

# 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	EN 1087-1	N/mm <sup>2</sup>	≥0.15	≥0.13	≥0.12
Swelling in thickness 24h	EN 317	%	≤15	≤15	≤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/SITE PROTECT PLUS

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
<b>Durable</b>	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
<b>Pre-primed</b>	Panels are supplied with a smooth pre-primed face and coated edges, which removes the need to prime	Will require priming and painting
<b>Edge coated</b>	Edge primed to protect from moisture	Edges will require sealing to protect from moisture
<b>Smooth finish</b>	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
<b>Cost effective</b>	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	
15mm	2397 x 1197	Square edge	Euroclass C Wall, Ceiling, Roofing	Euroclass B Flooring
15mm	2440 x 1220	Square Edge	C-s2, d0	B <sub>fi</sub> - s1
15mm	2397 x 1220	Tongue & Groove T&G2	C-s2, d0	B <sub>fi</sub> - s1
18mm	2397 x 1197	Square edge	C-s2, d0	B <sub>fi</sub> - s1
18mm	2440 x 1220	Square edge	C-s2, d0	B <sub>fi</sub> - s1
18mm	2397 x 1200	Tongue & Groove T&G2	C-s2, d0	B <sub>fi</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 us in service class 2 conditions

Mechanical properties	Test method	Unit	Requirement EN 300
Panel thickness	-	mm	30
Norminal 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 intergrated vapour control and air barrier properties for use as structural sheathing in timber frame structures.



### Applications



### Features

- ▶ Airtight
- ▶ Intergrated 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	94±1.0
	wet cup			5.2±0.6
Air permeability @ 50Pa		$m^3/m^2/h/Pa$	-	<0.001
Air permeability coefficient @ 50Pa		$m^3/(h.m^2)$	EN 12114	<0.005
Air permeability of air tightness system @ 50Pa using Propassiv and speciality airtight tapes		$m^3/h/m^2$	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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