

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

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN 13329:2016+A2:2021 sisaldab Euroopa standardi EN 13329:2016+A2:2021 ingliskeelset teksti.	This Estonian standard EVS-EN 13329:2016+A2:2021 consists of the English text of the European standard EN 13329:2016+A2:2021.
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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 aminoplastes 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 and includes Amendment 2 approved by CEN on 18 July 2021.

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## European foreword

This document (EN 13329:2016+A2:2021) 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of an identical text or by endorsement, at the latest by March 2022, and conflicting national standards shall be withdrawn at the latest by March 2022.

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 and Amendment 2 approved by CEN on 2021-07-18.

This document supersedes A2 EN 13329:2016+A1:2017 A2.

The start and finish of text introduced or altered by amendment is indicated in the text by tags A1 A1 and A2 A2.

A2 In comparison with the previous version EN 13329:2016+A1:2017 of the original edition EN 13329:2016, the new consolidated version EN 13329:2016+A2:2021 contains the following technical modifications:

- Normative references: replace EN 424, *Resilient floor coverings - Determination of the effect of simulated movement of a furniture leg* with EN ISO 16581, *Resilient and laminate floor coverings — Determination of the effect of simulated movement of a furniture leg*;
- Normative references: add EN 17368, *Laminate floor coverings - Determination of impact resistance with small ball*;
- Scope: replacement of the last paragraph;
- term 3.3 substrate: replacement of the definition;
- Table 2: change the requirements and test method for impact resistance: small ball and addition of footnote to table <sup>d</sup> as clarification for testing, replacement of Table 2;
- Annex H: small ball test method has been deleted, replacement of Annex H. A2

A1 *deleted text* A1

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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 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.

**A<sub>2</sub>** Laminate floor coverings are generally designed for floating installations and are considered for domestic and commercial levels of use, including domestic kitchens. This document does not specify requirements relating to the use in areas which are subjected to frequent wetting, such as bathrooms, laundry rooms or saunas. In general laminate floor coverings can only be used in those areas when authorized by the manufacturer and under conditions described in the manufacturer's installation guidelines. **A<sub>2</sub>**

## 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*

**A<sub>2</sub>** EN ISO 16581, *Resilient and laminate floor coverings — Determination of the effect of simulated movement of a furniture leg (ISO 16581)* **A<sub>2</sub>**

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*

**A<sub>2</sub>** EN 17368, *Laminate floor coverings — Determination of impact resistance with small ball* **A<sub>2</sub>**

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**  
[A<sub>2</sub>] core material of the laminate floor covering containing wood for at least 65 % in mass [A<sub>2</sub>]

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