

Title	Demonstrate and apply knowledge of electrotechnology engineering workshop safe practice		
Level	3	Credits	5

Purpose	<p>This unit standard covers the development of practical skills, as well as knowledge and application of safe working practices and safety regulations requirements for an electrotechnology workshop and/or assembly environment.</p> <p>People credited with this unit standard are able to:</p> <ul style="list-style-type: none"> - demonstrate knowledge of safe workshop practices, and the correct use of workshop tools and equipment in an electrotechnology workshop environment; and - follow safe workshop practices to construct a device enclosure or rack for an electrotechnology application to a given specification.
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Classification	Electrical Engineering > Electrotechnology
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Available grade	Achieved
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Guidance Information

- 1 This unit standard is intended for use in engineering courses at diploma level with assessment primarily against practical assignments.
- 2 References
 Hazardous Substances and New Organisms Act 1996;
 Health and Safety at Work Act 2015;
 Health and Safety in Employment Regulations 1995;
 and all subsequent amendments and replacements.
- 3 Definitions
Industry acceptable timeframe – the length of time within which a competent person at this level could reasonably be expected to perform the task.
Industry practice – practice used and recommended by organisations involved in the electrotechnology industry.
- 4 Evidence for the outcomes of this unit standard must be presented for the following:
 - a *electrotechnology application* – either light electrotechnology fabrication, for example, an electronic product enclosure or rack with suitable mounting components for printed circuit board or wiring assemblies; or heavy electrotechnology products, for example, cable ducting and mounts, safety guards or installation fabrication for electrical switchgear, motors or equivalent;

- b *handtools* – screwdrivers, spanners, torque wrench, power drill, metal saw, tin snips, rivet gun, files;
 - c *workshop equipment* – includes but is not limited to – vices, bench drills sheet metal equipment;
 - d *common measuring tools* – such as micrometers and vernier callipers;
 - e *electrotechnology equipment and tools* – either for light electrotechnology or heavy electrotechnology applications.
- 5 All measurements are to be expressed in Système International (SI) units, and, where required, converted from Imperial units into SI units.
- 6 All activities must comply with: any policies, procedures, and requirements of the organisations involved; the standards of relevant professional bodies; and any relevant legislative and/or regulatory requirements.
- 7 Range
- a performance in relation to the outcomes of this unit standard must comply with the Health and Safety at Work Act 2015;
 - b laboratory and workshop safety practices are to be observed at all times.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of safe workshop practices, and the correct use of workshop tools and equipment in an electrotechnology workshop environment.

Performance criteria

- 1.1 Workshop and assembly skills and safe workshop practice are explained in accordance with industry practice.

Range personal protection; clothing; handling, use, and storage of all tools, equipment, and materials; clear ways; clear space; workshop behaviour; signage; observance of all rules; safety equipment and guards.

Outcome 2

Follow safe workshop practices to construct a device enclosure or rack for an electrotechnology application to a given specification.

Range may include but is not limited to – metals, plastic, wood.
evidence of at least two materials is required.

Performance criteria

- 2.1 An electrotechnology device enclosure or rack is constructed to a given specification in accordance with industry and safe working practice.
- Range construction is to be completed within an industry acceptable timeframe.
- 2.2 Measurements taken in accordance with industry practice confirm that the electrotechnology device enclosure or rack is within specified tolerances.

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

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	27 April 2000	31 December 2013
Revision	2	3 April 2001	31 December 2013
Review	3	18 December 2006	31 December 2024
Rollover and Revision	4	15 March 2012	31 December 2024
Revision	5	15 January 2014	31 December 2024
Rollover and Revision	6	25 March 2021	31 December 2024
Review	7	2 March 2023	31 December 2024

Consent and Moderation Requirements (CMR) reference

0003

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.