



# SLOVENSKI STANDARD SIST EN 548:1999

01-marec-1999

---

## Netekstilne talne obloge - Specifikacija linoleja brez dekorativnega vzorca in z njim

Resilient floor coverings - Specification for plain and decorative linoleum

Elastische Bodenbeläge - Spezifikation für Linoleum mit und ohne Muster

Revetements de sol résilients - Spécifications pour le linoléum uni et décoratif

Ta slovenski standard je istoveten z: EN 548:1997

[SIST EN 548:1999](https://standards.iteh.ai/catalog/standards/sist/f3666df2-81bc-4141-a6cc-7da91deda6f8/sist-en-548-1999)

<https://standards.iteh.ai/catalog/standards/sist/f3666df2-81bc-4141-a6cc-7da91deda6f8/sist-en-548-1999>

### **ICS:**

97.150      Netekstilne talne obloge      Non-textile floor coverings

**SIST EN 548:1999**

**en**

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

SIST EN 548:1999

<https://standards.iteh.ai/catalog/standards/sist/f3666df2-81bc-4141-a6cc-7da91deda6f8/sist-en-548-1999>

EUROPEAN STANDARD

EN 548

NORME EUROPÉENNE

EUROPÄISCHE NORM

May 1997

ICS 97.150

Descriptors: floor coverings, linoleum, sheets, floor slabs, specifications, characteristics, tests, safety, classifications, tables (data), symbols, labelling

English version

## Resilient floor coverings - Specification for plain and decorative linoleum

### iTeh STANDARD PREVIEW

Revêtements de sol résilients - Spécifications pour le linoléum uni et décoratif (standards.iteh.ai) Elastische Bodenbeläge - Spezifikation für Linoleum mit und ohne Muster

SIST EN 548:1999

<https://standards.iteh.ai/catalog/standards/sist/b3666d2-81bc-4141-a6cc-7da91deda6f8/sist-en-548-1999>

This European Standard was approved by CEN on 1997-04-11. 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 Central Secretariat or to any CEN member.

The European Standards exist 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 Central Secretariat 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.

# CEN

European Committee for Standardization  
Comité Européen de Normalisation  
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart, 36 B-1050 Brussels

## Foreword

This European Standard has been prepared by Technical Committee CEN/TC TC 134 "Resilient and textile floor coverings", the secretariat of which is held by BSI.

Annex A and annex B are informative.

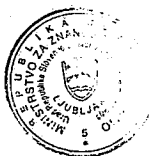
This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by November 1997, and conflicting national standards shall be withdrawn at the latest by November 1997.

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.

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

SIST EN 548:1999

<https://standards.iteh.ai/catalog/standards/sist/f3666d2-81bc-4141-a6cc-7da91deda6f8/sist-en-548-1999>



## 1 Scope

This European Standard specifies the characteristics of plain and decorative linoleum, supplied as either tiles or rolls.

To encourage the consumer to make an informed choice, the standard includes a classification system based on intensity of use, which shows where resilient floor coverings should give satisfactory service (see EN 685). It also includes requirements for marking.

The term 'linoleum' is frequently incorrectly applied to a range of floor coverings, often to those based on polyvinyl chloride or rubber. Such materials are not included in this standard.

## 2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

- iTeh STANDARD PREVIEW**  
(standards.iteh.ai)
- EN 426 Resilient floor coverings - Determination of width, length, straightness and flatness of sheet material
- EN 427 Resilient floor coverings - Determination of the side length, squareness and straightness of tiles
- EN 428 Resilient floorcoverings - Determination of overall thickness
- EN 429 Resilient floor coverings - Determination of the thickness of layers
- EN 430 Resilient floor coverings - Determination of mass per unit area
- EN 433 Resilient floor coverings - Determination of residual indentation after static loading
- EN 435 Resilient floor coverings - Determination of flexibility
- prEN 669 Linoleum floor coverings - Determination of the dimensional changes of tiles, caused by atmospheric humidity changes
- prEN 670 Identification and composition of linoleum. Determination of cement content and ash residue
- EN 685 Resilient floor coverings - Classification
- EN 20 105-B02 Textiles - Tests for colour fastness - Part B02 : Colour fastness to artificial light (Xenon arc fading lamp test) (ISO 105-B02:1988).

### 3 Definitions

For the purposes of this standard, the following definitions apply.

**3.1 linoleum cement:** Binder in linoleum, consisting of a mixture of linseed oil and/or other vegetable drying oils, rosin and drying oil catalysts, which is converted to a semi-elastic mass by an oxidative curing process.

**3.2 linoleum:** Product produced by calendaring a homogeneous mixture of linoleum cement, cork and/or woodflour, pigments and inorganic filler onto a fibrous backing. The product is then converted into its final form by an oxidative curing process.

NOTE: The only chemical cross-linking bondings in linoleum will be those which are formed during the oxidation process.

### 4 Identification

Linoleum shall be identified by its ability to be disintegrated in 0,5 mol/l potassium hydroxide/methanol solution and by the determination of cement content and ash residue.

The minimum amount of linoleum cement shall be 30 % when tested in accordance with prEN 670.

The maximum amount of inorganic filler (ash residue) shall be 50 % when tested in accordance with prEN 670.

<https://standards.iteh.ai/catalog/standards/sist/b3666df2-81bc-4141-a6cc-7da91deda6f8/sist-en-548-1999>

### 5 Requirements

#### 5.1 General requirements

All classes of plain and decorative linoleum shall comply with the appropriate general requirements specified in table 1, when tested in accordance with the methods given therein.

Table 1: General requirements











Characteristic	Requirement	Test method
Roll form: length m width mm	Not less than the nominal values	EN 426
Tiles: side length mm  squareness and straightness mm  for side length ≤ 400 mm > 400 mm	Deviation ≤ 0,15 % of nominal length up to 0,5 mm maximum  Deviation allowed at any point  ≤ 0,25 ≤ 0,35	EN 427
Dimensional stability of tiles caused by changes of atmospheric humidity %	Variation ≤ 0,1	prEN 669
Overall thickness average mm  individual values	Nominal value ± 0,15  Nominal value ± 0,20	EN 428
Thickness of fibrous backing average mm	≤ 0,80	EN 429
Mass per unit area average g/m <sup>2</sup>	Nominal value ± 10 %	EN 430
Residual indentation after static loading average mm  nominal thickness: ≤ 3,2 mm ≥ 4,0 mm	≤ 0,15 ≤ 0,20	EN 433
Flexibility of sheets  Thickness (nominal) Mandrel diameter 2,0 mm 30 mm 2,5 mm 40 mm 3,2 mm 50 mm 4,0 mm 60 mm	Shall show no sign of cracking when bent around the appropriate mandrel	EN 435 Method A
Colour fastness to artificial light	6 minimum	EN 20 105-BO2: Method 3 <sup>1)</sup>
<p>1) Before comparing the test piece, expose the reference sample together with the Blue Wool cloth to the xenon arc lamp, until a contrast is produced on Blue Wool Reference 2 equal to the contrast illustrated by Grey Scale 3. This step is necessary to remove the inherent 'stove yellowing' of linoleum before the stable colouration is achieved.</p>		

Plain and decorative linoleum complying with the requirements of this standard are suitable for use with castor chairs.

## 5.2 Classification requirements

The classification scheme for resilient floor coverings is described in EN 685. The requirements for plain and decorative linoleum in accordance with this scheme, are related to the nominal overall thickness of the linoleum, as shown in table 2.

**Table 2: Classification requirements**

Class	Symbol	Intensity of use	Nominal overall thickness, mm
21		<b>Domestic</b> Moderate	2,0
22		General	2,0
23		Heavy	2,0
31		<b>Commercial</b> Moderate	2,0
32		General	2,0
33		Heavy	2,5
34		Very heavy	2,5 <sup>1)</sup>
41		<b>Light Industrial</b> Moderate	2,0 <sup>1)</sup>
42		General	2,5 <sup>1)</sup>
43		Heavy	2) <sup>2)</sup>

<sup>1)</sup> Other thicknesses, e.g. 3,2 mm and 4,0 mm, may be specified to satisfy particular customer requirements.  
<sup>2)</sup> Any requirements for class 43 should be determined and agreed between the parties concerned, taking into account specification of use.



## 6 Marking

Plain and decorative linoleum floor coverings and/or their packaging shall bear the following marking:

- a) number and date of this European Standard, i.e. EN 548 : 1997;
- b) manufacturer's or supplier's identification;
- c) product name;
- d) colour/pattern, and batch and roll number if applicable;
- e) classes/symbols appropriate for the product
- f) for rolls: the length, width and thickness
- g) for tiles: the dimensions of a tile and the area in square metres contained in a package

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

SIST EN 548:1999

<https://standards.iteh.ai/catalog/standards/sist/f3666df2-81bc-4141-a6cc-7da91deda6f8/sist-en-548-1999>