SLOVENSKI STANDARD
SIST EN 14081-3:2012/oprA1:2016

01-julij-2016

Lesene konstrukcije - Razvrščanje konstrukcijskega lesa pravokotnega prečnega prereza po trdnosti - 3. del: Strojno razvrščanje - Dodatne zahteve za kontrolo proizvodnje v obratu

Timber structures - Strength graded structural timber with rectangular cross section - Part 3: Machine grading; additional requirements for factory production control

Holzbauwerke - Nach Festigkeit sortiertes Bauholz für tragende Zwecke mit rechteckigem Querschnitt - Teil 3: Maschinelle Sortierung, zusätzliche Anforderungen an die werkseigene Produktionskontrolle

Structures en bois - Bois de structure à section rectangulaire classé pour sa résistance - Partie 3: Classement mécanique - Exigences complémentaires relatives au contrôle de la production en usine

Ta slovenski standard je istoveten z: **EN 14081-3:2012/prA1**

ICS:

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

SIST EN 14081-3:2012/oprA1:2016 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

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English Version

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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 A1, if approved, will modify the European Standard EN 14081-3:2012. 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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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European foreword

This document (EN 14081-3:2012/prA1:2016) 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.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

This amendment includes new requirements for factory production control for output controlled systems.

As a consequence of this amendment, Clause 6 (formerly Clause 7) is completed and Annexes A and B are deleted.

1 Modifications to Clause 2, Normative references

Add the following references to this clause:

"EN 384, *Structural timber - Determination of characteristic values of mechanical properties and density"*

and

"EN 14358, *Timber structures - Calculation and verification of characteristic values".*

2 Modifications to Clause 3, Terms and definitions

Delete the existing definitions and add the following new definition:

"3.1
production batch
one production run where the timber of one source, grade or grade combination, species or species combination and size is graded using the same settings, possibly adapted to the quality of timber in production".

3 Modification to Clause 4, Symbols

Delete the entire clause.

Renumber the remaining clauses and subclauses accordingly.

4 Modifications to Clause 6, Additional factory production control requirements for output controlled systems

Replace the current text, "A procedure is given in Annex B and Annex C." *with the following new text:*

"6.1 General

When grading structural timber in an output controlled system, grading accuracy shall be monitored by testing samples drawn from production and analysing the results using the procedure described as follows.

6.2 Grading

Timber shall be graded by the machine using settings verified for the grade, grade combination, species or species combination, size and timber source. The moisture content at grading shall be measured.

During grading, the settings can be adapted to the quality of timber in production in accordance with Clause 9 of EN 14081-2:2010+A1:2012.

6.3 Sampling

To verify the grading of each production batch, sufficient timber shall be sampled to allow testing of at least 0,2 % of the graded timber, with a minimum of 10 specimens. These specimens shall be randomly sampled at approximately equal intervals from each production batch.

NOTE The purpose of random sampling is to reflect as far as possible the variability of timber within a production batch.

6.4 Destructive testing and calculation of characteristic values

Testing shall be carried out in accordance with EN 384 and EN 408 for edgewise bending or tension strength parallel to grain, modulus of elasticity in bending or tension, density and moisture content with the following exceptions:

— conditioning of test specimens to the reference moisture content is not necessary;

— the moisture content can be determined in accordance with EN 13183-2 or EN 13183-3;

— the density can be determined from the mass and volume of the full size specimen. For softwood, the result shall be adjusted to the density of small defect-free prisms by dividing by 1,05. For hardwood, no adjustment is necessary;

— the deflection and load transducers shall be accurate to within 3 % of the actual measurement. The loading rate in bending and tension tests can be increased to reach the ultimate load down to (60 ± 15) s.

The characteristic values of edgewise bending or tension strength parallel to grain, mean modulus of elasticity in bending or tension and density shall be determined in accordance with EN 384 and EN 14358.

6.5 Batch verification

The grading is verified only if the calculated characteristic values of edgewise bending or tension strength parallel to grain, mean modulus of elasticity in bending or tension and density are equal to or exceed the declared characteristic values. The verification shall separately be carried out for each batch, grade or grade combination, species or species combination and size.

If the verification fails, the batch shall not be marked with the intended strength class.

If the grading is verified for a lower strength class, the batch may be marked with the verified class.

6.6 Recording

For each batch, grade or grade combination, species or species combination and size, the following information shall be recorded:

— name of person responsible for the output controlled system (machine grading, testing and analysis);

— identification of the grading machine;

— details of grading (date, machine operator, grades, settings, feed speed, moisture content, yield, etc.);

— details of testing (date, person who carries out testing, method, remarks, etc.);

— individual test results (strength, modulus of elasticity, density and moisture content);

— mean and coefficient of variation of test results;

— calculated characteristic values (strength, modulus of elasticity and density);

— information if grading is verified or not;

— actions, including downgrading, taken if verification of grading is failed.".

5 Modification to Annex B (informative), Additional factory production control requirements for output controlled systems

Delete the entire annex.

6 Modification to Annex C (informative), Example of cusum control charts

Delete the entire annex.

7 Modifications to the Bibliography

Add the following new references to the Bibliography:

"EN 13183-2, *Moisture content of a piece of sawn timber - Part 2: Estimation by electrical resistance method*

EN 13183-3, *Moisture content of a piece of sawn timber - Part 3: Estimation by capacitance method*".