



Australian Government

UEECD0020 Fix and secure electrotechnology equipment

Release: 1

UEECD0020 Fix and secure electrotechnology equipment

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 fix, secure and mount electrotechnology equipment to hollow walls, solid walls and metal fixings.

It includes the safe use of hand and portable tools/ power tools and the selection and safe application of fixing devices and supporting accessories/equipment.

No 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

Competency Field

Cross Discipline

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare to fix and secure electrotechnology equipment

PERFORMANCE CRITERIA

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

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|------------|--|
| 1.1 | Work health and safety (WHS)/occupational health and safety (OHS) requirements and workplace procedures for a given work area are identified and applied |
| 1.2 | Hazards are identified, risks are assessed and control measures are implemented |

- 1.3 Scope of work to be undertaken is obtained from relevant documentation and/or from work supervisor
 - 1.4 Advice is sought from work supervisor to ensure work is coordinated effectively with others
 - 1.5 Materials required for the work are identified and obtained in accordance with workplace procedures
 - 1.6 Fixing devices are selected for their suitability for the environment, weight of the load they are supporting and sub-stratums into which they are being installed in accordance with manufacturer specifications and safe load limits
 - 1.7 Supporting accessories/equipment are selected for their suitability for the environment and ability to support and protect from damage in accordance with workplace procedures
 - 1.8 Tools, equipment and testing devices needed to carry out the work are obtained and checked for correct operation and safety in accordance with workplace procedures
- 2 Install fixing and support devices**
 - 2.1 Exposed and/or conductive parts, plant or machinery are confirmed as isolated in consultation with authorised person
 - 2.2 WHS/OHS risk control measures relevant to work site are followed
 - 2.3 Fixing devices are installed in accordance with manufacturer instructions, regulatory requirements and workplace procedures
 - 2.4 Support accessories/equipment are installed accurately in accordance with industry technical standards, regulatory requirements and job specifications
 - 2.5 Work is carried out without waste of materials or damage to apparatus or circuits, the surrounding environment or services and using sustainable energy practices
- 3 Complete fixing and support work**
 - 3.1 WHS/OHS risk control measures for work completion are followed
 - 3.2 Worksite is tidied and tools and equipment cleaned and

securely stored in accordance with workplace procedures

- 3.3** Relevant personnel are notified of work completion 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.

Fixing and securing electrotechnology equipment must include:

- installation
- maintenance or development work functions

Unit Mapping Information

This unit replaces and is equivalent to UEENEEE105A Fix and secure electrotechnology equipment.

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 UEECD0020 Fix and secure electrotechnology equipment

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:

- applying relevant workplace health and safety (WHS)/occupational health and safety (OHS) requirements
- applying sustainable energy principles and practices
- communicating effectively with relevant stakeholders
- completing fixing and support work to electrotechnology equipment
- completing workplace documentation
- ensuring exposed and/or conductive parts, plant or machinery are isolated by an authorised person
- installing a fixing device and accessory capable of supporting up to 20 kilograms (kg) on the metal plate
- using appropriate fixing methods, tools and devices to install fixings to hollow walls, solid walls, brick, concrete and steel
- installing, aligning and adjusting fixing devices in accordance with manufacturer instructions and load limits, including installing relevant fixing support accessories/equipment
- maintaining a clean worksite and equipment
- selecting relevant fixing devices suitable for the environment they are being installed for loads, including:
 - less-than 5 kg
 - 5-20 kg
 - 20-50 kg
- selecting the correct device for supporting, fixing and protecting wiring/cabling/piping and functional accessories
- using fixing adhesives and tapes safely in accordance with manufacturer instructions and load limits
- using power drills, including selecting and changing drill bits and drill speeds.

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:

- devices, tools, equipment and methods for supporting, fixing and protecting electrotechnology equipment wiring/cabling/piping and functional accessories, including:
 - hollow walls, wood, masonry blocks, plasterboard and panelling
 - fixing to metal
 - solid walls, including masonry and concrete structures
 - vertical and horizontal surfaces
 - fixing adhesives and tapes
 - securing and mounting types, load limits and safe installation
 - support accessories/equipment
- relevant electrical regulations and legislations
- relevant job safety assessments or risk mitigation processes
- relevant electrotechnology equipment manufacturer specifications
- relevant WHS/OHS legislated requirements
- relevant workplace documentation
- relevant workplace policies and procedures
- sustainable energy principles and practices.

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 workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in 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 other simulations
- relevant and appropriate materials, tools, equipment and personal protective equipment (PPE) currently used in industry
- applicable documentation, including workplace procedures, equipment specifications, regulations, codes of practice and operation manuals.

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