

# SLOVENSKI STANDARD oSIST prEN 71-14:2024

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Varnost igrač - 14. del: Trampolini za domačo uporabo

Safety of toys - Part 14: Trampolines for domestic use

Sicherheit von Spielzeug - Teil 14: Trampoline für den häuslichen Gebrauch

Sécurité des jouets - Partie 14: Trampolines à usage familial

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## EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

# DRAFT prEN 71-14

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#### **English Version**

### Safety of toys - Part 14: Trampolines for domestic use

Sécurité des jouets - Partie 14: Trampolines à usage familial

Sicherheit von Spielzeug - Teil 14: Trampoline für den häuslichen Gebrauch

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 52.

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

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

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#### **European foreword**

This document (prEN 71-14:2024) has been prepared by Technical Committee CEN/TC 52 "Safety of toys", the secretariat of which is held by DS.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 71-14:2018.

This document has been prepared under a standardization request addressed to CEN by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

For the relationship with EU Legislation, see informative Annex ZA, which is an integral part of this document.

The significant changes from the previous standard edition of this standard are detailed in Annex B.

This document constitutes the 14th part of the EN 71 series of standards on safety of toys.

EN 71, *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; 14.2
- Part 8: Activity toys for domestic use;
- 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 [this document];
- *Part 15: Formamide in foam toy materials (content)* (under development);
- Part 16: Certain chlorinated phosphorus flame retardants (TCEP, TCPP, TDCP) in toy materials (under development);
- Part 17: Certain isothiazolinones (MIT, CIT, BIT) in aqueous toy materials (under development);
- *Part 18: Phenol in aqueous (content) and polymeric (migration) toy materials* (under development);

- Part 19: Migration of bisphenol A from toy materials (under development);
- Part 20: Microbiological safety of toys containing accessible aqueous media (under development).

It is up to the user of the standard to determine whether or not a toy is included in the scope of several of the above parts of the EN 71 series, and to apply each applicable standard accordingly. Normative references from one part of the EN 71 series to another, are therefore normally not provided in the individual parts.

NOTE 1 In addition to the above parts of EN 71, the following deliverables have been published:

- CEN/TR 15071, Safety of toys National translations of warnings and instructions for use in EN 71;
- CEN/TR 15371 (parts 1 and 2), Safety of toys Interpretations;
- CEN/TR 16918, Safety of toys Children's mouthing behaviour in contact with toys;
- CEN/TR 17695, Safety of toys Mechanical and physical properties Guidance on categorisation of projectile toys within EN 71-1;
- CEN/TS 17973, Safety of toys Categorization of slime type materials;
- CEN/TR XXXXX, Safety of toys Migration of certain elements from (hard) polymers (under development);
- CEN ISO/TR 8124-8, Safety of toys Part 8: Age determination guidelines.

NOTE 2 Words in *italics* (apart from document titles) are defined in Clause 3 (Terms and definitions).

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#### 1 Scope

This document specifies requirements and test methods for toy trampolines for domestic use, their *access devices* and their *enclosures*, intended for outdoor and/or indoor use by one person at a time.

The scope of this document excludes:

- trampolines used as gymnastic equipment, covered by EN 13219:2008;
- floating inflatable trampolines, covered by the EN ISO 25649:2017 series;
- trampolines used in public playgrounds;
- inclined mat trampolines;
- inflatable trampolines;
- fitness trampolines, including trampolines for medical use;
- trampolines with additional features, e.g. tents, basketball hoop.

#### 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 71-1:2014+A1:2018, Safety of toys — Part 1: Mechanical and physical properties

EN 71-8:2018, Safety of toys — Part 8: Activity toys for domestic use

EN 913:2018+A1:2021, Gymnastic equipment — General safety requirements and test methods

EN 1176-1:2017+A1:2023, Playground equipment and surfacing — Part 1: General safety requirements and test methods

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EN 13219:2008, Gymnastic equipment — Trampolines — Functional and safety requirements, test methods

EN ISO 4892-3:2016, Plastics — Methods of exposure to laboratory light sources — Part 3: Fluorescent UV lamps (ISO 4892-3:2016)

EN ISO 9227:2022, Corrosion tests in artificial atmospheres — Salt spray tests (ISO 9227:2022)

EN ISO 13934-1:2013, Textiles — Tensile properties of fabrics — Part 1: Determination of maximum force and elongation at maximum force using the strip method (ISO 13934-1:2013)

#### 3 Terms and definitions

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

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

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

#### 3.1

#### access device

equipment used for access to, or egress from, the *mat* of a toy trampoline including, but not limited to, ladders

#### 3.2

#### bouncing

action considered as normal use of a toy trampoline consisting of continuous, vertical jumping in which each landing is in close proximity to the previous landing

#### 3.3

#### enclosure

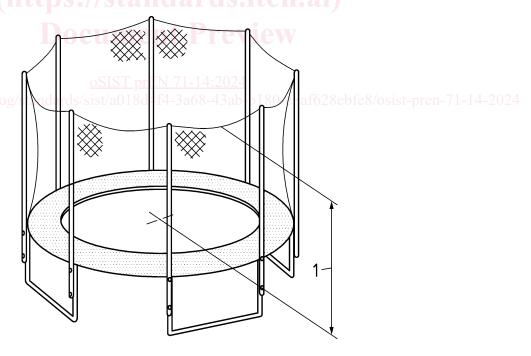
flexible barrier (constraint) surrounding the toy trampoline

#### 3.4

#### enclosure height

distance from the surface of the *mat* to the lowest point of the brim of the *enclosure* 

Note 1 to entry: The *enclosure height* is illustrated in Figure 1:



#### Key

1 enclosure height

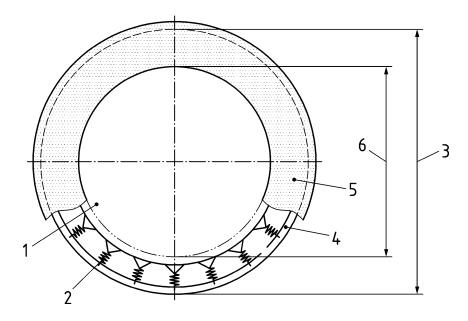
Figure 1 — Enclosure height

### 3.5

#### frame

construction of rigid supportive materials from which the *mat* is suspended

Note 1 to entry: See Figure 2 for an example of domestic toy trampoline including trampoline *frame* and *mat*.



#### Key

- 1 mat
- 2 suspension system
- frame size (in case of a non-circular toy trampoline the frame size is the maximum distance between two opposite points of the *frame*)
- 4 frame
- 5 padding
- jumping area

https://standards.itch.ai/cFigure 2 — Example of trampoline frame and mat 628ebfe8/osist-pren-71-14-2024

#### 3.6

#### frame height

distance from the surface of the ground to the highest point of the *frame* 

#### 3.7

#### legs

part of the framework, constructed of rigid materials which support the *frame* 

#### 3.8

#### mat

predominantly flexible surface which the user contacts in the course of bouncing on the toy trampoline

Note 1 to entry: See Figure 2 for an example of domestic toy trampoline including trampoline *frame* and *mat*.

#### 3.9

#### maximum user weight

mass, in kilograms, indicated by the manufacturer as the maximum weight of a user

#### 3.10

#### padding

shock-attenuating protective system attached to the *frame* to cover the *frame* and the *suspension system* 

Note 1 to entry: See Figure 2 for an example of domestic toy trampoline including trampoline *frame* and *mat*.

#### 3.11

#### suspension system

mechanism that supports the *mat*, consisting of flexible devices that connect the *mat* to the *frame* 

Note 1 to entry: Steel extension springs are a typical example of a *suspension system*.

#### 3.12

#### buried toy trampoline

toy trampoline which according to the manufacturer's instructions requires a hole to be dug as part of the installation process

#### 3.13

#### raised buried toy trampoline

buried toy trampoline with the frame levelled above the ground

#### 3.14

#### ground-levelled toy trampoline

buried toy trampoline with the frame levelled with the ground

#### 3.15

#### non-buried toy trampoline

toy trampoline which according to the manufacturer's instructions does not require a hole to be dug as part of the installation process

#### 3.16

#### skirt

device intended to prevent the user to enter the area below the toy trampoline

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#### jumping area

area of the *mat* accessible for *bouncing* 

Note 1 to entry: See Figure 2 for an example of domestic toy trampoline including trampoline frame and mat.

#### 3.18

#### collapse

sudden or unexpected folding of a structure

[SOURCE: EN 71-1:2014+A1:2018, 3.12]

#### 4 Trampoline categories

Toy trampolines shall be classified by the *frame* size, *maximum user weight* and *frame height* according to Table 1.

Table 1 — Trampoline frame size, frame height and maximum user weight

	Mini	Medium	Large
Frame size in mm	< 1 500	< 2 500	≥ 2 500
<b>Maximum user weight</b> in kg	≤ 25	≤ 50	Manufacturer defined
Frame height of non- buried toy trampolines in mm	< 350	< 500	≥ 500

The *frame* size for a circular trampoline is equal to the diameter (see Figure 2) while for non-circular toy trampolines it is equal to the maximum distance between two opposite points of the outside of the *frame* (e.g. the largest diagonal in the case of a rectangular toy trampoline).

If at least one of the measurements in Table 1 is exceeded, the toy trampoline shall be classified in the closest higher category.

#### 5 Requirements

## 5.1 General requirements for the trampoline construction (see A.3)

#### 5.1.1 Requirements for mini-toy-trampolines (see Clause 4)

Mini-toy-trampolines shall be provided with anti-slip feet. Such toy trampolines shall not slip when tested according to EN 13219:2008, 5.2.

Mini-toy-trampolines may be equipped with handrails to assist the balance of the user. Mini-toy trampolines may be equipped with an *enclosure*. If mini-toy-trampolines are equipped with handrails, they shall not be equipped with an *enclosure*.

NOTE See 5.1.3.2 for requirements on *enclosures*.

#### 5.1.2 Requirements for medium and large toy trampolines (see Clause 4)

#### 5.1.2.1 Non-buried toy trampolines

*Non-buried* large *toy trampolines* shall have a *frame height* of  $\geq 500$  mm.

*Non-buried* medium and large *toy trampolines* shall be equipped with an *enclosure* but shall not be equipped with a handrail.

NOTE See 5.1.3.2 for requirements on *enclosures*.

#### 5.1.2.2 Raised buried toy trampolines

Raised buried medium and large toy trampolines shall be equipped with an enclosure but shall not be equipped with a handrail.

NOTE See 5.1.3.2 for requirements on *enclosures*.