Australian Government

Department of Education, Employment and Workplace Relations

CPCCRI3001A Operate personnel and materials hoists

Release: 1

CPCCRI3001A Operate personnel and materials hoists

Modification History

Not Applicable

Unit Descriptor

Unit descriptor This unit of competency specifies the outcomes required to operate personnel and materials hoists for moving people and equipment to various heights in a multi-storey structure.

Application of the Unit

Application of the unit This unit supports the attainment of skills and knowledge to safely and efficiently use hoists capable of moving personnel and materials.

It includes conducting pre-operational checks, operation, shut down and post-operational checks of hoist equipment while working with others 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 in ***planning*** the work activities. 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. ***Types of hoist*** and ***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, specifications and quality requirements including appropriate ***quality requirements***. 1.6. Materials appropriate to the 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 applied.
2. Conduct daily safety check.	2.1. Hoisting details for the day are identified from proposed work schedule, and other relevant ***information*** and hoist work program is developed. 2.2. Signalling system is confirmed with associated site personnel. 2.3. Weather conditions for safe hoist operation are assessed. 2.4. ***Personnel and materials hoist equipment*** and site are checked for damage, structural weakness or interference. 2.5. Mechanical, electrical and safety functions are checked in accordance with operator's manual and checklist. 2.6. Test run is conducted without a load through the full height of the hoist's travel, checking the operation and security of the mast and wall bolting. 2.7. Braking system is checked and tested. 2.8. ***Safety systems*** are checked and challenged.

ELEMENT	PERFORMANCE CRITERIA
3. Record results.	3.1. Results of checks and tests are recorded in hoist book to requirement of regulatory authority. 3.2. Faults are reported in accordance with company policy.
4. Operate hoist.	4.1. Loads are checked for conformity to safe load capacity of hoist. 4.2. Hoist is safely operated to requirements of operator's manual and state or territory regulatory authority. 4.3. Hoist is shut down, rendered safe and secured at end of work period in accordance with operator's manual. 4.4. Post-operational checks are conducted and recorded.
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 manufacturer recommendations and standard work practices. 5.3. ***Work completion details*** and procedures are applied and relevant personnel notified that work is finished.

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
  - notify completion of work
  - read and interpret:
    - documentation from a variety of sources
    - drawings and specifications
  - report faults
  - use language and concepts appropriate to cultural differences

REQUIRED SKILLS AND KNOWLEDGE

- written skills to record results of checks and tests and relevant work completion procedures
- identifying and accurately reporting to appropriate personnel any faults in tools, equipment or materials
- numeracy skills to apply calculations, including load mass requirements
- 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:

- designs and functions of hoisting equipment
- emergency procedures (hoist specific)
- fault finding and identification
- general construction terminology
- hoist operation techniques
- job safety analysis (JSA) and safe work method statements
- material safety data sheets (MSDS)
- materials storage and environmentally friendly waste management
- personnel and materials hoist equipment
- plans, drawings and specifications
- plant, tools and equipment types, characteristics, uses and limitations
- processes for the calculation of load mass requirements
- quality requirements
- relevant Acts, regulations and codes of practice
- signalling methods and communications
- working at heights
- 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 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 pre-operational check, raise and lower to four limits including a top and bottom, conduct manual lowering between floors, shut down and carry out post-operational checks, finalise logbook, all to manufacturer specifications and complying with OHS legislation.

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:

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- 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

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	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.

Planning includes:	• assessment of conditions and hazards • determination of work requirements and safety plans and policies • equipment defect identification • work site inspection.
Safety (***OHS***) is to be in accordance with state and territory legislation and regulations and project safety plan and may include:	• 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 mechanical lifting devices where size, weight or other issues, such as a disability are a factor

RANGE STATEMENT

	• 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
	  • 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.

Types of hoist include:	• bucket • cantilevered • car • materials • multiple winch and tower • personnel and materials • platform.
Tools and equipment include:	• associated equipment • personnel and materials hoists.
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

RANGE STATEMENT

	• waste management.
Statutory and regulatory authorities include:	• federal, state and local authorities administering the applicable Acts, regulations and codes of practice.
Information includes:	• diagrams or sketches • instructions issued by authorised organisational or external personnel • manufacturer specifications and instructions, where specified • MSDS • memos • regulatory and legislative requirements pertaining to operating personnel and materials hoists • relevant Australian standards • safe work procedures relating to operating personnel and materials hoists • signage • verbal, written and graphical instructions • work bulletins • work schedules, plans and specifications.
Personnel and materials hoist equipment include:	• rack and pinion • self-climbing • super hoist • winch operated.
Safety systems include:	• anemometer • emergency brakes • limit switches • manual lowering systems.
Work completion details include:	• check sheets • equipment defect records • job cards • JSAs • plant and maintenance records • safe work method statements.

Unit Sector(s)

Unit sector Construction

Functional area

Functional area