



Australian Government

RIICSG401D Apply the principles of civil concrete structures construction

Release: 2

RIICSG401D Apply the principles of civil concrete structures construction

Modification History

Release	Comment
1	This unit replaces RIICSG401A Apply the principles of civil concrete structure construction.
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 apply the principles of civil concrete structures construction in Civil construction.

This unit is appropriate for those working in supervisory or technical specialist 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 tasks	1.1 Access, interpret and apply civil concrete structure construction documentation and ensure the work activity is compliant 1.2 Obtain, interpret and clarify the work instruction 1.3 Ensure a job plan is available which makes best use of the available resources, meets task requirements and ensures safe, effective and efficient conduct of the tasks
2. Implement Job Plan	2.1 Confirm necessary resources are available 2.2 Ensure clear, concise and timely instructions are communicated verbally or in writing to others 2.3 Set out and allocate tasks to others

3. Oversee the execution of tasks	3.1 Monitor civil concrete structures construction task performance 3.2 Implement adjustments to work processes or job plan if required to ensure required outcomes are achieved 3.3 Established program for plant, equipment and tool maintenance is carried out and records are kept
4. Report on the execution of tasks	4.1 Complete and submit written reports as required 4.2 Recommend changes to improve safety, efficiency and effectiveness

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

RIICSG401A Apply the principles of civil concrete structure construction

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 RIICSG401D Apply the principles of civil concrete structures construction

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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 relevant legislation, documentation, policies and procedures
- implements appropriate procedures and techniques for the safe, effective and efficient supervision of civil concrete structures construction tasks including:
 - calculate quantities for the execution of tasks including:
 - volumes
 - grades
 - percentages
 - areas
 - resource consumption figures, including required supply rates
 - interpret civil concrete structures construction materials properties and test results, including:
 - concrete slump tests
 - concrete cylinder tests
 - maintains clear and legible written records and the reporting systems including:
 - preparing and presenting job reports
 - preparing and maintaining of log books and diaries
- works effectively with others to plan, prepare and conduct civil concrete structures construction tasks including:

- provides clear and timely instruction and supervision using a range of communication techniques to those involved in civil concrete structures construction tasks
- prepares for and conducts briefings, toolbox and site meeting
- demonstrates completion of the principles of civil concrete structures construction that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - provide recommendations for the improvement of the safe, effective and efficient execution of civil concrete structures construction tasks including:
 - interpreting project contract
 - specification requirements
 - procedures to problem solve
 - make decisions for activity
 - carry out continuous improvement in meeting task outcomes

Knowledge Evidence

The candidate must demonstrate knowledge in applying the principles of civil concrete structures construction through:

- civil concrete structures construction plant and equipment capabilities and application
- execution of civil concrete structures construction tasks
- organisational, client and site operational requirements
- relationship between various areas of civil works
- team leadership techniques
- works planning techniques
- civil concrete structures construction monitoring methods
- engineering survey principles
- materials quality and delivery requirements
- civil works construction sequencing
- civil concrete structures construction and related activities terminology
- set out requirements
- ground surface treatment requirements and procedures e.g. proof rolling
- pavement drainage requirements
- works planning techniques
- monitoring methods

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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