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**BSI Standards Publication**

## **Playground equipment and surfacing**

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Part 2: Additional specific safety requirements and test methods for swings

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## National foreword

This British Standard is the UK implementation of EN 1176-2:2017, incorporating corrigendum October 2019. It supersedes BS EN 1176-2:2008, which is withdrawn.

The start and finish of text introduced or altered by corrigendum is indicated in the text by tags. Text altered by CEN corrigendum October 2019 is indicated in the text by AC AC.

The UK participation in its preparation was entrusted to Technical Committee SW/65, Children's playground 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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## EUROPÄISCHE NORM

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English Version

## Playground equipment and surfacing - Part 2: Additional specific safety requirements and test methods for swings

Équipement et sols d'aires de jeux - Partie 2: Exigences de sécurité et méthodes d'essai complémentaires spécifiques aux balançoires

Spielplatzgeräte und Spielplatzböden - Teil 2: Zusätzliche besondere sicherheitstechnische Anforderungen und Prüfverfahren für Schaukeln

This European Standard was approved by CEN on 6 August 2016 and includes Corrigendum approved by CEN on 6 August 2016.

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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 1176-2:2017+AC:2019) 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of an identical text or by endorsement, at the latest by April 2020, and conflicting national standards shall be withdrawn at the latest by April 2020.

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 AC EN 1176-2:2017 AC.

This document includes Corrigendum 1 issued by CEN on 23 October 2019.

The start and finish of text introduced or altered by corrigendum is indicated in the text by tags AC AC

The main changes are:

- a) amended definition of a swing;
- b) additional figure for an example of a swing with one rotational axis (see Figure 1);
- c) new figure on ground clearance (see Figure 7);
- d) new definition and requirements for group swing seats;
- e) improved recommendations for fences around swings;
- f) revised figure for free height of fall and surfacing requirements beneath a swing (see Figure 10);
- g) harmonization of B.4 and B.5 with the measuring device from the EN 1176 series.

This document is part of a series of standards dealing with playground equipment and surfacing which consists of:

- *Part 1: General safety requirements and test methods;*
- *Part 2: Additional specific safety requirements and test methods for swings;*
- *Part 3: Additional specific safety requirements and test methods for slides;*
- *Part 4: Additional specific safety requirements and test methods for cableways;*
- *Part 5: Additional specific safety requirements and test methods for carousels;*
- *Part 6: Additional specific safety requirements and test methods for rocking equipment;*
- *Part 7: Guidance on installation, inspection, maintenance and operation;*
- *Part 10: Additional specific safety requirements and test methods for fully enclosed play equipment;*

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— *Part 11: Additional specific safety requirements and test methods for spatial network.*

This part of EN 1176 will be used in conjunction with parts EN 1176-1, EN 1176-7 and EN 1177.

For inflatable play equipment see EN 14960, *Inflatable play equipment — Safety requirements and test methods.*

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## 1 Scope

This European Standard specifies additional safety requirements for swings intended for permanent installation for use by children. Where the main play function is not swinging, the relevant requirements in this part of EN 1176 may be used, as appropriate.

NOTE Recommendations on the design and siting of swings are given in Annex A.

## 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 1176-1:2017, *Playground equipment and surfacing — Part 1: General safety requirements and test methods*

EN ISO/IEC 17025, *General requirements for the competence of testing and calibration laboratories (ISO/IEC 17025)*

ISO 6487, *Road vehicles — Measurement techniques in impact tests — Instrumentation*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 1176-1 and the following apply.

NOTE In order not to confine the application of this European Standard to those items of equipment currently in use and to allow freedom of design for the manufacture of new equipment, only the fundamental forms of equipment and motion are defined.

### 3.1

#### **swing**

moving equipment where the weight of the user is supported below a pivot or universal joint, where the pivot or universal joint is more than 1,3 m above the ground

### 3.2

#### **swing with one rotational axis (Type 1)**

seat that is flexibly suspended individually from a load bearing cross beam that can swing to and fro in an arc at right angles to the cross beam