

DIN EN 16899



ICS 97.220.10

Supersedes  
DIN EN 16899:2017-03

**Sports and recreational equipment –  
Parkour equipment –  
Safety requirements and test methods;  
English version EN 16899:2016,  
English translation of DIN EN 16899:2018-07**

Sport- und Freizeitanlagen –  
Parkoureinrichtungen –  
Sicherheitstechnische Anforderungen und Prüfverfahren;  
Englische Fassung EN 16899:2016,  
Englische Übersetzung von DIN EN 16899:2018-07

Equipements de sports et de loisirs –  
Equipements de parkour –  
Exigences de sécurité et méthodes d'essai;  
Version anglaise EN 16899:2016,  
Traduction anglaise de DIN EN 16899:2018-07

Document comprises 50 pages

Translation by DIN-Sprachendienst.

In case of doubt, the German-language original shall be considered authoritative.

*A comma is used as the decimal marker.*

## Start of application

The start of application of this standard is 2017-03-01.

## National foreword

This standard includes safety requirements within the meaning of the *Produktsicherheitsgesetz (ProdSG)* (German Product Safety Act).

This document (EN 16899:2016) has been prepared by Technical Committee CEN/TC 136 “Sports, playground and other recreational facilities and equipment” (Secretariat: DIN, Germany), Working Group WG 1 “Parkour equipment”.

The responsible German body involved in its preparation was *DIN-Normenausschuss Sport- und Freizeitgerät* (DIN Standards Committee Sports Equipment), Working Group NA 112-07-02-02 AK “Parkour equipment”.

Where this standard has been identified by the *Ausschuss für Produktsicherheit* (German Committee for Product Safety) and reference to it has been published in the *Gemeinsames Ministerialblatt* (German Joint Ministerial Gazette) by the *Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (BAuA)* (German Federal Institute for Occupational Safety and Health), it is to be presumed that parkour equipment which complies with this standard fulfils the relevant health and safety requirements.

## Amendments

Compared with DIN EN 16899:2017-03, the following corrections have been made to the German version:

- a) in subclause E.3.2, paragraph 2, the last sentence “*Die Prüfung ist bestanden, wenn keines der beiden Enden hindurchpasst.*” has been replaced by “*Die Prüfung ist bestanden, wenn keines der beiden Enden oder beide Enden hindurchpassen.*”;
- b) further changes have been made to adjust the German translation of EN 16899:2016 to the English reference version;
- c) editorial amendments have been made.

## Previous editions

DIN EN ISO 16899: 2017-03

English Version

## Sports and recreational equipment - Parkour equipment - Safety requirements and test methods

Equipements de sports et de loisirs - Equipements de  
parkour - Exigences de sécurité et méthodes d'essai

Sport- und Freizeitanlagen - Parkoureinrichtungen -  
Sicherheitstechnische Anforderungen und  
Prüfverfahren

This European Standard was approved by CEN on 17 September 2016.

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.

CEN members are the national standards bodies of 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 United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

## Content

Page

European foreword.....	5
Introduction .....	6
1 Scope .....	8
2 Normative references .....	8
3 Terms and definitions .....	8
4 Materials and structural integrity.....	12
4.1 Requirements for materials .....	12
4.1.1 General.....	12
4.1.2 Concrete.....	12
4.1.3 Wood .....	12
4.1.4 Metals .....	13
4.1.5 Rubbers and synthetics.....	13
4.2 Requirements for structural integrity and loading .....	13
4.3 Requirements for foundations and groundwork .....	15
5 Safety requirements.....	15
5.1 Sporting ability.....	15
5.2 Access restrictions .....	15
5.3 Accessible surfaces, profiles and edge chamfers .....	17
5.4 Parkour bars and rails .....	18
5.5 Enclosed passage ways.....	19
5.6 Protection against injuries during movement and falling .....	19
5.7 Clearances.....	19
5.8 Entrapment .....	20
5.8.1 Entrapment of hair and clothing .....	20
5.8.2 Entrapment of the head and neck .....	20
5.8.3 Completely bound openings.....	20
5.8.4 Partially bound and V-shaped openings.....	21
5.8.5 Body and finger clearances .....	21
5.9 Separation from other facilities and activities .....	21
6 Dimensions.....	21
6.1 Landings .....	21
6.2 Impact attenuating surface (IAS) and critical fall height.....	22
6.3 Maximum height of any element or part of equipment.....	22
6.4 Maximum free height of fall.....	22
6.5 Extent of the falling space .....	23
7 Installation, inspection and maintenance.....	24
7.1 Installation .....	24
7.1.1 General.....	24
7.1.2 Information sign/board.....	25
7.1.3 Level mark .....	25
7.2 Inspection .....	25
7.2.1 General.....	25
7.2.2 Inspection of impact attenuating surfacing.....	25
7.2.3 Inspection schedule.....	25
7.2.4 Frequency of inspections .....	26

7.3	Maintenance .....	26
7.3.1	General .....	26
7.3.2	Routine maintenance .....	26
7.3.3	Corrective maintenance .....	27
8	Operation.....	27
8.1	General .....	27
8.2	Specific requirements .....	27
8.2.1	Personnel.....	27
8.2.2	Documentation .....	28
8.2.3	Procedures .....	28
8.2.4	Personnel and public safety.....	29
8.2.5	Equipment alterations .....	29
8.2.6	Supervised settings.....	29
9	Labelling/markings .....	29
10	Information to be provided by the manufacturer/supplier .....	29
10.1	General product information .....	29
10.2	Pre-information .....	30
10.3	Installation information.....	30
Annex A (normative) Method of determining structural integrity.....		32
A.1	General principle .....	32
A.2	User load .....	33
A.3	Safety factors .....	33
A.4	Self-weight.....	33
A.5	Physical testing.....	33
A.6	Horizontal stability.....	33
Annex B (normative) Number of users on the equipment.....		34
B.1	General .....	34
B.2	Number of users on a point.....	34
B.3	Number of users on line type elements.....	34
B.4	Number of users on an area .....	34
Annex C (normative) Impact test method.....		35
C.1	Principle.....	35
C.2	Apparatus .....	35
C.3	Procedure.....	36
Annex D (normative) Assessment of surface area of a landing.....		37
D.1	Principle.....	37
D.2	Apparatus .....	37
D.3	Procedure.....	38
Annex E (normative) Test method for entrapment.....		40
E.1	General .....	40
E.2	Head and neck entrapment.....	40