



Australian Government

RIICBM302D Install pre-cast girders

Release: 2

RIICBM302D Install pre-cast girders

Modification History

Release	Comments
1	This unit replaces RIICBM302A Install pre-cast girders
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 install pre-cast girders 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 to install pre-cast girders	1.1 Access, interpret and apply pre-cast girder installation 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 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 environmental issues, potential
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	hazards and risks 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 materials for quality 2.3 Install bearings 2.4 Identify and install locating brackets/bolts in preparation for the placement of girders
3. Install girders	3.1 Determine individual girder location 3.2 Determine fitting sequence to install girders and advise the crane operator 3.3 Check girders for conformity to design prior to lifting 3.4 Check lifting points on girders for serviceability and attach and use tag lines to guide girder to position 3.5 Place timber packing to support girder load 3.6 Use drift to align holes and insert and tension locating bolts 3.7 Adjust bearings to provide support across the full face of the bearing to the girder 3.8 Brace girder to prevent lateral movement or rolling 3.9 Remove, roll and store tag lines 3.10 Remove excess epoxy putty or mortar 3.11 Remove timber packing at specified time
4. Clean up	4.1 Clear work area and dispose of or recycle materials 4.2 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

RIICBM302A Install pre-cast girders

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 RIICBM302D Install pre-cast girders

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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 girders that meets all of the required outcomes including:
 - using a range of communication techniques and equipment to convey information to others
 - maintaining written and verbal reporting requirements
 - communicating clearly and concisely with others to receive and clarify work instructions
 - implement traffic management signage
 - accurately and safely direct crane operation
- demonstrates completion of installing pre-cast girders that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - installing bearings and locating brackets/bolts
 - installing all the pre-cast concrete girders on a multi-span bridge of not less than twenty (20) metres in length to specifications including:
 - installing bearings
 - installing lateral bracing
 - installing locating brackets and bolts
 - identifying hog

- checking direction of skew angle, lateral bow and twist prior to lifting
- removing excess epoxy putty or mortar and timber packaging

Knowledge Evidence

The candidate must demonstrate knowledge of installing pre-cast girders through:

- applying legislative, organisation and site requirements for:
 - risk assessment and management
 - site and equipment safety requirements
 - bridge construction and sequencing
 - pre-cast concrete girder installation
 - bearing types and installation
 - safe lifting techniques
 - structural technology
 - safe working procedures for working at heights and over water
 - site isolation and traffic control responsibilities and authorities
 - project quality requirements
 - civil construction terminology
- interpreting engineering drawings
- equipment types, characteristics, technical capabilities and limitations
- operational, maintenance and basic diagnostic procedures
- safety data sheets and materials handling methods
- JSAs/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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