

Title	Install stainless steel pipe-work for mechanical building services		
Level	4	Credits	12

Purpose	<p>This unit standard is intended primarily for use in the training of personnel in the mechanical building services industry and covers installation of stainless steel pipe-work for mechanical building services.</p> <p>People credited with this unit standard are able to: prepare to install stainless steel pipe-work; install stainless steel pipe-work for mechanical building services; and test stainless steel pipe-work.</p>
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Classification	Mechanical Engineering > Heating, Ventilating, and Air Conditioning
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Available grade	Achieved
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Guidance Information

- 1 Candidates should be certified for the particular type of pipe welding performed under performance criterion 2.1.
- 2 Reference and legislation
Health and Safety at Work Act 2015.
NZS 4219:2009, *Seismic performance of engineering systems in buildings*.
- 3 Definitions
Accepted industry practice refers to approved codes of practice and standardised procedures accepted by the mechanical building services industry sector as examples of best practice.
Specifications refer to systems documentation that include technical standards, documented operating and maintenance procedures or instructions for the system, installation drawings, manufacturers' data, installation instructions, installation programme schedules, material schedules, and site instructions.
Workplace procedures refer to procedures used by the organisation carrying out the work and applicable to the tasks being carried out. They may include but are not limited to – standard operating procedures, safety procedures, equipment operating procedures, codes of practice, quality management practices and standards, procedures to comply with legislative and local body requirements.
- 4 Range
Evidence of a minimum of three jobs is required.
- 5 Assessment information

- a Evidence may be gathered by the candidate over several work sites and may need to be spread between several time periods. There will typically be jobs where part of the job is completed in conjunction with other mechanical building services personnel. The evidence relates to the candidates own specific work, not work jointly performed with other team members, except where the other team member is checking or assessing the candidate.
- b All activities must comply with applicable workplace procedures and must be consistent with accepted industry practice.

Outcomes and performance criteria

Outcome 1

Prepare to install stainless steel pipe-work.

Performance criteria

- 1.1 On-site measurements are conducted to determine components, component sizes, and spatial requirements.
- 1.2 Materials on site are verified against specifications.
- 1.3 Setting-out of job is in accordance with specifications.

Outcome 2

Install stainless steel pipe-work for mechanical building services.

Performance criteria

- 2.1 Stainless steel pipes are cut, bent, fabricated, and joined in accordance with specifications. This includes purging.
- 2.2 Stainless steel pipes and hangers are installed to structural and seismic standards and spaced in accordance with specifications.
- 2.3 All penetrations are appropriately sealed to maintain the integrity of the passive fire protection of the walls and ceilings.
- 2.4 Installation is completed within the time frame specified and without unplanned cost or waste, and includes pipe cleaning and flushing.
- 2.5 Installation is completed so that all control instructions and identifications can be read.

Outcome 3

Test stainless steel pipe-work.

Performance criteria

- 3.1 Tests confirm that pipe-work meets operational requirements in accordance with specifications.
- 3.2 Test record is produced and is passed by inspecting authority in accordance with specifications.

Planned review date	31 December 2023
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	30 January 1995	31 December 2018
Revision	2	14 April 1997	31 December 2018
Revision	3	5 January 1999	31 December 2018
Revision	4	18 May 2001	31 December 2018
Revision	5	16 April 2002	31 December 2022
Review	6	16 July 2010	31 December 2023
Review	7	29 March 2018	N/A

Consent and Moderation Requirements (CMR) reference	0013
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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 Competenz qualifications@competenz.org.nz if you wish to suggest changes to the content of this unit standard.