

AS 16630:2021



STANDARDS
Australia



Permanently installed outdoor fitness equipment — Safety requirements and test methods (EN 16630:2015, MOD)

This national standard is the adoption of EN 16630:2015 with national modifications as set out in the Appendix ZZ to take account of Australian conditions with the permission of the European Committee for Standardization — CEN, Rue de la Science 23, B — 1040 Brussels, Belgium.



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- Australian Chamber of Commerce and Industry
- Australian Competition and Consumer Commission
- Australian Industry Group
- Engineers Australia
- Institute of Public Works Engineering Australasia
- Kidsafe Australia
- Parks and Leisure Australia
- Play Australia
- Scouts Australia
- Sports and Recreation Victoria
- Sydney Children's Hospitals Network
- University of Technology Sydney

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Preface

This Standard was prepared by the Standards Australia Committee CS-101, Sports and Recreational Equipment.

The objective of this document is to specify general safety requirements for the manufacture, installation, inspection and maintenance of permanently installed, freely accessible outdoor fitness equipment.

This document does not cover electrically driven equipment, functional training facilities (typically with unrestrained weights) nor military style obstacle courses.

This document is an adoption with national modifications, and has been reproduced from, EN 16630:2015, *Permanently installed outdoor fitness equipment — Safety requirements and test methods*. The modifications are additional requirements and are set out in [Appendix ZZ](#), which has been added at the end of the source text.

[Appendix ZZ](#) lists the variations to EN 16630:2015 for the application of this Standard in Australia.

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

Australian or Australian/New Zealand Standards that are identical adoptions of international normative references may be used interchangeably. Refer to the online catalogue for information on specific Standards.

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

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.

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

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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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.