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Permanently installed outdoor fitness equipment - Safety requirements and test methods



EESTI STANDARDI EESSÕNA

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EUROPEAN STANDARD NORME EUROPÉENNE

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English Version

Permanently installed outdoor fitness equipment - Safety requirements and test methods

Modules fixes d'entraînement physique de plein air -Exigences de sécurité et méthodes d'essai Standortgebundene Fitnessgeräte im Außenbereich -Sicherheitstechnische Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 14 February 2015.

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Cont	ents Pa	ıge
Forewo	ord	3
Introdu	ıction	4
4	Scope	
ı	• • • • • • • • • • • • • • • • • • • •	
2	Normative references	5
3	Terms and definitions	5
4	Safety requirements	8
4.1	General	8
4.2	Materials	
4.2.1	General	
4.2.2	Flammability	
4.2.3	Timber and associated products	
4.2.4	Metals	
4.2.5	Rubbers and synthetics	
4.2.6	Dangerous substances	
4.3	Design and manufactureGeneral	
4.3.1 4.3.2	Structural integrity	
4.3.2 4.3.3	Surface finish of accessible parts of equipment	
4.3.4	Tread surface	
4.3.5	Moving parts	
4.3.6	Entrapment	
4.3.7	Weights and resistance	
4.3.8	Adjustment and locking mechanisms	
4.3.9	Access/Egress	15
4.3.10	Connections	
4.3.11	Consumable components	
4.3.12	Grasp and grip	
4.3.13	Ropes, belts, chains	
4.3.14	The state of the s	
4.3.15	Foundations	
5	Test methods	23
5.1	General	
5.2	Test methods for entrapment	23
5.2.1	General	
5.2.2	Test method for head and neck entrapment	
5.2.3	Test method for finger entrapment	
6	Test report	
7	Information for use	32
7.1	Facilities	_
7.2	Fitness equipment	32
В	Marking	
9	Information to be provided by the manufacturer	32
9.1	General	32
9.2	Assembly/set-up	
9.3	Use	
9.4	Inspection and maintenance	33
Diblios	ranhu	25

Foreword

This document (EN 16630:2015) has been prepared by 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of an identical text or by endorsement, at the latest by October 2015, and conflicting national standards shall be withdrawn at the latest by October 2015.

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Introduction

Outdoor fitness equipment is suitable for people who enjoy movement and want to actively engage themselves. The equipment should be designed to promote physical activity across a wide range of abilities. Such activities could include cardiovascular, strength, toning, balance, coordination and flexibility exercises.

When drafting this European Standard, the difficulties have been recognized to address safety issues by age criteria alone, because the ability to handle risks is based on the individual users' level of skill. Also, age groups other than the intended ones will almost certainly make use of the outdoor fitness equipment. Therefore, it was decided to recommend the use of the fitness equipment for youths and adults or users with an overall height greater than 1 400 mm and to specify safety requirements on this basis. This is necessary in order to produce a clear differentiation from playground equipment in accordance with the EN 1176 series. However, relevant requirements of this series have been taken into account wherever it was useful and possible.

The requirements in this European Standard assume that all users of the fitness equipment are aware of the limits of their physical capacity and are able to use the equipment unassisted. Provided that the equipment is used as intended, i.e. in accordance with the exercise instructions attached to each individual piece of equipment, it is assumed that single or multiple body parts are moved and are not incorrectly strained.

As long as there is human interaction with moving equipment there is a residual risk that cannot be further mitigated in order to maintain the function. However, a slightly incorrect execution is considered not to cause severe health consequences for the user. In the case of improper use, bruises, sprains and occasional bone fractures caused (e.g. by falls) might have to be accepted.

In correspondence with the available opportunities, it is advisable to offer introductory courses at regular intervals, in which trained experts explain the individual pieces of equipment, their handling and their possible effects on the body and mind.

The design of outdoor fitness equipment is subject to constant development. Therefore, the design of particular types of equipment might not be specified in this European Standard, however the general requirements of this European Standard apply to all equipment.

1 Scope

This European standard specifies general safety requirements for the manufacture, installation, inspection and maintenance of permanently installed, freely accessible outdoor fitness equipment. This standard does not cover electrically driven equipment, functional training facilities (typically with unrestrained weights) nor military style obstacle courses.

The equipment is intended for youths and adults or users having an overall height greater than 1 400 mm to promote fitness by using the equipment to exercise. Equipment covered by this standard is not playground equipment for children (EN 1176 series), indoor stationary training equipment (EN 957 series) or free access multi-sports equipment (EN 15312) even if it meets the requirements of each of these standards.

NOTE In this standard "permanently installed outdoor fitness equipment" is simply called "fitness equipment".

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.

EN 335-2:2006, Durability of wood and wood-based products — Definition of use classes — Part 2: Application to solid wood

EN 350-2:1994, Durability of wood and wood-based products — Natural durability of solid wood — Part 2: Guide to natural durability and treatability of selected wood species of importance in Europe

EN 351-1:2007, Durability of wood and wood-based products — Preservative-treated solid wood — Part 1: Classification of preservative penetration and retention

EN 636, Plywood — Specifications

EN 933-1, Tests for geometrical properties of aggregates — Part 1: Determination of particle size distribution - Sieving method

EN 1176-1:2008, Playground equipment and surfacing — Part 1: General safety requirements and test methods

EN 1177, Impact attenuating playground surfacing — Determination of critical fall height

ISO 1834, Short link chain for lifting purposes — General conditions of acceptance

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

user station

location of a piece of fitness equipment which the user can occupy while standing, sitting, lying or hanging

Note 1 to entry: See Figure 1.

3.2

area of movement

base area of movement space

Note 1 to entry: See Figure 1.