

### SLOVENSKI STANDARD SIST EN 747-1:2012+A1:2015

01-september-2015

Pohištvo - Pogradi in visoke postelje - 1. del: Zahteve za varnost, trdnost in trajnost

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

Möbel - Etagenbetten und Hochbetten - Teil 1: Anforderungen an die Sicherheit, Festigkeit und Dauerhaltbarkeit TANDARD PREVIEW

(standards.iteh.ai)
Meubles - Lits superposés et lits surélevés - Partie 1: Exigences de sécurité, de résistance et de durabilité SIST EN 747-1:2012+A1:2015

https://standards.iteh.ai/catalog/standards/sist/fcbfd30b-66b7-4111-b2bb-

Ta slovenski standard je istoveten z: EN 747-1-2012a1-2015

ICS:

97.140 Pohištvo **Furniture** 

SIST EN 747-1:2012+A1:2015 en,fr,de SIST EN 747-1:2012+A1:2015

# iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 747-1:2012+A1:2015 https://standards.iteh.ai/catalog/standards/sist/fcbfd30b-66b7-4111-b2bb-c1c91f49429f/sist-en-747-1-2012a1-2015 EUROPEAN STANDARD NORME EUROPÉENNE EN 747-1:2012+A1

EUROPÄISCHE NORM

May 2015

ICS 97.140

Supersedes EN 747-1:2012

#### **English Version**

## Furniture - Bunk beds and high beds - Part 1: Safety, strength and durability requirements

Meubles - Lits superposés et lits surélevés - Partie 1: Exigences de sécurité, de résistance et de durabilité Möbel - Etagenbetten und Hochbetten - Teil 1: Anforderungen an die Sicherheit, Festigkeit und Dauerhaltbarkeit

This European Standard was approved by CEN on 8 March 2012 and includes Amendment 1 approved by CEN on 16 April 2015.

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.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

SIST EN 747-1:2012+A1:2015

https://standards.iteh.ai/catalog/standards/sist/fcbfd30b-66b7-4111-b2bb-c1c91f49429f/sist-en-747-1-2012a1-2015



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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Foreword  Introduction  1 Scope  2 Normative references  3 Terms and definitions  4 Safety requirements  4.1 Construction  4.1.1 General  4.1.2 Accessible holes gaps and openings  4.1.3 Bed base(s)  4.1.4 Safety barriers  4.1.5 Ladder or other means of access  4.1.5 Ladder or other means of access: Attachment, deflection and strength  4.3 Strength of frame and fastenings  4.4 Stability  4.5 Fastening of the upper bed to the lower bed ARLD PREVIEW  5 Instructions for use  (standards, itch.ai)	Foreword		Page
1 Scope			3
Normative references  Terms and definitions  Safety requirements  Construction  And General  Accessible holes gaps and openings  And Safety barriers  Ladder or other means of access  Strength of ladder or other means of access: Attachment, deflection and strength  Strength of frame and fastenings  Stability  Stability  Fastening of the upper bed to the lower bed ARD PREVIEW	Introd	uction	4
Terms and definitions  Safety requirements  Construction  And General  Accessible holes gaps and openings  Accessible holes gaps and openings  Ladder or other means of access  Strength of ladder or other means of access: Attachment, deflection and strength  Strength of frame and fastenings  Accessible holes gaps and openings  Accessible holes gaps and	1	Scope	Ε
4 Safety requirements 4.1 Construction 4.1.1 General 4.1.2 Accessible holes gaps and openings 4.1.3 Bed base(s) 4.1.4 Safety barriers 4.1.5 Ladder or other means of access 4.2 Strength of ladder or other means of access: Attachment, deflection and strength 4.3 Strength of frame and fastenings 4.4 Stability 4.5 Fastening of the upper bed to the lower bed A.R.D. P.R.E.V.E.W.	2	Normative references	5
4.1 Construction	3	Terms and definitions	5
4.1 Construction	4	Safety requirements	е
4.1.2 Accessible holes gaps and openings	4.1		
4.1.3 Bed base(s)	4.1.1	General	£
4.1.4 Safety barriers  4.1.5 Ladder or other means of access  4.2 Strength of ladder or other means of access: Attachment, deflection and strength  4.3 Strength of frame and fastenings  4.4 Stability  4.5 Fastening of the upper bed to the lower bed ARD PREVIEW	4.1.2	Accessible holes gaps and openings	7
4.1.4 Safety barriers	4.1.3	Bed base(s)	8
4.2 Strength of ladder or other means of access: Attachment, deflection and strength	4.1.4		
4.3 Strength of frame and fastenings	4.1.5	Ladder or other means of access	Ç
4.3 Strength of frame and fastenings	4.2	Strength of ladder or other means of access: Attachment, deflection and strength	10
4.4 Stability	4.3	Strength of frame and fastenings	10
Fastening of the upper bed to the lower bed A.K.D.P.K.E.V.I.E.W.  Instructions for use	4.4	Stability	10
5 Instructions for use	4.5	Fastening of the upper bed to the lower bed A.K.D.P.K.E.V.	11
	5	Instructions for use	11
6 Marking	6	Marking	12

<u>SIST EN 747-1:2012+A1:2015</u> https://standards.iteh.ai/catalog/standards/sist/fcbfd30b-66b7-4111-b2bb-c1c91f49429f/sist-en-747-1-2012a1-2015

#### **Foreword**

This document (EN 747-1:2012+A1:2015) 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 November 2015, and conflicting national standards shall be withdrawn at the latest by November 2015.

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 includes Amendment 1, approved by CEN on 2015-04-16.

The start and finish of text introduced or altered by amendment is indicated in the text by tags [A].

This document supersedes [A] EN 747-1:2012 [A].

A<sub>1</sub> deleted text (A<sub>1</sub>

EN 747 is divided into the following parts:

- EN 747-1, Furniture Bunk beds and high beds Part 1: Safety, strength and durability requirements;
- EN 747-2, Furniture Bunk beds and high beds Part 2: Test methods.

It should be noted that the changes made to Part 2 are of importance for Part 1 because information regarding loads and forces is contained in Part 2 SIST EN 747-1:2012+A1:2015

https://standards.itch.ai/catalog/standards/sist/fcbfd30b-66b7-4111-b2bb-

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, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

#### Introduction

This part of EN 747 specifies requirements for bunk beds and high beds for use by one occupant per bed.

## iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN 747-1:2012+A1:2015</u> https://standards.iteh.ai/catalog/standards/sist/fcbfd30b-66b7-4111-b2bb-c1c91f49429f/sist-en-747-1-2012a1-2015

#### 1 Scope

high beds for domestic and non-domestic use.

It applies to bunk beds with a height to the upper surface of the top bed base of 600 mm or more above the floor and to high beds with a height to the upper surface of the bed base of 600 mm or more above the floor.

The loads and forces in the strength and durability tests apply to beds with an internal length greater than 140 cm and a maximum bed base width of 120 cm. 🔄

The dimensional requirements are intended to minimise the risk of accidents, particularly to children.

The strength and durability requirements are intended to represent use by one occupant per bed.

Safety requirements for other products included in a bunk bed/high bed, for example a table or storage furniture, are not included in this standard.

This European Standard does not apply to bunk beds and high beds used for special purposes, including but not limited to prison, the military and fire brigades.

### 2 Normative references iTeh STANDARD PREVIEW

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.

SIST EN 747-1:2012+A1:2015

(A) EN 747-2:2012+A1;2015 (A) Furniture Bunk beds and high-beds 4+1 Part 2: Test methods c1c91f49429f/sist-en-747-1-2012a1-2015

#### 3 Terms and definitions

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

#### 3.1

#### bunk bed

set of components that can be assembled as beds, one above the other, where the upper surface of the top bed base is  $\{A_1\}$  600  $\{A_1\}$  mm or more above the floor

#### 3.2

#### high bed

set of components that can be assembled as a bed, where the upper surface of the top bed base is [A] 600 (A] mm or more above the floor, irrespective of the use to which the space below is put

#### 3.3

#### bed end structures

upright unit at the head and foot of the bed to which the side rails are attached

#### 3.4

#### bed base

support structure for a mattress

#### 3.5

#### safety barrier

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

#### 3.6

#### side rail

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

#### 3.7

#### tread

structure intended as a foothold, including ladder rungs and steps

#### 4 Safety requirements

#### 4.1 Construction

#### 4.1.1 General

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

There shall be no open ended tubes.

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

Vertically protruding parts on the top of the upper bed shall either: (Standards.Iteh.ai)

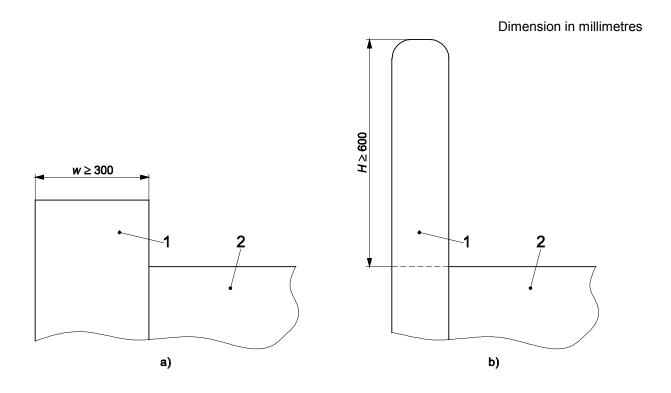
a) have an uninterrupted minimum horizontal dimension of 300 mm without any other vertical protrusion (see Figure 1 a), or SIST EN 747-1:2012+A1:2015

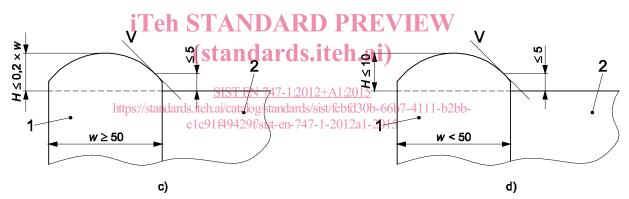
https://standards.iteh.ai/catalog/standards/sist/fcbfd30b-66b7-4111-b2bb-

- b) have an uninterrupted vertical dimension of at least 600-mm measured from the highest adjacent part (see Figure 1 b), or
- c) where the largest dimension is 50 mm or more (see Figure 1), have a maximum height at which a line, drawn at 45° touches it, of not more than 5 mm above at least one adjacent/adjoining horizontal component; the maximum vertical protrusion above that component shall not exceed 20 % of the largest horizontal dimension of parts (see Figure 1 c), or
- d) where the largest dimension is less than 50 mm, have a maximum height at which a line, drawn at 45° touches it, of not more than 5 mm above at least one adjacent/adjoining horizontal component; the maximum vertical protrusion above that component shall not exceed 10 mm (see Figure 1) of parts (see Figure 1 d).

It shall not be possible to dismantle the bed or its components without the use of a tool.

The dimensional requirements apply both before and after testing without re-tightening.





#### Key

- 1 Vertically protruding part
- 2 Highest adjacent part
- w Width of protruding part
- H Height of protruding part
- V 45° angle to the horizontal

Figure 1 — Examples of a vertically protruding part

#### $A_1$

#### 4.1.2 Accessible holes gaps and openings

#### **4.1.2.1** General

There shall be no accessible holes, gaps or openings with a diameter/width greater than 7 mm and less than 12 mm, unless the depth is less than 10 mm when tested according to 5.3 of EN 747-2:2012+A1:2015.