

Playground equipment and surfacing —

Part 10: Additional specific safety requirements and test methods for fully enclosed play equipment

ICS 97.200.40

National Foreword

This British Standard is the UK implementation of EN 1176-10:2008. It partially supersedes BS 8409:2002, which is going to be revised to remove conflicting material. In the meantime, where conflict exists between the two standards the provisions of BS EN 1176-10:2008 take precedence.

The UK participation in its preparation was entrusted to Technical Committee SW/65, Children’s playground equipment.

National standards have been published by BSI on children’s playground equipment since BS 3178 was first issued in 1959. That standard concentrated on specifications for specific types of equipment. It was replaced in 1979 by BS 5696 which switched focus to a design and safety approach.

With the increasing introduction of overseas equipment BSI led the way by calling for a European Standard to address the conflicting safety advice and standards from other countries. This was published in 1999 as BS EN 1176 and it further focused on the safety of playground equipment.

The process of UK standardization for the indoor play product range effectively began in 1992 with the first of a series of independent safety guideline and good practice references published by the Institute of Leisure and Amenity Management (ILAM). Further publications by ILAM on this theme followed in 1995 and 1999. The latter publication, *Indoor Play Areas – Guidance on Safe Practice*, was subsequently used as the base reference for BS 8409:2002, *Soft indoor play areas – Code of practice*, which was published by BSI.

The move towards European standardization for indoor play began in 2002. This followed a CEN decision that indoor play products should conform to EN 1176. Part 10 sets out additional specific safety requirements and test methods which also apply to indoor play products. This was to take account of those types of equipment that are specific to the indoor play product range.

Operators and providers are advised that equipment conforming to EN 1176 require regular maintenance. Guidance on this and appropriate inspection, maintenance and operation schedules are contained within BS EN 1176-7:2008.

Playground equipment not conforming to this revision should not automatically be considered as being unsafe or to require replacement. A risk assessment by competent persons should be used to determine what action, if any, is necessary. Manufacturers and Inspectors of the Register of Play Inspectors International (RPII) are amongst those that will be able to assist in this.

All standards published by the BSI are regularly revised. Therefore it is advised that from the date of this revised publication, a period of twelve months is to be given to manufacturers to enable them to amend their product lines.

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.

Compliance with a British Standard cannot confer immunity from legal obligations.

Amendments/corrigenda issued since publication

Date	Comments

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English Version

Playground equipment and surfacing - Part 10: Additional
specific safety requirements and test methods for fully enclosed
play equipment

Equipements d'aires de jeux et revêtements de surface
d'aires de jeux - Partie 10: Exigences de sécurité et
méthodes d'essai complémentaires spécifiques aux
équipements de jeu totalement fermés

Spielplatzgeräte und Spielplatzböden - Teil 10: Zusätzliche
besondere sicherheitstechnische Anforderungen und
Prüfverfahren für vollständig umschlossene Spielgeräte

This European Standard was approved by CEN on 25 April 2008.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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Foreword

This document (EN 1176-10:2008) 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 November 2008, and conflicting national standards shall be withdrawn at the latest by May 2009.

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.

This European Standard consists of a number of parts as follows:

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

EN 1176-2, *Playground equipment and surfacing — Part 2: Additional specific safety requirements and test methods for swings*

EN 1176-3, *Playground equipment and surfacing — Part 3: Additional specific safety requirements and test methods for slides*

EN 1176-4, *Playground equipment and surfacing — Part 4: Additional specific safety requirements and test methods for cableways*

EN 1176-5, *Playground equipment and surfacing — Part 5: Additional specific safety requirements and test methods for carousels*

EN 1176-6, *Playground equipment and surfacing — Part 6: Additional specific safety requirements and test methods for rocking equipment*

EN 1176-7, *Playground equipment and surfacing — Part 7: Guidance on installation, inspection, maintenance and operation*

EN 1176-10, *Playground equipment and surfacing — Part 10: Additional specific safety requirements and test methods for fully enclosed play equipment*

EN 1176-11, *Playground equipment and surfacing — Part 11: Additional specific safety requirements and test methods for spatial network*

This part of EN 1176 should not be used in isolation, but in conjunction with 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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This document is applicable to fully enclosed play equipment intended for installation inside and outside buildings, for children up to 14 years old, see 3.1.

The purpose of this document is to provide additional safety requirements covering particulars of these structures, such as exits and escape routes, visibility, external "climbability", containment walls/netting in relation to safety area, ignition resistance, specific equipments/components, impact-attenuating surfaces, signage, specific inspection and maintenance.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 1021-1, *Furniture — Assessment of the ignitability of upholstered furniture — Part 1: Ignition source smouldering cigarette*

EN 1021-2, *Furniture — Assessment of the ignitability of upholstered furniture — Part 2: Ignition source match flame equivalent*

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

EN 1176-3:2008, *Playground equipment and surfacing — Part 3: Additional specific safety requirements and test methods for slides*

EN 1176-4: *Playground equipment and surfacing — Part 4: Additional specific safety requirements and test methods for cableways*

EN 1177:2008, *Impact attenuating playground surfacing - Determination of critical fall height*

EN ISO 11925-2, *Reaction to fire tests - Ignitability of building products subjected to direct impingement of flame - Part 2: Single-flame source test (ISO 11925-2:2002)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 1176-1:2008 and EN 1177:2008 and the following apply.

3.1

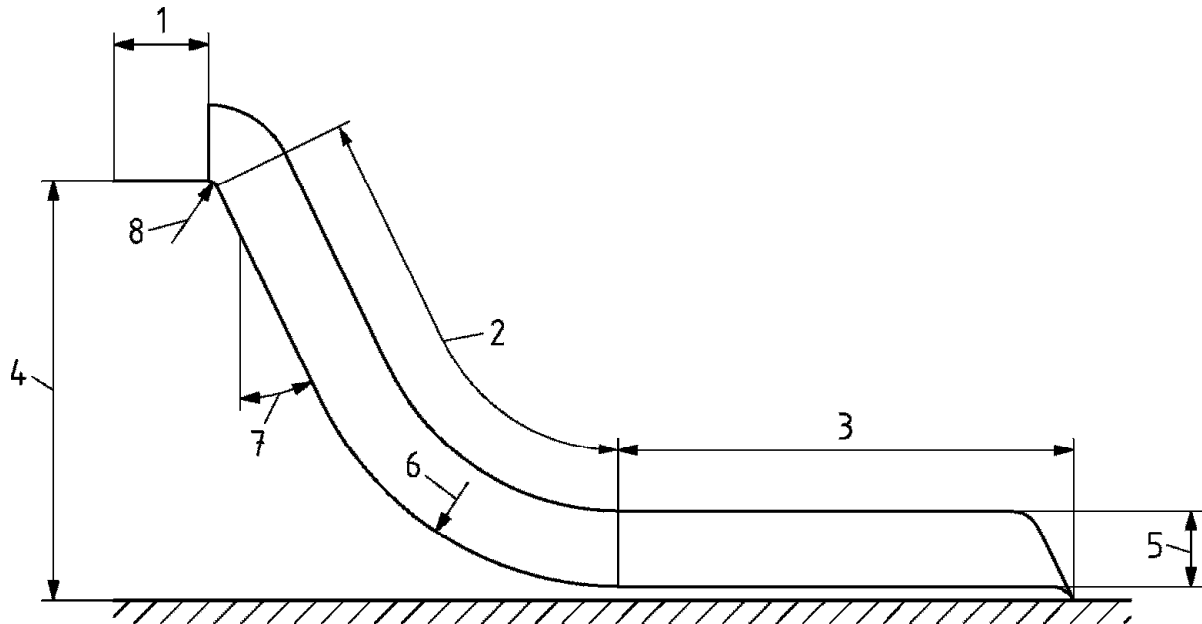
fully enclosed play equipment

equipment and structures, including components and constructional elements with, or on which, children can play, that are within a three dimensional enclosure with specified entrances and exits

3.2

drop slide

open-fronted, near vertical free-fall slide which continues into a concave curve to a near horizontal run-out section (see Figure 1)



Key

- 1 starting section
- 2 sliding section (includes curve)
- 3 run-out section
- 4 height of slide
- 5 lateral protection
- 6 concave curve
- 7 slide angle to vertical, 15° min.
- 8 radius, 100 mm min.

Figure 1 — Typical drop slide, side view

3.3

overhead track ride (rigid)

equipment on which children can travel by self propulsion along a rigid fixed horizontal or inclined overhead track

3.4

terminus or starting point

area in which the user can reach the grip and/or "seat" and set the equipment in motion

3.5

area of travel

area in which the user can travel freely

3.6

overhead track

part of the structure that supports the traveller

3.7

traveller

moving part that, by influence of self propulsion by the user, he/she moves along the overhead track

3.8

linkage element

part of the structure between the traveller and the "seat" and which often also provides grip