SLOVENSKI STANDARD
SIST EN 1176-3:2018

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Oprema in podloge otroških igrišč - 3. del: Dodatne posebne varnostne zahteve in preskusne metode za tobogane

Playground equipment and surfacing - Part 3: Additional specific safety requirements and test methods for slides

Spielplatzgeräte und Spielplatzböden - Teil 3: Zusätzliche besondere sicherheitstechnische Anforderungen und Prüfverfahren für Rutschen

Équipement et sols d'aires de jeux - Partie 3: Exigences de sécurité et méthodes d'essai complémentaires spécifiques aux toboggans

Ta slovenski standard je istoveten z: **EN 1176-3:2017**

ICS:

97.200.40	Igrišča	Playgrounds

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EUROPEAN STANDARD

NORME EUROPÉENNE

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English Version

Playground equipment and surfacing - Part 3: Additional specific safety requirements and test methods for slides

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

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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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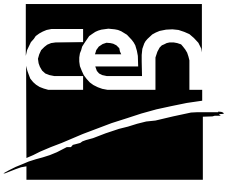

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (EN 1176-3:2017) 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of an identical text or by endorsement, at the latest by April 2018, and conflicting national standards shall be withdrawn at the latest by October 2018.

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 1176-3:2008.

The main changes are:

a) definition for wave slide deleted;

b) revised figure for illustration of the position of the sections of a slide (see Figure 2);

c) reduction of free height of fall if starting section is easily accessible unless guarding is provided;

d) maximal length of the initial straight sliding section and of the second sliding section after a bend (4.4.1 and Annex B);

e) improvement Table 1 – inclination of run-out section for small slides;

f) reduction of the impact area for Type 1 if sliding section is max. 1 500 mm;

g) Figure 5 – Application of template to curved profile sliding section – amended;

h) start of the free space on a slide;

i) A-deviation for Romania.

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*;

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

1 Scope

This European Standard specifies additional safety requirements for slides intended for permanent installation for use by children. The aim is to provide protection to the user against possible hazards during use. Where the main play function is not sliding, the relevant requirements in this part of EN 1176 may be used, as appropriate.

This document is not applicable to waterslides, rollerways or slide installations where auxiliary equipment such as mats or sledges are used. This document is not applicable to inclined surfaces that do not contain and guide the user, e.g. banister rails (inclined parallel bars).

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*

3 Terms and definitions

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

3.1
slide
structure with inclined surface(s) that contains and guides the user sliding in a defined track

Note 1 to entry: Inclined planes, designed primarily for other purposes, such as roofs, do not constitute slides.

3.2
embankment slide
slide in which the majority of the sliding section follows the contour of the land

Note 1 to entry: Access to the starting section is usually direct from the mound or via an access ladder or stairs.

3.3
attachment slide
slide for which access to the starting section is possible only by passing via other equipment or parts of equipment

Note 1 to entry: Such equipment includes climbing nets, bridges, platforms, inclined planes, other climbing devices.

3.4
helical slide
slide where the sliding section follows spirals

Note 1 to entry: See Figure 4.

3.5
curved slide
slide where the sliding section follows curves

Note 1 to entry: See Figure 4.

3.6
free-standing slide
slide which is separate from any other piece of equipment with its own means of access from the ground directly to the starting section

3.7
tunnel slide
slide where the sliding section has an enclosed cross section

3.8
mixed tunnel slide
slide for which only the upper section of the sliding section has an enclosed cross section

3.9
multi-track slide
slide with several defined tracks separated by dividers

3.10
starting section
section on which the user is enabled to get into sliding position

Note 1 to entry: The starting section can be a platform or an extension of a platform of playground equipment.

3.11
sliding section
section on which the user is undergoing forced movement

3.12
run-out section
section on which the user's speed is reduced to enable a safe departure from the slide

3.13
guarding section
additional component of a slide, which serves the function of a barrier, to protect users from falls from the starting section

Note 1 to entry: The guarding section can extend into the region of the sliding section.

3.14
lateral protection
side of the starting section or sliding section that retains and guides the user

4 Safety requirements

4.1 General

Slides shall conform to EN 1176-1 unless otherwise specified in this part of EN 1176.

4.2 Access

Access to the starting section shall be by means of an access ladder, stairs, climbing section or device.

In the case of embankment slides, access to the starting section may be gained directly from the mound.

For free-standing slides, the maximum vertical height that the first stairs can reach without a change in direction or offset, by a minimum width of the means of access, shall be 2 500 mm.

Where the starting section of a slide is easily accessible the free height of fall (h) shall be 1 000 mm maximum unless guarding is provided (see 4.3.2).

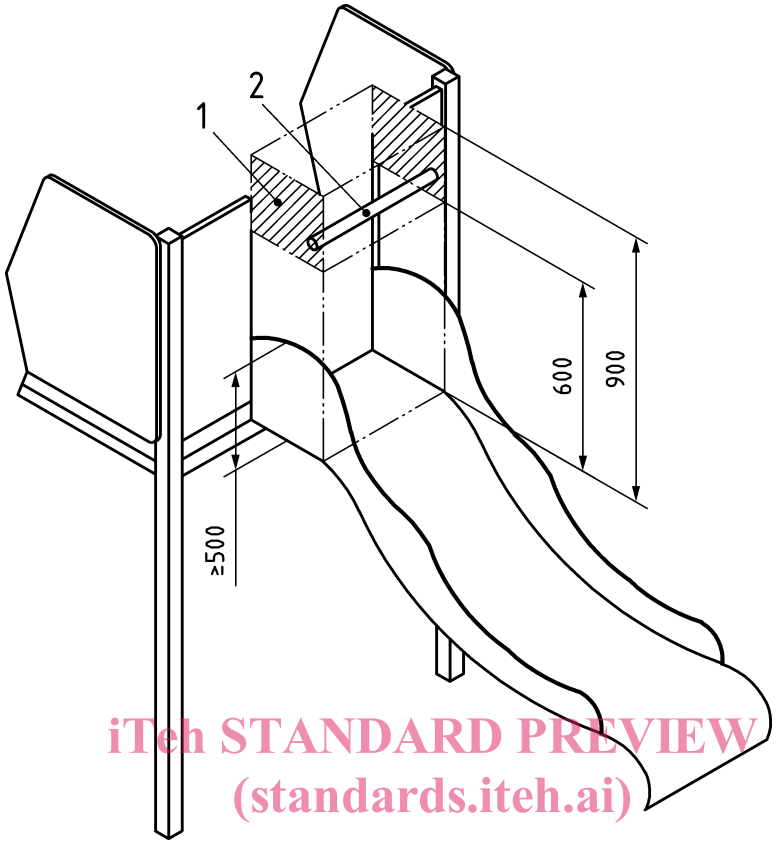
For all attachment slides with a fall height greater than 1 000 mm, a rail or crossbar across the access opening shall be provided (see Figure 1a)). The rail or crossbar shall be positioned between the platform guard rail or barrier and the start of the sliding section.

The height of the rail or crossbar shall be between 600 mm and 900 mm above the starting section.

For attachment slides with a starting section or barrier beyond the edge of the platform, the area of the starting section between the rail or crossbar and the platform shall comply with the same requirements as platforms in EN 1176-1.

NOTE Such requirements include the height of guard rail or barrier.

Dimensions in millimetres

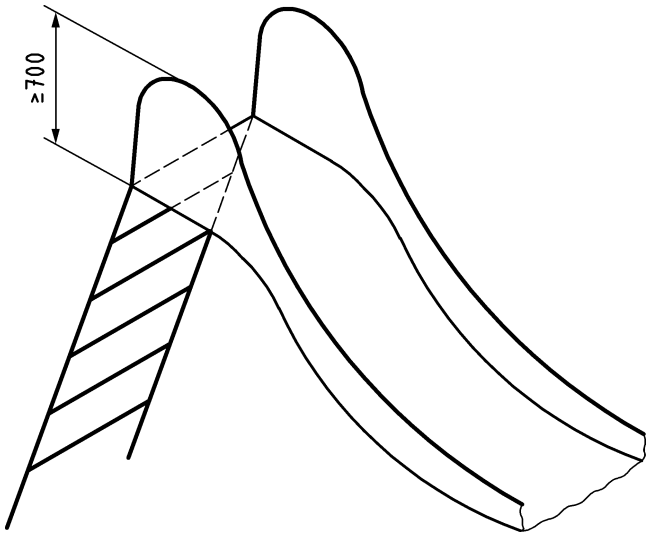


Key

1 zone representing all the possible positions of a rail or crossbar

2 crossbar

a) Example of lateral protection of a starting section for attachment slides over 1 000 mm and zone for the possible position of a rail or crossbar



b) Example of lateral protection of a starting section of a free-standing slide

Figure 1 — Examples of lateral protection

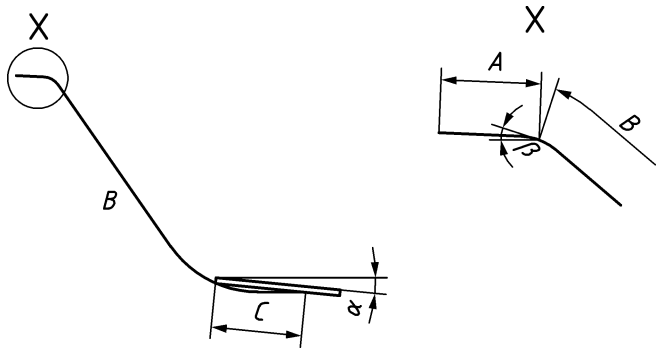
4.3 Starting section

NOTE The starting section and run-out section are illustrated in Figure 2.

4.3.1 Length and angle

Each slide shall have a starting section of at least 350 mm length. The starting section shall have a downward slope tolerance from 0° to 5° in the direction of the sliding section, the measurement being made at the centreline of the starting section.

For attachment slides the platform may be used as a starting section.



Key

A starting section measured along the surface of the slide
B sliding section measured along the surface of the slide
C run-out section measured along the surface of the slide
α maximum declination of the run-out section
β maximum declination of the starting section

Figure 2 — Illustration of the position of the sections of a slide

4.3.2 Guarding section

The starting section shall have a guarding section conforming to the barrier requirements of EN 1176-1 when one of the following applies:

— the length of the starting section is more than 400 mm;

— the starting section is easily accessible and has a free height of fall of more than 1 000 mm;

— the free height of fall of the starting section is more than 2 000 mm.

The guarding section shall either be a continuation of the lateral protection or be outside the plane of the lateral protection.

When the guarding section is separate from or outside the plane of the lateral protection, the maximum vertical or horizontal offset shall be less than 89 mm.

For attachment slides, the opening in the barrier shall be the same as the width of the starting section or guarding section.

For attachment slides where all or part of the starting section is beyond the platform edge, the guarding section shall have a height of at least 500 mm at some point (see Figure 1a)).