



Australian Government

CPCCCM2007B Use explosive power tools

Release 1

CPCCCM2007B Use explosive power tools

Modification History

Minor changes made to range statement, including addition of photovoltaic (solar) panels Equivalent to CPCCCM2007A

Unit Descriptor

This unit of competency specifies the outcomes required to apply safe and effective operation of explosive power tools (EPT), used to fasten materials or fix fasteners to bases. It includes both direct action and indirect action explosive powered fastening tools.

Application of the Unit

This unit of competency supports achievement of skills to safely and effectively use a range of EPT used in the construction industry.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

CPCCOHS2001A Apply OHS requirements, policies and procedures in the construction industry

Employability Skills Information

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

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|---|--------------------|--|
| 1 | Plan and prepare. | 1.1 Work instructions, including plans, specifications, quality requirements and operational details, are obtained, confirmed and applied from relevant information for planning and preparation . |
| | | 1.2 Safety (OHS) requirements are followed in accordance with safety plans and policies. |
| | | 1.3 Signage and barricade requirements are identified and implemented. |
| | | 1.4 Plant, tools and equipment selected to carry out tasks are consistent with job requirements, checked for serviceability, and any faults are rectified or reported prior to commencement. |
| | | 1.5 Material quantity requirements are calculated in accordance with plans and specifications. |
| | | 1.6 Materials appropriate to work application are identified, obtained, prepared, safely handled and located ready for use. |
| | | 1.7 Environmental requirements are identified for the project in accordance with environmental plans and statutory and regulatory authority obligations, and are applied. |
| 2 | Set out fasteners. | 2.1 Minimum distances for set out from edge of substrate material are adhered to in accordance with legislation, regulations and codes of practice. |
| | | 2.2 Material is located and temporarily held or fixed into designed position according to detailed drawings. |
| 3 | Use EPT. | 3.1 EPT is checked for operation according to manufacturer specifications and safety (OHS) requirements for use of EPT . |
| | | 3.2 Fastener is selected according to requirements of job. |
| | | 3.3 Charge is selected to assessed requirements for material, base and penetration. |

- 3.4 **Attachments** and accessories are installed to EPT in accordance with manufacturer specifications and safety (OHS) requirements.
 - 3.5 **Fastener and charge** in EPT are located to manufacturer specifications.
 - 3.6 EPT operation is carried out and fastener is fixed into place in accordance with manufacturer recommendations, legislation, regulations and codes of practice.
 - 3.7 Fastening penetration is checked and appropriate depth into material is applied.
 - 3.8 Power regulating device is adjusted for conditions.
 - 3.9 Misfire procedures are carried out according to manufacturer recommendations, legislation, regulations and codes of practice.
 - 3.10 Temporary holding and fixings are removed without damage to material.
- 4 Secure and store equipment and charges.
 - 4.1 Charges are stored in designated container in accordance with legislation, regulations and codes of practice and used charges are recorded.
 - 4.2 Unused fasteners, the EPT and attachments are stored in a carry case in line with manufacturer recommendations.
 - 4.3 Logbook is checked and maintenance recorded according to manufacturer recommendations.
- 5 Maintain EPT and kit.
 - 5.1 Safety features of tools are checked for serviceability in accordance with manufacturer operating manual.
 - 5.2 Tools are cleaned and lubricated to manufacturer recommendations.
 - 5.3 Periodic maintenance service is carried out to manufacturer specifications.
 - 5.4 Diminished stocks of charges and fasteners are replenished to designed effectiveness of EPT kit.

- 6 Clean up.
 - 6.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation, regulations, codes of practice and job specification.
 - 6.2 Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturer recommendations and standard work practices.

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:
 - determine requirements
 - enable clear and direct communication, using questioning to identify and confirm requirements, share information, listen and understand
 - follow instructions
 - read and interpret:
 - documentation from a variety of sources
 - drawings and specifications
 - report faults
 - use language and concepts appropriate to cultural differences
 - use and interpret non-verbal communication, such as hand signals
 - written skills to record maintenance in logbook
- identifying and accurately reporting to appropriate personnel any faults in tools, equipment or materials
- numeracy skills to apply measurements and make calculations
- organisational skills, including the ability to plan and set out work
- 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:
 - use a range of mobile technology, such as two-way radio and mobile phones
 - voice and hand signals to access and understand site-specific instructions.

Required knowledge

Required knowledge for this unit is:

- construction terminology
- EPT materials
- EPT charges and fasteners
- equipment safety manuals and instructions
- job safety analysis (JSA) and safe work method statements
- material safety data sheets (MSDS)
- materials storage and environmentally friendly waste management

- plans, specifications and drawings
- processes for the calculation of material requirements
- quality requirements
- relevant Acts, regulations and codes of practice
- security and storage procedures for equipment and charges
- types, characteristics, uses and limitations of plant, tools and equipment
- workplace and equipment safety requirements.

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, provided that simulated or project-based assessment techniques fully replicate construction 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 the ability to:

- locate, interpret and apply relevant information, standards and specifications
- comply with site safety plan and OHS legislation, regulations and codes of practice applicable to workplace operations
- comply with organisational policies and procedures, including quality requirements
- safely and effectively use tools and equipment
- communicate and work effectively and safely with others
- fix metal or timber to a steel, concrete or masonry base on one project of each to job specifications, including:
 - completion of stripping and assembly of the tool
 - completing log of serviceability
 - maintaining and cleaning

- selecting charges and fasteners applicable to base material and material being fixed
- misfire procedures
- using attachments
- complying with storage and security regulations and OHS requirements for the working environment
- selecting signage
- test fire.

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
- realistic tasks or simulated tasks covering the mandatory 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 work 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 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

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.

Information includes:

- diagrams or sketches

- instructions issued by authorised organisational or external personnel
- manufacturer specifications and instructions where specified
- memos
- MSDS
- organisation work specifications and requirements
- plans and specifications
- regulatory and legislative requirements pertaining to using EPT
- relevant Australian standards
- safe work procedures related to using EPT
- signage
- verbal or written and graphical instructions
- work bulletins
- work schedules.

Planning and preparation include:

- work site inspection
- equipment defect identification
- assessment of conditions and hazards
- determination of work requirements.

Safety (OHS) is to be in accordance with legislation, regulations, codes of practice, organisational safety policies and procedures, and project safety plan and may include:

- emergency procedures, including extinguishing fires, organisational first aid requirements and evacuation
- handling of materials
- hazard control
- hazardous materials and substances
- safe operating procedures, including the conduct of operational risk assessment and treatments associated with:
 - earth leakage boxes
 - lighting
 - photovoltaic (solar) panels
 - power cables, including overhead service trays, cables and conduits
 - restricted access barriers
 - surrounding structures
 - traffic control
 - trip hazards
 - work site visitors and the public

- working at heights
- working in confined spaces
- working in proximity to others
- working with dangerous materials
- organisational first aid
- personal protective clothing and equipment prescribed under legislation, regulations and workplace policies and practices
- use of firefighting equipment
- use of tools and equipment
- workplace environment and safety.

Tools and equipment may include:

- direct action EPT
- indirect action EPT
- clamps and levels.

Materials include:

- timber
- metals
- patented fasteners.

Environmental requirements include:

- clean-up management
- noise and dust
- vibration
- waste management.

Statutory and regulatory authorities include:

- federal, state and local authorities administering applicable Acts, regulations and codes of practice.

Minimum distance for set out of fasteners is to be in accordance with:

- regulated minimum distances
- bases, including concrete, masonry or steel.

Use of EPT includes:

- stripping and assembling tools
- completing log of serviceability
- maintaining and cleaning tools
- selecting charges and fasteners applicable to the base material and material being fixed
- misfire procedures
- using attachments
- complying with storage and security regulations

and OHS requirements for the working environment

- selecting signage
- test fire.

Attachments include:

- channel, rebate and other manufacturer attachments.

Fastener and charge include:

- firing a test shot with misfire procedures, complying with the regulated safety procedure for misfire.

Unit Sector(s)

Functional area

Unit sector Construction

Custom Content Section

Not applicable.