

Title	Install, test, and commission electrical appliances		
Level	4	Credits	2

Purpose	<p>This unit standard covers the installation of domestic or commercial electrical appliances, and is for people wishing to qualify as electrical technicians, service persons or as electricians.</p> <p>People credited with this unit standard are able to:</p> <ul style="list-style-type: none"> – prepare for installation of electrical appliances; – install and test electrical appliances; and – commission electrical appliances.
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Classification	Electrical Engineering > Electrical Appliance Servicing
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Available grade	Achieved
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Prerequisites	<p>Critical health and safety prerequisites:</p> <p>For safety reasons it is recommended that competency in this unit standard should be assessed only after competency in the following unit standards has been achieved, or equivalent knowledge and skills demonstrated:</p> <p>Unit 750, <i>Demonstrate knowledge of electrical test instruments and take measurements</i>;</p> <p>Unit 15852, <i>Isolate and test low-voltage electrical subcircuits</i>;</p> <p>Unit 29465, <i>Apply knowledge of electrical safety and safe working practices for electrical workers</i>;</p> <p>Unit 29477, <i>Demonstrate knowledge of the New Zealand national electricity grid and associated electrical protection</i>;</p> <p>Unit 29480 <i>Demonstrate knowledge of electric circuit design, control, and protection</i>; and</p> <p>hold a current First Aid certificate.</p>
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Guidance Information

- 1 This unit standard has been developed for learning and assessment on-job.
- 2 This unit standard and unit standards 15844, 29441, and 29469 together meet the assessment requirements of ERAC CEPC 33.
This unit standard and unit standards 15866, and 29468 together meet the assessment requirements of ERAC CEPC 50.

3 Definitions

CEPC – Critical Essential Performance Capabilities.

EPC – Essential Performance Capabilities.

ERAC – Electrical Regulatory Authorities Council.

EWRB – Electrical Workers Registration Board.

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 3000:2007, *Electrical Installations (known as the Australian/New Zealand Wiring Rules)*.

4 Range

a Evidence of four different appliances is required.

b Candidates may refer to current legislation and Standards during assessment.

c Demonstration of safe working practices and installation in accordance with *safe and sound practice* are essential components of assessment of this unit standard.

d 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

Prepare for installation of electrical appliances.

Performance criteria

1.1 Consult the customer to establish their requirements regarding type, size, and position of appliance to be installed.

1.2 Establish other installation requirements through consultation with other trades on site, if any, and manufacturers' specifications for the appliance.

Range may include but is not limited to – location of waste outlet, hot and cold water supply, water pressure, water temperature, electrical connection, circuit rating, need for additional support structures or framing.

Outcome 2

Install and test electrical appliances.

Performance criteria

- 2.1 Move appliance into position without damage to the appliance or its surroundings.
- 2.2 Install, connect, and adjust the appliance.
- 2.3 Test to confirm that all requirements of current regulations and Standards have been met and that the appliance is safe to connect to the supply.
- 2.4 Leave work site clear and clean to the customer's satisfaction.

Outcome 3

Commission electrical appliances.

Performance criteria

- 3.1 Verify normal operation by running appliance through a complete cycle.
- 3.2 Complete documentation in accordance with company requirements.
- 3.3 Explain the appliance operation to the customer and handover appliance documentation and warranties.

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	21 July 2016	31 December 2027
Review	2	24 March 2022	31 December 2027
Rollover and Revision	3	25 May 2023	31 December 2027

Consent and Moderation Requirements (CMR) reference

0003

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