methods, correctly spaced supports, Range proper protection, and any required identification.
- 2.3 Perform soundness tests in accordance with AS/NZS 5601.1:2013 Appendix E.
  - Range installations up to 30 litres, including processes for leakage detection, and repair, and final connection methods.
- 2.4 Connect the installation to the gas supply and test final connections.
- 2.5 Purge gas pipework under 30 litres.

### Outcome 3

Maintain consumer gas pipework.

### Performance criteria

- 3.1 Inspect pipe and fittings to determine their physical condition, and test an installation for soundness.
- 3.2 Identify causes of faults and possible means of rectifying them.
  - must include but is not limited to blockage, leaks, physical Range damage, corrosion.
- 3.3 Repair or remedy faults in accordance with maintenance requirements and job specifications.

Replacement information	This unit standard was replaced by unit standard 33414 and unit standard 33416.
	This unit standard and unit standard 30715 replaced unit standard 2116.

# This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.

#### Process Version Date Last Date for Assessment 1 23 November 2017 31 December 2028 Registration 2 Review 25 July 2024 31 December 2028

# Status information and last date for assessment for superseded versions

Consent and Moderation Requirements (CMR) reference	0003
This CMR can be accessed at http://www.nzqa.govt.nz/framework/sea	arch/index.do.