



**Australian Government**

# **RIICFW302D Install temporary and permanent rock anchors**

**Release: 2**

## RIICFW302D Install temporary and permanent rock anchors

### Modification History

Release	Comment
1	This unit replaces RIICFW302A Install temporary and permanent rock anchors
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 install temporary and permanent rock anchors 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 for rock anchor installation	<p>1.1 Access, interpret and apply rock anchor installation documentation and ensure the work activity is compliant</p> <p>1.2 Obtain, interpret and clarify work instructions before proceeding</p> <p>1.3 Confirm and apply environmental protection and safety requirements</p> <p>1.4 Obtain, interpret and implement traffic management signage requirements</p> <p>1.5 Select, and check for faults, plant, tools and equipment to carry out tasks</p> <p>1.6 Select and wear personal protective equipment appropriate for work activities</p> <p>1.7 Identify, address and report potential hazards and risks</p>
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	1.8 Obtain and interpret emergency procedures, and be prepared for fire/accident/emergency
2. Set up and prepare anchor holes	2.1 Ensure holes are drilled to specified diameter and depth 2.2 Ensure holes are cleaned 2.3 Ensure bond length of holes for permanent anchors are tested for leakage to specified rate and grouted, re-drilled and retested 2.4 Ensure holes are temporarily covered to prevent entry of foreign material
3. Install anchors to anchor holes	3.1 Check components to verify conformity with job requirements 3.2 Grease, sheathe and assemble anchors to specifications 3.3 Prepare temporary anchors with spacers and fit grout tubes 3.4 Prepare permanent anchors with spacers, fit grout tubes and prepare external polyethylene sheath 3.5 Install anchors and sheaths to full depth, without damage and to specifications 3.6 Set up grouting plant and flow monitoring apparatus to design requirements 3.7 Mix and pump grout into hole
4. Set up anchorage assembly and stress anchors	4.1 Position anchorage using packing materials 4.2 Stress anchors to nominated loads 4.3 Lock off anchors to nominated loads 4.4 Install mesh to job specification 4.5 Apply shotcrete to design depth, tolerance and job specification 4.6 Monitor permanent anchors at scheduled intervals, and determine and record anchor's residual load 4.7 Cut anchors where required and seal
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**

RIICFW302A Install temporary and permanent rock anchors

## **Links**

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=88a61002-9a21-4386-aaf8-69c76e675272>