



Australian Government

Department of Education, Employment and Workplace Relations

CPCPCM2026A Use plumbing hand and power tools

Release: 1

CPCPCM2026A Use plumbing hand and power tools

Modification History

Not Applicable

Unit Descriptor

Unit descriptor This unit of competency specifies the outcomes required to use commonly used hand and power tools in plumbing work applications.

Application of the Unit

Application of the unit Site location for work application may be either domestic or commercial and may be a new work site or an existing structure being renovated, extended, restored or maintained.

Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Prerequisite units

CPCPCM2023A	Carry out OHS requirements
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Employability Skills Information

Employability skills This unit contains employability skills.

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.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify hand and power tools.	1.1. Safety (OHS) requirements associated with the use of plumbing hand and power tools, and workplace environmental requirements , are adhered to throughout the work. 1.2. Quality assurance requirements for company operations are identified and adhered to. 1.3. Types of hand and power tools and their functions are identified. 1.4. Power sources and access to power supply are recognised.
2. Select appropriate hand tools.	2.1. Hand tools are selected consistent with the needs of the job. 2.2. Hand tools are checked for serviceability and safety and any faults reported to supervisor in accordance with workplace requirements. 2.3. Equipment is selected to hold, position or support material for hand tools application.
3. Use appropriate hand tools.	3.1. Material is located and held in position for hand tool application. 3.2. Hand tools are safely and effectively used according to their intended use. 3.3. Hand tools are safely located when not in immediate use.
4. Select appropriate power tools.	4.1. Appropriate personal protective equipment is selected, correctly fitted and used. 4.2. Power tools are selected consistent with the needs of the job in accordance with conventional work practice. 4.3. Power tools are visually checked for tags, serviceability and safety in accordance with OHS requirements and any faults are reported to supervisor in accordance with enterprise procedures. 4.4. Equipment is selected to hold, position or support materials for power tool application.
5. Use appropriate power tools.	5.1. Material is located and held in position for power tool application. 5.2. Power tools are safely and effectively used in application processes. 5.3. Power tools are safely switched and located when not in use.

ELEMENT	PERFORMANCE CRITERIA
6. Clean up work area.	<p data-bbox="574 302 1311 369">6.1. Work area is cleared in accordance with workplace procedures.</p> <p data-bbox="574 380 1311 526">6.2. Tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturer recommendations and workplace procedures.</p> <p data-bbox="574 537 1311 649">6.3. <i>Information</i> is accessed and documentation completed in accordance with workplace requirements.</p>

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Required skills for this unit are:

- communication skills to:
 - complete workplace documentation
 - enable clear and direct communication, using questioning to identify and confirm requirements, share information, listen and understand
 - read and interpret:
 - documentation from a variety of sources
 - drawings and specifications
 - report faults and follow instructions
 - use language and concepts appropriate to cultural differences
 - use and interpret non-verbal communication, such as hand signals
- organisational skills, including the ability to plan and set out work
- identifying and accurately reporting to appropriate personnel any faults in tools, equipment or materials
- identifying, correctly applying and effectively operating tools
- teamwork skills to work with others to action tasks and relate to people from a range of cultural and ethnic backgrounds and with varying physical and mental abilities
- technological skills to:
 - access and understand site-specific instructions in a variety of media
 - use mobile communication technology.

REQUIRED SKILLS AND KNOWLEDGE

Required knowledge

Required knowledge for this unit is:

- function and purpose of hand and power tools used in plumbing applications
- job safety analysis (JSA) and safe work method statements (SWMS)
- workplace safety requirements and OHS legislation.

Evidence Guide

EVIDENCE GUIDE

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.

Overview of assessment

This unit of competency could be assessed in the workplace or a close simulation of the workplace environment providing that simulated or project-based assessment techniques fully replicate plumbing and services workplace conditions, materials, activities, responsibilities and procedures.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

A person who demonstrates competency in this unit must be able to provide evidence of:

- demonstrating compliance with OHS regulations applicable to workplace operations
- adopting and carrying out correct procedures prior to, during and after use of hand and power tools
- following work instructions, operating procedures and inspection practices to use the listed plumbing hand and power tools for their appropriate application, ensuring:
 - there is no damage to materials, tools or equipment
 - all work is completed to specification
 - compliance with regulations, standards and organisational quality procedures and processes
 - communicating and working effectively and safely with others.

Context of and specific resources for assessment

This competency is to be assessed using standard and authorised work practices, safety requirements and environmental constraints.

Assessment of essential underpinning knowledge will usually be conducted in an off-site context.

Assessment is to comply with relevant regulatory or Australian standards' requirements.

Resource implications for assessment include:

- an induction procedure and requirement

EVIDENCE GUIDE

- realistic tasks or simulated tasks covering the minimum task requirements
- relevant specifications and work instructions
- tools and equipment appropriate to applying safe work practices
- support materials appropriate to activity
- workplace instructions relating to safe working practices and addressing hazards and emergencies
- material safety data sheets
- research resources, including industry related systems information.

Reasonable adjustments for people with disabilities must be made to assessment processes where required. This could include access to modified equipment and other physical resources, and the provision of appropriate assessment support.

Method of assessment

Assessment methods must:

- satisfy the endorsed Assessment Guidelines of the Construction, Plumbing and Services Training Package
- include direct observation of tasks in real or simulated work conditions, with questioning to confirm the ability to consistently identify and correctly interpret the essential underpinning knowledge required for practical application
- reinforce the integration of employability skills with workplace tasks and job roles
- confirm that competency is verified and able to be transferred to other circumstances and environments.

Validity and sufficiency of evidence requires that:

- competency will need to be demonstrated over a period of time reflecting the scope of the role and the practical requirements of the workplace
- where the assessment is part of a structured learning experience the evidence collected must relate to a number of performances assessed at different points in time and separated by further learning and practice, with

EVIDENCE GUIDE

a decision on competency only taken at the point when the assessor has complete confidence in the person's demonstrated ability and applied knowledge

- all assessment that is part of a structured learning experience must include a combination of direct, indirect and supplementary evidence.

Assessment processes and techniques should as far as is practical take into account the language, literacy and numeracy capacity of the candidate in relation to the competency being assessed.

Supplementary evidence of competency may be obtained from relevant authenticated documentation from third parties, such as existing supervisors, team leaders or specialist training staff.

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.

Safety (OHS) is to be in accordance with commonwealth, state and territory legislation and regulations and may include:

- handling of materials
- hazard control
- hazardous materials and substances
- personal protective clothing and equipment prescribed under legislation, regulations and workplace policies and practices
- use of firefighting equipment
- use of first aid equipment
- use of tools and equipment
- workplace environment and safety.
- clean-up protection
- waste management.

Environmental requirements cover water quality management

RANGE STATEMENT

and may include:

Quality assurance requirements may include:

- Australian standards
- Environment Protection Authority (EPA)
- internal company quality assurance policy and risk management strategy
- International Standards Organisation
- site safety plan
- workplace operations and procedures.

Appropriate plumbing **hand tools** may include:

- battery operated drills
- caulking guns
- copper tube cutters
- copper tube expanders
- customised tools to meet manufacturer specifications
- files and rasps
- hacksaws
- ladders
- other specialist tools for water services
- oxy-acetylene
- pipe benders
- pipe dies
- pipe wrenches
- pop riveters
- screwdrivers
- spirit levels
- squares
- tin snips
- tube benders
- tube flaring tools
- wood saws.

Appropriate plumbing **power tools** may include:

- compactor (wacker)
- compressed air
- drop saw
- electric dies (up to 100mm)
- electric drills
- electric nibbler
- generator
- grinder
- hydraulic tools and equipment
- large rotary drills

RANGE STATEMENT

Information may include:

- petrol diamond saws
- power saws.
- charts and hand drawings
- diagrams or sketches
- instructions issued by authorised organisational or external personnel
- job drawings
- manufacturer specifications and instructions
- material safety data sheets (MSDS)
- memos
- organisation work specifications and requirements
- regulatory and legislative requirements, particularly those pertaining to:
 - building codes
 - OHS and environmental requirements
 - plumbing and gasfitting authority regulations
- relevant Australian standards
- safe work procedures relating to handling and storing plumbing materials, including the disposal of waste
- signage
- verbal, written and graphical instructions
- work bulletins
- work schedules, plans and specifications.

Unit Sector(s)

Unit sector Plumbing and services

Co-requisite units

Co-requisite units Nil

Co-requisite units Nil

Functional area

Functional area