



**Australian Government**

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

# **BCGCA2002B Use carpentry tools and equipment**

**Release: 1**

## **Modification History**

Not Available

## INTRODUCTION - USE CARPENTRY TOOLS AND EQUIPMENT

Unit Descriptor	This unit specifies the competency required to safely select and use carpentry tools and equipment.  The unit includes hand tools, power tools, pneumatic tools, plant and equipment.
Prerequisite Unit(s)	BCGCM1001B Follow OH&S policies and procedures
Unit Sector	Carpentry

### ELEMENT

#### 1. Plan and prepare

### PERFORMANCE CRITERIA

- 1.1 Work instructions and operational details are obtained, confirmed and applied
- 1.2 Safety requirements are followed in accordance with safety plans and policies
- 1.3 Signage/barricade requirements are identified and implemented
- 1.4 Plant, tools and equipment selected to carry out tasks are consistent with the requirements of the job, 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/or specifications
- 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use
- 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied

#### 2. Identify and select hand, power pneumatic tools

- 1 Hand, power and pneumatic tools, their functions, operations and limitations are identified and selected
- 2.2 OH&S requirements for using hand, power and pneumatic tools are recognized and adhered to
- 2.3 Lubricants, hydraulic fluid and water are checked

according to manufacturers recommendations

### 3. Use tools

- 3.1 Hand tools used are appropriate to the task, the materials and are in accordance with OH&S requirements
- 3.2 Power and pneumatic tools are safely and effectively used in accordance with manufacturers recommendations and State or Territory OH&S requirements
- 3.3 Tools are sharpened and maintained

### 4. Identify, select and use plant and equipment

- 4.1 Plant and equipment are selected and used consistent with OH&S requirements and the needs of the job
- 4.2 Lubricants, hydraulic fluid and water are checked according to manufacturers recommendations
- 4.3 Plant and equipment are maintained in accordance with manufacturers recommendations and standard work practices

### 5. Clean Up

- 5.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification
- 5.2 Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices.

## KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application - Performance Level 1
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for using carpentry tools and equipment, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturer's instructions, material safety data sheets and equipment instructions
Planning and organising activities	Conduct activities associated with using carpentry tools and equipment, including the coordination and use of equipment, materials and tools to avoid backtracking and rework
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage
Using technology	Use workplace technology related to using carpentry tools and equipment, including the use of calculators, power, pneumatic and levelling equipment, the use of communication devices and the reporting/recording of results



## RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

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| Unit scope                 | <ul style="list-style-type: none"><li>• Planning and preparation is to include but not be limited to worksite inspection, equipment defect identification, assessment of conditions and hazards and determination of work requirements</li><li>• Hand tools are to include but not be limited to setting out, marking out and levelling tools, cutting, planing, boring, shaping, fixing, fastening and percussion tools and holding tools</li><li>• Power and pneumatic tools (portable and static) are to include but not be limited to electrical and pneumatic operated tools, leads and hoses and may include gas driven tools</li><li>• Plant and equipment are to include but not be limited to generator, compressor, pneumatic driven, 240v power supplied, hand held or small single person operated equipment</li></ul>  |
| Safety (OH&S)              | <ul style="list-style-type: none"><li>• OH&amp;S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances</li><li>• Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices</li><li>• Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with power cables (including overhead service trays, cables and conduits), lighting, earth leakage boxes, trip hazards, working with dangerous materials, working in confined spaces, surrounding structures, restricted access barriers, working at heights, traffic control, working at heights, working in proximity to others, worksite visitors and the public</li><li>• Emergency procedures related to equipment operation are to include but may not be limited to emergency shutdown and stopping, extinguishing fires, organisational first aid requirements and evacuation</li></ul> |
| Environmental Requirements | <ul style="list-style-type: none"><li>• Environmental requirements are to include but are not limited to waste management, noise, dust, vibration and clean-up management</li></ul>   |

- Quality Requirements • Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified
- Statutory/Regulatory Authorities • Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
- Materials • Materials are to include but not be limited to timber, reconstituted timber products and may include bricks and concrete masonry units, joinery units, structural steel sections/components, concrete components, reinforcement materials, scaffolding components, metal sheeting, insulation, glass, paints and sealants, plaster or fibre cement sheeting
- Communications • Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals
- On site meeting processes may include notification/ scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues
- Information • Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches
- Safe work procedures related to using carpentry tools and equipment
- Regulatory/legislative requirements pertaining to using carpentry tools and equipment
- Manufacturer's specifications and instructions where specified
- Organisation work specifications and requirements
- Instructions issued by authorised organisational or external personnel
- Relevant Australian Standards



## EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

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| Critical aspects of evidence required to demonstrate competency in this unit | <ul style="list-style-type: none"> <li>• Location, interpretation and application of relevant information, standards and specifications</li> <li>• Compliance with site safety plan and OH&amp;S legislation/regulations/codes of practice applicable to workplace operations</li> <li>• Compliance with organisational policies and procedures including quality requirements</li> <li>• Safe and effective operational use of tools, plant and equipment</li> <li>• Communication and working effectively and safely with others</li> <li>• Identification and selection of hand tools for given tasks</li> <li>• Safe use and maintenance of a minimum of rules, tapes, squares, hammer, hand saw, hand plane and chisels for given tasks</li> <li>• Identification of power and pneumatic tools for a given task</li> <li>• Safe use and maintenance of a minimum of power saw, electric plane, impact power drill, nail gun and compressor for given tasks</li> <li>• Maintenance including grinding and sharpening of a hand plane, chisel, a hand saw and one non tungsten tip power saw blade</li> </ul> |
| Relationship to other units  | <ul style="list-style-type: none"> <li>• Pre-requisite units are:</li> <li>• BCGCM1001B Follow OH&amp;S policies and procedures</li> <li>• Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role</li> </ul>  |
| Specific knowledge required to achieve the performance criteria              | <ul style="list-style-type: none"> <li>• A knowledge of:             <ul style="list-style-type: none"> <li>• Workplace and equipment safety requirements</li> <li>• Quality requirements</li> <li>• General Construction terminology</li> <li>• Plant, tools and equipment types, characteristics, uses and limitations</li> <li>• Carpentry tool use techniques</li> <li>• Carpentry materials</li> <li>• Processes for the calculation of material requirements</li> </ul> </li> </ul>  |

- Material Safety Data Sheets
  - Plans, drawings and specifications
  - Materials handling, storage and environmentally friendly waste management
  - Relevant acts, regulations and codes of practice
  - Tools and equipment safety manuals and instructions
  - JSA's/Safe work method statement
- The context of assessment
- The application of competency is to be assessed in the workplace or realistically simulated construction site
  - Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
  - Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
  - Assessment is to comply with relevant regulatory requirements including specified Australian Standards
- Methods of assessment
- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
  - Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
  - Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
  - Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
  - Assessment may be applied under project related conditions (real or simulated) and require evidence of process
  - Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
  - Assessment may be in conjunction with assessment of other units of competency, including those listed above
- Specific resource requirements for this unit
- The following resources should be made available:
    - workplace location or simulated workplace
    - materials relevant to using carpentry tools and equipment
    - hand and power tools, plant and equipment

- realistic activities covering the mandatory task requirements
- specifications and work instructions