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Varnost igráč - 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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Sécurité des jouets Partie 14 : Trampolines à usage
familial

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

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Contents

	Page
European Foreword.....	5
1 Scope	6
2 Normative references	6
3 Terms and definitions	6
4 Trampoline categories	9
5 General requirements	9
5.1 Exemptions from certain requirements in EN 71-1 (see A.2).....	9
5.2 General requirements for the trampoline construction (see A.3).....	10
5.2.1 Requirements for mini-trampolines (see Clause 4).....	10
5.2.2 Requirements for medium and large trampolines (see Clause 4).....	10
5.2.3 Requirements for all trampoline categories.....	11
5.3 Durability of materials (see A.4).....	12
5.3.1 Metallic parts.....	12
5.3.2 Non-metallic parts.....	12
5.4 Entrapment (see A.5).....	13
5.4.1 Finger entrapment.....	13
5.4.2 Head and neck entrapment.....	13
5.4.3 Foot entrapment.....	14
5.5 Pinching and crushing hazards (see 7.7 and A.6).....	14
5.6 Sharp edges, sharp points and protruding parts.....	14
5.6.1 General.....	14
5.6.2 Sharp edges and sharp points.....	15
5.6.3 Protruding parts.....	15
5.7 Access devices.....	15
5.8 Padding (see 7.7 and A.7).....	15
5.8.1 Padding coverage.....	15
5.8.2 Impact resistance of the frame padding and the suspension system.....	16
5.8.3 Protection of the poles.....	16
5.8.4 Protection of the handrails (for mini-trampolines).....	16
5.9 Strength (see A.8).....	16
5.9.1 Vertical strength of the enclosure.....	16
5.9.2 Frame strength.....	16
5.9.3 Dynamic strength of enclosures.....	16
5.9.4 Strength of the fixations of the padding to the frame.....	16
5.9.5 Static strength of access devices.....	16
5.9.6 Strength of mat, suspension system and frame.....	16
5.10 Mat deflection (see A.9).....	16
5.10.1 Raised buried and buried trampolines.....	16
5.10.2 Non-buried trampolines.....	17
5.11 Stability.....	17
5.12 Tool for assessing a correct hole depth for (raised) buried trampolines.....	17
6 Warnings, markings and instructions (see A.10)	17
6.1 Warnings.....	17
6.1.1 General.....	17
6.1.2 Warning regarding domestic use.....	17

6.1.3	Warning regarding trampolines not intended for children under 36 months	17
6.2	Warnings and markings on the product (see A.10)	17
6.2.1	General	17
6.2.2	Marking of the centre of the mat	18
6.3	Warnings and markings on the packaging	19
6.4	Warnings and information in the instructions for use	20
6.4.1	Warnings	20
6.4.2	Information	21
6.4.3	Assembly and maintenance instructions	21
7	Test methods	22
7.1	Dynamic tests	22
7.1.1	Padding impact test (see 5.8.2)	22
7.1.2	Enclosure and poles impact strength test (see 5.2.3.1 and 5.9.3)	22
7.2	Strength	24
7.2.1	Vertical strength of the enclosure (see 5.9.1)	24
7.2.2	Frame strength (see 5.9.2)	24
7.2.3	Strength test of mat, suspension system and frame (see 5.9.6)	26
7.2.4	Strength of the padding fixations to the frame (see 5.9.4)	26
7.2.5	Static strength of access devices (see 5.9.5)	26
7.3	Stability (see 5.11)	26
7.3.1	Stability of the frame	26
7.3.2	Enclosure and poles impact stability test	27
7.4	Testing of the assembly (see 5.2.3.1 and 5.2.3.2)	28
7.5	Durability tests (see 5.3)	29
7.5.1	Metallic parts (see 5.3.1)	29
7.5.2	Non-metallic parts	29
7.6	Mat deflection test (see 5.10)	29
7.6.1	Raised buried and buried trampolines	29
7.6.2	Non-buried trampolines	30
7.7	Test for padding and pinching and crushing hazards (see 5.5 and 5.8.1)	31
7.8	Test for retaining wall system	32
Annex A (informative)	Rationale	33
A.1	Scope (see Clause 1)	33
A.2	General (see 4.1 and 5.2.3)	33
A.3	Enclosures (see 5.2)	33
A.4	Durability of materials (see 5.3)	35
A.5	Entrapment (see 5.4)	35
A.6	Pinching and crushing hazards (see 5.5)	35
A.7	Padding (see 5.8)	36
A.8	Strength test (see 5.9)	36
A.9	Mat deflection (see 5.10)	36
A.10	Warnings and markings on the product (see 6.2)	37
A.11	Safety skirt to prevent children, animals or objects to end up under the mat	37
Annex B (informative)	Significant technical changes between this European Standard and the previous version	38

prEN 71-14:2017 (E)

Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 2009/48/EC aimed to be covered	40
Bibliography	41

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European Foreword

This document (prEN 71-14:2017) has been prepared by Technical Committee CEN/TC 52 “Safety of toys”, the secretariat of which is held by DS.

This document will supersede EN 71-14:2014.

This document has been prepared under a mandate 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 document.

This European Standard constitutes the 14th part of the European Standard on safety of toys and needs to 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 [this document].*

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

NOTE 2 Words in italics are defined in Clause 3 (Terms and definitions). Additional information on the background and rationale for various requirements is given in Annex A.

NOTE 3 Different legal requirements may exist in non-EU countries.

prEN 71-14:2017 (E)**1 Scope**

This European Standard specifies requirements and test methods for 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 European Standard excludes:

- trampolines used as gymnastic equipment, covered by EN 13219;
- floating inflatable trampolines, covered by the EN 15649 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, 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*

prEN 71-8:2016, *Safety of toys — Part 8: Activity toys for domestic use*

EN 913:2008, *Gymnastic equipment - General safety requirements and test methods*

EN 1176-1:2017, *Playground equipment and surfacing - Part 1: General safety requirements and test methods*

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

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

EN ISO 9227, *Corrosion tests in artificial atmospheres - Salt spray tests (ISO 9227)*

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

3 Terms and definitions

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

3.1**access device**

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

3.2**bouncing**

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

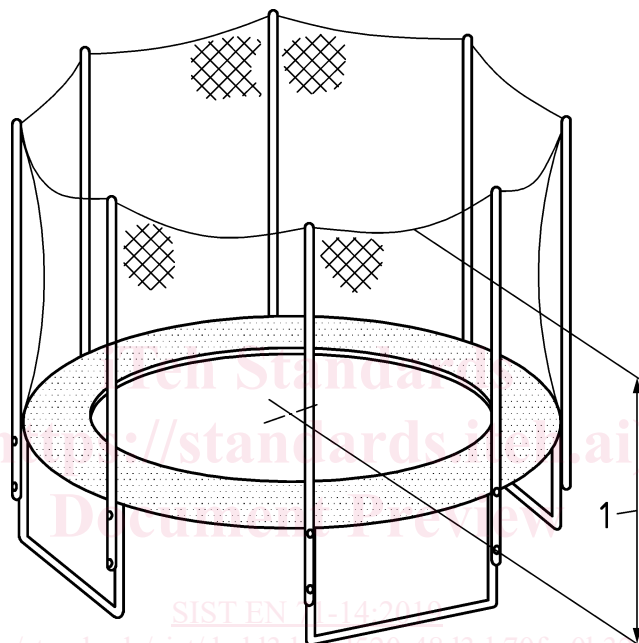
3.3**enclosure**

flexible barrier (constraint) surrounding the 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 3 for an example of domestic trampoline including trampoline *frame* and *mat*.

3.6**legs**

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

3.7**mat**

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

prEN 71-14:2017 (E)

Note 1 to entry: See Figure 3 for an example of domestic trampoline including trampoline *frame* and *mat*.

3.8

maximum user weight

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

3.9

padding

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

Note 1 to entry: See Figure 3 for an example of domestic trampoline including trampoline *frame* and *mat*.

3.10

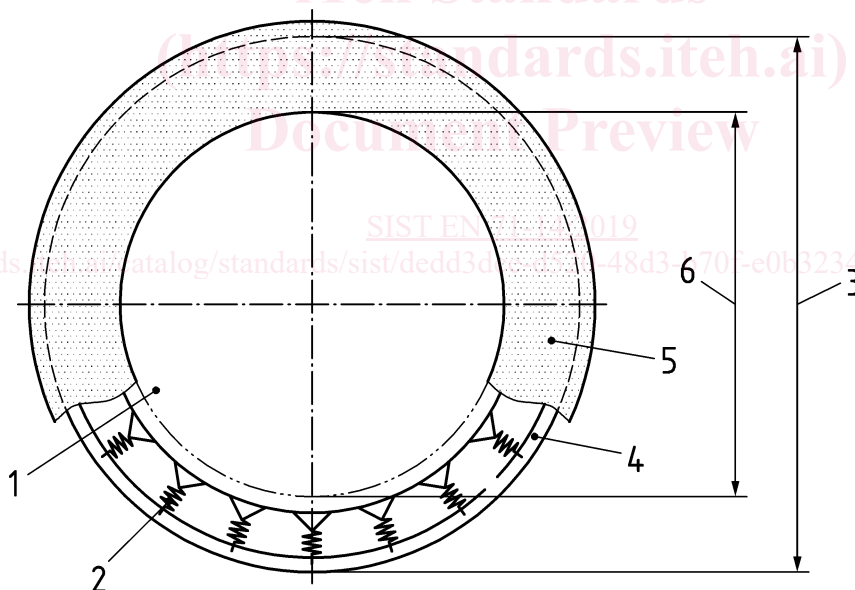
suspension system

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* (see Figure 2).



Figure 2 — Example of a suspension system

**Key**

- 1 Mat
- 2 Suspension system
- 3 Frame size (in case of a non-circular trampoline the frame size is the maximum distance between two opposite points of the frame)
- 4 Frame
- 5 Padding
- 6 Jumping area

Figure 3 — Example of trampoline frame and mat

3.11**buried trampoline**

trampoline which according to the manufacturer's instructions requires a hole to be dug as part of the installation process resulting in the trampoline frame to be levelled with the ground

3.12**raised buried trampoline**

trampoline which according to the manufacturer's instructions requires a hole to be dug as part of the installation process resulting in the trampoline frame to be levelled above the ground

3.13**skirt**

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

3.14**jumping area**

area of the *mat* accessible for *bouncing*

Note 1 to entry: See Figure 3 for an example of domestic trampoline including trampoline *frame* and *mat*.

3.15**collapse**

sudden or unexpected folding of a structure

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

4 Trampoline categories

Trampolines shall be classified by the *frame size* and *maximum user weight* according to Table 1.

Table 1 — Trampoline frame size and maximum user weight

	Mini	Medium	Large
Frame size in mm	< 1 500	≥ 1 500 < 2 500	≥ 2 500
Maximum user weight in kg	25	50	Manufacturer defined

The *frame size* for a circular trampoline is equal to the diameter (see Figure 3) while for non-circular 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 trampoline).

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

5 General requirements**5.1 Exemptions from certain requirements in EN 71-1 (see A.2)**

The requirements in EN 71-1 are applicable to trampolines for domestic use with exemptions for the requirements under the following headings in EN 71-1:

— edges (EN 71-1:2014, 4.7);

prEN 71-14:2017 (E)

- sharp points (EN 71-1:2014, 4.8);
- protruding parts (EN 71-1:2014, 4.9);
- toys which a child can enter (EN 71-1:2014, 4.14.1).

The above mentioned requirements from EN 71-1 are not exempted for trampolines intended for children under 36 months.

NOTE This European standard specifies specific requirements for edges, sharp points and protruding parts for trampolines for domestic use (see 5.6.2 and 5.6.3) which is why the corresponding requirements of EN 71-1 do not apply to trampolines (for children of 36 months and over).

5.2 General requirements for the trampoline construction (see A.3)**5.2.1 Requirements for mini-trampolines (see Clause 4)**

Mini-trampolines shall have a *frame* height of < 350 mm. They shall be provided with anti-slip feet. Such trampolines shall not slip when tested according to EN 13219:2008, 5.2.

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

NOTE See 5.2.3.2 for requirements on *enclosures*.

5.2.2 Requirements for medium and large trampolines (see Clause 4)**5.2.2.1 Non-buried trampolines**

Non-buried medium trampolines shall have a *frame* height of ≥ 350 mm and non-buried large trampolines shall have a *frame* height of ≥ 500 mm.

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

NOTE See 5.2.3.2 for requirements on *enclosures*.

5.2.2.2 Buried trampolines

The frame of buried trampolines shall be levelled with the ground. A tolerance of ± 50 mm is acceptable.

Buried medium and large trampolines shall not be equipped with a handrail. They shall

- either be equipped with an enclosure; or
- be provided with means of ensuring a soft surface (e.g. impact absorbing material) of 1,5 m measured from the edge of the *jumping area*. The soft surface shall comply with EN 1176-1:2017, 4.2.8.5 (Protection against injuries from the surface of the impact area) with a critical fall height of 1,5m.

NOTE See 5.2.3.2 for requirements on enclosures.

Buried trampolines shall be provided with means that prevent them from moving during play.

Buried trampolines shall be provided with a retaining wall system to avoid soil or other substances from falling beneath the structure.