Title	**Apply knowledge of working safely in the electrical industry**		
Level	**4**	**Credits**	**8**

Purpose	People credited with this unit standard are able to: – apply health and safety measures in the workplace; – identify health and safety procedures and identify risks in the workplace; and – use a voltmeter to safely and correctly test for voltage and to test for isolation.

Classification	Electrical Engineering > Core Electrical

Available grade	Achieved

Guidance Information

1 This unit standard has been developed for learning and assessment on-job.

2 Unit standard or equivalent prior knowledge and skills recommended:
Unit 32605, *Demonstrate knowledge for working safely in the electrical industry*.

3 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*;
Electricity Act 1992;
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.

4 This unit standard and unit standards 6401, 6402, and 32605, together meet the Safety Training requirements for a Trainee Limited Certificate.

5 Definitions
AC – alternating current.
DC – direct current.
EWRB – Electrical Workers Registration Board.
JSA – Job Safety Analysis.
PPE – personal protective equipment.
Safe and sound practice – as it relates to the installation of electrical equipment is defined in AS/NZS 3000.
Safety briefings – refers to health and safety inductions, health and safety briefings, toolbox meetings, or similar.
SWMS – Safe Work Method Statements.

6 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.

7 Range
a Candidates may refer to current legislation and Standards during assessment.
b Demonstration of safe working practices and installation in accordance with *safe and sound practice* are essential components of assessment of this unit standard.
c All activities and evidence presented for all outcomes and performance criteria in this unit standard must be in accordance with:
i legislation;
ii policies and procedures;
iii ethical codes;
iv Standards – may include but are not limited to those listed in Schedule 2 of the Electricity (Safety) Regulations 2010;
v applicable site, enterprise, and industry practice; and
vi where appropriate, manufacturers' instructions, specifications, and data sheets.

8 A non-contact 'volt stick' type voltage indicator is not suitable for use in this assessment.

9 The AC circuits in this unit standard apply to installations and equipment rated above extra-low voltage.

Outcomes and performance criteria

Outcome 1

Apply health and safety measures in the workplace.

Performance criteria

1.1 Record and action health and safety measures required in the workplace.

Range six health and safety measures taken from three safety briefings.

Outcome 2

Identify health and safety procedures and identify risks in the workplace.

Performance criteria

2.1 Find and record the location of workplace-specific health and safety procedure documents.

Range includes – emergency procedure, incident or accident reporting procedure.

2.2 Use risk management forms to identify electrical risks for workplace activities.

Range forms may include but are not limited to – SWMS, JSA or alternative system;
evidence of three different workplace activities is required.

2.3 Record appropriate control measures for different identified risks in the workplace.

Range risks from three different workplace activities.

Outcome 3

Use a voltmeter to safely and correctly test for voltage and to test for isolation.

Performance criteria

3.1 Identify live AC and DC supplies.

Range three AC supplies, two DC supplies.

3.2 Isolate circuits and test for circuit isolation safely.

Range three different types of circuits.

3.3 Re-liven circuits safely.

Range three different types of circuits.

Planned review date	31 December 2026

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

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.