



Institut luxembourgeois de la normalisation
de l'accréditation, de la sécurité et qualité
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ILNAS-EN 17142:2018

Modular multilayer floor coverings - Elements with a wood powder based surface layer - Specifications, requirements and test methods

Revêtements de sol modulaires
multicouches - Éléments comportant une
couche de surface à base de poudre de
bois - Spécifications, exigences et

Modularer mehrschichtiger Bodenbelag -
Elemente mit einer auf Holzpulver
basierenden Deckschicht -
Spezifikationen, Anforderungen und

12/2018



National Foreword

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English Version

**Modular multilayer floor coverings - Elements with a wood
powder based surface layer - Specifications, requirements
and test methods**

Revêtements de sol modulaires multicouches -
Éléments comportant une couche de surface à base de
poudre de bois - Spécifications, exigences et méthodes
d'essai

Modularer mehrschichtiger Bodenbelag - Elemente mit
einer auf Holzpulver basierenden Deckschicht -
Spezifikationen, Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 6 August 2018.

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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 17142:2018) 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of an identical text or by endorsement, at the latest by June 2019, and conflicting national standards shall be withdrawn at the latest by June 2019.

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1 Scope

This document specifies characteristics, states requirements and gives test methods for modular multilayer floor coverings with an surface layer based on wood powder (as defined in 3.1).

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

Powder based floor coverings are considered for domestic and commercial levels of use.

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

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

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 438-2, *High-pressure decorative laminates (HPL) — Sheets based on thermosetting resins (usually called laminates) — Part 2: Determination of properties*

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

EN 16354, *Laminate floor coverings — Underlays — Specification, requirements and test methods*

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 4892-2:2013, *Plastics — Methods of exposure to laboratory light sources — Part 2: Xenon-arc lamps (ISO 4892-2:2013)*

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 48-2, *Rubber, vulcanized or thermoplastic — Determination of hardness — Part 2: Hardness between 10 IRHD and 100 IRHD*

ISO 48-7, *Rubber-covered rollers — Determination of apparent hardness — Part 2: Shore-type durometer method*

ISO 6506-1, *Metallic materials — Brinell hardness test — Part 1: Test 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*

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

3.1

modular multilayer floor covering

floor covering, typically in a plank or tile format, having a multiple layer product structure: e.g. backer, substrate and surface layer

Note 1 to entry: The planks/tiles have worked edges that allow the product to be joined together to form a larger integral unit. The product can vary in thickness, format, surface texture, gloss level and colour.

3.2

modular multilayer floor covering with wood powder based surface layer

upper decorative layer consisting of one or more wood powder based layers which consists of a minimum 20% w/w of wood particles, together with aminoplastic, thermosetting resins (usually melamine), additives, pigments and any corundum and these components are dry mixed and scattered in layers on the substrate

Note 1 to entry: By the simultaneous action of heat and pressure, these powder layers are either pressed as such or are directly pressed on a substrate (usually wood-based panels). The product is usually fitted with a backer (powder backer or impregnated papers), primarily used as a balancing material. In case of individually pressed layers, such layers can be fitted on substrates by, for example, a gluing operation.

3.3

substrate

core material of the powder based floor covering

Note 1 to entry: It is generally a particleboard, as defined in EN 309, or a Plywood board or an OSB board or a Medium Density 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 stabilise the product

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

3.5

underlay

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

Note 1 to entry: Some powder based floor covering products have the underlay pre-attached directly to the backer.