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**Furniture — Mattresses — Test  
methods for the determination of  
functional characteristics**

*Ameublement — Matelas — Méthodes d'essai pour la détermination  
des caractéristiques fonctionnelles*



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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 136, *Furniture*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

## Introduction

This document does not give any product requirements. Where no requirements document is available the desired functional characteristics should be determined by the specifier.



# Furniture — Mattresses — Test methods for the determination of functional characteristics

## 1 Scope

This document specifies test methods for the determination of the durability, height loss and hardness of mattresses with a height  $\geq 100$  mm (and mattress pads when they form a unit with the mattress).

This document applies to adult mattresses for domestic and non-domestic use. It does not apply to water mattresses, air mattresses or standalone mattress pads.

Test methods for the assessment of aging, degradation, fire resistance and electrical functions are not included.

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

## 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

#### load curve

#### deflection curve

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

### 3.2

#### hardness value

#### $H$

determined from load/deflection measurement, in N/mm

### 3.3

#### firmness rating

#### $H_s$

number (1 decimal) on a scale from 1 to 10 which expresses the firmness of a mattress

### 3.4

#### height loss

change in the height of a mattress, in mm, as a result of the durability test