MACHINE-LIFTED WORK PLATFORMS

These machines include elevating work platforms, cherry pickers, scissor hoists, crane lift platforms and building maintenance units. Before using such a machine, **have you:**

- Checked that the machine is the correct type and is fit for the intended work?
- Been trained to set up and operate that particular type of machine?
- Made sure the machine will not be overloaded?

Climbing out of any platform at height is prohibited.

SCAFFOLDING

Scaffolds can be used on most sites to provide a good working platform at any height. Make sure all scaffolding is suitable and safe to use.

- Is it erected on a firm foundation?
- Are all guardrails in position and at the correct height?
- Are there enough planks to form the work platform and are they secured in position?
- How far is it from the closest plank to the workface, and also to the outer edge of the scaffold?
- What access is provided between platforms?
- Is a safety belt or harness needed?
- Are all scaffold ties in place?

Ensure that a certified scaffolder is in direct charge of erection, modification or dismantling of any scaffold more than 5 metres above the ground (and a register kept for general inspection).

Fatal Accident

A 46-year-old construction worker was removing roof dwangs prior to roof purlins being lowered during salvage. The roof netting had been removed to assist the job. He fell 5.5 metres from the roof to the concrete floor and died from his injuries.

FOR FURTHER INFORMATION

For more detailed information on safe work at heights, see the following publications:

- *Guidelines for the Prevention of Falls*, Occupational Safety & Health Service.
- *Working at Height Safety Guide*, Site Safe New Zealand.

You can also get information and advice from the following organisations:

Occupational Safety & Health Service (www.osh.dol.govt.nz)

OSH's strategy for the building and construction industry aims to improve risk management, change workplace culture, and bring about a behavioural change. Objectives include working in partnership with industry, introducing self-managed systems to decrease reliance on OSH inspections, and assisting the industry to implement best practice and to improve communication.

Site Safe New Zealand (www.sitesafe.org.nz)

Site Safe is an independent, non-profit organisation set up by the entire construction industry. Site Safe is governed by a board of directors made up of representatives from throughout all the major sectors of the construction industry, unions, and government — both ACC and OSH. Site Safe's sole aim is to reduce both the injury and fatality rates across all the construction industry sectors.

ACC (www.acc.co.nz)

ACC 's first priority is to prevent injuries and it has a range of injury prevention programmes to achieve this. For the construction industry, it has assessment tools including checklists and fact sheets to help you manage injury risk.

SAFE WORK AT HEIGHTS

WHAT THE LAW REQUIRES

When you risk a fall in excess of 3 metres, regulations require fall prevention measures to be put in place. Where a fall from any height could result in harm, an effective means of fall prevention needs to be put in place.

As an employer, you must have an effective method for identifying and managing hazards. Remember to document your process — simply write it down. Subcontractors also have a duty to document hazards and the means of controlling them. You are also required to have emergency procedures in place should an accident occur or anything go wrong on site.

As an employee, you are required to take all practicable steps to ensure the safety of yourself and others, as well as not knowingly exposing yourself or others to harm.

HAZARD MANAGEMENT

There are three levels of hazard management prescribed within the HSE Act.

1.**Elimination** or how can I remove the hazard altogether? For example, do as much work on the ground. This should always be your first option.

2. Isolation or how can I separate the hazard from myself and any other worker? For example, install guardrails. If there is no way that you can eliminate a fall hazard, then you have to isolate it.

3. Minimisation or what can I do to minimise the impact should an accident occur? For example use safety harnesses. Only when the first two methods of managing a height hazard are impossible should you minimise it.

Following are just five common systems used when working at height.

LADDERS

Do's:

- Use the ladder at a safe angle – 'four up, one out'.
- Allow at least a 1 metre extension above the step off point (unless some other form of hand hold is provided).
- Set the ladder up on a firm, even surface (unless a secure method is used to ensure an even distribution of weight between the stiles).
- Secure the ladder against sliding at the top and bottom while in use (get someone to hold the ladder until another can secure the top).
- Make sure you have removed any loose tools or other items from the steps or rungs before you move the ladder.
- Consider the need to place cones or barricading where the ladder encroaches onto a passage or roadway.

Don'ts:

- Don't use the rung or step of a ladder to support a plank on which a person has to work.
- Don't use a ladder horizontally as a work platform.
- Don't carry a load that will prevent both hands from being able to hold or grab the rungs.
- Don't over-reach – your waist should remain within the stiles of the ladder at all times.

Remember: ladders and steps are designed for the use of one person only at any one time.

HANDRAILS, GUARDRAILS AND TOEBOARDS

Remember, handrails are to assist balance, guardrails are to prevent falls.

Have you:

- Made sure the top rail for both types of rail is between 0.9 and 1.1 metres above the floor or front of the stair nosing?
- Ensured a midrail has been fitted for guardrails?
- Fitted a toeboard of sufficient height anywhere there is a danger of tools or materials being lost over the edge?

FALL ARREST DEVICES

Use of belts, harnesses, fall arrest devices and the related rigging of static lines, anchorage lines and restraints is a skilled and specialised area, and should be relied on only as a last resort for fall prevention.

Only use these systems if you have been fully trained and there are emergency procedures in place which enable a rescue within a few minutes.

Where a fall has been arrested (the worker is held having fallen), faintness and serious blood circulation problems can occur which can lead to brain damage or death in under 10 minutes.

Fatal Accident

A construction worker was using a scaffold to seal the wall and roof panel joints in a newly constructed dust-resistant office. Following completion of the office jointing, the worker went on to a ceiling and subsequently fell more than three metres on to a concrete floor, suffering a fatal head injury. The ceiling work was undertaken without adequate means to support the worker on the joists.

Fatal Accident

A 73-year-old semi-retired builder was working with another man fixing flashings on a roof. The victim went on to the roof to help his colleague. The victim climbed up to the roof but was told to go down because it was too windy. He fell from the ladder while descending and died as a result of injuries. The ladder was not securely footed or tiled off at the top, which allowed it to slide sideways, causing the victim to lose balance and fall.