



Australian Government

ICTCBL214 Fix aerial cable

Release: 1

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Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 2.0.

Application

This unit describes skills and knowledge required to install aerial cables in client 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 individuals working as telecommunications linesmen 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 home (FTTH) and hybrid fibre coaxial (HFC) networks.

Work functions in the occupational areas where this unit may be used are subject to regulatory requirements. Refer to the ICT Implementation Guide Companion Volume 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 safety hazards at cabling worksite 1.3 Determine cable route and type of cable from construction plan, identifying and avoiding other services 1.4 Obtain plant, tools, safety equipment and material to perform tasks

ELEMENT	PERFORMANCE CRITERIA
	safely and efficiently
2. Install aerial cable	2.1 Use tools according to enterprise guidelines and work health and safety (WHS) regulations 2.2 Install catenary wire, gantry wire or integral bearer cable (IBC) and tension to required specifications 2.3 Install cable according to current Australian Standards and enterprise guidelines, ensuring that no damage is caused and that physical characteristics of cable are maintained 2.4 Secure cable permanently to support structure using aerial fixing devices according to manufacturer's and enterprise guidelines 2.5 Number cables on towers according to enterprise guidelines
3. Terminate, seal and secure aerial cable	3.1 Terminate and seal cables according to manufacturer's specifications 3.2 Joint cable in suitable closures using enterprise guidelines 3.3 Loop and secure cable on support structure with bending radius tolerance for cable materials to reduce damage to conductors 3.4 Test cable for continuity and rectify fault if required 3.5 Record test results for future reference
4. Complete project	4.1 Complete reports on installation and design amendments and file according to enterprise requirements 4.2 Recover obsolete materials and equipment and return to appropriate point for disposal 4.3 Restore site according to requirements of enterprise or approving authority and to client satisfaction 4.4 Notify appropriate personnel of job completion and obtain sign off

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.3, 2.2, 2.3, 4.1	Interprets information from technical sources to identify relevant and key information

Writing	1.2, 3.5, 4.1	Documents outcomes and changes to designs using industry relevant terminology
Numeracy	1.3, 2.2, 2.5, 3.3	- Interprets scales and ratios on plans - Performs basic calculations required to take accurate measurements
Navigate the world of work	1.2, 2.1, 2.3-2.5, 3.1, 3.2, 4.3	Takes personal responsibility for adherence to legal, regulatory and organisational requirements relevant to own work context
Interact with others	1.1, 4.3, 4.4	Identifies and follows accepted communication practices and protocols when liaising with clients and internal and external personnel on technical and operational matters
Get the work done	1.1-1.4, 2.1, 2.3-2.5, 3.1, 3.2, 4.2, 4.3	- 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 as per 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

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTCBL214 Fix aerial cable	ICTCBL2134A Fix aerial cable	Updated to meet Standards for Training Packages Performance Criteria clarified	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

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

Assessment Requirements for ICTCBL214 Fix aerial cable

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Performance Evidence

Evidence of the ability to:

- plan the works and prepare the site
- install an aerial cable, including hauling aerial cable, cable securing and sealing
- demonstrate identification of safe support structures from pole status markings, visual inspection or approved testing procedures
- use specialised hand or power tools and equipment for installing aerial cable safely
- test the installation and document test result
- apply all related work health and safety (WHS) requirements and work practices, including documentation associated with installing aerial cable pole and ladder safety.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe the features and operating requirements of cable test equipment
- describe the information required to operate equipment according to a test specification
- discuss installation of a range of aerial cable types
- identify legislation, codes of practice and other formal agreements that impact on the work activity
- identify the relevant licence requirements for working at heights
- identify the manufacturer's requirements for safe operation of equipment
- identify specific WHS requirements relating to the activity and site conditions
- describe test methods and performance requirements
- identify typical issues and challenges that occur on site.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the telecommunications – cabling field of work and include access to:

- sites where aerial cable may be installed
- plant, tools and equipment to erect aerial cable currently used in industry
- 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.

Links

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