

# The Specifiers Guide

OSB Edition

# OSB

Oriented Strand Board



This guide details a full range of OSB products along with  
technical data for all specifications









OSB3 is a highly engineered, moisture resistant, load-bearing panel designed for use in humid conditions and is therefore ideal for many structural and non-structural applications.



Mechanical Properties	Test Method	Unit	Requirement		
Panel thickness	-	mm	6-10	11-17	18-25
Mean density tolerance	EN 323	%	+/- 15	+/- 15	+/- 15
Bending strength (MOR) - Major axis	EN 310	N/mm <sup>2</sup>	≥22	≥20	≥18
Bending strength (MOR) - Minor axis	EN 310	N/mm <sup>2</sup>	≥11	≥10	≥9
Modulus of elasticity (MOE) - Major axis	EN 310	N/mm <sup>2</sup>	≥3500	≥3500	≥3500
Modulus of elasticity (MOE) - Minor axis	EN 310	N/mm <sup>2</sup>	≥1400	≥1400	≥1400
Internal bond	EN 319	N/mm <sup>2</sup>	≥0.34	≥0.32	≥0.30
Internal bond after boil test Swelling in thickness 24h	EN 1087-1 EN 317	N/mm <sup>2</sup> %	≥0.15 ≤15	≥0.13 ≤15	≥0.12 ≤15
Formaldehyde release - Perforator value	EN 120	mg/100g	≤8.0(E1)	≤8.0(E1)	≤8.0(E1)
Moisture content - Ex works	EN 322	%	2-12	2-12	2-12

Applications

-  CONSTRUCTION/SITE HOARDING
-  FLOORING
-  PACKAGING
-  WALL SHEATHING
-  SIGNBOARDS
-  PORTABLE BUILDINGS

-  ROOFING
- Roof Decking
- Roof Sarking

Features

- ▶ Durable
- ▶ Versatile
- ▶ Sustainable
- ▶ FSC® certified
- ▶ Zero Added Formaldehyde
- ▶ Excellent load bearing
- ▶ CE certification

Siteprotect is a highly engineered and improved moisture resistant OSB/3 pre-primed panel specifically designed to save both time and money in the most demanding hoarding applications.



SITE HOARDING & PROTECTION

SITEPROTECT & General Softwood Plywood Comparison









SPECIFICATION CHARACTERISTICS:	SITEPROTECT	GENERAL SOFTWOOD PLYWOOD
Durable	Using an economic, yet fully certified board and adding a primer coat during the manufacturing process, allows the easy assembly of durable site hoarding requiring just a face and edge finishing coat on site	Perishable unprotected softwood is sometimes used
Pre-primed	Panels are supplied with a smooth pre-primed face and coated edges, which removes the need to prime	Will require priming and painting
Edge coated	Edge primed to protect from moisture	Edges will require sealing to protect from moisture
Smooth finish	Coated with a smooth, heavy duty, cross-linked polymer primer treatment. Just requires top seal	Boards can be bowed/twisted with knot holes and core gaps/voids
Cost effective	Siteprotect is a pre-primed site hoarding panel, designed to save you time and money	Needs to be primed, painted and edged sealed, more labour means more money

Boards are treated with a Zeroignition® solution, which is a water-based and eco-friendly fire retardant.



FR OSB3 Euroclass Dimensions & Thickness (mm)				
Thickness (mm)	Length	Edge Detail	Performance Rating	
11mm	2397 x 1197	Square edge	Euroclass B Wall, Ceiling, Roofing	Euroclass B Flooring
15mm	2397 x 1197	Square Edge	B-s2	B-s2 & B <sub>f1</sub> - s1
18mm	2397 x 1197	Square Edge	B-s2	B-s2 & B <sub>f1</sub> - s1
18mm	2397 x 1200	Tongue & Groove 2 long edges	B-s2	B-s2 & B <sub>f1</sub> - s1

### Applications

-  FLOORING
-  ROOFING
-  EXHIBITION/DISPLAYS
-  SITE HOARDING
-  SHOP FITTING
-  FURNITURE
-  WALL SHEATHING
-  GENERAL JOINERY

### Features

- ▶ CE marked
- ▶ FSC® certified
- ▶ Flame retardancy built-in
- ▶ Easy to cut and install
- ▶ High racking strength
- ▶ Zero added Formaldehyde
- ▶ 100% wood based
- ▶ Sustainable



**Strongdeck is a strong durable 30mm OSB/4 panel developed for heavy duty loadbearing applications in humid conditions.**

### Applications



FLOORING  
Mezzanine  
Industrial  
Commercial



INDUSTRIAL SHELVING



STORAGE PLATFORMS

### Features

- ▶ Durable mezzanine flooring
- ▶ Heavy duty racking
- ▶ Moisture resistant
- ▶ Stronger than P5 alternatives
- ▶ Quick to install
- ▶ Zero added formaldehyde
- ▶ Reduced thickness swell
- ▶ Suitable for use in service class 2 conditions

Mechanical properties	Test method	Unit	Requirement EN 300
Panel thickness	-	mm	30
Normal density	EN 323	kg/m <sup>3</sup>	600
Mean density tolerance	EN 323	%	+/- 15%
Bending strength - major axis	EN 310	N/mm <sup>2</sup>	24
Bending strength - minor axis	EN 310	N/mm <sup>2</sup>	13
Modulus of elasticity - major axis	EN 310	N/mm <sup>2</sup>	4800
Modulus of elasticity - minor axis	EN 310	N/mm <sup>2</sup>	1900
Internal bond	EN 319	N/mm <sup>2</sup>	0.35
Bending strength after cyclic test	EN 321 EN 310	N/mm <sup>2</sup>	6
Swelling in thickness after 24 hours	EN 317	%	≤ 12
Formaldehyde release	EN 130	mg/100g	≤ 8.0 (E1)
Moisture content - ex works	EN 322	%	2 - 12%



Pattress Plus is designed to provide support for fixtures and fittings in non-structural dry wall partitions. The product is an engineered OSB/3 panel incorporating a continuous recess, designed to accommodate 'C' shaped metal studs used in the construction of plaster board partitions.

### Features

- Ready prepared modular panels
- Speeds up installation
- Allows secure anchorage
- Zero added formaldehyde
- Versatile
- Solid core
- Fix to any point between studs

### SPECIFICATION DETAIL :

Thicknesses (mm)	15, 18
Dimensions	1250 x 597, 2397 x 597, 1250 x 397, • 2397 x 397
Manufactured with	OSB/3
Environmental certification	FSC® certified
CE marked	BS EN 13986
Material safety data sheet	Available
Fitting Instructions	Refer to manufacturers instructions

**Panels are 15 or 18mm thick OSB/3 manufactured using innovative 'zero added formaldehyde' resin technology.**







Propassiv is a structural OSB panel with integrated vapour control and air barrier properties for use as structural sheathing in timber frame structures.



## Applications



## Features

- ▶ Airtight
- ▶ Integrated vapour control
- ▶ Easy to install
- ▶ High racking strength
- ▶ Zero Added Formaldehyde
- ▶ High vapour resistance
- ▶ Safety data sheet available

PHYSICAL PROPERTIES				
Property		Units	Standard	Values
Thickness		mm	EN 324	12.5
Moisture content		%	EN 322	2-12
Release of formaldehyde		Class	EN 13986	E1
Thermal conductivity		W/m.K	EN 13986	0.1
Water vapour diffusion factor ( $\mu$ )	dry cup	-	EN 12572	750±80
	wet cup			420±50
Equivalent air layer thickness (sd)	dry cup	m	EN 12572	9.4±1.0
	wet cup			5.2±0.6
Air permeability @ 50Pa		m <sup>3</sup> /m <sup>2</sup> /h/Pa	-	<0.001
Air permeability coefficient @ 50Pa		m <sup>3</sup> /(h.m <sup>2</sup> )	EN 12114	<0.005
Air permeability of air tightness system @ 50Pa using Propassiv and speciality airtight tapes		m <sup>3</sup> /h/m <sup>2</sup>	EN 13141	0.17



## Quick Reference Guide - OSB

Type	Application & Climatic Conditions	Use Class (EN 335)
OSB/1	Non-Structural, interior fitments including furniture	Use Class 1
OSB/2	Internal, structural applications	Use Class 1
OSB/3	Structural applications similar to those listed above, however OSB/3 is suitable for use in humid conditions	Use Class 1 & 2
OSB/4	Heavy-duty structural applications in humid conditions	Use Class 1 & 2

# OSB

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