

Wood-based panels - Wood veneer floor coverings

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 14354:2017 sisaldab Euroopa standardi EN 14354:2017 ingliskeelset teksti.	This Estonian standard EVS-EN 14354:2017 consists of the English text of the European standard EN 14354:2017.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 26.07.2017.	Date of Availability of the European standard is 26.07.2017.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 79.080

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega:
Koduleht www.evs.ee; telefon 605 5050; e-post info@evs.ee

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:

Homepage www.evs.ee; phone +372 605 5050; e-mail info@evs.ee

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 27 February 2017.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents

Page

European foreword.....	5
1 Scope.....	6
2 Normative references.....	6
3 Terms and definitions	7
4 Requirements	8
4.1 General.....	8
4.2 General requirements	8
5 Classification requirements	9
5.1 General.....	9
5.2 Classification requirements for elements with lacquered surfaces.....	10
6 Marking and packaging.....	10
6.1 Marking.....	10
6.2 Packaging.....	11
7 Test report.....	11
Annex A (normative) Determination of thickness, length, width, squareness, deviation from edge straightness and cup.....	12
A.1 General.....	12
A.2 Sampling.....	12
A.3 Conditioning.....	12
A.4 Test equipment.....	12
A.5 Procedure.....	13
A.5.1 Determination of thickness t	13
A.5.2 Determination of length l	14
A.5.3 Determination of width w and dimensions of squared elements.....	14
A.5.4 Determination of deviation from squareness q	15
A.5.5 Determination of deviation of edge straightness s	15
A.5.6 Determination of cup f_w	16
A.6 Calculation and expression of results.....	16
A.6.1 Thickness t	16
A.6.2 Width w	16
A.6.3 Length l	16
A.6.4 Deviation from squareness q	16
A.6.5 Deviation from edge straightness s	16
A.6.6 Cup f_w	17
A.7 Test report.....	17

Annex B (normative) Determination of opening and lipping between elements	18
B.1 General	18
B.2 Sampling	18
B.3 Conditioning	18
B.4 Test equipment.....	18
B.5 Procedure	18
B.5.1 Assembling.....	18
B.5.2 Measuring of lipping.....	19
B.5.3 Measuring of openings.....	19
B.5.4 Calculation and expression of results	19
B.6 Test report	19
Annex C (normative) Determination of the elasticity of lacquer.....	20
C.1 General	20
C.2 Sampling	20
C.3 Apparatus	20
C.4 Procedure	20
C.5 Calculation and expression of results	20
C.6 Evaluation of results, elasticity classification	20
Annex D (normative) Determination of the wear resistance using the falling sand method.....	21
D.1 General	21
D.2 Sampling	21
D.3 Conditioning	21
D.4 Apparatus	22
D.4.1 Testing machine	22
D.4.2 Grit feeder and accessories	22
D.4.3 Additional material or equipment	27
D.5 Procedure	27
D.5.1 General	27
D.5.2 Maintenance of the abrading wheels.....	27
D.5.3 Operation of the abrader	27
D.5.4 Calibration.....	28
D.5.5 Abrasion of test specimen	29
D.6 Expression of results	30
D.7 Test report	30
Annex E (normative) Determination of abrasion resistance using the sand paper method.....	31
E.1 General	31

E.2	Sampling.....	31
E.3	Conditioning.....	31
E.4	Apparatus.....	32
E.4.1	Testing machine	32
E.4.2	Additional material or equipment.....	35
E.5	Procedure.....	35
E.5.1	General.....	35
E.5.2	Preparation of test specimens and abrasive papers	36
E.5.3	Preparation of abrasive wheels	36
E.5.4	Determination of the abrasion rate of abrasive paper.....	36
E.5.5	Abrasion of test specimen.....	36
E.5.6	Expression of results.....	38
E.5.7	Test report.....	38
Annex F (normative)	Determination of the adhesion of the lacquer — Cross cut test.....	39
F.1	General.....	39
F.2	Test equipment.....	39
F.2.1	Cutting tool	39
F.2.2	Spacing guide	41
F.2.3	Soft brush	41
F.2.4	Transparent pressure-sensitive adhesive tape	41
F.3	Sampling.....	42
F.4	Test procedure	42
F.4.1	General.....	42
F.4.2	Cutting and removing the lacquer.....	42
F.5	Expression of the results	43
F.6	Test report.....	44
Annex G (normative)	Complementary properties	45
Annex H (informative)	Guide for evaluation of conformity of product quality	46
H.1	General.....	46
H.2	Terms and definitions	46
H.3	Rules for evaluation of conformity	47
H.3.1	Batch	47
H.3.2	Sampling.....	47
H.3.3	Evaluation of conformity	47
H.4	Sampling report.....	48
Bibliography		49

European foreword

This document (EN 14354:2017) 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 January 2018, and conflicting national standards shall be withdrawn at the latest by January 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 supersedes EN 14354:2004.

Compared to EN 14354:2004 the following modifications have been made:

- a) definitions of lacquered and oiled surfaces were introduced;
- b) deletion of requirements on humidity variations as in 4.3;
- c) modifications of classification on wear resistance in Table 2 with two methods of testing;
- d) requirement for the locking strength in Table 2 for the classes 32 and 33;
- e) modified test method for abrasion resistance in Annex D;
- f) new method for abrasion resistance in Annex E;
- g) reference to test according ISO 24339 in Annex G.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This European Standard defines terms and specifies requirements and test methods for wood veneer floor coverings with multilayer built up for internal use. It gives guidance for the evaluation of conformity of the products to the requirements of this standard.

This European Standard is not applicable to multilayer parquet elements with a minimum top layer thickness of 2,5 mm. For these products EN 13489 applies.

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 319, *Particleboards and fibreboards — Determination of tensile strength perpendicular to the plane of the board*

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

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

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

EN 13329:2016, *Laminate floor coverings — Elements with a surface layer based on aminoplastic thermosetting resins — Specifications, requirements and test methods*

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

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

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

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

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

ASTM D 785, *Standard test method for Rockwell hardness of plastics and electrical insulating materials*

FEPA-Standard 42-1, *Grains of fused aluminium oxide, silicon carbide and other abrasive materials for bonded abrasives and for general applications Macrogrits F 4 to F 220*

FEPA-standard 44-1, *Grains of fused aluminium oxide and silicon carbide abrasive materials — Part 1: Determination of bulk density — Macrogrits F and P series*

3 Terms and definitions

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

3.1

wood veneer floor covering

rigid floor covering consisting of a substrate made from a wood-based panel, with a top layer of wood veneer and possibly a backing

3.2

top layer

finished upper wood layer, intended to be the visible side when the floor is installed

3.3

substrate

core material of the wood veneer floor covering

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 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