



Australian Government

RIICRC321D Use automated paving guidance systems

Release: 2

RIICRC321D Use automated paving guidance systems

Modification History

Release	Comment
1	This unit replaces RIICRC321 Use automated paving guidance systems
2	Required frequency and volume of evidence amended in Performance evidence. Substantial amendments made in Assessment Conditions field, including: references to Industry Sectors, assessor and subject matter expert experience requirements, how assessment should be conducted and what it should confirm.

Application

This unit describes a participant's skills and knowledge required to use automated paving guidance systems in Civil Construction.

This unit is appropriate for those working in operational roles.

No licensing, legislation, or certification requirements apply to this unit at the time of publication.

Unit Sector

Civil construction

Elements and Performance Criteria

1. Plan and prepare to use automated paving guidance systems	1.1 Access, interpret and apply automated paving guidance systems documentation and ensure the work activity is compliant 1.2 Obtain, read, interpret, clarify and confirm work requirements 1.3 Identify and address potential risks, hazards and environmental issues, and implement control measures 1.4 Select and wear correct personal protective equipment appropriate for work activities 1.5 Select and check for faults to plant, tools and equipment to carry out tasks
2. Setup automated paving guidance system	2.1 Setup prisms within site tolerances and according to manufacturer's specifications 2.2 Locate survey equipment according to worksite and

	manufacturer's specifications 2.3 Identify and establish control points and theodolite positions for planned operation 2.4 Verify survey model is consistent with worksite plans 2.5 Calibrate paver to tolerances within manufacturers and worksite specifications
3. Operate automated paving guidance system (AGPS)	3.1 Set APGS controls to automatic control settings 3.2 Check signal inputs and automated control is operational 3.3 Check freshly paved concrete for conformance against worksite model 3.4 Conduct paver/APGS adjustments during operation 3.5 Reposition total station as required 3.6 Monitor movements and hazards and identify and communicate changes to the work environment during the work process
4. Conduct shutdown operations	4.1 Confirm instructions from supervisor prior to shutdown procedure 4.2 Shutdown APGS 4.3 Lower sensors on paver 4.4 Clean, check, maintain and store total stations

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit. Further information is available in the Resources and Infrastructure Industry Training Package Companion Volume.

Unit Mapping Information

RIICRC321A Use automated paving guidance systems

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=88a61002-9a21-4386-aaf8-69c76e675272>

Assessment Requirements for RIICRC321D Use automated paving guidance systems

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Performance Evidence

Evidence is required to be collected that demonstrates a candidate's competency in this unit. Evidence must be relevant to the roles within this sector's work operations and satisfy all of the requirements of the performance criteria of this unit and include evidence that the candidate:

- locates and applies applicable documentation, policies and procedures
- implements the requirements, procedures and techniques for the safe, effective and efficient completion of APGS operations including:
 - accessing, interpreting and applying documentation for sealing concrete pavements
 - identifying and applying relevant specifications to all work activities
 - identifying, addressing and reporting potential hazards and risks
 - selecting and checking for faults all plant, tools and equipment to carry out tasks
 - identifying, addressing and reporting environmental issues
- works effectively with others to undertake and complete APGS that meets all of the required outcomes including:
 - preparing for and organising work activities to meet all task requirements
 - communicating clearly and concisely with others to receive and clarify work instructions
 - using a range of communication techniques and aids to advise others of work activity and exclusion zones
 - monitoring movements and hazards and identifying and communicating changes to the work environment during the work process
- demonstrates completion of the use of automated paving guidance systems that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - setting up automated paving guidance system as per project specifications

- operating automated paving guidance system
- conducting shutdown operations
- cleaning, checking, maintaining and storing total stations as per worksite requirements and manufacturer's instructions
- the conduct of APGS operations are to cover as a minimum:
 - setup, calibrate and pave for two hundred (200) meters within required conformance
- demonstrate ability to adjust paver (six (6) times):
 - two (2) times horizontal (one (1) positive, one (1) negative)
 - Two (2) times vertical (one (1) positive, one (1) negative)
 - Two (2) times combination of above
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Knowledge Evidence

The candidate must demonstrate knowledge in using automated paving guidance systems through:

- accessing, interpreting and applying the organisation and site requirements and procedures for:
 - identifying and managing risks
 - identifying, addressing and reporting environmental issues
 - setting up work activity
 - work health and safety
 - selecting and checking for faults, tools and equipment to carry out tasks
 - applying effective techniques in using automated paving guidance systems

Assessment Conditions

- An assessor of this unit must satisfy the requirements of the NVR/AQTF or their successors; and Industry regulations for certification and licensing; and,
- this unit must be assessed in the context of this sector's work environment; and,
- this unit must be assessed in compliance with relevant legislation/regulation and using policies, procedures, processes and operational manuals directly related to the industry sector for which it is being assessed; and,
- assessment may be conducted in conjunction with the assessment of other Units of Competency; and,
- assessment must confirm consistent performance can be applied in a range of relevant workplace circumstances; and,
- assessors must demonstrate the performance evidence, and knowledge evidence as outlined in this Unit of Competency, and through the minimum years of current* work experience specified below in an Industry sector relevant to the outcomes of the unit; or,

- where the assessor does not meet experience requirements a co-assessment or partnership arrangement must exist between the qualified assessor and an Industry subject matter expert. The Industry subject matter expert should hold the unit being assessed (or an equivalent unit) and/or demonstrate equivalence of skills and knowledge at the unit level. An Industry technical expert must also demonstrate skills and knowledge from the minimum years of current work experience specified below in the Industry sector, including time spent in roles related to the unit being assessed; and,
- assessor and Industry subject matter expert requirements differ depending on the Australian Qualifications Framework Level (AQF) of the qualification being assessed and/or Industry Sector as follows:

Industry sector	AQF** Level	Required assessor or Industry subject matter expert experience
Drilling, Metalliferous Mining, Coal Mining, Extractive (Quarrying) and Civil Construction	1	1 Year
	2	2 Years
Drilling, Coal Mining and Extractive (Quarrying)	3-6	3 Years
Metalliferous Mining and Civil Construction	3-6	5 Years
Other sectors	Where this Unit is being assessed outside of the Resources and Infrastructure Sectors assessor and/or Industry subject matter expert experience should be in-line with industry standards for the sector in which it is being assessed and where no Industry standard is specified should comply with any relevant regulation.	

*Assessors can demonstrate current work experience through employment within Industry in a role relevant to the outcomes of the Unit; or, for external assessors this can be demonstrated through exposure to Industry by conducting frequent site assessments across various locations.

**Where a unit is being delivered outside of a Qualification the first numeric character in the Unit code should be considered to indicate the AQF level

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