

Roof restoration and maintenance: Working at heights (factsheet)

People restoring or maintaining roofs work at heights for both short and long periods of time. When anyone works at height, they could be seriously injured or killed unless they use the right height hazard controls.

Doing nothing is not an option.

Introduction

Roof restoration and maintenance tasks include:

- roof repairs, including replacing corroded sheeting, broken tiles, re-bedding, pointing and other minor repairs
- surface preparation
- preparing and applying roof re-coating systems
- applying moss, lichen or roof cleaning products
- cleaning roof surfaces with hoses or water blasting
- tile replacement
- inspecting a roof for leaks
- repairing roof leaks
- removing debris from a roof or gutter
- repairing, replacing or reinstating loose or damaged roofing elements
- cleaning chimneys and flues
- installing aerials or SKY dishes.

The hazard control hierarchy

Always use the hierarchy of significant hazard controls when deciding which roof access and safety controls to use: eliminate, isolate, minimise.

Some examples are:

- eliminate by working from the ground
- isolate by using scaffolding or edge protection
- minimise by using a total restraint system.

Elimination and isolation controls must take priority. Do not use minimisation controls without taking all practicable steps to eliminate or isolate the hazards first.

See the 'Selecting the Right Equipment for Working on Roofs' section of the Best Practice Guidelines for Working on Roofs for more information.

Are controls on a single-level dwelling necessary?

Yes. People working on single-storey dwellings need the same level of protection as people working on two-storey dwellings. Roof restorers and maintainers must use the same process to establish appropriate safety controls.

Initial roof access

First, take all practicable steps to eliminate the need to access the roof by carrying out all, or as much of, the job from the ground. For example, workers can measure the building perimeter and add soffit overhangs from the ground.

Most roofs do not have a permanent, safe access, so roof renovators will have to provide their own. Examples of safe temporary access are scaffolding or mobile elevating work platforms (MEWPs).

If these options are not practicable for the job, ladder access is acceptable, as long as workers use a well-secured (top and bottom) industrial-grade ladder, pitched at 75 degrees (4:1). The ladder should extend one metre above the stepping-off point.

Before climbing onto any roof, assess the roof for structural soundness and brittleness.

Examples of brittle roofing are:

- fibrolite sheets (usually containing asbestos)
- clear roofing
- some old masonry tiles
- glass (such as skylights)
- severely corroded metal roofing.

Do not access brittle roofs, they are not sound surfaces. See the 'Brittle Roofing' section of the Best Practice Guidelines for Working on Roofs for more information.

Short-duration work

Even when carrying out short-duration work, roof restorers must put appropriate hazard controls in place.

Examples of short-duration roof renovation and maintenance work (that lasts minutes instead of hours) include inspections and applying moss and mould removal products.

When planning short-duration work at height, think about:

- how long the work will take
- how complex the work is expected to be
- the roof pitch
- the roof's condition
- the material the roof is made from
- weather conditions
- any risks to workers while edge protection is being erected
- any risks to other workers and the public.

When doing short-duration work, personal control measures like work positioning systems (fall restraint), industrial rope access or fall arrest systems are acceptable. However, these systems require significant training, planning and specialised equipment.

New Zealand Qualification Authority (NZQA) unit standard 15757^[1] equivalent or higher should be the minimum training requirement for fall arrest training.

Long-duration work

Examples of long-duration roof restoration and maintenance work include: roof repair, cleaning and recoating.

If the restoration process needs several re-visits over an extended period, think about using isolation controls. The process of water blasting alone may justify short-duration work and hazard controls, but if work continues for resealing, painting or repair over some days, this is long-duration work.

When planning for scaffolding or edge protection, build in these factors:

- safe access
- roof pitch
- roof height.

Qualified scaffolders must erect scaffolding if any part is five metres or more above the ground.

Scaffolds on buildings with roof pitches over 25 degrees should be a maximum of 200mm from the roof edge.

To minimise the risk of serious injury from falling from the edge of the roof onto a scaffold platform, locate the platform as near to the gutter line as possible and no more than one metre below the lower edge of the roof surface.

See the Best Practice Guidelines for Working on Roofs for more information.

Mobile elevating work platforms (MEWPs)

MEWPs are useful for roof work because they can be used to complete all roofing tasks. If using MEWPs to access the roof, but workers have to leave the MEWP and access the roof directly, scaffolding or edge protection is still necessary.

See the Best Practice Guide for Mobile Elevating Work Platforms for more information.

Remember to notify hazardous works to WorkSafe New Zealand

WorkSafe needs to know about construction work where someone could fall five metres or more. Complete the Notification of Particular Hazardous Work form at least 24 hours before work begins.

Note: you don't need to notify work on residential buildings up to and including two full storeys, but you must notify WorkSafe about the scaffolding if someone could fall five metres or more.

Further information

The following publications are available from www.worksafe.govt.nz:

Best Practice Guidelines for Working on Roofs. Ministry of Business, Innovation and Employment, 2012.

Best Practice Guidelines for Working at Height in New Zealand. Ministry of Business, Innovation and Employment, 2012.

Be Safe Working on Roofs. Department of Labour, 2011.

Edge Protection. Department of Labour, 2011.

Planning a Safe Approach to Working at Height. Department of Labour, 2012.

Roof Inspection and Measurement. Ministry of Business, Innovation and Employment, 2013.

Best Practice Guide for Mobile Elevating Work Platforms. WorkSafe New Zealand, 2014.

Footnote

[1] Unit standard 15757: Use, install and disestablish proprietary fall arrest systems when working at height. For further information, visit the [NZQA website](http://www.nzqa.govt.nz).