

# **SLOVENSKI STANDARD**

## **SIST EN 1645-1:2000/A1:2004**

**01-januar-2004**

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### **Leisure accommodation vehicles - Caravans - Part 1: Habitation requirements relating to health and safety**

Leisure accommodation vehicles - Caravans - Part 1: Habitation requirements relating to health and safety

Bewohnbare Freizeitfahrzeuge - Caravans - Teil 1: Anforderungen an den Wohnbereich hinsichtlich Gesundheit und Sicherheit

Véhicules habitables de loisirs - Caravanés - Partie 1: Exigences d'habitation relatives à la santé et à la sécurité

[SIST EN 1645-1:2000/A1:2004](https://standards.iteh.ai/catalog/standards/sist/f598dcae-81a1-4565-a9a6-17bcb8f0b7/sist-en-1645-1-2000-a1-2004)

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**Ta slovenski standard je istoveten z: EN 1645-1:1998/A1:2001**

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#### **ICS:**

43.100	Osebni avtomobili. Bivalne prikolice in lahke prikolice	Passenger cars. Caravans and light trailers
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**SIST EN 1645-1:2000/A1:2004**

**en**

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 1645-1:1998/A1**

December 2001

ICS 43.100

English version

**Leisure accommodation vehicles - Caravans - Part 1: Habitation  
requirements relating to health and safety**

Véhicules habitables de loisirs - Caravanes - Partie 1:  
Exigences d'habitation relatives à la santé et à la sécurité

Bewohnbare Freizeitfahrzeuge - Caravans - Teil 1:  
Anforderungen an den Wohnbereich hinsichtlich  
Gesundheit und Sicherheit

This amendment A1 modifies the European Standard EN 1645-1:1998; it was approved by CEN on 16 November 2001.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Management Centre or to any CEN member.

This amendment 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

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

**Management Centre: rue de Stassart, 36 B-1050 Brussels**

**EN 1645-1:1998/A1:2001 (E)****Foreword**

This Amendment EN 1645-1:1998/A1:2001 to EN 1645-1:1998 has been prepared by Technical Committee CEN/TC 245 "Leisure accommodation vehicles", the secretariat of which is held by BSI.

This Amendment to the European Standard EN 1645-1:1998 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2002, and conflicting national standards shall be withdrawn at the latest by June 2002.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

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## 2 Normative references

Delete the date of prEN 1949 and “pr” before “EN 1949”.

## 5 Design and construction

### 5.5.1 Heights

In the 2<sup>nd</sup> paragraph, replace the 2<sup>nd</sup> sentence by the following :

"The maximum rise of any other tread shall not exceed 300 mm."

### 5.6 Doors

#### 5.6.1 Dimensions

In the 2<sup>nd</sup> paragraph replace “1 360 mm” by “1 300 mm”.

At the end of the subclause, add :

“The measurements taken shall be clear from any protrusions or obstructions (for example flyscreens, door catches, hinges, etc.), except for a radius in each corner of not more than 90 mm.

NOTE Verification of compliance can be achieved by passing a rectangular test board with dimensions 1 590mm by 480 mm (or 1 300 mm by 480 mm for rigid folding caravans), and with 90 mm raduised corners, through the open doorway, parallel to the frame.

## 6 Internal equipment

[SIST EN 1645-1:2000/A1:2004](https://standards.iteh.ai/catalog/standards/sist/f598dcae-81a1-4565-a9a6-671bc8f60b77/sist-en-1645-1-2000-a1-2004)

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### 6.1.3 Protection against falling out

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#### 6.1.3.1 General

At the end of the subclause, add :

“Bunks shall be provided with a label with the following wording :

“Care shall be taken against the risk of falling out when this bunk is used by children, especially under 3 years of age”.

#### 6.1.5 Security of folding bunks

Replace the subclause with the following :

“If a bunk is designed to fold away it shall be secured against unintentional folding away.

The ability of a bunk to withstand unintentional folding away shall be tested in accordance with annex J.

A folding bunk shall not unintentionally move from its stored position. This will be tested in accordance with annex J.”

**EN 1645-1:1998/A1:2001 (E)****6.1.7 Protection against entrapment**

*Replace the 2<sup>nd</sup> paragraph with the following :*

"If the base of a bunk is not covered by permanently fixed upholstery, any gap in the base not covered by the mattress shall not permit the passage of the cone (see L.1) beyond the point at which the diameter of the cone is 75 mm, when measured from above in accordance with L.2".

*Replace the 3<sup>d</sup> paragraph with the following :*

"Any other gap or space accessible from the upper surface of the bed, including mattress where applicable, shall be between 12 mm and 25 mm or between 60 mm and 75 mm, (tested in accordance with L.3) or equal to or larger than 200 mm.

**6.2 Shelves and upper cupboards**

*Delete "upper" in the title.*

*The existing text is replaced by the following :*

"Kitchen shelves and bases of cupboards and shelves at more than 1000 mm from the floor of the vehicle at the place of measurement shall be provided with means to prevent their contents from sliding off.

NOTE Work surfaces are not considered as shelves.

Protection should be appropriate for the items likely to be stored in the cupboards. Where an up-stand or lip is used as the method of protection, then this should be a minimum height of 5 mm."

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**9 Classification of thermal insulation and heating**

*Replace the 3<sup>d</sup> paragraphy of c) with the following :*

"Precautions shall be taken to ensure that the fresh-water supply can be filled at the end of the stabilising time of one hour according to annex N. Then the fresh-water service shall operate when the outside temperature is – 15° C".

*Add after the last paragraph :*

"To ensure compliance with this clause it is sufficient to test only one caravan with the largest plan area of a specified number of similar caravans. This caravan shall fulfill the following conditions :

- a) the bodywork, materials used and cross sectional dimensions in similar positions for the walls, floor, roof and windows are identical (except for colour);
- b) the caravan tested shall have the largest total window area;
- c) the space heater shall have the smallest output;
- d) all caravans shall have the same space heating system (convected air, blown air, hot water, etc.);
- e) the caravan shall have the least number of heating outlets (air outlets, heat exchangers, radiators, etc.) of the smallest dimensions of the caravans;

f) all caravans shall have the same hot and cold water supply system and any tank(s) shall have the same method of protection against freezing."

## 10.2 Liquefied petroleum gas (LPG)

*Delete "pr" before "EN 1949" in the 1<sup>st</sup> line.*

*Add "NOTE 1:*

Pending publication of EN 1949, attention is drawn to national requirements which may apply."

*The existing note becomes "NOTE 2"*

## 11 Ventilation

*Replace the term "natural ventilation" by "safety ventilation".*

## 12 Fire precautions

### 12.1.2 Escape path

*Replace the subclause with the following :*

"It shall be possible to reach an emergency exit by means of an unobstructed escape path.

Objects such as drawers, doors, bunk ladders, etc that can be moved quickly and easily from the escape path, emergency exit or door with a single movement shall not be considered as obstructions.

An escape path shall be at least 450 mm wide."

### 12.1.3 Toilet compartment

*Replace the subclause with the following :*

"Toilet compartments shall be equipped with an emergency exit unless the compartment door is situated less than 2 000 mm from an emergency exit of the caravan. This distance or sum of distances is measured from the door handle of the toilet compartment to the nearest part of the emergency exit aperture passing through the escape path."

**EN 1645-1:1998/A1:2001 (E)****12.1.7 Work surfaces**

*Replace the subclause with the following :*

“No work surface shall open towards an emergency exit in such a way as to obstruct the emergency exit or to reduce the clear opening”.

**12.1.8 Heating and cooking equipment**

*Delete the 2<sup>nd</sup> paragraph.*

**12.2.2 Non rigid elements**

*Replace the subclause with the following :*

“All non guided elements such as curtains or non guided blinds situated at less than 900 mm from the point of emission of the flame of a burner shall be inspected to ensure that they cannot be blown to within 300 mm, except when these elements are protected by non-flammable material.

The vertical dimensions of such non-flammable protection shall be the greater of :

- a) 300 mm above the point of emission of the flame or
- b) equal to or higher than a line drawn between the point of emission of the flame and the closest point at which the element is suspended.

Element shall be considered when they are open (pulled back) and disregarding any storage devices.

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**14 User's handbook**

*In the paragraph “Warning instructions”, add the sentence :*

“When upper bunks are used by children especially under 3 years of age care shall be taken against the risk of falling out”.



## Annex J (normative)

### J.2 Preparation and procedure

*Replace the paragraph e) with the following :*

“e) repeat b), c) and d) fixing the load cell to the other outside corner and one other location between the two outside corners”;

*Add at the end of subclause J.2 :*

- g) place the folding bunk in its stored position according to the manufacturers instructions;
- h) attach the load cell (see Q.2) to the centre of the upper edge of the bunk in its stored position;
- i) exert a force of 125 N perpendicular with a tolerance of  $\pm 10^\circ$  to the plane of the stored bunk”.

### J.3 Expression of results

*Replace the subclause with the following :*

“The caravan shall be considered to have passed the tests and for its bunks to be suitably secured against unintentional folding away and unintentional movement whilst stored in accordance with the requirements of 6.1.5. if on completion of the tests (J.2) there was no observed detachment of the bunk(s) from its fittings”.

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