

AS/NZS 4994.2:2023



Australian/New Zealand Standard™

Temporary edge protection

Part 2: Roof edge protection — Installation and dismantling



AS/NZS 4994.2:2023

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- Australasian Wire Industry Association
- Australian Chamber of Commerce and Industry
- Australian Council of Trade Unions (ACTU)
- Australian Industry Group
- Australian Institute of Building Surveyors
- Australian Roofing Tile Association
- Better Regulation Division (Fair Trading, Safework NSW, Testsafe)
- Edge Protection New Zealand
- Hire and Rental Industry Association of Australia
- Housing Industry Association
- Master Builders Australia
- Master Plumbers Australia and New Zealand
- National Edge Protection and Platform Association
- Site Safe New Zealand
- Victorian WorkCover Authority (WorkSafe Victoria)

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Preface

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee BD-092, Temporary Edge Protection — Construction Practices, to supersede AS/NZS 4994.2:2009.

The objective of this document is to specify requirements and give guidance for the selection, installation, use and dismantling of roof edge protection conforming to AS/NZS 4994.1. It covers temporary roof edge protection for persons working on roofs of buildings having roof slopes of not greater than 35° to the horizontal.

A list of all parts in the AS/NZS 4994 series can be found in the Standards Australia online catalogue.

The major changes in this edition are as follows:

- (a) The document scope was revised to align with parts 1 and 3 of this series.
- (b) Text was revised in few clauses to ensure clarity.

The terms “normative” and “informative” are used in Standards to define the application of the appendices to which they apply. A “normative” appendix is an integral part of a document, whereas an “informative” appendix is only for information and guidance.

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Australian/New Zealand Standard

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1 Scope and general

1.1 Scope

This document specifies requirements and gives guidance for the selection, installation, use and dismantling of roof edge protection conforming to AS/NZS 4994.1. It covers temporary roof edge protection for persons working on roofs of buildings having roof slopes of not greater than 35° to the horizontal.

Edge protection is used on buildings that are being constructed, renovated, extended, altered or maintained.

The requirements of this document apply to scaffolding required to act as edge protection.

NOTE 1 This document is not a substitute for any Standard applying to scaffolding.

This document does not apply to the containment of objects falling from the edges of roofs, during construction, alteration or while being inspected.

Specific statutory requirements may apply regarding work health and safety (WHS) legislation, scaffolding and working at heights.

NOTE 2 In Australia, housing and residential buildings are considered to be of not more than three habitable storeys, based on Classes 1, 2 and 10 of the National Construction Code (NCC).

NOTE 3 In New Zealand, such buildings within the definition of a housing unit are as per the New Zealand Building Code (NZBC).

NOTE 4 Users are reminded to check if the relevant legislation contains a requirement to also control the risks associated with falling objects.

1.2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document.

NOTE Documents referenced for informative purposes are listed in the Bibliography.

AS/NZS 1892 (all parts), *Portable ladders*

1.3 Terms and definitions

For the purposes of this document, the terms and definitions given in AS/NZS 4994.1 and the following apply.

1.3.1

competent person

person who has acquired through education, training, qualification or experience or a combination of these, the knowledge and skills enabling that person to perform the task required

Note 1 to entry: The relevant skills may include WHS knowledge and skills.

1.3.2**fall arrest system**

assembly of interconnected components comprising a harness connected to an anchorage point or anchorage system, either directly or by means of a lanyard, lanyard assembly or pole strap, and whose purpose is to arrest a fall in accordance with the principles and requirements of AS/NZS 1891.4

1.3.3**install**

erection, altering and dismantling of temporary roof edge protection

1.3.4**installer**

person or organization directly responsible for installing, erecting, altering or dismantling roof edge protection

1.3.5**may**

indicates the existence of an option

1.3.6**sarking membrane****water barrier**

material intended to collect and discharge any water that might penetrate a building, and which may have some water absorbency properties for some applications

1.3.7**shall**

indicates that a statement is mandatory

1.3.8**should**

indicates a recommendation

1.3.9**total restraint**

control of a person's movement by means of a connection to an anchorage in such a way that will physically prevent the person from reaching any position at which there is risk of a fall, either over an edge or through a surface

2 Planning

2.1 General

Before determining the type of roof edge protection for an installation, an assessment shall be undertaken by a competent person. The requirements in this section shall be taken into account for the assessment.

2.2 Selection of system

The building structure shall be assessed to determine an appropriate type of roof edge protection system.

The type of roof edge protection system shall be selected to ensure that its installation and the intended work on a roof can be carried out safely.

When determining the appropriate type of roof edge protection system to be used, the following matters shall be taken into account:

- (a) Roof access points.

- (b) Roof edge height.
- (c) Roof cladding material, profile, method of fixing and condition.
- (d) Interference with under-roof material (e.g. mesh, sarking membranes, close boarding).
- (e) Rafter/truss length and pitch.
- (f) Rafter/truss spacing, type and size.
- (g) Dimensional compatibility of fixings to structural members.
- (h) Location of double rafters and attachment.
- (i) Building structure material and condition (e.g. timber, steel, precast, tilt-up, masonry).
- (j) Structural strength and deflection of the building and roof frame that is to support loads imposed by the roof edge protection.
- (k) Width, type and construction sequence of eaves.
- (l) If the roof edge protection is to be used to prevent objects falling.
- (m) Batten type and position.
- (n) Gutter and fascia profile.
- (o) Suitability at gable ends and appropriate alternatives.
- (p) Proximity to powerlines.
- (q) Any other relevant information.

C2.2 *This list of factors will assist in selecting an appropriate style of roof edge protection. However, its use requires an understanding of the styles of roof edge protection and their individual traits. For example, one issue that may not be obvious is the relationship between the roofing materials, sarking (roof underlay) or close timbering under the tiles, the roof edge protection and the sequencing of construction activity on and around the roof. A style of roof edge protection that connects to the roof rafters from above allows for early wall cladding and eaves lining, but results in localized damage to the sarking and may prevent some of the tiles from being secured in accordance with AS 2050, NZS 4206 or NZS 4217. While the finished roof may look complete, it is virtually impossible to repair damaged sarking and complete the roof cladding installation.*

2.3 Site conditions

Provision shall be made for the delivery, unloading, storage and installation of roof edge protection.

3 Installation, alteration and dismantling

3.1 General

A procedure shall be established for unloading and installing, in order to ensure that the roof edge protection equipment can be stored on site, without damage or risk of injury to persons, and delivered to the roof in a systematic manner.

Where it is necessary to work on an existing roof cladding to install roof edge protection, protective measures shall be developed based on a risk assessment.

NOTE 1 The supplier's instructions should be consulted.