



Australian Government

RIICCM209D Carry out concrete work

Release: 3

RIICCM209D Carry out concrete work

Modification History

Release	Comment
1	This unit replaces RIICCM209A Carry out concrete work.
2	Editorial corrections Amended Performance Evidence.
3	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 carry out concrete work in Civil Construction.

This unit is appropriate for those working in operational roles.

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.

Unit Sector

Civil construction

Elements and Performance Criteria

1. Plan and prepare for concrete work	1.1 Access, interpret and apply concrete work 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 personal protective equipment appropriate for work activities 1.5 Identify, obtain and implement traffic signage requirements 1.6 Select, and check for faults, equipment and/or attachments for
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	work activities 1.7 Identify environmental protection requirements 1.8 Obtain and interpret emergency procedures, and be prepared for fire/accident/emergency
2. Select materials	2.1 Determine location requirements of steel reinforcement and formwork 2.2 Confirm reinforcement requirements 2.3 Select formwork components/materials 2.4 Select and use fixing/fasteners
3. Set out for concrete work	3.1 Set string lines accurately from existing pegs 3.2 Check grades and ensure correct fall 3.3 Identify services, protect and prevent damage
4. Construct and fit reinforcement	4.1 Cut and bend reinforcing fabric and bars 4.2 Tie/fix fabric and bars to configuration 4.3 Attach stiffening rods to panels as required to facilitate handling 4.4 Locate reinforcement material in formwork, and place it on bar chairs/spacers, and confirm clearance from formwork 4.5 Locate and secure cast-ins
5. Erect formwork	5.1 Clear work area and prepare surface for erection of formwork 5.2 Set out formwork 5.3 Assemble/erect and brace formwork 5.4 Position expansion joints to specification and to relevant Australian standard 5.5 Position dowel joints 5.6 Remove debris, sawdust and other waste material from formwork 5.7 Apply release agent to manufacturer's specifications
6. Carry out concrete work	6.1 Place concrete to specified levels and grades and avoid segregation 6.2 Compact concrete using immersion vibrator or other specified method 6.3 Screed, finish and apply curing process to concrete

	6.4	Cover and protect concrete surface
7. Strip formwork	7.1	Remove edge boxing and braces sequentially
	7.2	Denail, clean, store/stack timber components
	7.3	Clean, oil, store/stack steel components
	7.4	Discard damaged formwork components after stripping
	7.5	Clean screens before movement
8. Conduct housekeeping activities	8.1	Clear work area and dispose of or recycle materials
	8.2	Clean and maintain condition of equipment, ensure suitability for use, and address/report issues
	8.3	Manage/report hazards, and maintain a safe working environment
	8.4	Process written records

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

RIICCM209A Carry out concrete work

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 RIICCM209D Carry out concrete work

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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 concrete work including:
 - selecting and using relevant tools/equipment
 - carrying out steel reinforcement
 - completing formwork
 - communicating effectively to confirm work requirements/drawings/specifications
- works effectively with others to undertake and complete concrete work that meets all of the required outcomes including:
 - using a range of communications techniques and equipment to convey information to others
 - complying with written and verbal reporting requirements and procedures
- demonstrates completion of carrying out concrete work that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - set up string lines, framework and reinforcements
 - position expansion and dowel joints
 - place concrete according to job specifications

- compact concrete
- screed/finish concrete surface

Knowledge Evidence

The candidate must demonstrate knowledge of the following when carrying out concrete work:

- accessing, interpreting and applying the organisation and site requirements and procedures for:
 - using JSAs/JSEA/safe work methods
 - achieving project quality outcomes
 - identifying and reporting on hazards related to the worksite and work activity
 - applying materials handling methods and using safety data sheets
- organising work activities
- using relevant tools and equipment safely
- identifying equipment types, characteristics, technical capabilities and limitations
- identifying site isolation and traffic control responsibilities and authorities
- identifying concrete characteristics and properties
- using concreting principles
- using structural technology
- using civil construction terminology
- completing housekeeping activities

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 is best assessed in the context of this sector's 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 this sector's workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills; 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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