Furniture - Beds and mattresses - Test methods for the determination of functional characteristics and assessment criteria



# **EESTI STANDARDI EESSÕNA**

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	This Estonian standard EVS-EN 1957:2012 consists of the English text of the European standard EN 1957:2012.	
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	kohase teate This standard has been endorsed with a notification published in the official bulletin of the Estonian Cent for Standardisation.	
, and a second s	Date of Availability of the European standard is 17.10.2012.	
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# EUROPEAN STANDARD NORME EUROPÉENNE

# **EN 1957**

EUROPÄISCHE NORM

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ICS 97.140

Supersedes EN 1957:2000

#### **English Version**

# Furniture - Beds and mattresses - Test methods for the determination of functional characteristics and assessment criteria

Meubles - Lits et matelas - Méthodes d'essai pour la détermination des caractéristiques fonctionnelles et critères d'évaluation Möbel - Betten und Matratzen - Prüfverfahren zur Bestimmung der funktionellen Eigenschaften und Leistungskriterien

This European Standard was approved by CEN on 18 August 2012.

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.

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

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# **Foreword**

This document (EN 1957:2012) 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 April 2013, and conflicting national standards shall be withdrawn at the latest by April 2013.

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 1957:2000.

The main change with respect to the previous edition is the correcting of the dimensions of the roller (Figure 3) to enable the roller to be manufactured.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Jy , Lux switzerle Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

# 1 Scope

This European Standard specifies test methods for the determination of the durability and hardness of mattresses and all types of fully erected beds with mattresses (and mattress pads when they form a unit with the mattress). It does not apply to water beds, air beds and children cots.

It includes a method for the determination of the firmness rating of a mattress or a bed correlating to the subjective assessment made by people (see Annex A). It needs to be emphasized that the firmness rating cannot be used to demonstrate comfort and/or quality of a mattress or a complete bed.

Ageing and degradation caused by air, light, humidity and temperature is not included. The test results are only valid for the article tested. When test results are intended to be applied to other similar articles, the test specimen shall be representative of them.

#### 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 1334, Domestic furniture — Beds and mattresses — Methods of measurement and recommended tolerances

EN 1725:1998, Domestic furniture — Beds and mattresses — Safety requirements and test methods

#### 3 Terms and definitions

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

#### 3.1

#### test unit

mattress or mattress/bed combination

#### 3.2

#### durability test

test simulating the repeated application of loads and/or movement of components occurring during long-term use and assessing the strength of the article under such conditions and is a test is a procedure mainly intended to evaluate the change of the properties of the test unit caused by repeated loadings

#### 3.3

#### load/deflection curve

curves that are obtained by pressing a load pad into the test unit and measuring the associated value of indentation and force simultaneously

#### 3.4

#### hardness value (H)

determined from load/deflection measurement, in N/mm

#### 3.5

# firmness rating (H<sub>s</sub>)

expression of the subjective assessment by persons determined from the hardness value upon results from empiric studies