



Australian Government

UEEDV0002 Install aerial telecommunication cables

Release: 1

UEEDV0002 Install aerial telecommunication cables

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 aerial telecommunication cables.

It includes working safely, installing catenary cable, fixing communication cables and completing documentation.

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

UEECD0019 Fabricate, assemble and dismantle utilities industry components

UEECD0020 Fix and secure electrotechnology equipment

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

UEEDV0005 Install and maintain cabling for multiple access to telecommunication services
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

Data and Voice

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS

PERFORMANCE CRITERIA

Elements describe the essential outcomes.

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

1 Prepare to install aerial communication cables

- 1.1** Work health and safety (WHS)/occupational health and safety (OHS) requirements and workplace procedures for a given work area are identified, obtained and applied
- 1.2** WHS/OHS risks are identified, and risk control measures and workplace procedures are followed in preparation for the work
- 1.3** Safety hazards not previously identified are noted and risk control measures implemented
- 1.4** Cabling installation is prepared in consultation with others affected by the work and sequenced in accordance with workplace procedures
- 1.5** Scope of work is determined from documentation and/or discussions with relevant person/s to establish the work to be undertaken
- 1.6** Cable routes are planned in accordance with the precinct, structure, significant and relevant industry standards
- 1.7** Advice is sought from relevant person/s to ensure the work is coordinated effectively with others
- 1.8** Material required for installation work is obtained in accordance with workplace procedures and job specifications
- 1.9** Tools, equipment and testing devices required for the 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 in accordance with relevant industry standards

2 Install aerial communication cables

- 2.1** WHS/OHS risk control measures and workplace procedures for carrying out the work are followed

- 2.2 Poles are checked for soundness in accordance with workplace procedures
 - 2.3 Catenary cables are installed ensuring sufficient clearances are in accordance with relevant industry standards
 - 2.4 Cables are attached to catenary without strain or damage in accordance with relevant industry standards
 - 2.5 Cable ends are protected from damage in preparation for termination
 - 2.6 Methods for dealing with unplanned situations are discussed with relevant person/s for approval and documented in accordance with workplace procedures
 - 2.7 Unexpected situations are dealt with safely and with the approval of relevant person/s
 - 2.8 Quality checks of the installed aerial communication cables are conducted in accordance with workplace procedures
 - 2.9 Cable installation is carried out efficiently without waste of materials or damage to apparatus, circuits or the surrounding environment using sustainable energy practices
- 3 Document and verify cabling installation**
- 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 Documenting cable installation is carried out 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 UEENEEF112A Install aerial telecommunication cables.

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 UEEDV0002 Install aerial telecommunication cables

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 and performance criteria on at least one occasion and include:

- reading and interpreting drawings related to cable schedules and routes
- installing catenary cables correctly
- attaching communications cable to catenary without damage
- protecting cable ends
- completing the necessary documentation accurately
- dealing with unplanned events
- applying relevant work health and safety (WHS)/occupational health and safety (WHS/OHS) requirements, including using risk control measures
- carrying out cable installation efficiently without waste of materials or damage to apparatus, circuits or the surrounding environment using sustainable energy practices
- checking poles for soundness
- documenting and verifying cabling installation
- installing aerial communication cables
- obtaining material required for installation
- obtaining tools, equipment and testing devices and checking for correct operation and safety
- planning cable routes in accordance with precinct, structure, significant and relevant industry standards
- preparing to install aerial communication cables
- quality checking the installed aerial communication cables.

Knowledge Evidence

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

- telecommunication aerial cabling requirements and techniques, safe working practices and relevant standards, codes and regulations, including:
 - hazards and control measures in aerial cabling working environment encompassing:
 - risk management and assessment of risk:
 - principle and purpose of risk management

- processes for conducting a risk assessment
- hazards associated with low voltage (LV), extra-low voltage (ELV) and high currents encompassing:
 - parts of an electronic systems and equipment that operate at LV and ELV
 - parts of an electronic systems and equipment where high currents are likely
- risks and control measures associated with high voltage (HV) encompassing:
 - parts of an electronic systems and equipment that operate at HV
 - the terms ‘touch voltage’, ‘step voltage’, ‘induced voltage’ and ‘creepage’ as they relate to the hazards of HV
 - control measures used for dealing with the hazards of HV
- risks and control measures associated with LV encompassing:
 - risks associated with installation, fault finding, maintenance and repair
 - control measures before, while and after working on electronic systems or equipment
 - isolation and tagging-off procedures
 - risks and restrictions in working live
 - control measures for working live
- risks and control measures associated with working on aerial cables encompassing:
 - soundness of pole for aerial cabling
 - use of aerial safety equipment
 - procedure to apply pole top rescue
- aerial construction methods and regulations
- joining aerial cables
- problem-solving techniques
- relevant manufacturer specifications and operating instructions
- relevant tools, equipment and testing devices
- relevant workplace documentation
- relevant workplace quality, policies and procedures
- sustainable energy 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 suitable workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated suitable 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 and equipment currently used in industry
- resources that reflect current industry practices in relation to installing aerial communication cables
- applicable documentation, including workplace procedures, equipment specifications, regulations, codes of practice and operation manuals.

Links

Companion Volume implementation guides are found in VETNet - -

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