

## Technical Data Sheet ALUCOBOND® Class '0'

Properties	Standard	Unit	Values
Panel Thickness		[mm]	4
Width		[mm]	1000 / 1250* / 1500 / 1575 * standard
Weight		[kg/m <sup>2</sup> ]	5.5
<b>Technical Properties:</b>			
Section Modulus W	DIN 53293	[cm <sup>3</sup> /m]	1.75
Rigidity (Poisson's ratio $\mu = 0,3$ ) E·I	DIN 53293	[kNcm <sup>2</sup> /m]	2400
Alloy	EN 573-3		EN AW-5005 (AlMg 1)
Temper of Cover Sheets	EN 515		H22/24 (bare aluminium coil) H42/44 (coated aluminium coil)
Modulus of Elasticity	EN 1999 1-1	[N/mm <sup>2</sup> ]	70,000
Tensile Strength of Aluminium	EN 485-2	[N/mm <sup>2</sup> ]	min. 125 & max. 185
0.2% Proof Stress	EN 485-2	[N/mm <sup>2</sup> ]	$R_{p0.2} \geq 90$
Elongation	EN 485-2	[%]	$A_{50} \geq 4$
Linear Thermal Expansion	EN 1999 1-1		2.4 mm / m at 100°C temperature difference
<b>Core:</b>			
Polyethylene, Type LDPE	Virgin	[g/cm <sup>3</sup> ]	0.92
<b>Surface:</b>			
Lacquering			Coil Coating
Gloss ( initial value )	ECCA T2	[%]	Fluorocarbon based (e.g. PVDF)
Pencil Hardness	ECCA T4		30 – 80 ( $\pm 5\%$ ) HB - F
<b>Acoustical Properties:</b>			
Sound Absorption Factor $\alpha_S$	ISO 354		0.05
Sound Transmission Loss $R_W$	ISO 717-1	[dB]	26
Loss Factor d	EN ISO 6721		0.0087
<b>Thermal Properties:</b>			
Thermal Resistance R	DIN 52612	[m <sup>2</sup> K/W]	0.0103
Heat Transition Coefficient U	DIN 4108	[W/m <sup>2</sup> K]	5.54
Temperature Range		[°C]	-50 to +80
<b>Fire Properties :</b>			
Fire propagation	BS 476, Part 6		Class 0
Surface spread of Flame	BS 476, Part 7		Class 1
Reaction to Fire	UBC 17-5		Passed
	ASTM E-162		Flame spread Index 0
	ASTM E-108,		Passed
	ASTM E-84		
	Flame spread		Index 0
	Fuel contribution		Index 0
	Smoke density		Index 0
Corrosion Risk			Marine grade Alloy
<b>Environment &amp; Health Aspects :</b>			
:Environment Management System			- CFC Free
:Occupational Health and Safety Management System			- VOC free
:Quality Management System			- ISO 14001:2004
			- OHSAS 18001:2007
			- ISO 9001:2008
<b>Dimensional Tolerances:</b>			
Thickness		[mm]	4 mm $\pm 0.2$ mm
Thickness of Aluminium Layers		[mm]	0.50 $\pm 0.02$ mm
Weight		[kg/m <sup>2</sup> ]	5.5 $\pm 5\%$
Width		[mm]	Upto 1575 mm + 4mm
Length		[mm]	Till 4000 mm + 6 mm
			Above 4000 mm +10 mm