

EDGE PROTECTION

WHAT IS EDGE PROTECTION?

Edge protection helps prevent people, tools, and materials from falling:

- > around the perimeters of a work area
- > around openings
- > where brittle material cannot safely support the weight of a person.

Edge protection comes in different forms:

- > **A proprietary system** is a system bought “off the shelf”.
- > **Guardrailing and/or physical barrier** constructed from materials or components that form a guardrail and/or physical barrier.
- > **Scaffolding** in the form of a temporary edge protection system for working at height.

Where the hazard of working at height cannot be eliminated, edge protection should be used to isolate workers from a fall.

When is edge protection required?

Edge protection is the preferred control for preventing falls from roofs on single-storey buildings because it isolates multiple workers from the risk of a fall.

If this is not practicable then the use of scaffolding (more detail below), mobile elevating work platforms or temporary work platforms are more acceptable alternatives.

Provide edge protection on all the exposed edges of a roof, including the perimeter of buildings, skylights or other fragile roof materials, and any openings in the roof. This also applies to openings and edges of floor areas.

Working at height means working in a place where a person could be injured if they fell from one level to another. Rather than thinking about how high the fall will be, consider how someone could fall and what they might land on.

PLANNING THE WORK

Plan for when you will need edge protection, how it will be installed, and how to manage risks to safety during installation. Sourcing and erecting edge protection may take time, and the configuration will depend on a number of factors, such as how many workers will be in the work area at any one time, and the pitch of the roof.

INSTALLING EDGE PROTECTION

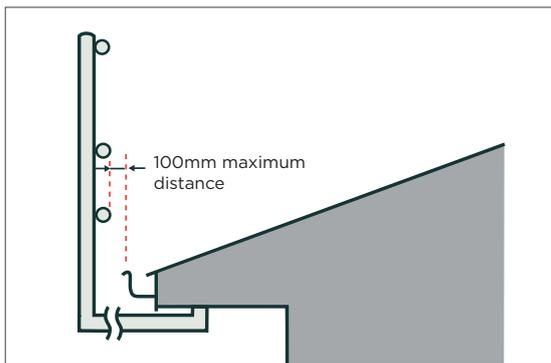
Install edge protection as early as possible on a job so multiple groups of contractors, sub-contractors and workers can use it throughout the project (eg builders, electrical workers, and roofers).

Construction and installation must take into account the forces that are likely to be applied to the edge protection as a result of the work undertaken. **Do not install it from the roof.**

Inspect edge protection regularly, especially after a storm or other occurrence that could affect its ability to prevent falls from height.

Proprietary system

- > Installed by a competent person with suitable training in safe work methods.
- > Must be installed according to the manufacturer's instructions and specifications.
- > Pitch less than 25 degrees: must be rated.
- > Pitch greater than 25 degrees: must be rated and have infill panels to prevent tools and equipment falling from the roof.



Guardrails

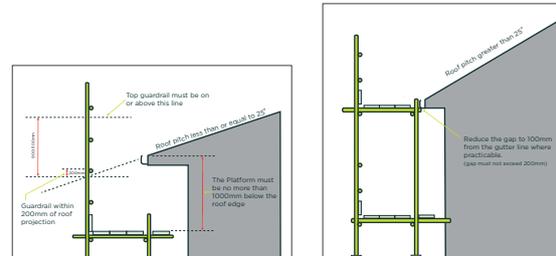
- > Must be Installed by a competent person.

Scaffolding

- > Installed by a certified scaffolder or competent person depending on height of the scaffold. See the *Good Practice Guidelines for Scaffolding*.

Note: Where a person may fall 5 m or more (ie the highest platform is 5 m or more above the ground), the work must be notified to WorkSafe.

Scaffolding as roof edge protection



Roof pitch less than or equal to 25 degrees

Roof pitch greater than 25 degrees

- > Install the mid rail and bottom rail at 450 mm intervals.
- > Install the top guardrail 900 - 1100 mm above where the roof line projection intersects the guardrailing.

OTHER SOURCES OF INFORMATION

- > Best Practice Guidelines for Scaffolding in New Zealand (SARNZ publication)
- > WorkSafe fact sheets:
 - Short duration work at height
 - Be safe working on roofs
- > AS/NZS 4994 Temporary roof edge protection for housing and residential buildings
- > AS/NZS 4994.2 Temporary roof edge protection - Installation and dismantling

PUBLISHED: SEPTEMBER 2015. CURRENT UNTIL REVIEW IN 2017

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