



SLOVENSKI STANDARD

SIST EN 12246:2003

01-oktober-2003

Razvrščanje lesa za palete in embalažo po kakovosti

Quality classification of timber used in pallets and packaging

Qualitäts-Sortierung von Holz zur Verwendung in Paletten und Packmitteln

Classes de qualité du bois utilisé dans les palettes et les emballages

Ta slovenski standard je istoveten z: **EN 12246:1999**

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ICS:

55.040	Materiali in pripomočki za pakiranje	Packaging materials and accessories
55.180.20	Večnamenske palete	General purpose pallets
79.040	Les, hlodovina in žagan les	Wood, sawlogs and sawn timber

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en

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 12246

June 1999

ICS 55.040; 55.180.20; 79.040

English version

Quality classification of timber used in pallets and packaging

Classes de qualité du bois utilisé dans les palettes et les emballages

Qualitäts-Sortierung von Holz zur Verwendung in Paletten und Packmitteln

This European Standard was approved by CEN on 2 May 1999.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

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

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Foreword

This European Standard 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 december 1999, and conflicting national standards shall be withdrawn at the latest by december 1999.

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

Introduction

Pallets and packaging, of whatever material, fulfil some functional requirements. These requirements can be verified either through tests or through appropriate means.

For pallets and packaging, the characteristics linked with the use of the timber are checked either through functional verifications or through more traditional systems such as strength grading of structural timber or appearance grading of sawn timber. The classes in this standard are based on the latter system. It will be possible to improve the grading of timber through new systems.

This standard should be used as a reference document in product standards or contracts to specify the class of timber used in the product.

All the criteria are the results of long experience in pallets and packaging.

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1 Scope

This standard defines quality classes of timber used in industrial packaging and reusable pallets.

Two classes P1 and P2 are defined with minimum requirements based on visual classification.

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.

EN 844-1		Round and sawn timber - Terminology - Part 1 : General terms common to round timber and sawn timber
EN 844-3		Round and sawn timber - Terminology - Part 3 : General terms relating to sawn timber
EN 844-4		Round and sawn timber - Terminology - Part 4 : Terms relating to moisture content
EN 844-6		Round and sawn timber - Terminology - Part 6 : Terms relating to dimensions of sawn timber
EN 844-7		Round and sawn timber - Terminology - Part 7 : Terms relating to anatomical structure of timber
EN 844-9		Round and sawn timber - Terminology - Part 9 : Terms relating to features of sawn timber
EN 844-10		Round and sawn timber - Terminology - Part 10 : Terms relating to stain and fungal attack
EN 844-11		Round and sawn timber - Terminology - Part 11: Terms relating to degrade by insects
EN 1309-1		Round and sawn timber - Method of measurement of dimensions - Part 1 : Sawn timber
EN 1310	1997	Round and sawn timber - Method of measurement of features
EN 1311		Round and sawn timber - Method of measurement of biological degrade

3 Definitions

For the purposes of this European Standard, the definitions of EN 844-1, EN 844-3, EN 844-4, EN 844-6, EN 844-7, EN 844-9, EN 844-10 and EN 844-11 apply.

4 Timber classes

Two classes P1 and P2 (visual classification) are considered to be sufficient for general use in industrial packaging and reusable pallets. The minimum requirements of these classes are shown in table 1.

Dimensions, features and biological attacks are measured according to EN 1309-1, EN 1310 and EN 1311.

The choice between P1 and P2 depends on the requirements in existing product standards or contracts.

NOTE 1 : Timber as raw material for pallets and packaging can be chosen in the general classification of grading of sawn timber described in the following standards :

EN 975-1

prEN 1611-1

or can be directly produced in conformity with the P1 or P2 classes of this standard.

In both cases, the criteria of acceptance are determined on the basis of prEN 12169.

When the timber is in the pallets or packaging and is classified as described in this standard (P1, P2), the criteria of acceptance are based on criteria of product standards or as defined in contracts.

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Table 1: Minimum requirements

Criteria	Class P 1	Class P 2
Knots	On both faces, knots shall be measured according to 4.1.2. of EN 1310:1997. They shall be disregarded on the edges. Knots less than 10 mm shall be disregarded. Knot clusters shall be considered as individual knots.	
intergrown, partially intergrown or dead knot	≤ 33 % of the width of the piece	≤ 60 % of the width of the piece
loose knot	≤ 20 mm	≤ 30 mm
unsound knot	≤ 20 mm	≤ 30 mm
branched knot	Permitted	Permitted
Exposed pith	Permitted on one face	Permitted on one face
Boxed heart	Permitted	Permitted
Shakes	Shakes are taken into account on the ends, on the faces and on the edges. It shall be measured according to EN 1310.	
face shake	Permitted ¹⁾	Permitted ¹⁾
split (in boards)	1 split in the board ≤ 1 width of the board	1 split in the board ≤ 2 widths of the board
split (in bearers and blocks)	Not permitted	Not permitted
Resin pocket	Permitted on one face only	Permitted on one face only
Bark pocket	Not permitted	Not permitted
Blue stain	Refer to 2)	Refer to 2).
Biodeterioration except blue stain	Not permitted	Not permitted
Active timber infestation	Not permitted	Not permitted
Black hole	Up to 5 holes of diameter ≤ 3 mm permitted	Up to 5 holes of diameter ≤ 3 mm permitted
Wane (without bark)³⁾	Wane shall be measured according to 4.8 of EN 1310:1997.	
	Permitted up to 25 % of the piece length, up to 33 % of the thickness and allowed on both sides of one face if ≤ 10 mm from each side.	Permitted up to 30 % of the piece length, up to 50 % of the thickness and allowed on both sides of one face if ≤ 20 mm from each side.
1) Except at point of nailing (refer to the relevant product standards).		
2) Mechanical properties are not affected by blue stain. Stain can be avoided by kiln drying or other means.		
3) If wane is to be excluded, it may be specified in product standards or contracts.		

NOTE 2 :

The moisture content can be of importance in the use of pallets and packaging and requirements may be specified in product standards or contracts.

NOTE 3 :

Below a moisture content of 20 %, there is a very minimal risk that biodeterioration may occur.