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Wood-based panels - Determination of characteristic 5-percentile values and characteristic mean values

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>See Eesti standard EVS-EN 1058:2024 sisaldab Euroopa standardi EN 1058:2024 ingliskeelset teksti.</p> <p>Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 11.12.2024.</p> <p>Standard on kättesaadav Eesti Standardimis- ja Akrediteerimiskeskusest.</p>	<p>This Estonian standard EVS-EN 1058:2024 consists of the English text of the European standard EN 1058:2024.</p> <p>This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.</p> <p>Date of Availability of the European standard is 11.12.2024.</p> <p>The standard is available from the Estonian Centre for Standardisation and Accreditation.</p>
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English Version

## Wood-based panels - Determination of characteristic 5-percentile values and characteristic mean values

Panneaux à base de bois - Détermination des valeurs caractéristiques correspondant au fractile à 5 % d'exclusion et des valeurs caractéristiques moyennes

Holzwerkstoffe - Bestimmung der charakteristischen 5-%-Quantilwerte und der charakteristischen Mittelwerte

This European Standard was approved by CEN on 25 November 2024.

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

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## European foreword

This document (EN 1058:2024) 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of an identical text or by endorsement, at the latest by June 2025, and conflicting national standards shall be withdrawn at the latest by June 2025.

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 1058:2009.

This document includes the following significant technical changes with respect to EN 1058:2009:

- test methods like EN 1195 or any other relevant test referring to EN 1058 included in the scope;
- the calculation of mean values (50-percentile values) follows the statistical principles of EN 14358:2016, 4.3: Calculation of characteristic stiffness properties (mean values);
- the characteristic mean values are taken as the sample mean value of EN 14358:2016, Formula (14);
- Annex B has been changed from normative to informative.

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.

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

On the basis of test results from wood-based panel products for structural purposes, this document specifies a method for the determination of:

- characteristic 5-percentile values of mechanical properties under the assumption of a log-normal distribution of the test data according to EN 14358; and
- characteristic mean values (50-percentile values) of physical properties under the assumption of a normal distribution of the test data according to EN 14358.

Test data can be determined from tests using the test methods outlined in the test standard EN 789 or other relevant test standard, performance standard or product standard normatively referring to EN 1058.

NOTE See e.g. EN 1195 and EN 12871.

The statistical evaluation follows the principles of EN 1990:2023<sup>1</sup>, Annex D of EN 1995-1-1:2004<sup>2</sup> and of EN 14358:2016.

## 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 1195, *Timber structures - Test methods - Performance of structural floor decking*

## 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

#### **characteristic value**

value of a material property which is defined as a fractile of the distribution of that property within the total population of that material

Note 1 to entry: For all strength properties, this fractile is the fifth percentile. For stiffness properties as well as physical properties, two different characteristic values can be used: the fifth percentile and the mean value.

### 3.2

#### **panel**

piece of wood-based sheet material large enough to permit the cutting of test pieces

<sup>1</sup> As impacted by EN 1990:2002/A1:2005, EN 1990:2002/A1:2005/AC:2008 and EN 1990:2002/A1:2005/AC:2010.

<sup>2</sup> As impacted by EN 1995-1-1:2004/A1:2008, EN 1995-1-1:2004/A2:2014 and EN 1995-1-1:2004/AC:2006.