Title	Install specialised components for heating, ventilating, and air conditioning systems		
Level	3	Credits	6

Purpose	This unit standard is intended primarily for use in the training of personnel in the heating, ventilating, and air conditioning (HVAC) industry and covers installation of specialised components for HVAC systems.
	People credited with this unit standard are able to: prepare to install, and install specialised components; and complete installation documentation.

	Mechanical Engineering > Heating, Ventilating, and Air Conditioning	

Available grade Achieved

Guidance Information

- 1 Reference and legislation Health and Safety at Work Act 2015.
- 2 Definitions

Accepted industry practice refers to approved codes of practice and standardised procedures accepted by the HVAC industry sector as examples of best practice. *Specifications* include technical standards, documented operating and maintenance procedures or instructions for the system, installation drawings, schematics, 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.

3 Range

Examples of specialised components – pipe mounted switches, sensors, motorised dampers, gauges, motorised valves, water meters, acoustic components. Evidence of installation of an acoustic component and three other different specialised components is required.

- 4 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 typically will be jobs where part of the job is completed in conjunction with other HVAC 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 specialised components.

Performance criteria

- 1.1 Components to be installed are verified against specifications.
- 1.2 Setting-out of job is in accordance with specifications, drawings, and schematics.
- 1.3 Installation of components is coordinated with other trades.

Range examples are – building, water, gas, electricity, plumbing.

1.4 Workplace safety procedures are followed.

Outcome 2

Install specialised components.

Performance criteria

- 2.1 Components are positioned and secured in accordance with specifications, drawings, and schematics.
- 2.2 Installation of components is completed as planned within the time frame specified, without unplanned cost or waste, and with all identification labelling readable, so that commissioning and maintenance can be carried out without alteration to installation.

Outcome 3

Complete installation documentation.

Performance criteria

3.1 Installation documents are completed, distributed, and stored.

Range examples are – as built drawings, quality assurance or management documents, test certificates.

Planned review date	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	30 January 1995	31 December 2017
Revision	2	14 April 1997	31 December 2017
Revision	3	5 January 1999	31 December 2017
Revision	4	18 May 2001	31 December 2017
Revision	5	16 April 2002	31 December 2022
Review	6	16 July 2010	31 December 2022
Review	7	26 October 2017	N/A

Consent and Moderation Requirements (CMR) reference	0013		
This CMR can be accessed at http://www.nzqa.govt.nz/framework/search/index.do.			

Comments on this unit standard

Please contact Competenz <u>qualifications@competenz.org.nz</u> if you wish to suggest changes to the content of this unit standard.