

Title	Use safety harness system when working at height		
Level	3	Credits	4

Purpose	<p>People credited with this unit standard are able to:</p> <ul style="list-style-type: none"> – demonstrate knowledge of the hazards associated with wearing a safety harness and associated equipment; – demonstrate knowledge of safety harnesses and associated systems and equipment; – check and fit a safety harness system; – use a safety harness system where a fall hazard exists at height; and – demonstrate knowledge of the rescue plan to be implemented in the event of a fall.
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Classification	Lifting Equipment > Industrial Rope Access
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Available grade	Achieved
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Guidance Information

- 1 All tasks must be carried out in accordance with:
 - a quality management systems;
 - b designer's requirements and manufacturer's operating instructions; and legislation, regulations, bylaws, Health and Safety at Work Act 2015, and New Zealand Standards;
 - c *Industrial Rope Access in New Zealand: Best Practice Guidelines*, May 2012, available from the website <https://worksafe.govt.nz/>; and
 - d AS/NZS 1891 parts 1 - 4: 2020 *Industrial fall-arrest systems and devices*; AS/NZS ISO 22846.1: 2020 *Personal equipment for protection against falls – Rope access systems, Part 1: Fundamental principles for a system of work*. New Zealand Standards are available from <http://www.standards.co.nz>, and their subsequent amendments.

- 2 Reference

EN361 *Personal protective equipment against falls from a height: Full body harnesses*, available at <https://www.en-standard.eu/search/?q=EN361>.

- 3 Definitions

Equipment operators are personnel specifically trained and designated to use specialist equipment while carrying out the rescue plan to recover a suspended person after a fall. Their primary focus is securing the site and accessing the suspended person.

Fall hazard is a working environment where there is an unprotected edge and where there is a risk of a fall.

Hazards refer to occurrences, processes, substances or situations as determined by the organisation that are an actual or potential cause or source of harm associated

with, but not limited to – process, activities, environment, equipment, materials, work organisation, site and facilities.

Height, for the purpose of this unit standard, is a work environment where a fall hazard exists, generally where a fall can be sustained.

Rescue plan is a realistic strategy to deal with a fall arrest incident that ensures the rapid recovery of a suspended person before suspension trauma occurs. For the purposes of this unit standard, it is intended that this is the pre-prepared plan currently used in the environment in which the assessment occurs.

Workplace procedures refer to instructions to staff on policy and procedures, which are documented in memo or manual format and are available in the workplace. These requirements may include but are not limited to – site specific requirements, company quality management requirements, Approved Codes of Practice and guidelines, and legislative requirements.

- 4 This unit standard is intended to encourage hazard management and the prevention of safety incidents. As much as possible, assessment should focus on prevention and fall restraint using travel restraint strategies rather than fall arrest.
- 5 Training and assessment
People working towards, and being assessed against, this unit standard should note that work in the industrial rope access industry usually takes place at heights well above ground level and, therefore, requires a level of physical fitness and ability to work at heights.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of the hazards associated with wearing a safety harness and associated equipment.

Performance criteria

- 1.1 Explain the terminology associated with fall hazards.

Range	may include but is not limited to – fall restraint, fall arrest, free fall, suspension intolerance, working at height, unprotected edge.
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- 1.2 Describe potential faults and non-compliance in the use of personal equipment.

Range	may include but is not limited to – non-registered equipment and damage to harnesses, lanyards, shock absorbers, type one fall arrestor, type two fall arrestor, connectors.
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- 1.3 Explain the primary hazards associated with the use of a safety harness and associated equipment and associated control strategies.

Range	may include but is not limited to – suspension intolerance, fall restraint and work positioning versus fall arrest, pendulum effect, fall clearance.
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Outcome 2

Demonstrate knowledge of safety harnesses and associated systems and equipment.

Performance criteria

2.1 Describe the different safety harness system/s in terms of the height work to be undertaken.

Range systems may include but are not limited to – fall restraint system, fall-arrest system, static line and anchorage system, work-positioning system;
description may include but is not limited to – characteristics, advantages and limitations of various systems; job requirements; work environment mobility; number of workers; access and egress.

2.2 Describe the different equipment associated with safety harness systems/s in terms of the height work to be undertaken.

Range equipment may include but is not limited to – fixed and adjustable length lanyards, retracting and twin tail lanyards, karabiners, slings, ropes;
description may include but is not limited to – characteristics, advantages and limitations; employment in safety harness systems.

2.3 Describe compliance of safety harnesses and associated equipment is in terms of recording requirements.

Range may include but is not limited to compliance with documents such as – fall-arrest equipment logs, harness inspection records, manufacturer's instructions, operating instructions, AS/NZS standards.

Outcome 3

Check and fit a safety harness system.

Performance criteria

3.1 Identify parts of a safety harness.

Range includes but is not limited to – attachment point, shoulder straps, front buckle, leg straps, lanyard, shock absorber and inspection tags, fall arrest attachment points.

3.2 Check the harness for faults.

Range visual inspection, functionality assessment, currency of inspection records (tags, logs, etc).

3.3 Confirm the lanyard as appropriate for the task and check for faults in accordance with manufacturer’s specifications and workplace procedures.

Range lanyards may include but are not limited to – single, twin tail, adjustable, retractable;
check – visual inspection, functionality assessment, length, connection to harness.

3.4 Fit the safety harness.

Range correct fitting and adjustment sequence, straps untwisted, evenness on shoulders, tightened to ‘flat hand space’ comfort, objects in pockets are no hazard, lanyard secured.

Outcome 4

Use a safety harness system where a fall hazard exists at height.

Performance criteria

4.1 Choose and confirm the safety of possible hook on points and optimum hook-on points.

4.2 Attach lanyard in a safe manner to, and detached from, anchor points during movement at height.

Range single, double, twin tail, retractable lanyards.

4.3 Minimise the risks to others while using a safety harness system during movement at height.

Range two or more people working together, people working below.

Outcome 5

Demonstrate knowledge of the rescue plan to be implemented in the event of a fall.

Performance criteria

5.1 Confirm a rescue plan with work supervisor.

5.2 Describe the roles of individuals involved in the rescue plan.

Range own role, trained specialists, equipment operators, emergency services.

Planned review date	31 December 2025
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	25 July 2007	31 December 2016
Review	2	22 May 2009	31 December 2016
Review	3	20 May 2011	31 December 2016
Review	4	16 July 2015	31 December 2022
Review	5	29 April 2021	N/A

Consent and Moderation Requirements (CMR) reference

0003

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact The Skills Organisation reviewcomments@skills.org.nz if you wish to suggest changes to the content of this unit standard