



SLOVENSKI STANDARD
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Nadomešča:
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Pohištvo - Postelje - Zahteve za varnost, trdnost in trajnost

Furniture - Beds - Requirements for safety, strength and durability

Möbel - Betten - Anforderungen an Sicherheit, Festigkeit und Dauerhaltbarkeit

Meubles - Lits - Exigences pour la sécurité, la résistance et la durabilité

Ta slovenski standard je istoveten z: EN 1725:2023

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EUROPEAN STANDARD
NORME EUROPÉENNE
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EN 1725

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English Version

**Furniture - Beds - Requirements for safety, strength and
durability**

Meubles - Lits - Exigences de sécurité, solidité et
durabilité

Möbel - Betten - Anforderungen an Sicherheit,
Festigkeit und Dauerhaltbarkeit

This European Standard was approved by CEN on 22 October 2023.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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EN 1725:2023 (E)**European foreword**

This document (EN 1725:2023) has been prepared by Technical Committee CEN/TC 207 “Furniture”, the secretariat of which is held by UNI.

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of an identical text or by endorsement, at the latest by month May 2024, and conflicting national standards shall be withdrawn at the latest by May 2024.

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 supersedes EN 1725:1998.

In comparison with the previous edition EN 1725:1998, the following technical modifications have been made:

- addition of horizontal test methods;
- addition of test method for durability of electrically operated bed mechanism;
- reference to the test methods of ISO 19833:2018;
- introduction of requirements for guest beds;
- introduction of requirement for non-domestic use;
- introduction of information for use;
- addition of requirements for strength and durability;
- addition of entanglement hazards.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

1 Scope

This document specifies requirements on safety, strength and durability for all types of fully assembled beds used by adults in domestic and non-domestic environments including their components, such as bed frames, bed bases, mattresses and mattress pads (when they form a unit with the mattress) and, when supplied with the bed base, mattresses and mattress pads.

The tests are based on use by persons weighing up to 110 kg.

With the exception of sleeping functions, it does not apply to foldaway beds.

It does not apply to bunk beds, high beds and medical beds where separate standards exist, as well as waterbeds and air beds.

Additional requirements can be applicable to items that have additional functions, e.g. storage features, day beds and convertible sofa-beds.

The durability test, 6.6.1, test 11, applies only to electrically operated beds.

It does not include requirements for the resistance to ageing, degradation, flammability and electrical safety.

Annex A (normative) specifies test methods for finger entrapment.

Annex B (informative) gives a rationale.

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 1728:2012¹, *Furniture — Seating — Test methods for the determination of strength and durability*

EN 13759:2012, *Furniture — Operating mechanisms for seating and sofa-beds — Test methods*

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

ISO 19833:2018, *Furniture — Beds — Test methods for the determination of stability, strength and durability*

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

unframed slat base

bed base consisting of separate slats flexibly held together normally by means of textile, rubber or plastic tape

¹ As impacted by EN 1728:2012/AC:2013.

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[SOURCE: ISO 19833:2018, 3.1, modified — Note 1 to entry deleted.]

3.2**framed base**

bed base consisting of slats, springs, etc. which are connected to a structural frame system

[SOURCE: ISO 19833:2018, 3.2, modified — Note 1 to entry deleted.]

3.3**framed sprung mattress**

upholstered bed base consisting of springs, topped with fillings, on a rigid frame to be used in a bed frame or freestanding

3.4**divan base**

upholstered bed base used without the need of any framework. It may be constructed with a spring filling or a solid top and may include drawers or storage facilities

3.5**convertible sofa-bed**

item of seating that utilises a mechanism to convert into a bed

[SOURCE: EN 13759:2012, 2.2]

3.6**side rail**

longitudinal member attached to the bed end structure(s) by which the bed base can be supported

3.7**headboard**

component of bed that a person can lean against when in bed (e.g. while reading)

3.8**footboard**

component of bed opposite to headboard

3.9**guest bed**

bed that is intended to be used on an occasional basis e.g. folding beds or a trundle bed which is stored underneath the main bed when not in use

4 Test procedures and tolerances

4.1 General

For all tests referred to in this document, ISO 19833:2018, Clause 4 “General test conditions”, Clause 5 “Test apparatus” and 6.1 “General” apply with the exception of the test mattress.

Unless otherwise specified, the tests shall be carried out according to ISO 19833:2018.

If a test cannot be carried out as specified, the test shall be conducted in such a way that it comes as close as possible to the specified requirements. Any modification to the test method shall be technically justified and recorded in the test report.

4.2 Sequence of testing

The tests shall be carried out in the same sequence as the clauses are numbered in Table 2 of this document.

With the exception of test no. 10 (EN 13759:2012), Table 2, all tests specified shall be carried out on the same sample.

4.3 Tolerances

Unless otherwise stated, the following tolerances are applicable:

— Forces: $\pm 5\%$ of the nominal force;

The forces may be replaced by masses. The relationship $10\text{ N} = 1\text{ kg}$ shall be used.

— Masses: $\pm 1\%$ of the nominal mass;

— Dimensions: all dimensions less than 200 mm shall have an accuracy of $\pm 1\text{ mm}$ of the nominal dimension, the other dimensions shall have an accuracy of $\pm 0,5\%$;

— Angles: $\pm 1^\circ$ of the nominal angle.

5 Test apparatus

5.1 Adult test mattress

In derogation to ISO 19833:2018, 5.5, the following test mattress shall be used:

— a foam sheet with a thickness of 100 mm, a bulk density of $(35 \pm 5)\text{ kg/m}^3$ and an indentation hardness index of $(170 \pm 40)\text{ N HA}_{(40\%/30\text{ s})}$ in accordance with EN ISO 2439.

The mattress shall be at least 700 mm \times 700 mm.

The test mattress shall have a cover having the following characteristics:

— composition: 100 % cotton;

— mass per unit area: $(120 \pm 20)\text{ g/m}^2$;

— cover make up: tight fit, but with no restrictions on the foam.

The same part of the test mattress shall not be re-used within 30 min of completing a test. The mattress shall be replaced if damaged, or in any case after 30 complete bed tests, unless it can be demonstrated that the mattress specification has not been degraded.

EN 1725:2023 (E)**5.2 Test dummy**

For electrically operated functions of beds (see 6.5) occupied during operation the test dummy shown in Figure 1 shall be utilized. The test dummy shall be manufactured from a smooth, rigid material.

The sections shall be connected together via a hinging mechanism that does not inhibit the movement of the dummy sections relative to each other.

The total mass of the dummy including any hinge mechanisms shall be 110 kg.

The weight distribution of the sections of the test dummy shall be in accordance with Table 1:

Table 1 — Weight distribution of the sections of the test dummy

Test dummy section including appropriate hinge mechanism	Weight distribution
Head	5 kg
Upper body	54 kg + 5 kg ^a
Upper leg	24 kg + 5 kg ^a
Lower leg	17 kg
^a The additional 5 kg have to be added at the geometric centre of the body part.	

For the dummy shown in Figure 1, all dimensions shall be subject to a ± 2 mm tolerance. All edges and corners in contact with the furniture shall have a 12 mm radius.

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