AS/NZS 4024.2201:2024

Australian/New Zealand Standard™

Safety of machinery — Permanent means of access to machinery

Part 2201: Choice of fixed means and general requirements of access (ISO 14122-1:2016, MOD)



AS/NZS 4024.2201:2024

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Preface

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee SF-041, Safety of Machinery.

The objective of this document is to provide general requirements for access to stationary machines and guidance about the correct choice of means of access when necessary, access to the stationary machine is not possible directly from the ground level or from a floor.

This document is an adoption with national modifications, and has been reproduced from, ISO 14122-1:2016, *Safety of Machinery — Permanent means of access to machinery — Part 1: Choice of fixed means and general requirements of access*. The modifications are set out in national variations boxes which give instructions where the text is to be modified for use in Australia and New Zealand.

As this document has been reproduced from an International document the following apply:

(a) In the source text "this part of ISO 14122" should read "this document".

(b) A full point substitutes for a comma when referring to a decimal marker.

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

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 199, *Safety of machinery*.

This second edition cancels and replaces the first edition (ISO 14122-1:2001), which has been technically revised. It also incorporates the Amendment ISO 14122-1:2001/Amd 1:2010. See Annex B.

ISO 14122 consists of the following parts, under the general title *Safety of machinery — Permanent means of access to machines*:

— *Part 1: Choice of fixed means and general requirements of access*

— *Part 2: Working platforms and walkways*

— *Part 3: Stairs, stepladders and guard-rails*

— *Part 4: Fixed ladders*

An additional part, dealing with mobile machinery, is under preparation.

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Introduction

This International Standard is a type-B standard as stated in ISO 12100.

This International Standard is of relevance, in particular, for the following stakeholder groups representing the market players with regard to machinery safety:

— machine manufacturers (small, medium, and large enterprises);

— health and safety bodies (regulators, accident prevention organizations, market surveillance, etc.);

Others can be affected by the level of machinery safety achieved with the means of this International Standard by the above-mentioned stakeholder groups:

— machine users/employers (small, medium, and large enterprises);

— machine users/employees (e.g. trade unions, organizations for people with special needs);

— service providers, e.g. for maintenance (small, medium, and large enterprises);

— consumers (in case of machinery intended for use by consumers).

The above mentioned stakeholder groups have been given the possibility to participate at the drafting process of this International Standard.

In addition, this International Standard is intended for standardization bodies elaborating type-C standards.

The requirements of this International Standard can be supplemented or modified by a type-C standard.

For machines which are covered by the scope of a type-C standard, and which have been designed and built according to the requirements of that standard, the requirements of that type-C standard take precedence.

The purpose of this International Standard is to define the general requirements for safe access to machines. This part of ISO 14122 gives guidance about the correct choice of access means when the necessary access to the machine is not possible directly from the ground level or from a floor or platform.

Annex A is informative and contains “Examples of the possible changes in the machine or system to make a better access possible”.

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NOTES

Australian/New Zealand Standard

Safety of machinery — Permanent means of access to machinery

Part 2201: Choice of fixed means and general requirements of access (ISO 14122-1:2016, MOD)

1 Scope

NATIONAL VARIATIONS

Delete the following clause text and *replace* with the following:

This part of AS/NZS 4024.2200 provides general requirements for access to stationary machines and guidance about the correct means of access when necessary access to the stationary machine is not possible directly from the ground level or from a floor.

It is applicable to permanent means of access which are a part of a stationary machine, and also to non-powered adjustable parts (e.g. foldable, sliding) and movable parts of fixed means of access.

It does not apply to movable platforms that are permanently configured but that may be site adjustable or site assembled/modified.

NOTE 1 "Fixed" means of access are those mounted in such a manner (for example, by screws, nuts, welding) that they can only be removed by the use of tools.

Means of access to stationary machines which form part of construction works and are integral with a building, civil or other structure (for example, where the building or structure has been specifically designed to accommodate the stationary machinery, such as plant rooms) are outside the scope of this part of AS/NZS 4024.2200.

The access to machinery parts of the AS/NZS 4024.2200 series are not applicable to powered means of access such as lifts, escalators, or other devices specially designed to lift persons between two or more levels.

NOTE 2 Where no local regulation or Standard exists, the principles contained within this part of AS/NZS 4024.2200 can provide guidance for means of access for many applications in the broader workplace.

NOTE 3 The principles contained within this part of AS/NZS 4024.2200 can be used as a guide for means of permanent access to mobile machinery in the absence of an access-specific part of AS/NZS 4024.2200 or any other relevant Standard.

It is intended that this part of AS/NZS 4024.2200 be used with a relevant access-specific part of AS/NZS 4024.2200.

For the significant hazards covered by this part of AS/NZS 4024.2201, see Clause 4.

This part of ISO 14122 gives general requirements for access to stationary machines and guidance about the correct choice of means of access when necessary access to the stationary machine is not possible directly from the ground level or from a floor.

It is applicable to permanent means of access which are a part of a stationary machine, and also to non-powered adjustable parts (e.g. foldable, slidable) and movable parts of fixed means of access.

NOTE 1 "Fixed" means of access are those mounted in such a manner (for example, by screws, nuts, welding) that they can only be removed by the use of tools.

This part of ISO 14122 specifies minimum requirements that also apply when the same means of access is required as the part of the building or civil construction (e.g. working platforms, walkways, ladders)

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where the machine is installed, on condition that the main function of that part of the construction is to provide a means of access to the machine.

NOTE 2 Where no local regulation or standards exist, this part of ISO 14122 can be used for means of access which are outside the scope of the standard.

It is intended that this part of ISO 14122 be used with a relevant access-specific part of ISO 14122.

The ISO 14122 series as a whole is applicable to both stationary and mobile machinery where fixed means of access are necessary. It is not applicable to powered means of access such as lifts, escalators, or other devices specially designed to lift persons between two levels.

This part of ISO 14122 is not applicable to machinery manufactured before the date of its publication.

For the significant hazards covered by this part of ISO 14122, see Clause 4.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NATIONAL VARIATIONS

1. After the preceding paragraph, *add* the following:

The Australian/New Zealand Standards listed below are modified adoptions of, or not equivalent to, the ISO normative references and are required for the application of this document. All references in the source text to those ISO normative references shall be replaced by references to the corresponding Australian/New Zealand Standards.

Australian or Australian/New Zealand Standards that are identical adoptions of international normative references may be used interchangeably.

2. Delete "ISO 14122 3:2016, *Safety of machinery — Permanents means of access to machines — Part 3: Stairs, stepladders and guard-rails*" and replace with the following:

AS/NZS 4024.2203, *Safety of machinery — Permanent means of access to machinery, Part 3: Stairs, stepladders and guard-rails (ISO 14122 3:2016, MOD)*

Delete "ISO 14122 4:2016, *Safety of machinery — Permanent means of access to machine — Part 4: Fixed ladders*" and replace with the following:

AS/NZS 4024.2204, *Safety of machinery — Permanent means of access to machinery, Part 4: Fixed ladders (ISO 14122 4:2016, MOD)*

ISO 12100, *Safety of machinery — General principles for design — Risk assessment and risk reduction*

ISO 14122-3:2016, *Safety of machinery — Permanent means of access to machinery — Part 3: Stairs, stepladders and guard-rails*

ISO 14122-4:2016, *Safety of machinery — Permanent means of access to machinery — Part 4: Fixed ladders*

3 Terms and definitions

NATIONAL VARIATIONS

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(continued)

1. In Clause 3.2 *delete* "45° up to 75°" and *replace* with the following:

60° up to 75°

2. In Clause 3.2 Note 1 to entry, after first sentence, add the following:

Angles between 45° up to 60° are considered an unsafe zone and a stepladder is not permitted within this unsafe zone.

For the purposes of this document, the terms and definitions given in ISO 12100 and the following apply.

3.1
fixed ladder
fixed means of access with an angle of pitch from more than 75° up to 90°, whose horizontal elements are rungs

Note 1 to entry: See Figure 1.

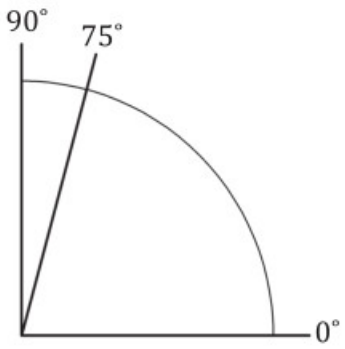

Figure 1 — 75° < angle of pitch ≤ 90° for a fixed ladder

3.2
stepladder
fixed means of access with an angle of pitch from more than 45° up to 75°, whose horizontal elements are steps

Note 1 to entry: See Figure 2.

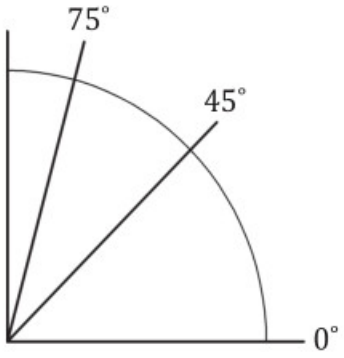

Figure 2 — 45° < angle of pitch ≤ 75° for a stepladder

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