SLOVENSKI STANDARD
SIST EN 1912:2012

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Nadomešča:
SIST EN 1912:2004+A4:2010

Konstrukcijski les - Trdnostni razredi - Določitev trdnostnih razredov na podlagi vizualnega razvrščanja in vrste lesa

Structural Timber - Strength classes - Assignment of visual grades and species

Bauholz für tragende Zwecke - Festigkeitsklassen - Zuordnung von visuellen Sortierklassen und Holzarten

Bois de structure - Classes de résistance - Affectation des classes visuelles et des essences

Ta slovenski standard je istoveten z: **EN 1912:2012**

ICS:

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

SIST EN 1912:2012 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 1912

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ICS 79.040

Supersedes EN 1912:2004+A4:2010

English Version

Structural Timber - Strength classes - Assignment of visual grades and species

Bois de structure - Classes de résistance - Affectation des classes visuelles et des essences

Bauholz für tragende Zwecke - Festigkeitsklassen - Zuordnung von visuellen Sortierklassen und Holzarten

This European Standard was approved by CEN on 9 March 2012.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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Contents

Page

Foreword

This document (EN 1912:2012) has been prepared by Technical Committee CEN/TC 124 “Timber structures”, the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by October 2012, and conflicting national standards shall be withdrawn at the latest by October 2012.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 1912:2004+A4:2010.

This revised version contains assignments of additional grades and species.

According to the CEN/CENELEC Internal Regulations, the national standards organizations 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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This European Standard lists the visual strength grades, species and sources of timber, and specifies the strength classes to which they are assigned, as documented in EN 338.

NOTE For the grades, species and sources included, there is a long history of use and/or satisfactory test data. The sources listed therefore are largely determined by existing commercial practice.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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

EN 14081-1, *Timber structures — Strength graded structural timber with rectangular cross section — Part 1: General requirements*

EN 14081-2, *Timber structures — Strength graded structural timber with rectangular cross section — Part 2: Machine grading; additional requirements for initial type testing*

EN 14081-3, *Timber structures — Strength graded structural timber with rectangular cross section — Part 3: Machine grading; additional requirements for factory production control*

EN 14081-4, *Timber structures — Strength graded structural timber with rectangular cross section — Part 4: Machine grading; grading machine settings for machine controlled systems*

3 Terms and definitions

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

3.1
timber source
geographical area of growth of the trees from which the timber is sawn

3.2
timber species
individual species or combination of species

3.3
Nordic countries
Denmark, Finland, Iceland, Norway and Sweden

4 Symbols and abbreviations

CNE Europe Central, Northern and Eastern Europe

NNE Europe Northern and North Eastern Europe

NC Europe Northern and Central Europe

5 Requirements

5.1 The grades referred to in Tables 1 and 2 shall be in accordance with a grading standard that meets the requirements of EN 14081.

5.2 Timber of a grade, species and source may be assigned to a strength class and listed in this document, provided there is a long history of use and/or test data in accordance with EN 384.

NOTE 1 Where the required information becomes available for a grade, species and source not included in this document, preliminary assignment to a strength class, pending revision of this document, may be obtained from CEN/TC 124.

NOTE 2 The assignments of grades, species and sources to strength classes given in this document should be reassessed when this document is reviewed, or sooner if there is reason to suspect that the mechanical properties and/or density of the timber have changed, or the basis for the existing assessment no longer represents the current situation (e.g. if there has been a change in the source).

6 Assignments to strength classes

The timber grades, species and sources listed meet the requirements of the strength classes to which they are assigned in Table 1 and Table 2.

Table 3 and Table 4 identify the botanical species for the commercial names listed in Table 1 and Table 2.

NOTE 1 Timber graded by machine to EN 14081 may be graded directly to the strength classes and marked accordingly, and is therefore not referenced in this document.

NOTE 2 For combinations of species and visual grades which meet the requirements of EN 14081 but are not listed in this standard, the assignment to strength classes can be made according to EN 338 using characteristic values determined in accordance with EN 384.

The accepted assignments to strength classes given in this European Standard are based on initial type testing (ITT) and initial type calculation (ITC). The ITT and ITC documentation from the manufacturers has been evaluated by CEN/TC124/WG2/TG1 and the accepted values given in an ITT report. This report is the basis for the attestation of conformity by the Notified Body conducting the certification of the producer's factory production control (FPC). Further ITT reports may be used as documentation before the information they contain becomes available in an amendment or revision of this European Standard, EN 1912.

Table 1 — Assignment of grades of conifer and poplar species to strength classes

Strength Class	Grading rule publishing country	Grade (see Note 2)	Species commercial name	Source	Botanical identification (see Table 3)	Comments
C35	Germany & Austria	S13, S13K	Douglas Fir	Germany & Austria	54	
C30	France	ST-I	Spruce & Fir	France	1, 22	
	Germany, Austria & Czech Republic	S13, S13K S13, S13K S13, S13K S13, S13K	Spruce Pine Fir Larch	CNE Europe CNE Europe CNE Europe CNE Europe	22 47 1 15	
	Italy	S1	Douglas fir	Italy	54	Maximum width and thickness 100 mm
	Nordic countries	T3 T3 T3 T3	Pine (Redwood) Spruce (Whitewood) Fir Larch	NNE Europe NNE Europe NNE Europe NNE Europe	47 22 1 15	
	Slovak Republic	S0	Spruce	Slovak Republic	22	
	Spain	ME1	Laricio pine	Spain	39	
	The Netherlands	T3 T3 T3 T3	Pine (Redwood) Spruce (Whitewood) Fir Larch	NNE Europe NNE Europe NNE Europe NNE Europe	47 22 1 15	
C27	France	ST-I	Larch	France	15	
	Germany	LS13	Poplar	Germany	51	
	Spain	ME1	Scots pine	Spain	47	
C24	France	ST-II ST-II ST-II ST-II ST-II	Spruce & Fir Douglas Fir Pines Poplar (see note 1) Larch	France France France France France	1, 22 54 39, 44, 47 50 15	
	Germany & Austria	S10, S10K	Douglas Fir	Germany & Austria	54	
	Germany, Austria & Czech Republic	S10, S10K S10, S10K S10, S10K S10, S10K	Spruce Pine Fir Larch	CNE Europe CNE Europe CNE Europe CNE Europe	22 47 1 15	
	Italy	**S2 & better** **S2 & better**	Corsican pine Spruce & fir	Italy Italy	39 1, 22	
	Nordic countries	T2 T2 T2 T2 T2 & better	Pine (Redwood) Spruce (Whitewood) Fir Larch Sitka spruce	NNE Europe NNE Europe NNE Europe NNE Europe Denmark and Norway	47 22 1 15 28	
	Slovak Republic	SI	Spruce	Slovak Republic	22	

Strength Class	Grading rule publishing country	Grade (see Note 2)	Species commercial name	Source	Botanical identification (see Table 3)	Comments
	Slovenia	S10	Spruce & fir	Slovenia	1, 22	
	Spain	ME1 ME1	Radiata pine Maritime pine	Spain Spain	49 44	
	Canada	J&P Sel J&P Sel J&P Sel	Douglas fir-Larch Hem-fir S-P-F	USA & Canada USA & Canada USA & Canada	18, 54 2, 4, 5, 7, 8, 62 3, 6, 23, 25, 26, 27, 32, 34, 45	
	Canada	SLF Sel SLF Sel SLF Sel	Douglas fir-Larch Hem-fir S-P-F	USA & Canada USA & Canada USA & Canada	18, 54 2, 4, 5, 7, 8, 62 3, 6, 23, 25, 26, 27, 32, 34, 45	
	UK	SS SS SS SS SS SS SS SS SS	Paraná pine Redwood Whitewood Douglas fir-Larch Hem-fir S-P-F Southern pine Caribbean pitch pine Larch	Brazil CNE Europe CNE Europe USA & Canada USA & Canada USA & Canada USA Caribbean UK	12 47 1, 22 18, 54 2, 4, 5, 7, 8, 62 3, 6, 23, 25, 26, 27, 32, 34, 45 35, 36, 43, 48 33, 42 15, 16, 17	
	The Netherlands	T2 T2 T2 T2	Pine (Redwood) Spruce (Whitewood) Fir Larch	NNE Europe NNE Europe NNE Europe NNE Europe	47 22 1 15	
C22	Germany	LS10 & better	Poplar	Germany	51	
	Italy	S2 & better	Larch Douglas fir	Italy Italy	15 54	
	Spain	MEG MEG	Scots pine Laricio pine	Spain Spain	47 39	Minimum thickness & width is 70mm
	UK	SS	British pine	UK	39, 47	
C20	Canada	No.1 & better No.1 & better No.1 & better	S-P-F Douglas Fir – Larch Hem-fir	Canada Canada Canada	3, 6, 23, 25, 26, 27, 32, 34, 45 18,54 2, 4, 5, 7, 8, 62	
C18	Canada	J&P Sel J&P Sel SLF Sel SLF Sel	Sitka spruce Western red cedar Sitka spruce Western red cedar	Canada Canada Canada Canada	28 58 28 58	
	France	ST-III ST-III ST-III	Spruce & fir Douglas fir Pines	France France France	1, 22 54 39, 44, 47	