



Australian Government

TLIS2020 Install overhead wiring structure

Release: 2

TLIS2020 Install overhead wiring structure

Modification History

Release 2. This is the second release of this unit of competency in the TLI Transport and Logistics Training Package:

- Minor statement changes in Assessment Conditions.

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Application

This unit involves the skills and knowledge required to install overhead wiring structures in accordance with safeworking and regulatory requirements, and workplace procedures.

It includes planning and preparing for installation, installing the required components to specification and completing all required documentation.

Work is performed under minimal supervision, generally within a team environment.

People achieving competence in this unit will need to fulfil the applicable state/territory legislated rail safety requirements and to comply with relevant codes of practice and/or guidelines.

Operators of mechanised equipment must have undertaken training and, where appropriate, hold the relevant licence, permit or certificate and be recognised as competent for the class of machinery being used.

Pre-requisite Unit

Not applicable.

Competency Field

S – Construction and Installation

Unit Sector

Rail sector.

Elements and Performance Criteria

ELEMENTS

PERFORMANCE CRITERIA

Elements describe the essential outcomes.

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

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|-----------------------------------|--|
| 1 Plan installation | 1.1 Work requirements are determined to identify scope of work and resources required |
| | 1.2 Hazards are identified, risks are assessed and control measures are implemented |
| | 1.3 Type of overhead wiring structure required for job is identified and organised |
| 2 Prepare for installation | 2.1 Footings are prepared and excavated in accordance with rail industry standards and workplace procedures |
| | 2.2 Formwork is installed in accordance with rail industry standards and workplace procedures |
| | 2.3 Concrete reinforcing is installed in accordance with rail industry standards and workplace procedures |
| | 2.4 Concrete is mixed and placed in accordance with rail industry standards and workplace procedures |
| | 2.5 Hold down plates/bolts are placed into concrete to correct dimensions to enable fitting of overhead wiring structure |
| 3 Install components | 3.1 Components are assembled onto bridge section as required in preparation for installation |
| | 3.2 Masts and other components are positioned and installed as required in accordance with accepted workplace procedures |
| | 3.3 Fastening systems are installed in accordance with rail industry standards to ensure the integrity of the overhead wiring structure |
| 4 Complete documentation | 4.1 Required documentation procedures and processes are confirmed |
| | 4.2 Documentation is filled in legibly and proofread |
| | 4.3 Documentation is processed 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 can be found in the TLI Transport and Logistics Training Package Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to TLIS2020A Install overhead wiring structure.

Links

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

Assessment Requirements for TLIS2020 Install overhead wiring structure

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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:

- applying relevant workplace procedures
- checking compliance of work with job specifications
- identifying job hazards and taking required action to minimise, control or eliminate identified hazards
- installing overhead wiring structures
- interpreting and following operational instructions and prioritising work
- modifying activities depending on operational contingencies, risk situations and environments
- monitoring work activities in terms of planned schedule
- planning own work including predicting consequences and identifying improvements
- reading and interpreting relevant technical data, drawings, instructions and manuals
- reporting and/or rectifying identified problems, faults or malfunctions, in accordance with regulatory requirements, rail industry standards and workplace procedures
- selecting and using relevant equipment and tools in accordance with workplace procedures
- using levelling equipment in accordance with workplace procedures
- working systematically with required attention to detail without injury to self or others, or damage to equipment.

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:

- applicable state/territory legislated rail safety requirements, relevant codes of practice and/or guidelines
- characteristics and relevant information on overhead wiring structures
- characteristics of plant and equipment, materials, transport, structures, hardware and

components used in work activities

- emergency management plan
- hazardous situations and related personal protection measures
- hazards that may exist when installing overhead wiring structures and ways of controlling the risks involved
- problems that may occur when installing overhead wiring structures and action that can be taken to report or resolve these problems
- relevant earthmoving equipment and methods
- relevant information in workplace technical manuals and instructions
- relevant rail danger zones
- relevant rail industry standards
- relevant recording and documentation procedures
- relevant safeworking system and workplace procedures
- relevant work health and safety (WHS)/occupational health and safety (OHS) and environmental procedures and regulations
- workplace procedures for installing overhead wiring structures.

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 rail corridor 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, equipment and personal protective equipment (PPE) currently used in industry
- applicable documentation including workplace procedures, regulations, codes of practice, rail industry standards and operation manuals.

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