

Technical Data Sheet ALUCOBOND®

PANEL-THICKNESS:		Standard	Unit	3 mm	4 mm	6 mm
Thickness of Aluminium Layers			[mm]	0.50		
Weight			[kg/m ²]	4.5	5.5	7.3
Technical Properties:						
Section Modulus	W	DIN 53293	[cm ³ /m]	1.25	1.75	2.75
Rigidity (Poisson's ratio $\mu = 0,3$)	E-I	DIN 53293	[kNcm ² /m]	1250	2400	5900
Alloy /		EN 573-3		EN AW-3003 (AL-Mn1Cu),		
Temper of Cover Sheets		EN 515		H24/H44		
Modulus of Elasticity		EN 1999 1-1	[N/mm ²]	70'000		
Tensile Strength of Aluminium		EN 485-2	[N/mm ²]	R _m ≥ 145		
0.2% Proof Stress		EN 485-2	[N/mm ²]	R _{p0.2} ≥ 130		
Elongation		EN 485-2	[%]	A ₅₀ ≥ 4		
Linear Thermal Expansion		EN 1999 1-1		2.4 mm/m at 100°C temperature difference		
Core:						
Polyethylene, Type LD-PE blend			[g/cm ³]	0.92		
Surface:						
Lacquering				Coil Coating		
Gloss (initial value)		ECCA T2	[%]	Fluorocarbon based (e.g. PVdF)		
Pencil Hardness		ECCA T4		25 - 60		
				HB - F		
Acoustical Properties:						
Sound Absorption Factor	α_S	ISO 354		0.05		
Sound Transmission Loss	R _W	ISO 717-1	[dB]	25	26	27
Loss Factor	d	EN ISO 6721		0.0072	0.0087	0.0138
Thermal Properties:						
Thermal Resistance	R	DIN 52612	[m ² K/W]	0.0069	0.0103	0.0172
Heat Transition Coefficient	U	DIN 4108	[W/m ² K]	5.65	5.54	5.34
Temperature Range			[°C]	-50...+80		