



Australian Government

Department of Education, Employment and Workplace Relations

SISOCVE409A Rig ladders in complex situations

Release: 2

SISOCVE409A Rig ladders in complex situations

Modification History

Not Applicable

Unit Descriptor

This unit describes the performance outcomes, skills and knowledge required to independently rig caving ladders in complex and non-routine situations in a cave environment. It includes anchor selection and establishment of belay systems.

Application of the Unit

This unit applies to those working as caving adventure guides, instructors or program managers. This may include those responsible for rigging ladders in complex and non-routine situations.

This unit also applies to outdoor recreation leaders working for outdoor education or adventure providers; volunteer groups; not-for-profit organisations or government agencies.

Licensing/Regulatory Information

No licensing, regulatory or certification requirements apply to this unit at the time of endorsement.

Pre-Requisites

Nil

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements and Performance Criteria

ELEMENT

PERFORMANCE CRITERIA

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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|------------------------------|--|
| 1. Rig ropes and ladders. | <p>1.1. Select suitable <i>anchors</i> and <i>safety equipment</i> for the activity.</p> <p>1.2. Tie <i>knots</i> according to the equipment and situation.</p> <p>1.3. Rig ladders and ropes for ease of use and safety using <i>rigging equipment</i> according to manufacturer's specifications, <i>relevant legislation</i> and <i>organisational policies and procedures</i>.</p> <p>1.4. Identify pitch <i>hazards</i> and minimise or eliminate, where possible.</p> |
| 2. Set up a belay system. | <p>2.1. Construct and operate a <i>belay system</i> according to the complex situation and participant ability.</p> <p>2.2. Set up the belay to allow the belayer to safely escape from the system.</p> |
| 3. De-rig ropes and ladders. | <p>3.1. De-rig ladders and ropes safely according to manufacturer's specifications and organisational policies and procedures.</p> <p>3.2. Pack ladders and ropes for appropriate transport away from the pitch.</p> |

Required Skills and Knowledge

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

Required skills

- problem-solving skills to:
 - select appropriate anchors and belay systems for the context and conditions
 - identify and eliminate hazards
 - rig and de-rig ropes and ladders safely
- self management skills to take responsibility for rigging and de-rigging ropes and ladders in complex situations
- first aid and emergency response skills appropriate to the location to enable initial response to emergencies and personal health care.

Required knowledge

- legislation and organisational policies and procedures to enable the safe conduct of all rigging activities
- equipment types, characteristics and technology used to rig ropes and ladders for caving activities to enable selection, use, care and maintenance of all required equipment
- ladders, ropes, and belay and anchor systems required to rig and de-rig ladder pitches for complex caving activities
- caving techniques, complex situations and activities requiring use of ladder pitches
- types of knots, their advantages and disadvantages, and their impact on rigging activities
- safety systems and emergency procedures relevant to the location and complex situation to ensure safety of self and others.

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

Evidence of the following is essential:

- selects and uses anchors, knots, belay techniques and rigging equipment within a range of complex caving contexts
- sets up belay systems suitable to the complex situation and abilities of those participating
- identifies and eliminates hazards where required.

Context of and specific resources for assessment

Assessment must ensure participation in rigging and de-rigging of ropes and ladders in complex caving environments that reflect local conditions and are of sufficient breadth and duration to demonstrate competency and consistency of performance.

Assessment must also ensure access to:

- suitable natural cave sites with the potential for rigging ladders and belays
- natural, fixed and artificial anchors to rig ladders
- rigging and safety equipment.

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- observation of rigging and de-rigging ladder pitches within a complex caving situation
- oral or written questioning to assess knowledge of relevant legislation and organisational policies and procedures to ensure safe conduct of activities
- observation of dealing with hazards throughout the rigging and de-rigging process
- third-party reports from a supervisor detailing performance.

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- SISOCVE410A Rig a complex pitch using caving specific techniques.

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.

- Anchors*** may include:
- natural
 - fixed
 - artificial.
- Safety equipment*** may include:
- harnesses
 - helmets
 - headlamps
 - first aid kit
 - rescue equipment
 - communication devices.
- Knots*** may include:
- end-of-rope knots
 - mid-rope knots
 - rope-joining knots
 - friction knots
 - tape knot.
- Rigging equipment*** may include:
- wire traces
 - tape slings
 - bolts
 - climbing protection
 - caving ladders
 - ropes
 - rope protectors
 - belay devices
 - karabiners.
- Relevant legislation*** may include:
- occupational health and safety
 - permits or permission for access
 - environmental regulations.
- Organisational policies and procedures*** may include:
- occupational health and safety
 - use, maintenance and storage of equipment
 - risk management
 - communication protocols
 - minimal impact environmental and caving codes
 - Australian Speleological Federation Codes and Guidelines

Hazards may include:

- code of ethics.
- water pools or seepage
- loose gear
- falling rocks, water, debris and or gear
- abrasion points
- tangled rope
- loose clothing and hair
- jewellery
- strong cave breezes
- vertical squeezes.

Belay system may include:

- top belay
- bottom belay
- bottom break
- self belays.

Unit Sector(s)

Outdoor Recreation

Competency Field

Caving