



Australian Government

UEEEEC0076 Verify compliance and functionality of fire protection system installations

Release: 1

UEEEEC0076 Verify compliance and functionality of fire protection system installations

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 verify compliance and functionality of fire protection system installations.

It includes testing and visual inspection for verifying that a fire protection system and components are safe and comply with requirements and functions. It also includes working safely, conducting compliance tests, conducting visual inspections, identifying non-compliance defects and mandatory reporting requirements.

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, skills and knowledge described in this unit require a relevant contract of training, such as an Australian Apprenticeship.

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.

No other licensing, legislative or certification requirements apply to this unit at the time of publication.

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

UEEEEC0041 Install fire detection and warning system apparatus

Competency Field

Electronics and Communications

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

PERFORMANCE CRITERIA

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

1 Prepare to verify fire protection installation

- 1.1 WHS/OHS requirements and workplace procedures for a given work area are identified and applied
- 1.2 WHS/OHS risk control measures and workplace procedures are followed in preparation for work activities
- 1.3 Safety hazards that have not previously been identified are assessed, noted and job safety assessments and risk control measures determined and implemented
- 1.4 Appropriate person/s is consulted to ensure the work is coordinated effectively with others involved on the worksite
- 1.5 Location of fire protection system components is determined from job specifications and diagrams
- 1.6 Inspection and tests are appropriately sequenced in accordance with job schedule and workplace procedures
- 1.7 Materials needed for the fire protection system tests and verification are obtained in accordance with workplace procedures and checked against job requirements
- 1.8 Tools, equipment and testing devices needed to verify compliance are obtained in accordance with workplace procedures and checked for correct operation and safety

2 Visually inspect fire protection installation

- 2.1 WHS/OHS risk control measures and workplace procedures for carrying out verification work activities are followed
- 2.2 Circuits/machines/plant are checked and isolated in accordance with WHS/OHS requirements and workplace procedures

- 2.3 Cabling/wiring is checked for appropriate type and size
 - 2.4 Cabling/wiring accessories and fire alarm warning components are validated as being suitably located, securely fixed and suitably protected from damage or corrosion
 - 2.5 Accessories and components are validated as being appropriately rated and meeting functional requirements
 - 2.6 Fire protection equipment compliance is verified in accordance with safety and functional requirements
 - 2.7 Unplanned situations are responded to in accordance with workplace procedures in a manner that minimises risk to personnel and equipment
 - 2.8 Unplanned situations are dealt with safely and with the approval of relevant person/s
 - 2.9 Inspection is carried out efficiently without waste of materials or damage to fire protection apparatus, the surrounding environment or services using sustainable energy practices
- 3 Conduct fire protection compliance tests**
- 3.1 WHS/OHS risk control measures and workplace procedures for carrying out fire protection testing are followed
 - 3.2 Back-to-base facilities and system interfaces are isolated in accordance with workplace procedures
 - 3.3 Testing and measuring of live work and operating system is conducted in accordance with WHS/OHS requirements and within workplace safety procedures
 - 3.4 Circuits/machines/plant/other system interfaces are checked and isolated to ensure the system is not activated during testing in accordance with WHS/OHS requirements and workplace procedures
 - 3.5 Electrical inspections and tests are conducted to verify the electrical circuit within the fire installation is safe and functional in accordance with job specifications
 - 3.6 System tests are conducted to verify that the fire protection equipment and cabling/wiring within the fire protection installation is safe and functions as intended

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| | 3.7 | Unplanned situations are responded to in accordance with workplace procedures in a manner that minimises risk to personnel and equipment |
| | 3.8 | Unplanned situations are dealt with safely and with the approval of relevant person/s |
| | 3.9 | Testing is carried out efficiently without waste of materials or damage to apparatus, the surrounding environment or services using sustainable energy practices |
| 4 Report inspection and verification findings | 4.1 | WHS/OHS work completion risk control measures and workplace procedures are followed |
| | 4.2 | Worksite and equipment are cleaned and made safe in accordance with workplace procedures |
| | 4.3 | Non-compliance defects are identified and reported in accordance with workplace procedures |
| | 4.4 | Recommendations for rectifying defects are made in accordance with workplace procedures |
| | 4.5 | Work completion 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.

Verifying compliance and functionality of fire protection system installations must include at least the following:

- two different new or existing fire protection installations, including:
 - one fire alarm system with at least 50 input devices, 20 output devices and two system interface controls
 - one fire warning system with at least five

- speakers, five interface communication devices and two warning indicators
- voice message facilities

Unit Mapping Information

This unit replaces and is equivalent to UEENEEH162A Verify compliance and functionality of fire protection system installations.

Links

Companion Volume implementation guides are found in VETNet - -

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

Assessment Requirements for UEEEC0076 Verify compliance and functionality of fire protection system installations

Modification History

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements, performance criteria and range of conditions on at least two separate occasions and include:

- acting within regulatory limits
- applying relevant work health and safety (WHS)/occupational health and safety (WHS/OHS) requirements, including using risk control measures
- applying sustainable energy principles and practices
- conducting electrical tests safely and correctly
- conducting fire alarms and warning tests safely and correctly
- dealing with unplanned events/situations in accordance with workplace procedures in a manner that minimises risk to personnel and equipment
- identifying non-compliant defects from test results
- identifying visual defects
- recommending appropriate corrective actions
- reporting legibly and accurately.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements, performance criteria and range of conditions and include knowledge of:

- features of fire protection installations that can be visually inspected
- fire alarm and warning system routine testing
- fire protection installations, testing and verification methods
- relevant inspection and testing techniques
- relevant job safety assessments or risk mitigation processes
- relevant mandatory and optional testing and verification requirements applicable to fire protection installations
- relevant manufacturer specifications
- relevant WHS/OHS legislated requirements
- relevant workplace documentation

- relevant workplace policies and procedures.

Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the time of assessment

Assessment must occur in suitable workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in suitable simulated workplace operational situations that replicate workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment must include access to:

- a range of relevant exercises, case studies and/or simulations
- relevant and appropriate materials, tools, facilities, equipment and personal protective equipment (PPE) currently used in industry
- resources that reflect current industry practices in relation to verifying compliance and functionality of fire protection installations
- applicable documentation, including workplace procedures, equipment specifications, regulations, codes of practice and operation manuals.

Links

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