



**Australian Government**

# **RIICRC321E Use automated paving guidance systems**

**Release: 1**

# RIICRC321E Use automated paving guidance systems

## Modification History

| Release   | Comments                                                                                                 |
|-----------|----------------------------------------------------------------------------------------------------------|
| Release 1 | This version first released with RII Resources and Infrastructure Industry Training Package Version 6.0. |

## Application

This unit describes the skills and knowledge required to use automated paving guidance systems (APGS) in civil construction, including setting up, calibrating, operating and adjusting APGS.

It applies to those working in operational roles. They generally work under minimal supervision to undertake a broad range of tasks in varied work contexts, using some discretion and judgement in selecting equipment, services or contingency measures.

Licensing, legislative and certification requirements that apply to this unit can vary between states, territories, and industry sectors. Users must check requirements with relevant body before applying the unit.

## Unit Sector

Civil construction

## Elements and Performance Criteria

| ELEMENT                                                      | PERFORMANCE CRITERIA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Elements describe the essential outcomes.</i>             | <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 1. Plan and prepare to use automated paving guidance systems | <ul style="list-style-type: none"><li>1.1 Obtain, interpret, clarify and confirm work requirements</li><li>1.2 Access, interpret and apply documentation required to use automated paving guidance systems (APGS) and confirm work activity is compliant</li><li>1.3 Identify and address potential risks, hazards and environmental issues and implement control measures</li><li>1.4 Select and wear personal protective equipment according to site requirements</li><li>1.5 Select plant, tools and equipment required to carry out tasks and check for faults</li></ul> |

| ELEMENT                        | PERFORMANCE CRITERIA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2. Set up APGS                 | <ul style="list-style-type: none"><li>2.1 Set up prisms according to manufacturer specifications and job and site requirements</li><li>2.2 Locate survey equipment according to manufacturer specifications and job and site requirements</li><li>2.3 Identify and establish control points and theodolite positions according to job and site requirements</li><li>2.4 Verify survey model against job and site requirements</li><li>2.5 Calibrate paver to tolerances according to manufacturer specifications and site requirements</li></ul>                                                         |
| 3. Operate APGS                | <ul style="list-style-type: none"><li>3.1 Set APGS controls to automatic control settings</li><li>3.2 Check signal inputs and automated control according to manufacturer specifications and site requirements</li><li>3.3 Check conformity of newly paved concrete against worksite model</li><li>3.4 Conduct paver and APGS adjustments according to job and site requirements</li><li>3.5 Reposition total station according to job and site requirements</li><li>3.6 Monitor movements and hazards and identify and communicate changes to work environment according to site requirements</li></ul> |
| 4. Conduct shutdown operations | <ul style="list-style-type: none"><li>4.1 Check and confirm supervisor instructions</li><li>4.2 Shutdown APGS according to manufacturer specifications and site requirements</li><li>4.3 Lower sensors on paver according to manufacturer specifications and site requirements</li><li>4.4 Clean, check, maintain and store total stations according to manufacturer specifications and site requirements</li></ul>                                                                                                                                                                                      |

## Foundation Skills

*This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.*

| SKILL           | DESCRIPTION                                                                                                                                |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Numeracy        | <ul style="list-style-type: none"><li>• Calculates basic measurements including masses and dimensions</li></ul>                            |
| Self-management | <ul style="list-style-type: none"><li>• Monitors and minimises own exposure to worksite risks and hazards during work activities</li></ul> |

## Unit Mapping Information

Supersedes and is equivalent to RIICRC321D Use automated paving guidance systems.

## Links

Companion Volume Implementation Guide is found on VETNet -

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