



Australian Government

Department of Education, Employment and Workplace Relations

RIICRC315 Use concreting materials and equipment

Release: 1

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Modification History

Not applicable.

Unit Descriptor

This unit of competency covers planning, preparing, selecting, using and cleaning up concreting tools, plant and equipment. The unit includes hand tools, power tools, small plant and equipment. Licensing, legislative, regulatory and certification requirements that apply to this unit can vary between states, territories and industry sectors. Relevant information must be sourced prior to application of the unit.

Application of the Unit

This unit is appropriate for those working in entry level operational roles, at worksites within: Civil Construction

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

Not applicable.

Elements and Performance Criteria Pre-Content

Not applicable.

Elements and Performance Criteria

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.
1. Plan and prepare for operations	1.1 Access, interpret and apply <i>compliance documentation</i> relevant to the work activity 1.2 Obtain and confirm <i>safety requirements</i> from the <i>site</i> safety plan and organisational policies and procedures, and apply to the allotted <i>task</i> 1.3 Identify, obtain and implement <i>signage</i> requirements from the project <i>traffic</i> management plan 1.4 Select <i>plant, tools and equipment</i> to carry out <i>tasks</i> consistent with the requirements of the job, check for serviceability and rectify or report any faults 1.5 Identify <i>environmental protection requirements</i> from the project environmental management plan, and confirm and apply to the allotted task 1.6 Identify <i>type of pavement</i> required
2. Identify and select hand and power tools	2.1 Identify and select <i>hand and power tools</i>, according to their functions, operations and limitations. 2.2 Recognise and adhere to OHS requirements for using hand and power tools 2.3 Check lubricants, hydraulic fluid and water according to manufacturer recommendations 2.4 Select tools consistent with job requirements 2.5 Check tools, including leads and hoses, for tags, serviceability and safety, and report any faults 2.6 Check and maintain power tool guards, retaining bolts, couplings, gauges and controls in accordance with manufacturer recommendations 2.7 Select equipment to hold or support material during operation
3. Use tools	3.1 Use hand tools appropriate to the task and materials, and in accordance with OHS requirements 3.2 Use power tools safely and effectively and in accordance with manufacturer recommendations and state or territory OHS requirements

	3.3 Sharpen and maintain tools
4. Identify, select and use plant and equipment	4.1 Check plant and equipment for safety and report faults 4.2 Select and use plant and equipment consistent with OHS requirements, manufacturer specifications and the needs of the job 4.3 Check lubricants, hydraulic fluid and water according to manufacturer's specifications 4.4 Maintain plant and equipment in accordance with manufacturer specifications and standard work practices
5. Clean up	5.1 Clear the work area and dispose of, reuse or recycle material in accordance with legislation, regulations, codes of practice and job specification 5.2 Clean, check, maintain and store plant, tools and equipment in accordance with manufacturer recommendations and standard work practices

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Required Skills and Knowledge

Required skills
Required skills for this unit are: • communication skills to: • determine requirements • enable clear and direct communication, using questioning to identify and confirm requirements, share information, listen and understand • follow instructions • read and interpret: • 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 • evaluating own actions and making judgments about performance and necessary improvements • identifying and accurately reporting to appropriate personnel any faults in tools, equipment or materials • organisational skills, including the ability to plan and set out work • recognising procedures, following instructions, responding to change and contributing to workplace responsibilities, such as current work site environmental and sustainability frameworks or management systems

- teamwork skills to coordinate own 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:

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

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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	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	The evidence required to demonstrate competency in this unit must be relevant to worksite operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit and include evidence of the following: • knowledge of the requirements, procedures and instructions for conducting concrete road curing and texturing • implementation of requirements, procedures and techniques for the safe, effective and efficient completion of concrete road curing and texturing • working with others to undertake and complete the

	concrete road curing and texturing operations in a way that meets all of the required outcomes • consistent timely completion of concrete road curing and texturing operations that safely, effectively and efficiently meets the required outcomes • conduct road curing and texturing operations to ensure: • correct calculation and application of road curing compound • correct application of texture type according to specifications
Context of and specific resources for assessment	• This unit must be assessed in the context of the work environment. Where personal safety or environmental damage are limiting factors, assessment may occur in a simulated environment provided it is realistic and sufficiently rigorous to cover all aspects of workplace performance, including task skills, task management skills, contingency management skills and job role environment skills. • Assessment of this competency requires typical resources normally used in Civil Construction. Selection and use of resources for particular worksites may differ due to the site circumstances. • The assessment environment should not disadvantage the participant. For example, language, literacy and numeracy demands of assessment should not be greater than those required on the job. • Customisation of assessment and delivery environment to sensitively accommodate cultural diversity. • Aboriginal people and other people from a non English speaking background may have second language issues. • Where applicable, physical resources should include equipment modified for people with disabilities. Access must be provided to appropriate learning and/or assessment support when required
Method of assessment	This unit may be assessed in a holistic way with other units of competency. The assessment strategy for this unit must verify required knowledge and skill and practical application using more than one of the following assessment methods: • written and/or oral assessment of the candidate's required knowledge

	• observed, documented and/or first hand testimonial evidence of the candidate's: • implementation of appropriate requirement, procedures and techniques for the safe, effective and efficient achievement of required outcomes • consistent achievement of required outcomes • first hand testimonial evidence of the candidate's: • working with others to undertake and complete the conduct of concrete road curing and texturing operations .
Guidance information for assessment	Consult the SkillsDMC User Guide for further information on assessment including access and equity issues.

Range Statement

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 using concreting tools and equipment • relevant Australian standards • safe work procedures relating to using concreting tools and equipment • signage • verbal, written and graphical instructions • work bulletins • work schedules, plans and specifications.
Planning and preparation include:	• 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	• emergency procedures, including extinguishing fires, organisational first aid requirements and evacuation • handling activities that may require the assistance of

plan and may include:	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 • 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 at heights • working in confined spaces • working in proximity to others • use of firefighting equipment • use of tools and equipment • workplace environmental requirements and safety.
<i>Tools and equipment</i> include:	• bolt cutters • crow bars • cutting knives • edging tools • floats • grinders • hammers • jointers • kneel boards • levelling equipment • long handled shovels • measuring tapes • nail bags • picks • pinch bars • pliers • rakes

	• screeds • sledge hammers • steel fixing reels • string lines • trowels • vibrators.
Quality requirements include:	• internal company quality policy and standards • manufacturer specifications where specified • relevant regulations, including Australian standards • workplace operations and procedures.
Environmental requirements include:	• clean-up management • dust and noise • stormwater management • vibration • waste management.
Hand and power tools include:	• digging, transporting, levering, cutting, shaping, fixing, fastening and percussion tools • electrically operated portable and static power tools and leads • material shifting, holding tools and finishing tools • setting out, marking out and levelling tools • 240 volt electricity (circular saw, mitre saw, drill, grinder, impact hammer) • pneumatic (wrench, grinder, jackhammer, screwdriver) • battery driven (drill, grinder, circular saw, sander, impact hammer) and • hydraulics (portapower and attachments, jacking equipment, shoring systems)
Plant and equipment include:	• compressors • generators.

Unit Sector(s)

Road and Pavements Construction and Maintenance (General)

Custom Content Section

Not applicable.