

Technical Data Sheet ALUCOBOND® plus

Panel Thickness	Standards	Units	3 mm	4 mm	6 mm
Thickness of Aluminium Layers		[mm]	0.5		
Weight		[kg/m²]	5.9	7.6	10.8
Technical Properties					
Section Modulus W	DIN 53293	[cm³/m]	1.25	1.75	2.75
Rigidity (Poisson's ratio μ = 0,3) E·I	DIN 53293	[kNcm²/m]	1250	2400	5900
Alloy /	EN 573-3		EN AW-5005A (AlMg1),		
Temper of Cover Sheets	EN 515		H22 / H42		
Modulus of Elasticity	EN 1999 1-1	[N/mm²]	70'000		
Tensile Strength of Aluminium	EN 485-2	[N/mm²]	R _m	≥ 130	
0.2% Proof Stress	EN 485-2	[N/mm²]	R _{p0,2}	≥ 90	
Elongation	EN 485-2	[%]	A ₅₀	≥ 5	
Linear Thermal Expansion	EN 1999 1-1		2,4 mm / m at 100°C temperature difference		
Core					
Mineral filled polymer					
Acoustical Properties					
Sound Absorption Factor α _s	ISO 354		0.05		
Sound Transmission R _w	ASTM E90	[dB]	STC: 30 OITC: 24		
Thermal Properties					
Thermal Resistance R	DIN 4108	[m²K/W]	0.0021	0.0032	0.0053
Thermal conductivity λ	EN 12667	[W/mK]	1.41	1.25	1.13
Heat Transfer Coefficient U	DIN 4108	[W/m²K]	5.80	5.77	5.70
Temperature Resistance		[°C]	-50 to +80		
Fire Classification	EN 13501-1: Class B-s1, d0				
Calorific value PCS _{core}	ISO 1716	MJ/kg	≤ 13.9		