

41191**Operate as an intermediate level industrial rope access technician**

Kaupae Level	4
Whiwhinga Credit	5
Whāinga Purpose	This standard is intended for people who are working in a range of settings that require the use of intermediate level industrial rope access skills when working at height or in places with difficult access. People with this skill standard will be able to apply knowledge and skills to prepare and construct elevated rope systems, hauling systems, and tensioned lines, and conduct rescues with a casualty through all common rope configurations and from climbing situations. This skill standard contributes to credentials for industrial rope access services.
Whakaakoranga me mātua oti Pre-requisites	Skill standard 41185 <i>Operate as a basic level industrial rope access technician</i> , or evidence of equivalent knowledge and skills.

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

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria
1. Operate as an intermediate level industrial rope access technician.	a. Use pulley theory to carry out mechanical advantage calculations, key loading concepts and risks.
	b. Construct rope systems while elevated to ensure correct configuration and secure anchoring.
	c. Construct and operate redundant hauling systems for casualty movement, by applying correct mechanical advantage and risk mitigation principles.
	d. Construct tension line and cross-haul systems for the movement of loads or personnel to ensure stability and safety throughout the operation.
	e. Operate hauling and transit systems, including redirected tendering, during elevated rope access to ensure correct configuration, smooth operation.

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria
	f. Perform casualty recovery rescues through a selection of common rope access configurations and climbing situations.

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

Assessment specifications:

Candidates must be capable of performing skills in a safe manner to current industry verification of competency requirements and regulatory requirements.

Assessment must be carried out under supervision of an advanced rope access technician who has the responsibility for safety and execution as a technical lead in line with requirements AS/NZS ISO 22846 Industrial Rope Access in NZ: Best Practice Guidelines.

Evidence expected for this skill standard aligns with the technical requirements for independent industry verification of competency (Level 2).

Definitions

Casualty refers to a person that has been impacted by an event or situation causing injury.

Intermediate rope access requires more complex rope access rigging arrangements, system setups, or work environments than basic. This may involve the use of hauling, lowering, deviations, tensioned lines or rescue systems. Risks are greater or less predictable but remain manageable with established methods.

Redundancy refers to the duplication of critical components or functions to ensure a system continues to operate if one part fails.

Ngā momo whiwhinga | Grades available

Achieved

Ihirangi waitohu | Indicative content

Review of rope access and safety

- Role in the team
- Pre-start checks (people, equipment, anchors and rope systems)
- Rescue from ascent mode
- Risk assessments and method statements
- Sources of emergency on a rope access worksite
- Permit to work systems
- Toolbox talks and team briefings.

Review of techniques

- Basic industrial rope access techniques as set out in the SARNZ Certificate of Competency Level 1 schedule.

Manoeuvre rescues and hauling

- Redundancy and casualty management
- Passing a deviation with a casualty
- Rope-to-rope transfer with a casualty
- Passing a re-anchor with a casualty
- Key loading and rating concepts
- Mechanical advantage systems
- Pulley systems
- Calculating theoretical mechanical advantage.

Hauling rescue techniques

- Rescue from an aid climb
- Vertical limited free-fall arrest line rigging
- Rescue from fall arrest equipment
- Hanging haul rescue
- Cross haul rescue
- Inter-team coordination
- Risk assessments, mitigations, and method statements (job plans creation).

Tension line system

- Key tension line risk factors and the corresponding mitigations
- Rigging and using tension lines.

Industry code of competency

- Introduction and preparing for industry verification of Intermediate competency.

Rauemi | Resources

Legislation, regulations and/or industry standards relevant to this skill standard include but are not limited to:

- AS/NZS ISO 22846 Industrial Rope Access in New Zealand: Best Practice Guidelines available on <https://www.worksafe.govt.nz/>
- Rope Access Certificate of Competence Scaffolding, Access and Rigging New Zealand <https://www.sarnz.co.nz/cocs/rope-access-certificate-of-competence/rope-access-certificates-of-competence>
- 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/>
- EN361 Personal protective equipment against falls from a height: Full body harnesses, available at <https://www.en-standard.eu/>
- AS/NZS ISO 22846.2:2020 Personal equipment for protection against falls - Rope access systems, Part 2: Code of practice <https://www.standards.govt.nz/shop/asnz-iso-22846-2020>.

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

Pārongo Whakaū Kouna | Quality assurance information

Ngā rōpū whakatau-paerewa Standard Setting Body	Construction and Specialist Trades Industry Skills Board
Whakaritenga Rārangi Paetae Aromatawai DASS classification	Service Sector > Lifting Equipment > Industrial Rope Access
Ko te tohutoro ki ngā Whakaritenga i te Whakamanatanga me te Whakaōritenga CMR	0120

Hātepe Process	Putanga Version	Rā whakaputa Review Date	Rā whakamutunga mō te aromatawai Last date for assessment
Rēhitatanga Registration	1	28 May 2026	N/A
Kōrero whakakapinga Replacement information	N/A		
Rā arotake Planned review date	31 December 2031		

Please contact the Construction and Specialist Trades Industry Skills Board at info@cstisb.nz if you wish to suggest changes to the content of this skill standard.