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| <b>Title</b> | <b>Install, test, and commission electrical appliances</b> |                |          |
| <b>Level</b> | <b>4</b>   | <b>Credits</b> | <b>2</b> |

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| <b>Purpose</b> | <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"> <li>– prepare for installation of electrical appliances;</li> <li>– install and test electrical appliances; and</li> <li>– commission electrical appliances.</li> </ul> |
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| <b>Classification</b> | Electrical Engineering > Electrical Appliance Servicing |
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| <b>Available grade</b> | Achieved |
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| <b>Entry information</b>                        |   |
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| <b>Critical health and safety prerequisites</b> | <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> |

### Explanatory notes

- 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 evidence requirements 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.

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## Outcomes and evidence requirements

### Outcome 1

Prepare for installation of electrical appliances.

#### Evidence requirements

- 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.

#### Evidence requirements

- 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.

### Evidence requirements

- 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.

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| <b>Planned review date</b> | 31 December 2019 |
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### Status information and last date for assessment for superseded versions

| Process      | Version | Date         | Last Date for Assessment |
|--------------|---------|--------------|--------------------------|
| Registration | 1       | 21 July 2016 | N/A                      |

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| <b>Consent and Moderation Requirements (CMR) reference</b> | 0003 |
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

### Please note

Providers must be granted consent to assess against standards (accredited) by NZQA, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be granted consent to assess against standards by NZQA before they can register credits from assessment against unit standards.

Providers and Industry Training Organisations, which have been granted consent and which are assessing against unit standards must engage with the moderation system that applies to those standards.

Requirements for consent to assess and an outline of the moderation system that applies to this standard are outlined in the Consent and Moderation Requirements (CMR). The CMR also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

### **Comments on this unit standard**

Please contact The Skills Organisation [reviewcomments@skills.org.nz](mailto:reviewcomments@skills.org.nz) if you wish to suggest changes to the content of this unit standard.