



**Australian Government**

# **Assessment Requirements for UETDRRT24 Maintain rail traction bonds**

**Release: 1**

# Assessment Requirements for UETDRRT24 Maintain rail traction bonds

## Modification History

Release 1. This is the first release of this unit of competency in the UET Transmission, Distribution and Rail Sector Training Package.

## 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 two separate occasions and include:

- applying relevant work health and safety (WHS)/occupational health and safety (OHS) requirements, including the use of risk control measures
- applying sustainable energy principles and practices
- diagnosing and correcting simple faults in traction bonds that includes at least two (2) of the following types of connecting bond cables and components:
  - covered or bare aluminium bonds
  - copper bonds
  - steel bonds
  - steel rail
- maintaining and repairing traction bonds that includes at least three (3) of the following types of connecting bond cables and components:
  - bonding specific tools
  - crimping devices
  - thermal moulds
  - rail drill
  - bonding fittings
  - explosive power tools
  - portable hand tools
- dealing with unplanned events on at least one (1) occasion.

## 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:

- traction bond and cables, including:
  - temporary and permanent bonding methods
  - applications for temporary and permanent bonding

- components of temporary and permanent bonds
- interface between traction and signalling circuits
- safe working procedures/practices when carrying out temporary and permanent bonding, including:
  - personnel protective equipment (PPE)
  - electrical and visual testing using PPE
- installation and removal of temporary traction bonds and cables, including:
  - types and purpose of tools and equipment
  - installation and removal methods
  - testing for electrical integrity of bonds and cables
- maintenance of traction bond, including:
  - types and components
  - types and function of tools and equipment
  - maintenance/repair procedures
  - inspection and recording procedures
- diagnosis and correction of simple faults in specific traction bonds, including:
  - types and causes
  - determination of appropriate corrective actions
  - repair and replace procedures
- installation and removal of permanent traction bonds and cables, including:
  - types and purposes of tools and equipment
  - installation and removal methods
  - testing for electrical integrity of bond, cables and equipment
- maintenance and repair of permanent traction bonds, cables and equipment.

## 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 conditions involving realistic and authentic activities that replicate operational 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, facilities, equipment and PPE currently used in

industry for maintaining rail traction bonds

- applicable documentation, including workplace procedures, relevant industry standards, equipment specifications, regulations, codes of practice and operation manuals.

## **Links**

UET Training Package Companion Volume Implementation Guide is found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=229bace1-b7bc-4653-9300-dffb13ecfad7>