



Australian Government

RIICFW307D Direct cast in-situ piling operations

Release: 2

RIICFW307D Direct cast in-situ piling operations

Modification History

Release	Comment
1	This unit replaces RIICFW307A Direct cast in-situ piling operations
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 direct cast in-situ piling operations in Civil Construction.

This unit is appropriate for those working in operational roles.

No licensing or certification requirements apply to this unit at the time of publication.

Unit Sector

Civil construction

Elements and Performance Criteria

1. Plan and prepare to direct in-situ piling operations	1.1 Access, interpret and apply documentation to the direction of cast in-situ piling operations and ensure the work activity is compliant 1.2 Obtain, interpret, clarify and confirm work instructions and resolve coordination requirements before proceeding 1.3 Confirm and apply environmental protection and safety requirements 1.4 Select and wear correct personal protective equipment appropriate for work activities 1.5 Obtain, interpret and implement traffic management signage requirements 1.6 Select, and check for faults, plant, tools and equipment to carry out tasks 1.7 Identify, address and report environmental issues, potential
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	hazards and risks 1.8 Obtain and interpret emergency procedures, and be prepared for fire/accident/emergency
2. Direct the rig, locate and prepare pile positions	2.1 Establishing the location of piles from reference points and set out 2.2 Establish recovery pegs and conduct on-going measurements to ensure correct location 2.3 Position plant and related equipment and conduct pre-start checks 2.4 Provide guidance for boring of holes 2.5 Direct installation of the casing in the bored hole if applicable 2.6 Prepare pile to receive concrete
3. Assist with placing concrete	3.1 Place concrete into pile 3.2 Identify the process of placing concrete in dry situations 3.3 Identify the process of placing concrete in wet situations
4. Carryout post-operational requirements	4.1 Provide direction for the relocation of boring rig 4.2 Provide direction for the removal of boring rig from site on completion of work 4.3 Clear work area and dispose of or recycle materials 4.4 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

RIICFW307A Direct cast in-situ piling operations

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 RIICFW307D Direct cast in-situ piling operations

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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 direct, undertake and complete cast in-situ piling operations tasks that meet all required outcomes including:
 - maintaining written and verbal reporting requirements and procedures
 - communicating clearly and concisely with others to resolve coordination requirements and receive and clarify work instructions
 - using a range of communication technique and systems such as signage to advise others of work activity and exclusion zones
- demonstrates completion of cast in-situ piling operations that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - establishing locations for piles
 - positioning and checking plant and related equipment
 - providing guidance for:
 - boring of holes
 - relocation and removal of boring rigs
 - installation of the casing in the bored hole
 - boring a hole to install a minimum of one (1) caisson, including reinforcement construction and placing concrete to that caisson

Knowledge Evidence

The candidate must demonstrate knowledge of directing cast in-situ piling operations through:

- applying organisation and site requirements and procedures for:
 - risk assessment and management
 - statutory compliance
 - work health and safety
 - emergency procedures
 - off-set pegging
 - pile locating
 - maintenance requirements
 - environmentally sensitive fluids and materials disposal
 - chemical and fuel safety
 - hazardous goods handling
 - cast in-situ
 - piling operation
 - isolation and traffic control responsibilities and authorities
 - water erosion issues
 - civil construction terminology and principles
 - foundation work
 - project quality requirements
 - work platform installation
 - machine operation
- interpreting engineering drawings
- placing concrete in wet/dry conditions
- monitoring site personal protective equipment requirements
- implementing site and equipment health and safety procedures
- monitoring and responding to site environmental and heritage requirements and constraints
- interpreting and complying with safety data sheets and materials handling methods
- preparing and/or implementing safe work method statement and/or Job safety analysis
- identifying types and characteristics of soil, sand, rock, clay, shale, gravel and silt and water table
- describing machine characteristics, technical capability and limitations
- describing the boring process for cast in-situ piles and their installation techniques
- describing techniques for installing piles in water
- maintaining site record keeping requirements

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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