

## Demonstrate knowledge of electrical safety for plumbing, gasfitting and drainlaying

**Level** 2

**Credits** 3

**Purpose** People credited with this unit standard are able to demonstrate knowledge of: electricity, electrocution, and electrical hazards in plumbing, gasfitting and drainlaying; regulations applicable to electrical installations and workplaces; the safe use of electric power tools in plumbing, gasfitting and drainlaying work.

**Subfield** Plumbing, Gasfitting and Drainlaying

**Domain** Core Plumbing, Gasfitting, and Drainlaying

**Status** Registered

**Status date** 23 January 2009

**Date version published** 23 January 2009

**Planned review date** 31 December 2014

**Entry information** Open.

**Accreditation** Evaluation of documentation by NZQA.

**Standard setting body (SSB)** The Skills Organisation

**Accreditation and Moderation Action Plan (AMAP) reference** 0008

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

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### Special notes

Legislation, standards, and codes applicable to this unit standard include but are not limited to:

- Health and Safety in Employment Act 1992;
- Electricity Regulations 1997;
- Occupational Safety and Health *Guidelines for the Provision of Facilities and General Safety in the Construction Industry*, 1995; available at <http://www.osh.dol.govt.nz>;
- AS/NZS 3500.1:2003 *Plumbing and drainage – Water services*; available at <http://www.standards.co.nz>.

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## Elements and performance criteria

### Element 1

Demonstrate knowledge of electricity, electrocution, and electrical hazards in plumbing, gasfitting and drainlaying.

#### Performance criteria

- 1.1 Electricity is described in terms of volts, amps and watts.
- 1.2 New Zealand domestic electrical supply is described in terms of voltage, current and connection to dwellings.
- 1.3 Electric shock and electrocution are described in terms of required voltage, current and effect on the human body.
- 1.4 Hazards that may lead to electric shock and electrocution are identified in plumbing, gasfitting and drainlaying situations.  
  
Range at least four hazards.
- 1.5 Procedure for reducing risk of electric shock is described in accordance with AS/NZS3500.1:2003, s5.2.

### Element 2

Demonstrate knowledge of regulations applicable to electrical installations and workplaces.

#### Performance criteria

- 2.1 The requirements for people carrying out electrical work are identified in accordance with the Electricity Regulations 1997.
- 2.2 The effect of the Health and Safety in Employment Act 1992 is identified for electrical hazards and installations in plumbing, gasfitting and drainlaying workplaces.

### Element 3

Demonstrate knowledge of the safe use of electric power tools in plumbing, gasfitting and drainlaying work.

Range electrical aspects.

#### Performance criteria

- 3.1 Safe use of extension cables is described in terms of selection, protection and coiling.

- 3.2 A Residual Circuit Breaker (RCD) is described in terms of function, purpose and use.
- 3.3 The contents of part 3 of the OSH Guidelines for the Provision of Facilities and General Safety in the Construction Industry are explained.

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**Please note**

Providers must be accredited by NZQA, or an inter-institutional body with delegated authority for quality assurance, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be accredited by NZQA before they can register credits from assessment against unit standards.

Accredited providers and Industry Training Organisations assessing against unit standards must engage with the moderation system that applies to those standards.

Accreditation requirements and an outline of the moderation system that applies to this standard are outlined in the Accreditation and Moderation Action Plan (AMAP). The AMAP 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.

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**Comments on this unit standard**

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