

## SELECTING THE RIGHT EQUIPMENT FOR WORKING SAFELY AT HEIGHT

This fact sheet will help you select the right equipment for working safely at height. It is one of six fact sheets in the *Working Safely at Height Toolkit* to be used together with the *Best Practice Guidelines for Working at Height in New Zealand*.

Once you've identified and assessed significant hazards for working at height, put specific steps in place to control the risk of these hazards and keep people safe.

### HIERARCHY OF CONTROLS

Selecting the right equipment for working safely at height means thinking about:

- a. **eliminating** the working at height hazard (eg long-handled tools be used from ground level)
- b. **isolating** people from the working at height hazard (eg scaffolds and edge protection)
- c. **minimising** the distance and impact of the fall (eg nets or air bags).

Remember that minimisation is only acceptable when you've exhausted elimination and isolation. **Doing nothing is not an option.**

### GROUP CONTROLS VERSUS PERSONAL CONTROLS

As well as the hierarchy of controls, think about the controls that prevent multiple people from falling. These are group controls. The best



work methods are those that don't require any active judgement by the workers to keep themselves safe, such as edge protection, scaffold, and elevating work platforms.

Personal controls only look after individuals and rely on active judgement by the user for them to work safely, for example a total restraint system and fall arrest system. Training, inspection and equipment maintenance are critical for these personal control measures to be effective.

## HOW TO SELECT THE RIGHT EQUIPMENT

The diagram (over page) helps you select the best equipment for keeping people safe at height.

Start with the most effective control – elimination, and then working through isolation and minimisation.

### Considerations when assessing controls

#### *Working conditions*

Slopes, poor ground, obstructions and traffic can determine the choice of work equipment. For example a mobile elevating work platform (MEWP) could reach over bad ground or obstructions as long as its stability is not compromised. A MEWP may be preferable to a tower scaffold in such circumstances.

#### *Distance to be negotiated for access and egress*

Ladders are likely to be less suitable for higher access.

#### *Distance and consequences of a fall*

A fall arrest lanyard would be ineffective if the deployment length was greater than the fall height because the user would hit the floor before the system could deploy.

#### *Duration and frequency of use*

Long duration, higher frequency work justifies a higher standard of fall protection eg a tower scaffold rather than a ladder. However, a ladder may be justified for short duration low-riskwork.

#### *Evacuation and rescue*

if evacuation from a deployed fall arrest system is going to be difficult, choose other work equipment, for example a MEWP.

#### *Additional risk posed by the installation and removal of work equipment*

AMEWP used by one person may be less risk than two or three people erecting a tower or scaffold for one person to work safely.

## USING AND MAINTAINING THE RIGHT EQUIPMENT

Once you've selected the right equipment, it's critical it is used and maintained properly. Below are two simple checklists for safe use and maintenance of equipment for working at height.

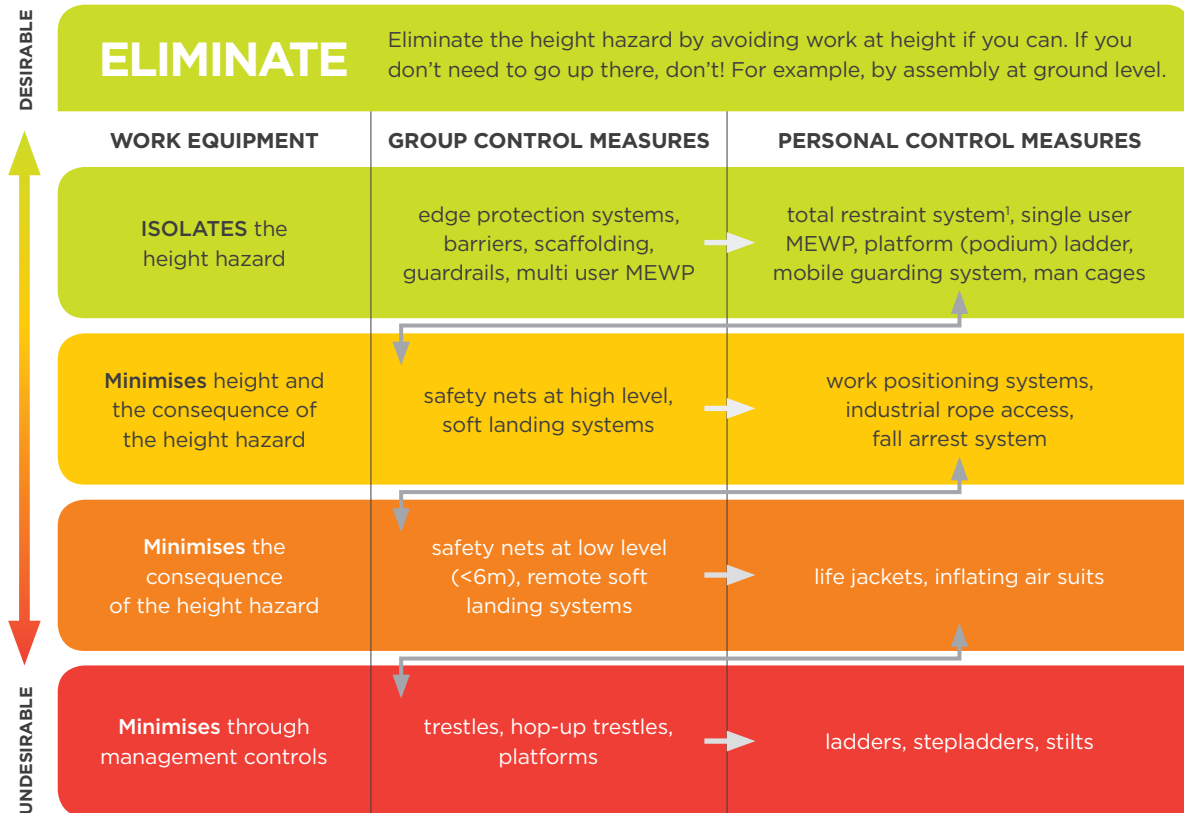
### CHECKLIST FOR USING WORKING AT HEIGHT EQUIPMENT

- Have workers been instructed and trained?
- Do workers have the knowledge they need to use and maintain the equipment safely?
- Have you provided workers with the information they need? (manufacturer's instructions, operating manuals, training courses)
- Have you ensured workers understand the information provided?

### MAINTENANCE CHECKLIST

- Is equipment maintained in a safe condition?
- Have regular maintenance, preventive checks, and inspections on all fall prevention and height access equipment (including ladders) been carried out?
- Is there a record of inspections?
- Have inspections been carried out before the equipment is used for the first time or after any incidents or any major repairs?
- Have you checked the manufacturer's instructions to ensure maintenance is carried out and is to the correct standard?

## THE SELECTION OF WORK EQUIPMENT LINKED TO THE HIERARCHY OF CONTROLS



This fact sheet is part of the *Working Safely at Height Toolkit* that supports the Best Practice Guidelines for Working at Height in New Zealand.

- > Fact Sheet 1: Planning a safe approach to working at height
- > Fact Sheet 2: Selecting the right equipment for working safely at height
- > Fact Sheet 3: Short duration work at height
- > Fact Sheet 4: Edge protection

- > Fact Sheet 5: Temporary work platforms
- > Fact Sheet 6: Total restraint system

**For additional guidance on safe working at height see:**

- > Be Safe Working on Roofs
- > Safe Working with Ladders and Stepladders
- > Health and Safety In Contracting Situations

<sup>1</sup> While a harness is classified as PPE, which is a minimisation control, a total restraint system is more desirable than other minimisation controls and can be considered isolation of the hazard.