



Australian Government

ICTCBL250 Haul and fix aerial cable

Release: 1

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Modification History

Release	Comments
Release 1	This version released with ICT Information and Communications Technology Training Package Version 5.0.

Application

This unit describes the skills and knowledge required to install aerial cables in customer and access networks. It involves installing, terminating and securing cables. Aerial cable installation may be for a new cable, a cable upgrade, or a cable in need of repair.

It applies to telecommunications lines workers and line installers who use support anchors and catenaries for new installations and upgrades, or to maintain existing networks in domestic, commercial and industrial installations to deliver services in x-digital subscriber line (xDSL), fibre to the X (FTTx) and hybrid fibre coaxial (HFC) networks.

Licensing, legislative, regulatory and certification requirements apply to telecommunications systems and working at heights. All customer cabling work in the telecommunications, fire, security and data industries must be performed by a registered cabler. All cablers are required to register with an Australian Communications and Media Authority (ACMA) accredited registrar. Refer to the ICT Information and Communications Technology Training Package Companion Volume Implementation Guide or the relevant regulator for details of licensing, legislative or certification requirements.

Unit Sector

Telecommunications – Cabling

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for aerial cable installation	1.1 Obtain construction plan from appropriate personnel to scope work and arrange for site access 1.2 Notify appropriate personnel of identified hazards at cabling worksite 1.3 Determine cable route and type of cable from construction plan,

ELEMENT	PERFORMANCE CRITERIA
	identifying and avoiding other services 1.4 Obtain plant, tools, safety equipment and material to perform tasks safely and efficiently 1.5 Perform pole inspection before climbing and/or making attachment according to industry standards and asset owner requirements
2. Construct aerial to underground transition	2.1 Install cable protection on pole for transition, using approved hardware according to industry standards and asset owner requirements 2.2 Connect conduit to pits or manholes as designed according to telecommunications industry standards and asset owner requirements
3. Install aerial cable	3.1 Use tools according to enterprise guidelines and work health and safety (WHS) regulations 3.2 Install catenary wire, gantry wire or integral bearer cable (IBC) and tension to required specifications 3.3 Position hauling hardware including rollers, hauling guides to ensure no damage is caused and that physical characteristics of cable are maintained 3.4 Haul cable at correct tension according to current Australian Standards and enterprise guidelines, ensuring that no damage is caused and that physical characteristics of cable are maintained 3.5 Secure cable permanently to support structure using aerial fixing devices according to manufacturer specifications and enterprise guidelines
4. Terminate, seal and secure aerial cable	4.1 Terminate, seal and label cables according to manufacturer specifications and enterprise guidelines 4.2 Loop and secure cable on support structure adhering to h bend radius tolerances to reduce damage likelihood or to prevent damage 4.3 Test cable for continuity 4.4 Record and report test results for escalation to other team members or supervisors as required
5. Complete project	5.1 Complete reports about installation and design amendments and file according to enterprise requirements 5.2 Recover obsolete materials and equipment, and return to appropriate point for disposal 5.3 Restore site according to requirements of enterprise or approving authority and to customer satisfaction

ELEMENT	PERFORMANCE CRITERIA
	5.4 Notify appropriate personnel about job completion and obtain sign-off

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance, but not explicit in the performance criteria.

Skill	Description
Reading	Interprets information from technical sources to identify relevant and key information
Writing	Documents outcomes and changes to designs using industry relevant terminology
Oral Communication	Uses language and non-verbal features appropriate to context
Numeracy	- Interprets scales and ratios on plans - Performs basic calculations required to take accurate measurements
Navigate the world of work	Takes personal responsibility for adherence to legal, regulatory and enterprise requirements relevant to own work context
Interact with others	Identifies and follows accepted communication practices and protocols when liaising with customers and internal and external personnel on technical and operational matters
Get the work done	- Determines job sequence and works logically and systematically to undertake clearly defined tasks - Analyses task requirements to decide on appropriate equipment and practices - Implements actions according to plan, making slight adjustments if necessary, and addressing some unexpected issues - Automatically implements standard procedures for routine decisions in response to familiar problems - Determines and uses appropriate equipment

Unit Mapping Information

No equivalent unit. Supersedes and is not equivalent to ICTCBL214 Fix aerial cable.

Links

Companion Volume Implementation Guides are available from VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTCBL250 Haul and fix aerial cable

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Performance Evidence

The candidate must demonstrate the ability to perform the tasks outlined in the elements, performance criteria, and foundation skills, and to:

- plan the works and prepare the site
- read and interpret drawings and construction designs to interpret installation requirements
- use cable dispensing equipment
- haul aerial cable using hauling hardware
- transition cable from aerial to underground /underground to aerial
- secure and seal aerial cable
- apply work health and safety (WHS) requirements and work practices relating to hauling and fixing the above cables, including:
 - identifying safe support structures from pole status markings, visual inspection or approved testing procedures
 - completing documentation associated with installing aerial cable pole and ladder safety
- use specialised hand or power tools and equipment for installing aerial cable safely
- test the installation, document and escalate the test result.

Note: Evidence must be provided at least once when a specific volume or frequency is not stated.

Knowledge Evidence

The candidate must demonstrate the knowledge required to perform the tasks outlined in the elements, performance criteria, and foundation skills, which includes knowledge about:

- legislation, regulations, codes, standards, enterprise requirements, authorisations and other formal agreements that impact on hauling and fixing aerial cables
- specific WHS requirements and environmental procedures relating to the activity and site conditions
- typical safety issues and challenges that occur on site

- features and operating requirements of cable test equipment
- information required to operate equipment according to a test specification
- procedures for installing a range of aerial cable types
- manufacturer recommendations for correct hauling of cables
- relevant licence requirements for working at heights
- manufacturer specifications and industry requirements for safe operation of equipment
- test methods and performance requirements
- required authorisations for pole access.

Assessment Conditions

Skills must be assessed in a workplace or simulated environment where conditions are typical of those in a telecommunications work environment or workplace.

Access is required to:

- site/s where aerial cable can be installed
- plant, tools and equipment currently used in industry to erect aerial cable
- relevant regulatory and equipment documentation that impacts on aerial cable installation activities.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

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