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**oSIST prEN 71-14:2012**  
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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

**Ta slovenski standard je istoveten z: prEN 71-14**

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

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

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## Foreword

This document (prEN 71-14:2012) 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.

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 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.

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

This standard is part of a series of standards for the safety of toys.

This European Standard constitutes the fourteenth part of the European Standard on safety of toys and should be read in conjunction with Part 1 and Part 8.

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*
- *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, gustative board games, cosmetic kits and gustative kits*

NOTE 1 In addition to the above parts of EN 71, the following guidance documents have been published: CEN Report, CR 14379, *Classification of toys – Guidelines*; CEN Technical Report CEN/TR 15071, *Safety of toys – National translations of warnings and instructions for use in EN 71*, and 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 Different legal requirements may exist in non-EU countries.

## Introduction

This European Standard aims at reducing as far as possible those hazards which are not evident to users; it does not cover inherent hazards that are obvious to children or the persons in charge of them. Assuming that the toys are used in the intended manner, they should not present any further hazard to children for whom they are intended. According to the Directive 2009/48/EC [1] “intended for use by” means that a parent or supervisor shall reasonably be able to assume by virtue of the functions, dimensions and characteristics of a toy that it is intended for use by children of the stated age group. Allowance should also be made for foreseeable use, bearing in mind the behaviour of children who do not generally share the same degree of care as the average adult user.

As a general rule, toys are designed and manufactured for particular ages of children. Their characteristics are related to the age and stage of development of the children, and their use presupposes certain aptitudes. Accidents are frequently due to a toy either being given to a child for whom it is not intended, or being used for a purpose other than that for which it was designed. Great care should therefore be taken when choosing a toy or game; account should be taken of the mental and physical development of the child who will be using it. The requirements of this European Standard do not release parents or carers from their responsibility of watching over the child while he or she is playing.

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## prEN 71-14:2012 (E)

## 1 Scope

This European Standard specifies requirements and test methods for domestic trampolines, their means of access and their *enclosures* (surrounds), intended for outdoor use by one person at a time.

This European Standard also specifies requirements and test methods for small (mini) trampolines, intended for children with a body mass of 25 kg or less, which are intended to be used indoors or outdoors.

The scope of this European Standard excludes:

- trampolines used as gymnastic equipment, covered by EN 13219
- floating inflatable trampolines, covered by EN 15649
- trampolines used in public playgrounds
- inclined mat trampolines
- inflatable trampolines
- fitness trampolines, including trampolines for medical use
- trampolines with additional features, e.g. tents.

## 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 71-1:2011, *Safety of toys — Part 1: Mechanical and physical properties*

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

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

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

EN ISO 9227, *Corrosion tests in artificial atmospheres — Salt spray tests*

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

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

## 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 *bed* of a trampoline including, but not limited to, ladders



### 3.2

#### **bed**

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

Note 1 to entry: A *bed* is commonly referred to as a mat.

### 3.3

#### **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

### 3.4

#### **enclosure**

surround of the trampoline, designed to provide a flexible barrier (constraint) to prevent the user of the trampoline from falling off the *bed* or *frame*

### 3.5

#### **enclosure height**

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

### 3.6

#### **frame**

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

Note 1 to entry: A *frame* is sometimes referred to as a suspension *frame*.

### 3.7

#### **padding**

shock-attenuating protective system attached to the *frame* to cover, as a minimum, the *frame* and the *suspension system*

### 3.8

#### **legs**

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

### 3.9

#### **maximum user weight**

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

### 3.10

#### **suspension system**

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

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



Figure 1 — Example of a *suspension system*

## 4 General requirements<sup>1</sup>

### 4.1 Assembly

Trampolines shall be accompanied by detailed assembly instructions.

The assembly instructions shall indicate that an adult shall assemble the trampoline and check it before use.

Trampolines 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.

### 4.2 Verification of the assembly

After being tested according to 6.3 (verification of the assembly), the legs and the frame shall remain in their initial connection position without apparent movement.

### 4.3 Trampoline categories

Trampolines shall comply with the size, height and *maximum user weight* requirements for one of the trampoline categories specified in Table 1.

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

	Trampoline category		
	Mini-trampoline	Medium trampoline	Large trampoline
Size	< 1 500 mm	≥ 1 500 mm, < 2 500 mm	≥ 2 500 mm
Maximum <i>frame</i> height	350 mm	600 mm	1 000 mm
Minimum <i>enclosure height</i>	1 500 mm (if any)	1 500 mm	1 800 mm
<i>Maximum user weight</i>	25 kg	Manufacturer defined (kg)	
NOTE 1 A trampoline with a maximum size of less than 2 500 mm and a <i>frame</i> height exceeding 600 mm is classified as a large trampoline.			
NOTE 2 Size is determined as the longest single measure of the trampoline from one external edge of the <i>frame</i> to another external edge of the <i>frame</i> (maximum dimension), for example the diameter of a circular trampoline or the diagonal length of a rectangular trampoline.			
NOTE 3 A mini-trampoline could be designed for either indoor or outdoor use. Medium and large trampolines are designed for outdoor use only			

### 4.4 General elements of construction

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 achieved by the use of pit pins or bolts.

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

Indoor trampolines (mini-trampolines) (see Table 1) shall be provided with non-slip feet. Such trampolines shall not slip when tested according to EN 13219:2008, 5.2 (Testing of stability and antislip).

<sup>1</sup> 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.

Medium and large trampolines (see Table 1) shall be equipped with an *enclosure* but shall not be equipped with a handrail.

Mini-trampolines (see Table 1) may be equipped with handrails to assist the balance of the user.

If a mini-trampoline is equipped with a handrail, it shall not be equipped with an *enclosure*.

Any *enclosure* shall be made of a material which allows supervision of the child during play.

The access through any *enclosure* shall have a contrasting colour.

The opening shall be easily operable.

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

The slider of the zip shall not be of the same colour as the teeth and ribbons of the zip, unless a conspicuous handle of a different colour is attached to the slider.

In order to allow opening of the *enclosure* from the inside and outside independently, the zip fasteners of the opening shall have a double-tagged slider.

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

The height of the *enclosure* shall as a minimum be:

- *bed* diameter of less than 2,5 m: minimum 1,5 m;
- *bed* diameter of 2,5 m or more: minimum 1,8 m;

When tested according to 6.4 (verification of the assembly), no element supporting the enclosure (e.g. poles, liaison tubes, caps) shall dismantle.

#### 4.5 Trampoline intended for children under 36 months

Trampolines intended for children under 36 months, and their *enclosures*, if any, shall also comply with EN 71-1, 5.1 (toys intended for children under 36 months, general requirements).

#### 4.6 Durability of materials

##### 4.6.1 Metallic parts in structural design

This requirement does not apply to mini-trampolines if designed for indoor use according to the manufacturer's specification.

When tested with a 5 % neutral salt spray according to EN ISO 9227 for a duration of 72 hours, all structural metallic parts, coated or non-coated, shall present a surface aspect with less than 8 % red-rusted surface.

This requirement also applies to fasteners and fixing mechanisms.

##### 4.6.2 Textile parts

The outermost material of the *padding* system for the *frame*, the material of the *bed* and the material of the *enclosure* shall maintain 80 % of their initial tensile strength according to EN ISO 13934-1 after exposure to light and UV, according to ISO 4892-3, for a minimum period of 400 h.