

Title	Demonstrate fundamental knowledge for working in electrical trades		
Level	3	Credits	1

Purpose	People credited with this unit standard are able to demonstrate fundamental knowledge for working in electrical trades.
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Classification	Electrical Engineering > Electrical Standards and Statutes
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Available grade	Achieved
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Guidance Information

- 1 This unit standard has been developed for learning and assessment off-job.
- 2 This unit standard covers the capstone assessment of fundamental knowledge of legislation, electrical theory and its application and is expected to be assessed towards the end of the first-year of training in electrical trades. For example, people enrolled in the New Zealand Certificate in Electrical Pre-Trade (Level 3) [Ref: 4316] and the New Zealand Certificate in Electrical Trade (Level 4) with strands in General Electrical, and Electricity Supply [Ref: 4204].

For the purposes of this unit standard, *fundamental knowledge* is associated with these theory unit standards, assessed in year one of the New Zealand Certificate in Electrical Trade (Level 4) with strand in General Electrical [Ref: 4204-1]:

Unit 32605, *Demonstrate knowledge for working safely in the electrical industry;*
Unit 32606, *Demonstrate knowledge of tools, fittings, and plans in the electrical industry;*

Unit 32609, *Demonstrate knowledge of mathematical principles, conductors and insulators;*

Unit 32610, *Demonstrate knowledge of voltage, power and energy, and DC circuits;*

Unit 32611, *Demonstrate knowledge of magnetism and AC generation;*

Unit 32612, *Demonstrate knowledge of legislation, industry governance bodies, and AS/NZS 3000 for the electrical industry;*

Unit 32613, *Demonstrate knowledge of cords, cables, and cable installation;*

Unit 32614, *Demonstrate knowledge of electrical faults, circuit protection, de-commissioning, and commissioning.*

- 3 To achieve this unit standard, candidates must pass the capstone assessment, which is not an Electrical Workers Registration Board (EWRB) assessment. It is set and moderated by the Workforce Development Council (WDC), or as delegated by the WDC. The WDC capstone assessment is the only valid assessment tool for this unit standard, and credit for this unit standard may only be awarded on evidence of passing the assessment.

- 4 Achievement of this unit standard does not entitle trainees to legally perform prescribed electrical work without supervision. Until registered and licensed under the Electricity Act 1992, trainees are assisting, and must work under supervision when carrying out prescribed electrical work.
- 5 Range
- a Candidates may refer to current legislation and Standards during assessment.
 - b 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.

Outcomes and performance criteria

Outcome 1

Demonstrate fundamental knowledge for working in electrical trades.

Performance criteria

1.1 Present answers in response to questions related to working in electrical trades.

Range may include but is not limited to – legislation, electrical theory, electrical practice.

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 Waihangara 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.