

## SLOVENSKI STANDARD SIST EN 408:2010/kFprA1:2012

01-februar-2012

# Lesene konstrukcije - Konstrukcijski les in lepljeni lamelirani les - Ugotavljanje nekaterih fizikalnih in mehanskih lastnosti

Timber structures - Structural timber and glued laminated timber - Determination of some physical and mechanical properties.

Holzbauwerke - Bauholz für tragende Zwecke und Brettschichtholz - Bestimmung einiger physikalischer und mechanischer Eigenschaften

Structures en bois - Bois de structure et bois lamellé-collé - Détermination de certaines propriétés physiques et mécaniques

Ta slovenski standard je istoveten z: EN 408:2010/FprA1

ICS:

79.040 Les, hlodovina in žagan les Wood, sawlogs and sawn

timber

91.080.20 Lesene konstrukcije Timber structures

SIST EN 408:2010/kFprA1:2012 en,fr,de

**SIST EN 408:2010/kFprA1:2012** 

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM FINAL DRAFT EN 408:2010

## FprA1

December 2011

ICS 79.040; 79.060.99; 91.080.20

#### **English Version**

# Timber structures - Structural timber and glued laminated timber - Determination of some physical and mechanical properties.

Structures en bois - Bois de structure et bois lamellé-collé -Détermination de certaines propriétés physiques et mécaniques Holzbauwerke - Bauholz für tragende Zwecke und Brettschichtholz - Bestimmung einiger physikalischer und mechanischer Eigenschaften

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

This draft amendment A1, if approved, will modify the European Standard EN 408:2010. 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.

CEN members are the national standards bodies of 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, 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: Avenue Marnix 17, B-1000 Brussels

Contents		Page
Fore	eword	3
1	Modification to 2	4
2	Modification to 10.3	4
3	Modification to 19.1	4
4	Modification to 19.2	5

## **Foreword**

This document (EN 408:2011/FprA1:2011) has been prepared by Technical Committee CEN/TC 124 "Structural timber", the secretariat of which is held by AFNOR.

This document is currently submitted to the Unique Acceptance Procedure.

#### 1 Modification to 2

Add "EN 384:2010, Structural timber — Determination of characteristic values of mechanical properties and density" to Clause 2.

### 2 Modification to 10.3

Replace the following text after the Equation (2):

"where

 $F_2$  -  $F_1$  is an increment of load in newtons on the regression line with a correlation coefficient of 0,99 or better and

 $w_2$  -  $w_1$  is the increment of deformation corresponding to  $F_2$  - $F_1$ , in millimetres (see Figure 2).

If unknown, G can be taken as infinite.

NOTE The mean shear modulus of coniferous wood species can be can be taken as G = 650 N/mm<sup>2</sup>.

The other symbols are as given in Clause 4. The modulus of elasticity shall be calculated to an accuracy of 1 %."

with the following text:

"where:

and

 $F_2$  -  $F_1$  is an increment of load in newtons on the regression line with a correlation coefficient of 0,99 or better

 $w_2$  -  $w_1$  is the increment of deformation corresponding to  $F_2$  -  $F_1$ , in millimetres (see Figure 2).

G is the shear modulus determined either by the method given in 11.1 or 11.2.

The shear modulus G shall be taken as infinite when Equation (2) is used for the EN 384 strength class allocation procedure.

NOTE Equation (2) accounts for the influence of the shear deformation. The strength class allocation procedure in EN 384:2010, 5.3.2. includes a normative transformation equation accounting implicitly for the shear deformation. For that case the shear influence as given in Equation (2) can be ignored by taking G as infinitive. However, Equation (2) offers the option to study and evaluate the shear influence for other purposes when the shear modulus is known. The mean shear modulus of coniferous wood species can be can be taken as  $G = 650 \text{ N/mm}^2$ . It is advised to report both results with and without the shear deformation correction."

### 3 Modification to 19.1

In the second paragraph, replace "twelve" with "19".

To read:

"For the determination of the bending strength of the finger jointed timber the test piece shall have a minimum length of 19 times the depth of the section. Where this is not possible, the span of the beam shall be reported.".

## 4 Modification to 19.2

Second paragraph, replace "eleven" with "18".

To read:

"For the determination of the bending strength of the finger jointed timber the test piece shall be symmetrically loaded in bending at two points over a span of 18 times the depth as shown in Figure 18 with the finger joint at mid span.

Sixth paragraph, replace "Load shall be applied at a constant rate until failure occurs or the finger joint fails. The rate of movement of the loading head shall be not greater than 0,003 h mm/s (see Figure 1)" with "Load shall be applied at a constant loading-head movement so adjusted that maximum load is reached within (300 ± 120)s.

NOTE 2 This rate should be determined from the results of preliminary tests. The objective is that the time to reach  $F_{\text{max}}$  for each test piece is 300 s.".

Replace "NOTE" with "NOTE 1";