

Playground equipment —

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

The European Standard EN 1176-2:1998, with the incorporation of amendment A1:2003, has the status of a British Standard

ICS 97.200.40

National foreword

This British Standard is the official English language version of EN 1176-2:1998, including amendment A1:2003. Together with BS EN 1176-1:1998 and parts 3 to 6, it supersedes BS 5696-1:1997, BS 5696-1:1986 and BS 5696-2:1986, which are withdrawn on 31 December 1998.

The UK participation in its preparation was entrusted to Technical Committee SW/65, Children’s playground equipment, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European development and promulgate them in the UK.

A list of organizations represented on this committee can be obtained on request to its secretary.

Cross-references

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Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 14, an inside back cover and a back cover.

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English version

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

(includes amendment A1:2003)

Equipements d'aires de jeux —
Partie 2: Exigences de sécurité et méthodes
d'essai complémentaires spécifiques aux
balançoires
(inclut l'amendement A1:2003)

Spielplatzgeräte —
Teil 2: Zusätzliche besondere
sicherheitstechnische Anforderungen und
Prüfverfahren für Schaukeln
(enthält Änderung A1:2003)

This European Standard was approved by CEN on 22 July 1998. Amendment A1 was approved by CEN on 9 January 2003.

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CEN

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Foreword

This European Standard has been prepared by Technical Committee CEN/TC 136, Sports, playground and other recreational 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of an identical text or by endorsement, at the latest by February 1999, and conflicting national standards shall be withdrawn at the latest by February 1999.

This standard consists of a number of parts as follows:

- EN 1176-1, *Playground equipment — Part 1: General safety requirements and test methods*;
- EN 1176-2, *Playground equipment — Part 2: Additional specific safety requirements and test methods for swings*;
- EN 1176-3, *Playground equipment — Part 3: Additional specific safety requirements and test methods for slides*;
- EN 1176-4, *Playground equipment — Part 4: Additional specific safety requirements and test methods for runways*;
- prEN 1176-5, *Playground equipment — Part 5: Additional specific safety requirements and test methods for carousels*;
- EN 1176-6, *Playground equipment — Part 6: Additional specific safety requirements and test methods for rocking equipment*;
- EN 1176-7, *Playground equipment — Part 7: Guidance on installation, inspection, maintenance and operation*.

This standard should not be used in isolation, but in conjunction with EN 1176-1, EN 1176- 7 and EN 1177, *Impact absorbing playground surfacing — Safety requirements and test methods*. It amends and supplements EN 1176-1 and EN 1177.

Where swings are combined with other items of children’s playground equipment, the relevant standards applying to the other items of equipment should also be consulted.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

Foreword to amendment A1

This document (EN 1176-2:1998/A1:2003) has been prepared by Technical Committee CEN/TC 136, Sports, playground and other recreational equipment, the Secretariat of which is held by DIN.

This amendment to the European Standard EN 1176-2:1998 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by October 2003, and conflicting national standards shall be withdrawn at the latest by October 2003.

The purpose of amendment 1 to EN 1176-2 is to modify Clause 4.11.

With resolution 165, CEN/TC 136 agreed to an amendment 1 to EN 1176-2:1998 using the UAP procedure of 4 months.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

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1 Scope

This standard specifies additional safety requirements for swings intended for permanent installation for use by children.

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

2 Normative references

This European Standard incorporates by dated or undated references, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 1176-1:1998, *Playground equipment — Part 1: General safety requirements and test methods*.

EN 1177, *Impact absorbing playground surfacing — Safety requirements and test methods*.

3 Definitions

For the purposes of this standard, the definitions given in EN 1176-1 apply, together with the following.

NOTE In order not to confine the application of this European Standard to those items of equipment currently in use and hence 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

3.2

swing with one rotational axis (type 1)

seat, 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 (see Figure 1)

3.3

swing with several rotational axes (type 2)

seat suspended from one or more load bearing cross beam, supported in such a way that it can move at right angles or longitudinally to cross beams (see Figure 2)

3.4

single point swing (type 3)

seat or platform with suspension cables that meet at one fixing point (see Figure 3) the swing can move in all directions

3.5

swing height h_1

distance between the middle of the fulcrum of the suspension and the playing surface (see Figure 4)

3.6

length of swing suspension member l

distance between the middle of the fulcrum of the suspension member and top surface of the seat or platform

NOTE Suspension members include chains and ropes.

3.7

ground clearance h_2

distance between the lowest part of the seat or platform and the playing surface when the swing is at rest (see Figure 4)

3.8

height of seat h_3

distance between the top of the seat or platform and the playing surface (see Figure 4)

3.9

seat clearance h_4

distance between the lower edge of the seat and any obstacle adjacent to the path of the swing, ground or suspension point (see Figure 5)

3.10

flat seat

seat without back and side protections

3.11

cradle seat

seat provided with greater body support for younger or less able users

3.12

platform (for a type 3 swing)

support primarily intended for use in a standing position

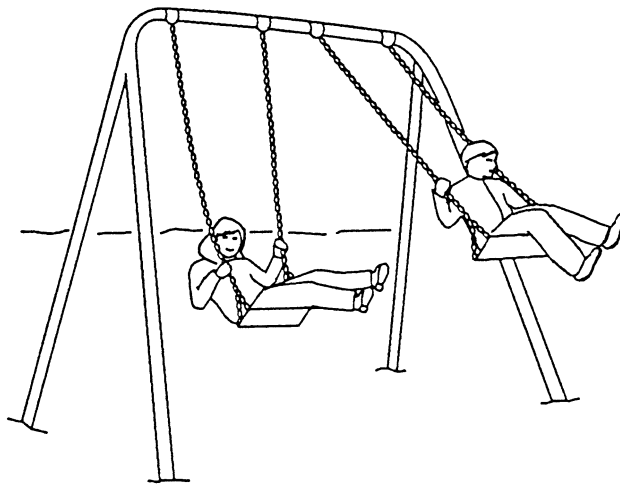


Figure 1 — Example of swing with one rotational axis (type 1)



Figure 2 — Example of swing with several rotational axes (type 2)