



Australian Government

Department of Education, Employment and Workplace Relations

RIICBS302A Conduct paver screeding operations

Release: 1

RIICBS302A Conduct paver screeding operations

Modification History

Not applicable.

Unit Descriptor

This unit covers the conduct of paver screeding operations in the civil construction industry. It includes planning and preparing, setting up paver screed, operating paver screed, 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

Refer to Unit Descriptor.

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.
---	--

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Plan and prepare	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
2. Set up paver screed	2.1. Set equipment to the correct levels to lay material on surface to specifications 2.2. Set electronic levelling equipment to check level 2.3. Set heating controls for screed to specifications 2.4. Set screed controls for correct operation
3. Operate paver screed	3.1. Identify site hazards associated with paver screeding operations and use safe operating techniques to minimise risk 3.2. Adjust screed during operation to ensure work remains within specifications 3.3. Identify faults in the mat and take correct action to rectify faults 3.4. Monitor work of rake hands and rollers to ensure they are keeping up with the paver 3.5. Maintain communication with paver operator monitoring the progress of the job 3.6. Notify paver operator of problems with the mat 3.7. Perform operator maintenance in accordance with manufacturer's or company instructions

4. Clean up	4.1. Handle/dispose of waste material safely in accordance with requirement of regulatory bodies, OHS, MSDS and EPA 4.2. Clear work area and dispose of or recycle materials in accordance with project environmental management plan 4.3. Clean, check, maintain and store plant, tools and equipment
-------------	--

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

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 paver screeding operations:

- apply legislative, organisation and site requirements and procedures for conducting 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
- communicate effectively to receive and clarify work instructions

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 paver screeding operations:

- site and equipment safety requirements
- paver screed operations
- aggregate types and sizes
- bituminous materials
- 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
- project 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 paver screeding operations • implementation of requirements, procedures and techniques for the safe, effective and efficient completion of paver screeding operations • working with others to undertake and complete paver screeding operations that meets all of the required outcomes • consistent timely completion of paver screeding operations that safely, effectively and efficiently meets the required outcomes • the conduct of paver screeding operations are to be performed in a minimum of two different bituminous material types/surface types and are to include the mandatory tasks: • 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 • six transverse joints 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 sections 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 • three intersections to required thickness, uniformity, line and level, on both matching and unsupported edge in accordance with project specifications and/or work instructions • one of the above tasks to include at least one mode of automatic screed levelling
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 paver screeding operations
Guidance information for assessment	Consult the SkillsDMC User Guide for further information on assessment including access and equity issues.

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.

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 parking practices including ensuring access ways are clear, equipment/machinery is away from overhangs and refuelling sites, safe distance are kept from excavations, and areas secured from unauthorised access or movement • safe operating procedures including recognising and preventing hazards associated with uneven/unstable terrain, trees, pits, poles, trip hazards, dirt mounds, overhead service lines, bridges, surrounding buildings, obstructions, structures, facilities, dangerous materials, recently filled trenches, other machines, personnel, traffic control, working in proximity to others, worksite visitors and the public • 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:	• car parks • airport runways • container yards • hard stands • footpaths • bikeways • roadways
Signage may include:	• escort vehicle • highway traffic signs • site safety signage • temporary signage for the benefit of motorists and pedestrians • traffic conditions signage
Traffic conditions may include:	• congested urban environments • low traffic rural areas • off-road un-trafficked areas • buildings • parking sites • pedestrian areas
Tools and equipment may include:	• paver screeds • shovels • measuring tapes • depth gauges • standard tool kits • string lines • thermometers • straight edges
Environmental protection requirements may include:	• organisational/project environmental management plan • waste management • water quality protection • noise • vibration • dust and clean-up management
Set equipment may include:	• use of boards to correct the height for transverse joint construction • setting up string lines and sensors to job

	specifications • adjusting machine attachments to string line • preparing and setting a screed to achieve a specified level and texture of asphalt
Surface may include:	• formed/prepared roads • pads • sealed • primersealed • primed • asphalt • profiled • profile concrete • slurry
Electronic levelling equipment may include:	• grade sensors/averaging sensors • matching shoes • levelling beams • sonic, contact and laser
Paver screeding operations may include:	• uniform flow of asphalt • electronic/manual levelling • auguring • width of the screed • adjustment of the crown • control of burners, • hot and cold transverse and longitudinal joints • manual screed level control • automatic screed level control
Operation may include:	• spreading bituminous materials • mixing materials • spreading granular materials • spreading concrete materials
Communication method may include:	• verbal instructions • two way radio • hand signals • mobile phone
Materials may include:	• aggregates • gravel asphalt • granular materials

Unit Sector(s)

Bituminous Surfacing

Competency field

Refer to Unit Sector(s).

Co-requisite units

Not applicable.