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**BSI Standards Publication**

## **Playground equipment and surfacing**

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Part 7: Guidance on installation, inspection, maintenance and operation

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## National foreword

This British Standard is the UK implementation of EN 1176-7:2020. It supersedes BS EN 1176-7:2008, which is withdrawn.

BSI, as a member of CEN, is obliged to publish EN 1176-7:2020 as a British Standard. However, attention is drawn to the fact that during the development of this European Standard, the UK committee voted against its approval.

The UK committee submitted a negative vote due to concerns that although the scope of the document is to establish guidance on the installation, inspection, maintenance and operation of playground equipment and surfacing around the equipment, the latest published version of EN 1176-7 contains guidance expressed in the language of requirements. For the purposes of this version of EN 1176-7, the UK committee advises the application of the document within the UK as best practice guidance, as the document has been used since its initial publication.

Significant changes in the requirements for testing the impact attenuation (absorbing) of playground surfacing have been introduced into EN 1176-1:2017 and EN 1176-7:2020 in order to reflect the national variations in surfacing provision across Europe. The UK committee therefore provides a National Annex (NA) in BS EN 1176-1:2017 to comply with clause 5.2. National Annex NA in BS EN 1176-1:2017 contains the UK requirements to be used instead of Annex H of EN 1176-1:2017; these reflect current UK practice that has proven over the lifetime of the current standard to be reasonable and proportionate.

Testing or confirmation of the surface impact attenuating properties, during or after installation, is not a requirement of the UK National Annex. It is strongly advised that the operator confirms that any surfacing provided has an adequate level of impact attenuation for the critical fall height of the playground equipment; this should be confirmed by a certificate of test from a UKAS registered laboratory. For post installation inspections, the considered depth of the surface should be ascertained and provided to the operator, for comparison to this original certificate of test. For Annual and Operational Inspections, it is not necessary to ascertain the depth of synthetic surfaces.

For all surfacing it is important that an adequate level of impact attenuation for the critical fall height be maintained. In the instances of loose fill surfaces, confirmation of the depth of surfacing should be undertaken as part of the inspection process as these surfaces will compact and disperse reducing their depth and impact attenuating properties during normal use.

Operators and providers are advised that playground equipment requires regular maintenance; guidance on this and appropriate inspection, maintenance and operational schedules are contained within BS EN 1176-7:2020. Clause 6.1 of this standard provides for inspection and maintenance information and guidance from the manufacturer of the equipment; this is to assist operators in determining their safety management system. It is appreciated that playgrounds are likely to contain a range of equipment from different manufacturers and installed over a number of years; operators should implement any guidance provided by the manufacturer. Item specific detail is not readily available to Annual Playground inspectors whose report contributes to the operators' overall Annual Main Inspection as detailed in this standard.

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The undertaking of the advised inspection protocols, methodologies, and ensuring that the necessary competencies are held by those undertaking these tasks are necessary to ensure a suitable and sufficient safety management system as prescribed under the Health and safety at work act 1974 and its implementing regulations. Where such detailed knowledge base and in-house training is not held it is advised that specialist guidance is obtained, such as from the Register of Play Inspectors International (RPII).

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 committee manager.

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

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#### **Amendments/corrigenda issued since publication**

Date	Text affected
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English Version

## Playground equipment and surfacing - Part 7: Guidance on installation, inspection, maintenance and operation

Équipements et sols d'aires de jeux - Partie 7 :  
Recommandations relatives à l'installation, au  
contrôle, à la maintenance et à l'utilisation

Spielplatzgeräte und Spielplatzböden  
- Teil 7: Anleitung für Installation,  
Inspektion, Wartung und Betrieb

This European Standard was approved by CEN on 13 January 2020.

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.

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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 1176-7:2020) 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 2020, and conflicting national standards shall be withdrawn at the latest by October 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 EN 1176-7:2008.

EN 1176, *Playground equipment and surfacing*, consists of the following parts:

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

This part should be read in conjunction with EN 1176 (all parts) and EN 1177, *Impact attenuating playground surfacing — Methods of test for determination of impact attenuation*.

The following European Standards and Technical Reports and others might also apply:

- EN 14960 (all parts), *Inflatable play equipment — Safety requirements and test methods*
- EN 14974, *Skateparks — Safety requirements and test methods*
- EN 15312, *Free access multi-sports equipment — Requirements, including safety and test methods*
- EN 16630, *Outdoor fitness equipment — Safety requirements and test methods*
- CEN/TR 16598, *Collection of rationales for EN 1176 — Requirements*
- CEN/TR 16879, *Siting of playgrounds and other recreational facilities — Advice on methods for positioning and separation*
- EN 16899, *Sports and recreational equipment — Parkour equipment — Safety requirements and test methods*
- CEN/TR 17207, *Playground and recreational areas — Framework for the competence of playground inspectors*

For requirements on the maintenance of fully enclosed play equipment, see EN 1176-10, *Playground equipment and surfacing — Part 10: Additional specific safety requirements and test methods for fully enclosed play equipment*.

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The principal change from the previous edition of EN 1176-7 is that the guidance given in this part of EN 1176 has been updated in the light of experience of use of EN 1176-7:2008, for example by referring to other parts of EN 1176 when carrying out an inspection. This resulted in the following changes:

- a) wording aligned with EN 1176-1;
- b) recommendations mostly transformed into requirements;
- c) inspection and maintenance revised split and into separate sections;
- d) other CEN documents added to the European Foreword to show relation with this standard to the reader;

terms and definitions updated.

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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.



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## 1 Scope

This document is applicable to playground equipment, surfacing and ancillary items, e.g. gates, fences, benches, bins, shades, etc. It is intended for use by playground operators (see [definitions 3.4](#)) to assist them in developing an inspection and maintenance regime for each playground.

NOTE 1 The scope of the inspection and inclusion of the ancillary items will vary individually.

NOTE 2 Ancillary items are not included in the specific equipment-type parts of the EN 1176 series; hence they are not assessed for compliance with EN 1176 series and are subject to risk assessment.

This document establishes guidance on the installation, inspection, maintenance and operation of playground equipment and surfacing around the equipment.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1176-1:2017, *Playground equipment and surfacing — Part 1: General safety requirements and test methods*

EN 1177:2018, *Impact attenuating playground surfacing — Methods of test for determination of impact attenuation*

## 3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

### 3.1

#### **inspection**

check to ensure the continuous safe use of a playground

NOTE The purpose of an inspection is to assess the overall level of safety of the equipment and/or surfacing of the playground. The outcome of an inspection is reported in an inspection report and can result in preventive measures such as extra maintenance, repairs, etc.

### 3.2

#### **maintenance**

intervention that is required and/or undertaken to conserve, as nearly and as long as possible, the original condition of the equipment and surfacing while compensating for normal wear and tear

NOTE The maintenance instructions are provided by the supplier as stated in EN 1176-1:2017, 6.1.4

### 3.3

#### **competent person**

person, suitably trained, qualified by knowledge and practical experience to carry out the required task

Note 1 to entry: Levels of knowledge required by different levels of inspectors to be competent are given in e.g. CEN/TR 17207:2018, 5.1, and/or national specifications.

Note 2 to entry: A competent person might be the operator, inspector, employee of the manufacturer or else.