



SLOVENSKI STANDARD

SIST EN 1816:2020

01-julij-2020

Nadomešča:
SIST EN 1816:2010

Netekstilne talne obloge - Specifikacija homogenih in heterogenih gladkih gumenih talnih oblog s penastim hrbtiščem

Resilient floor coverings - Specification for homogeneous and heterogeneous smooth rubber floor coverings with foam backing

Elastische Bodenbeläge - Spezifikation für homogene und heterogene ebene Elastomer-Bodenbeläge mit Schaumstoffbeschichtung

Revêtements de sol résilients - Spécifications des revêtements de sol homogènes et hétérogènes en caoutchouc lisse avec semelle en mousse

Ta slovenski standard je istoveten z: **EN 1816:2020**

ICS:

97.150 Talne obloge Floor coverings

SIST EN 1816:2020 en,fr,de

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 1816

April 2020

ICS 97.150

Supersedes EN 1816:2010

English Version

**Resilient floor coverings - Specification for homogeneous
and heterogeneous smooth rubber floor coverings with
foam backing**

Revêtements de sol résilients - Spécifications des
revêtements de sol homogènes et hétérogènes en
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und heterogene ebene Elastomer-Bodenbeläge mit
Schaumstoffbeschichtung

This European Standard was approved by CEN on 14 March 2020.

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.

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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.

CEN members are the national standards bodies of 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 United Kingdom.



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 1816:2020) has been prepared by Technical Committee CEN/TC 134 “Resilient, textile and laminate 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 October 2020, and conflicting national standards shall be withdrawn at the latest by October 2020.

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 1816:2010.

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

— references to standards in Table 1, Table 2 and Annex A.

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 1816:2020 (E)**1 Scope**

This document specifies the characteristics of homogeneous and heterogeneous smooth (including grained or embossed) rubber floor coverings with foam backing, supplied in roll or in tile form.

This document includes a classification system based on intensity of use, which shows where these resilient floor coverings will give satisfactory service (see EN ISO 10874). It also specifies requirements for marking.

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 425, *Resilient and laminate floor coverings — Castor chair test*

EN 12466, *Resilient floor coverings — Vocabulary*

EN ISO 105-B02:2014, *Textiles — Tests for colour fastness — Part B02: Colour fastness to artificial light: Xenon arc fading lamp test (ISO 105-B02:2014)*

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

EN ISO 23999, *Resilient floor coverings — Determination of dimensional stability and curling after exposure to heat (ISO 23999)*

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

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

EN ISO 24342, *Resilient and textile floor coverings — Determination of side length, edge straightness and squareness of tiles (ISO 24342)*

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

EN ISO 24344:2012, *Resilient floor coverings — Determination of flexibility and deflection (ISO 24344:2008)*

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

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

ISO 48-4, *Rubber, vulcanized or thermoplastic — Determination of hardness — Part 4: Indentation hardness by durometer method (Shore hardness)*

ISO 4649:2017, *Rubber, vulcanized or thermoplastic — Determination of abrasion resistance using a rotating cylindrical drum device*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 12466 and the following 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 <https://www.iso.org/obp/ui>

3.1

homogeneous rubber floor covering

floor covering based on natural or synthetic rubber with one or more layers of the same composition and colour, patterned throughout its thickness

3.2

heterogeneous rubber floor covering

floor covering based on natural or synthetic rubber consisting of a wear layer and other compact layers which differ in composition and/or design and can contain a reinforcement

4 General requirements

All homogeneous and heterogeneous smooth rubber floor coverings with foam backing shall conform to the appropriate general requirements specified in Table 1, when tested in accordance with the test methods given therein. Optional properties are given in Annex A.

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Table 1 — General requirements

Property	Requirements	Test method
Roll form: length width	not less than the stated nominal values	EN ISO 24341
Tiles: sides length squareness and straightness for side of length: ≤ 610 mm > 610 mm	tolerance allowed: ±0,15 % of nominal length tolerance allowed: ±0,25 mm tolerance allowed: ±0,35 mm	EN ISO 24342
Dimensional stability	tolerance allowed: ±0,4 %	EN ISO 23999
Thickness of foam backing	not less than the stated nominal value	EN ISO 24340
Flexibility: diameter of mandrel 20 mm	no cracking	EN ISO 24344:2012, Method A
Hardness of wear layer	≥ 75 Shore A	ISO 48-4
Residual indentation (after static loading)	average value: ≤ 0,25 mm	EN ISO 24343-1
Peel resistance	average value: ≤ 50 N/50 mm or rupture in the foam	EN ISO 24345
Abrasion resistance of wear layer	≤ 250 mm ³	ISO 4649:2017, Method A, vertical load (5 ± 0,1) N
Colour fastness to artificial light ^a	6 minimum on blue wool scale ≥ 3 on grey scale	EN ISO 105-B02:2014, Method 3
^a Expose a full size test specimen. Store a further test specimen in the dark, which will constitute the reference standard for assessment of colour change.		

5 Classification requirements

All the homogeneous and heterogeneous smooth rubber floor coverings with foam backing shall be classified in accordance with the requirements for overall thickness and the wear layer thickness specified in Table 2, when tested in accordance with the test methods given therein.

Table 2 — Classification requirements

Class	Intensity of use	Minimum overall thickness ^a (homogeneous and heterogeneous)	Minimum thickness of wear layer ^b (heterogeneous)	Effect of a castor chair
(see EN ISO 10874)	(see EN ISO 10874)	EN ISO 24346 mm	EN ISO 24340 mm	EN 425
21	domestic - moderate/light	2,5	1,0	No requirement
22	domestic - general/medium	2,5	1,0	
23	domestic - heavy	3,5	1,0	
31	commercial - moderate	3,5	1,0	
32	commercial - general	3,5	1,0	
33	commercial - heavy	3,5	1,0	If tested for verification, no disturbance to the surface other than slight change due to flatter appearance – no delamination shall occur.
<p>^a The average overall thickness shall have a tolerance of $\pm 0,20$ mm and no individual result shall exceed 0,25 mm from the nominal.</p> <p>^b The average thickness of the wear layer shall have a tolerance of $\pm 0,20$ mm and no individual result shall exceed 0,25 mm from the nominal.</p>				

6 Marking

The floor coverings described in this document and/or their packaging shall bear the following marking:

- a reference to this document, i.e. EN 1816:2020;
- the manufacturer's or supplier's identification;
- the product name;
- the colour/pattern, and batch and roll number if applicable;
- the class/symbol, as specified in EN ISO 10874;
- the dimensions for tiles;
- the covered area for rolls.