



# SLOVENSKI STANDARD

## SIST EN 686:2019

01-september-2019

Nadomešča:  
SIST EN 686:2011

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**Netekstilne talne obloge - Specifikacija linoleja na penastem hrbtišču z dekorativnim vzorcem in brez njega**

Resilient floor coverings - Specification for plain and decorative linoleum on a foam backing

Elastische Bodenbeläge - Spezifikation für Linoleum mit und ohne Muster mit Schaumrücken

(standards.iteh.ai)

Revêtements de sol résilients - Spécifications pour le linoléum uni et décoratif sur sous-couche de mousse

<https://standards.iteh.ai/catalog/standards/sist/9b667d6e-7b39-4d62-92f2-652eb2b20564/sist-en-686-2019>

**Ta slovenski standard je istoveten z: EN 686:2019**

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**ICS:**

97.150      Talne obloge      Floor coverings

**SIST EN 686:2019**

**en,fr,de**

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 686**

June 2019

ICS 97.150

Supersedes EN 686:2011

English Version

**Resilient floor coverings - Specification for plain and decorative linoleum on a foam backing**

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This European Standard was approved by CEN on 12 April 2019.

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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.

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

**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

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## European foreword

This document (EN 686:2019) has been prepared by Technical Committee CEN/TC 134 “Resilient, textile and laminate floor coverings”, the secretariat of which is held by NBN.

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of an identical text or by endorsement, at the latest by December 2019, and conflicting national standards shall be withdrawn at the latest by December 2019.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 686:2011.

In comparison with the previous edition, the following technical modifications have been made:

— All referenced test methods have been changed.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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**EN 686:2019 (E)****1 Scope**

This document specifies the characteristics of plain and decorated linoleum on a foam backing as a compound floor covering, supplied in roll form.

To encourage the consumer to make an informed choice, this document includes a classification system based on the intensity of use, which shows where resilient floor coverings provide satisfactory service.

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 document.

**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 ISO 10874, *Resilient, textile and laminate floor coverings — Classification*

EN ISO 23997, *Resilient floor coverings — Determination of mass per unit area*

EN ISO 24340, *Resilient floor coverings — Determination of thickness of layers*

EN ISO 24341, *Resilient and textile floor coverings — Determination of length, width and straightness of sheet*

EN ISO 24343-1, *Resilient and laminate floor coverings — Determination of indentation and residual indentation — Part 1: Residual indentation*

EN ISO 24344, *Resilient floor coverings — Determination of flexibility and deflection*

EN ISO 24345, *Resilient floor coverings — Determination of peel resistance*

EN ISO 24346, *Resilient floor coverings — Determination of overall thickness*

EN ISO 26985, *Resilient floor coverings — Identification of linoleum and determination of cement content and ash residue*

EN ISO 105-B02, *Textiles — Tests for colour fastness — Part B02: Colour fastness to artificial light: Xenon arc fading lamp test*

ISO 4918, *Resilient, textile and laminate floor coverings — Castor chair test*

**3 Terms and definitions**

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

**3.1****linoleum**

product produced by calendaring one or more layers of a homogeneous mixture of linoleum cement, cork and/or wood flour, pigments and inorganic fillers containing a fibrous reinforcement and/or a fibrous backing; the product is then converted into its final form by an oxidative curing process

Note 1 to entry: The only chemical crosslinking bondings in linoleum are those which are formed during the oxidation process.

**3.2****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

**3.3****linoleum on a foam backing**

product formed by laminating linoleum on to a foam layer

**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 EN ISO 26985.

The maximum amount of inorganic filler (ash residue) shall be 50 % when tested in accordance with EN ISO 26985.

**5 Requirements**

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See Table 1.

**Table 1 — General requirements**

PROPERTY	REQUIREMENT	TEST METHOD
Rolls length width	m mm Not less than the nominal values	EN ISO 24341
Overall thickness average individual values	mm Nominal value $\pm$ 0,20 Nominal value $\pm$ 0,25	EN ISO 24346
Thickness of linoleum average individual values	mm Nominal value $\pm$ 0,15 Nominal value $\pm$ 0,20	EN ISO 24340
Thickness of fibrous backing average	mm $\leq$ 0,80	EN ISO 24340
Thickness of foam backing average	mm Nominal value $\pm$ 0,10	EN ISO 24340

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PROPERTY		REQUIREMENT	TEST METHOD
Mass per unit area	g/m <sup>2</sup>	Nominal value ± 10 %	EN ISO 23997
average			
Residual indentation after static loading average	mm	≤ 0,30	EN ISO 24343-1
Flexibility		Shall show no signs of cracking when bent around the appropriate mandrel	EN ISO 24344
nominal thickness of linoleum	diameter of mandrel		
2,0 mm	30 mm		
2,5 mm	40 mm		
Colour fastness to artificial light		Minimum 6	EN ISO 105-B02 <sup>a</sup>
Effect of a castor chair		No damage shall be apparent.	ISO 4918
Peel resistance between foam backing and fibrous backing		≥ 10 N/50 mm	EN ISO 24345
average			
<sup>a</sup> 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.			




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## 6 Classification

The classification scheme for resilient floor coverings is specified in EN ISO 10874. The requirements for plain and decorative linoleum on a foam backing sold as a compound floor covering, 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	LEVEL OF USE	NOMINAL THICKNESS OF THE LINOLEUM
<b>Domestic</b>			
21		domestic moderate	2,0 mm
22		domestic general	
23		domestic heavy	