SLOVENSKI STANDARD
SIST EN 384:2016+A1:2019/oprA2:2020

01-januar-2020

Konstrukcijski les - Ugotavljanje karakterističnih vrednosti mehanskih lastnosti in gostote

Structural timber - Determination of characteristic values of mechanical properties and density

Bauholz für tragende Zwecke - Bestimmung charakteristischer Werte für mechanische Eigenschaften und Rohdichte

Bois de structure - Détermination des valeurs caractéristiques des propriétés mécaniques et de la masse volumique

Ta slovenski standard je istoveten z: **EN 384:2016+A1:2018/prA2**

ICS:

79.040	Les, hlodovina in žagan les	Wood, sawlogs and sawn timber
91.080.20	Lesene konstrukcije	Timber structures

SIST EN 384:2016+A1:2019/oprA2:2020 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

DRAFT
EN 384:2016+A1:2018

prA2

November 2019

ICS 79.040

English Version

Structural timber - Determination of characteristic values of mechanical properties and density

Bois de structure - Détermination des valeurs caractéristiques des propriétés mécaniques et de la masse volumique

Bauholz für tragende Zwecke - Bestimmung charakteristischer Werte für mechanische Eigenschaften und Rohdichte

This draft amendment is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 124.

This draft amendment A2, if approved, will modify the European Standard EN 384:2016+A1:2018. If this draft becomes an amendment, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration.

This draft amendment 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-CENELEC Management Centre has the same status as the official versions.

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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.

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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 384:2016+A1:2018/prA2:2019) has been prepared by Technical Committee CEN/TC 124 “Timber structures”, the secretariat of which is held by AFNOR.

This document is currently submitted to the CEN Enquiry.

1 Modifications to 5.1, "Sampling"

Replace the first sentence "The sampling shall be representative of the population."

with

"The sampling shall be representative of the population, including commercial practices.".

In the 5th paragraph, replace the sentence "A length of at least 30 times the depth or 3.6 m whichever is the lesser meets this requirement."

with

"However, care should be taken to avoid biasing the sample through selection of unusually long lengths compared to industrial practice.

NOTE 1 For bending specimens, a length of at least 30 times the depth or 3,6 m, whichever is the lesser, meets this requirement. Shorter lengths can be accepted if they are justified in the report (see Clause 8) and meet the requirements of EN 408.

NOTE 2 For tension specimens, a length of at least 2 m plus the length required for the grips meets this requirement. Shorter lengths can be accepted if they are justified in the report (see Clause 8) and meet the requirements of EN 408.".

2 Modification to 5.4.2, "Moisture content"

Replace the entire subclause 5.4.2 with the following:

"**5.4.2 Moisture content**

5.4.2.1 General

Test values for strength and stiffness properties as well as density shall be adjusted to reference conditions using the best available information, including test data from previous testing. This information shall be justified in the report.

NOTE 1 The following subclauses provide simplified adjustments that may be used in the absence of more accurate information.

NOTE 2 Although testing at reference conditions is advised, it is noticeable that for some species or end uses, this may not be achieved. The purpose of this clause is to provide guidance for these situations.

If the moisture content u is lower than 8 %, special consideration is required for the adjustment of strength properties, modulus of elasticity and density.

5.4.2.2 Density

Test values for density should be adjusted according to Formula (1):

$$\rho = \rho\,(u)(1-0{,}005(u - u_{ref})) \qquad (1)$$

where

ρ is the density;

u is the moisture content at testing (8 % ≤ u ≤ 18 %);

u_{ref} is the reference moisture content, normally u_{ref} = 12 % (see 5.3.1).

For the adjustment of density, special consideration is required for moisture contents above fibre saturation.

5.4.2.3 Modulus of elasticity parallel to grain

Test values for modulus of elasticity parallel to the grain should be adjusted according to Formula (2):

$$E_0 = E_0(u)\ (1+0{,}01\ (u- u_{ref})) \quad (2)$$

where

E_0 is the modulus of elasticity parallel to the grain;

u is the moisture content at testing (8 % ≤ u ≤ 18 %);

u_{ref} is the reference moisture content, normally u_{ref} = 12 % (see 5.3.1).

For the adjustment of the modulus of elasticity u shall be taken as 18 % for moisture contents higher than 18 %.

5.4.2.4 Compression strenght

Test values for compression parallel to the grain should be adjusted according to Formula (3):

$$f_{c,0}=f_{c,0}\ (u)(1+0{,}03(u- u_{ref})) \quad (3)$$

where

$f_{c,0}$ is the compression strength parallel to the grain;

u is the moisture content at testing (8 % ≤ u ≤ 18 %);

u_{ref} is the reference moisture content, normally u_{ref} = 12 % (see 5.3.1).

For the adjustment of compression strength parallel to the grain u shall be taken as 18 % for moisture contents higher than 18 %.".