
**Stationary training equipment —
Part 8:
Steppers, stairclimbers and climbers
— Additional specific safety
requirements and test methods**

Équipement d'entraînement fixe —

Partie 8: Monte-escaliers, escalators et simulateurs d'escalade —

Exigences spécifiques de sécurité et méthodes d'essai supplémentaires

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Contents

Page

Foreword	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Classification	6
5 Safety requirements	6
5.1 General	6
5.2 External construction	6
5.2.1 Additional requirements for squeeze and shear points within the accessible area	6
5.2.2 Temperature of accessible surfaces	6
5.3 Intrinsic loading	6
5.4 Handrails/handlebars	6
5.5 Footplatforms and stairs	7
5.5.1 Footplatforms	7
5.5.2 Stairs	7
5.6 Endurance	7
5.7 Freewheel	7
5.8 Additional requirement for class A	7
5.9 Additional requirements for stairclimbers	8
5.9.1 Stepping on and stepping off	8
5.9.2 Manual stopping system	8
5.9.3 Automatic stopping system to reduce the risk of entrapment	8
5.10 Additional requirements for seated steppers	8
5.10.1 Movable handlebars	8
5.10.2 Non-movable handlebars	8
5.10.3 Seat handlebars	9
5.10.4 Seat backrest	9
5.11 Additional instructions for use	9
6 Test methods	9
6.1 General	9
6.1.1 Dimensional check	9
6.1.2 Visual examination	9
6.1.3 Tactile examination	9
6.1.4 Performance test	9
6.2 Testing of temperature of accessible surfaces	9
6.3 Testing of intrinsic loading	10
6.3.1 General	10
6.3.2 Stepper or climber with independent action	10
6.3.3 Stepper or climber with dependent action	10
6.3.4 Stairclimber	10
6.4 Testing of handrails/handlebars	11
6.5 Testing of friction	11
6.6 Endurance testing	12
6.6.1 General	12
6.6.2 Endurance testing for stairclimbers	12
6.6.3 Endurance testing for steppers	12
6.7 Testing of the additional requirements for class A	12
6.8 Testing of stepping on and stepping off	13
6.9 Testing of stopping system and clearance between moving stairs and floor or structure	13
6.10 Testing for additional requirements for seated steppers	14
6.10.1 Movable handlebars	14

6.10.2	Non-movable handlebars	14
6.10.3	Seat handlebars	14
6.10.4	Seat backrest	14
7	Test report	15
	Bibliography	16

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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 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.

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.

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

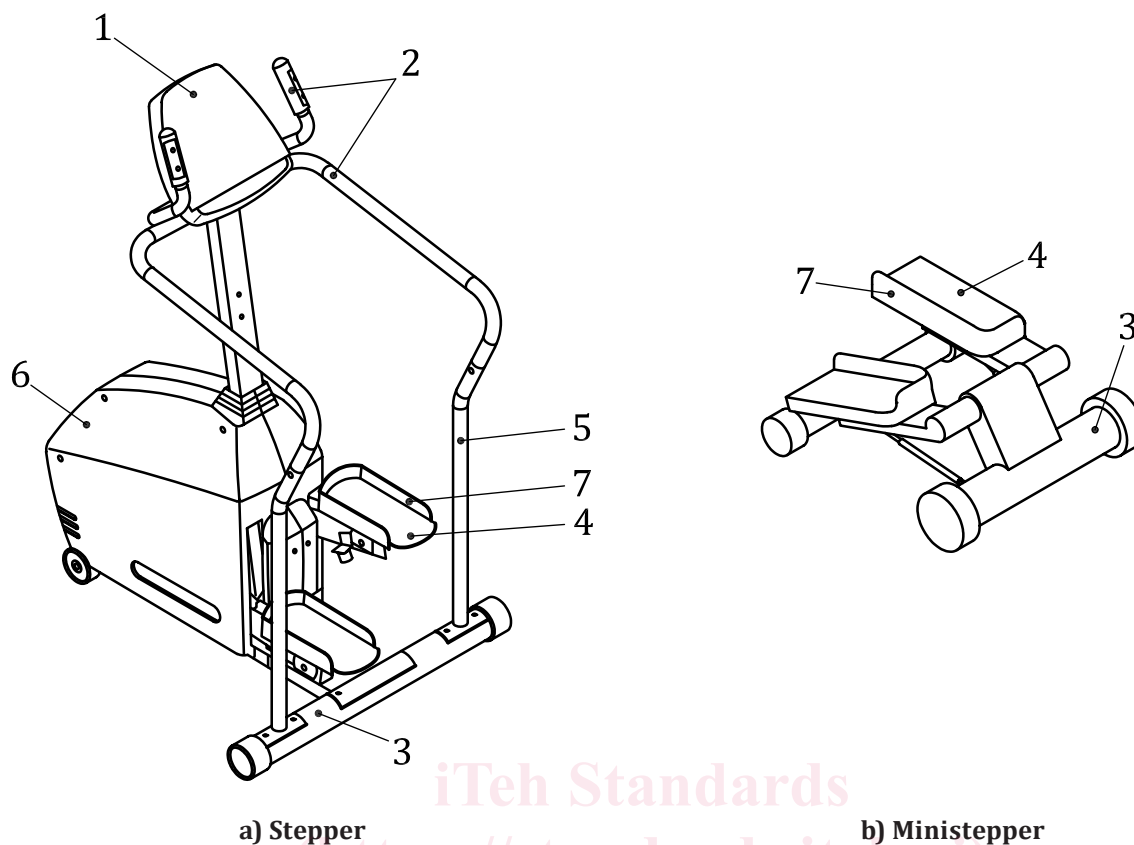
Note 1 to entry: See [Figure 1 a](#)).

3.2

ministepper

stepper ([3.1](#)) with a hinge point height to the floor <200 mm

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



Key

- 1 display
- 2 hand grip
- 3 base frame
- 4 footplatform
- 5 handrail/handlebar
- 6 housing
- 7 footplatform guard

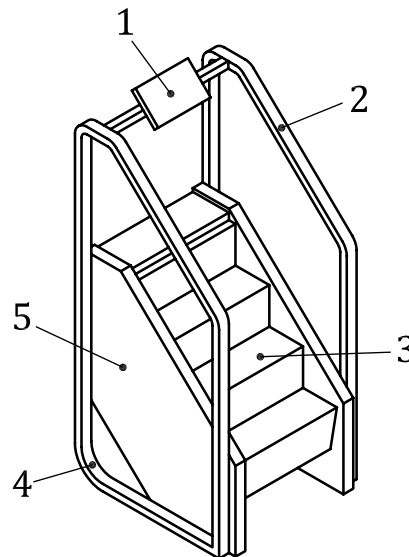
Figure 1 — Examples of steppers

3.3

stairclimber

stationary training equipment similar to a moving mechanical staircase or escalator where the user's foot must leave the staircase in order to perform the action of climbing

Note 1 to entry: See [Figure 2](#).



Key

- 1 display
- 2 handrail
- 3 stair
- 4 base frame
- 5 housing

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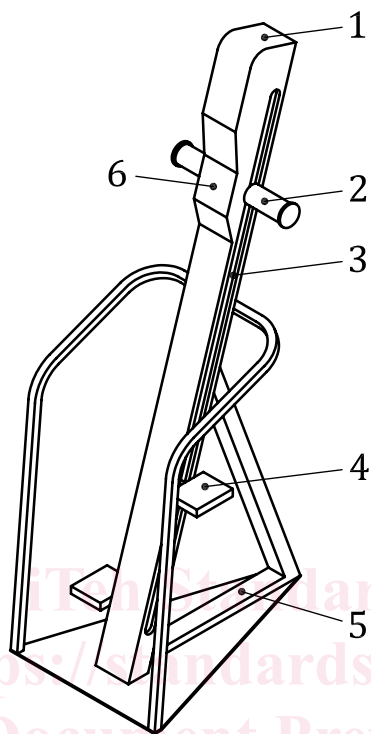
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<https://standards.itih.ai/catalog/standards/sr/1cb2edd/iso-20957-8-2017> Figure 2 — Example of a stairclimber

3.4 climber

stationary training equipment that is equipped with feet and hand positions both of which can be moved in a reciprocating simulated climbing motion

Note 1 to entry: See [Figure 3](#).



Key

- 1 display
- 2 movable handgrip
- 3 track rail
- 4 foot pedal
- 5 base frame
- 6 resistance adjustment

Figure 3 — Example of a climber