

Working at heights process

1. Introduction

1.1. Purpose

Wellington Water actively manages all work at height to ensure people are not harmed. Wellington Water's priority is to avoid the need to work at heights as much as practicable, with engineering controls implemented wherever possible where a risk of a fall exists. Specific fall arrest and restraint systems will be available if an engineering control is not possible.

1.2. Scope

This process applies to all persons performing work for Wellington Water.

2. Title

2.1. Overview

WorkSafe NZ's [Best Practice Guidelines for Working At Height](#) document places an obligation on a person conducting a business or undertaking to manage the risk of a falls in the workplace including:

- ensuring, so far as is reasonably practicable, that any work involving the risk of a fall is carried out on the ground or on a solid construction
- providing safe means of access to, and exit from, the workplace
- minimising the risk of falls, as far as is reasonably practicable, by providing a fall prevention device, work positioning system, or a fall arrest system.

Where possible work at heights or working where a risk of a fall is present should be avoided, however when there is no alternative a full risk identification and assessment must be performed using the Wellington Water RCP form.

2.2. Assessing risk

All risks identified in this process must be:

- documented on a Risk Assessment form (Wellington Water Risk Control Plan (RCP) form)
- control measures identified and implemented for the fall from height risk
- a nominated person to authorise the RCP (such as, job supervisor) Control measures to be considered in the development of a RCP include:
 - a stable and securely fenced work platform, for example, platform ladder
 - secure perimeter screens, fencing, handrails or other forms of physical barriers that are capable of preventing the fall of a person, for example, scaffolding
 - physical restraints that restrict a workers' movement so that they are unable to reach an edge over which they may fall
 - other forms of physical restraints that are capable of arresting the fall of a person where there is a risk of the person falling

2.3. Performing work

All work at heights on Wellington Water sites must be performed under the authorisation of a Permit to Work or under an approved Risk Control Plan (RCP) for regular tasks.

The work permit will only be authorised after the revisions of:

- RCP and risk assessments developed and presented by the persons performing the work
- detailed scope of work of the task to be performed
- verification that the documented control measures are in place
- fall from height equipment is certified for use and available

2.3.1. Working on Reservoirs

- A minimum of two people are required when accessing a reservoir roof, both of which must be working at heights trained (Section 6).
- Reservoir roofs shall only be access as part of a prescribed activity on site.
- Where there is no access staircase harnesses and lanyards are compulsory when using the access ladder.

2.3.1.1. Domed Reservoirs

- Work is only to be completed on domed reservoirs where there is a guardrail present.
- Work must not be completed near an unguarded edge.
- Avoid walking over the reservoir dome
 - Where perimeter edge protection is present, walk around the reservoir, not over the top to avoid the uneven slope.

2.3.1.2. Flat-Roofed Reservoirs

- Work should be completed behind edge protection
- No work is to occur within 1 m of an unguarded edge without additional working at height controls including full prevention systems.

3. Equipment

3.1. Ladders

When accessing areas where working at heights is required:

- ladders should only be used for low risk and short duration work
- ladders are to be inspected prior to use and deemed serviceable and should comply with AS/NZS 1892.1.1.1996 Portable ladders
- three points of contact must be maintained while using a ladder
- stop at the third step from the top on a straight ladder
- ladders hand holds (rungs) must protrude past an edge, opening or tank level by at least 1 metre (both fixed and portable ladders)
- all portable ladders must be secured top and bottom before use wherever possible
- all portable straight ladders should be set at an incline of 1:4

3.2. Scaffolding

All scaffolds should comply with the WorkSafe NZ's Scaffolding in New Zealand or a higher standard. All scaffolds should be erected, altered and dismantled by persons who have been trained and have suitable experience/competency with the type of scaffolding being used.

Plan all scaffolding works to identify ways to protect persons who are:

- erecting, dismantling, maintaining and altering the scaffolding
- using the scaffolding
- near the scaffolding (for example, other workers and members of the public)

The scaffolding must clearly indicate through a scaffold tag or handover certificate-

- the Safe Working Load of both the upright supports and the working platform □ its intended use
- dates of inspections

Where work is performed using mobile scaffolds, employers should ensure that workers understand that scaffold should:

- remain level and plumb at all times
- be kept at least one metre from open floor edges and openings unless the edge is protected to prevent the scaffold from tipping
- never be accessed until all castors are locked to prevent movement
- never be moved while someone is on it
- be clear from overhead power lines

Long term Scaffolding must be regularly inspected by a competent person and the inspection recorded and documented.

Control measures to be used to prevent risk of being hit by falling objects:

- establish exclusion zones around scaffolding and adjoining areas to prevent unauthorised persons from accessing the area
- use perimeter containment screening, edge protection, kickboards, hoardings etc. to contain falling objects
- erect and dismantle scaffold in built-up areas during quiet times
- never drop materials from a scaffold – use mechanical hoists to move materials
- attach danger tags and warning signs such as 'Keep Out – Falling Objects' and 'Danger – Incomplete Scaffolding' in obvious locations to warn persons of hazards

3.3. Mobile elevating work platforms (MEWP)

Mobile Elevating Work Platforms (MEWPs) include: vertical lifts, scissor lifts, cherry pickers, boom lifts and travel towers and can either be self-propelled or truck mounted.

Training in the appropriate unit standards are required to operate MEWP equipment. Refer to the *Training and qualification* section.

Performing high risk work where a risk of fall exists and requires control measures for the risk to be in place.

Any person working from a MEWP, regardless of the type or working height, are required to wear:

- a fall arrest harness – full body harness
- a fall restraint lanyard – the shortest lanyard possible

- the lanyard attached to the designated anchor points on the EWP – not the handrail

4. Fall prevention

4.1. Fall arrest devices

The following is a list of requirements for fall arrest devices:

- Any person using fall arrest devices will be trained to the appropriate unit standards (refer to the *Training and qualifications* section)
- All anchorage points, harnesses, safety lines or other components of the device are inspected by a competent person before their first use and then on a regular basis to ensure they are capable of supporting the design loads (AS/NZ 1891.4 Industrial fall-arrest systems and devices)
- If the load bearing capacity of an anchorage point is impaired, the anchorage is immediately made inoperable so as to prevent its use
- Any harness, safety line or other component of the device that shows wear or weakness to the extent it may cause the device to fail is not used
- All persons using the device have received training in the selection, assembly, and use of the system
- Adequate provision is made for the rescue of the person whose fall is arrested by a fall arrest device

4.2. Guardrails and edge protection

The perimeter of buildings, structures, pits, tanks, floor openings, and so on, must have guardrails or edge protection to stop people falling over the edge.

The guardrails must be positioned at mid and top rail and edge protection must be 150mm above the base of the platform.

Both will have the necessary strength to be able to withstand the impact of a person falling against them. Where guardrails are used, they must be in place prior to any work commencing and should not be removed until all work is complete.

They must be constructed in accordance with AS/NZS 1576 Scaffolding and AS/NZS 1657, fixed platforms, walkways, stairways and ladders – design, construction, and installation.

5. Responsibilities

Position title	What they are responsible for
Project/Team Manager	<ul style="list-style-type: none"> □ ensuring all workers are aware of these guidelines and have all the information, required training and competency necessary to undertake the work safely
H & S Manager	<ul style="list-style-type: none"> • implementing and maintaining this procedure • providing support and advice in managing the risks of falls in the workplace • ensuring compliance to legislative requirements for risk of falls in the workplace
Operations/Team Leaders	<ul style="list-style-type: none"> • ensuring these guidelines for managing risk of falls are implemented • ensuring workers who are required to perform tasks where there is a risk of a fall are provided with appropriate training, instruction, and supervision • establishing and implementing appropriate risk assessments and control measures for working where a risk of fall exists, and maintenance of appropriate control measures • ensuring that all equipment provided to control the risk of falls from height and over water are maintained
Workers	<ul style="list-style-type: none"> • carrying out risk assessments where a fall from height exists • implementing the appropriate risk controls for the risks • attending training programs initiated as a control measure, for example, Mobile Elevating Work Platform (MEWP) training

6. Training and qualifications

As a minimum to fulfil the requirements of this procedure, the following training and competency is a requirement:

- Training must be provided on what constitutes working at height

- All persons using fall arrest devices must have received training and be competent in the selection, assembly, and use of the system

6.1. Unit standards for different equipment types

The following table details the unit standards are required to work at height.

Key:

□ M = mandatory: Required competence, appropriate for reassessment □

D = Developmental: Not required, appropriate for reassessment

MEWP	23960	23961	23962	23963	23964	23966	23229	23231	15757	Low-level prefabricated scaffold
Scissor lift (SL)	M					M	M	D		
Truck Mounted (TM)		M				M	M	D		
Self-propelled Boom Lift (BM)			M			M	M	D		
Trailer Mounted (TL)				M		M	M	D		
Vertical Lift (VL)					M	M	M	D		
Working at Height (other)							M	D	D	
Supervision of Working at Height (All)							M	M	M	
Mobile Scaffolding										M

6.2. Unit standard names

Unit number	Unit description
US – 15757	Employ fall arrest systems on building and construction sites
US – 23229	Use a safety harness for personal fall prevention when working at height
US – 23231	Develop a safety plan to manage risks when individuals are working at height and fall prevention strategies are required
US – 23232	Develop a rescue plan for recovery of a suspended individual after a fall
US – 23960	Assess the worksite, prepare and operate a scissor lift elevating work platform

US – 23961	Assess the worksite, prepare, and operate a truck mounted elevating work platform
US – 23962	Assess the worksite, prepare, and operate a self-propelled boom lift elevating work platform
US – 23963	Assess the worksite, prepare, and operate a trailer mounted elevating work platform
Unit number	Unit description
US – 23964	Assess the worksite, prepare, and operate a vertical lift elevating work platform
US – 23966	Describe types of elevating work platforms (EWPs) and legislative requirements for their use

7. Related documents

Document number	Title
HSEP_0015	Permit to work and controlled work checklist process
HSEC_0008	Working at heights controlled work checklist

8. Reference documents

Document name	Entity	Location
Best practice guidelines for working at height in New Zealand	WorkSafe NZ	https://worksafe.govt.nz/topic-and-industry/working-atheight/working-at-height-in-nz/
Best Practice Guidelines – Mobile Elevating Work Platforms	WorkSafe NZ	https://worksafe.govt.nz/topic-and-industry/working-atheight/mobile-elevating-work-platforms/mobile-elevatingwork-platforms/
Scaffolding in New Zealand	WorkSafe NZ	https://worksafe.govt.nz/topic-and-industry/working-atheight/scaffolding-in-new-zealand/
Portable ladder safety	WorkSafe NZ	http://www.worksafe.nt.gov.au/PDF%20Conversion/portableladder-safety.pdf

9. Legislation and standards

- Health and Safety at Work 2015
- AS/NZS 1576 Scaffolding
- AS/NZS 1657 Fixed platforms, walkways, stairways, and ladders – design, construction and installation
- AS/NZS 1891.4 Industrial fall-arrest systems and devices
- AS/NZS 1892.1.1 Portable ladders