



SLOVENSKI STANDARD
SIST EN 71-14:2015
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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

Ta slovenski standard je istoveten z: EN 71-14:2014

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97.200.50 Igrače

Toys

SIST EN 71-14:2015

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English Version

Safety of toys - Part 14: Trampolines for domestic use

Sécurité des jouets - Partie 14: Trampolines à usage
familialSicherheit von Spielzeug - Teil 14: Trampoline für den
häuslichen Gebrauch

This European Standard was approved by CEN on 8 November 2014.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents

	Page
Foreword.....	4
1 Scope (see A.1).....	6
2 Normative references	6
3 Terms and definitions	6
4 General requirements.....	9
4.1 Exemptions from certain requirements in EN 71-1 (see A.2).....	9
4.2 Trampoline categories	9
4.3 General requirements for the trampoline construction (see A.3).....	9
4.3.1 Requirements for mini-trampolines (see 4.2)	9
4.3.2 Requirements for medium and large trampolines (see 4.2).....	10
4.3.3 Requirements for all trampoline categories	10
4.4 Durability of materials (see A.4).....	11
4.4.1 Metallic parts	11
4.4.2 Non metallic parts.....	11
4.5 Entrapment (see A.5).....	11
4.5.1 Finger entrapment	11
4.5.2 Head and neck entrapment.....	11
4.5.3 Foot entrapment.....	12
4.6 Pinching and crushing hazards (see A.6)	12
4.7 Sharp edges, sharp points and protruding parts	13
4.7.1 General.....	13
4.7.2 Sharp edges and sharp points	13
4.7.3 Protruding parts.....	13
4.8 Access devices	13
4.9 Padding (see A.7).....	13
4.9.1 Padding coverage	13
4.9.2 Impact resistance of the frame padding and the suspension system	14
4.9.3 Protection of the poles.....	14
4.9.4 Protection of the handrails (for mini-trampolines).....	14
4.10 Strength (see A.8)	14
4.10.1 Vertical strength of the enclosure.....	14
4.10.2 Frame strength.....	14
4.10.3 Dynamic strength of enclosures	14
4.10.4 Strength of the fixations of the padding to the frame.....	14
4.10.5 Static strength of access devices	15
4.10.6 Strength of mat, suspension system and frame	15
4.11 Mat deflection (see A.9).....	15
4.12 Stability	15
5 Warnings, markings and instructions	15
5.1 General.....	15
5.2 Warnings and markings on the product (see A.10).....	16
5.2.1 General.....	16
5.2.2 Marking of the centre of the mat	16
5.3 Warnings and markings on the packaging	17
5.4 Warnings and information in the instructions for use.....	17
5.4.1 Warnings.....	17
5.4.2 Information	18

5.4.3	Assembly and maintenance instructions	18
6	Test methods	19
6.1	Dynamic tests	19
6.1.1	Padding impact test (see 4.9.2).....	19
6.1.2	Enclosure and poles impact strength test (see 4.3.3.1 and 4.10.3).....	19
6.2	Strength	21
6.2.1	Vertical strength of the enclosure (see 4.10.1).....	21
6.2.2	Frame strength (see 4.10.2).....	22
6.2.3	Strength test of mat, suspension system and frame (see 4.10.6).....	24
6.2.4	Strength of the padding fixations to the frame (see 4.10.4).....	24
6.2.5	Static strength of access devices (see 4.10.5)	24
6.3	Stability (see 4.12)	24
6.3.1	Stability of the frame	24
6.3.2	Enclosure and poles impact stability test.....	25
6.4	Testing of the assembly (see 4.3.3.1 and 4.3.3.2)	26
6.5	Durability tests (see 4.4)	27
6.5.1	Metallic parts (see 4.4.1)	27
6.5.2	Non metallic parts	27
6.6	Mat deflection test (see 4.6, 4.9.1 and 4.11).....	27
Annex A	(informative) Rationale.....	29
A.1	Scope (see Clause 1).....	29
A.2	General (see 4.1 and 4.3.3)	29
A.3	Enclosures (see 4.3).....	29
A.4	Durability of materials (see 4.4).....	31
A.5	Entrapment (see 4.5)	31
A.6	Pinching and crushing hazards (see 4.6).....	31
A.7	Padding (see 4.9)	32
A.8	Strength test (see 4.10).....	32
A.9	Mat deflection (see 4.11).....	32
A.10	Warnings and markings on the product (see 5.2).....	32
Annex ZA	(informative) Relationship between this European Standard and the Essential Requirements of EU Directive 2009/48/EC on the safety of toys	33
Bibliography	34

EN 71-14:2014 (E)**Foreword**

This document (EN 71-14:2014) 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 June 2015 and conflicting national standards shall be withdrawn at the latest by June 2015.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

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 Report, CR 14379, *Classification of toys – Guidelines*; 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 – Replies to requests for interpretation of EN 71–1, EN 71–2, and EN 71–8*.

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.

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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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EN 71-14:2014 (E)**1 Scope (see A.1)**

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 above ground level 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, basket ball hoop;
- trampolines for domestic use buried at ground level.

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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 71-8:2011, *Safety of toys — Part 8: Activity toys for domestic use*

EN 913:2008, *Gymnastic equipment — 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

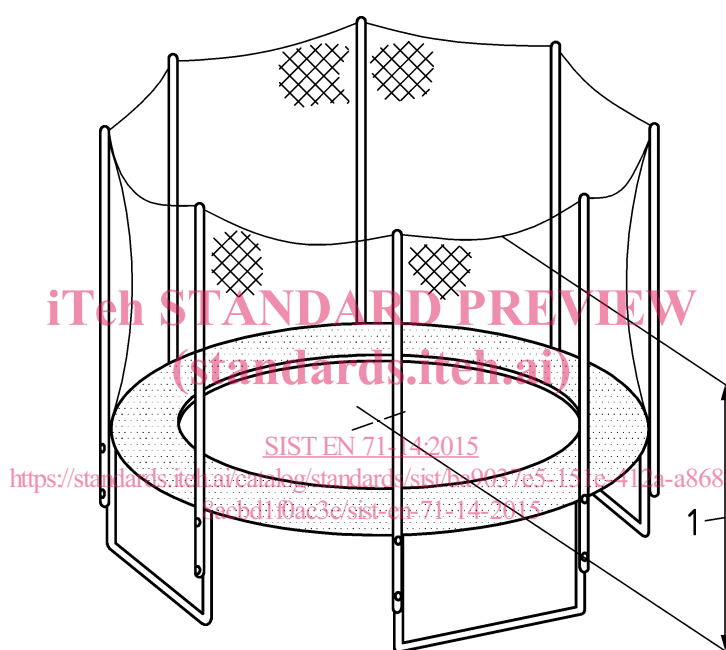
3.3**enclosure**

flexible barrier (constraint) surrounding the trampoline and designed to prevent the user from falling off a 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: Example of domestic trampoline including trampoline *frame* and *mat* (see Figure 3).

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

Note 1 to entry: Example of domestic trampoline including trampoline *frame* and *mat* (see Figure 3).

EN 71-14:2014 (E)

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: Example of domestic trampoline including trampoline *frame* and *mat* (see Figure 3).

3.10

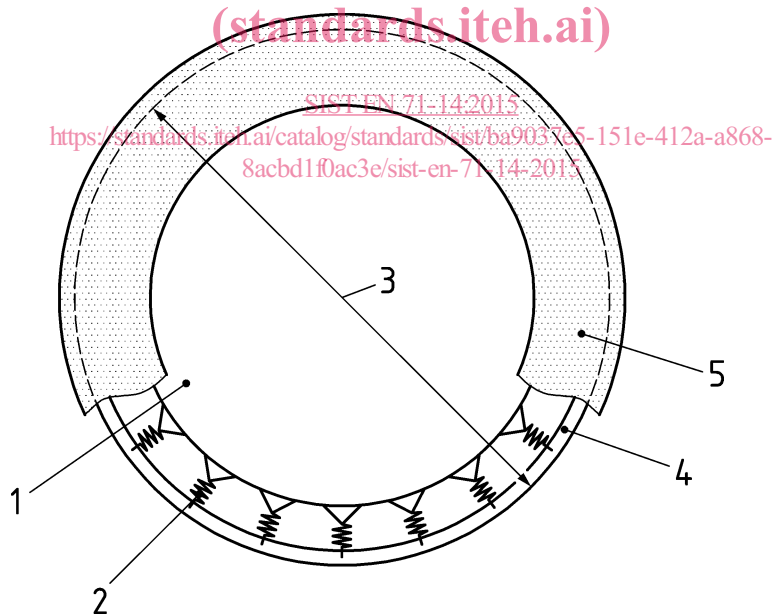
suspension system

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*

Figure 3 — Example of trampoline frame and mat

4 General requirements

4.1 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);
- 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 which is why the corresponding requirements of EN 71-1 do not apply to trampolines (for children of 36 months and over).

4.2 Trampoline categories

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

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

	Mini SIST EN 71-14:2015 8acbd10ac3e/sist-en-71-14-2015 https://standards.iteh.ai/catalog/standards/sist/ba9037c5-151e-412a-a068-8acbd10ac3e/sist-en-71-14-2015	Medium	Large
Frame size in mm	< 1 500	$\geq 1\ 500 < 2\ 500$	$\geq 2\ 500$
Frame height in mm	< 350	≥ 350	≥ 350
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.

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

4.3.1 Requirements for mini-trampolines (see 4.2)

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

EN 71-14:2014 (E)

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 4.3.3.2 for requirements on *enclosures*.

4.3.2 Requirements for medium and large trampolines (see 4.2)

Medium and large trampolines shall be equipped with an *enclosure* but shall not be equipped with a handrail.

NOTE See 4.3.3.2 for requirements on *enclosures*.

4.3.3 Requirements for all trampoline categories**4.3.3.1 General requirements**

The construction of the trampoline shall ensure that during play (or movement of the trampoline) the assembled joints cannot become dislodged.

NOTE This requirement can be fulfilled by the use of pit pins or bolts.

After being tested according to 6.4 (testing of the assembly), the *legs* and the *frame* shall remain in their initial connection position without apparent movement.

The assembled joints of the trampoline and *enclosure*, if any, shall stay connected when tested according to 6.1.2 (enclosure and poles impact strength test).

4.3.3.2 Enclosures

The opening of the *enclosure* shall also allow access for an adult.

Any *enclosure* shall allow supervision of the child during play on any point of the periphery of the trampoline.

Access under the trampoline shall be free and the zone between the *mat* and ground shall not be enclosed. No barrier shall be mounted around the trampoline *frame*.

It shall be possible to open the opening in the *enclosure* from the inside and from the outside independently. The opening for access through any *enclosure* shall be easy to distinguish from the rest of the *enclosure*.

NOTE 1 EN 71-1:2014, A.33 contains Good practices for visibility and legibility for warnings. Some of the recommendations given in this annex could also be applied for distinguishing the opening for access from the rest of the *enclosure*.

If buckles are used for the opening, the opening force needed for opening each (single) buckle shall be 50 N or less.

If a zip is used for the opening, the opening-direction the zip shall be from bottom to top.

The slider of any zip or any other means of opening shall be of a colour which contrasts with the colour of the teeth and ribbons of the zip, unless a conspicuous handle of a different colour is attached to the slider.

NOTE 2 This requirement can be fulfilled by having a double-tagged slider on a zip-fastener.

The height of the *enclosure* shall be:

— at least 1,5 m for trampolines with a *frame* size of less than 2,5 m;