



Australian Government

RIICBM305D Install pre-cast concrete bridge decks

Release: 2

RIICBM305D Install pre-cast concrete bridge decks

Modification History

Release	Comment
1	This unit replaces RIICBM305A Install pre-cast concrete bridge decks
2	Corrected Knowledge Evidence formatting. 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 install pre-cast concrete bridge decks 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.

Pre-requisite Unit

Elements and Performance Criteria

1. Plan and prepare to install pre-cast concrete bridge decks	1.1 Access, interpret and apply documentation to install pre-cast concrete bridge decks 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 1.4 Obtain, interpret and implement traffic management signage 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
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	issues
	1.7 Obtain and interpret emergency procedures, and be prepared for fire/accident/emergency
2. Install bearings	2.1 Determine bearing types and position 2.2 Check bearing dimensions and material for quality 2.3 Install bearings 2.4 Identify locating brackets/bolts and install in preparation for placement of girders
3. Install concrete bridge deck	3.1 Prepare deck components for grouting prior to placement 3.2 Place deck components 3.3 Carry out and complete pre-fabricated concrete decking grouting 3.4 Insert and tension pre-fabricated concrete decking transverse stressing bar 3.5 Grout transverse stressing bar 3.6 Grout anchor bolts 3.7 Place and specify deck joints of pre-fabricated decking and scuppers
4. Fix bridge fittings	4.1 Fit posts and bridge rails 4.2 Assemble and install pre-fabricated stairs
5. Clean up	5.1 Clear work area and dispose of or recycle materials 5.2 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

RIICBM305A Install pre-cast concrete bridge decks

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 RIICBM305D Install pre-cast concrete bridge decks

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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 installation of pre-cast concrete bridge decks 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 installing pre-cast concrete bridge decks that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - installing bearings and brackets/bolts in preparation for placement of girders
 - installing pre-cast concrete deck units including installation of transverse stressing bars and bearings on a multi-span bridge with a minimum length of twenty (20) metres to specifications
 - assembling and installing pre-fabricated stairs

Knowledge Evidence

The candidate must demonstrate knowledge of the following in applying the install pre-cast concrete bridge decks through:

- applying legislative, organisational and site requirements and procedures for:
 - risk assessment and management
 - site and equipment safety requirements
 - bridge construction and sequencing
 - pre-cast concrete bridge decks and installation
 - bearing types and installation
 - safe lifting techniques
 - safe working procedures, working at heights and over water
 - project quality requirements
 - civil construction terminology
- interpreting engineering drawings
- equipment types, characteristics, technical capabilities and limitations
- 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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