



Australian Government

RIIMCU302E Construct and maintain ventilation devices

Release: 1

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Modification History

Release	Comment
1	This unit replaces RIIMCU302D Construct and maintain ventilation devices. Performance criteria 1.1 amended. Performance evidence added to include monitoring and responding to local environmental conditions, applying basic construction skills and added list of materials used for devices. Knowledge evidence added to include hazard management processes and techniques. Mapping table added.

Application

This unit describes a participant's skills and knowledge required to construct and maintain ventilation devices in Coal mining.

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 the application of this unit.

Unit Sector

Coal mining

Elements and Performance Criteria

1. Plan and prepare to construct and maintain ventilation devices	1.1 Access, interpret and apply all task related documentation and ensure the work activity is compliant 1.2 Obtain, read, interpret, clarify and confirm work requirements 1.3 Identify and address potential risks, hazards and environmental issues and implement control measures 1.4 Select and wear appropriate personal protective equipment and protective clothing 1.5 Access, interpret and apply mine environmental data required to complete the allocated work 1.6 Obtain, transport and prepare materials and resources required for the work 1.7 Obtain and interpret emergency procedures and be prepared
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	for fire/accident/emergency
2. Construct ventilation devices	2.1 Communicate and coordinate activities with others throughout the work activity 2.2 Prepare work site 2.3 Construct ventilation device 2.4 Continually monitor hazards and risks, and ensure safety of self, other personnel, plant and equipment 2.5 Complete the work plan
3. Maintain ventilation devices	3.1 Carry out inspections 3.2 Obtain, transport and prepare necessary replacement materials/equipment 3.3 Carry out maintenance work 3.4 Carry out housekeeping activities 3.5 Maintain records/reports

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

Code and title current version	Code and title previous version	Comments	Equivalence status
RIIMCU302E Construct and maintain ventilation devices	RIIMCU302D Construct and maintain ventilation devices	Performance criteria 1.1 amended. Performance evidence added. Knowledge evidence added.	Not equivalent

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 RIIMCU302E Construct and maintain ventilation devices

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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 relevant documentation, policies and procedures
- implements the requirements, procedures and techniques for the safe, effective and efficient completion of constructing and maintaining ventilation devices including:
 - reading, interpreting, applying and communicating technical information
 - identifying, addressing and reporting environmental issues, potential hazards and risks
 - selecting and using relevant tools and equipment
 - complying with environmental requirements and constraints
 - identifying work requirements
 - applying diagnostic and fault finding techniques
 - applying construction techniques
 - monitoring and responding to local environmental conditions (including ventilation, gas levels, spontaneous combustion and strata conditions)
 - inspecting and maintaining devices, equipment and materials
- works effectively with others to undertake and complete constructing and maintaining ventilation devices in a way that meets all of the required outcomes including:
 - organising work activities to meet all task requirements
 - communicating clearly and concisely with others to receive and clarify work instructions
 - complying with written and verbal reporting requirements and procedures
 - resolving coordination requirements throughout work activities

- demonstrates completion of constructing and maintaining ventilation devices that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - applying basic construction skills to conduct remedial work to make workplace safe and to identify potential strata hazards (roof and ribs)
 - completing operations on the following devices in an underground coal mine:
 - stoppings OR regulators; and
 - overcasts OR undercasts; and
 - seals OR bulkheads
 - using materials for devices under this unit including but not limited to:
 - poles/props/ply/mesh
 - pre-fabricated steel
 - plaster/cementitious products or bricks
 - pumping equipment
 - together with foam or other secondary materials as necessary
 - establish ventilation at construction site and monitor mine atmosphere

Knowledge Evidence

The candidate must demonstrate knowledge of the following when constructing and maintaining ventilation devices:

- legislative, and organization procedures, layout and plan
- operational safety systems related to ventilation devices
- mine geology and survey information related to ventilation devices
- types and applications of ventilation circuits, ventilation devices and sealing systems
- applying ventilation device construction processes and techniques
- ventilation device equipment and material characteristics including transportation requirements
- hazard management processes and techniques for managing hazards (including strata, dust, gases, poor ventilation and spontaneous combustion)
- being prepared for fire/accident/emergency

Assessment Conditions

- Assessors must satisfy the Standards for Registered Training Organisations (RTOs) 2015/AQTF mandatory competency requirements for assessors; 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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