



Australian Government

UEEEL0049 Install and maintain emergency safety systems

Release: 2

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Modification History

Release 2. Minor Change. Typographic error in prerequisites corrected.

Release 1. This is the first release of this unit of competency in the UEE Electrotechnology Training Package.

Application

This unit involves the skills and knowledge required to install and maintain fire and smoke control, emergency power supplies and early warning systems in buildings and premises.

It includes working safely to install and maintain emergency safety systems to relevant industry standards, complying with maintenance schedules and completing documentation.

Compliance with permits may be required in various jurisdictions and typically relates to the operation of plant, machinery and equipment such as elevated work platforms (EWPs), powder-operated fixing tools, power-operated tools, vehicles, road signage and traffic control and lifting equipment. Permits may also be required for some work environments such as confined spaces, working aloft, near live electrical apparatus and site rehabilitation.

The skills and knowledge described in this unit require a licence or permit to practice in the workplace where work is carried out on electrical installations which are designed to operate at voltages greater than 50 volt (V) alternating current (a.c.) or 120 V direct current (d.c.).

Competency development activities in this unit are subject to regulations directly related to licensing. Where a licence or permit to practice is not held, a relevant contract of training, such as an Australian Apprenticeship, may be required.

Additional and/or other conditions may apply in some jurisdictions subject to regulations related to electrical work. Practice in the workplace and during training is also subject to work health and safety (WHS)/occupational health and safety (OHS) regulations.

Pre-requisite Unit

UEECD0007 Apply work health and safety regulations, codes and practices in the workplace

UEECD0019 Fabricate, assemble and dismantle utilities industry components

UEECD0020 Fix and secure electrotechnology equipment

UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications

UEECD0016 Document and apply measures to control WHS risks associated with electrotechnology work

UEEEL0003 Arrange circuits, control and protection for general electrical installations

UEEEL0020 Solve problems in low voltage a.c. circuits

UEEEL0023 Terminate cables, cords and accessories for low voltage circuits

UEEEL0018 Select wiring systems and cables for low voltage general electrical installations

UEEEL0005 Develop and connect electrical control circuits

UEEEL0019 Solve problems in direct current (d.c.) machines

UEEEL0021 Solve problems in electromagnetic devices

UEEEL0014 Isolate, test and troubleshoot low voltage electrical circuits

UEEEL0024 Test and connect alternating current (a.c.) rotating machines

UEEEL0025 Test and connect transformers

UEEEL0012 Install low voltage wiring, appliances, switchgear and associated accessories and

UEECD0043 Solve problems in direct current circuits

or

UEECD0044 Solve problems in multiple path circuits

UEECD0046 Solve problems in single path circuits

Competency Field

Electrical

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare to install and maintain emergency safety systems

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

- 1.1** WHS/OHS requirements and workplace procedures for a given work area are identified and applied
- 1.2** Hazards are identified, health and safety risks assessed and existing risk control measures and workplace procedures implemented
- 1.3** Installation and/or maintenance is prepared in consultation with others affected by the work and

sequenced appropriately

- 1.4 Nature and location of work is determined from workplace documentation or appropriate person/s to determine the scope of work
- 1.5 Location of apparatus and associated equipment is planned within the constraints of the building structure, significant and regulations
- 1.6 Advice is sought from appropriate person/s to ensure work is coordinated effectively with others
- 1.7 Material for the installation work is obtained in accordance with workplace procedures and checked against job requirements
- 1.8 Tools, equipment and testing devices needed for installation work are obtained in accordance with workplace procedures and checked for correct operation and safety
- 1.9 Preparatory work is checked to ensure no damage has occurred and complies with job specifications

2 Install and maintain emergency safety systems

- 2.1 WHS/OHS risk control measures and workplace procedures for carrying out work are followed
- 2.2 Need to test or measure live electrical work is determined in accordance with WHS/OHS requirements and workplace procedures
- 2.3 Circuits/machines/plant are checked and isolated, as required, in accordance with WHS/OHS requirements and workplace procedures
- 2.4 Apparatus and associated equipment are installed or maintained to comply with relevant industry technical standards, job specifications and requirements with sufficient access to enable terminations for adjustment and maintenance
- 2.5 Wiring is terminated at apparatus and associated equipment in accordance with manufacturer specifications and functional and regulatory requirements
- 2.6 Methods for dealing with unplanned situations are discussed with appropriate person/s, documented and acted upon in a manner that minimises risk to personnel

		and equipment
	2.7	Ongoing checks of the quality of installed apparatus are undertaken in accordance with workplace procedures
	2.8	Apparatus installation is carried out efficiently without unnecessary waste of materials or damage to apparatus, circuits, the surrounding environment or services using sustainable energy principles
3 Complete and report on installation or maintenance activities	3.1	WHS/OHS work completion risk control measures and workplace procedures are followed
	3.2	Worksite is cleaned and made safe in accordance with workplace procedures
	3.3	Final inspections and tests are made to ensure the installed or maintained apparatus conforms to job requirements
	3.4	‘As-installed’ emergency safety systems apparatus and associated equipment are documented and appropriate person/s notified in accordance with workplace procedures

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions may be found in the UEE Electrotechnology Training Package Companion Volume Implementation Guide.

Installing and maintaining emergency safety systems must include at least the following:

- fire and smoke control emergency safety systems
- warning and evacuation safety systems
- emergency power supplies

Unit Mapping Information

This unit replaces and is equivalent to UEENEEG113A Install and maintain emergency safety

systems.

Links

Companion Volume implementation guides are found in VETNet - -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b8a8f136-5421-4ce1-92e0-2b50341431b6>