



Australian Government

Department of Education, Employment and Workplace Relations

RIIUMM201A Install ground support

Release: 1

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Modification History

Not applicable.

Unit Descriptor

This unit covers the installation of ground support in the metalliferous mining industry. It includes planning and preparing for operations, installing ground support, and conducting housekeeping activities. 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.

Application of the Unit

This unit is appropriate for those working in an assistant role at worksites within:

- Metalliferous mining

Licensing/Regulatory Information

Refer to Unit Descriptor.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Plan and prepare for operations	1.1. Access, interpret and apply compliance documentation relevant to the work activity 1.2. Plan and prepare work 1.3. Receive, interpret and clarify shift change over details 1.4. Select appropriate personal protective equipment 1.5. Select appropriate type of equipment , safety equipment and ground control materials according to job type, work plan and site conditions 1.6. Arrange for delivery of ground support materials to site 1.7. Inspect and assess site conditions to determine if scaling is required and take action 1.8. Conduct equipment pre-start checks to ensure equipment is ready for operation 1.9. Identify, address and report potential risks and hazards 1.10. Inspect and assess appropriateness of ground control mechanism/plan to ensure safety of site 1.11. Use approved dust suppression and extraction equipment and/or methods
2. Install ground support	2.1. Assemble and install reinforcement components according to ground control plan 2.2. Install reinforcement components with appropriate fixative 2.3. Install reinforcement components following contour of ground and according to ground conditions 2.4. Tension external reinforcement components according to ground control conditions
3. Conduct housekeeping activities	3.1. Complete all required documentation clearly, concisely and on time 3.2. Clean equipment to maintain condition and ensure safe and efficient operations

	3.3.Pass on end-of-shift information to oncoming shift
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Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills

Specific skills are required to achieve the Performance Criteria of this unit, particularly for its application in the various circumstances in which this unit may be used. This includes the ability to carry out the following, as required to install ground support:

- apply legislative, organisation and site requirements and procedures for the installation of ground support
- identify hazards
- monitor operations
- organise work tasks
- report defects
- perform troubleshooting
- use hand and power tools

Required knowledge

Specific knowledge is required to achieve the Performance Criteria of this unit, particularly for its application in the various circumstances in which this unit may be used. This includes knowledge of the following, as required to install ground support:

- environmental procedures
- equipment safety requirements
- geological and technical data (basic)
- ground control characteristics and applications
- hazardous substances (handling and transport)
- inspection procedures
- isolation procedures
- manufacturer's specifications
- operational procedures and checks
- working at heights

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	The evidence required to demonstrate competency in this unit must be relevant to worksite operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit and include evidence of the following: • knowledge of the requirements, procedures and instructions for installing ground support • implementation of requirements, procedures and techniques for the safe, effective and efficient completion of ground support installation • working with others to undertake and complete the installation of ground support that meets all of the required outcomes • consistent timely completion of ground support installation that safely, effectively and efficiently meets the required outcomes
Context of and specific resources for assessment	• This unit must be assessed in the context of the work environment. Where personal safety or environmental damage are limiting factors, assessment may occur in a simulated environment provided it is realistic and sufficiently rigorous to cover all aspects of workplace performance, including task skills, task management skills, contingency management skills and job role environment skills. • Assessment of this competency requires typical resources normally used in a resources and infrastructure sector environment. Selection and use of resources for particular worksites may differ due to the site circumstances. • The assessment environment should not disadvantage the participant. For example, language, literacy and numeracy demands of assessment should not be greater than those required on the job. • Customisation of assessment and delivery

	environment to sensitively accommodate cultural diversity. • Aboriginal people and other people from a non English speaking background may have second language issues. • Where applicable, physical resources should include equipment modified for people with disabilities. Access must be provided to appropriate learning and/or assessment support when required.
Method of assessment	This unit may be assessed in a holistic way with other units of competency. The assessment strategy for this unit must verify required knowledge and skill and practical application using more than one of the following assessment methods: • written and/or oral assessment of the candidate's required knowledge • observed, documented and/or first hand testimonial evidence of the candidate's: • implementation of appropriate requirement, procedures and techniques for the safe, effective and efficient achievement of required outcomes • consistent achievement of required outcomes • first hand testimonial evidence of the candidate's: • working with others to undertake and complete the ground support installation
Guidance information for assessment	Consult the SkillsDMC User Guide for further information on assessment including access and equity issues.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Relevant compliance documentation may include:	• legislative, organisational and site requirements and procedures • manufacturer's guidelines and specifications • Australian standards • Employment and workplace relations legislation • Equal Employment Opportunity and Disability Discrimination legislation
Equipment may include:	• power tools and hand tools • bolt cutters • lifting and handling equipment • lighting • support vehicles • recommended/required PPE
Dust suppression and extraction equipment and/or methods may include:	• mobile/fixed sprays • screens (vent doors, vent blinds) • use of water trucks • ventilation bags operational • watering down site • hoses • portable air fan (air mover)
Reinforcement components may include:	• ground anchors • rock-bolts • expansion shells • plates • nuts and washers • other approved components used for ground control • butterfly bars • plates • rope • steep straps • wire
Fixatives may include:	• point anchors

	• cement grout/resin • friction bolts • expansion • chemical anchor
Site conditions may include:	• accessibility • amount of scale • ground conditions(e.g. dry, wet) • ground stability (e.g. broken, blocky, flaky, stable, compacted) • location of water table • slope of working surface • ventilation characteristics (e.g. fumes, dust) • visibility

Unit Sector(s)

Metalliferous Mining (Underground)

Competency field

Refer to Unit Sector(s).

Co-requisite units

Not applicable.