

norm

NEN-EN 1058

Houtachtige plaatmaterialen - Bepaling van de karakteristieke 5-procentwaarden en karakteristieke gemiddelde waarden

Publicatie uitsluitend voor commentaar

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

juni 2008

ICS 79.060.01; 79.060.20

Commentaar voor 2008-09-22

Zal vervangen NEN-EN 1058:1995

Als Europees normontwerp is gepubliceerd: prEN 1058:2008, IDT

Definitief vastgestelde normen zullen als Nederlandse norm gelden. Daarom wordt dit normontwerp in Nederland voor commentaar gepubliceerd. Op het ontwerp ingebracht commentaar zal aan de bevoegde normcommissie worden voorgelegd die hiermee rekening zal houden bij de bepaling van de Nederlandse stem. Indien er geen bezwaar bij NEN wordt ingebracht, kan dat leiden tot ongewijzigd definitieve vaststelling van het ontwerp als norm.

Van Europese normen bestaan drie officiële versies: Engels, Frans en Duits. Voor Nederland zal de Engelse versie gelden, tenzij voor een geautoriseerde versie in het Nederlands wordt gekozen.

Normcommissie 353 099 "Verzameling geregistreerde onderwerpen"

Apart from exceptions provided by the law, nothing from this publication may be duplicated and/or published by means of photocopy, microfilm, storage in computer files or otherwise, which also applies to full or partial processing, without the written consent of the Netherlands Standardization Institute.

The Netherlands Standardization Institute shall, with the exclusion of any other beneficiary, collect payments owed by third parties for duplication and/or act in and out of law, where this authority is not transferred or falls by right to the Reproduction Rights Foundation.

Auteursrecht voorbehouden. Behoudens uitzondering door de wet gesteld mag zonder schriftelijke toestemming van het Nederlands Normalisatie-instituut niets uit deze uitgave worden veeleenvoudigd en/of openbaar gemaakt door middel van fotokopie, microfilm, opslag in computerbestanden of anderszins, hetgeen ook van toepassing is op gehele of gedeeltelijke bewerking.

Het Nederlands Normalisatie-instituut is met uitsluiting van ieder ander gerechtigd de door derden verschuldigde vergoedingen voor veeleenvoudiging te innen en/of daartoe in en buiten rechte op te treden, voor zover deze bevoegdheid niet is overgedragen c.q. rechtens toekomt aan de Stichting Reprorecht.

Although the utmost care has been taken with this publication, errors and omissions cannot be entirely excluded. The Netherlands Standardization Institute and/or the members of the committees therefore accept no liability, not even for direct or indirect damage, occurring due to or in relation with the application of publications issued by the Netherlands Standardization Institute.

Hoewel bij deze uitgave de uiterste zorg is nagestreefd, kunnen fouten en onvolledigheden niet geheel worden uitgesloten. Het Nederlands Normalisatie-instituut en/of de leden van de commissies aanvaarden derhalve geen enkele aansprakelijkheid, ook niet voor directe of indirecte schade, ontstaan door of verband houdend met toepassing van door het Nederlands Normalisatie-instituut gepubliceerde uitgaven.

May 2008

ICS 79.060.01

Will supersede EN 1058:1995

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 pour cent d'exclusion inférieure et des valeurs caractéristiques moyennes

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

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

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Warning : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Contents

Page

Foreword.....	3
1 Scope	3
2 Normative references	3
3 Symbols	3
4 Terms and definitions	4
5 Reference population	4
6 Determination of characteristic values of mechanical and physical properties.....	5
6.1 Sampling	5
6.2 Testing	5
6.3 Analysis of data	5
6.3.1 Strength and stiffness properties	5
6.3.2 Characteristic mean value (50-percentile characteristic value).....	5
7 Test report	5
Annex A (informative) Calculation of the 5-percentile characteristic value of log-normal distributed test data according to EN 14358.....	6
A.1 Symbols	6
A.1.1 Letter symbols	6
A.1.2 Indices	6
A.2 Analysis of data	7
A.2.1 Characteristic value m_k of test data with unknown coefficient of variation	7
A.2.2 Characteristic value m_k of test data with known coefficient of variation.....	7
A.3 Acceptance criteria for a sample	8
A.4 Examples of calculation	8
A.4.1 Determination of the characteristic value of the modulus of bending \bar{f}_{05} of particle boards with unknown coefficient of variation:	8
A.4.2 Determination of the characteristic value of the modulus of bending \bar{f}_{05} of particle boards with known coefficient of variation:	10
Annex B (informative) Calculation of the characteristic mean value (50-percentile value) of normal distributed test data.....	12
B.1 Symbols	12
B.1.1 Letter symbols (see appendix A)	12
B.1.2 Indices (see also appendix A)	12
B.2 Analysis of data	12
B.2.1 50-percentile characteristic values (characteristic mean values)	12
B.3 Acceptance criteria for a sample	13
B.4 Examples of calculation	13
B.4.1 Determination of the lower 50-percentile characteristic value (lower characteristic mean value) of the modulus of elasticity $\bar{E}_{50\%}$ parallel to the production line of OSB of a normal distributed sample with unknown coefficient of variation.....	13
B.4.2 Determination of the upper 50-percentile characteristic value (upper characteristic mean value) of the density ${}_U\bar{\rho}_{50}$ of a normal distributed sample of particle boards with known coefficient of variation $V_{\bar{\rho}}$	15

Foreword

This document (prEN 1058:2008) 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 1058:1995, the statistical evaluation of which had to be corrected. The statistical evaluation follows the principles of Annex D of EN 1990:2002, of EN 1995-1-1:1993: Eurocode 5: Design of timber structures – Part 1-1: General – Common rules and rules of buildings, and of EN 14358:2007 – Timber structures – Calculation of characteristic 5-percentile values and acceptance criteria for a sample.

1 Scope

On the basis of test results from wood-based panel products for structural purposes, this European Standard 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.

Test data should be determined from tests using the test methods outlined in EN 789.

2 Normative references

The following referenced documents are indispensable for the application 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 326-1, *Wood-based panels — Sampling, cutting and inspection — part 1: Sampling and cutting of test pieces and expression of test results*

EN 326-2, *Wood-based panels — Sampling, cutting and inspection — part 2: Quality control in the factory*

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

EN 14358, *Timber structures — Calculation of characteristic 5-percentile values and acceptance criteria for a sample*

3 Symbols

L	Lower specification limit
\bar{x}_{05}	Characteristic value of a log-normal distributed property
\bar{x}_{50}	Characteristic mean value of a normal distributed property

prEN 1058:2008 (E)

U Upper specification limit

$V_{\ln \bar{x}}$ Coefficient of variation of a log-normal distributed sample

$V_{\bar{x}}$ Coefficient of variation of a normal distributed sample

4 Terms and definitions

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

4.1 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 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.

4.2 panel

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

4.3 reference population

wood-based panels for which the characteristic values are relevant

4.4 production site

any single production line

4.5 sample

number of panels of one population

NOTE Unless otherwise agreed, the panels of the sample are drawn at random.

4.6 shift

continuous period of production by the same group of workers

NOTE Normally 8 h.

4.7 test piece

piece of panel cut to the size required for testing a specific property

5 Reference population

The reference population is in accordance with EN 326-1 defined by parameters such as type and manufacturing process, thickness range, grade, lay-up and quality classification of wood-based panels and is consistent with the material that is or can be supplied commercially and is capable of being identified at all stages of production, supply and in service.

Bestelformulier

Stuur naar:

NEN Standards Products & Services
t.a.v. afdeling Klantenservice
Antwoordnummer 10214
2600 WB Delft



NEN Standards Products & Services

Postbus 5059
2600 GB Delft

Vlinderweg 6
2623 AX Delft

T (015) 2 690 390
F (015) 2 690 271

www.nen.nl/normshop

Ja, ik bestel

__ ex. NEN-EN 1058:2008 Ontw. en Houtachtige plaatmaterialen - Bepaling van de karakteristieke 5-procentwaarden en karakteristieke gemiddelde waarden € 23.85

Wilt u deze norm in PDF-formaat? Deze bestelt u eenvoudig via www.nen.nl/normshop

Gratis e-mailnieuwsbrieven

Wilt u op de hoogte blijven van de laatste ontwikkelingen op het gebied van normen, normalisatie en regelgeving? Neem dan een gratis abonnement op een van onze e-mailnieuwsbrieven. www.nen.nl/nieuwsbrieven

Gegevens

Bedrijf / Instelling _____

T.a.v. _____ O M O V

E-mail _____

Klantnummer NEN _____

Uw ordernummer _____ BTW nummer _____

Postbus / Adres _____

Postcode _____ Plaats _____

Telefoon _____ Fax _____

Factuuradres (indien dit afwijkt van bovenstaand adres)

Postbus / Adres _____

Postcode _____ Plaats _____

Datum _____ Handtekening _____

Retourneren

Fax: 015 2 690 271

E-mail: klantenservice@nen.nl

Post: NEN Standards Products & Services,

t.a.v. afdeling Klantenservice
Antwoordnummer 10214,
2600 WB Delft

(geen postzegel nodig).

Voorwaarden

- De prijzen zijn geldig tot 31 december 2018, tenzij anders aangegeven.
- Alle prijzen zijn excl. btw, verzend- en handelingskosten en onder voorbehoud bij o.m. ISO- en IEC-normen.
- Bestelt u via de normshop een pdf, dan betaalt u geen handeling en verzendkosten.
- Meer informatie: telefoon 015 2 690 391, dagelijks van 8.30 tot 17.00 uur.
- Wijzigingen en typfouten in teksten en prijsinformatie voorbehouden.
- U kunt onze algemene voorwaarden terugvinden op: www.nen.nl/leveringsvoorwaarden.