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| Title | Demonstrate knowledge of legislation and codes of practice that apply to RAC, and mechanical building services | | |
| Level | 3 | Credits | 5 |

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| Purpose | <p>This unit standard is intended for people entering the industry to ensure they have a basic understanding of the content and application of legislation and codes of practice relevant to work on refrigeration and air conditioning (RAC) equipment.</p> <p>People credited with this unit standard are able to demonstrate knowledge of legislation and codes of practice relating to: work on refrigeration and air conditioning equipment; and refrigerants.</p> |
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| Classification | Mechanical Engineering > Refrigeration and Air Conditioning |
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| Available grade | Achieved |
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Guidance Information

- Legislation and standards
 - Health and Safety at Work Act 2015;
 - Health and Safety in Employment (Pressure Equipment, Cranes, and Passenger Ropeways) Regulations 1999;
 - Building Act 2004;
 - Montreal Protocol and its amendments;
 - Electricity (Safety) Regulations 2010;
 - Electricity Act 1992;
 - AS/NZS 3000: 2018: *Electrical installations (known as the Australian/New Zealand Wiring Rules)*;
 - AS/NZS 3760:2010: *In-service safety inspection and testing of electrical equipment*;
 - AS/NZS 4701:2000: *Requirements for domestic electrical appliances and equipment for reconditioning or parts recycling*;
 - AS/NZS 5761:2011: *In-service safety inspection and testing—Second hand electrical equipment prior to sale*;
 - AS/NZS 5762:2011: *In-service safety inspection and testing—Repaired electrical equipment*;
 - AS/NZS 1677:1998 Parts 1 & 2: *Refrigerating systems—Safety requirements for fixed applications*;
 - AS 1668.1:2015 *The use of ventilation and air conditioning in buildings*;
 - AS/NZS 3000:2008 *Electrical installations known as the Australian/New Zealand Wiring Rules*;
 - AS/NZS 3666:2011 *Air-handling and water systems of buildings - Microbial control*;
 - ISO 817:2014 *Refrigerants – Designation and safety classification*;

and any subsequent amendments.

2 References

Althouse, Turnquist, Bracciano. *Modern Refrigeration and Air Conditioning*. 19th edition. Tinley Park, Illinois: The Goodhouse-Willcox Company Inc. ISBN 1-59070-280-8.

Institute of Refrigeration, Heating and Air Conditioning Engineers of New Zealand (IRHACE New Zealand). 2001 *Code of Practice for the reduction of emissions of fluorocarbon refrigerants in refrigeration and air conditioning applications*. Available from IRHACE, <http://www.irhace.org.nz/>.

3 Definition

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, site safety procedures, equipment operating procedures, codes of practice, quality assurance procedures, housekeeping standards, procedures to comply with legislative and local body requirements.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of legislation and codes of practice relating to work on refrigeration and air conditioning equipment.

Performance criteria

- 1.1 Legislation and codes that apply to refrigeration and air conditioning work are identified and an overview of their application is provided.
- 1.2 Legislation and codes are accessed from Government and IRHACE websites.
- 1.3 Examples of workplace procedures used by the candidate's employer to comply with legislation and codes are provided.
- Range a minimum of two workplace procedures.
- 1.4 Examples of the consequences of breaching legislation and codes are provided.
- Range a minimum of two examples.

Outcome 2

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

Performance criteria

- 2.1 The training and certification requirements relating to handling and filling of compressed gases used in refrigeration and air conditioning systems are outlined in accordance with current legislation.

- 2.2 The requirements for storage and handling of refrigerants are outlined in terms of current legislation.
- 2.3 The obligations of employers and employees relating to the use of ozone depleting refrigerants are outlined in accordance with the current legislation.

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| Planned review date | 31 December 2020 |
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Status information and last date for assessment for superseded versions

| Process | Version | Date | Last Date for Assessment |
|--------------|---------|-------------------|--------------------------|
| Registration | 1 | 18 June 2015 | 31 December 2017 |
| Revision | 2 | 17 September 2015 | N/A |
| Revision | 3 | 26 September 2019 | N/A |
| Revision | 4 | 22 October 2020 | N/A |

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| 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.