



SFRITO
SPORT, FITNESS AND RECREATION
INDUSTRY TRAINING ORGANISATION

ASSESSMENT GUIDELINE

Demonstrate lead climbing on multi-pitch climbs

Unit Standard: 447

Level: 4 Credit: 12 Version: 8

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Purpose:

People credited with this unit standard are able to: select, plan, and undertake a multi-pitch climb; demonstrate safe change-over techniques at belay stations; apply climbing skills to a simulated rescue situation on a multi-pitch route; and abseil on a multi-pitch route.

Special Notes:

All activities must comply with any relevant environmental, legislative and/or regulatory requirements set out in the *New Zealand Environmental Care Code*, Health and Safety in Employment Act 1992, Injury Prevention, Rehabilitation, and Compensation Act 2001, and their subsequent amendments. The *New Zealand Environmental Care Code* is available from the Department of Conservation, Head Office, PO Box 10420, Wellington.

Overview of assessment:

This assessment has 5 tasks

- Task 1: Choose a multi-pitch climb and prepare to climb it
- Task 2: Climb a multi-pitch route
- Task 3: Rescue a member of your party on a multi-pitch climb
- Task 4: Abseil down a multi-pitch route

Resources for all tasks:

- http://www.spadout.com/articles/general/rock_climbing_technique/101_trad_gear.htm
- http://www.spadout.com/articles/general/rock_climbing_technique/lesson/climbing_anchor.htm
- <http://www.abc-of-rockclimbing.com/howto/ropesystems.asp> (single vs double rope)
- http://www.spadout.com/articles/general/rock_climbing_technique/multipitch_101.htm (retreating from a climb)
- Equipment required for a rock climbing session

The equipment required will depend on the site but is likely to include:

Dynamic climbing ropes (single and half ropes), slings, quickdraws, prussicks, ascenders, karabiners, belay devices, harnesses and helmets. Hardware such as cams, wires, hexes will be required if the route is not well bolted.

Task 1: Choose a multi-pitch climb and prepare to climb it

Overview of Task 1: the focus of the assessment is to select the party, route and equipment for a multi-pitch climb, and to make plans in case something goes wrong

Notes to the assessor

Performance criterion 4.2 is assessed partly in this task and partly in Task 3

Instruction to candidate:

During the task you are required to:

- Choose a climbing partner and a climb
- Explain what you would do given a number of rescue scenarios
- Plan the climb in terms of belay stations and equipment
- Rack up for the climb

Element 1: Select and plan a multi-pitch climb.

Element 4: Apply climbing skills to a simulated rescue situation on a multi-pitch route.

Range: situations may include but are not limited to – person injured; person frozen, wedged, or inverted on pitch; clothing or hair jam; stuck rope; obstacles; equipment retrieval.

Performance criteria	Evidence/Judgement
1.1 Contextual issues are considered when selecting a route.	<ul style="list-style-type: none"> • The candidate chooses a climbing partner (s) to climb the route with <p>In conjunction with the rest of the climbing party, the candidate:</p> <ul style="list-style-type: none"> • Chooses a climb taking into account: <ul style="list-style-type: none"> - The fitness, skills and experience of everyone in the party - The gear available - The weather and weather forecast - Other climbing parties on the rock - The quality and nature of the rock - The quality and nature of the protection available - The availability of information on the route • Explains to the assessor the action plan for each of the situations described in the range statement of Element 4. • Identifies possible belay stations from the ground • Racks up with appropriate gear for the climb, i.e. <ul style="list-style-type: none"> - Enough quickdraws, slings, karabiners for the climb - If the climb is not well-bolted: enough appropriately sized protection e.g. a range of wires, cams and/or hexes - All gear is racked in a systematic way enabling the right piece to be found quickly.
1.2 Equipment is selected and its selection justified based on the contextual issues.	
1.3 Suitable protection is racked so as to be accessible during the climb.	
1.4 Contingency plans are determined.	
1.5 Belay stations are identified and communicated to the climbing party members.	
<p>4.2 A rescue strategy is described and implemented.</p> <p>Range: must include – abseil victim, lowering, raising.</p>	

Task 2: Climb a multi-pitch route

Overview of task: The focus of this assessment is to safely climb 2 multi-pitch routes using different rope systems

Resources: (available from the Sfrito website at www.sfrito.org.nz)

- Assessment Guideline for 20155 *Demonstrate lead climbing on bolted routes on natural rock*
- Assessment Guideline for 20156 *Demonstrate lead climbing on single pitch routes using natural and placed protection*

Notes to the Assessor

1. The candidate must climb at least 2 different multi-pitch climbs. They must lead at least one pitch using each of the following:
 - a single rope
 - double ropes
 (One of the pitches led could be a single pitch climb, done to demonstrate one of the above rope systems.)
2. The candidate must lead at least one pitch of each climb. Therefore 2 candidates can be assessed for one climb if they climb together as a pair.

Instruction to candidate:

During this task you are required to:

- Climb 3 multi-pitch routes using a single rope and double rope system
- Lead at least one pitch and set up anchors smoothly and efficiently
- Look after your own safety and the safety of your partner

Element 2: Undertake a multi-pitch climb.

Element 3: Demonstrate safe change-over techniques at belay stations.

Performance criteria	Evidence/Judgement
2.1 Sound route finding is demonstrated.	The candidate climbs 2 multi-pitch routes using: <ol style="list-style-type: none"> 1. a single rope to lead at least one pitch 2. a double rope system to lead at least one pitch During all climbs <ul style="list-style-type: none"> • All members of the party are always attached to an anchor or belay system. • Sound route finding is demonstrated • Places runners at intervals up the climb: <ul style="list-style-type: none"> - If the climb is bolted, clips every bolt on the route and demonstrates the ability to assess their safety to the standard described in the Assessment Guideline for 20155 <i>Demonstrate lead climbing on bolted routes on natural rock</i>.
2.2 Belay systems are established to meet the current demands of the situation.	
2.3 Anchors are set up safely and efficiently.	
2.4 Safety of party members is continuously maintained and monitored.	
2.5 Efficient rope techniques are demonstrated.	
Range: double, single.	

<p>3.1 All climbing party members are always attached to an anchor or belay system.</p>	<ul style="list-style-type: none"> - If the climb is protected using placed protection, places protection safely to the standard described in the Assessment Guideline for 20156 <i>Demonstrate lead climbing on single pitch routes using natural and placed protection</i>
<p>3.2 Change-overs from one system to another are conducted in a safe and efficient manner.</p>	<ul style="list-style-type: none"> • Climbs smoothly and efficiently • Makes a safe belay system at the top of the pitch: <ul style="list-style-type: none"> - Linking at least 2 anchors - Climber is connected to focal point - Belays off focal point (could be through harness) • Belays the second up: <ul style="list-style-type: none"> - Communication is effective and understood so that the second is safe at all times - Rope is managed tidily - Second arrives and remains safe until they descend or take over their own safety • Continues the climb: <ul style="list-style-type: none"> - Either transfers the lead or continues to lead themselves - Changeovers are safe, tidy and efficient

Task 3: Rescue a member of your party on a multi-pitch climb

Resources:

The candidate should be carrying the same climbing equipment as for Tasks 1 and 2

Notes to the Assessor

1. This task only needs to be assessed on one of the multi-pitch climbs. It can be assessed while climbing on single or double ropes.
2. The candidate must demonstrate all rescue skills independently of others
3. The rescue scenario(s) must occur while on the second pitch or higher
4. Performance criteria 4.2 is assessed partly in this task and partly in Task 1

Instruction to candidate:

During this task you are required to solve impromptu rescue scenarios on a multi-pitch climb, including:

- Abseiling down to an injured second, and ascending back up to the belay station
- Demonstrating an assisted hoist
- Lowering an injured climber for more than one pitch
- Improvising harnesses

Element 4: Apply climbing skills to a simulated rescue situation on a multi-pitch route.

Range: a rescue situation may include but are not limited to – person injured; person frozen, wedged, or inverted on pitch; clothing or hair jam; stuck rope; obstacles; equipment retrieval.

Element 5: Abseil on a multi-pitch route.

Performance criteria	Evidence/Judgement
<p>4.1 Harnesses are improvised and used in a simulated rescue.</p> <p>Range: sit, chest.</p>	<p>During a multi-pitch climb, the candidate is presented with one or more simulated rescue scenarios, and demonstrates <u>all</u> of:</p> <ul style="list-style-type: none"> • Escaping the system • Abseiling down to an incapacitated second, tying them into a chest harness to keep their torso upright, then ascending the rope back to the belay station using prussicks or ascenders <ul style="list-style-type: none"> - Ascent is smooth and energy-efficient - The candidate is attached to the rope at 2 points (e.g. ties abseil device off at intervals) • An assisted hoist • Lowering and 2-person abseil of an injured climber e.g. lower a climber to a belay stance, abseil down to them, then abseil a pitch with them • Tying an improvised sit harness and chest harness <p>All rescues should be carried out:</p> <ul style="list-style-type: none"> • Smoothly, efficiently and within a reasonable time • Without endangering the safety of the rescuer, victim, or any other person
<p>4.2 A rescue strategy is described and implemented.</p> <p>Range: must include – assisted hoist, abseil with victim.</p>	
<p>5.4 Techniques for ascending the rope are demonstrated efficiently.</p>	

Task 4: Abseil down a multi-pitch route

Overview of task: The focus of this assessment is to safely descend a multi-pitch route with a partner

Notes to the Assessor

1. This task must be assessed at least twice for sufficiency, on two different abseil routes. It may be assessed using single or double ropes

Instruction to candidate:

During this task you are required to:

- Abseil down a multi-pitch route with a climbing partner
- Choose appropriate anchors and set them up so you can easily retrieve the rope
- Look after your own safety and the safety of your partner

Element 5: Abseil on a multi-pitch route.

Performance criteria	Evidence/Judgement
5.1 The chosen abseil line is safe.	While descending a multi-pitch route, the candidate: <ul style="list-style-type: none"> • Chooses an appropriate safe abseil line, free of significant hazards such as loose rock • Manages hazards as they arise e.g. rope tangles, loose rock • Chooses appropriate anchors, that are safe and allow a minimum of gear to be left behind • The rope is threaded to allow easy retrieval • Actively manages their own safety i.e. abseils using self-protection or a bottom belay; double checks attachment to anchors at changeovers • Actively manages their climbing partner’s safety i.e. bottom belays; ensures partner’s safety during changeovers
5.2 Anchors are set up correctly and allow the rope to be retrieved at the end of each abseil pitch.	
5.3 The candidate protects self and partner during change-overs between abseil pitches.	

Candidate Name _____ NSN _____

**Unit 447 (v8) Checklist
Demonstrate lead climbing on multi-pitch climbs**

Assessor name: _____

Organisation name: _____

C/NYC

Comments

Throughout all tasks:

- Actively manages their own safety
- Actively manages their climbing partner's safety
- Manages hazards as they arise e.g. rope tangles, loose rock
- Performs tasks smoothly, efficiently, within a reasonable time, without endangering the safety of self or any other person

Task 1: Choose a multi-pitch climb and prepare to climb it

- Chooses a climbing partner (s) to climb the route with
- Chooses a climb taking into account:
 - Fitness, skills and experience, gear, weather, other parties, the quality and nature of rock, protection, information
- Explains to the assessor the action plan for each of the situations described in the range statement of Element 4 – person injured; person frozen, wedged, or inverted on pitch; clothing or hair jam; stuck rope; obstacles; equipment retrieval
- Identifies possible belay stations from the ground
- Racks up with appropriate gear in a systematic way

Task 2: Climb a multi-pitch route

- Sound route-finding is demonstrated
- Places safe runners at intervals up the climb
- Climbs smoothly and efficiently
- Makes a safe belay system at the top of the pitch
- Belays the second up
- Continues the climb
- Changeovers are safe, tidy and efficient

Single

Double

Task 3: Rescue a member of your party on a multi-pitch climb

- During a multi-pitch climb demonstrates:
- Escaping the system
 - Abseiling down to an incapacitated second, tying them into a chest harness, then ascending back to the belay station
 - An assisted hoist
 - Lowering an injured climber for more than one pitch
 - Tying an improvised sit harness for themselves

Task 4: Abseil down a multi-pitch route

<ul style="list-style-type: none"> • Chooses an appropriate safe abseil line • Chooses appropriate anchors • The rope is threaded to allow easy retrieval 	1	2	

DATE	CANDIDATE'S SIGNATURE	ASSESSOR'S SIGNATURE	C/NYC

Comments: