

Title	Demonstrate knowledge for working safely in the electrical industry		
Level	3	Credits	6

Purpose	<p>People credited with this unit standard are able to demonstrate knowledge of:</p> <ul style="list-style-type: none"> – legislative requirements for working safely in the electrical industry; – workplace dangers, hazards, risk, and its control; and – testing for voltage and isolating circuits.
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Classification	Electrical Engineering > Core Electrical
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Available grade	Achieved
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Guidance Information

- 1 References

AS/NZS 3000 (version as cited in the Electricity (Safety) Regulations), *Electrical Installations (known as the Australian/New Zealand Wiring Rules)*;
 AS/NZS 4836:2011, *Safe working on or near low-voltage electrical installations and equipment*;
 AS/NZS 60479.1:2010, *Effects of current on human beings and livestock - General aspects*;
 Electricity (Safety) Regulations 2010;
 EWRB Supervision Guidelines, available at <https://www.ewrb.govt.nz>;
 Health and Safety at Work Act 2015;
 or any current subsequent amendments and replacements.
- 2 This unit standard and unit standards 6401, 6402, and 32607 together meet the EWRB Safety Training requirements for a Trainee Limited Certificate.
- 3 This unit standard can be used together with other relevant unit standards, additional learning and workplace training to meet the requirements of the EWRB core competencies, available at <https://www.ewrb.govt.nz>.
- 4 Definitions

AC – alternating current.
DC – direct current.
EWRB – Electrical Workers Registration Board.
JSA – Job Safety Analysis.
PPE – personal protective equipment.
SWMS – Safe Work Method Statements.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of legislative requirements for working safely in the electrical industry.

Performance criteria

- 1.1 Identify the purpose of the Health and Safety at Work Act.
- 1.2 Define key terms according to the Health and Safety at Work Act.
- Range at least three terms.
- 1.3 Define Health and Safety duties according to the Health and Safety at Work Act.
- Range at least three duties.
- 1.4 Outline requirements for working safely in the electrical industry according to the Electricity (Safety) Regulations and AS/NZS 4836.
- 1.5 Define terms used in the electrical industry and their relevance to electrical workers.
- Range terms must include but are not limited to – Trainee Limited Certificate (TLC), prescribed electrical work (PEW), limits of work, supervision for electrical workers.

Outcome 2

Demonstrate knowledge of workplace dangers, hazards, risk, and its control.

Performance criteria

- 2.1 Explain the dangers of electricity, the physiological effects of current on humans.
- 2.2 Explain the dangers, precautions, and a safe procedure for rescuing someone in contact with electricity.
- 2.3 Explain the dangers and appropriate control measures for hazards within workplace situations.
- Range evidence of two situations with three hazards per situation.
- 2.4 Describe typical work site health and safety procedures.
- Range two procedures;
may include but is not limited to – site inductions, accident and incident reporting, emergency, and notifiable event procedures.

2.5 Describe the requirements to be completed in a risk management form.

Range one from SWMS, JSA, alternative system.

Outcome 3

Demonstrate knowledge of testing for voltage and isolating circuits.

Performance criteria

3.1 Explain how to store and check a multimeter before use.

3.2 Describe the procedures for the safe use of a voltmeter.

Range must include – identifying live AC and DC supplies, testing for voltage, testing to confirm circuit isolation.

3.3 Outline a procedure for safely re-livening simple circuits.

Planned review date	31 December 2026
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	24 March 2022	N/A

Consent and Moderation Requirements (CMR) reference	0003
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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 Waihanga Ara Rau Construction and Infrastructure Workforce Development Council at qualifications@waihanga.nz if you wish to suggest changes to the content of this unit standard.