



SLOVENSKI STANDARD
SIST EN 1912:2004+A4:2010
01-september-2010

Konstruktivni 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

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Ta slovenski standard je istoveten z: **EN 1912:2004+A4:2010**

ICS:

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

SIST EN 1912:2004+A4:2010

en,fr,de

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EUROPEAN STANDARD

EN 1912:2004+A4

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2010

ICS 79.040

Supersedes EN 1912:2004+A3:2009

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 3 September 2004 and includes Amendment 1 approved by CEN on 28 December 2006, Amendment 2 approved by CEN on 2 February 2008, Amendment 3 approved by CEN on 21 April 2009 and Amendment 4 approved by CEN on 11 February 2010.

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. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN Management Centre or to any CEN member.

This European Standard exists 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, 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.

<https://standards.iteh.ai/catalog/standards/sist/eec31055-6ac2-4bce-8384-c97a4f227620/sist-en-1912-2004a4-2010>



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

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Foreword

This document (EN 1912:2004+A4:2010) has been prepared by Technical Committee CEN/TC 124 "Timber structures", the secretariat of which is held by SFS.

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 September 2010 and conflicting national standards shall be withdrawn at the latest by September 2010.

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 includes Amendment 1 approved on 2006-12-28, Amendment 2, approved by CEN on 2008-02-02, Amendment 3, approved by CEN on 2009-04-21 and Amendment 4, approved by CEN on 2010-02-11.

This document supersedes A4 EN 1912:2004+A3:2009. A4

The start and finish of text introduced or altered by amendment is indicated in the text by tags A1, A2, A3 and A4.

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 and United Kingdom.

EN 1912:2004+A4:2010 (E)**1 Scope**

This document lists visual strength grades, species and sources of timber, and specifies the strength classes from EN 338, to which they are assigned.

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

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

EN 14081 (all parts), *Timber structures — Strength graded structural timber with rectangular cross section*

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

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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 meeting the requirements of EN 14081 A_2 .

5.2 Timber of a grade, species and source may be assigned to a strength class and listed in this document provided there is long experience 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

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 A_2 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 A_2 , 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.

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

Strength Class	Grading rule publishing country (see Note 1 at end of Table)	Grade (see Note 4)	Species commercial name	Source (see Note 2)	Botanical identification (see Table 3)	Comments
C35	Germany	S13	Douglas Fir	Germany	54	
C30	France	ST-I	Spruce & Fir	France	1, 22	
	Germany, Austria & Czech Republic	S13	Spruce	CNE Europe	22	
		S13	Pine	CNE Europe	47	
		S13	Fir	CNE Europe	1	
		S13	Larch	CNE Europe	15	
	Nordic countries	T3	Pine (Redwood)	NNE Europe	47	
		T3	Spruce (Whitewood)	NNE Europe	22	
		T3	Fir	NNE Europe	1	
		T3	Larch	NNE Europe	15	
	USA	J&P Sel	Southern pine	USA	35, 36, 43, 48	
SLF Sel		Southern pine	USA	35, 36, 43, 48		
Spain	ME1	Laricio pine	Spain	39		
Slovak Republic	S0	Spruce	Slovak Republic	22		
C 27	France	ST-I	Larch	France	15	
	Germany	LS13	Poplar	Germany	51	
	Spain	ME1	Scots pine	Spain	47	
C24	France	ST-II	Spruce & Fir	France	1, 22	
		ST-II	Douglas Fir	France	54	
		ST-II	Pines	France	39, 44, 47	
		ST-II	Poplar (see note 3)	France	50	
		ST-II	Larch	France	15	
	Germany	S10	Douglas Fir	Germany	54	
	Germany, Austria & Czech Republic	S10	Spruce	CNE Europe	22	
		S10	Pine	CNE Europe	47	
		S10	Fir	CNE Europe	1	
		S10	Larch	CNE Europe	15	
	Nordic countries	T2	Pine (Redwood)	NNE Europe	47	
		T2	Spruce (Whitewood)	NNE Europe	22	
		T2	Fir	NNE Europe	1	
		T2	Larch	NNE Europe	15	
T2 & better		Sitka spruce	Denmark and Norway	28		
Spain	ME1	Radiata pine	Spain	49		
	ME1	Maritime pine	Spain	44		
USA & Canada	J&P Sel	Douglas fir-Larch	USA & Canada	18, 54		
	J&P Sel	Hem-fir	USA & Canada	2, 4, 5, 7, 8, 62		
	J&P Sel	S-P-F	USA & Canada	3, 6, 23, 25, 26, 27, 32, 34, 45		

C24	USA & 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	Paraná pine	Brazil	12	
		SS	Redwood	CNE Europe	47	
		SS	Whitewood	CNE Europe	1, 22	
		SS	Douglas fir-Larch	USA & Canada	18, 54	
		SS	Hem-fir	USA & Canada	2, 4, 5, 7, 8, 62	
		SS	S-P-F	USA & Canada	3, 6, 23, 25, 26, 27, 32, 34, 45	
	Slovak Republic	SS	Southern pine	USA	35, 36, 43, 48	
		SS	Caribbean pitch pine	Caribbean	33, 42	
		SS	Larch	UK	15, 16, 17	
	SI	Spruce	Slovak Republic	22		
C22	Germany	LS10 & better	Poplar	Germany	51	Minimum thickness & width is 70mm
	Spain	MEG	Scots pine	Spain	47	
		MEG	Laricio pine	Spain	39	
	UK	SS	British pine	UK	39, 47	
	USA	J&P No.1	Southern pine	USA	35, 36, 43, 48	
J&P No.2		Southern pine	USA	35, 36, 43, 48		
C20	Canada	No.1 & better	S-P-F	Canada	3, 6, 23, 25, 26, 27, 32, 34, 45	
		No.1 & better	Douglas Fir - Larch	Canada	18,54	
	Canada	No.1 & better	Hem-fir	Canada	2, 4, 5, 7, 8, 62	
		No.1 & better				
C18	Canada	J&P Sel	Sitka spruce	Canada	28	
		J&P Sel	Western red cedar	Canada	58	
		SLF Sel	Sitka spruce	Canada	28	
		SLF Sel	Western red cedar	Canada	58	
	France	ST-III	Spruce & fir	France	1, 22	
		ST-III	Douglas fir	France	54	
		ST-III	Pines	France	39, 44, 47	
		ST-III	Poplar (see note 3)	France	50	
		ST-III	Larch	France	15	
	Germany & Austria	S7	Norway spruce	CNE Europe	22	
		S7	Scots pine	CNE Europe	47	
	Ireland	SS	Norway spruce	Ireland	22	
		SS	Sitka spruce	Ireland	28	
	Nordic countries	T1	Pine (Redwood)	NNE Europe	47	
		T1	Spruce (Whitewood)	NNE Europe	22	
		T1	Fir	NNE Europe	1	
T1		Larch	NNE Europe	15		
T1		Sitka spruce	Denmark & Norway	28		