



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **UEENEEG197A Apply currency of safe working practices and compliance verification of electrical installations**

**Release: 1**

## **UEENEEG197A Apply currency of safe working practices and compliance verification of electrical installations**

### **Modification History**

Not applicable.

### **Unit Descriptor**

#### **Unit Descriptor**

#### **1) Scope:**

##### **1.1) Descriptor**

This unit covers current practices in working safely and verifying compliance of electrical installations that affect the currency of competencies held. It encompasses working safely, procedures for rescue from contact with live parts and for applying emergency first aid. It also encompasses current practices in visual inspections and mandatory compliance testing, identifying non-compliance defects and mandatory reporting requirements.

### **Application of the Unit**

#### **Application of the Unit 2)**

##### **2.1) General Application**

The licensing regulator may require a holder of 'Unrestricted Electrician's Licence' or 'Qualified Electrical Contracting Licence' to undertake this unit periodically to demonstrate currency in safe working, electrical rescue practices and compliance verification of electrical installations.

##### **2.2) Electrical Contractors**

A 'licensed electrician' applying for an 'electrical contractors licence' may be required to undertake this unit to demonstrate their currency with verification of compliance requirements. In this case they are deemed to have met the prerequisites for this unit provided that: hold a current 'Unrestricted Electrician's Licence' issued in an Australian State or Territory. have recently been in permanent employment as a licensed electrician.

## Licensing/Regulatory Information

### License to practice 3)

In the workplace: The application of the skills and knowledge described in this unit require a license to practice in the workplace where work is carried out on electrical equipment or installations which are designed to operate at voltages greater than 50 V a.c. or 120 V d.c. Other conditions may apply under State and Territory legislative and regulatory requirements.

## Pre-Requisites

### Prerequisite Unit(s) 4)

### Competencies 4.1)

Competency in this unit can only be gained by persons who hold a current 'Unrestricted Electrician's Licence' issued in an Australian State or Territory.

### Literacy and numeracy skills 4.2)

Participants are best equipped to achieve competency in this unit if they have reading, writing and numeracy skills indicated by the following scales. Description of each scale is given in Volume 2, Part 3 'Literacy and Numeracy'

Reading	5	Writing	5	Numeracy	5
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## Employability Skills Information

### Employability Skills 5)

The required outcomes described in this unit of competency contain applicable facets of Employability Skills. The Employability Skills Summary of the

## Employability Skills

5)

qualification in which this unit of competency is packaged will assist in identifying Employability Skill requirements.

## Elements and Performance Criteria Pre-Content

6) Elements describe the essential outcomes of a competency standard unit

Performance Criteria describe the required performance needed to demonstrate achievement of the element.  
Assessment of performance is to be consistent with the Evidence Guide.

## Elements and Performance Criteria

### ELEMENT

### PERFORMANCE CRITERIA

1 Prepare to enter a work area and verify compliance of an electrical installation	1.1	Work area access permits are obtained from appropriate personnel according to established procedures
	1.2	Safe work methods for controlling risk obtained, read and understood prior to undertaking a work activity.
	1.3.	Preparations for electrical and non-electrical isolation are carried out to prevent creation of hazards from loss of machine/system/process control according to established procedures.
	1.4	Documentation or deemed to comply standard on which installation is based is reviewed and understood.
	1.5	Appropriate personnel are consulted to ensure the work is coordinated effectively with others involved on the work site.
	1.6	Tools and equipment needed for the work are checked for safety and correct functionality according to established procedures and regulatory requirements.

ELEMENT	PERFORMANCE CRITERIA
2. Follow workplace procedures for hazard identification and risk control	2.1 Hazards are identified and control measures implemented and monitored through active participation in the consultation process with employer and other employees.
	2.2 Hazards in the work area are recognised and reported to appropriate personnel according to established procedures.
	2.3 OHS records of incidents are completed in accordance with regulatory requirements and established procedures.
	2.4 Workplace instructions and training are followed accurately within established procedures.
3 Apply safe working practices to verifying compliance of an electrical installation	3.1 Safe work methods for controlling risk are followed accurately.
	3.2 Workplace procedures for dealing with accidents, fires and emergencies are followed according to work procedures and scope of responsibility and competencies.
	3.3 The need to test or measure live is determined in strict accordance with OHS requirements and when necessary conducted within established safety procedures.
	3.4 Compliance of the electrical equipment and as it is installed is ascertained by visual inspection in accordance with current standards and regulatory requirements.
	3.5 Mandatory tests are conducted to ascertain the compliance of the safety parameters of installed circuits, switchgear, protection and earthing in accordance with current standards and regulatory requirements.
4 Report compliance findings.	4.1 OHS risk control work completion measures and procedures are followed.
	4.2 Work site is cleaned and made safe in accordance with established procedures.
	4.3 Non-compliance defects are identified and reported in

**ELEMENT**

**PERFORMANCE CRITERIA**

accordance with current standards and regulatory requirements.

4.4 Recommendations for rectifying defects are made in accordance with established procedures.

4.5 Mandatory documentation is completed in accordance with current standards and regulatory requirements.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

8) This describes the essential skills and knowledge and their level, required for this unit.

Evidence shall show that knowledge has been acquired of preparing quotations for the supply of products for lighting projects

All knowledge and skills detailed in this unit should be contextualised to current industry practices and technologies.

#### **KS01-EG197A Current requirements of safe working practices**

Evidence shall show an understanding of current requirements of working place health and safety to an extent indicated by the following aspects.

T1 The current legal requirements covering workplace health and safety in the workplace.

T2 The current work environment in relation to safety signage, emergencies, fire protection, ensuring personal safety, industrial housekeeping and pollution sources and controls.

T3 Hazards and risks and control measures in working on construction sites.

Note.

Hazards include (not limited to) manual and mechanical handling; working at heights; working in confined spaces; noise; dusts.

T4 Workplace safety check, identifying potential workplace hazards and suggested measures for accident prevention.

T5 Working safely with electrical tools or equipment

T6 Current procedure for safe isolation of an electrical supply.

T7 Hazards associated with, extra-low voltage, low-voltage, high voltage and high-currents

T8 Hazards and control measures associated with electrical work

T9 Emergency procedures for the rescue of an electric shock victim equipment

T10 Emergency first aid for an electric shock victim

Note:

Emergency first aid is limited to first-on-the scene assistance to a victim of electric shock, and basics of CPR.

#### **KS02-EG197A Evidence shall show an understanding of electrical installations testing and verification to an extent indicated by the following aspects:**

T1 Current electrical installations legislated regulations and responsibilities of a licensed electrician

T2 Current compliance standards and regulatory requirement of electrical equipment and how and where it is installed.

## REQUIRED SKILLS AND KNOWLEDGE

T3 Current compliance standards and regulatory requirement for testing safety parameters of installed circuits, switchgear, protection and earthing.

T4 Current compliance standards and regulatory requirement for documenting and reporting compliance inspection and testing outcomes.

## Evidence Guide

### EVIDENCE GUIDE

9) This provides essential advice for assessment of the unit. It must be read in conjunction with the performance criteria and the range statement of the unit and the Training Package Assessment Guidelines.

The Evidence Guide forms an integral part of this unit. It must be used in conjunction with all parts of this unit and performed in accordance with the Assessment Guidelines of this Training Package.

### Overview of Assessment 9.1)

Longitudinal competency development approaches to assessment, such as Profiling, require data to be reliably gathered in a form that can be consistently interpreted over time. This approach is best utilised in Apprenticeship programs and reduces assessment intervention. It is the Industry's preferred model for apprenticeships. However, where summative (or final) assessment is used it is to include the application of the competency in the normal work environment or, at a minimum, the application of the competency in a realistically simulated work environment. It is recognised that, in some circumstances, assessment in part or full can occur outside the workplace. However, it must be in accordance with industry and regulatory policy.

Methods chosen for a particular assessment will be influenced by various factors. These include the extent of the assessment, the most effective locations for the assessment activities to take place, access to physical resources, additional safety measures that may be required and the critical nature of the competencies being assessed.

The critical safety nature of working with electricity, electrical equipment, gas or any other hazardous substance/material carries risk in deeming a person competent. Sources of evidence need to be 'rich' in nature to minimise error in judgment.

Activities associated with normal every day work have a bearing on the decision as to how much and how detailed the data gathered



will contribute to its ‘richness’. Some skills are more critical to safety and operational requirements while the same skills may be more or less frequently practised. These points are raised for the assessors to consider when choosing an assessment method and developing assessment instruments. Sample assessment instruments are included for Assessors in the Assessment Guidelines of this Training Package.

**Critical aspects  
of evidence  
required to  
demonstrate  
competency in  
this unit**

**9.2)**

Before the critical aspects of evidence are considered all prerequisites shall be met.

Evidence for competence in this unit shall be considered holistically. Each element and associated performance criteria shall be demonstrated on at least two occasions in accordance with the ‘Assessment Guidelines – UEE11’. Evidence shall also comprise:

- A representative body of work performance demonstrated within the timeframes typically expected of the discipline, work function and industrial environment. In particular this shall incorporate evidence that shows a candidate is able to:
  - Implement Occupational Health and Safety workplace procedures and practices including the use of risk control measures as specified in the performance criteria and range statement
  - Apply sustainable energy principles and practices as specified in the performance criteria and range statement
  - Demonstrate an understanding of the essential knowledge and associated skills as described in this unit. It may be required by some jurisdictions that RTOs provide a percentile graded result for the purpose of regulatory or licensing requirements.
  - Demonstrate an appropriate level of skills enabling employment
  - Conduct work observing the relevant Anti Discrimination legislation, regulations, policies and workplace procedures
- Demonstrated consistent performance across a representative range of contexts from the prescribed items below:
  - Apply currency of safe working practices and compliance verification of electrical installations as described as

described in 8) and including:

- A Preparing to enter a workplace.
- B Identifying work safety hazards
- C Applying current safe working practices
- D Identifying visual non-compliance defects.
- E Using effective methods for conducting mandatory and optional tests.
- F Identifying non-compliance from test results.
- G Identifying causes of non-compliance.
- H Completing mandatory reporting.
- I Dealing with unplanned events

**Context of and specific resources for assessment**      **9.3)**

This unit should be assessed as it relates to normal work practice using procedures, information and resources typical of a workplace. This should include:

OHS policy and work procedures and instructions.

Suitable work environment, facilities, equipment and materials to undertake actual work as prescribed by this unit.

These should be part of the formal learning/assessment environment.

Note:

Where simulation is considered a suitable strategy for assessment, conditions must be authentic and as far as possible reproduce and replicate the workplace and be consistent with the approved industry simulation policy.

The resources used for assessment should reflect current industry practices in relation to verifying compliance and functionality of general electrical installations.

**Method of assessment**      **9.4)**

This unit shall be assessed by methods given in Volume 1, Part 3 'Assessment Guidelines'.

Note:

Competent performance with inherent safe working practices is expected in the industry to which this unit applies. This requires assessment in a structured environment which is primarily intended for learning/assessment and incorporates all necessary equipment and facilities for learners to develop and demonstrate

the essential knowledge and skills described in this unit.

**Concurrent  
assessment and  
relationship with  
other units**

There are no concurrent assessment recommendations for this unit.

## **Range Statement**

### **RANGE STATEMENT**

**10)** This relates to the unit as a whole providing the range of contexts and conditions to which the performance criteria apply. It allows for different work environments and situations that will affect performance.

This unit shall be demonstrated in verifying compliance of an electrical installations comprising a main switchboard, supplying more than one circuit each for, lighting, socket outlets, a distribution board separate from the main switchboard and at least two circuits supplying fixed appliances one of which three-phase.

## **Unit Sector(s)**

Not applicable.

## **Competency Field**

**Competency Field**                      **11)**

Electrical