SLOVENSKI STANDARD
oSIST prEN 18102:2024

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Izdelki za otroke - Varnostne ograje za otroške posteljice za domačo uporabo - Varnostne zahteve in preskusne metode

Child care articles - Children’s bedguards for domestic use - Safety requirements and test methods

Artikel für Säuglinge und Kleinkinder - Sicherheitstechnische Anforderungen und Prüfverfahren für Kinderbettschutzgitter für den Wohnbereich

Ta slovenski standard je istoveten z: **prEN 18102**

ICS:

97.140	Pohištvo	Furniture
97.190	Otroška oprema	Equipment for children

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English Version

Child care articles - Children's bedguards for domestic use - Safety requirements and test methods

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 252.

If this draft becomes a European Standard, 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.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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

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European foreword

This document (prEN 18102:2024) has been prepared by Technical Committee CEN/TC 252 “Child care articles”, the secretariat of which is held by AFNOR.

This document is currently submitted to the CEN Enquiry.

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.

1 Scope

This document specifies safety requirements and test methods for children's bedguards for domestic use intended for use with junior or adult beds.

These bedguards, when used in conjunction with a bed/mattress combination, are intended to prevent children aged between 18 months and 4 years from falling out of bed.

This document is not applicable to bedguards designed for adult use, or to bedguards which are an integral part of a bed, i.e. a permanent fixture not intended to be detached.

If the bedguard has several functions or can be converted into another function, the relevant European standard/s apply to it.

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 71-2:2020, *Safety of toys — Part 2: Flammability*

EN 71-3:2019+A1:2021, *Safety of toys — Part 3: Migration of certain elements*

EN 71-10:2005, *Safety of toys — Part 10: Organic chemical compounds — Sample preparation and extraction*

EN 71-11:2005, *Safety of toys — Part 11: Organic chemical compounds — Methods of analysis*

EN 622-1:2003, *Fibreboards — Specifications — Part 1: General requirements*

EN 717-1:2004, *Wood-based panels — Determination of formaldehyde release — Part 1: Formaldehyde emission by the chamber method*

EN ISO 105-A03:2019, *Textiles — Tests for colour fastness — Part A03: Grey scale for assessing staining (ISO 105-A03:2019)*

EN ISO 2439:2008, *Flexible cellular polymeric materials — Determination of hardness (indentation technique) (ISO 2439:2008)*

EN ISO 14184-1:2011, *Textiles — Determination of formaldehyde — Part 1: Free and hydrolysed formaldehyde (water extraction method) (ISO 14184-1:2011)*

EN ISO 14362-1:2017, *Textiles — Methods for determination of certain aromatic amines derived from azo colorants — Part 1: Detection of the use of certain azo colorants accessible with and without extracting the fibres (ISO 14362-1:2017)*

EN ISO 17234-1:2020, *Leather — Chemical tests for the determination of certain azo colourants in dyed leathers — Part 1: Determination of certain aromatic amines derived from azo colorants (ISO 17234-1:2020)*

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
underframe
part of the bedguard which fits under the mattress

Note 1 to entry: The underframe is sometimes referred to as the “arm”, “leg” or “horizontal member”.

3.2
single-sided bedguard
bedguard with a vertical element on one side of the bed only, intended to fit against one long side of a mattress

3.3
double-sided bedguard
bedguard with a vertical element on both sides of the bed, intended to fit against both long sides of a mattress

4 Test equipment

4.1 Tolerances

Unless otherwise specified, the accuracy of the test equipment shall be:

a) Forces: ±5 % of the nominal force;

b) Masses: ±0,5 % of the nominal mass;

c) Dimensions: ±1 mm;

d) Angles: ±0,5°;

e) Time: ±1 s.

The tests are described in terms of the application of forces. Masses can however be used. The relationship 10 *N* = 1 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 Test surface

A smooth, hard surface, e.g. of medium-density fibreboard.

4.3 Test mattress

Mattress, of dimensions (1,900 ± 10) mm x (762 ± 10) mm x (150 ± 10) mm, made from flexible polyether foam with a thickness of 100 mm, a density of (30 ± 2) kg/m^3 and an indentation hardness index of (170 ± 20) N in accordance with A40 in EN ISO 2439:2008. The size of the mattress shall be such as to overlap the size of the loading pad by at least 100 mm all round.

The test mattress shall have a light, soft cotton cover with a mass not greater than 120 g/m^2.

4.4 Small parts cylinder

Small parts cylinder for the assessment of small components, having dimensions in accordance with Figure 1.

Dimensions in millimetres

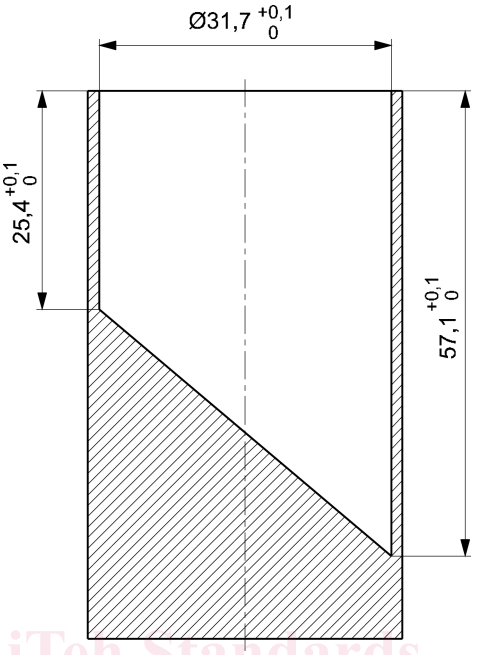


Figure 1 — Small parts cylinder

4.5 Test probes

Probes made from plastic or other hard, smooth material mounted on a force measuring device, one each of diameters $45_{+0}^{-0,1}$ mm and $65_{+0,1}^{0}$ mm with a rounded or conical end (see Figure 2).

Dimensions in millimetres

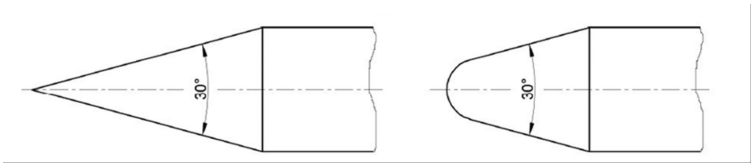


Figure 2 — Test probe

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 a 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. See Figure 3.

The diameter of each ball is (3,2 ± 0,2) mm.

Dimensions in millimetres

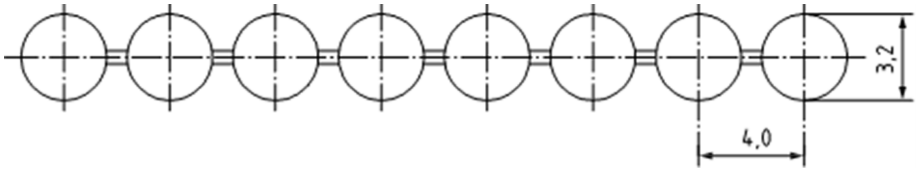
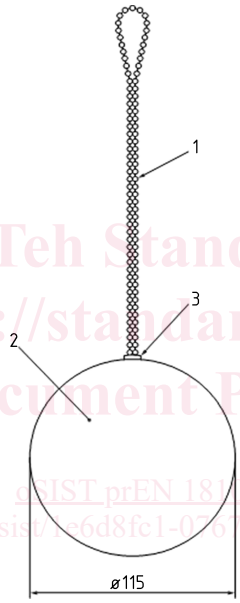


Figure 3 — Ball chain

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 4.

A smooth spherical mass of (2,5 ± 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 4 — Ball chain loop and spherical mass

4.7 Ball chain loop and spherical mass

4.7.1 Test probes with hemispherical end

Probes made from plastic or other hard, smooth material of diameters $7\ ^{0}_{-0,1}$ mm and $12\ ^{+0,1}_{0}$ mm with a full hemispherical end that can be mounted on a force-measuring device, see Figure 5.