
**Safety of machinery — Permanent means
of access to machinery —**

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

*Sécurité des machines — Moyens d'accès permanents aux machines —
Partie 3: Escaliers, échelles à marches et garde-corps*



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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this part of ISO 14122 may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 14122-3 was prepared by the European Committee for Standardization (CEN) in collaboration with ISO Technical Committee TC 199, *Safety of machinery*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

Throughout the text of this standard, read "...this European Standard..." to mean "...this International Standard...".

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

- *Part 1: Choice of fixed means of access between two levels*
- *Part 2: Working platforms and walkways*
- *Part 3: Stairs, stepladders and guard-rails*
- *Part 4: Fixed ladders*

For the purposes of this part of ISO 14122, the CEN annex regarding fulfillment of European Council Directives has been removed.

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Foreword

The text of EN ISO 14122-3:2001 has been prepared by Technical Committee CEN/TC 114 "Safety of machinery", the secretariat of which is held by DIN, in collaboration with Technical Committee ISO/TC 199 "Safety of machinery".

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by October 2001, and conflicting national standards shall be withdrawn at the latest by October 2001.

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

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Introduction

It is the third part of this document "Safety of machinery - Permanent means of access to machinery". The parts of the standard are:

Part 1: Choice of a fixed means of access between two levels

Part 2: Working platforms and walkways

Part 3: Stairs, step ladders and guard-rails

Part 4: Fixed ladders.

This document is a type B standard as stated in EN 1070.

This standard is to be read in conjunction with clause 1.6.2 "Access to operating position and servicing points" and 1.5.15 "Risk of slipping, tripping or falling" of the essential safety requirements expressed in annex A of EN 292-2:1991/A1:1995. See also 6.2.4 "Provision for safe access to machinery" of EN 292-2:1991.

The provisions of this document may be supplemented or modified by a type C standard.

NOTE 1 For machines which are covered by the scope of a type C standard and which have been designed and built according to the provisions of that standard, the provisions of that type C standard take precedence over the provisions of this type B standard.

The purpose of this standard is to define the general requirements for safe access to machines mentioned in EN 292-2. Part 1 of EN ISO 14122 gives advice 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.

The dimensions specified are consistent with established ergonomic data given in EN 547-3 "Safety of machinery - Human body dimensions – Part 3 : Anthropometric data".

NOTE 2 The use of materials other than metals (composite materials, so-called "advanced" materials, etc.) does not alter the application of the present standard.

This standard contains a Bibliography.

1 Scope

This standard applies to all machinery (stationary and mobile) where fixed means of access are necessary.

This standard applies to stairs, step ladders and guard-rails which are a part of a machine.

This standard may also apply to stairs, step ladders and guard-rails to that part of the building where the machine is installed, providing the main function of that part of the building is to provide a means of access to the machine.

NOTE This standard may be used also for means of access which are outside the scope of this standard. In those cases the possible relevant national or other regulations should be taken into account.

This standard applies also to stairs, step ladders and guard-rails specific to the machine which are not permanently fixed to the machine and which may be removed or moved to the side for some operations of the machine (e.g. changing tools in a large press).

For the significant hazards covered by this standard, see clause 4 of EN ISO 14122 -1.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of ISO 14122. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO 14122 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

EN 292—1 (ISO/TR 12100-1), *Safety of machinery — Basic concepts, general principles for design — Part 1 : Basic terminology, methodology*

EN 292-2:1991 + A1 (ISO/TR 12100-2), *Safety of machinery — Basic concepts, general principles for design — Part 2 : Technical principles and specifications*

EN 1070, *Safety of machinery — Terminology*

EN ISO 14122-1:2001, *Safety of machinery — Permanent means of access to machinery — Part 1 : Choice of fixed means of access between two levels*