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Laminate floor coverings - Elements with a surface layer based on aminoplastic thermosetting resins - Specifications, requirements and test methods

EESTI STANDARDI EESSÕNA

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

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Supersedes EN 13329:2016

English Version

Laminate floor coverings - Elements with a surface layer
based on aminoplastic thermosetting resins -
Specifications, requirements and test methods

Revêtements de sol stratifiés - Éléments dont la surface
est à base de résines aminoplastiques thermodurcissables
- Spécifications, exigences et méthodes d'essai

Laminatböden - Elemente mit einer Deckschicht auf
Basis aminoplastischer, wärmehärtbarer Harze -
Spezifikationen, Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 27 November 2015 and includes Amendment 1 approved by CEN on 1 July 2017.

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COMITÉ EUROPÉEN DE NORMALISATION
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European foreword

This document (EN 13329:2016+A1:2017) 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of an identical text or by endorsement, at the latest by April 2018, and conflicting national standards shall be withdrawn at the latest by April 2018.

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 includes Amendment 1 approved by CEN on 2017-07-01.

This document supersedes ~~EN 13329:2016~~.

The start and finish of text introduced or altered by amendment is indicated in the text by tags .

deleted text

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1 Scope

This European Standard specifies characteristics, requirements and test methods for laminate floor coverings with a surface layer based on aminoplastic thermosetting resins as defined in 3.1 and 3.2. It also specifies requirements for marking and packaging.

It includes a classification system, based on EN ISO 10874, giving practical requirements for areas of use and levels of use, to indicate where laminate floor coverings will give satisfactory service and to encourage the consumer to make an informed choice.

Laminate floor coverings are considered for domestic and commercial levels of use, including domestic kitchens. This standard does not specify requirements relating to areas which are subjected to frequent wetting, such as bathrooms, laundry rooms or saunas.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 311, *Wood-based panels — Surface soundness — Test method*

EN 318, *Wood based panels — Determination of dimensional changes associated with changes in relative humidity*

EN 322, *Wood-based panels — Determination of moisture content*

EN 424, *Resilient floor coverings — Determination of the effect of simulated movement of a furniture leg*

EN 425:2002, *Resilient and laminate floor coverings — Castor chair test*

EN 438 (all parts), *High-pressure decorative laminates (HPL) — Sheets based on thermosetting resins (Usually called Laminates)*

EN 16094, *Laminate floor coverings — Test method for the determination of micro-scratch resistance*

CEN/TS 16354, *Laminate floor coverings — Underlays — Specification, requirements and test methods*

EN 20105-A02, *Textiles — Tests for colour fastness — Part A02: Grey scale for assessing change in colour (ISO 105-A02)*

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

EN ISO 4892-2:2006/A1:2009, *Plastics — Methods of exposure to laboratory light sources — Part 2: Xenon-arc lamps (ISO 4892-2:2006/Amd1:2009)*

EN ISO 6506-1, *Metallic materials — Brinell hardness test — Part 1: Test method (ISO 6506-1)*

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

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

ISO 48, *Rubber, vulcanized or thermoplastic — Determination of hardness (hardness between 10 IRHD and 100 IRHD)*

ISO 7267-2, *Rubber-covered rollers — Determination of apparent hardness — Part 2: Shore-type durometer method*

ISO 24334, *Laminate floor coverings — Determination of locking strength for mechanically assembled panels*

ISO 24336, *Laminate floor coverings — Determination of thickness swelling after partial immersion in water*

ISO 24339, *Laminate and textile floor coverings — Determination of dimensional variations after exposure to humid and dry climate conditions*

3 Terms and definitions

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

3.1

laminate floor covering

rigid floor covering, typically in a plank or tile format, with a multiple layer structure: e.g. backer, substrate, décor and worked edges that allow the product to be joined together to form a larger integral unit

Note 1 to entry: Laminate flooring does not include products having a resilient, stone, textile, wood, leather or metal top surfacing material(s).

3.2

surface layer based on aminoplastic thermosetting resins

upper decorative layer, which may vary in surface texture and gloss level, consisting of one or more thin sheets of a fibrous material (usually paper), impregnated with aminoplastic, thermosetting resins (usually melamine)

Note 1 to entry: By the simultaneous action of heat and pressure, these sheets are either pressed as such (HPL, CPL, Compact), and in the case of HPL and CPL bonded on a substrate (usually wood-based panels), or in the case of DPL directly pressed on a substrate (usually wood-based panels). The product is usually finished with a backer (e.g. HPL, CPL, impregnated papers), primarily used as a balancing material.

3.3

substrate

core material of the laminate floor covering

Note 1 to entry: It is generally a particleboard, as defined in EN 309, or a dry process fibreboard (MDF) as defined in EN 316 or a so called High Density Fibreboard (HDF) which is a MDF-board with a density $\geq 800 \text{ kg/m}^3$.

3.4

backer

layer opposite to the surface layer used to balance and stabilize the product

Note 1 to entry: The backer is generally made of impregnated papers.

3.5

underlay

layer placed between the laminate floor covering and the subfloor to impart specific properties