

Title	Apply knowledge of common cords, cables, and electrical fittings		
Level	4	Credits	6

Purpose	People credited with this unit standard are able to: <ul style="list-style-type: none"> – identify and describe common types of cords and cables; – prepare and terminate common cords and cables; and – install electrical fittings using appropriate tools and fixings.
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Classification	Electrical Engineering > Core Electrical
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Available grade	Achieved
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Guidance Information

- 1 This unit standard has been developed for learning and assessment on-job. However, Outcome 2 may be assessed in a classroom, workshop, or a simulated work environment.
- 2 Unit standards or prior knowledge and skills recommended:
 Unit 32606, *Demonstrate knowledge of tools, fittings, and plans in the electrical industry*;
 Unit 32613, *Demonstrate knowledge of cords, cables, and cable installation*.
- 3 This unit standard can be used together with other relevant unit standards, additional learning and workplace training to meet the requirements of the Electrical Workers Registration Board (EWRB) core competencies, available at <https://www.ewr.govt.nz>.
- 4 Definitions
Characteristics – refers to the type, size, and standard current rating of cords and/or cables.
Construction – refers to the material and configuration of cords and/or cables.
Electrical fittings – electrical accessories and light fittings. Considerations for selection of fittings may include but not limited to – current rating, voltage rating, environmental suitability.
Industry practice – those practices that competent practitioners within the industry recognise as current industry best practice.
Safe and sound practice – as it relates to the installation of electrical equipment is defined in AS/NZS 3000.
Standard current rating – refers to the current rating of the cable unenclosed in free air at a standard air ambient temperature of 30°C.
TPS – thermoplastic-sheathed cable.

- 5 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 (Safety) Regulations 2010;
New Zealand Building Code;
or any current subsequent amended or replacement versions.
- 6 This unit standard applies to installations and equipment rated above extra-low voltage unless specifically stated.
- 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 Candidates are expected to locate and reference the relevant clauses in the Standards that relate to the electrical work being undertaken.

Outcomes and performance criteria

Outcome 1

Identify and describe common types of cords and cables.

Range five different cords and cables in total.

Performance criteria

- 1.1 Identify examples of common cords and cables.
- 1.2 Describe the construction, characteristic and applications for identified cords and cables.
- 1.3 Identify common cable sizes used in the workplace and state their standard ratings.

Outcome 2

Prepare and terminate common cords and cables.

Range at least two cable sizes, at least two cable types; terminations at two different appliances and six different types of low voltage electrical fittings.

Performance criteria

2.1 Prepare cable ends and use appropriate terminations to terminate common cords and cables into appliances and electrical fittings.

2.2 Check terminations for soundness and correct connections.

Outcome 3

Install electrical fittings using appropriate tools and fixings.

Performance criteria

3.1 Select and install common electrical fittings.

Range six different fittings;
must include – interior and exterior fittings

3.2 Select and use appropriate fixings and tools to correctly install electrical fittings or equipment to common building materials.

Range three different building materials.

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 Waihangā 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.