



SLOVENSKI STANDARD
oSIST prEN 14354:2024
01-december-2024

Lesne plošče - Furnirane talne obloge

Wood-based panels - Wood veneer floor coverings

Holzwerkstoffe - Furnierte Fußbodenbeläge

Panneaux à base de bois - Revêtements de sol à placage bois

Ta slovenski standard je istoveten z: prEN 14354

ICS:

| | | |
|--------|--------------------|-----------------------------|
| 79.080 | Polizdelki iz lesa | Semi-manufactures of timber |
| 97.150 | Talne obloge | Floor coverings |

oSIST prEN 14354:2024

en,fr,de

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

DRAFT
prEN 14354

October 2024

ICS 79.080

Will supersede EN 14354:2017

English Version

Wood-based panels - Wood veneer floor coverings

Panneaux à base de bois - Revêtements de sol à placage
bois

Holzwerkstoffe - Furnierte Fußbodenbeläge

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 112.

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prEN 14354:2024 (E)**European foreword**

This document (prEN 14354:2024) has been prepared by Technical Committee CEN/TC 112 “Wood-based panels”, the secretariat of which is held by DIN.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 14354:2017.

This document includes the following significant technical changes with respect to EN 14354:2017:

- reference to EN 16511 for semi-rigid modular mechanical locked floor coverings (MMF) added in the scope;
- in 3.2 definition of top layer thickness added;
- in 3.3 new definition of the substrate including minimum wood content of the substrate;
- in 3.4 new definition of wood-based panels added;
- in 3.5 new definition of wood-based product added;
- new definitions of surface finishes in 3.12 to 3.15 introduced;
- in 3.16 synonym for reparation and new definition added;
- in 3.21 new definition of sanding to bare wood added;
- in 3.22 new definition of sanding a finishing added;
- in 3.23 new definition of finishing added;
- in 3.24 new definition of refinishing added;
- new definition for maintenance, reparation, renovation and refurbishment in 3.17 – 3.20 introduced;
- in 4.2. explanation regarding creaking added;
- in Table 1 thickness tolerance for elements with pre-attached underlays added and test method added as A.4.6 and A.5.2;
- in Table 1 requirements for internal bond deleted;
- in Table 1 delamination test of top layer with requirements included;
- distinction between general classification requirements in Table 2 and classification requirements for coated and printed surfaces in Table 3 introduced;
- requirements on Brinell hardness in Table 2 modified;
- in Table 2 requirements for thickness swelling modified;
- resistance to chemical agents introduced as general classification requirement in Table 2 for non-film forming coatings and classification requirement in Table 3 for film-forming coatings added;

- abrasion resistance in Table 3 modified;
- castor chair resistance in Table 3 added;
- in Table 3 micro scratch resistance introduced as classification requirement for coated and printed surfaces;
- additional requirements as new Table 4 added;
- new Clause 7 with measures to extend the lifespan added;
- Clause 9 test report modified;
- Annex A integration of measurement of thickness with pre-attached underlay;
- normative references in Annex C modified;
- Annex G “Complementary properties” moved to Table 4 and Annex H “Guide for evaluation of conformity of product quality” deleted;
- new Annex G Topical moisture resistance – Assembled joint added.

This document has been prepared under a standardization request addressed to CEN by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

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prEN 14354:2024 (E)**1 Scope**

This document defines terms and specifies requirements and test methods for wood veneer floor coverings for internal use.

This document is not applicable to multilayer parquets according to EN 13489 with a top layer thickness $\geq 2,5$ mm and to modular mechanical locked floor covering (MMF) panels with wear resistant top layer according EN 16511.

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

EN 438-2:2016+A1:2018, *High-pressure decorative laminates (HPL) — Sheets based on thermosetting resins (usually called laminates) — Part 2: Determination of properties*

EN 1534, *Wood flooring and parquet — Determination of resistance to indentation — Test method*

EN 13329:2023, *Laminate floor coverings — Elements with a surface layer based on aminoplastic thermosetting resins — Specifications, requirements and test methods*

EN 13442:2023, *Wood and parquet flooring and wood panelling and cladding — Determination of the resistance to chemical agents*

EN 16094:2021, *Laminate floor coverings — Test method for the determination of micro-scratch resistance*

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

EN 17456:2021, *Wood flooring and parquet — Determination of top layer delamination of multilayer elements — Test method*

EN 60454-2, *Pressure-sensitive adhesive tapes for electrical purposes — Part 2: Methods of test (IEC 60454-2)*

EN ISO 4918, *Resilient, textile and laminate floor coverings — Castor chair test (ISO 4918)*

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)*

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

ISO 4760:2022, *Laminate flooring — Topical moisture resistance — Assembled joint*

ISO 48-7, *Rubber, vulcanized or thermoplastic — Determination of hardness — Part 7: Apparent hardness of rubber-covered rollers by 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*

ASTM D785, *Standard Test Method for Rockwell Hardness of Plastics and Electrical Insulating Materials*

3 Terms and definitions

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

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

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

3.1

wood veneer floor covering

floor covering consisting of a substrate, with a top layer and possibly a backing

3.2

top layer

upper wood layer with a thickness $< 2,5$ mm measured according to EN 13647, intended to be the visible side when the floor is installed which can be uncovered or covered with surface treatments

Note 1 to entry: Surface treatments are defined in 3.10 to 3.13.

3.3

substrate

core material of the wood veneer floor covering, consisting of wood-based panel or wood-based product, made of wood or wooden components for at least 75 % in mass

3.4

backing

layer opposite to the top layer

3.5

wood veneer floor covering element

smallest single item identified as the complete product, shaped and machined on its sides to the appropriate dimensions

Note 1 to entry: The element is provided with a suitable system allowing the elements to be assembled together at installation.

3.6

cup

curvature, concave or convex, of the element across the width of the face

3.7

lipping

difference in height, at the edge, between the upper faces of two adjacent and assembled elements when laid on a flat surface

prEN 14354:2024 (E)**3.8****deviation from edge straightness**

concavity or convexity of the edge of the element along the length between the two ends of the element

3.9**wear layer**

layer on which wearing occur

3.10**film-forming coating**

coating that form a continuous, perceivable and measurable film $\geq 20 \mu\text{m}$

Note 1 to entry: These products could be lacquers for example.

3.11**non film forming coating**

coating $< 20 \mu\text{m}$ thickness

Note 1 to entry: These are products are containing oil, wax, oil-wax combination and soap as defined in EN 13756.

3.12**partly coloured surface**

surface of the wood that is partly changed by technical surface treatment processes, whereby the natural wood grain remains visible

Note 1 to entry: Partly colouring, staining and reactive staining are examples for technical surface treatments.

3.13**printed surface**

surface with a décor that is printed and protected by film forming coating

3.14**underlay**

resilient layer between the substrate and floor covering added to obtain specific properties

Note 1 to entry: It is also possible to have combinations of underlays and underlay materials as underlays, as well as combinations of underlays with films or coatings (e.g. vapour barriers).

Note 2 to entry: The underlay can be profiled or textured.

[SOURCE: EN 16354]

3.15**maintenance**

process of retaining the appearance of the face and its treatment either by cleaning, reoiling, rewaxing, refreshing or application of specialist products

[SOURCE: EN 13756:2018, 12.3, modified – “relacquering” deleted]

3.16**reparation****repair**

process of replacement or reinstallation of damaged elements or parts of elements to renew the appearance or return to the original functional characteristics

[SOURCE: EN 13756:2018, 12.2]

3.17

renovation

process of renewing the appearance by sanding and coating without modifying the installation

Note 1 to entry: The process of sanding the finishing or sanding down to the bare wood depends on the product characteristics (thickness of the top layer, presence of printing, etc.).

[SOURCE: EN 13756:2018, 12.1, modified – Note 1 to entry has been added.]

3.18

refurbishing

refurbishment

process by which an item, during its expected service life, is restored to a useful condition for the same purpose and may change the appearance and performance

Note 1 to entry: Refurbishing does not include remanufacture after the expected service life.

Note 2 to entry: Refurbishing can include activities such as repair, rework, replacement of worn parts.

3.19

wood-based panel

solid wood panel, laminated veneer lumber (LVL), plywood, oriented strand board (OSB), resin-bonded particleboard, cement-bonded particleboard or fibreboard

[SOURCE: EN 13986:2004+A1:2015]

3.20

wood-based product

product made of wood or wooden components for at least 75 % in mass

3.21

sanding to bare wood

sanding down to the wood top layer prior to applying a finishing coat

Note 1 to entry: This operation reduces the wood top layer thickness.

3.22

sanding a finishing

sanding of the finishing without touching the wood top layer prior to applying a finishing coat

3.23

finishing

surface treatment with filler, paint, lacquer, oil, wax or impregnating agent to protect, change the colour or highlight the decorative characteristics

[SOURCE: EN 13756:2018, 7.23, modified – last sentence deleted]

3.24

refinishing

process of retaining the appearance of the face by reoiling, rewaxing, relacquering or revarnishing, and if necessary sanding a finishing, within the expected service life

prEN 14354:2024 (E)**4 Requirements****4.1 General**

All wood veneer floor coverings shall comply with the general requirements given in Table 1 and Table 2. Wood veneer floor coverings with film-forming coating and printed surfaces shall comply with the classification requirements given in Table 3. The values given in this Table take account of uncertainties due to variations in the application of finishes and of those described in the test method in Annex D and Annex E.

4.2 General requirements

The nominal dimensions shall be declared by the manufacturer at a given humidity.

The wood used for the top layer are hardwood or softwood species and shall be free from decay and insect attack. Variations of colour can occur under the influence of light.

Uncovered surfaces will change their natural appearance depending on the level of use. A surface treatment is necessary to protect the veneer surface after installation.

Low use frequency combined with climate changes may lead to slight creaking effects on floated installed wood veneer floor covering.

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