



Australian Government

Department of Education, Employment and Workplace Relations

RIICRC319 Saw and cut concrete pavements to initiate planned cracks

Release: 1

RIICRC319 Saw and cut concrete pavements to initiate planned cracks

Modification History

Not applicable.

Unit Descriptor

This unit covers the cutting of concrete to initiate planned cracks in road pavement operations in the civil construction industry. It includes the conduct of planning and preparing, selecting and operating a concrete saw and cleaning up. 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 1.5 Mark out saw-cuts in accordance with specifications
2. Select and operate concrete saw	2.1 Select <i>concrete saw</i> consistent with needs of job and in accordance with standard work practice, and report any faults 2.2 Check <i>equipment</i> for serviceability and safety, and report faults 2.3 Clear route of hazards for safe placement of hoses 2.4 Assess concrete for optimum timing of saw-cut 2.5 Connect hoses to tool and cover trip hazards 2.6 Use concrete saw safely and effectively in application processes 2.7 Locate concrete saw safely when not in use 2.8 Saw and cut to correct dimensions as specified 2.9 Clean out and protect open cut 2.10 Complete saw cutting records
3. Clean up	3.1 Clear work area and dispose of or recycle materials in accordance with project environmental management plan 3.2 Clean, check, maintain and store machinery, tools and equipment in accordance with manufacturer's recommendations and

	standard work practices
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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 use hand and power tools:

- 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 concrete saws, 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

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 use hand and power tools:

- site and equipment safety requirements
- concrete saws and their application
- portable power tools and their application
- power sources
- 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
- understanding of concrete setting process to determine optimum setting time, and minimise unplanned cracks
- electrical and compressed air safety
- JSA's/safe work method statement

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Evidence Guide

Critical aspects for assessment and evidence required to demonstrate	The evidence required to demonstrate competency in this unit must be relevant to worksite operations and satisfy
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competency in this unit	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 use of concrete saws on pavements • implementation of requirements, procedures and techniques for the safe, effective and efficient use of cutting and sawing concrete pavements • consistent timely use of concrete saws to safely, effectively and efficiently meets the required outcomes • conduct sawing on concrete pavements to a minimum of 100 linear metres
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: - 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 use of concrete saws to initiate planned cracks
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 - hazard control - hazardous materials and substances

	• 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
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
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)
Concrete saws are to include:	• wet cut • cut off saws • early dry cut
Equipment is to include:	• air hoses • generator • electric leads

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Unit Sector(s)

Road and Pavements Construction and Maintenance (General)

Custom Content Section

Not applicable.