



Australian Government

Department of Education, Employment and Workplace Relations

RIICRC311 Conduct concrete road paver operations

Release: 1

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Modification History

Not applicable.

Unit Descriptor

This unit covers the conduct of concrete road paver operations in the civil construction industry. It includes planning and preparing, setting up concrete road paver, operating concrete road paver, carrying out operator maintenance, relocating paver, 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

Not applicable.

Elements and Performance Criteria

1. Plan and prepare for operations	1.1 Access, interpret and apply compliance documentation relevant to the work activity 1.2 Obtain and confirm safety requirements from the site safety plan and organisational policies and procedures, and apply to the allotted task 1.3 Identify, obtain and implement signage requirements from the project traffic management plan 1.4 Select plant, tools and equipment to carry out tasks consistent with the requirements of the job, check for serviceability and rectify or report any faults 1.5 Identify environmental protection requirements from the project environmental management plan, and confirm and apply to the allotted task 1.6 Identify type of pavement required
2. Set up concrete road paver	2.1 Set up paver width and settings in accordance with job specification and plans 2.2 Use paving drawings and survey markings to establish work area 2.3 Conduct pre-start and maintenance checks within worksite and manufacturer's specifications
3. Operate concrete road paver	3.1 Make adjustments to sensors and controls while paving 3.2 Use communication systems and hand signals within workplace specifications 3.2 Operate paver within machinery guidelines and job specifications 3.3 Complete shut-down and park-up procedures as per machine and site instructions 3.4 Complete required documentation and report concerns to appropriate personnel
4. Clean up	4.1 Conduct wash down procedures within worksite and manufacturer's specifications 4.2 Clean up work area and dispose of or recycle materials in accordance with the project environment management plan 4.3 Clean, check, maintain and store plant and tools

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Required Skills and Knowledge

Required skills

Specific skills are required to achieve the Performance Criteria of this unit, particularly for its application in the various circumstances in which this unit may be used. This includes the ability to carry out the following, as required to conduct concrete road paver operations:

- apply legislative, organisation and site requirements and procedures for conducting road construction paver screeding operations
- organise work activities
- select and use relevant tools and equipment safely
- identify and report on hazards related to the worksite and work activity and report defects in machinery and tools
- communicate effectively to receive and clarify work instructions
- numeracy skills for planning and operations

Required knowledge

Specific knowledge is required to achieve the Performance Criteria of this unit, particularly for its application in the various circumstances in which this unit may be used. This includes knowledge of the following, as required to conduct concrete road paver operations:

- site and equipment safety requirements
- site communication and hand signals
- paver screed operations
- approaches to basic concreting
- longitudinal and transverse joints
- equipment types, characteristics, technical capabilities and limitations
- operational, maintenance and basic diagnostic procedures
- site isolation and traffic control responsibilities and authorities
- processes for the calculation of material uniformity and travel speed
- materials safety data sheets and materials handling methods
- quality requirements
- civil construction terminology
- safe operating techniques in all terrain
- JSAs/safe work method statements

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 paver operations • implementation of requirements, procedures and techniques for the safe, effective and efficient completion of concrete road paver operations • working with others to undertake and complete concrete road paver operations that meets all of the required outcomes • consistent timely completion of concrete road paver operations that safely, effectively and efficiently meets the required outcomes • the conduct of paver operations are to be performed in a minimum of two different concrete types/surface types and are to include the mandatory tasks from the unit scope and cover as a minimum: • three longitudinal joints (of at least 100m) to be constructed to required thickness, uniformity, line and level, on both matching and unsupported edge in accordance with project specifications and/or work instructions • five occasions of straight paving (one of at least 100 linear metres) to required thickness, uniformity, line and level, on both matching and unsupported edge in accordance with project specifications and/or work instructions • one intersection to required thickness, uniformity, line and level, on both matching and unsupported edge in accordance with project specifications and/or work instructions • operations to include residential, commercial and highway projects • material delivery through the paver is to include manual and automatic control • prestart operations on the machine • pave off the stop end and pave on the form stop end • maintain edges both with and without boards • use and changes made to vibrators

	• end-of-day wash-up and washing down of the machine • correct use of the safety systems • demonstrate knowledge of plough and auger systems • monitoring of concrete height in boxes
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 a resources and infrastructure sector environment. 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 concrete road paver operations
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, organisational and site requirements and procedures • manufacturer's guidelines and specifications • Australian standards • Employment and workplace relations legislation • Equal Employment Opportunity and Disability Discrimination legislation
Safety requirements may include:	• OHS requirements in accordance with state or territory legislation and regulations, organisational safety policies and procedures, and project safety plan, including 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 and hazardous materials and substances • safe operating procedures including recognising and preventing hazards associated with high voltage power lines, uneven/unstable terrain, trees, overhead service lines, bridges, surrounding buildings, obstructions, structures, facilities, dangerous materials, recently filled trenches, other machines, personnel, traffic control, working at heights, working in proximity to others, worksite visitors and the public • safe parking practices including ensuring access ways are clear, visibility is maintained and blind spots are avoided, equipment/machinery is away from overhangs and refuelling sites, safe distances are kept from excavations, and areas secured from unauthorised access or movement • safety supports are certified and within manufacturer's recommendations • recognising hazards and risks including

	uneven/unstable terrain, trees, fires, overhead and underground services, bridges, buildings, excavations, traffic, embankments, cuttings, structures and hazardous materials • emergency procedures related to equipment operation including emergency shutdown and stopping, extinguishing equipment fires, organisational first aid requirements and evacuation
Site may include:	• formed/prepared roads • barriers • parapets • airport runways • factory floors • reinforced foundations • pads • highways • freeways • car parks • container yards • hard stands • footpaths and bikeways
Task may include:	• formation within recommended lateral tilt values • mixing and spreading granular materials • spreading concrete materials • mixing and spreading stabilised materials
Traffic may include:	• high speed freeways and highways • rail corridors • commercial estates • egress and ingress locations • congested urban environments • low traffic rural areas • off-road un-trafficked areas • parking sites • pedestrian areas
Plant, tools and equipment may include:	• shovels • safety supports • material placing equipment • agitator tools • tippers and dump trucks • measuring tapes • depth gauges • standard tool kits

	• string lines • thermometers • straight edges • operator manuals • communication equipment • GPS systems
Environmental protection requirements may include:	• organisational/project environmental management plan • waste management • water quality protection • noise • vibration • dust and clean-up management • spill kit • fuels, oils, hydraulic fluids
Types of pavement may include:	• no – fines • kerb – gutter • base • sub-base • type F barrier • shoulder • continuous reinforced concrete pavement
Communication systems may include:	• two-way radios • mobile phones • hand signals • traffic control signals • fixed warning signs

Unit Sector(s)

Road and Pavements Construction and Maintenance (General)

Custom Content Section

Not applicable.