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Laminate floor coverings - Test method for the determination of micro-scratch resistance

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 16094:2021 sisaldab Euroopa standardi EN 16094:2021 ingliskeelset teksti.	This Estonian standard EVS-EN 16094:2021 consists of the English text of the European standard EN 16094:2021.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 30.06.2021.	Date of Availability of the European standard is 30.06.2021.
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English Version

Laminate floor coverings - Test method for the determination of micro-scratch resistance

Revêtements de sol stratifiés - Méthode d'essai pour la détermination de la résistance aux micro-rayures

Laminatböden - Prüfverfahren zur Bestimmung der Mikrokratzbeständigkeit

This European Standard was approved by CEN on 30 May 2021.

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.

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

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Contents	Page
European foreword	3
1 Scope	4
2 Normative references	4
3 Terms and definitions	4
4 Principle	5
5 Apparatus and materials	5
5.1 Martindale tester	5
5.2 Holder for scrub material	5
5.3 Diffuse light source	5
5.4 Reflectometer	5
5.5 Positioning device	5
5.6 Scrub materials	6
5.7 Double-sided tape	6
5.8 Soft cotton cloth	7
5.9 Reference black high gloss HPL with anti-scratch surface by corundum in the surface layer	7
6 Assembly and maintenance of the Martindale tester	7
7 Preparation and conditioning	7
7.1 Preparation	7
7.2 Conditioning	7
8 Test procedure	7
8.1 General	7
8.2 Testing	8
8.2.1 Measurement of gloss levels	8
8.2.2 Procedure A	8
8.2.3 Procedure B	9
8.2.4 Procedure C	10
9 Test report	11
Annex A (normative) Method for checking the Lissajous figure	12
Annex B (normative) Classification of the image after scratching according to procedure B	13

European foreword

This document (EN 16094:2021) 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 2021 and conflicting national standards shall be withdrawn at the latest by December 2021.

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 16094:2012.

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

- addition of a method C for evaluation of polishing effect on mat laminate flooring surfaces;
- introduction of a reference HPL for calibration of the respective scrub materials.

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.

1 Scope

This document specifies a test method for the micro-scratch resistance with two procedures (A and B) and a test method for polishing resistance (procedure C) which can be used for all types of laminate floor coverings. The resistance to polishing is related to mat surfaces.

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 2813, *Paints and varnishes — Determination of gloss value at 20°, 60° and 85° (ISO 2813)*

EN ISO 12945-2, *Textiles — Determination of fabric propensity to surface pilling, fuzzing or matting — Part 2: Modified Martindale method (ISO 12945-2)*

EN ISO 12947-1, *Textiles — Determination of the abrasion resistance of fabrics by the Martindale method — Part 1: Martindale abrasion testing apparatus (ISO 12947-1)*

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

3.1 cycle

completion of all the translational movements tracing a Lissajous figure comprising 16 rubs

Note 1 to entry: This comprises of 16 revolutions of the two outer drives and 15 revolutions of the inner drive of the Martindale tester.

3.2 Lissajous figure

figure created by movement which changes from a circle gradually narrowing ellipses, until it becomes a straight line, from which progressively widening ellipses develop, in a diagonally opposite direction before the pattern is repeated

3.3 rub

one revolution of the two outer drives of the Martindale tester

3.4 mat surface

surface with a reflectometer value $R' \leq 7$, measured with 60° geometry

Note 1 to entry: See 5.4.