



**CBond Aluminium Composite Panels - Signage Grade**

Panel Thickness	Standard	Unit	2mm	3mm	3mm	3mm	3mm	4mm
Thickness of Aluminium	DIN 1784	mm	0.1	0.1	0.15	0.2	0.3	0.3
Aluminum thickness deviation	DIN 1784	mm	±0.02	±0.02	±0.02	±0.02	±0.02	±0.02
Weight		Kg/m <sup>2</sup>	3	4	4.13	4.28	4.57	5.81
Tolerance in length	DIN 16927 / ISO 11833-1	mm	±2	±2	±2	±2	±2	±2
Tolerance in width	DIN 16927 / ISO 11833-1	mm	- 0 / +1.5	- 0 / +1.5	- 0 / +1.5	- 0 / +1.5	- 0 / +1.5	- 0 / +1.5
Tolerance in thickness	DIN 16927 / ISO 11833-1	mm	± 0.10	± 0.10	± 0.10	± 0.10	± 0.10	± 0.10
Longitudinal roughness	DIN ISO 1101	mm	5	5	5	5	5	5
Horizontal flatness	DIN ISO 1101	mm	5	3	3	3	3	3
Corner warpage	DIN ISO 1101	mm	5	3	3	3	3	3
Section Modulus W	DIN 53293	cm <sup>3</sup> /m	1	1.02	1.04	1.05	1.25	1.75
Rigidity (Poisson's ratio $\mu = 0.3$ ) E.I	DIN 53293	kNm <sup>2</sup> /m	0.07	0.14	0.14	0.14	0.14	0.28
Alloy	EN 573-3	ENAW	1100					
Temper of Cover Sheets	EN 515		H16/H18					
Modulus of Elasticity	GB/T 17748-2016	Mpa	≥2.0*10 <sup>4</sup>					
Tensile Strength of Aluminium	EN 485-2	N/mm <sup>2</sup>	R <sub>m</sub> ≥ 130					
0.2% Proof Stress	EN 485-2	N/mm <sup>2</sup>	R <sub>p0.2</sub> ≥ 100					
Elongation	EN 485-2	%	A <sub>50</sub> ≥ 1					
Linear Thermal Expansion	GB/T 17748-2016	°C <sup>-1</sup>	≤4.0*10 <sup>-5</sup>					
<b>Core</b>								
Polyethylene, Typ LD-PE		g/cm <sup>3</sup>	0.935					
<b>Surface</b>								
Lacquering	Polyester							
Thickness of coating		µm	≥16	≥16	≥16	≥16	≥16	≥16
Gloss (initial value)	ECCA T2	%	20-75		20-100			
Pencil Hardness	ECCA T4		2H					
<b>Acoustical Properties</b>								
Sound Absorption Factor $\alpha_s$	ISO 354							
Sound Transmission Loss $R_w$	ISO 717-1	DB	23	25	25	25	25	26
Loss Factor d	EN ISO 6721		0.006	0.0064	0.0064	0.0064	0.0072	0.0087
<b>Thermal Properties</b>								
Thermal Resistance R	DIN 52612	m <sup>2</sup> K/W	0.0036	0.004	0.0041	0.0042	0.0069	0.0103
Heat Transition Coefficient U	DIN 4108	W/m <sup>2</sup> K	5.98	5.88	5.78	5.73	5.65	5.54
Temperature Range		°C	-50...+80					
FR test	EN—13501		B2 (with Fireproofing core)					
Colour difference	matt (white, silver)		ΔE≤1.0					
	bright (red, yellow, blue, green)		ΔE≤2.0					
<b>Warranty Period</b>								
Polyester Finish	5 years							
Delamination	5 years							
<b>Fire Retardancy</b>								
Fire Rating	B2 is standard with option with extra cost for B1 or A2 or DIN 4102							
ASTM E84	Class A							
UL Listing	UL Components							
CE Marking	Approved							
EN 12899	Approved for Cbond Traffic							
<p>NB! all arrows on back of cladding must face in the same direction. Longitudinal roughness, Horizontal flatness and Corner warpage should be tested on a horizontal surface only. All above information is considered as a guide line only. Buyers should independently test and determine the products' suitability.</p>								
<p>Explanation: Exposed outer skin and PE center on the front surface of a sign created by routing or similar methods will reduce warranty to 3 years. This exposed section has no polyester coating to protect the surface from weather hazards.</p>								

Graphic Solutions Digital (Pty) Ltd

Head Office  
4 Midhurst Way  
Constantia, 7806

Reg No. 2020/459255/07  
Vat no. 494 015 4919  
Tel: 021 794 6094