



Australian Government

Department of Education, Employment and Workplace Relations

SISOCLA407A Apply multi pitch lead climbing skills on artificial surfaces

Release: 2

SISOCLA407A Apply multi pitch lead climbing skills on artificial surfaces

Modification History

Not Applicable

Unit Descriptor

This unit describes the performance outcomes, skills and knowledge required to apply lead climbing and belaying skills to multi pitch routes on artificial surfaces. This unit focuses on the use of advanced climbing techniques and independent participation as part of a climbing party. It does not include the competencies required to instruct or guide others.

Application of the Unit

This unit applies to those working as climbing guides or assistant guides in a range of artificial multi pitch conditions.

This unit may also apply to 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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|---|---|
| <p>1. Plan for the climbing activity.</p> | <p>1.1. Identify and select an appropriate activity site according to <i>relevant legislation</i> and <i>organisational policies and procedures</i>.</p> <p>1.2. Identify associated <i>hazards</i> and procedures to minimise <i>risks</i> to climber and belayer on multi pitch <i>artificial surfaces</i>.</p> <p>1.3. Access <i>relevant sources</i> to interpret detailed <i>weather and environment information</i> to determine activity plan, where applicable.</p> <p>1.4. Establish a suitable <i>communication system</i> to use while climbing and belaying with other participants.</p> <p>1.5. Develop <i>contingency plans</i> in the case of <i>unforeseen circumstances</i>.</p> |
| <p>2. Select a route for the climb.</p> | <p>2.1. Identify suitable access to and egress from the climbing site.</p> <p>2.2. Select a suitable route for the climb and inspect the position and quality of <i>features</i> to ensure the <i>capabilities</i> of the climbing party are not exceeded.</p> <p>2.3. Provide an accurate route description for the climb.</p> <p>2.4. Identify and communicate route demands and hazards with climbing party members.</p> <p>2.5. Determine the need for protection required for the safe ascent of the route.</p> |
| <p>3. Select and utilise equipment.</p> | <p>3.1. Select and use <i>equipment</i> according to manufacturer's specifications, organisational policies and procedures and <i>contextual issues</i>.</p> <p>3.2. Adjust and fit equipment to ensure personal comfort and safety.</p> <p>3.3. Complete all necessary personal and equipment <i>safety checks</i>, according to organisational policies and procedures, prior to commencement.</p> <p>3.4. Demonstrate attachment to a suitable <i>belay system</i> at bottom of pitch, in accordance with manufacturer's specifications, and apply correct rope</p> |

ELEMENT**PERFORMANCE CRITERIA**

- handling and *knot tying* techniques.
- 3.5. Apply safety procedures at the top and bottom of climbing site, and at belay stations.
 - 3.6. Organise quick draws on the harness to provide the required access when climbing.

ELEMENT	PERFORMANCE CRITERIA
4. Demonstrate climbing techniques.	4.1. Apply fluent <i>climbing techniques</i> suitable to features and possible holds. 4.2. Maintain effective communication between climber and belayer throughout climb. 4.3. Locate and evaluate the main features of the climb whilst climbing. 4.4. Apply safe and correct climbing techniques to minimise injury in the event of a fall. 4.5. Locate and utilise rest positions to reduce fatigue. 4.6. Negotiate <i>obstacles</i> and avoid hazards to climb in a controlled manner.
5. Ascend a multi pitch route as a lead climber.	5.1. Set up <i>anchors</i> and belay systems safely and efficiently. 5.2. Place <i>fixed protection</i> and quick draws throughout the climb to reduce fall distance. 5.3. Apply correct techniques to minimise rope drag, displacement of quick draws and artificial protection, and injury in the event of a fall. 5.4. Establish a belay system at the top of the pitch which maximises climber and belayer safety at all times. 5.5. Demonstrate the ability to retreat from pitches.
6. Change over safely at belay stations.	6.1. Ensure climbing party members are always attached to an anchor or belay system. 6.2. Apply efficient rope handling skills at the belay stations.
7. Demonstrate belaying technique.	7.1. Establish <i>belaying position</i> by moving body in relation to chosen <i>belay device</i> that allows effective use of belay system. 7.2. Demonstrate a safe and efficient escape from belay system, and attachment of belayer to anchor to minimise movement during a fall. 7.3. Perform all safety checks in accordance with organisational policies and procedures to ensure <i>belayer safety</i> in the event of a climber or gear fall. 7.4. Maintain rope tension to ensure fall distance is minimised whilst not restricting climber movement. 7.5. Monitor climber progress constantly and respond appropriately to climber calls. 7.6. Arrest falls promptly using technique suitable to the belaying device and situation.
8. Evaluate climbing activity.	8.1. Evaluate <i>relevant aspects</i> of lead climbing and belaying. 8.2. Identify improvements for future lead climbing

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 fits equipment independently and carries out safety checks to ensure effective working order
- communicates effectively to monitor progress when belaying and to organise climbing group at belay stations safely and efficiently
- negotiates obstacles and hazards during lead climbing, and adapts quickly to unforeseen circumstances that may arise to ensure safety of self and other participants
- evaluates and reflects on own lead climbing and belaying performance to identify strengths, weaknesses and areas that need improvement.

Context of and specific resources for assessment

Assessment must ensure participation in multiple lead climbing and belaying activities on multi pitch artificial surfaces to demonstrate competence and consistency of performance.

Assessment must ensure access to:

- resources and information regarding lead climbing and belaying, to accurately plan for the activity
- suitable artificial multi pitch climbing sites with obstacles and features that allow participant to demonstrate lead climbing skills and belaying
- other climbing participants, to assist with belaying and second climbing
- equipment such as harnesses, helmets, belay devices, ropes, slings, quick draws, karabiners and climbing shoes.

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:

- oral or written questioning to assess knowledge of relevant legislation and organisational policies and procedures to enable safe conduct of all climbing activities
- observation of safe participation and demonstration of lead climbing skills, such as placement of quick

draws and protection, and communicating with belayer to inform of progress

- observation of dealing with contingencies, such as equipment misuse or change in weather
- 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:

- SISOCLA408A Establish belays for multi pitch climbing on artificial surfaces.

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 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 and maintenance of equipment
 - communication protocols
 - emergency procedures
 - code of ethics.
- Hazards*** may include:
- temperature extremes
 - slippery or unstable terrain
 - group management hazards.
- Risks*** may include:
- hypothermia
 - heat exhaustion
 - injuries
 - exhaustion
 - equipment failure.
- Artificial surfaces*** may include:
- portable or fixed walls
 - fixed towers or bridges
 - indoor or outdoor.
- Relevant sources*** may include:
- Bureau of Meteorology
 - media
 - land managers or agencies
 - local knowledge.
- Weather and environmental information*** may include:
- satellite images
 - daily and weekly forecasts
 - maximum and minimum temperatures
 - weather warnings
 - event warnings
 - synoptic charts.
- Communication system*** may include:
- calls
 - radio
 - hand signals
 - whistles.

- Contingency plans*** may include:
- poor communication conditions
 - injuries
 - escape or retreat options
 - off route possibilities
 - ability of the second.
- Unforeseen circumstances*** may include:
- equipment failure
 - change of route
 - climber or belayer injury.
- Features*** may include:
- arêtes
 - chimneys
 - corners
 - cracks
 - edges
 - flakes
 - jugs
 - ledges
 - overhangs
 - pockets
 - roofs
 - slabs.
- Capabilities*** may include:
- body weight or strength ratio
 - stamina
 - flexibility
 - balance
 - endurance.
- Equipment*** may include:
- helmets
 - karabiners
 - harnesses
 - belay device
 - ropes
 - tapes
 - anchors
 - slings
 - quick draws
 - personal clothing
 - climbing shoes
 - chalk bag and chalk.
- Contextual issues*** may include:
- weather conditions, including times
 - season
 - transport
 - location

- group objectives
- group size.

- Safety checks*** may include:
- A - anchors - secure and suitable to application
 - B - buckles - locked as per manufacturers recommendations
 - C- connector - locked, secured and orientated
 - D - devices - threaded correctly and secured
 - E- everything else including end or rope knots, friction hitches, belayer ready, helmet chin strap, clothing, jewellery and hair secured.
 - F- friend - cross check
 - G - organisation specific procedures.
- Belay system*** may include:
- top belay
 - bottom belay
 - single rope
 - double rope.
- Knot tying*** may include:
- midline knots
 - end-line loops
 - stopper knots
 - friction hitches
 - lock-off knots.
- Climbing techniques*** may include:
- bridging
 - dynamic movement
 - heel hooks
 - jamming
 - lay backing
 - layaways and side pulls
 - mantle shelving
 - pinch grips
 - smearing
 - underclings.
- Obstacles*** may include:
- ledges
 - overhangs
 - squeezes
 - traverses.
- Anchors*** may include:
- multi-directional
 - uni-directional
 - self-equalising.
- Fixed protection*** may include:
- fixed hangers
 - fixed draws
 - chains
 - quick draws.

- Belaying position*** may include:
- top of the pitch
 - bottom of the pitch.
- Belay device*** may include:
- plate device
 - tube device
 - auto locking device.
- Belayer safety*** may include:
- wearing of helmets
 - attaching to safety ropes
 - standing out of direct line of gear fall.
- Relevant aspects*** may include:
- objectives
 - planning process
 - activity site
 - weather
 - equipment selection
 - clothing selection
 - group feedback
 - directing techniques
 - rescue techniques employed.

Unit Sector(s)

Outdoor Recreation

Competency Field

Climbing artificial surfaces