



Australian Government

ICTCBL239 Install customer cable support systems

Release: 1

ICTCBL239 Install customer cable support systems

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 support systems for cable infrastructure for new installations or upgrades to existing networks in domestic, commercial and industrial premises.

It applies to individuals who work in technical roles planning cable routes and selecting and installing support structures for communications applications including digital and analog, telephony, data, video, digital broadcasting, computer networks, local area networks (LANs), wide area networks (WANs) and multimedia.

Licensing, legislative, regulatory and certification requirements apply to telecommunications systems. 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.

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 cable support installation	1.1 Access site according to customer requirements, required procedures and site security arrangements 1.2 Confirm site capacities for storage and location of cable feeders or establish alternative methods 1.3 Determine customer specifications, and manufacturer and enterprise requirements for cable support 1.4 Notify appropriate personnel of identified safety hazards at cabling

ELEMENT	PERFORMANCE CRITERIA
	worksite 1.5 Plan cable route, identifying and avoiding other services and remote power feeding services operating at above telecommunications network voltage (TNV) on site in commercial buildings 1.6 Select tools and materials for installation of support system from work specifications and schedules
2. Determine cable routes	2.1 Review relevant plans and verify cable locations 2.2 Select cable routes appropriate to location of building services, providing access to all outlets and enabling cable to be supported to outlet point 2.3 Plan safe and efficient installation by accurately identifying structural building requirements and site constraints 2.4 Identify cable and services segregation clearances to ensure cable route complies with manufacturer specifications, enterprise and legislative requirements, and industry codes of practice
3. Determine support method	3.1 Select appropriate support system for planned cable route and identified site constraints 3.2 Prepare support system for capability to meet planned concentration of cable in any location to facilitate ready access for maintenance and to allow for future expansion
4. Mark out and install fixings and support structure	4.1 Mark out and install fixings and structures securely in a safe manner to manufacturer specifications, ensuring cable weight can be supported in all operating conditions 4.2 Align support structure correctly to enable cable to be installed evenly, in sequence and without damage 4.3 Install protective earthing to industry standards 4.4 Conduct work with minimal disruption to ongoing customer activity
5. Complete support installation	5.1 Check and adjust installed supports to ensure cable will not be exposed to damage during installation and operation 5.2 Remove installation waste and debris from worksite and dispose of according to environmental requirements to maintain safe worksite conditions 5.3 Complete enterprise documentation to record work completed

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 textual information from relevant sources to identify relevant and key information
Writing	Uses clear, specific and industry-related terminology to complete workplace documentation
Oral Communication	Uses clear language and concepts, and tone and pace appropriate for the audience and purpose
Numeracy	Takes readings and measurements and interprets results
Navigate the world of work	Complies with explicit policies, procedures and legislative requirements relevant to own role
Interact with others	Identifies and follows accepted communication practices and protocols when liaising with 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 - Selects and uses appropriate tools and equipment to perform tasks

Unit Mapping Information

ICTCBL239 Install customer cable support systems supersedes and is equivalent to ICTCBL201 Install customer cable support systems.

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 ICTCBL239 Install customer cable support systems

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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:

- interpret plans and schematic drawings to verify cable layout
- install three different support structures:
 - catenary wire
 - ducts and/or trays
 - frame back-mounts
- comply with all related work health and safety (WHS) and environmental requirements.

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

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:

- building construction methods for commercial buildings as they relate to routing cables
- features and operating requirements of cable installation equipment
- services that may impact on cable installations
- cable installation support methods and their performance features
- legislation, regulations, codes, standards, rules and other formal agreements that impact on the work activity, in particular:
 - wiring rules
 - communications cabling manual
 - mandatory and voluntary technical standards
- typical safety issues and challenges that occur on a commercial installation site
- cable types – purpose, construction, characteristics
- cable screening

- recognition of colour
- basic telephony including operation.

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 customer cable support systems can be installed
- equipment currently used in industry
- relevant regulatory and equipment documentation that impacts on cable installation activities.

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

Work functions in the occupational areas where this unit may be used are subject to regulatory requirements. 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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