Australian Government

Department of Education, Employment and Workplace Relations

# SISOCLA302A Apply top rope climbing skills on artificial surfaces

**Release: 2**

INDUSTRY
SKILLS
COUNCILS
Creating Australia's Future

## SISOCLA302A Apply top rope climbing skills on artificial surfaces

## Modification History

Not Applicable

## Unit Descriptor

This unit describes the performance outcomes, skills and knowledge required to apply climbing and belaying skills to single pitch top rope situations on artificial surfaces. This unit relates to independent participation as part of a climbing party. It does not include the competencies required to instruct or guide others or establish belay systems.

## Application of the Unit

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

This unit may also apply 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. |
| 1. Plan for the activity. | 1.1. Identify and select an appropriate activity site after consideration of *relevant legislation* and *organisational policies and procedures*. |
| | 1.2. Identify associated *hazards* and procedures to minimise *risks* to climber and belayer on *artificial surfaces*. |
| | 1.3. Access *relevant sources* to interpret detailed *weather and environmental information* to determine activity plan, where applicable. |
| | 1.4. Establish a suitable *communication system* to use while climbing and belaying with other participants. |
| 2. Select and utilise appropriate equipment. | 2.1. Select and use *equipment* according to manufacturer's specifications, after consideration of *contextual issues*. |
| | 2.2. Adjust and fit equipment to ensure personal comfort and safety. |
| | 2.3. Complete all necessary personal *safety checks* prior to commencing climbing and or belaying. |
| | 2.4. Demonstrate attachment to a suitable *belay system* in accordance with manufacturer's specifications, and apply correct rope handling and *knot tying* techniques. |
| 3. Demonstrate climbing technique. | 3.1. Select a suitable route for the climb, inspect the position and quality of *features*, and provide an accurate route description. |
| | 3.2. Display correct posture and fluent *climbing techniques* suitable to features and possible holds. |
| | 3.3. Maintain effective communication between climber and belayer throughout climb. |
| | 3.4. Locate and evaluate the main features of the climb, while climbing. |
| | 3.5. Locate and utilise rest positions to reduce fatigue. |

| ELEMENT | PERFORMANCE CRITERIA |
|---|---|
| | 3.6. Negotiate *simple obstacles* and a climb in a controlled manner. |
| | 3.7. Demonstrate suitable posture for lowering purposes. |
| 4. Demonstrate belaying technique. | 4.1. Establish belaying position by moving body in relation to *belay device* that allows effective use of belay system. |
| | 4.2. Demonstrate attachment of belayer to an anchor to minimise movement during a fall. |
| | 4.3. Maintain rope tension to ensure fall distance is minimised while not restricting climber movement. |
| | 4.4. Monitor climber progress constantly and respond appropriately to climber calls. |
| | 4.5. Arrest falls promptly using technique suitable to the belaying device and or situation. |
| 5. Evaluate climbing activity. | 5.1. Evaluate *relevant aspects* of climbing and belaying. |
| | 5.2. Identify improvements for future climbing activities. |

# Required Skills and Knowledge

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

**Required skills**

- communication skills to:
    - inform progress
    - interact with climber and or belayer during activity
- problem-solving skills to:
    - negotiate obstacles and hazards when climbing
    - assess application of rope tension when belaying
- rope handling skills to maintain adequate rope tension when belaying
- first aid and emergency response skills appropriate to the location to enable initial response to emergencies and personal health care.

**Required knowledge**

- relevant legislation and organisational policies and procedures to ensure safe conduct of all activities
- equipment types, characteristics and technology used for climbing on artificial surfaces, the advantages and disadvantages of the range of equipment, and factors affecting appropriate selection of equipment
- care and maintenance of climbing equipment to ensure prolonged life span and safety requirements
- climbing techniques and common communication methods and calls used between climbers and belayers to reduce risk during climbing on artificial surfaces
- belay techniques and devices appropriate for single pitch surfaces
- technical climbing knowledge, such as selection and description of suitable route to take
- basic weather and environmental information to ascertain possible conditions and their affect on the activity
- hazards that may be experienced in an artificial climbing environment
- emergency procedures, potential hazards and obstacles relevant to the location 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**

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| **Critical aspects for assessment and evidence required to demonstrate competency in this unit** | Evidence of the following is essential: |
| | • applies relevant processes to plan for climbing activity, and describes suitable route to take |
| | • selects and fits equipment independently and carries out safety checks to ensure effective working order |
| | • arranges a suitable communication system with climber, when belaying, to monitor progress |
| | • negotiates obstacles and hazards during climbing, and adapts quickly to problems or issues that may arise to ensure safety of self and other participants |
| | • evaluates and reflects on own 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 climbing and belaying activities on single pitch artificial surfaces to demonstrate competency and consistency of performance. |
| | Assessment must ensure access to: |
| | • resources and information regarding climbing and belaying, to accurately plan for the activity |
| | • suitable artificial single pitch climbing site with simple obstacles and features that allow participant to demonstrate climbing skills |
| | • other climbing participants to assist with belaying |
| | • equipment such as harnesses, helmets, belay devices, ropes, gloves, karabiners, climbing shoes and first aid 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: |
| | • oral and 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 climbing and belaying skills, such as |

communicating with climber or belayer to inform of progress

- observation of dealing with contingencies, such as equipment failure 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.

- SISOCLA303A Establish belays for 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<br>• permits or permission for access<br>• environmental regulations. |
| ***Organisational policies and procedures*** may include: | • occupational health and safety<br>• use and maintenance of equipment<br>• communication protocols<br>• emergency procedures<br>• code of ethics. |
| ***Hazards*** may include: | • temperature extremes<br>• slippery or unstable terrain<br>• dangerous animals and insects<br>• group management hazards. |
| ***Risks*** may include: | • falls and slips<br>• injuries and illnesses<br>• height phobia<br>• rope burn<br>• equipment failure. |
| ***Artificial surfaces*** may include: | • portable or fixed walls<br>• fixed towers or bridges<br>• indoor or outdoor. |
| ***Relevant sources*** may include: | • Bureau of Meteorology<br>• media<br>• land managers or agencies<br>• coastal patrol or coastguard<br>• local knowledge. |
| ***Weather and environmental information*** may include: | • satellite images<br>• daily and weekly forecasts<br>• maximum and minimum temperatures<br>• weather warnings<br>• event warnings<br>• river levels<br>• synoptic charts<br>• high and low tide predictions. |
| ***Communication system*** may | • climbing calls |

| | |
|---|---|
| include: | • radio<br>• hand signals<br>• whistles. |
| *Equipment* may include: | • helmets<br>• karabiners<br>• harnesses<br>• gloves<br>• belay device<br>• slings<br>• ropes<br>• tapes<br>• chalk bag and chalk. |
| *Contextual issues* may include: | • weather conditions, including times<br>• season<br>• transport<br>• location<br>• trip distance and duration<br>• group objectives<br>• group size. |
| *Safety checks* may include: | • A - anchors - secure and suitable to application<br>• B - buckles - locked as per manufacturers recommendations<br>• C- connector - locked, secured and orientated<br>• D - devices - threaded correctly and secured<br>• E- everything else including end of rope knots, belayer ready, helmet chin strap, clothing, jewellery and hair secured.<br>• F- friend - cross check. |
| *Belay system* may include: | • top belay<br>• bottom belay. |
| *Knot tying* may include: | • alpine butterfly<br>• end of line loop<br>• mid line loop<br>• stopper knot<br>• rethreaded figure 8<br>• figure 8 on bight<br>• friction hitches. |
| *Features* may include: | • aretes<br>• chimneys<br>• corners<br>• cracks |

    

- edges
- jugs
- ledges
- overhangs
- pockets
- roofs
- slabs.

*Climbing techniques* may include:
- bridging
- dynamic movement,
- dead pointing
- heel hooks
- jamming
- lay backing
- layaways and side pulls
- mantle shelving
- pinch grips
- smearing
- underclings.

*Simple obstacles* may include:
- ledges
- overhangs
- squeezes
- traverses.

*Belay device* may include:
- plate device
- tube device
- auto locking device.

*Relevant aspects* may include:
- objectives
- planning process
- activity site
- weather
- equipment selection
- clothing selection.

# Unit Sector(s)

Outdoor Recreation

# Competency Field

Climbing artificial surfaces