



Australian Government

Department of Education, Employment and Workplace Relations

CPCSC2002A Erect and dismantle basic scaffolding

Release: 1

CPCSC2002A Erect and dismantle basic scaffolding

Modification History

Not Applicable

Unit Descriptor

Unit descriptor

This unit of competency specifies the outcomes required to erect and dismantle a range of modular scaffolding systems to provide work platforms for construction purposes.

It includes edge protection, access ways and falsework (scaffold support systems for formwork).

Application of the Unit

Application of the unit

This unit supports the attainment of skills and knowledge to erect and dismantle a range of basic scaffolding systems, which includes working with others and as a member of a team.

Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Prerequisite units

CPCCOHS2001A

Apply OHS requirements, policies and procedures in the construction industry

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. Plan and prepare.	1.1. Work instructions, including plans, specifications, quality requirements and operational details are obtained from relevant information, confirmed and applied to the scope of work performed. 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 the requirements of the job, checked for serviceability and any faults or concerns regarding quality requirements are rectified or reported prior to commencement. 1.5. Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use. 1.6. Environmental requirements are identified for the project in accordance with environmental plans and statutory and legislative authority obligations and applied.
2. Whip, tie, splice and inspect ropes.	2.1. Whipping cord and fibre rope are inspected for damage and wear. 2.2. Designated rope ends are whipped in accordance with regulations and project specifications. 2.3. Designated rope ends are spliced in accordance with regulations and project specifications. 2.4. Bends and hitches are applied and inspected in accordance with project specifications.
3. Erect scaffolding.	3.1. Purpose for scaffolding is confirmed and associated work tasks are identified. 3.2. Expected loading on scaffold and supporting structure is determined using load tables and manufacturer specifications. 3.3. Site access and egress routes are identified. 3.4. Scaffolding and components are selected and inspected, and damaged components are labelled and rejected. 3.5. Sole board/base plate is selected in accordance with regulations, legislation, codes of practice and manufacturer specifications. 3.6. Scaffolding is set out and erected in accordance with

ELEMENT	PERFORMANCE CRITERIA
4. Inspect, repair and alter erected scaffolding.	regulatory and manufacturer requirements. 3.7. Static lines are erected and installed where specified in accordance with regulatory requirements. 3.8. Lifting device is assembled and erected where specified. 4.1. Erected modular scaffolding is inspected for damage, corrosion, wear and compatibility. 4.2. Current use of scaffolding is checked against original design and is in accordance with regulations and specifications. 4.3. Scaffolding stability is inspected and confirmed. 4.4. Alteration or repair is carried out where specified. 4.5. Inspection log and handover is completed and dated, ready for signing by a certified scaffolder.
5. Dismantle scaffolding.	5.1. Scaffolding is isolated and appropriately signed and barricaded to ensure safe dismantling. 5.2. Scaffolding is dismantled using reverse procedure as for erection.
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

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
 - follow instructions
 - read and interpret:

REQUIRED SKILLS AND KNOWLEDGE

- 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 complete inspection log and handover
- identifying and accurately reporting to appropriate personnel any faults in tools, equipment or materials
- numeracy skills to apply measurements and 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:

- general construction terminology
- job safety analysis (JSA) and safe work method statements
- lifting devices
- material safety data sheets (MSDS)
- materials storage and environmentally friendly waste management
- plans, drawings and specifications
- plant, tools and equipment types, characteristics, uses and limitations
- processes for the calculation of material requirements
- quality requirements
- relevant Acts, regulations and codes of practice
- scaffolding equipment and techniques
- workplace and equipment safety requirements.

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, 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 of 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, plant and equipment
- communicate and work effectively and safely with others
- complete whipping, splicing, tying and inspecting of five fibre ropes in accordance with regulations
- complete planning, erection and dismantling of a modular scaffolding system, in accordance with JSA and safe work method statements and regulations, including a minimum of:
 - five bays with an internal and external return
 - four lifts, including ties
 - ladder and stair access
 - fall and edge protection.

Context of and specific resources for assessment

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

EVIDENCE GUIDE

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

EVIDENCE GUIDE

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

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
- MSDS

RANGE STATEMENT

Scope of work:

- memos
- regulatory and legislative requirements pertaining to erecting and dismantling modular scaffolding
- relevant Australian standards
- safe work procedures relating to erecting and dismantling modular scaffolding
- signage
- verbal, written and graphical instructions
- work bulletins
- work schedules, plans and specifications.
- planning and preparation includes work site inspection, equipment defect identification, assessment of conditions and hazards, and determination of work requirements
- erection of scaffolding is to include placement, sequencing, squaring, levelling, tying to structure, and the reverse for dismantling
- purposes of scaffolding include provision of work platforms, edge protection, access ways, falsework, grandstands and covered walkways
- lifting devices include cantilevered hoists and gin wheels
- establishment of footings includes review of JSA and safe work method statements to determine the bearing capacity of ground or working surfaces
- whipping methods include common, west countryman, American and sail makers
- splicing methods include end splice and eye splice
- types of bends and hitches include clove hitch around a tube, rolling hitch around a tube, single bow line, timber hitch and half hitch around a plank, and sheet bend to another rope
- alteration and repair may be required due to storm damage, accidents, misuse and process changes.
- emergency procedures, including extinguishing fires, organisational first aid requirements and evacuation
- handling activities that may require the assistance of others or the use of manual or

Safety (OHS) is to be in accordance with state and territory legislation and regulations and project safety plan and may include:

RANGE STATEMENT

mechanical lifting devices where size, weight or other issues, such as a disability are a factor

- hazard control
- hazardous materials and substances, including cement and curing agents
- organisational first aid
- PPE prescribed under legislation, regulations and workplace policies and practices
- safe operating procedures, including the conduct of operational risk assessment and treatments associated with:
 - earth leakage boxes
 - lighting
 - power cables, including overhead service trays, cables and conduits
 - restricted access barriers
 - surrounding structures
 - traffic control
 - trip hazards
 - working at heights
 - work site visitors and the public
 - working in confined spaces
 - working in proximity to others
- use of firefighting equipment
- use of tools and equipment
- workplace environmental requirements and safety.
- include:
 - adjustable base plates
 - bends and hitches
 - box spanners
 - braces
 - bracket scaffolds (tank and formwork)
 - cantilevered hoists (materials only with maximum capacity of 500kg)
 - couplers and accessories
 - fibre ropes
 - guard rails
 - hammers
 - ledgers

Tools and equipment:

RANGE STATEMENT

- mesh guards
 - mid rails
 - modular and prefabricated scaffolds
 - podgers hammers
 - prefabricated components
 - scaffold belts
 - scaffolding planks
 - spirit levels
 - stairs or ladders
 - standards
 - steel and aluminium tubes
 - tape measures
 - torpedo levels
 - transoms
 - wire nips
 - wrenches
 - may include:
 - gin wheels
 - safety nets
 - shovels
 - spanners
 - static lines.
- Quality requirements** include relevant regulations, including:
- Australian standards
 - internal company quality policy and standards
 - manufacturer specifications
 - workplace operations and procedures.
- Environmental requirements** include:
- clean-up management
 - dust and noise
 - vibration
 - waste management.
- Statutory and regulatory authorities** include:
- federal, state and local authorities administering the applicable Acts, regulations and codes of practice.

Unit Sector(s)

Unit sector

Construction

Functional area

Functional area