



Australian Government

RIICBM307D Construct formwork and false work on concrete bridges

Release: 2

RIICBM307D Construct formwork and false work on concrete bridges

Modification History

Release	Comment
1	This unit replaces RIICBM307A Construct formwork and false work on concrete bridges
2	Knowledge Evidence formatting corrected. 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 construct formwork and false work on concrete bridges 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	1.1 Access, interpret and apply construct formwork and false work on concrete bridges documentation and ensure the work activity is compliant 1.2 Obtain, interpret, clarify and confirm work instructions before proceeding 1.3 Confirm and apply environmental protection and safety requirements
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	1.4 Obtain, interpret and implement traffic management signage requirements 1.5 Select and check for faults plant, tools and equipment to carry out tasks 1.6 Identify, address and report hazards, risks and environmental issues
2. Prepare for formwork erection	2.1 Identify and confirm location and design of formwork/false work 2.2 Accurately place key set out locations 2.3 Prepare work area and materials for the erection of formwork/false work 2.4 Assemble formwork shutters 2.5 Sequentially erect formwork support system (false work) 2.6 Check scaffolding and/or hand railing where required 2.7 Place bracing of formwork support to maintain rigidity and stability 2.8 Set support system to correct height level, line and tolerance
3. Erect formwork	3.1 Fabricate, position and fix formwork for beams, drop panels and cantilevers into place 3.2 Assemble, erect and fix formwork for walls into place, plumb and to specified tolerance 3.3 Fabricate, position and fix soffit formwork into place 3.4 Fix edge boxing to formwork in correct position and plumb to alignment. 3.5 Brace formwork 3.6 Install cast-ins, inserts and penetration blocks to locations
4. Inspect formwork	4.1 Inspect erected formwork and formwork support system for safety and quality of work 4.2 Remove loose dirt, sawdust and other waste material with due care to welfare of site personnel and public 4.3 Apply release agent to formwork 4.4 Monitor formwork and support system during concrete pour
5. Stripping of formwork	5.1 Obtain approval to remove formwork/false work support 5.2 Carefully remove edge boxing and braces, denail, clean and store/stack 5.3 Back off support system to appropriate height to loosen soffit

	decking
	5.4 Safely and sequentially remove formwork, denail and relocate or store
	5.5 Select and install appropriate back propping system, where applicable
6. Clean up	6.1 Clear work area and dispose of or recycle materials
	6.2 Clean, check, maintain and store plant, tools and equipment

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

RIICBM307A Construct formwork and false work on concrete bridges

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 RIICBM307D Construct formwork and false work on concrete bridges

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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 legislation, documentation, policies and procedures
- works effectively with others to undertake and complete the construction of formwork and false work on concrete bridges that meets all of the required outcomes including:
 - communicating clearly and concisely with others to receive and clarify work instructions
 - using a range of communication techniques and systems such as signage to advise others of work activity and exclusion zones
- demonstrates completion of constructing formwork and false work on concrete bridges that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - preparing for formwork erection
 - erecting and dismantling formwork and false work on concrete multi-span bridge with a minimum length of twenty (20) metres for each:
 - casting in situ decks
 - concrete footings/pile caps/abutments
 - piers and headstocks
 - inspecting and monitoring erected formwork and support system

Knowledge Evidence

The candidate must demonstrate knowledge of the following in applying the construct formwork and false work on concrete bridges through:

- applying legislative, organisation and site requirements for:
 - site and equipment safety requirements
 - bridge construction and sequencing
 - formwork and falsework
 - steel reinforcement
 - concrete
 - bracing and loading
 - structural characteristics of reinforced concrete
 - working in confined spaces
 - working at heights and over water
 - project quality requirements
 - civil construction terminology
- interpreting engineering drawings
- equipment types, characteristics, technical capabilities and limitations
- operational, maintenance and basic diagnostic procedures
- applying site isolation and traffic control responsibilities and authorities
- safety data sheets and materials handling methods
- JSA/JSEA/safe work method statements

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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