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SIST EN 747-1:2007

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English Version

Furniture - Bunk beds and high beds for domestic use - Part 1:  
Safety, strength and durability requirements

Meubles - Lits superposés et lits surélevés à usage  
domestique - Partie 1 : Exigences de sécurité, de  
résistance et de durabilité

Möbel - Etagenbetten und Hochbetten für den Wohnbereich  
- Teil 1: Anforderungen an die Sicherheit, Festigkeit und  
Dauerhaltbarkeit

This European Standard was approved by CEN on 18 September 2006.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, 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  
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## Foreword

This document (EN 747-1:2007) 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of an identical text or by endorsement, at the latest by October 2007, and conflicting national standards shall be withdrawn at the latest by April 2008.

This document supersedes EN 747-1:1993.

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, 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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## Introduction

This part of EN 747 specifies requirements for bunk beds and high beds for domestic use. The loads and forces contained in EN 747-2 are based on use by one adult per bed.

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## 1 Scope

This European Standard specifies requirements for the safety, strength and durability of bunk beds and high beds for domestic use. The loads and forces in the strength and durability tests apply to beds with a maximum bed base width of 120 cm.

It is particularly intended to minimise the risk of accidents happening to children.

If the bunk bed/high bed includes other products, for example a table or storage furniture, the safety requirements for these products are not covered by this standard.

## 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 747-2:2007, *Furniture – Bunk beds and high beds for domestic use – Part 2: Test methods*

## 3 Terms and definitions

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

### 3.1

#### **bunk bed**

set of beds, one above the other

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### 3.2

#### **high bed**

bed where the height of the upper surface of the bed base is 800 mm or more above floor level, irrespective of the use to which the space below is put

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### 3.3

#### **bed base**

support structure for a mattress

### 3.4

#### **safety barrier**

component intended to prevent an occupant from falling out of the upper bunk or high bed

## 4 Safety requirements

### 4.1 Materials

Wood and wood-based material shall be visually free of infestation.

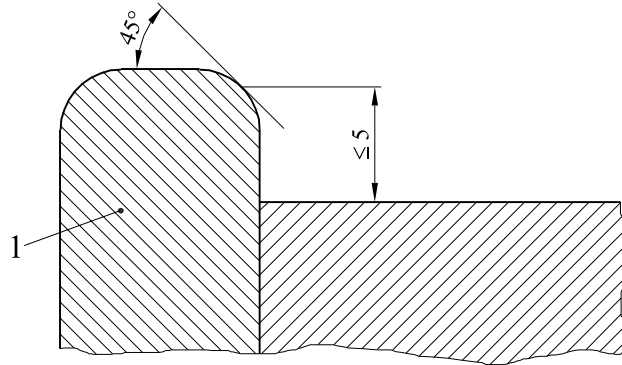
### 4.2 Construction

Accessible edges and corners shall be rounded or chamfered and free from burrs or sharp edges.

All assembly and pilot holes shall be made by the manufacturer.

For any part protruding vertically on the top of the upper bed, the height at which a line, drawn at 45 °, touches it shall not be more than 5 mm above at least one adjacent/adjoining horizontal component and the maximum vertical protrusion above that component shall not exceed 10 mm (see Figure 1).

Dimension in millimetres



**Key**

1 Bedpost

**Figure 1 — Example of a vertically protruding part**  
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**4.3 Safety barriers**

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Any bed where the height of the upper surface of the bed base is 800 mm or more above the floor shall be equipped with safety barriers all around the bed.

The safety barriers shall be secured against unintentional loosening. This requirement is fulfilled if the safety barriers do not become damaged or loosened when tested in accordance with 5.4.2 of EN 747-2:2007.

It shall not be possible to remove the barriers without the use of a tool.

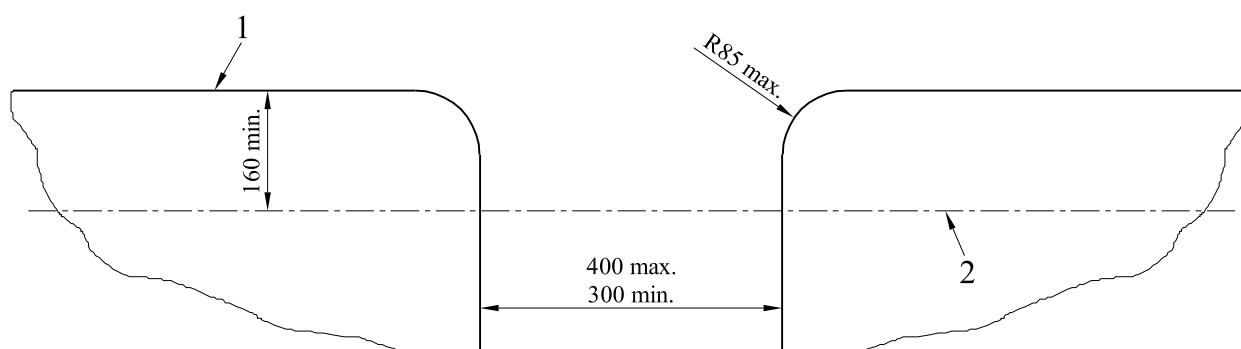
The distance between the upper edge of the safety barriers and the upper surface of the bed base shall be at least 260 mm.

The top of the mattress shall be at least 160 mm below the upper edge of the safety barriers. The maximum thickness of the mattress shall be permanently marked, see clause 5 d) and clause 6 b).

With the exception of the upper corners of the safety barrier, which may end in a maximum radius of 85 mm, the opening for access shall have a width between 300 mm and 400 mm from the maximum mattress thickness mark (see clause 6 b)) to 160 mm above it (see Figure 2).



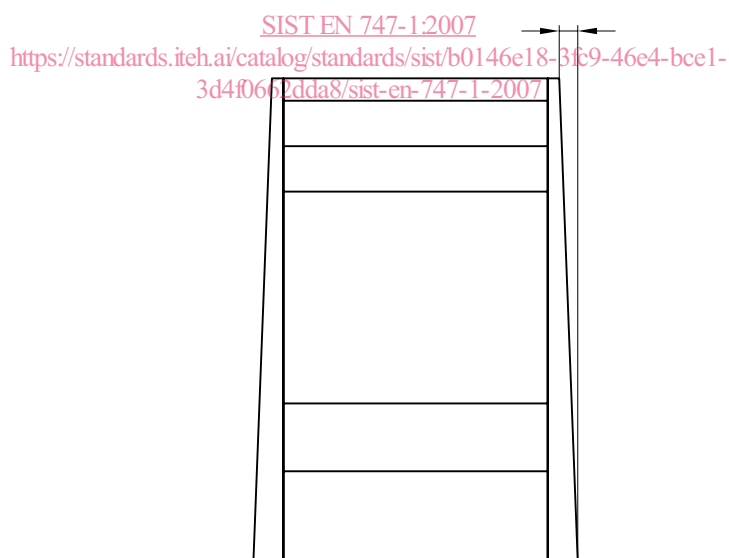
Dimensions in millimetres

**Key**

- 1 Safety barrier
- 2 Maximum mattress thickness mark

**Figure 2 — Opening in the top safety barrier – Example**

With the exception of the long side where the ladder or other means of access is mounted, the horizontal distance between the outside of the top safety barrier and the vertical projection of the outermost point of the legs/posts, shall not exceed 55 mm or shall be more than 230 mm (see Figure 3).

**Figure 3 — Distance between the top safety barrier and the vertical projection**

Except for the opening for access, the safety barrier shall be designed so that in at least one direction the clear space between two adjacent retaining elements, e.g. bands, filler bars, is either  $\leq 5$  mm or is at least 60 mm and not more than 75 mm when tested in accordance with 5.3 of EN 747-2:2007.