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| Title | **Demonstrate knowledge of tools and equipment used for carpentry** |
| Level | **3** | **Credits** | **9** |

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| Purpose | People credited with this standard can demonstrate knowledge of:* hand tools used for carpentry;
* portable power tools used for carpentry;
* mitre saws used for carpentry; and
* mechanical and non-mechanical construction equipment used for carpentry.
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| Classification | Construction Trades > Carpentry |

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| Available grade | Achieved |

**Guidance Information**

1 Range

 Evidence generated for assessment against this standard must reflect workplace and industry requirements specified in:

* documented worksite specifications, procedures, and practices;
* manufacturer recommendations, specifications, and technical data sheets.

 Evidence generated for assessment against this standard must reflect the requirements of:

* Health and Safety at Work Act 2015
* Health and Safety in Employment Regulations 1995.

 Health and safety requirements include – labour, identification of hazards and controls, plant.

Health and safety procedures related to plant may include – any machinery, vehicle, vessel, aircraft, equipment (including personal protective equipment), appliance, container, implement, or tool; any component of any of those things; anything fitted or connected to any of those things.

 Personal protective equipment includes – anything used or worn by a person (including clothing) to minimise risks to the person’s health and safety; air supplied respiratory equipment.

2 Definition

 *Mechanical and non-mechanical construction equipment* refers to specialised tools commonly hired for construction work. Non-mechanical tools do not require a power source, whereas mechanical tools do.

**Outcomes and performance criteria**

**Outcome 1**

Demonstrate knowledge of hand tools used for carpentry.

Range apron, folding rule, measuring tape, carpenter’s pencil, claw hammer, nail punch combination square, chisels, planes, screwdrivers, spirit level, pinch bar, end-cutting nippers, adjustable spanner, pliers, tin snips, hacksaw and blades, chalk line, string line, cutting knife, straight edge, cross-cut saw, drill bits.

**Performance criteria**

1.1 Describe how to use hand tools for carpentry.

1.2 Identify and explain the manufacturer recommendations for maintaining and caring for carpentry hand tools.

 Range maintenance includes – routine maintenance, cutting edges.

1.3 Identify and describe the health and safety requirements for working with carpentry hand tools.

**Outcome 2**

Demonstrate knowledge of portable power tools used for carpentry.

Range circular saw, jig-saw, reciprocating saw, planer, drill, screwdriver, hammer drill, sander, disc grinder, nail gun, powder‑actuated fastening tool.

**Performance criteria**

2.1 Describe how to use portable power tools.

2.2 Describe how to set up portable power tools.

2.3 Identify and explain the manufacturer recommendations for maintaining and caring for portable power tools.

 Range blades, knives, bits, cutting edges, adjustment, cleaning, power source, guards.

2.4 Identify and describe the health and safety requirements for working with power tools.

**Outcome 3**

Demonstrate knowledge of mitre saws used for carpentry.

Range one of – mitre saw, sliding compound mitre saw.

**Performance criteria**

3.1 Describe how to use a mitre saw according to manufacturer instructions.

Range set-up, guarding, cleanliness of machinery and work area.

3.2 Identify and explain the manufacturer recommendations for maintaining and caring for mitre saws.

 Range blades, cutting edges, adjustment, cleaning, power source, guarding.

3.3 Identify and describe the health and safety requirements for working with mitre saws.

**Outcome 4**

Demonstrate knowledge of mechanical and non-mechanical construction equipment used for carpentry.

Range non-mechanical construction equipment includes but is not limited to – mobile scaffolding, plaster board lifting equipment, wheel barrows, shovels;

 mechanical construction equipment includes but is not limited to – compactors, concrete mixers, power trowels, concrete breakers, excavators, cranes.

**Performance criteria**

4.1 Identify and describe mechanical construction equipment.

4.2 Describe how to use mechanical construction equipment.

 Range intended purpose, manufacturer instructions for use.

4.3 Identify and describe non-mechanical construction equipment.

4.4 Describe how to use non-mechanical construction equipment.

 Range intended purpose, manufacturer instructions for use.

4.5 Identify and describe the health and safety requirements for working with mechanical and non-mechanical equipment used for carpentry.

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| Replacement information | This unit standard replaced unit standard 12998, unit standard 12999, unit standard 13000, and unit standard 13032. |

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| Planned review date | 31 December 2026 |

**Status information and last date for assessment for superseded versions**

| Process | Version | Date | Last Date for Assessment |
| --- | --- | --- | --- |
| Registration | 1 | 30 September 2021 | N/A |

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| Consent and Moderation Requirements (CMR) reference | 0048 |

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

**Comments on this unit standard**

Please contact the Building and Construction Industry Training Organisation at national.office@bcito.org.nz if you wish to suggest changes to the content of this unit standard.