



Australian Government

CPCCE3019A Demolish small buildings and structures using hand tools and small plant and equipment

Release 1

CPCCE3019A Demolish small buildings and structures using hand tools and small plant and equipment

Modification History

New unit.

This version first released with CPC08 Construction, Plumbing and Services Training Package Version 9.

Unit Descriptor

This unit of competency specifies the outcomes required to select and use hand tools, small plant and equipment safely and effectively to demolish small buildings and structures.

Manual demolition processes include dismantling or demolishing and removing materials and component parts of a building or structure using only hand tools, small plant and equipment.

Application of the Unit

This unit of competency supports demolition workers who remove fixtures and fittings, roofs, trusses, ceilings, external and internal walls, floors and floor support systems of small buildings and structures and sort materials for reuse and recycling.

Small buildings and structures include two-storey houses, small shops, factories, workshops and warehouses.

Licensing/Regulatory Information

Licensing, legislative, regulatory or certification requirements apply to demolition work in different States and Territories. Candidates are advised to consult with the relevant regulatory authorities.

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 required performance needed to demonstrate achievement of the element. Where ***bold italicised*** text is used, further information is detailed in the required skills and knowledge and/or the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

- | | | | |
|---|--------------------------|-----|---|
| 1 | Plan and prepare. | 1.1 | Work instructions are obtained using relevant <i>information</i> , confirmed and applied to planning and preparation. |
| | | 1.2 | <i>Work health and safety (WHS) requirements</i> are identified and applied to task planning according to safety plans and policies. |
| | | 1.3 | <i>Hand tools, small plant and equipment</i> are selected to carry out tasks consistent with job requirements, checked for serviceability, and faults are rectified and reported before work begins. |
| | | 1.4 | <i>Environmental requirements</i> are identified for the project according to environmental plans and regulatory obligations. |
| 2 | Prepare demolition site. | 2.1 | <i>Demolition tasks</i> are confirmed and requirements of site demolition plan determined according to workplace procedures. |
| | | 2.2 | <i>Site inspection</i> is conducted to determine condition of work site and surrounds before work begins. |
| | | 2.3 | Confirmation is obtained from supervisor and regulatory authorities that relevant <i>services</i> have been disconnected and services that will remain live on the demolition site are identified. |
| | | 2.4 | Hazardous material is identified for separate handling according to workplace requirements and instructions. |

- 2.5 Requirements for safe work at heights including fall protection devices are installed according to workplace requirements.
 - 2.6 Small plant and equipment are positioned in operating locations, and appropriate exclusion zone and traffic control are arranged.
 - 2.7 Site is protected and secured according to compliance requirements and unauthorised access is prevented.
- 3 Dismantle or demolish building components.
- 3.1 **Building components** are dismantled or demolished and removed in a directed sequence according to site demolition plan and safe work method statements
 - 3.2 Selected types of small plant are operated according to manufacturer specifications, standards and workplace procedures to carry out demolition of building components.
 - 3.3 **Communication** is maintained with team members, during the demolition process.
 - 3.4 Work site conditions and progress are monitored in consultation with team members and work is stopped or techniques adjusted as required, according to workplace requirements.
- 4 Sort and store demolition materials and waste.
- 4.1 Removed components are relocated to storage or disposal area according to workplace requirements.
 - 4.2 Materials and building component parts are safely and effectively handled using selected material handling techniques.
 - 4.3 Materials and components identified for salvaging are handled, stored and stacked ready for transport according to standard material handling practices and workplace procedures.
 - 4.4 Removed components are relocated to storage or disposal area according to workplace requirements.

- 5 Clean up.
 - 5.1 Work area is cleared and materials disposed of, reused or recycled according to workplace requirements, regulations, codes of practice and job specification.
 - 5.2 Plant, tools and equipment are cleaned, checked, maintained and stored according to manufacturer recommendations and standard work practices.

Required Skills and Knowledge

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

Required skills

- learning skills to:
 - recognise signs indicating undiscovered hazards on a demolition site, for example termite activity
 - respond to change, such as differences in current work site environmental and sustainability requirements
- numeracy skills to:
 - check levels of lubricants in equipment
 - estimate weights of volumes of demolition debris and recyclable materials
 - perform measurements and calculations associated with work, such as when determining specified length of wall to be removed
- oral communication skills to:
 - enable clear and direct communication, using questioning to identify and confirm requirements, and share information
 - report hazards on the work site, including faults in tools, equipment and materials
 - use language and concepts appropriate to cultural differences
- reading skills to:
 - interpret documentation relating to work requirements, including:
 - drawings and specifications
 - job safety analyses (JSA)
 - safe work method statements (SWMS)
 - safety data sheets (SDS)
 - understand written instructions, procedures and signage
- writing skills to complete pre-operational checklists and equipment fault forms

Required knowledge

- general construction terminology
- hazards associated with demolition tasks
- demolition processes and techniques for small structures
- procedures for material storage and environmentally friendly waste management
- types of small plant, tools and equipment used in the demolition of small buildings, including:
 - applications
 - characteristics

- limitations
- maintenance requirements
- methods of operation
- quality requirements relating to the demolition of small structures
- workplace and equipment safety requirements that apply to the demolition of small buildings and structures

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 by observing the demolition of a small building or structure, using hand tools, small plant and equipment.

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

A person should demonstrate the ability to:

- as a minimum, given a site demolition plan and instructions, remove fixtures and fittings, a pitched metal/tiled roof, trusses, ceiling, external and internal walls, floor and floor support system of a two-storey house; and clean up, disposing or salvaging materials, ensuring:
 - correct identification of job requirements and conduct of the demolition process
 - correct selection and use of appropriate processes, tools and equipment
 - completion of work to specification
 - safe and effective operation and use of tools, plant and equipment
 - communication and safe work with others
 - compliance with regulations, standards and organisational quality procedures and processes, including:
 - location, interpretation and application of relevant information, standards and specifications
 - compliance with site safety plan and WHS legislation, regulations and codes of practice applicable to workplace operations
 - compliance with organisational policies and procedures, including quality requirements.

Context of and specific resources for assessment

Assessment of this unit:

- must be in the context of the work environment
- must meet relevant compliance requirements.

Resource implications for assessment include:

- an induction procedure
- realistic tasks covering the mandatory task requirements
- relevant specifications and work instructions
- small plant, 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
- research resources, including industry-related systems information
- safety data sheets (SDS).

Method of assessment Assessment for this unit must verify the practical application of the required skills and knowledge, a combination of the following methods:

- direct observation of tasks
- questioning to confirm the ability to consistently identify and correctly interpret the essential underpinning knowledge required for practical application
- review of relevant authenticated documentation from third parties, such as existing supervisors, team leaders or specialist training staff.

Guidance information for assessment This unit could be assessed on its own or in combination with other units relevant to the job function.

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.

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.

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 may include:

- advice and guidelines relating to regulatory and legislative requirements for manual demolition processes, including statutory permits
- current Australian standards relating to demolishing small buildings and structures
- diagrams or sketches, including identification of load bearing and non-load bearing elements
- instructions issued by authorised organisational or external personnel

Work health and safety requirements must comply with state and territory legislation and regulations and project safety plan and may include:

- memos
- safe work procedures relating to manual demolition processes, including identification of suspended elements that may require propping
- safety data sheets
- site demolition plan, including provisions for minimising disruption to the public
- signage
- verbal, written and graphical instructions, including manufacturer specifications and instructions where specified
- work bulletins
- work schedules, plans and specifications.
- emergency procedures, including extinguishing fires, organisational first aid requirements, and evacuation procedures
- handling activities that may require the assistance of others or the use of manual or mechanical lifting devices where size, weight or other issues, such as a disability are a factor
- hazard control
- hazardous materials and substances, including asbestos, lead-based paints, dust, pesticide residue, animal residue and the safe handling or quarantining procedures for each
- personal protective equipment (PPE) prescribed under legislation, regulations and workplace policies and practices
- safe operating procedures, including operational risk assessment and treatments associated with:
 - lighting
 - 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
- use of firefighting equipment
- use of appropriate hot work methods and procedures
- use of tools and equipment
- workplace environmental requirements and safety.
- hand tools, such as:
 - bars:

Hand tools, small plant and equipment may

include:

- crow
- pinch
- bolt cutters
- hacksaws
- hammers
- handsaws
- picks and mattocks
- pliers
- power drills and saws
- shovels and spades
- sledge hammers
- spanners
- wrenches
- small plant, such as:
 - compressors
 - elevated work platforms (EWPs)
 - generators
 - jackhammers
 - material and personnel hoists
 - mini-loaders
 - mulchers
 - pedestrian trenchers
 - pumps
- equipment, such as:
 - brooms
 - safety equipment, including:
 - barricades
 - fall prevention
 - PPE
 - scaffolds
 - signs
 - pallet trolleys
 - wheelbarrows.

Environmental requirements may include:

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

Demolition tasks may be

- at ground level
- at height

performed:

- in a confined space with relevant permits and controls in place
- on a new construction site or an existing structure being renovated or extended, which involves the complete or partial removal of components
- over water
- under water
- underground.

Site inspection may include:

- assessing condition of property and surrounds
- checking:
 - erection of scaffolding
 - installation of supports and bracing
 - location of signage and barricades
 - provision of site amenities
 - site safety management plan
- communicating with those who may be affected by demolition task
- identifying hazardous materials
- identifying positions of hoses and cables clear of hazards.

Services:

- must include:
 - air
 - chemical product (fuel)
 - computer and communication
 - electricity
 - electrical distribution assets
 - gas
 - hydraulic
 - services specific to manufacturing processes
 - steam
 - telecommunications
 - wastewater
 - water
- may be:
 - overhead
 - underground
 - disconnected
 - live:
 - services adjacent to demolition site
 - services required during demolition process
 - located within structural elements
 - temporary

- undocumented:
 - extensions
 - relocations.
- Building components*** may include:
- concrete and masonry areas:
 - edge strips
 - pads
 - paths
 - retaining walls and fences
 - slabs
 - external sections of buildings:
 - attached structures, carports and sheds
 - non-load bearing walls
 - patios and decks
 - fixtures and fittings
 - internal sections of buildings:
 - built-in components
 - ceilings
 - cladding
 - flooring
 - load bearing and non-load bearing partition walling
 - wet area components.
- Communication*** may include the use of:
- hand signals
 - mobile equipment
 - radios.

Unit Sector(s)

Demolition

Custom Content Section

Not applicable.