

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

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ICS 97.150

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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 26 November 2011.

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Foreword

This document (EN 16094:2012) has been prepared by Technical Committee CEN/TC 134 “Resilient, textile and laminate floor coverings”, the secretariat of which is held by BSI.

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of an identical text or by endorsement, at the latest by July 2012, and conflicting national standards shall be withdrawn at the latest by July 2012.

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1 Scope

This European Standard specifies a test method for the micro-scratch resistance which can be used for all types of laminate floor coverings.

2 Normative references

The following referenced documents are indispensable for the application 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 specular gloss of non-metallic paint films at 20°, 60° and 85° (ISO 2813)*

EN ISO 12945-2, *Textiles — Determination of fabric propensity to surface fuzzing and to pilling — 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.

3.1 cycle

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

NOTE 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

4 Principle

The sample is fixed on a horizontal table. A circular scrub material fixed on a holder impacts on the sample with a defined load. Table and holder are moved perpendicular to each other in a translational movement, with defined frequencies, tracing a Lissajous figure. The holder is additionally freely rotatable around its own axis perpendicular to the horizontal plane.

The sample is exposed to the scrub material for a predetermined number of rubs. The changes of the surface are determined by gloss measurement and visual assessment.