

SLOVENSKI STANDARD SIST EN 1912:2004+A2:2008

01-september-2008

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

Bauholz für tragende Zwecke Festigkeitsklassen Zuordnung von visuellen Sortierklassen und Holzarten (standards.iteh.ai)

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

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Ta slovenski standard je istoveten z: EN 1912:2004+A2:2008

ICS:

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

timber

SIST EN 1912:2004+A2:2008 en,fr,de

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EN 1912:2004+A2

NORME EUROPÉENNE EUROPÄISCHE NORM

April 2008

ICS 79.040

Supersedes EN 1912:2004+A1:2007

English Version

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

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

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

This European Standard was approved by CEN on 10 September 2004 and includes Amendment 1 approved by CEN on 28 December 2006 and Amendment 2 approved by CEN on 2 February 2008.

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.

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

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Foreword

This document (EN 1912:2004+A2:2008) 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 October 2008 and conflicting national standards shall be withdrawn at the latest by October 2008.

This document includes Amendment 1 approved on 2006-12-28 and Amendment 2, approved by CEN on 2008-02-02.

This document supersedes (A) EN 1912:2004+A1:2007 (A).

The start and finish of text introduced or altered by amendment is indicated in the text by tags $\boxed{\mathbb{A}}$ and $\boxed{\mathbb{A}}$ $\boxed{\mathbb{A}}$.

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, 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.

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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 (\(\frac{1}{2} \)

3 Terms and definition Teh STANDARD PREVIEW

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

3.1

timber source

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geographical area of growth of the trees from which his inertial standards sitch al catalog/standards/sist/2bbf54fc-5dfe-4de5-9fe2-geographical area of growth of the trees from which his inertial standards sitch al catalog/standards/sist/2bbf54fc-5dfe-4de5-9fe2-geographical area of growth of the trees from which his inertial standards sitch al catalog/standards/sist/2bbf54fc-5dfe-4de5-9fe2-geographical area of growth of the trees from which his inertial standards sitch al catalog/standards/sist/2bbf54fc-5dfe-4de5-9fe2-geographical area of growth of the trees from which his inertial standards in the standards sitch al catalog/standards/sist/2bbf54fc-5dfe-4de5-9fe2-geographical area of growth of the trees from which his inertial standards sitch al catalog standards sit

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 $\boxed{\mathbb{A}}$ EN 14081 $\boxed{\mathbb{A}}$.
- **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 [A] EN 14081 [A] may be graded directly to the strength classes and marked accordingly, and is therefore not referenced in this document. 110 [A]

NOTE 2 For combinations of species and visual grades, which meet the requirements of Po EN 14081 (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 ten av catalog standards/sist/2bbis4tc-5die-4de5-9fe2-

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

A₂⟩ 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	
000	Tanco		- Opi 400 4 1 11	1141100	.,	
	Germany &	S13	Spruce	CNE Europe	22	
	Austria	S13	Pine	CNE Europe	47	
		S13	Fir	CNE Europe	1	
		S13	Larch	CNE Europe	15	
	Nordic	T3	Pine (Redwood)	NNE Europe	47	
	countries	T3	Spruce (Whitewood)	NNE Europe	22	
		T3	Fir	NNE Europe	1	
		T3	Larch	NNE Europe	15	
					05 00 40 10	
	USA	J&P Sel	Southern pine	USA	35, 36, 43, 48	1
		SLF Sel	Southern pine	USA	35, 36, 43, 48	
	Spain	ME1	Laricio pine	Spain	39	
	Slovak	S0 17	Spruce	Slovak Republic	22 IEW	
C 27	Republic	CT I	Larch -		V RES V V	
C 27	France	ST-I		r us. iteh.ai)15	
	Spain	ME1	Scots pine	Spain	47	
C24	France	ST-II	Spruce & FiSTEN 19	1 2rance +A2:2008	1, 22	
		ST-II https://	s Douglas i Eir. ai/catalog/s	la Fdance sist/2bbf54fc	-5 54 e-4de5-9fe2-	
		ST-II	Pinese38c1759ad62/sis	t- Eran@ė 2-2004a2-20	3 9, 44, 47	
		ST-II	Poplar (see note 3)	France	50	
		ST-II	Larch	France	15	
	Germany	S10	Douglas Fir	Germany	54	
	Germany &	S10	Spruce	CNE Europe	22	
	Austria	S10	Pine	CNE Europe	47	
		S10	Fir	CNE Europe	1	
		S10	Larch	CNE Europe	15	
				·		
	Nordic	T2	Pine (Redwood)	NNE Europe	47	
	countries	T2	Spruce (Whitewood)	NNE Europe	22	
		T2	Fir	NNE Europe	1	
		T2	Larch	NNE Europe	15	
		T2 &	Sitka spruce	Denmark and	28	1
		better		Norway		
	Spain	ME4	Dadiata nina	Spain	40	
	Spain	ME1 ME1	Radiata pine	Spain	49 44	
		IVIE I	Maritime pine	Spain		
C24	1164 0	19 D Cal	Douglas fir Largh	LICA & Consider	10 54	
C24	USA &	J&P Sel	Douglas fir-Larch	USA & Canada	18, 54	
	Canada	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,	ļ

	T	<u> </u>			
					27, 32, 34, 45
		SLF Sel	Douglas fir-Larch	USA & Canada	18, 54
		SLF Sel	Hem-fir	USA & Canada	2, 4, 5, 7, 8, 62
		SLF Sel	S-P-F	USA & Canada	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 SS	Hem-fir S-P-F	USA & Canada USA & Canada	2, 4, 5, 7, 8, 62 3, 6, 23, 25, 26,
		55	0-1 -1	JOA & Callaua	27, 32, 34, 45
		SS	Southern pine	USA	35, 36, 43, 48
		SS	Caribbean pitch pine	Caribbean	33, 42
		SS	Larch	UK	15, 16, 17
	Slovak Republic	SI	Spruce	Slovak Republic	22
C22	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
		SLF No.1	Southern pine	USA FY/TE	35, 36, 43, 48
C20	Canada	SLF No.2 No.1 &	Southern pineA S-P-F	USAKK V K Canada	35 , 36, 43, 48 3, 6, 23, 25, 26,
020	Janaua	better	(standards.i	ten.ai)	27, 32, 34, 45
		No.1 &	Douglas Fir – Larch	Canada	18,54
		better	SIST EN 1912:2004	<u>+A2:2008</u>	
	h	tps://standards better	Hem fir the standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/standards/stan	isCanada isC200154fc-5dfe-4de	<u>5²94.9</u> 5, 7, 8, 62
C18	Canada	J&P Sel	Sitka spruce	Canada	28
		J&P Sel	Western red cedar	Canada	58
		SLF Sel SLF Sel	Sitka spruce Western red cedar	Canada Canada	28 58
		SLF SEI	vvesterii reu ceuar	Callaua	
	France	ST-III	Spruce & fir	France	1, 22
		ST-III	Douglas fir	France	54
		ST-III ST-III	Pines Poplar (see note 3)	France	39, 44, 47 50
		ST-III ST-III	Larch	France France	15
					-
	Ireland	SS	Norway spruce	Ireland	22
		SS	Sitka spruce	Ireland	28
	Nordic	T1	Pine (Redwood)	NNE Europe	47
	countries	T1	Spruce (Whitewood)	NNE Europe	22
		T1	Fir	NNE Europe	1
		T1 T1	Larch Sitka spruce	NNE Europe Denmark &	15 28
		' '	οπικά οριάσε	Norway	
C18	Portugal	E	Maritime pine	Portugal	44
		_	manus pino	· · · · · · · · · · · · · · · · · · ·	
	Spain	ME2	Radiata pine	Spain	49
	J Spani	ME2	Maritime pine	Spain	44
		IVIL	Laricio pine	Opani	