

<b>Title</b>	<b>Demonstrate knowledge of legislation and codes of practice relevant to RAC and HVAC mechanical services</b>		
<b>Level</b>	<b>5</b>	<b>Credits</b>	<b>5</b>

<b>Purpose</b>	<p>This unit standard is for people in the Refrigeration and Air Conditioning (RAC) and Heating, Ventilating, and Air Conditioning trades (HVAC) who have supervisory or administrative responsibilities.</p> <p>People credited with this unit standard are able to demonstrate knowledge of: the New Zealand Building Code and its application in the provision of mechanical services; and legislation and codes of practice relating to refrigerants.</p>
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<b>Classification</b>	Mechanical Engineering > Refrigeration and Air Conditioning
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<b>Available grade</b>	Achieved
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### Explanatory notes

- For the purpose of this unit standard, Mechanical Services includes work covered by the Refrigeration and Air Conditioning and the Heating, Ventilating, and Air Conditioning trades.
- References  
 Building Act 2004 and associated Regulations.  
 Hazardous Substances (Compressed Gases) Regulations 2004.  
 Hazardous Substances and New Organisms Act 1996.  
 Health and Safety in Employment Act 1992.  
 Ozone Layer Protection Act 1996, and Ozone Layer Protection Regulations 1996.  
 APG 4-2, *Guide to Gas Cylinders*. Environmental Risk Management Authority (ERMA), 2009. Available from <http://www.ermanz.govt.nz>.  
*Code of Practice for the reduction of emissions of fluorocarbon refrigerants in refrigeration and air conditioning applications*. Institute of Refrigeration, Heating and Air Conditioning Engineers (IRHACE New Zealand), 2001. Available from IRHACE, 28 E Lambie Drive, Manukau City, Auckland 2241.  
 Department of Building and Housing. *New Zealand Building Code Handbook, 3<sup>rd</sup> Edition*. 2007. Available from <http://www.dbh.govt.nz/UserFiles/File/Publications/Building/Compliance-documents/building-code-handbook.pdf>.  
 Department of Building and Housing. *Compliance Schedule Handbook*. 2007. Available from <http://www.dbh.govt.nz/UserFiles/File/Publications/Building/Building-Act/Compliance-Schedule-Handbook.pdf>.

Department of Building and Housing. *Compliance Documents for the New Zealand Building Code* (compliance documents). Available from <http://www.dbh.govt.nz/building-code-compliance-documents>.

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## Outcomes and evidence requirements

### Outcome 1

Demonstrate knowledge of the New Zealand Building Code and its application in the provision of mechanical services.

Range New Zealand Building Code, Clauses B2, C3, E2, G4, G10, G12, H1, and associated Compliance Documents.

### Evidence requirements

- 1.1 The broad relationship between Building Act 2004, Building Regulations, Building Code, and Compliance Documents for the New Zealand Building Code is explained with reference to the provision of mechanical services.
- 1.2 Compliance Documents are applied to given mechanical services scenarios to satisfy the requirements of the Building Code.  
  
Range evidence is required of one or more scenarios applying Compliance Documents for Clauses G4, G10, G12, and H1 of the New Zealand Building Code.
- 1.3 The inspections, maintenance, and reporting procedures for a particular mechanical ventilation or air conditioning system are specified for compliance purposes in accordance with the Building Code requirements for Specified Systems (SS) 9.

### Outcome 2

Demonstrate knowledge of legislation and codes of practice relating to refrigerants.

### Evidence requirements

- 2.1 The training and certification requirements relating to handling and filling of compressed gases used in refrigeration and air conditioning systems are explained in accordance with the Hazardous Substances (Compressed Gases) Regulations 2004.
- 2.2 The requirements for safe storage and handling of refrigerants are applied to two different refrigerants in accordance with the Hazardous Substances (Compressed Gases) Regulations 2004.

- 2.3 The obligations of employers and employees relating to the use of ozone-depleting refrigerants are outlined in accordance with the Ozone Layer Protection Act 1996 and associated Regulations, and the *Code of Practice for the reduction of emissions of fluorocarbon refrigerants in refrigeration and air conditioning applications*.
- 2.4 Health and safety issues that have a bearing on working with refrigerants are identified in accordance with the Health and Safety in Employment Act 1992.

<b>Planned review date</b>	31 December 2016
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#### Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	22 October 2010	N/A

<b>Accreditation and Moderation Action Plan (AMAP) reference</b>	0013
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This AMAP can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

#### Please note

Providers must be granted consent to assess against standards (accredited) by NZQA, or an inter-institutional body with delegated authority for quality assurance, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be granted consent to assess against standards by NZQA before they can register credits from assessment against unit standards.

Providers and Industry Training Organisations, which have been granted consent and which are assessing against unit standards must engage with the moderation system that applies to those standards.

Consent requirements and an outline of the moderation system that applies to this standard are outlined in the Accreditation and Moderation Action Plan (AMAP). The AMAP also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

#### Comments on this unit standard

Please contact Competenz [qualifications@competenz.org.nz](mailto:qualifications@competenz.org.nz) if you wish to suggest changes to the content of this unit standard.