



Australian Government

Department of Education, Employment and Workplace Relations

RIICRC320 Seal concrete pavements

Release: 1

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Modification History

Not applicable.

Unit Descriptor

This unit covers the sealing of concrete pavements in the civil construction industry. It includes planning and preparing and completing concrete sealing operations on pavements. 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 an operational role at worksites within:
Civil construction

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

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 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.
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Elements and Performance Criteria

1. Plan and prepare for operations	1.1 Access, interpret and apply <i>compliance documentation</i> relevant to the use of hand and power tools 1.2 Obtain, confirm and apply <i>work instructions</i> for the allotted task 1.3 Obtain, confirm and apply <i>safety requirements</i> from the site safety plan and organisational policies and procedures relevant to the allotted task 1.4 Identify, confirm and apply <i>environmental protection requirements</i> for the allotted task from the project environmental management plan
2. Select and use hand tools	2.1 Select <i>hand tools</i> consistent with needs of the job 2.2 <i>Check tools</i> for serviceability and safety, and report faults 2.3 Clamp or fix <i>materials</i> in position 2.4 Use <i>hand tools</i> safely and effectively according to their intended use 2.5 Locate <i>hand tools</i> safely when not in immediate use
3. Select and use power tools	3.1 Select <i>power tools and equipment</i> consistent with needs of job and in accordance with standard work practice, and report any faults 3.2 Check tools for serviceability and safety, and report faults 3.3 Visually check power leads/hoses for serviceability/safety in accordance with the site safety plan 3.4 Clear route for safe placement of leads/hoses of identified hazards

	3.5 Run electrical power leads to power supply so they are clear of traffic and covered where possible 3.6 Connect electric power leads to the power board or direct to power tool 3.7 Run air hoses out to the compressed air supply and cover where potential trip hazards exist 3.8 Connect hose to power tool and air supply 3.9 Use power tools safely and effectively in application processes 3.10 Locate power tools safely when not in use 3.11 Clean out and prepare for joint sealing 3.12 Complete joint sealing records
4. Clean up	4.1 Clear work area and dispose of or recycle materials in accordance with project environmental management plan 4.2 Clean, check, maintain and store machinery, tools and equipment in accordance with manufacturer's recommendations and standard work practices

Required Skills and Knowledge

Required skills

Specific skills are required to achieve the performance criteria in this unit, particularly for the application in the various circumstances in which this unit may be applied. This includes the ability to carry out the following as required to seal concrete pavements:

- apply legislative, organisation and site requirements and procedures
- speak clearly and directly, listening carefully to instructions and information
- interpret and understand the information required for the preparation and application of hand and power tools, including work instructions, quality assurance procedures, manufacturer's instructions, materials safety data sheets and equipment
- apply teamwork to a range of situations, particularly in a safety context
- solve problems particularly in teams and in dealing practically with safety issues
- show initiative in adapting to changing work conditions or contexts particularly when working across a variety of work placements
- manage time, particularly in organising priorities and planning work including the scheduling and use of equipment, materials and tools to avoid back tracking and re work
- take responsibility for self organisation of work priorities
- use technology related to determining requirements, the planning and application of hand and power tools, including the use of calculations, mechanical equipment and the reporting/recording of results

Required knowledge

Specific knowledge is required to achieve the Performance Criteria of this unit, particularly its application in a variety of circumstances in which the unit may be used. This includes knowledge of the following, as required to seal concrete pavements:

- site and equipment safety requirements
- hand tools and their application
- portable power tools and their application
- power sources
- materials commonly used in the industry
- equipment types, characteristics, technical capabilities and limitations
- operational, maintenance and basic diagnostic procedures
- materials safety data sheets (MSDS) and materials handling methods
- project quality requirements
- industry and worksite terminology
- electrical and compressed air safety
- JSA's/safe work method statement

Evidence Guide

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 the sealing of concrete • implementation of requirements, procedures and techniques for the safe, effective and efficient sealing of concrete • working with others to undertake the sealing of concrete that meets all of the required outcomes • consistent timely sealing of concrete that safely, effectively and efficiently meets the required outcomes • conduct sealing of concrete pavements by: • application and instillation of sealer material and backer rods
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. • 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. • Assessment of this competency requires typical resources normally used in the work environment. Selection and use of resources for particular worksites may differ due to site circumstances. • 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: • seal 50lm of joint in accordance with specification • 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 • consistently achieving the required outcomes • first hand testimonial evidence of the candidate's: • working with others to undertake the sealing of concrete pavements
Guidance information for assessment	Consult the SkillsDMC User Guide for further information on assessment including access and equity issues.

Range Statement

Relevant compliance documentation may include:	• legislative, organisation and site requirements and procedures • manufacturer's guidelines and specifications • Australian standards • code of practice • Employment and workplace relations legislation • Equal Employment Opportunity and Disability Discrimination legislation
Work instructions may include:	• verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, charts and hand drawings, memos, materials safety data sheets (MSDS) and diagrams or sketches • plans and specifications • quality requirements, including: dimensions and

	tolerances, standards of work and material standards • safe work procedures or equivalent related to using hand and power tools
Safety requirements may include:	• protective clothing and equipment • use of tools and equipment • workplace environment and safety • handling of materials • use of fire fighting equipment • use of First Aid equipment • hazard control • hazardous materials and substances • personal protective equipment • emergency procedures related to equipment operation which may include: • emergency shutdown and stopping • extinguishing equipment fires • organisational first aid requirements and • evacuation
Environmental protection requirements may include:	• organisational/project environmental management plan • waste management • water quality protection • noise • vibration • dust and • clean-up management
Hand tools are to include but not be limited to:	• blowout pipe • spline roller • brooms • measuring tape • ruler/depth gauge
Checking tools is to include:	• checking of electrical safety/inspection tag for currency • equipment defect identification • assessment of conditions and hazards and determination of work requirements
Materials are:	• backer rods • joint sealant
Power tools may include those powered by but not limited to:	• 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)
Equipment is to include:	• power leads and • safety switches and • air hoses

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Unit Sector(s)

Road and Pavements Construction and Maintenance (General)

Custom Content Section

Not applicable.