



# SLOVENSKI STANDARD

## SIST EN 1930:2012

01-februar-2012

Nadomešča:

SIST EN 1930:2002

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**Izdelki za otroke - Varnostne pregrade - Varnostne zahteve in preskusne metode**

Child use and care articles - Safety barriers - Safety requirements and test methods

Artikel für Säuglinge und Kleinkinder - Kinderschutzgitter - Sicherheitstechnische Anforderungen und Prüfverfahren

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Articles de puériculture - Barrières de sécurité - Exigences de sécurité et méthodes d'essai

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**Ta slovenski standard je istoveten z: EN 1930:2011**

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**ICS:**

97.190

Otroška oprema

Equipment for children

**SIST EN 1930:2012**

**en,fr,de**

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English Version

Child use and care articles - Safety barriers - Safety  
requirements and test methodsArticles de puériculture - Barrières de sécurité - Exigences  
de sécurité et méthodes d'essaiArtikel für Säuglinge und Kleinkinder - Kinderschutzgitter -  
Sicherheitstechnische Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 22 October 2011.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

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

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**EN 1930:2011 (E)****Foreword**

This document (EN 1930:2011) has been prepared by Technical Committee CEN/TC 252 "Child use and care articles", the secretariat of which is held by AFNOR.

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 2012, and conflicting national standards shall be withdrawn at the latest by June 2012.

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 supersedes EN 1930:2000.

The new edition of this European Standard is a hazard based standard. In comparison with the previous version, the main technical changes are:

- addition of a new hip probe;
- addition of new drawings for finger probes;
- removal of the disk from the ball and chain test so that the test is now more accurate and reproducible unlike the old one;
- improvement of the diagram for the ball and chain test;
- introduction of the rattle test which tests for security of the gate;
- deletion of the out of alignment requirement as not reproducible;
- improvement of the impact test and new test frame which provides a more reproducible test;
- improvement of the requirements for the closing system.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

## 1 Scope

This European Standard specifies the safety requirements and test methods for child safety barriers for domestic indoor use which are designed to be fitted across openings to limit a child's access inside the home and to prevent young children up to 24 months of age passing through.

This European Standard does not apply to products designed to be fitted across windows.

## 2 Normative references

The following referenced documents are indispensable for the application 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 71-2, *Safety of toys — Part 2: Flammability*

EN 71-3, *Safety of toys — Part 3: Migration of certain elements*

## 3 Terms and definitions

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

### 3.1

#### **safety barrier**

product designed to limit a child's access inside the home

### 3.2

#### **opening system**

system allowing access by opening the safety barrier or a section of the safety barrier or by removing the safety barrier

### 3.3

#### **closing system**

system restricting access by closing and/or locking the opening system

## 4 Test equipment

### 4.1 Tolerances for test equipment

Unless otherwise stated, the following tolerances apply:

Forces:	$\pm 5 \%$ of the nominal force;
Masses:	$\pm 0,5 \%$ of the nominal mass;
Dimensions:	$\pm 1,0$ mm of the nominal dimension;
Angles:	$\pm 2^\circ$ of the nominal angle;
Positioning of loading pads:	$\pm 5$ mm;
Duration of forces:	$(2 \pm 1)$ s for durability tests;

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$(10 \pm 2)$  s for static load tests.

The tests are described in terms of the application of forces. Masses can however be used. The relationship  $10 \text{ N} = 1 \text{ kg}$  may be used for this purpose.

Unless otherwise specified, the test forces may be applied by any suitable device which does not adversely affect the results.

#### 4.2 Hip probe

A probe made from plastics or other hard, smooth material with the dimensions given in Figure 1.

Dimensions in millimetres

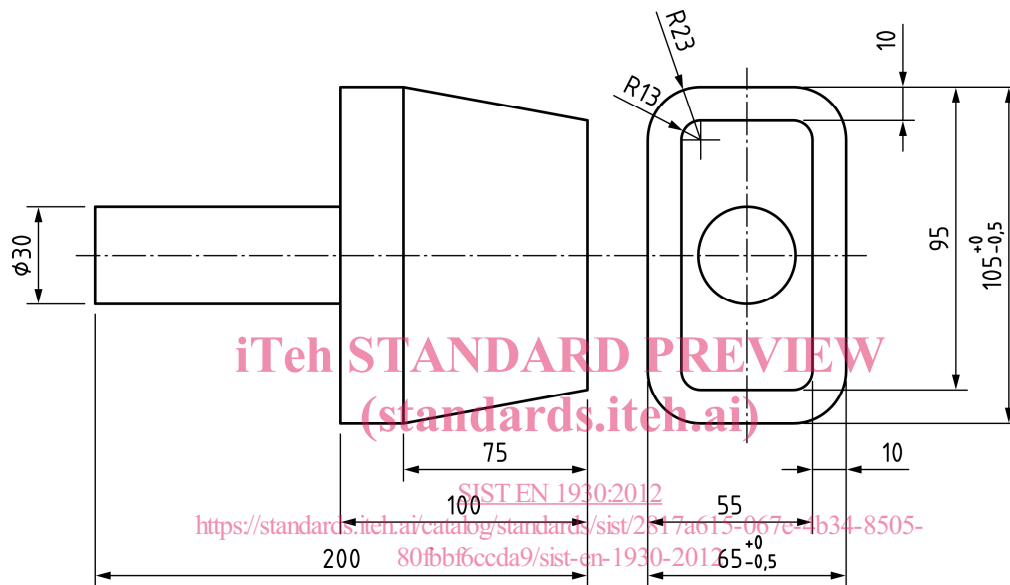


Figure 1 — Hip probe

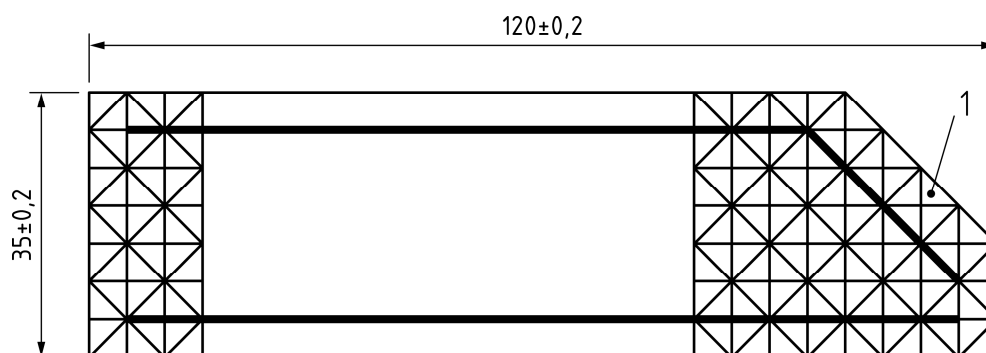
#### 4.3 Foothold template

A strip of 10 mm thick transparent material cut to the shape as shown in Figure 2.

The sides of the template shall be square to the faces. All edges and corners shall be left as machined without any radius.



Dimensions in millimetres

**Key**

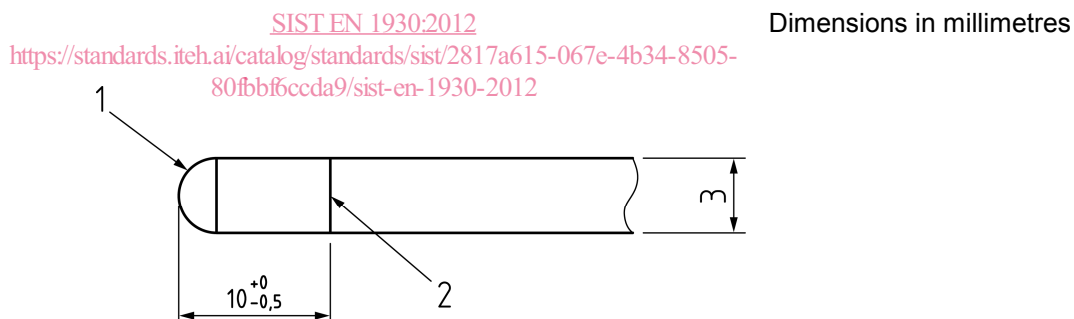
- 1 triangular cells plotted on a  $5 \times 5 \pm 0,2$  grid

**Figure 2 — Template for foothold test (example of left hand template)**

Two templates are required to provide a left and right hand template. The markings shown in Figure 2 are on the bottom face of each template to avoid parallax errors.

**4.4 Finger probes**

Probes made from plastics or other hard, smooth material of diameters 5 mm, 7 mm and 12 mm with a full hemispherical end, which shall be capable of being mounted on a force-measuring device, so that the hemispherical end can be presented to the opening being assessed see Figure 3.

**Key**

- 1 spherical ends R2,5 (for 5 mm diameter) R3,5 (for 7 mm diameter) or R6 (for 12 mm diameter)  
 2 line scribed around circumference showing depth of penetration  
 3  $\varnothing (5_{-0,1}^0)$ ,  $\varnothing (7_{-0,1}^0)$  or  $\varnothing (12_{0}^{+0,1})$

**Figure 3 — 5 mm, 7 mm and 12 mm finger probes for gaps**

**4.5 Finger probe for mesh**

Probe for assessing mesh made from plastics or other hard, smooth material as shown in Figure 4 which is capable of being mounted on a force measuring device, so that the conical end can be presented to the opening being assessed.

Dimensions in millimetres

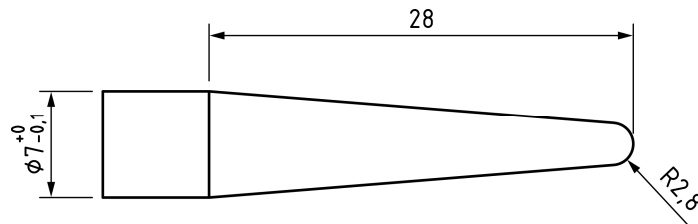


Figure 4 — Finger probe for mesh

#### 4.6 Ball chain loop and spherical mass

This equipment comprises a ball chain loop attached to a spherical mass at a common fixing point.

The ball chain comprises maximum of 10 balls per 40 mm, equally distributed along the length of the chain when the chain is loaded with a mass of 2,5 kg.

The diameter of each ball is  $(3,2 \pm 0,2)$  mm.

Dimensions in millimetres

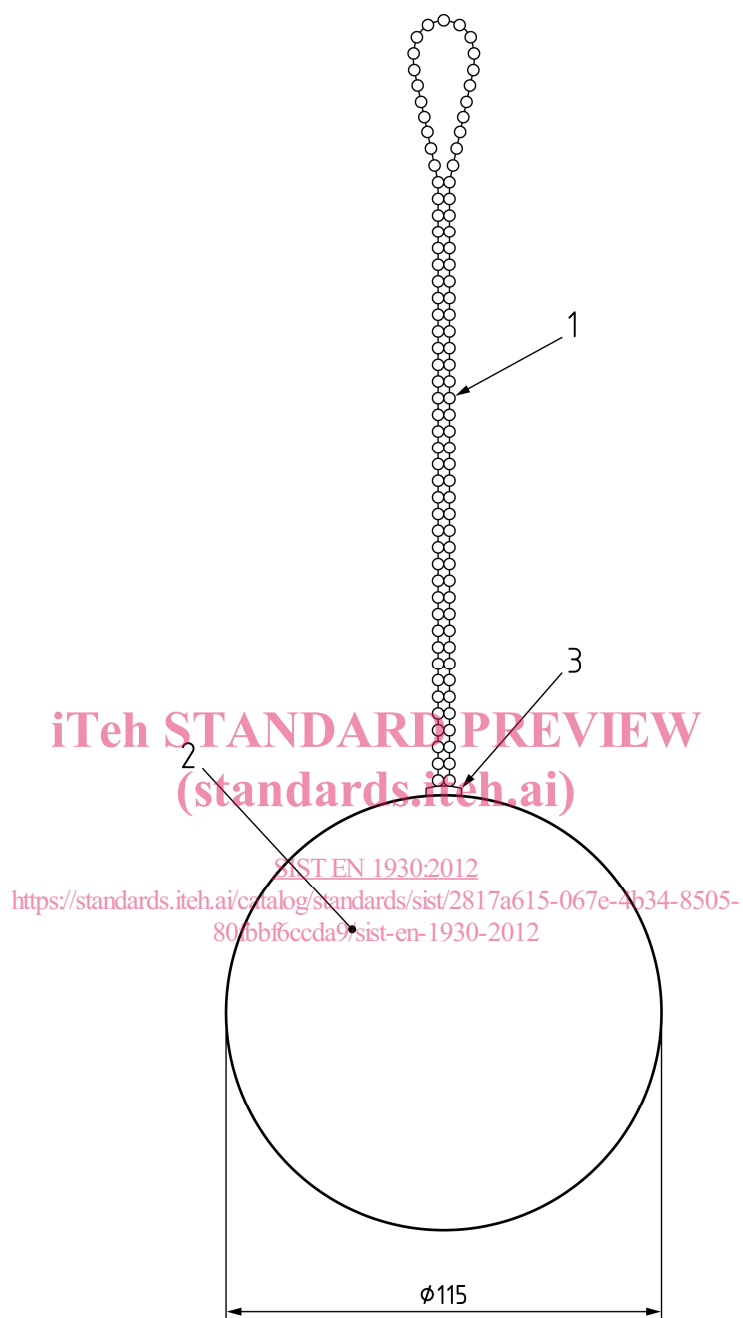


Figure 5 — Ball chain

The ball chain loop is formed by the ball chain entering the spherical mass at a common fixing point with a ball from each side of the chain in contact with each other. The external peripheral length of the ball chain loop shall be  $400^{+5}_0$  mm see Figure 6.

A smooth spherical mass of  $(2,5 \pm 0,05)$  kg and a diameter of 115 mm.

Dimensions in millimetres

**Key**

- 1 ball chain loop
- 2 spherical mass
- 3 common fixing point

**Figure 6 — Ball chain loop and spherical mass****4.7 Small parts cylinder**

Cylinder having the dimensions given in Figure 7.

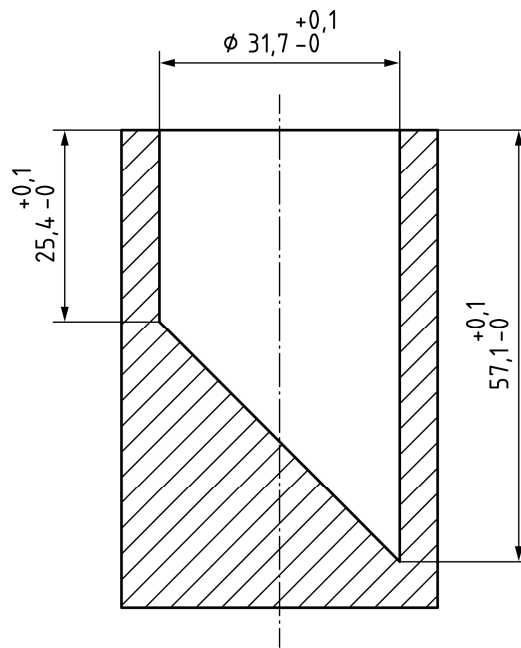


Figure 7 — Small parts cylinder

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#### 4.8 Test frame

A rigid construction made from 100 mm × 100 mm steel tube, having a vertical beam adjustable in the horizontal direction within the frame made from 100 mm × 100 mm steel tube, see Figure 8.

The maximum deflection of the test frame and the adjustable vertical beam shall be 1 mm when a force of a 1 000 N is applied in the positions and directions given in Figure 8. The application of the forces shall be done in the sequence of F, F1 and F2 and take the measurements in the sequence M, M1 and M2.

Smooth, planed beech pads of thickness  $(50 \pm 1)$  mm shall be fixed to the surface of the vertical beams on to which the safety barrier is fitted.

The vertical beams and beech pads shall, once adjusted, not move or twist during fitting and testing of the safety barrier.