



Australian Government

RIIMSM306D Design, develop and maintain pillar system and ground control

Release: 2

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Modification History

Release	Comment
1	This unit replaces RIIMSM306A Design and maintain pillar system and ground control.
2	Performance Criteria numbering 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 design, develop and maintain pillar system and ground control in Metalliferous Mining (Small Mines).

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

Metalliferous Mining (Small Mines)

Elements and Performance Criteria

1. Plan and prepare for design, develop and maintain pillar system and ground control	1.1 Access, interpret and apply pillar system and ground control documentation and ensure the work activity is compliant 1.2 Obtain, read, interpret, clarify and confirm work requirements 1.3 Select and wear appropriate personal protective equipment appropriate for work activities 1.4 Obtain and interpret emergency procedures, and be prepared for fire/accident/emergency
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	1.5 Select, and check for faults, relevant tools/equipment for the activity 1.6 Determine location of materials/ore to determine design parameters 1.7 Identify the potential hazards which could have an effect on pillar design and layout 1.8 Identify and address potential risks, hazards and environmental issues, and implement control measures 1.9 Identify the characteristics and properties of the roof to determine the span that can stand unsupported 1.10 Identify ground conditions where secondary support will be needed 1.11 Evaluate the effect of any adjacent mines and incorporate in pillar design
2. Develop pillar system	2.1 Plan and prepare for pillar development according to pillar design parameters 2.2 Visually inspect work area to ensure safe access 2.3 Ensure work area is properly ventilated before entry 2.4 Inspect and assess site conditions and determine if scaling is required and take appropriate action 2.5 Ensure that dust suppression and/or extraction is prepared and ready for use 2.6 Arrange communications with other relevant personnel 2.7 Conduct pillar development safely and efficiently 2.8 Continuously monitor ground conditions and modify operation to maintain safe conditions
3. Extract pillars	3.1 Identify the strategic pillars which must not be removed for roof stability 3.2 Establish and observe a retreat system 3.3 Prop ground surrounding pillar before pillar removal 3.4 Extract selected pillars starting furthest from shaft, in a systematic manner 3.5 Prop ground area previously held by the removed pillars 3.6 Continuously monitor ground conditions and modify operation to maintain safe pillar removal

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

RIIMSM306A Design and maintain pillar system and ground control

Links

Companion Volume implementation guides are found in VETNet -

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