



**Australian Government**

# **UEEEL0048 Install and maintain emergency lighting systems**

**Release: 1**

# UEEEL0048 Install and maintain emergency lighting systems

## Modification History

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 emergency lighting systems in buildings and premises.

It includes preparing, installing and maintaining emergency systems by working safely, using installation and maintenance industry standards, and completing required documentation.

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

UEEEL0008 Evaluate and modify low voltage heating equipment and controls

UEEEL0009 Evaluate and modify low voltage lighting circuits, equipment, and controls

UEEEL0010 Evaluate and modify low voltage socket outlets circuits

UEEEL0024 Solve problems in 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 lighting system**

### 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, risks assessed and control measures implemented
- 1.3** Safety hazards not previously identified are noted on job safety sheet and risk control measures are implemented
- 1.4** Installation/maintenance is prepared in consultation with others affected by work and sequenced appropriately

- 1.5 Nature and location of work is determined from documentation and/or appropriate person/s
  - 1.6 Location of apparatus and associated equipment is planned within the constraints of the building structure, significant and regulations
  - 1.7 Advice is sought from appropriate person/s to ensure work is coordinated effectively with others
  - 1.8 Material needed for the installation work is obtained in accordance with workplace procedures and checked against job requirements
  - 1.9 Tools, equipment and testing devices needed for installation work are obtained in accordance with workplace procedures and checked for correct operation and safety
  - 1.10 Preparatory work is checked to ensure no damage has occurred and complies with job requirements and specifications
- 2 Install and maintain emergency lighting system**
- 2.1 WHS/OHS risk control measures and workplace procedures for carrying out the work are followed
  - 2.2 Need to test or measure live electrical work is determined in accordance with WHS/OHS workplace procedures
  - 2.3 Circuits/machines/plants are checked and isolated in accordance with workplace procedures
  - 2.4 Emergency lighting systems and associated equipment are installed and maintained to comply with technical industry standards, job specifications and requirements with sufficient access to affect terminations, 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 and documented
  - 2.7 Unplanned situations are responded to safely and with the approval of authorised person/s

- 2.8 Quality inspections and checks of installed apparatus are undertaken in accordance with workplace procedures
- 2.9 Problems are solved using sustainable energy principles and without damaging apparatus, the surrounding environment or services in accordance with workplace procedures
- 3 **Complete and report installation and maintenance activities**
  - 3.1 WHS/OHS work completion risk control measures and procedures are followed
  - 3.2 Worksite is cleaned and made safe in accordance with workplace procedures
  - 3.3 Final checks are made to ensure installed and maintained apparatus conforms to job requirements and specifications
  - 3.4 Completed work is 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.

## Unit Mapping Information

This unit replaces and is equivalent to UEENEEG189A Install and maintain emergency lighting systems.

## Links

Companion Volume implementation guides are found in VETNet - -

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

