Australian Government

ICTCBL301 Install, terminate and certify structured cabling installation

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 the skills and knowledge required to place, secure and terminate structured cabling for indoor and outdoor installations and to certify the installation within a domestic, commercial or industrial client's premises.

It applies to technical staff who install, terminate and certify structured cabling installations for communications applications including digital and analog, telephony, data, video, digital broadcasting, computer networks, local area networks (LAN), wide area networks (WAN) and multimedia.

All client 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 (ACMA) accredited registrar.

Unit Sector

Telecommunications – cabling

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
Elements describe the essential outcomes.	*Performance criteria describe the performance needed to demonstrate achievement of the element.*
1. Prepare for installation of structured cabling	1.1 Confirm client requirements and ensure compliance with relevant legislation, codes, regulations and standards 1.2 Arrange access to site according to required procedure 1.3 Inform appropriate personnel of identified safety hazards on worksite 1.4 Organise tools and cabling products equipment for given work

ELEMENT	PERFORMANCE CRITERIA
	1.5 Erect barriers according to safety requirements
	1.6 Select cable type and match structured cabling to installation environment and client requirements
	1.7 Verify proposed route to meet manufacturer's specifications and industry standards
2. Install structured cable	2.1 Place and secure correct type of cable following work health and safety (WHS) and environmental requirements, and according to accepted industry practice and standards
	2.2 Maintain cable and services separations in runs and cross overs to meet manufacturer and industry standards
	2.3 Install structured cabling to industry standards
	2.4 Minimise twist ratio defects to avoid accumulation effect on structured cable performance
	2.5 Fit over-voltage protection devices to all cables and metallic components where required
3. Terminate structured cable	3.1 Terminate cable according to accepted industry practice and standards
	3.2 Maintain correct twist ratio to optimise system performance at rated level
	3.3 Use correctly rated termination hardware with appropriate termination tool to ensure integrity and performance of termination
	3.4 Earth cable shield to manufacturer's specifications and relevant industry standards if applicable
4. Certify system performance to required level and complete documentation for client	4.1 Test installation and termination to comply with certification requirements
	4.2 Record and verify system performance promptly where required
	4.3 Authorise and issue appropriate documentation to client to certify system performance and complete records where required
	4.4 Reinstate site to client's satisfaction and dispose of waste in environmentally safe manner
	4.5 Notify client 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, 1.7, 4.2, 4.5	• Integrates new ideas and information with existing understanding • Recognises the structures and distinguishing features of a range of familiar text types
Writing	1.2, 1.3, 4.2, 4.3	• Sequences writing to produce cohesive text
Oral Communication	1.1-1.3, 4.5	• Uses clear language and concepts, and tone and pace appropriate for the audience and purpose
Numeracy	3.2	• Interprets and comprehends whole numbers and familiar or routine fractions, decimals and percentages
Navigate the world of work	1.1-1.3, 1.5, 1.7, 2.1-2.3, 3.1, 3.3, 4.1-4.4	• Takes personal responsibility for adherence to legal and regulatory responsibilities relevant to own work context, and draws attention to any issues that may affect self or others
Interact with others	4.3	• Recognises the purpose of various communications directly relevant to own role
Get the work done	1.2-1.4, 1.6, 1.7, 2.1-2.5, 3.1-3.4, 4.1, 4.2	• 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 • Understands when to take responsibility and when to notify others

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Over-voltage protection devices requirements *must comply with:*	• ACMA standards • enterprise or local environmental hazard • manufacturer.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTCBL301 Install, terminate and certify structured cabling installation	ICTCBL3009B Install, terminate and certify structured cabling installation	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet - https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2