



BSI Standards Publication

## Stationary training equipment

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Part 8: Steppers, stairclimbers and climbers — Additional specific safety requirements and test methods

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## National foreword

This British Standard is the UK implementation of EN ISO 20957-8:2017. It is identical to ISO 20957-8:2017. It supersedes BS EN 957-8:1998, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee SW/136/4, Sports, Playground and other Recreational Equipment - Stationary Training Equipment.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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English Version

## Stationary training equipment - Part 8: Steppers, stairclimbers and climbers - Additional specific safety requirements and test methods (ISO 20957-8:2017)

Équipement d'entraînement fixe - Partie 8: Monte-escaliers, escalators et simulateurs d'escalade - Exigences spécifiques de sécurité et méthodes d'essai supplémentaires (ISO 20957-8:2017)

Stationäre Trainingsgeräte - Teil 8: Stepper, Treppensteiggeräte und Climber - Zusätzliche besondere sicherheitstechnische Anforderungen und Prüfverfahren (ISO 20957-8:2017)

This European Standard was approved by CEN on 9 October 2017.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
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**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

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## European foreword

This document (EN ISO 20957-8:2017) has been prepared by Technical Committee ISO/TC 83 "Sports and other recreational facilities and equipment" in collaboration with Technical Committee CEN/TC 136 "Sports, playground and other recreational facilities and equipment" the secretariat of which is held by DIN.

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 June 2018, and conflicting national standards shall be withdrawn at the latest by June 2018.

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

This document supersedes EN 957-8:1998.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## Endorsement notice

The text of ISO 20957-8:2017 has been approved by CEN as EN ISO 20957-8:2017 without any modification.

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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](http://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](http://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 voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

ISO 20957-8 was prepared by the European Committee for Standardization (CEN) Technical Committee CEN/TC 136, *Sports, playground and other recreational facilities and equipment*, in collaboration with ISO Technical Committee TC 83, *Sports and other recreational facilities and equipment*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 20957-8:2005), which has been technically revised.

The main changes compared to the previous edition are as follows:

- the Scope has been simplified;
- the formulation has been aligned to ISO 20957-1;
- [Clause 5](#) has been specified and restructured;
- [Clause 6](#) has been specified and restructured.

A list of all parts in the ISO 20957 series can be found on the ISO website.

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# Stationary training equipment —

## Part 8:

# Steppers, stairclimbers and climbers — Additional specific safety requirements and test methods

## 1 Scope

This document specifies safety requirements for stepper, stairclimber and climber machines (hereafter called training equipment) performed from either a standing or sitting position. The requirements are in addition to the general safety requirements of ISO 20957-1, with which this document is intended to be read in conjunction.

This document is applicable to stationary training equipment type stepper, stairclimber and climber training equipment, within classes S and H. Additional requirements are provided for accuracy class A.

## 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. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 4649:2010, *Rubber, vulcanized or thermoplastic — Determination of abrasion resistance using a rotating cylindrical drum device*

ISO 20957-1, *Stationary training equipment — Part 1: General safety requirements and test methods*

EN 71-1, *Safety of toys — Part 1: Mechanical and physical properties*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 20957-1 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

### 3.1

#### **stepper**

stationary training equipment where the feet move in a reciprocating motion where the foot is not required to leave the foot pedal

Note 1 to entry: See [Figure 1 a](#)).

### 3.2

#### **ministepper**

*stepper* (3.1) with a hinge point height to the floor <200 mm

Note 1 to entry: See [Figure 1 b](#)).