Oriented Strand Board Technical Data



OSB can be sawn, cut, milled and nailed. Any standard timber joints can be used for



OSB 2

Is designed for use where a high performance board is required which provides dimensional stability and load bearing capabilities for use in dry conditions.



OSB 3

Is designed for use where a high performance board is required which provides dimensional stability and load bearing capabilities especially suited for use in humid conditions.

MOST COMMON USES FOR OSB 2

Shelving and platform construction

Pallet manufacture

Packaging

Boarding up

Signboards

Upholstered furniture frames

Shopfitting

Bar and hotel fitting

Exhibition stands

Film sets

MOST COMMON USES FOR OSB 3

Roofing 11mm, 15mm, 18mm

Sarking

Site hoardings

Timber Frame Buildings 8mm, 9mm and 11mm

Flooring 15 and 18mm



GENERAL PROPERTIES OF OSB

PROPERTY	TEST METHOD	ETHOD UNIT		VALUE	
Tolerances on nominal dimensions Length & Width Thickness ^{1,2}	EN 324-1	mm	± 3.0		
	EN 324-1 EN 324-2	mm mm/m	± 0.3	(sanded), ± 0.8 un-sanded	
Edge straightness tolerance ¹			1.5		
Squareness tolerance ¹	EN 324-2	mm/m	2.0		
Moisture content	EN 322	%	2 - 12%		
Tolerance on the mean density within a board ¹	EN 323	%	± 15		
Formaldehyde release according to EN 13986 ³	EN 120	mg/100g	E1	≤8mg/100g	

¹ These values are characterised in the material corresponding to a relative humidity of 65% and temperature of 20° C

² These values are characterised between and within boards

³ Perforator values are related to boards with moisture of 6,5%. In the case of boards with different moisture content the perforator value is recalculated.

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KRONOSPAN PROPERTIES FOR LOAD-BEARING BOARDS FOR USE IN DRY CONDITIONS (type OSB 2):

PROPERTY	TEST METHOD	UNIT	NOMINAL THICKNESS, mm 6 to 10 >10 to <18 18 to 25 >25 to 32			
Bending Strength - major axis	EN 310	N/mm²	22	20	18	16
Bending Strength - minor axis	EN 310	N/mm²	11	10	9	8
MOE in bending - major axis	EN 310	N/mm²	3500			
MOE in bending - minor axis	EN 310	N/mm²	1400			
Internal bond	EN 319	N/mm²	0.34	0.32	0.30	0.29
Swelling in thickness - 24h	EN 317	%	20			

KRONOSPAN PROPERTIES FOR LOAD-BEARING BOARDS FOR USE IN HUMID CONDITIONS (type OSB 3):

PROPERTY	TEST METHOD	UNIT	6 to 10	NOMINAL THIC >10 to <18	CKNESS, mm 18 to 25	>25 to 32	
Bending Strength - major axis	EN 310	N/mm²	22	20	18	16	
Bending Strength - minor axis	EN 310	N/mm²	11	10	9	8	
Bending strength after cyclic test - major axis 1 2	EN 321	N/mm²	9	8	7	6	
MOE in bending - major axis	EN 310	N/mm²	3500				
MOE in bending - minor axis	EN 310	N/mm²	1400				
Internal Bond	EN 319	N/mm²	0.34	0.32	0.30	0.29	
after cyclic test ¹	EN 321	N/mm²	0.18	0.15	0.13	0.10	
after boil test ³	EN 321	N/mm²	0.15	0.13	0.12	0.06	
Swelling in thickness - 24h	EN 322	%	15				

¹ Option 1 for moisture resistance requirement

GENERAL ADVICE

The boards should be stored in their intended installation area for a minimum of 48 hours to acclimatise to the surrounding temperature and humidity. Check for any damages before fitting.

Wetting of OSB should be avoided. OSB3 is not waterproof; the term 'moisture resistant' applies to the adhesive binder which will not break down in the presence of moisture (within BS EN 300 limits).

All common woodworking tools can be used successfully with Kronospan OSB. As a general rule, cutting speeds should be lower than for conventional wood. Carbide or diamond tipped blades and cutters are recommended because of their longer cutting life. Boards with straight edges need 2-3 mm dilatation gap at the edges of the boards for possible moisture expansion.

Corrosion resistant fasteners should be used where OSB is part of a load bearing structure. Structural fastening systems are only permitted if their use has been approved by the manufacturer.

Guidance on the use of OSB in load-bearing applications is given in DD CEN/TS 12872.

² For the calculation of bending strength after cyclic test, the thickness taken to account is the thickness measured after the cyclic test

³ Option 2 for moisture resistance requirement