



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **ICTCBL2131A Install an above ground equipment enclosure**

**Release: 1**

## **ICTCBL2131A Install an above ground equipment enclosure**

### **Modification History**

Not Applicable

## Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit describes the performance outcomes, skills and knowledge required to install an above ground equipment enclosure for cabling provisioning. It involves planning, building and earthing an enclosure.</p> <p>Licensing, legislative, regulatory and certification requirements apply to working at heights. If an elevated work platform (EWP) is required, verify state or territory law requirements for a licence to operate an EWP. Users should confirm requirements with the relevant federal, state or territory authority.</p> <p>If working at heights, achievement of the unit 'CPCPCM2015A Work safely on roofs' from the CPC08 Construction and Plumbing Services Integrated framework training Package fulfils this requirement.</p>
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## Application of the Unit

<p><b>Application of the unit</b></p>	<p>Technical staff whose work involves installing an above ground equipment enclosure apply the skills and knowledge in this unit.</p> <p>A relevant job role is civil construction worker whose work includes installation of enclosures including pillars, cabinets, remote integrated multiplexers (RIMs) and mobile equipment enclosures for new installations or network upgrades.</p>
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## Licensing/Regulatory Information

Refer to Unit Descriptor

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare to construct and install enclosure	1.1. Obtain construction plan from <i>appropriate personnel</i> to scope the work and arrange for site access 1.2. Notify appropriate personnel of identified <i>safety hazards</i> and <i>other services</i> at the worksite 1.3. Obtain <i>plant, tools, safety equipment</i> and material to perform tasks safely and efficiently 1.4. Determine the location and type of <i>above ground enclosure</i> specified in the construction plan that is required for the project
2. Build enclosure	2.1. Use tools according to enterprise guidelines and occupational health and safety ( <i>OHS</i> ) <i>regulations</i> 2.2. Construct footings or foundations to the construction design specifications 2.3. Construct enclosure to specifications given in the construction design 2.4. Connect enclosure to earth according to construction plan and industry practice
3. Complete project	3.1. Complete reports according to enterprise policy and record alterations to plans using appropriate symbols 3.2. Recover obsolete materials and equipment and return to appropriate point for disposal 3.3. Restore site according to the requirements of enterprise or approving authority and to customer satisfaction 3.4. Notify appropriate personnel of job completion and obtain sign off

## Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE
This section describes the skills and knowledge required for this unit.
<b>Required skills</b>
<ul style="list-style-type: none"> <li>communication skills to liaise with internal and external personnel on technical and operational matters</li> <li>literacy skills to interpret plans and specifications</li> </ul>

**REQUIRED SKILLS AND KNOWLEDGE**

- numeracy skills to take and analyse measurements for construction work
- planning and organisational skills to organise and maintain equipment
- problem solving skills to solve logistics problems on site
- safety awareness skills to:
  - apply precautions and required action to minimise, control or eliminate hazards that may exist during work activities
  - select and use required personal protective equipment conforming to industry and OHS standards
  - work systematically with required attention to detail without injury to self or others, or damage to goods or equipment
- task management skills to work systematically with required attention to detail
- technical skills to:
  - construct footings and foundations
  - construct earthing enclosures
  - use hand and power tools in civil construction work

**Required knowledge**

- civil construction:
  - construction plant, tools and equipment operation
  - enclosure construction methods
  - footings and foundations
  - plans
- legislation, codes of practice and other formal agreements that impact on the work activity
- specific OHS requirements relating to the activity and site conditions
- typical issues and challenges that occur on site

## Evidence Guide

<b>EVIDENCE GUIDE</b>	
<p>The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.</p>	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>Evidence of the ability to:</p> <ul style="list-style-type: none"> <li>• prepare to install an enclosure using construction plans with necessary tools and equipment</li> <li>• construct and connect an enclosure according to plans, specifications and OHS requirements</li> <li>• complete reports and document alterations to plans.</li> </ul>
<b>Context of, and specific resources for assessment</b>	<p>Assessment must ensure:</p> <ul style="list-style-type: none"> <li>• sites where enclosure construction and connection may be conducted</li> <li>• use of construction equipment currently used in industry</li> <li>• relevant regulatory and equipment documentation that impact on construction.</li> </ul>
<b>Method of assessment</b>	<p>A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:</p> <ul style="list-style-type: none"> <li>• review of an enclosure constructed by the candidate</li> <li>• review of an oral and written report with completed documentation, including reports and records of alterations</li> <li>• direct observation of the candidate installing an above ground equipment enclosure</li> <li>• oral or written questioning to assess required knowledge .</li> </ul>
<b>Guidance information for assessment</b>	<p>Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:</p> <ul style="list-style-type: none"> <li>• ICTCBL2133A Construct underground telecommunications infrastructure.</li> </ul> <p>Aboriginal people and other people from a non-English speaking background may have second language issues.</p>

**EVIDENCE GUIDE**

	<p>Access must be provided to appropriate learning and assessment support when required.</p> <p>Assessment processes and techniques must be culturally appropriate, and appropriate to the oral communication skill level, and language and literacy capacity of the candidate and the work being performed.</p> <p>In all cases where practical assessment is used it will be combined with targeted questioning to assess required knowledge. Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit of competency.</p> <p>Where applicable, physical resources should include equipment modified for people with special needs.</p>
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**Range Statement****RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

***Appropriate personnel*** may include:

- customer representative
- project manager
- site manager.

***Safety hazards*** may refer to:

- contact with remote power feed
- electrical supply and areas of earth potential rise (EPR) that require mandatory separation from cable work
- hazardous conduit as in conduit colours according to AS 1345:1995 associated with a hazardous service



<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• unstable ground.</li> </ul>
<i>Other services</i> may include:	<ul style="list-style-type: none"> <li>• fire services</li> <li>• gas and water mains</li> <li>• high voltage (HV) power.</li> </ul>
<i>Plant, tools, safety equipment</i> may include:	<ul style="list-style-type: none"> <li>• equipment: <ul style="list-style-type: none"> <li>• flashing lights</li> <li>• gas and other hazard detection equipment</li> <li>• safety barriers</li> <li>• trench guards</li> <li>• warning signs and tapes</li> </ul> </li> <li>• plant: <ul style="list-style-type: none"> <li>• back hoe</li> <li>• bobcat</li> <li>• excavator</li> <li>• trencher</li> </ul> </li> <li>• safety equipment: <ul style="list-style-type: none"> <li>• personal protective clothing: <ul style="list-style-type: none"> <li>• earmuffs</li> <li>• gloves</li> <li>• head protection</li> <li>• kneepads</li> <li>• masks</li> <li>• protective suits</li> <li>• safety boots</li> <li>• safety glasses</li> </ul> </li> </ul> </li> <li>• tools: <ul style="list-style-type: none"> <li>• concrete tool</li> <li>• diggers</li> <li>• jack-hammers</li> <li>• power tools: <ul style="list-style-type: none"> <li>• cutters</li> <li>• drills</li> </ul> </li> <li>• saws</li> <li>• shovels.</li> </ul> </li> </ul>
<i>Above ground enclosure</i> may include:	<ul style="list-style-type: none"> <li>• conduit and pipe</li> <li>• enclosure constructed of: <ul style="list-style-type: none"> <li>• fibreglass</li> <li>• metal</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• plastic</li> <li>• fibre hub</li> <li>• hybrid fibre coaxial (HFC) cabinet.</li> </ul>
<i>OHS regulations</i> may include:	<ul style="list-style-type: none"> <li>• appropriate licences:               <ul style="list-style-type: none"> <li>• crane</li> <li>• EWP</li> <li>• forklift</li> <li>• winch</li> </ul> </li> <li>• Australian Communications Industry Forum (ACIF) standards and codes</li> <li>• AS Communications Cabling Manual (CCM) Volume 1</li> <li>• AS/NZS 3000:2007</li> <li>• AS/NZS 3080:2003</li> <li>• AS/NZS 3084:2003</li> <li>• AS/NZS 3085.1:2004</li> <li>• AS/NZS IEC 61935.1:2006</li> <li>• AS/NZS IEC 61935.2:2006</li> <li>• AS/NZS ISO/IEC 14763.3:2007</li> <li>• AS/NZS ISO/IEC 15018:2005</li> <li>• AS/NZS ISO/IEC 24702:2007</li> <li>• cabling security codes and regulations</li> <li>• Environmental Protection Acts</li> <li>• OHS</li> <li>• road and traffic control legislation and codes</li> <li>• technical standards AS/ACIF S008:2006 and AS/ACIF S009:2006.</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	Telecommunications
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### Co-requisite units

<b>Co-requisite units</b>	
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<b>Co-requisite units</b>		

## Competency field

<b>Competency field</b>	Cabling
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