SLOVENSKI STANDARD
SIST EN 71-8:2018

01-maj-2018

Nadomešča:
SIST EN 71-8:2011

Varnost igrač - 8. del: Igrače za prostočasne aktivnosti za domačo uporabo

Safety of toys - Part 8: Activity toys for domestic use

Sicherheit von Spielzeug - Teil 8: Aktivitätsspielzeug für den häuslichen Gebrauch

Sécurité des jouets - Partie 8: Jouets d'activité à usage familial

Ta slovenski standard je istoveten z: **EN 71-8:2018**

ICS:

97.200.50 Igrače Toys

SIST EN 71-8:2018 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 71-8

January 2018

ICS 97.200.50

Supersedes EN 71-8:2011

English Version

Safety of toys - Part 8: Activity toys for domestic use

Sécurité des jouets - Partie 8 : Jouets d'activité à usage familial

Sicherheit von Spielzeug - Teil 8: Aktivitätsspielzeug für den häuslichen Gebrauch

This European Standard was approved by CEN on 15 October 2017.

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.

CEN members are the national standards bodies of 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 United Kingdom.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Contents

Page

European foreword

This document (EN 71-8:2018) has been prepared by Technical Committee CEN/TC 52 “Safety of toys”, the secretariat of which is held by DS.

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 July 2018, and conflicting national standards shall be withdrawn at the latest by July 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 71-8:2011.

This European Standard has been prepared under a standardization request M/445 given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive 2009/48/EC.

For relationship with EU Directive 2009/48/EC, see informative Annex ZA, which is an integral part of this European Standard.

Annex B provides details of significant technical changes between this European Standard and the previous edition.

This European Standard constitutes the eighth part of the European Standard on safety of toys. It should be read in conjunction with Part 1.

This European Standard, *Safety of toys*, consists of the following parts:

— *Part 1: Mechanical and physical properties*;

— *Part 2: Flammability*;

— *Part 3: Migration of certain elements*;

— *Part 4: Experimental sets for chemistry and related activities*;

— *Part 5: Chemical toys (sets) other than experimental sets*;

— *Part 7: Finger paints — Requirements and test methods*;

— *Part 8: Activity toys for domestic use*;

— *Part 9: Organic chemical compounds — Requirements*;

— *Part 10: Organic chemical compounds — Sample preparation and extraction*;

— *Part 11: Organic chemical compounds — Methods of analysis*;

— *Part 12: N-Nitrosamines and N-nitrosatable substances*;

— *Part 13: Olfactory board games, cosmetic kits and gustative games*;

— *Part 14: Trampolines for domestic use*.

NOTE 1 In addition to the above parts of EN 71, the following guidance documents have been published: CEN Technical Report CEN/TR 15071, *Safety of toys — National translations of warnings and instructions for use in the* EN 71 *series*, and CEN Technical Report CEN/TR 15371 (all parts), *Safety of toys — Interpretations*.

NOTE 2 Different legal requirements may exist in non-EU countries.

NOTE 3 Words in *italics* are defined in Clause 3 (Terms and definitions).

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, 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 requirements and test methods for activity toys for domestic use often attached to or incorporating a crossbeam, and similar toys intended for children under 14 years to play on or in and often intended to bear the mass of one or more children.

This European Standard also specifies requirements for:

— separately sold accessories for, and components of activity toys;

— separately sold swing elements that are ready for use on or in combination with an activity toy;

— construction packages for activity toys including components used to build activity toys according to a scheduled building instruction.

The scope of this European Standard excludes:

— playground equipment intended for public use dealt with in the EN 1176 series;

— bow-mounted rocking activity toys such as rocking horses and similar toys, which are covered by specific requirements in EN 71-1;

— toy pools with maximum depth of water over 400 mm measured, between the overflow level and the deepest point within the pool;

NOTE 1 For information regarding the classification of pools as toys see European Commission guidance document No. 8 from Bibliographical Entry [1].

— pools with maximum depth of water over 400 mm measured, between the overflow level and the deepest point within the pool, without play elements covered e.g. by the EN 16582 series or EN 16927.

NOTE 2 There is an enhanced risk of drowning in toy pools where the depth of water is in excess of 400 mm.

— trampolines for domestic use dealt with in EN 71-14.

— inflatable activity toys (except paddling pools).

See also A.1.

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 71-1:2014, *Safety of toys - Part 1: Mechanical and physical properties*

EN ISO 4287:1998,[1] *Geometrical product specifications (GPS) - Surface texture: Profile method - Terms, definitions and surface texture parameters (ISO 4287:1997)*

[1] As impacted by EN ISO 4287:1998/A1:2009 and EN ISO 4287:1998/AC:2008.

ISO 20712-1:2008, *Water safety signs and beach safety flags — Part 1: Specifications for water safety signs used in workplaces and public areas*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1
activity toy
toy for domestic use, in which the support structure remains stationary while the activity is taking place and which is intended for the performance by a child of any of the following activities: climbing, jumping, swinging, sliding, rocking, spinning, paddling, crawling and creeping, or any combination thereof

Note 1 to entry: Examples of such toys are swings, slides, carousels, climbing frames, rigid playhouses, paddling pools. In contrast, ride-on vehicles are not considered as activity toys.

3.2
anchor
device used to fix an *activity toy* to the standing surface

3.3
barrier
device intended to prevent the user from falling and from passing beneath

[SOURCE: EN 1176-1:2017, 3.24]

3.4
crossbeam
bar or beam which forms a main load bearing part of certain *activity toys* (see Figure 1)

3.5
entrapment
hazard presented by a situation in which a body, part of a body, or clothing is entrapped

3.6
exposed edge
edge intended to be touched and/or gripped by a child during the use of an *activity toy*

Note 1 to entry: *Exposed edges* are commonly found on doors, windows, shutters, ladders, steps, *handrails*, retaining sides for *slides* and seats.

3.7
forced movement
movement of the user caused by the equipment (e.g. swinging, sliding, carousel rotation etc.) which, once started, cannot be totally controlled by the user

Note 1 to entry: Falls are not considered forced movement as they are not imposed on the user by the equipment but occur for other reasons.

[SOURCE: EN 1176-1:2017, 3.34, modified — An original Note 2 to entry is not reproduced here.]

3.8
free height of fall
greatest vertical distance from the clearly intended body support to the impact area below

3.9
free space
space in, on or around the *activity toy* that can be occupied by a user undergoing a *forced movement* caused by use of the equipment (e.g. swinging, sliding, rocking, revolving)

Note 1 to entry: The definition of *free space* does not include the three-dimensional space in which a falling movement takes place.

3.10
handrail
rail intended to assist the user to balance

[SOURCE: EN 1176-1:2017, 3.22]

3.11
platform
raised surface where one or more users can stand without the need of hand support

Note 1 to entry: The classification of a platform will vary depending on its function. Surfaces where the user is only able to stand with the aid of hand supports are not classified as platforms. Exclusion of surfaces from the definition can be achieved by a number of means, e.g.:

— reducing the surface area to restrict free movement and encourage holding on;

— incline the surface to encourage holding on;

— introducing movement to the surface to encourage holding on.

[SOURCE: EN 1176-1:2017, 3.21, modified — The wording of the Note 1 to entry was modified.]

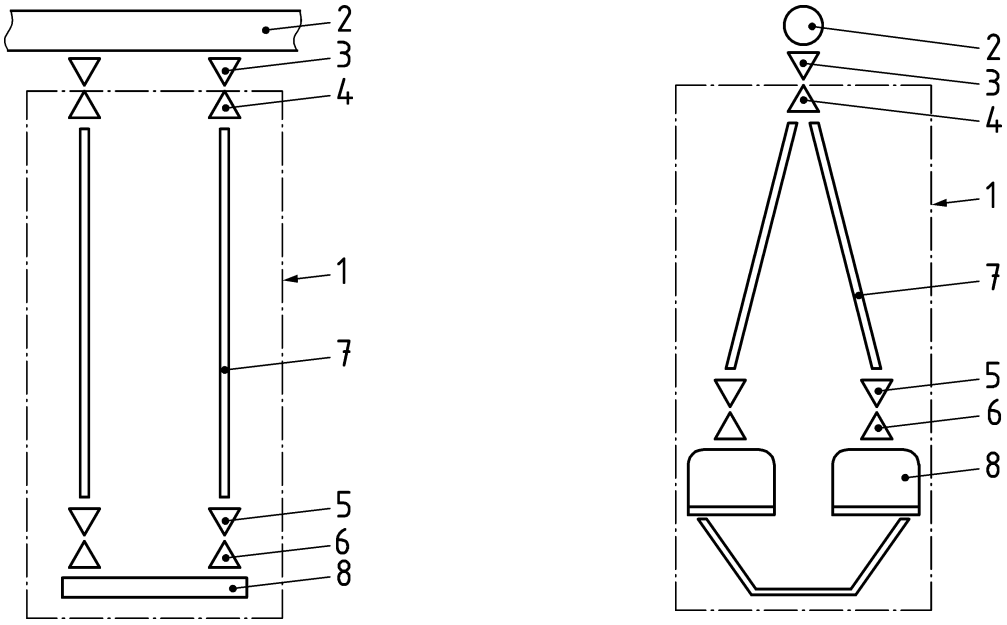
3.12
slide
structure with inclined surface(s) on which the user slides in a defined track

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

3.13
suspension connector
device which forms the direct contact between a *crossbeam* and the means of suspension (see Figure 1)

3.14
swing
structure incorporating a *crossbeam, suspension connectors* and a swing device with swing element, suspension coupling and means of suspension

Note 1 to entry: Examples of *swings* are shown in Figure 1.



a) Example of a flat seat **b) Example of a gondola**

Key

1 swing device
2 crossbeam
3 upper suspension connector
4 upper suspension coupling
5 lower suspension connector
6 lower suspension coupling
7 means of suspension
8 swing element (e.g. seat, rings, bar, gondola)

NOTE A swing device can include one or more footrests. Footrests are considered as parts of the swing elements.

Figure 1 — Diagrammatic representation of examples of swings

3.15
paddling pool
toy pool with a maximum depth of water of 400 mm measured between the overflow level and the deepest point within the pool

Note 1 to entry: Examples of typical *paddling pools* can be found in the guidance document on the application of the directive on the safety of toys (2009/48/EC).

3.16
resilient material
material which is capable of regaining its original shape, position or absorbing shock after bending, stretching, compression, impact or others actions

3.17
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.

[SOURCE: EN 1176-3:2017, 3.3]

3.18
declined plane
surface, which might be used for gliding downward in a sitting or lying position

3.19
collapse
sudden or unexpected folding of a structure

[SOURCE: EN 71-1:2014, 3.11]

4 Requirements

4.1 General (see A.2)

4.1.1 Assembly

Activity toys shall be assembled using self-locking mechanisms which, to avoid unintentional disassembling due to dynamic forces during use, may include spring washers and/or self-locking nuts.

NOTE Self-taping screws or nails are considered as self-locking devices.

4.1.2 Static strength

Activity toys other than *swings* and *paddling pools*, when tested according to 6.3.2 (strength of activity toys other than swings and paddling pools), shall not *collapse* such that they do not continue to comply with the relevant requirements of EN 71-1.

NOTE Static strength requirements for *swings* are given in 4.6.2 and for *paddling pools* in 4.9.1.

4.1.3 Maximum height (see A.3)

When measured from the ground, there shall be no part of the *activity toy* where the child is able to climb, sit or stand above a height of 2 500 mm.

4.1.4 Corners and edges (see A.4)

Exposed edges shall be rounded.

Corners and *exposed edges* on moving parts shall have a minimum radius of 3 mm. This requirement does not apply to swing elements with a mass of 1 000 g or less, the corners and edges of which shall be rounded.

4.1.5 Protruding parts

Protruding parts such as bolt ends, threaded bolt ends and other protrusions shall be recessed or be protected in such a way that they do not constitute a hazard to users of the equipment. This

requirement is applicable when protrusions are situated on accessible moving parts and in places where the user is running, sliding, climbing, sitting or lying down.

4.1.6 Diameter of ropes and other means of suspension

When measured according to 6.8 (diameter of ropes and other means of suspension), ropes and other means of suspension shall have the diameters according to Table 1.

Table 1 — Diameter of ropes and other means of suspension

Ropes fixed at both ends	diameter between 16 mm and 45 mm
Ropes used in climbing nets and ladders	diameter between 10 mm and 45 mm
Free-hanging ropes fixed at upper end	diameter between 25 mm and 45 mm
Means of suspension for swing elements	minimum diameter/width 10 mm

4.1.7 Water accumulation (see A.14)

Except when intended for water play, all parts of *activity toys* should be designed so that they do not accumulate water which could produce drowning hazard.

4.2 Barriers, handrails and ladders and similar means of access to activity toys

4.2.1 Barriers and handrails preventing a child from falling down (see 6.5.1, A.5)

Any *platform* 1 000 mm or more from the ground shall be equipped with a *barrier* on all sides that face outwards from the toy.

The openings between the surface of the platform and the lower edge of the barrier, and the openings in the barrier, shall not allow the passage of probe C (see Figure 17) and probe E (see Figure 19), except for entrance and exit openings necessary for each play element. Probe C and probe E shall be applied according to 6.5.1, (head and neck entrapment in accessible completely bound openings).

Openings to give access to *slides,* climbing structures and ladders are allowed.

The minimum height of the *barrier* shall be 600 mm.

For *barriers* with an uneven top design, a ruler of (200 ± 5) mm shall be used for measuring minimum height. Place the ruler horizontally on top of the *barrier*. Measure the vertical distance between the *platform* and the bottom of the ruler. The distance shall in no place be less than 600 mm.

NOTE Special requirements apply to *slides* (see 4.5.3 retaining sides for slides and 4.5.4 starting, sliding and run-out sections on slides).

After testing according to 6.4 (dynamic strength of barriers and handrails), no part of the *barrier* or *handrail* shall *collapse* so that the toy does not comply with the relevant requirements of EN 71-1.

4.2.2 Ladders and similar means of access to activity toys (see A.6)

The requirements in 4.2.2 do not apply to *activity toys* with a *platform* height of 600 mm or less.

Ladders and similar means of access to *activity toys* shall comply with the following requirements:

a) any opening shall comply with 4.3.1 (head and neck entrapment);

b) where a ladder or a stair is used, the lateral width of the tread or rung shall be 240 mm or more (see Figure 2 a, dimensions of ladders));

c) the distance between the upper surfaces of the treads or rungs shall not exceed 310 mm when measured vertically as indicated in Figure 2 b, details of a step ladder). This requirement does not apply to the vertical distance between the ground and the upper surface of the first step;

d) the surface of the tread shall not be slippery. This can be achieved by corrugation of the steps or by the use of non slippery types of materials;

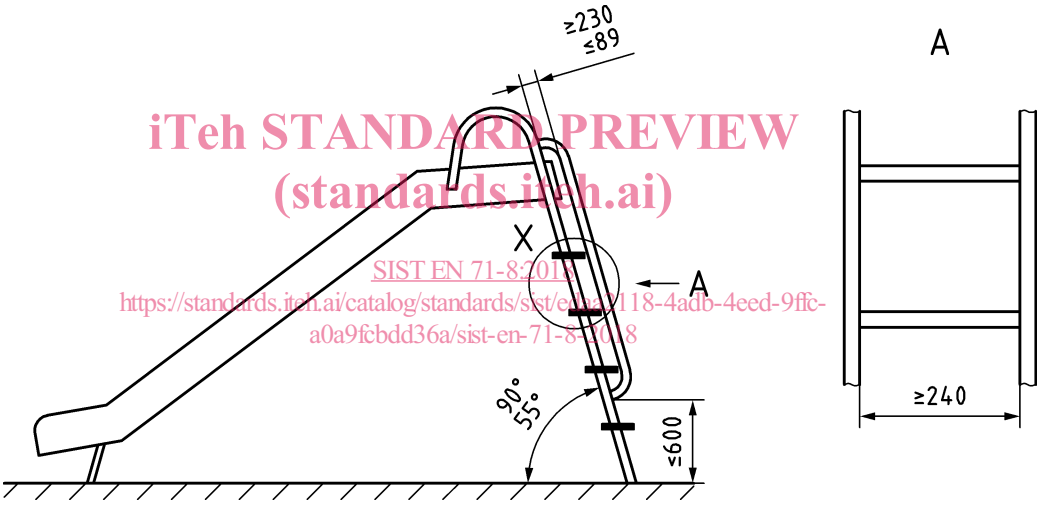
e) when ladders are provided with rungs, the cross-sectional dimension of the rungs shall be not less than 16 mm and not more than 45 mm;

f) the depth of treads on closed step ladders shall be 120 mm or more;

g) the inclination for ladders that are fixed to a toy shall be between 55° and 90° to the horizontal;

h) ladders any part of which reaches a height of 1 200 mm or more from the ground shall be provided with *handrails* from a height of not more than 600 mm from the ground to the top of the platform (see Figure 2 a)). This requirement does not apply to ladders with rungs.

Dimensions in millimetres



a) Dimensions of ladders