



Timber Trade Federation
growing the use of wood

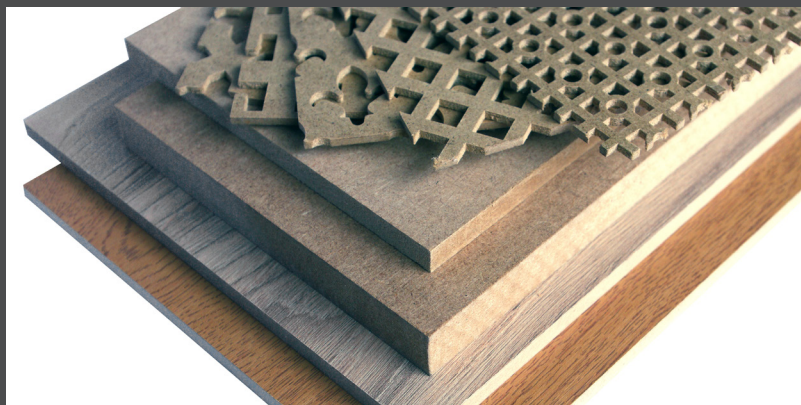
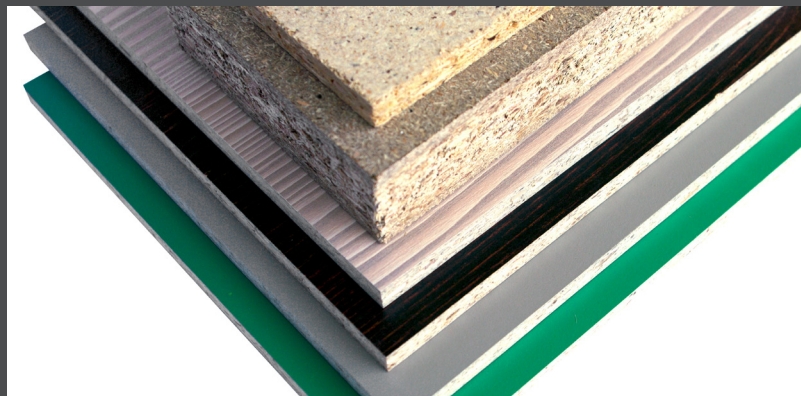


The leading authority on wood

WOOD
PANEL
INDUSTRIES
FEDERATION

Panel Guide

Version 4



Annex 1

Glossary of terms

Cement-bonded particleboard (CBPB)	Wood-based panel material (as defined in <i>BS EN 633 Cement-bonded particleboards. Definition and classification</i>) manufactured under pressure, based on wood or other vegetable particles bound with hydraulic cement and possibly containing additives.
Flaxboard	Wood-based panel (as defined in <i>BS EN 309 Particleboards. Definition and classification</i>) manufactured under pressure and heat from flax shives, with the addition of an adhesive. Flaxboard shall have at least 70% flax content and can contain other raw materials such as particles of wood (wood flakes, chips, shavings, saw dust and similar materials).
Oriented strand board (OSB)	Multi-layered panel (as defined in <i>BS EN 300 Oriented strand boards (OSB). Definitions, classification and specifications</i>) made from strands of wood with a binder. The strands in the external layers are aligned and parallel to the board length or width; the strands in the centre layer or layers can be randomly oriented, or aligned, generally at right angles to the strands of the external layers.
Particleboard	Wood-based panel (as defined in <i>BS EN 309 Particleboards. Definition and classification</i>) manufactured under pressure and heat from particles of wood (wood flakes, chips, shavings, saw-dust, wafers, strands and similar) and/or other lignocellulosic material in particle form (flax shives, hemp shives, bagasse fragments and similar) with the addition of an adhesive.
Plywood	Wood-based panel (as defined in <i>BS EN 313-2 Plywood. Classification and terminology. Terminology</i>) consisting of an assembly of layers bonded together with the direction of the grain in adjacent layers, usually at right angles.
Balanced plywood	Plywood in which the outer and inner layers are symmetrical about the centre layer with respect to thickness and species.
Veneer	Thin sheet of wood not more than 7mm in thickness.
Layer	Either one ply or two or more plies, glued together with their grain direction parallel, or another material.
Ply	Either one single veneer, or two or more veneers joined edge to edge or end to end.
Transverse layer (crossband)	Inner layer having grain direction at right angles to the outer layer.
Longitudinal layer (centre)	Inner layer having grain direction parallel to the outer layers.
Multi-ply	Plywood formed of more than three layers.

Core plywood	Plywood having a core.
Blockboard	Core plywood, the core of which is made of strips of solid wood more than 7mm wide but not wider than 30mm, which may or may not be glued together.
Laminboard	Core plywood, the core of which is made of strips of veneer not thicker than 7mm placed on edge, all or most of which are glued together.
Composite plywood	Plywood, the core (or certain layers) of which are made of materials other than solid wood or veneers. There are at least two crossbanded layers on each side of the core.
Moulded plywood	Plywood which is not flat, made by pressing in a mould.
Sanded plywood	
<ul style="list-style-type: none"> • Plywood sanded only on one side • Plywood sanded on both sides 	<p>Plywood the face or back of which has been smoothed by means of a mechanical sander.</p> <p>Plywood the face and back of which have been smoothed by means of a mechanical sander.</p>
Scraped plywood	Plywood the face and/or back of which have been smoothed by means of a mechanical scraper.
Pre-finished plywood	Plywood which has been subjected by the manufacturer to a special surface treatment other than sanding or scraping.
Overlaid plywood	<p>Plywood surfaced with one or several overlay sheets, or one or several films such as:</p> <ul style="list-style-type: none"> • impregnated paper • plastics • resin film • metal • decorative veneer.
<p>Wood fibreboard (subsequently referred to as 'fibreboard')</p>	<p>Wood-based panel (as defined in <i>BS EN 316 Wood fibre boards. Definition, classification and symbols</i>) with a nominal thickness of 1.5mm or greater, manufactured from lignocellulosic fibres with application of heat and/or pressure.</p> <p>Note: The bond is derived:</p> <ul style="list-style-type: none"> • either from the felting of the fibres and their inherent adhesive properties • or from a synthetic adhesive added to the fibres. <p>Other additives can be included.</p>

Wet process fibreboards

Wood fibreboards with a fibre moisture content of more than 20% at the stage of forming. Wet process boards are classified according to their density, as follows:

Hardboards

(HB, density $\geq 900 \text{ kg/m}^3$)

They can be given additional properties, for example fire retardancy, moisture resistance, resistance against biological attack, workability (eg mouldability), either by specific treatment (eg 'tempering', 'oil tempering') or by the addition of a synthetic adhesive or other additives.

Medium boards

(MB, density $\geq 400 \text{ kg/m}^3$ to $< 900 \text{ kg/m}^3$)

Medium boards are divided into two sub-categories according to their density, as follows:

- low density medium boards
(MBL, $\geq 400 \text{ kg/m}^3$ to $< 560 \text{ kg/m}^3$)
- high density medium boards
(MBH, $\geq 560 \text{ kg/m}^3$ to $< 900 \text{ kg/m}^3$)

They can be given additional properties, eg fire retardancy, moisture resistance.

Softboards

(SB, density $\geq 230 \text{ kg/m}^3$ to $< 400 \text{ kg/m}^3$)

These boards have basic properties of thermal and acoustic insulation. They can be given additional properties, eg fire retardancy. Improved moisture resistance as well as enhanced strength properties are usually achieved by the addition of a petrochemical substance (eg bitumen).

Dry process boards (MDF)

Wood fibreboards having a fibre moisture content of less than 20% at the forming stage. These boards are essentially produced under heat and pressure with the addition of a synthetic adhesive.

Dry process fibreboards can be given additional properties, such as fire retardancy, moisture resistance, resistance against biological attack, either by changing the composition of the synthetic adhesive or with the inclusion of other additives.

General terms

Coated panel

(See: Overlaid panel)

Dry conditions (Service Class 1)

Conditions corresponding to Service Class 1 of *EN 1995-1-1* (Eurocode 5) which is characterised by a moisture content in the material corresponding to a temperature of 20°C and a relative humidity of the surrounding air only exceeding 65% for a few weeks per year.

External conditions (Service Class 3)

Conditions corresponding with Service Class 3 of *EN 1995-1-1* (Eurocode 5) which is characterised by climatic conditions leading to higher moisture contents than in Service Class 2.

Humid conditions (Service Class 2)	Conditions corresponding with Service Class 2 of <i>EN 1995-1-1</i> (Eurocode 5) which is characterised by a moisture content in the material corresponding to a temperature of 20°C and a relative humidity of the surrounding air only exceeding 85% for a few weeks per year.
Overlaid panel (coated panel)	Panel surfaced with one or more overlay sheets or films, for example melamine impregnated paper, plastics, resin film, metal, decorative veneer.
Reaction to fire	The response of a material in contributing by its own decomposition to a fire to which it is exposed, under specified conditions.
Structural floor decking	A flooring assembly of wood-based panels supported on joists. When subjected to load, the decking is free to deflect between the joists.
Structural roof decking	A roofing assembly of wood-based panels supported on joists. When subjected to load, the decking is free to deflect between the joists.
Structural use	Use of a panel under load-bearing conditions as part of a building or other construction.
Structural wall sheathing	Wood-based panel capable of providing mechanical resistance to a wall structure.
Technical class	Class of product performance defined to make it easier to use a standard to relate product performance to its intended use.
Unfaced panel	Wood-based panel without overlaid surfaces.
Wood-based panel (panel)	Plywood, oriented strand board (OSB), resin-bonded particleboard, cement-bonded particleboard (CBPB), fibreboard, flaxboard, LVL, or solid wood panel.
Veneered panel	Wood-based panel overlaid with a veneer.

PanelGuide Version 4
ISBN 978-1-909594-21-0

Published in 2014 by the Wood Panel Industries Federation, TRADA Technology Ltd (a BM TRADA company), and the National Panel Products Division (a division of the Timber Trades Federation)

Previous editions are listed in Annex 4 of the PanelGuide

This is a technical book for professionals in the built environment sector. While every effort is made to ensure the accuracy of the advice given, the project partners cannot accept liability for loss or damage however caused arising from the use of the information supplied

All rights reserved. PanelGuide may be downloaded and printed for single use only. You must request the permission of the copyright owners if you wish to extract content from the PanelGuide or use it for any other purpose

© Wood Panel Industries Federation, TRADA Technology Ltd (a BM TRADA company), and the National Panel Products Division (a division of the Timber Trades Federation)

Unless otherwise stated in the caption, all photographs and illustrations included in the Panel Guide are © Wood Panel Industries Federation, TRADA Technology Ltd and the National Panel Products Division

Revisions to PanelGuide Version 4 contributed by Ian Rochester (WPIF), Vic Kearley (BM TRADA) and Nick Boulton (TTF)

Produced by the publishing team at BM TRADA, the official publisher for the Timber Research and Development Association

Contact details for the PanelGuide project partners are:



Wood Panel Industries Federation
Autumn Business Park
Dysart Road
Grantham
Lincs
NG31 7EU
Tel: 01476 512 381
Email: enquiries@wpif.org.uk
Website: www.wpif.org.uk

Timber Research and Development
Association
Chiltern House
Stocking Lane
Hughenden Valley
High Wycombe
Bucks
HP14 4ND
Tel: 01494 569 603
Email: information@trada.co.uk
Website: www.trada.co.uk

National Panel Products Division
Timber Trades Federation
The Building Centre
26 Store Street
London
WC1E 7BT
Tel: 020 3205 0067
Email: tff@tff.co.uk
Website: www.tff.co.uk



Produced by BM TRADA,
the official publisher for TRADA

Email: publications@bmtrada.com
Website: www.bmtradagroup.com