SLOVENSKI STANDARD
SIST EN 14354:2026

01-julij-2026

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: **EN 14354:2026**

ICS:

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

SIST EN 14354:2026 **en,fr,de**

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 14354

May 2026

ICS 79.080

Supersedes 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 European Standard was approved by CEN on 20 March 2026.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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, Türkiye and United Kingdom.

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Ref. No. EN 14354:2026 E

Contents

Page

European foreword

This document (EN 14354:2026) has been prepared by Technical Committee CEN/TC 112 “Wood-based panels”, the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by November 2026, and conflicting national standards shall be withdrawn at the latest by November 2026.

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 supersedes EN 14354:2017.

Compared to EN 14354:2017 the following modifications have been made:

a) reference to EN 16511 for modular mechanical locked floor coverings (MMF) added in the scope;

b) in 3.2 definition of top layer thickness added;

c) in 3.3 new definition of the substrate including minimum wood content of the substrate;

d) new definitions of surface finishes in 3.10 to 3.13 introduced;

e) in 3.14 new definition of underlay added;

f) in 4. explanation regarding creaking added;

g) in Table 1 thickness tolerance for elements with pre-attached underlays added and test method added as 4.6 and 5.2;

h) in Table 1 requirements for internal bond deleted;

i) in Table 1 delamination test of top layer with requirements included;

j) distinction between general classification requirements in Table 2 and classification requirements for coated and printed surfaces in Table 3 introduced;

k) requirements on resistance to indentation in Table 2 modified;

l) in Table 2 requirements for thickness swelling modified;

m) 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;

n) castor chair resistance in Table 2 added;

o) abrasion resistance in Table 3 modified;

p) in Table 3 micro scratch resistance introduced as classification requirement for coated and printed surfaces;

q) additional requirements as new Table 4 added;

r) Clause 8 test report modified;

s) Annex A integration of measurement of thickness with pre-attached underlay;

t) normative references in Annex C modified;

u) former Annex G “Complementary properties” moved to Table 4 and former Annex H “Guide for evaluation of conformity of product quality” deleted;

v) new Annex G “Topical moisture resistance – Assembled joint” added.

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, Türkiye and the United Kingdom.

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

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

EN ISO 868:2003, *Plastics and ebonite — Determination of indentation hardness by means of a durometer (Shore hardness) (ISO 868:2003)*

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 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*

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

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

ASTM D 785, *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(s) 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

EXAMPLE High density fibreboard (HDF).

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

3.8
deviation from straight edge straightness
lengthwise curvature of an element perpendicular to the edge

Note 1 to entry: This characteristic is referred to as “spring” in EN 13756:2018.

3.9
wear layer
layer on which wearing occur

3.10
film-forming coating
coating that form a continuous, perceivable and measurable film with a thickness ≥ 20 µm

EXAMPLE Lacquers.

3.11
non film forming coating
coating with a thickness < 20 µm

Note 1 to entry: These are products containing oil, wax, oil-wax combination or 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 16354:2018, definition 3.2]

4 General requirements

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 additionally comply with the classification requirements given in Table 3.

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.

Climate changes and/or low use frequency can lead to slight creaking effects on floated installed wood veneer floor covering.

Table 1 — General requirements

Characteristics	Requirements	Test methods
Moisture content H (dispatch from manufacturer)	$4\ \% \leq H_{average} \leq 10\ \%$ and $H_{max} - H_{min} \leq 3\ \%$	EN 322
Thickness t of an element without pre-attached underlay	$t_{max} - t_{min} \leq 0{,}50$ mm $\lvert t_{average} - t_{nominal} \rvert \leq 0{,}50$ mm	Annex A
Thickness t of an element with pre-attached underlay	$t_{max} - t_{min} \leq 0{,}80$ mm $\lvert t_{average} - t_{nominal} \rvert \leq 0{,}50$ mm	
Length l of the top layer in the same package	$l \leq 1\,500$ mm: $l_{max} - l_{min} \leq 0{,}50$ mm $l > 1\,500$ mm: $l_{max} - l_{min} \leq 0{,}30$ mm/m $\lvert l_{mean} - l_{nominal} \rvert \leq 1$ mm	
Width w of the top layer in the same package	$w_{max} - w_{min} \leq 0{,}20$ mm $\lvert w_{average} - w_{nominal} \rvert \leq 0{,}1$mm	
Length l and width w of squared elements $l = w$	$\lvert l_{average} - l_{nominal} \rvert \leq 0{,}10$ mm $\lvert w_{average} - w_{nominal} \rvert \leq 0{,}10$ mm $l_{max} - l_{min} \leq 0{,}20$ mm $w_{max} - w_{min} \leq 0{,}20$ mm	
Deviation of squareness	$q_{max} \leq 0{,}20$ mm	
Deviation from edge straightness of the top layer s	$s_{max} \leq 0{,}30$ mm/m	
Cup f_w in width direction	$\lvert f_{w\,max} \rvert \leq 0{,}20\ \%$ $\lvert f_{w\,average} \rvert \leq 0{,}15\ \%$	
Lipping p	$p_{max} \leq 0{,}15$ mm	Annex B
Opening between elements	$\leq 0{,}20$ mm	
Adhesion of the lacquer [a]	≤ class 2	Annex F
Surface soundness [b]	$\geq 1{,}00$ N/mm²	EN 13329:2023, Annex B
Top layer bonding	$D_{t\,average} \leq 1\ \%$ $D_{t\,max} \leq 5\ \%$	EN 17456:2021, Procedure AT1

[a] Not applicable for non-film forming coatings or unsealed surfaces.

[b] For products with HDF-substrate.

5 Classification requirements

5.1 General

Wood veneer floor coverings shall be classified as suitable for different levels of use, according to the performance requirements specified in Table 2, when tested with the methods given therein. Classification shall conform to the scheme specified in EN ISO 10874 (classes 21, 22, 23, 31, 32, 33). The use classification defined in the Table 2 had been fixed on the basis of the material and the linked test methods.

Table 2 — General classification requirements

Class	21	22	23	31	32	33	Test method
Symbol							
Level of use	Domestic			Commercial			
	Moderate	General	Heavy	Moderate	General	Heavy	
Resistance to indentation	≥ 10 N/mm²	≥ 20 N/mm²		≥ 25 N/mm²	≥ 30 N/mm²	≥ 35 N/mm²	EN 1534
Thickness swelling	≤ 20 %		≤ 18 %			≤ 15 %	ISO 24336
Locking strength "f0,2" [a]	No requirement				Length ≥ 1,0 KN/m Short side ≥ 2,0 KN/m		ISO 24334
"Castor Chair" resistance [a] [c]	No requirement	No requirement		≥ 10 000 cycles No damage with type W wheels	≥ 15 000 cycles No damage with type W wheels	≥ 25 000 cycles No damage with type W wheels	EN ISO 4918 [d]
Resistance to chemical agents [b]	For each chemical agent rating code ≥ 4						Class 21 to 31 tested according to EN 13442 procedure D Class 32 to 33 tested according to EN 13442 procedure C

NOTE To remain in the declared used classes the necessary and appropriate periodic maintenance is needed.

[a] For mechanical assembly systems only (assembly systems without glue).

[b] Valid for non film forming coatings (only oiled, waxed or oiled/waxed surfaces).

[c] No visible damage on the surface of the assembled test area caused by detachment of layers, opening of joints, or crazing. Ignore any flattening or change in appearance, e.g. change in gloss.

[d] Using soft castor wheels W PU (90 ± 5) Shore A. If no underlay is pre-attached or specified, a standard EPS foam of (1,6 ± 0,2) mm thickness, with a CS value (compressive strength) of at least 60 kPa and with PC-value (punctual conformability) of (0,9 ± 0,1) mm shall be used. The three parameters of the foam shall be determined according to EN 16354.

5.2 Classification requirements for elements with film-forming coating

The additional classification requirements for elements with film-forming coating and printed surfaces are given in Table 3. For the use of this table the producer shall declare which abrasion resistance test method is to be used (Annex D or E).