

IBS RigidRAP®-XT

TECHNICAL PROPERTIES

OSB TECHNICAL PROPERTIES



OSB/3 EN300 - Characteristic values acc. to EN 13986		
		Strand direction Major axis
	d	Board thickness 8 mm
Strength values [N/mm ²]		
Stresses on board		
Bending	f _{m,k}	18.0
Compression	f _{c,90,k}	10.0
Shear	f _{v,k}	1.0
Plate loading		
Bending	f _{m,k}	9.9
Tensile force	f _{t,k}	9.9
Compression	f _{c,k}	15.9
Shear	f _{v,k}	6.8
Stiffness values [N/mm ²]		
Stresses on board		
Bending modulus of elasticity	E _{ma}	4930
Shear modulus	G _{ra}	50
Plate loading		
Tensile force modulus of elasticity	E _{ta}	3800
Compression modulus of elasticity	E _{ca}	3800
Shear modulus	G _{va}	1080
^a The characteristic stiffness values E05 and G05 are calculated as follows: $E05 = 0.85 \times E$, and $G05 = 0.85 \times E$		
R Value	0.083	

General and building physics values		
Bulk density acc. to EN323	m	600 kg/m ³
Max. deviations in board thickness		± 0.8 mm (ContiFinish®) ± 0.3 mm (sanded)
Tolerance in length and width		± 3 mm
Perpendicularity acc. to EN 324-2		2 mm/m
Thermal conductivity acc. to EN 13986	λ	0.13 W/mK
Water vapour permeability value	μ	200 (moist) / 300 (dry)
Waste code		03 01 05
Air tightness at 50 Pa		0,14 [m ³ /hm ²]
Thickness swelling acc. to EN 317		≤ 15 %
Coefficient of expansion for 1% change in wood moisture content		0.03 %
Emissions class		E1 - 100% Formaldehyde -free binders (< 0.03 ppm)
Environmental Product Declaration as per ISO 14025 and EN 15084		EPD-KRO-20150067-IBD2-EN
Service classes acc. to EN 1995-1-1		1 + 2
Reaction to fire acc. to EN 13501-1		D-s2, d0
Declaration of Performance No. acc. to CPR		SKDE_OSB-3_CPR_2019_044

10MM RIGID FOAM

EXPOL platinum board is a lightweight expanded polystyrene (EPS) board that is easy to handle and easy to install. EXPOL insulation products are made in New Zealand, using an environmentally responsible manufacturing process and are 100% recyclable. 98% of EXPOL insulation product is actually trapped air. The manufacturing process of EXPOL products uses no CFCs or HCFCs.

RIGIDRAP®-XT WALL WRAP

RigidRAP® Technical Data Sheet					
Watertight Roof and Wall Wrap					
Characteristic	Test Method	Unit	Value	Tolerance	
				Min.	Max
Length	EN 1848-2	m	50	-0	+0
Width	EN 1848-2	m	1,50	-0,005	+0,005
Straightness	EN 1848-2	-	pass	-	-
Mass per unit area	EN 1849-2	g/m ²	120	-10	+10
Thickness	EN 1849-2	mm	0,55	-0,1	+0,1
Reaction to fire (free hanging)	EN 11925-2	class	F	-	-
Resistance to water penetration	EN 1928 method A	class	W1	-	-
Water vapour transmission properties	EN ISO 12572 set C	m	0,020	-0,005	+0,005
Resistance to penetration of air	EN 12114	m ³ /(m ² x h x 50 Pa)	Max 0,050	-	-
Tensile properties: Maximum tensile force	EN 12311-1	N/50 mm	MD 245	-45	+45
			CD 140	-25	+25
Tensile properties: Elongation	EN 12311-1	%	MD 50	-25	+25
			CD 80	-30	+30
Resistance to tearing (nail shank)	EN 12310-1	N	MD 120	-35	+35
			CD 135	-35	+35
Dimensional stability	EN 1107-2	%	2	-	-
Stability at low temperature	EN 1109	°C	-40	-	-
Artificial ageing by long term exposure to the combination of UV radiation and elevated temperature and heat (80°C)	Elongation EN 13859-1 zał. C	%	MD 40	-20	+20
			CD 55	-20	+20
	Tensile strength EN 13859-1 zał. C	N/50 mm	MD 220	-40	+40
			CD 110	-20	+20
	Resistance to water penetration EN 13859-1 zał. C	class	1	-	-
Water vapour transmission (23°C/85% RH)	Lyssy	g/m ² x 24h	1400	-200	+200
Water vapour transmission (38°C/90% RH)	Lyssy	g/m ² x 24h	3200	-400	+400