



SLOVENSKI STANDARD

SIST EN 14951:2006

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Notranje in zunanje obloge iz masivnega lesa listavcev – Elementi s profilom

Solid hardwood panelling and cladding - Machined profiles elements

Innen- und Außenbekleidungen aus massivem Laubholz -Profilholzelemente

Lambris et bardages en bois massif feuillus – Lames profilées usinées

Ta slovenski standard je istoveten z: EN 14951:2006

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ICS:

79.060.99	Druge lesne pločle	Other wood-based panels
79.080	Polizdelki iz lesa	Semi-manufactures of timber

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 14951

March 2006

ICS 79.060.99

English Version

**Solid hardwood panelling and cladding - Machined profiles
elements**

Lambris et bardages en bois massif feuillus - Lames
profilées usinées

Innen- und Außenbekleidungen aus massivem Laubholz -
Profilholzelemente

This European Standard was approved by CEN on 23 January 2006.

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, 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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Foreword

This document (EN 14951:2006) 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of an identical text or by endorsement, at the latest by September 2006, and conflicting national standards shall be withdrawn at the latest by September 2006.

This standard is one of a series of standards concerning solid wood panelling and wood flooring (including parquet).

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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

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Introduction

This document specifies the characteristics of solid hardwood panelling and cladding elements. It is based upon current dimensional standards within the industry and other characteristics together with functions that have been verified by test.

A large amount of knowledge exists about solid hardwood panelling and cladding elements and values for product characteristics are attested by long use and experience. It is therefore not necessary to have test results for those products and species described.

The appearance of the hardwood panelling and cladding is mainly influenced by species, classification and the pattern (e.g. the profile and system of assembly).

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1 Scope

This document specifies the characteristics of solid hardwood panelling and cladding elements with or without grooves and/or tongues, for interior or exterior use.

It does not cover characteristics of the possible coating system.

NOTE 1 Products sold in The European Economic Area will have to comply with prEN 14915.

NOTE 2 For softwood see EN 14519.

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 351-1, *Durability of wood and wood-based products – Preservative-treated solid wood – Part 1: Classification of preservative penetration and retention*

EN 460, *Durability of wood and wood-based products - Natural durability of solid wood - Guide of the durability requirements for wood to be used in hazard classes*

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

EN 1309-1:1997, *Round and sawn timber – Method of measurement of dimensions – Part 1: Sawn timber*

EN 1310, *Round and sawn timber - Method of measurement of features*

EN 1311, *Round and sawn timber - Method of measurement of biological degrade*

EN 13183-1, *Moisture content of a piece of sawn timber - Part 1: Determination by oven dry method*

EN 13183-2, *Moisture content of a piece of sawn timber - Part 2: Estimation by electrical resistance method*

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

EN 13756:2002, *Wood flooring – Terminology*

prEN 14915, *Solid wood panelling and cladding - Characteristics, evaluation of conformity and marking*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 13756:2002, EN 844-9:1997 and EN 1309-1:1997 and the following apply.

3.1

panelling and cladding without tongue and groove

boards of solid wood without “tongue and groove” that have been machined on the face and two edges. The back is either machined or hit and/or missed, depending on the product. The arrises may be chamfered or rounded. For special purposes (for instance, acoustic) the edges may have fastening grooves. The ends of the boards may be end-matched.

EN 14951:2006 (E)**3.2****panelling and cladding with tongue and groove**

tongued and grooved boards of solid wood which have been machined on the face and two edges. The back is either machined or hit and/or missed, depending on the product. The ends of the boards may be end-matched with tongue and groove.

3.3**panelling**

rigid or semi-rigid elements of solid wood mainly for interior use

3.4**cladding**

rigid or semi-rigid elements of solid wood mainly for exterior use

3.5**hit or missed**

feature of the surface of a board where some areas of a face remain untouched during the planning process, leaving a sawn or partially sawn finish

4 Symbols and abbreviations

Symbols and abbreviations used in this document are given in Figures 1 and 2 and in Tables 10 and 11.

5 Requirements**5.1 General**

All requirements apply at the time of production, unless the manufacturer states otherwise. Finger jointing is acceptable and has to be specified by the manufacturer.

NOTE The bonding should be appropriate for the intended use (see prEN 13307-2).

5.2 Wood species

The most commonly used hardwood species for wood panelling and cladding elements are those mentioned in 5.3.2.1 to 5.3.2.4 (European species) and 5.3.2.5 (Tropical species and other species). Other species may be used if indicated in contracts.

5.3 Appearance**5.3.1 General uses**

The following tables identify the features, and their limits, that shall be considered with regard to the appearance, use and general characteristics of the species where assigned to each grade.

Tables 1 to 9 define the classification relating to appearance rules for the face and for the non-visible parts (back and edges) of an element of the most commonly used hardwood species for solid wood panelling and cladding as defined in this standard.

Features shall be measured according to EN 1310 (knots assessed according to the general method of EN 1310). Biological alteration is measured according to EN 1311.

A classification with two appearance classes is specified, designated A and B.

A classification named "Free class" is based on the principles laid out in Annex A.

The face shall include the entire visible surface of the element. It shall therefore extend to the chamfering¹⁾, if any.

The wood shall be free from shake and shall be sound.

Sapwood cannot always be distinguished and generally is not suitable for external use.

The boards may be finished with a surface coating. The grading is done before the coating is applied.

5.3.2 Rules for the most commonly used species

5.3.2.1 Quercus spp.(oak)

Rules for oak are given in Table 1

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1) The chamfering is visible when elements are assembled.

Table 1 — Classification for Quercus spp.(oak)

Face of the element		
Features ^{b) c) d)}	Class	
	A	B
Sound sapwood^{a)}	Not permitted for outdoor use, permitted for indoor use	Not permitted for outdoor use, permitted for indoor use
Knots^{e)} Sound and intergrown Unsound knots (if not in clusters)	Permitted if: ≤ 20% of the width of the element diameter ≤ 2 mm	Permitted if: ≤ 50 % of the width of the element diameter ≤ 10 mm
Checks	Total length ≤ one width of the element per m.	Total length ≤ 2 width of the element per m.
Split	Not permitted	Total length ≤ one width of the element per m.
End shakes (going through the element) for end- matched elements	Not permitted	Total length ≤ 1/2 width of the element
End shakes (going through the element) for non end- matched elements	Total length ≤ 1/2 width of the element	Total length ≤ one width of the element
Bark pockets	Not permitted	All features permitted without limit to size or quantity if these do not impair the use
Slope of grain	Permitted	
Colour variation	Slight variation permitted	
Medullary ray	Permitted	
Biological alteration (Fungal attack, insect damage)	Not permitted	Not permitted, except blue stain and black holes
Non-visible parts		
All features permitted without limit to size or quantity if these do not impair the use. In the case of class A sound sapwood is permitted from the back up to the upper part of the tongue (for elements with tongue) and up to 3mm for elements without tongue and groove. Information must be expressed in the marking to say what is outside use or indoor use		
a) See Clause 5.3.1. b) Not more than 5 % of the quantity of the consignment is allowed to be in the next lower grade. Pieces not achieving the requirements of the B grade must fulfil the principles of panelling and cladding end use. c) The classification for appearance does not take into account features which may impair the element when installed. d) The face compromises the whole visible surface of the strip when assembled. It therefore extends to the edges and in particular to the chamfers. e) Cat paws allowed		

5.3.2.2 Fraxinus excelsior (ash)

Rules for ash are given in Table 2.

Table 2 — Classification for Fraxinus excelsior (ash)

Face of the element		
Features ^{b) c) d)}	Class	
	A	B
Sound sapwood^a	Normally not distinguishable from heartwood	
Knots Sound and intergrown Unsound knots	Permitted if: ≤ 20% of the width of the element diameter ≤ 2 mm	Permitted if: ≤ 50% of the width of the element diameter ≤ 10 mm
Checks	Total length ≤ one width of the element per m.	Total length ≤ 2 width of the element per m.
Split	Not permitted	Total length ≤ one width of the element per m.
End shakes (going through the element) for end- matched elements	Not permitted	Total length ≤ 1/2 width of the element
End shakes (going through the element) for non end- matched elements	Total length ≤ 1/2 width of the element	Total length ≤ one width of the element
Bark pockets	Not permitted	All features permitted without limit to size or quantity if these do not impair the use
Slope of grain	Permitted	
Colour variation	Natural colour variation accepted..	
Stick marks	Not permitted	
Biological alteration (Fungal attack, insect damage)	Not permitted	Not permitted, except blue stain and black holes
Non-visible parts		
All features permitted without limit to size or quantity if these do not impair the use		
a) See Clause 5.3.1. b) Not more than 5 % of the quantity of the consignment is allowed to be in the next lower grade. Pieces not achieving the requirements of the B grade must fulfil the principles of panelling and cladding end use. c) The classification for appearance does not take into account features which may impair the element when installed. d) The face comprises the whole visible surface of the strip when assembled. It therefore extends to the edges and in particular to the chamfers.		