

Solid wood panels — Classification and terminology

The European Standard EN 12775:2001 has the status of a
British Standard

ICS 79.060.99

National foreword

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The UK participation in its preparation was entrusted to Technical Committee B/541, Wood-based panels, which has the responsibility to:

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- present to the responsible European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
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Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 7 and a back cover.

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English version

Solid wood panels - Classification and terminology

Bois panneautés - Classification et terminologie

Massivholzplatten - Klassifizierung und Terminologie

This European Standard was approved by CEN on 1 January 2001.

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Foreword

This European Standard has been prepared by Technical Committee CEN/TC 112 "Wood-based panels", the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by July 2001, and conflicting national standards shall be withdrawn at the latest by July 2001.

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.

No existing European Standard is superseded.

1 Scope

This European standard gives a classification for solid wood panels and defines terms used with solid wood panels.

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 844-3

Round and sawn timber – Terminology – Part 3: General terms relating to 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

3 Classification

3.1 According to the composition of the panel

- a) Single-layer panels
- b) Multi-layer panels

3.2 According to their principal characteristics

3.2.1 According to their conditions of use

- a) Panels for use in dry conditions
- b) Panels for use in humid conditions
- c) Panels for use in exterior conditions

3.2.2 According to their mechanical properties

- a) Panels for general purposes
- b) Panels for structural uses

3.2.3 According to their surface appearance

3.2.3.1 According to the group of wood species in the outer layer

- a) Softwood panels
- b) Hardwood panels

3.2.3.2 According to the length of pieces in the outer layer

- a) Panels with pieces cut to length ("SC" – showing cuts).
- b) Panels with pieces not cut to length ("NC – no cuts)

3.3 According to their surface condition

- a) Raw panels
- b) Sanded panels
- c) Panels with textured surfaces
- d) Finished panels (e.g. overlaid, coated, primed, varnished, oil treated)

3.4 According to the ultimate user requirements

4 Terms and definitions relating to solid wood panels

For the purpose of this standard, the terms and definitions given in EN 844-3, EN 844-7, EN 844-9, EN 844-10 and EN 844-11 and the following apply.

NOTE In the following definitions "pieces of timber" means timber in the form of boards, lamellas, blanks, strips or planks.

4.1 Solid wood panel

Panel that consists of pieces of timber glued edge-to-edge and, if multi-layer, face-to-face.

4.1.1 Single-layer solid wood panel

Solid wood panel, consisting of several pieces of timber which are glued together to form one layer.

4.1.1.1 Solid wood panel with pieces cut to length

Solid wood panel with pieces of timber which show cuts across their length and, as a rule, are glued together at their ends or finger-jointed (Type "SC").

4.1.1.2 Solid wood panel with pieces not cut to length

Solid wood panel consisting of pieces of timber which are undivided for the full length of the panel (Type "NC").

4.1.2 Multi-layer solid wood panel

Solid wood panel, consisting of two outer layers with their grain direction running parallel and at least one inner layer with its grain direction at 90° to the outer layers.

4.2 Large-size panel

Panel with dimensions equal to or greater than 3 m in length and equal to or greater than 1 m in width.

4.3 Medium-sized panel

Panel with dimensions less than 3 m in length or less than 1 m in width.

4.4 Panel cut to size

Panel which conforms to the size specified by the purchaser.

4.5 Length of panel

The panel dimension in the direction of the grain of the outer layers.

4.6 Width of panel

The panel dimension at right angles to the length

4.7 Layer

Flat composition of pieces of timber which can be glued edge-to-edge and eventually end-to-end.

4.7.1 Outer layer

Outside stratum of a multi-layer solid wood panel.

4.7.2 Inner layer

Any stratum of a multi-layer solid wood panel which is not an outer layer.

4.7.3 Middle layer

Central stratum of a multi-layer solid wood panel.

4.8 Face

The surfaces which fall in the better appearance class.

NOTE If both surfaces fall in the same class, the panel can be considered to having two faces and no back.

4.9 Back

The surface of the panel which falls in the lower appearance class (compared to the face).

4.10 Strip

Piece of sawn timber of longish form, less than 40 mm in thickness and less than 80 mm in width.

4.11 Board

Piece of sawn timber of longish form, less than 40 mm in thickness (but not less than 10 mm thick) and more than 80 mm in width.

4.12 Lamella

Piece of sawn timber of longish form between 3 mm and 10 mm in thickness and of 25 mm or more in width.

4.13 Blank

Piece of sawn timber of longish form which is more than 40 mm in thickness and not exceeding 80 mm in width.

4.14 Plank

Piece of sawn timber of longish form which is 40 mm or more in thickness and more than 80 mm in width.

4.15 Structure of wood

Anatomic composition of wood, determined by the size and type of cells, pores and the width and regularity of growth rings.

4.16 Narrow-ringed wood

Wood with close growth rings. With softwood species, the wood is narrow-ringed if it has an average of 6 or more growth rings per 1 cm over the whole cross section.

4.17 Wide-ringed wood

Wood with large growth rings. Wood is wide-ringed if the average width of the growth rings (measured radially at the cross section) exceeds 6 mm.

4.18 Straight-grain wood

Wood with a slope of grain of less than 2 cm/m.

4.19 Presence of knots

Term which describes the existence of knots in a piece of timber.

4.20 Black knot

Unsound knot or dead knot with black discolouration at the whole or in part (ring-shaped) of its cross-section.

4.21 Patch

Small flat piece of wood used for inserting into a piece of sawn timber, or a solid wood panel, to replace visible parts of features such as knots or defects.

4.22 Natural plug

Plug which has been produced from a natural branch and therefore shows the complete circular growth rings across its surface.

4.23 Serial-plugging

Insertion of plugs separated by a distance less than their individual width or even overlapping.

4.24 Chemical patching

Defect filled with a chemical compound.

4.25 Worm hole

Borehole in wood with a diameter of more than 2 mm.

4.26 Fungal attack

Discolouration and/or structural alteration of wood by the attack of wood-destroying or wood-discolouring fungi.

4.27 Fine-sawn timber

Timber which has been worked with a fine cut circular saw or fine-cut band saw in such a way that the roughness depth does not exceed 0,5 mm.

4.28 Sanded timber

Timber which has been finished by machine with sanding belts.

4.29 End joint

Connection of two pieces of timber end-to-end either by glueing (finger or butt-jointed) or by mechanical fasteners (e.g. corrugated fasteners).

4.30 Simple butt

Jointing of two pieces of timber without glued or mechanical connection.

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