Wood-based panels - Characteristic values for structural design - Part 3: Solid wood panels

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 12369-3:2022 sisaldab Euroopa standardi EN 12369-3:2022 ingliskeelset teksti.	This Estonian standard EVS-EN 12369-3:2022 consists of the English text of the European standard EN 12369-3:2022.
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 and Accreditation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 20.07.2022.	Date of Availability of the European standard is 20.07.2022.
Standard on kättesaadav Eesti Standardimis-ja Akrediteerimiskeskusest.	The standard is available from the Estonian Centre for Standardisation and Accreditation.

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

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

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English Version

Wood-based panels - Characteristic values for structural design - Part 3: Solid wood panels

Panneaux à base de bois - Valeurs caractéristiques pour la conception des structures - Partie 3 : Bois panneautés

Holzwerkstoffe - Charakteristische Werte für die Berechnung und Bemessung von Holzbauwerken - Teil 3: Massivholzplatten

This European Standard was approved by CEN on 20 April 2022.

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 12369-3:2022) 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of an identical text or by endorsement, at the latest by January 2023, and conflicting national standards shall be withdrawn at the latest by January 2023.

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 12369-3:2008.

This document is intended to be used in conjunction with EN 1995-1-1.

The EN 12369 series *Wood-based panels – Characteristic values for structural design* is currently composed of the following parts:

— *Part 1: OSB, particleboards and fibreboards*;

— *Part 2: Plywood*;

— *Part 3: Solid wood panels*;

Annex A is informative.

Compared to EN 12369-3:2008 the following changes have been made:

a) modification of the thickness range and of the values for single-layer panels given at Table 2 in conjunction with changes in EN 13353;

b) modification the thickness ranges and of the values for multi-layer panels given at Table 3 in conjunction with changes in EN 13353;

c) editorial changes.

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 document provides information on the characteristic values for use in designing structures incorporating wood-based panels. The characteristic values given are as defined in EN 1995-1-1.

This document includes the characteristic values of the mechanical properties and of the raw density for solid-wood panels complying with EN 13353:2022 technical classes SWP/1 S, SWP/2 S, SWP/3 S.

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 789, *Timber structures - Test methods - Determination of mechanical properties of wood based panels*

EN 1058, *Wood-based panels - Determination of characteristic 5-percentile values and characteristic mean values*

EN 1156, *Wood-based panels - Determination of duration of load and creep factors*

EN 1995-1-1, *Eurocode 5: Design of timber structures - Part 1-1: General - Common rules and rules for buildings*

EN 13017-1, *Solid wood panels - Classification by surface appearance - Part 1: Softwood*

EN 13017-2, *Solid wood panels - Classification by surface appearance - Part 2: Hardwood*

3 Terms and definitions and symbols

3.1 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:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1.1
characteristic values

3.1.1.1
characteristic strength value
population 5-percentile value obtained from the results of tests with a duration of 300 s at an equilibrium moisture content of the test pieces relating to a temperature of 20 °C and a relative humidity of 65 %

3.1.1.2
characteristic stiffness value
either the population 5-percentile or the mean value obtained of tests with a duration of 300 s at an equilibrium moisture content of the test pieces relating to a temperature of 20 °C and a relative humidity of 65 %

Note 1 to entry: The stiffness values given in the Tables are mean values as these are most commonly used in design. Annex A explains how to calculate the 5-percentile value.