STRUCTURAL INSULATED PANEL

DATASHEET

EPS

Physical Properties	EPS 70	EPS 100	EPS 125
Thermal Conductivity (W/mK)	0.038	0.036	0.034
Compressive Strength at 10% (kPa)	70	100	125
Bending Strength (kPa)	115	150	175
Water Vapour Permeability (mg Pa.h.m)	0.015-0.030	0.009-0.020	0.009-0.020
Water Vapour Diffusion Resistance (μ)	20-40	30-70	30-70
Reaction to Fire Standard EPS	F	F	F
Reaction to Fire FRA EPS	E	E	E
Length Tolerance	L2	L2	L2
Width Tolerance	W2	W2	W2
Thickness Tolerance	T2	T2	T2
Flatness Tolerance	P5	P5	P5
Squareness	S2	S2	S2
Dimensional Stability	DS (N) 5	DS (N) 5	DS (N) 5
BRE Green Guide Rating	A+	A+	A+

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OSB3

Property	Designation	Thickness: 11mm
Characteristic Strength Properties (N/mm2)		
Bending Strength		
Parallel to span	fm, 0, k	16.4
Perpendicular to span	fm, 90, k	7.4
Tensile Strength		
Parallel to span	ft, 0, k	9.4
Perpendicular to span	ft, 90, k	7.0
Compressive Strength		
Parallel to span	fc, 0, k	15.4
Perpendicular to span	fc, 90, k	12.7
Shear Strength		
Panel (as a racking panel)	fv, k	6.8
Planar (as floor decking)	fv, r, k	1.0
Stiffness Properties (N/mm2)		
Modulus of elasticity		
Mean, in bending parallel to span	E0, mean	4930
Mean, in bending perpendicular to span	E90, mean	1980
Mean, in tension and compression parallel to span	Ect, 0, mean	3800
Mean, in tension and compression perpendicular to span	Ect, 90, mean	3000
Shear modulus		
Panel (as in a racking panel)	Gv, mean	1080
Planar (as in floor decking)	Gr, mean	50

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OSB3 Notes:

- 0 = in the direction of the major axis.
- 90 = in the direction of the minor axis.
- These properties relate to an equilibrium moisture content of the test pieces conditioned at a temperature of 20°C and a relative humidity of 65%.
- The 5th percentile characteristic values for stiffness should be taken as 0.85 x the mean values given in the table

Please Note:
The information contained within this datasheet is true and accurate at the date of issuance and is subject to change without prior notice. It is for guidance only the proper use and application of this product is the responsibility of the user.