



**Australian Government**

# **ICTCBL252 Joint and terminate coaxial cable**

**Release: 1**

## ICTCBL252 Joint and terminate coaxial cable

### 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, joint and terminate coaxial cable in the customer access network (CAN) environment for emerging technologies using high speed broadband and the delivery of cable television services on customer premises for domestic, commercial or industrial installations.

It applies to technical staff who joint and terminate coaxial cable used in all telecommunications applications, including convergence technologies of telephony, data, video and multimedia as part of next generation networks (NGNs).

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. 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 to install and joint coaxial cable	1.1 Confirm approval for site access with customer prior to site entry 1.2 Read and interpret customer installation specifications and physical conditions at site to determine layout of job 1.3 Locate and identify adjoining other services according to enterprise guidelines and work health and safety (WHS) practices

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
	<p>1.4 Test for and respond to presence of dangerous gases in underground enclosures according to enterprise guidelines</p> <p>1.5 Undertake approved alterations to design according to enterprise guidelines</p>
2. Verify placement and secure coaxial cable	<p>2.1 Use safety equipment to protect self and public</p> <p>2.2 Maintain coaxial cable segregation to industry standard requirements</p> <p>2.3 Protect integrity of coaxial shield cable to ensure no loss of performance</p> <p>2.4 Place cable in position with sufficient slack to allow termination and maintain minimum bend radius according to manufacturer specifications</p> <p>2.5 Follow installation designs to install cable safely without damage to cable or customer premises</p> <p>2.6 Maintain radio frequency (RF) signal strength by installing cable lengths within manufacturer or design specifications</p> <p>2.7 Locate securing hardware to reduce cumulative effect on cable wave shape properties and attach cable ties to minimise cable damage</p>
3. Joint coaxial cable	<p>3.1 Strip coaxial cable, according to specifications, to required length using appropriate tools</p> <p>3.2 Select appropriate kit to match type of coaxial cable in use and jointing method according to manufacturer recommendations</p> <p>3.3 Joint cable and ensure jointing fitting retains segregation of conductor and shield</p> <p>3.4 Seal all joints according to manufacturer specifications</p>
4. Terminate coaxial cable	<p>4.1 Prepare coaxial cable for termination according to specifications using appropriate tool</p> <p>4.2 Select connectors to match type of coaxial cable in use and use terminating method recommended by manufacturer</p> <p>4.3 Verify connector fitting retains segregation of conductor and shield</p> <p>4.4 Terminate connectors to torque as recommended by manufacturer to prevent RF leakage</p> <p>4.5 Test connectors to mating specifications using gauge tester</p> <p>4.6 Maintain continuous ground on terminations and waterproof seal to preserve cable integrity</p>

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
5. Complete installation operation	5.1 Place cables in enclosure and lay up according to manufacturer instructions and enterprise guidelines, and check that no safety hazards are evident 5.2 Place other services including cables according to enterprise guidelines 5.3 Reinststate site, remove waste and debris for disposal, and maintain safe worksite conditions
6. Complete installation administration	6.1 Complete reports according to enterprise policy 6.2 Note alterations to plans using appropriate symbols

## Foundation Skills

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

<b>Skill</b>	<b>Description</b>
Reading	<ul style="list-style-type: none"> <li>Reads familiar texts fluently, automatically recognising most everyday words and some specialised vocabulary</li> </ul>
Writing	<ul style="list-style-type: none"> <li>Sequences writing to produce cohesive text and uses layout consistent with text type</li> </ul>
Oral Communication	<ul style="list-style-type: none"> <li>Demonstrates awareness of choices for register, especially in situations that are familiar</li> </ul>
Numeracy	<ul style="list-style-type: none"> <li>Interprets and comprehends whole numbers and familiar or routine fractions, decimals and percentages</li> <li>Selects and uses appropriate tools, hand-held devices, computers and technological processes</li> </ul>
Navigate the world of work	<ul style="list-style-type: none"> <li>Takes responsibility for decisions regarding when and how to complete tasks, and coordinate with or delegate to others</li> <li>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</li> </ul>
Get the work done	<ul style="list-style-type: none"> <li>Implements actions as per plan, makes slight adjustments if necessary, and addresses unexpected issues</li> <li>Automatically implements standard procedures for routine decisions</li> </ul>

## Unit Mapping Information

ICTCBL252 Joint and terminate coaxial cable supersedes and is equivalent to ICTCBL209 Joint and terminate coaxial cable.

## Links

Companion Volume Implementation Guides are available from VETNet -

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