



**SLOVENSKI STANDARD**  
**SIST EN 13990:2004**

**01-september-2004**

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**Lesene talne obloge - Razvrstitev iglavcev za talne plošče**

Wood flooring - Solid softwood floor boards

Holzfußböden - Massive Nadelholz-Fußbodendielen

Planchers en bois - Lames massives pour planchers résineux

**Ta slovenski standard je istoveten z: EN 13990:2004**

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**ICS:**

79.080	Polizdelki iz lesa	Semi-manufactures of timber
97.150	Netekstilne talne obloge	Non-textile floor coverings

**SIST EN 13990:2004**

**en**

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EUROPEAN STANDARD

EN 13990

NORME EUROPÉENNE

EUROPÄISCHE NORM

February 2004

ICS 79.080

English version

## Wood flooring - Solid softwood floor boards

Planchers en bois - Lames massives pour planchers  
résineux

Holzfußböden - Massive Nadelholz-Fußbodendielen

This European Standard was approved by CEN on 10 December 2003.

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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 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

Management Centre: rue de Stassart, 36 B-1050 Brussels

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## Foreword

This document (EN 13990:2004) has been prepared by Technical Committee CEN/TC 175 "Round and sawn timber", 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of an identical text or by endorsement, at the latest by August 2004, and conflicting national standards shall be withdrawn at the latest by August 2004.

No existing European Standard is superseded.

Annex A is informative.

This document includes a Bibliography.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

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## Introduction

This standard specifies the characteristics of solid softwood floor boards. It is based upon current dimensional standards within the industry and other characteristics together with functions which have been verified by test.

A large amount of knowledge exists about solid softwood floor boards and values for product characteristics are attested by long use and experience. It is therefore not necessary to have test results. For new products technical data should be verified by testing.

Some information about technical properties is given in annex A.

This standard is one of a series of standards concerning wood and parquet flooring and wood panelling and cladding.

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## 1 Scope

This European Standard defines the characteristics of solid softwood floor boards with tongue and groove for internal use as flooring.

This standard contains specifications about dimensions, grading and delivery of floor boards.

Grading specifications are given for the following wood species: Norway spruce (*Picea abies*), Silver fir (*Abies alba*), Sitka spruce (*Picea sitchensis*), Scots pine (*Pinus sylvestris*), European larch (*Larix decidua*), Douglas fir (*Pseudotsuga menziesii*). For species not mentioned the limits of features as listed in Table 3 should be stated.

Products specified in this standard are manufactured from a natural untreated softwood or prefinished with a coating. This standard gives no information about the coating itself.

## 2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text, and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 844-9:1997, *Round and sawn timber – Terminology – Part 9: Terms relating to features of sawn timber.*

EN 844-12:2000, *Round and sawn timber – Terminology – Part 12: Additional terms and general index.*

EN 1310:1997, *Round and sawn timber – Method of measurement of features.*

EN 13556:2003, *Round and sawn timber – Nomenclature of timbers used in Europe.*

EN 13647, *Wood and parquet flooring and wood panelling and cladding – Determination of geometrical characteristics.*

EN 13756:2002, *Wood flooring – Terminology.*

## 3 Terms and definitions

For the purposes of this European Standard, the terms and definitions given in EN 13756:2002, EN 844-9:1997, EN 844-12:2000 and EN 13556:2003 and the following apply.

### floor board

tongued and grooved board of solid wood which have been planed on four sides at full length and have been at least hit and missed at the back. The ends of the board can be plain cut or endmatched with tongue and groove. The board can be finger-jointed

## 4 Symbols and abbreviations

For the purposes of this European Standard, the following symbols and abbreviations apply.

$b_f$  Width of the face

$b_p$  Width of the profile

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$f_b$	Width of the tongue
$f_d$	Thickness of the tongue
$n_d$	Thickness of the groove
$n_t$	Depth of the groove
$t$	Thickness of the element
$u$	Size of undercut
$w$	Thickness of upper lip

**5 Specific product requirements****5.1 Wood species**

The wood species shall be selected with regard to the use requirements of the building and the appearance expected.

NOTE The wood species listed in clause 1 meet the technical values given in annex A.

**5.2 Dimensions, geometrical characteristics****5.2.1 General**

The dimensions are given at reference moisture contents of 9 % and 17 %. In case of dispute regarding dimensions, assume a reference moisture content nearest to the specified moisture content.

The dimensions and geometrical characteristics shall be determined according to EN 13647.

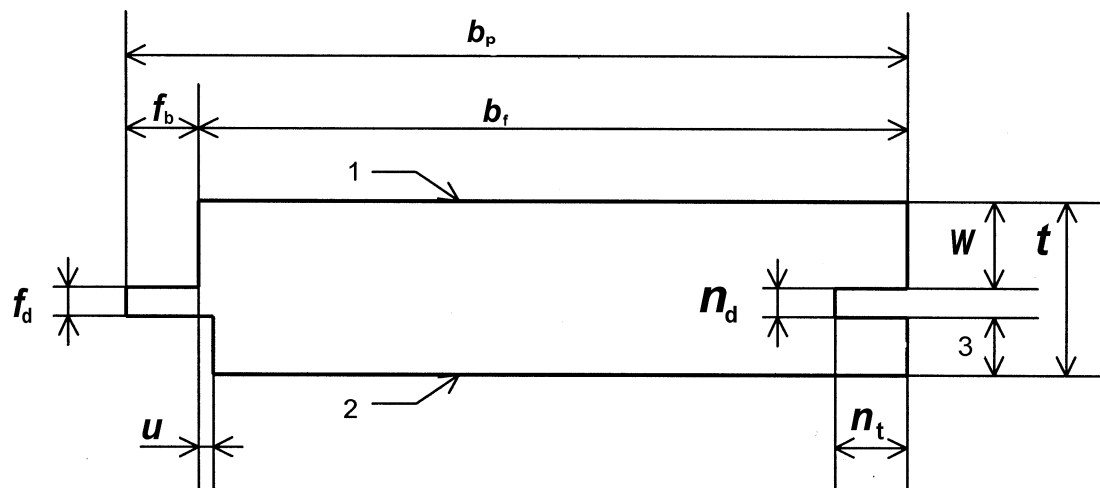
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### 5.2.2 Profile

Profile is shown on Figure 1.



#### Key

- 1 Face of the floor board
- 2 Back of the floor board
- 3 Thickness of the lower lip
- $b_f$  Width of the face
- $b_p$  Width of the profile
- $f_d$  Thickness of the tongue
- $f_b$  Width of the tongue
- $u$  Undercut (permitted on groove side alternatively)
- $n_t$  Depth of the groove
- $n_d$  Thickness of the groove
- $w$  Thickness of the upper lip
- $t$  Thickness of the floor board

Figure 1 - Profile of a solid softwood floor board

### 5.2.3 Thicknesses

Thicknesses are given in Table 1.

Floor boards of thickness less than those in Table 1 are permitted, provided that the dimensions of tongue, groove and thickness of upper lip are not less than minimum permitted in Table 1.

Floor boards of thickness greater than the maximum thickness of Table 1 are permitted provided that the dimensions of the tongue, groove and thickness of upper lip are adjusted proportionately.