



Australian Government

ICTCBL333 Install aerial cable for communications applications

Release: 1

ICTCBL333 Install aerial cable for communications applications

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 cable in domestic, commercial or industrial communications applications that include digital and analog, telephony, data, video, digital broadcasting, computer networks, local area networks (LANs), wide area networks (WANs), master antenna television (MATV), cable television (CATV), closed-circuit television (CCTV), long-term evolution (LTE) and multimedia.

It applies to technical staff installing aerial cable for customer and carrier networks. Installations are completed outdoors on customer premises using basic rigging procedures, methods and equipment for working safely at heights.

Licensing, legislative, regulatory and certification requirements apply to telecommunications systems. Work functions in the occupational areas where this unit may be used are subject to regulatory requirements. 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 specific guidance on 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 Access site according to required procedures 1.2 Verify location, cable bearer type and specific requirements of the proposed aerial cable installation according to appropriate plans and

ELEMENT	PERFORMANCE CRITERIA
	recognised constraints 1.3 Obtain information about location of other services from relevant authorities 1.4 Inform appropriate personnel of existing and potential worksite hazards 1.5 Select tools and equipment required for safe work practice 1.6 Erect barriers according to safety requirements 1.7 Assess support structure safety according to standard working conditions and proceed according to this assessment 1.8 Identify and set up traffic management plan as required 1.9 Set-up cable installation equipment according to manufacturer requirements and enterprise guidelines
2. Attach aerial cable to catenary	2.1 Select type of cable bearer 2.2 Use basic rigging procedures, methods and equipment for working safely at heights 2.3 Secure pole hardware permanently to support structure using safe installation practices, according to specifications 2.4 Haul and secure cable following health and safety requirements, manufacturer specifications and environmental requirements 2.5 Ensure minimum sag heights are achieved
3. Install self-supporting aerial cable	3.1 Select type of cable for installation 3.2 Use basic rigging procedures, methods and equipment for working safely at heights 3.3 Secure pole hardware permanently to support structure using safe installation practices according to specifications 3.4 Haul and secure cable following health and safety requirements, manufacturer specifications and environmental requirements 3.5 Ensure minimum sag heights are achieved
4. Seal and secure aerial cable	4.1 Seal cable ends to prevent entrance of foreign material 4.2 Secure cable loop, as required, on support structure and ensure equipment is left in a tidy manner to reduce damage to conductors or fibres and to enable ease of access for effective maintenance 4.3 Weatherproof building entry points, as required 4.4 Fit over-voltage protection devices to all cables with metallic component as required

ELEMENT	PERFORMANCE CRITERIA
	4.5 Complete installation reports and design amendments accurately and file promptly according to industry requirements
5. Restore site and complete documentation	5.1 Restore worksite to customer satisfaction 5.2 Complete reports on installation work and provide to appropriate personnel 5.3 Notify customer 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	Analyses plans, regulations and other documentation from a variety of sources and consolidates information to determine requirements
Writing	- Prepares documentation and correspondence using clear language and correct spelling and terminology - Documents outcomes and changes to plans using industry relevant terminology and recognised plan symbols
Oral Communication	Interacts effectively in verbal exchanges using active listening, questioning and reading of verbal and non-verbal signals to convey and clarify information
Numeracy	Makes calculations appropriate for measuring and estimating materials for construction
Navigate the world of work	- Accepts responsibility and ownership for the task and makes decisions on completion parameters and the need for coordination with others - Takes personal responsibility for following explicit and implicit policies, procedures and legislative requirements
Interact with others	Uses a range of strategies to establish a sense of connection and build rapport with clients and workmates
Get the work done	- Takes responsibility for planning, sequencing and prioritising tasks and own workload for efficiency and effective outcomes - Makes routine decisions and implements procedures for routine tasks, using formal decision making processes for more complex and non-routine situations

Unit Mapping Information

No equivalent unit. Supersedes and is not equivalent to ICTCBL310 Install 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 ICTCBL333 Install aerial cable for communications applications

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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:

- prepare site for installation, ensuring all relevant authorities have been notified and approvals obtained prior to commencement
- install various aerial cable using effective practices including:
 - integral bearer
 - self-supporting
 - stranded support (catenary)
- comply with all related health and safety requirements and work practices.

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, authorisations and other formal agreements that impact on aerial cabling, in particular:
 - Australian Communications and Media Authority (ACMA) competency requirements for Telecommunications Cabling Provider Rules as they apply to aerial cable
 - minimum sag heights
 - health, safety and environmental requirements relating to aerial cabling and working at heights
 - appropriate authorisations for pole access
- features and operating requirements of equipment used for aerial cabling and rigging
- manufacturer and industry requirements for safe operation of installation and rigging equipment

- basic traffic management plans
- typical worksite issues and challenges.

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 installation can be conducted
- aerial installation equipment currently used in industry
- aerial cables including:
 - integral bearer
 - self-supporting
 - stranded support (catenary)
- 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. Refer also to the *Requirements for assessors* in the ICT Information and Communications Technology Training Package Companion Volume Implementation Guide.

Links

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