

<b>Title</b>	<b>Test electrical appliances for safety</b>		
<b>Level</b>	<b>3</b>	<b>Credits</b>	<b>3</b>

<b>Purpose</b>	<p>This unit standard is for people in the electrical industry who need to test appliances to ensure that they are electrically safe.</p> <p>People credited with this unit standard are able to:</p> <ul style="list-style-type: none"> <li>– state the regulatory requirements for safety testing of electrical appliances;</li> <li>– describe the requirements for safety testing of electrical appliances; and</li> <li>– carry out safety testing of electrical appliances.</li> </ul>
----------------	--

<b>Classification</b>	Electrical Engineering > Electrical Appliance Servicing
-----------------------	---

<b>Available grade</b>	Achieved
------------------------	----------

---

### Guidance Information

- 1 This unit standard has been developed for learning and assessment off-job.
- 2 Competency under this unit standard does not entitle the candidate to legally perform prescribed electrical work without adequate supervision until the candidate has been registered and licensed under the Electricity Act 1992.
- 3 References  
Electricity (Safety) Regulations 2010;  
Electricity Act 1992;  
Health and Safety in Employment Act 1992, and associated regulations;  
AS/NZS 3760:2010, *In-service safety inspection and testing of electrical equipment* including Amendment 1;  
and all subsequent amendments and replacements.
- 4 Definition  
*Current regulations and standards* – refers to the requirements of the above legislation and standards, applied to the context in which the term is used.

---

### Outcomes and performance criteria

#### Outcome 1

State the regulatory requirements for safety testing of electrical appliances.

**Performance criteria**

- 1.1 The circumstances under which appliances must be tested are identified according to current regulations and standards.
- 1.2 The tests to be carried out are stated according to current regulations and standards.
- 1.3 The meaning of the term *electrically safe* is stated in accordance with current regulations and standards.

**Outcome 2**

Describe the requirements for safety testing of electrical appliances.

**Performance criteria**

- 2.1 Description includes items to be inspected visually in accordance with current regulations and standards.
- 2.2 Description includes protective earthing tests and acceptable limits in accordance with current regulations and standards.
- 2.3 Description includes insulation resistance tests and the acceptable limits in accordance with current regulations and standards.
- 2.4 Description includes polarity tests for single-phase and three-phase appliances in accordance with current regulations and standards.
- 2.5 Description includes tests for phase rotation in accordance with current regulations and standards.
- 2.6 Description includes the test instruments to be used for each type of test.
- 2.7 Reasons are stated as to why the test voltage for insulation tests must be at least twice the normal voltage.
- 2.8 Action to be taken following testing is stated for compliant and for non-compliant appliances in accordance with current regulations and standards.
- 2.9 Description includes the frequency of inspection and testing of electrical appliances in accordance with current regulations and standards.

**Outcome 3**

Carry out safety testing of electrical appliances.

Range three single-phase appliances, one three-phase appliance, one residual current device, one extension lead, one isolating transformer.

**Performance criteria**

- 3.1 Visual inspections are completed in accordance with current regulations and standards.
- 3.2 Electrical tests are completed in accordance with current regulations and standards.
- 3.3 Test results are recorded to meet industry requirements.
- 3.4 Actions resulting from inspection and testing are carried out in accordance with current regulations and standards.

**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	23 April 1996	31 December 2013
Review	2	10 February 1999	31 December 2013
Review	3	28 January 2001	31 December 2013
Revision	4	3 April 2001	31 December 2013
Review	5	26 May 2005	31 December 2022
Rollover and Revision	6	20 September 2012	31 December 2022
Revision	7	15 January 2014	31 December 2022
Review	8	28 January 2021	31 December 2022

<b>Consent and Moderation Requirements (CMR) reference</b>	0003
--	------

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