

1XXXXX Support rope rescue operations

Kaupae Level	3
Whiwhinga Credit	5
Whāinga Purpose	<p>This skill standard is intended for people supporting rope rescue operations without accessing the vertical environment.</p> <p>People credited with this skill standard can: prepare rope rescue equipment; employ rope rescue communication methods; determine rope rescue operational structures and related legislation; demonstrate hazard management; establish simple fixed anchors; and establish a fall protection system to work safely at height.</p> <p>This skill standard can be used for assessment within programmes across the Emergency Management sector.</p>

Hua o te ako me Paearu aromatawai | Learning outcomes and assessment criteria

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria
1. Prepare rope rescue equipment.	a. Describe rope rescue hardware and software strength, application and maintenance.
	b. Complete an equipment inspection and maintenance record.
	c. Tie knots, bends and hitches.
	d. Use appropriate knots, bends and hitches in rope rescue scenarios.
2. Employ rope rescue communication methods.	a. Identify light stick colour codes used in rope rescue operations.
	b. Recognise and use hand signals in rope rescue operations.
	c. Recognise and use whistle and voice commands in rope rescue operations.
3. Determine rope rescue operational structures and related legislation.	a. Determine health and safety requirements for rope rescue training and operations.
	b. Identify the phases of rescue and explain key tasks for each phase.
	c. Describe a tiered response plan including definition of roles.

4. Demonstrate rope rescue hazard management.	a. Describe three general hazards associated with rope rescue incidents and associated management strategies.
	b. Demonstrate scene size up and actions to secure the scene as a member of a team.
5. Establish simple fixed (load sharing) anchors to support a rope rescue system.	a. Identify five anchor point options suitable to sustain rope rescue systems.
	b. Rig a simple fixed two-point (load sharing) anchor system and single point anchor to support a rope rescue system.
	c. Perform calculations to determine safety limits of rope rescue system.
6. Establish a fall protection system to work safely at height.	a. Establish and use an edgeline providing safe viewing within fall risk area.
	b. Demonstrate personal and system safety checking techniques.
	c. Maintain communication with other personnel for the duration of the incident.

Pārongo aromatawai me te taumata paearu | Assessment information and grade criteria

Assessment specifications:

- Assessment of this standard must be consistent with:
 - current legislation.
 - the latest version of the primary reference document for this standard: CMC Rope Rescue Technician Manual (6th ed.).
 - organisation's Standard Operating Procedures (SOPs).
- Practical high angle sites during assessment are to be between 8 and 40 metres only.
- Assessment criteria 1 c. includes the following: knots - figure eight on the bight and alpine butterfly; bends – tape and double fisherman's; and hitches – prusik.

Definitions:

- Double line technique* refers to single line technique with independent safety.
- High angle* refers to an environment in which one must be secured with rope and other safety equipment to keep from falling from a height (generally above three metres) and more than 60 degrees.
- Rope rescue* is a generic term that has been used to subsume the terms high angle rescue, low angle, line rescue, and vertical rescue.
- Vertical environment* refers to steep and high angle environments.

Ngā momo whiwhinga | Grades available

Achieved /

Ihirangi waitohu | Indicative content

Equipment for rope rescue

- Personal protective equipment: edge protection, eye protection, whistle, rope cutter, boots, overalls, gloves, and helmet.
- Hardware materials and strength: mechanical descender, mechanical ascender, carabiner and pulley.
- Software materials and strength: prussik cord, full body rescue harness, anchor webbing, static and or low stretch, and rescue rope.
- Rescue rope characteristics, maintenance and applications: stretch, diameter, fibre, certification, construction, washing, inspection, and storage.
- Transfer device: characteristics, maintenance and applications.
- Safe working loads of equipment.
- Maintenance of equipment as per organisational requirements.

Rope rescue operation communication methods

- Whistle commands including rope rescue and USAR. Operations where whistle commands are used in rope rescue operations may be incompatible with other whistle command systems.
- Hand signals: up, down and stop, and rope free.
- Chemical light stick colour codes.
- Voice commands: up, down, stop rope, rock, and rope free.

Rope rescue strategies and legislation

- Phases of rescue: locate, access, stabilise, and transport.
- Tiered response plan: support, responder, technician and specialist roles.
- Relevant legislation, regulations and guidelines relating to health and safety:
 - Health and Safety at Work Act 2015.
 - Health and Safety at Work (General Risk and Workplace Management) Regulations 2016.
 - Worksafe Best Practice guidelines for working at height in New Zealand.

Hazard management

- Hazard management: helmets, gloves, light sticks, high visibility garments, barrier tape, traffic cones, placement of response vehicles, portable lighting, and restricting and securing scene access.
- Safe practices working with equipment: rescue rope, carabiners, technical hardware, technical software, and rope rescue safety equipment.

Anchor systems

- Anchor point systems to sustain rope rescue systems: natural, structural and artificial.
- Simple fixed (load sharing) anchor system preparation and rigging: rope or webbing based anchor, edge protection, single anchor, multiple anchors, and bombproof.
- Calculations to determine safety limits: Anchor angle forces fall factors.

Fall protection

- Established edgeline to provide safe viewing within fall risk area: variable tether, fall restraint, don harness, and helmet.
- Safety checking techniques in accordance with organisational requirements on established edgeline system (e.g. FENZ use ARCHER: anchors, rope, carabiners, harness, equipment, ready to go).

Rauemi | Resources

Where the resources have been updated, please refer to the latest version.

- Civil Defence and Emergency Management Act 2002.
<https://www.legislation.govt.nz/act/public/2002/0033/latest/whole.html>
- Frank, J. A [Ed]. (2021). CMC rope rescue technician manual (6th ed.).
https://www.cmcpro.com/equipment/rope-rescue-manual/#learn_more
- Health and Safety at Work Act 2015. Parliamentary Council Office, Te Tari Tohutohu Parēmata.
<https://www.legislation.govt.nz/act/public/2015/0070/latest/DLM5976660.html>
- Worksafe. (2019). Best practice guidelines for working at height in New Zealand.
<https://www.worksafe.govt.nz/topic-and-industry/working-at-height/working-at-height-in-nz/>

Pārongo Whakaū Kouna | Quality assurance information

Ngā rōpū whakatau-paerewa Standard Setting Body	Toitū te Waiora Community, Health, Education, and Social Services Workforce Development Council
Whakaritenga Rārangi Paetae Aromatawai DASS classification	Community and Social Services > Specialist Rescue > Rope Rescue
Ko te tohutoro ki ngā Whakaritenga i te Whakamanatanga me te Whakaōritenga CMR	039

Hātepe Process	Putanga Version	Rā whakaputa Review Date	Rā whakamutunga mō te aromatawai Last date for assessment
Rēhitatanga Registration	1	31 December 2029	N/A
Kōrero whakakapinga Replacement information	N/A		
Rā arotake Planned review date	31 December 2029		

Please contact Toitū te Waiora Community, Health, Education, and Social Services Workforce Development Council at qualifications@toitutewaiora.nz to suggest changes to the content of this skill standard.