

Alubond <sup>®</sup> U.S.A. STD					TECHNICAL DATA SHEET			
					THICKNESS: 4mm	ALLOY SERIES: 1) 1XXX 2) 3XXX 3) 5XXX		
S.NO	PROPERTIES	TOLERANCE	STANDARD	UNIT	AL -1XXX	AL-3XXX	AL-5XXX	
1	Skin thickness	±0.05	As per manufacture	mm	0.5			
2	Weight	±0.5	As per manufacture	kg/m <sup>2</sup>	5.5			
3	Panel bow	±0.8 in length or width	As per manufacture	%	0.8% max either length or width			
4	Squareness	±5mm	As per manufacture	mm	5mm max			
5	Standard Width	± 2	As per manufacture	mm	1250 & 1500			
6	Panel Thickness	± 0.03	As per manufacture	mm	4			
7	Special width min quantity 2000sqm (incl 1000mm)	± 2	As per manufacture	mm	Upto 2000 max	Upto 1750 max	Upto 1750 max	
FIRE BEHAVIOUR PROPERTIES								
Fire behaviour	FR Classification	Section Number	Core	Document Number	Testing Agency			
8	Din 4102 part 1	B2	Flame Retardant additives added Low density polyethelene core	304838	EXOVA WARRINGTON-UK			
9	BS 476 part 6&7	part 6 class 0 part 7 class 1		6&7	5062	EXOVA WARRINGTON-UK		
10	EN 13501--1	E		1	230005025-2	MPA NRW GERMANY		
11	AS/NZS 1530	Ignitability index :0 Flame spread index :0 Heat evolved index :0 Smoke developed index: 0		3	FNE 9907	CSIRO MATERIALS SCIENCE & ENGINEERING		
MECHANICAL PROPERTIES								
12	section modulus(W)	DIN 53293	cm <sup>3</sup> /m	1.62	1.7	1.75		
13	Rigidity (Poisson's ratio μ = 0,3)	DIN 53294	KN cm <sup>2</sup> /m	2300	2320	2400		
14	Aloy	EN 573-3	.....	EN AW- 1100	EN AW- 3105	EN AW- 5005A (Al mg1)		
15	Elongation	EN 515	....	H16/H18	H14/H16	H16/18		
16	Modulus of Elasticity	EN 1999 1-1	N/mm2	≥70000				
17	Tensile Strength of Aluminium	EN 485-2	N/mm2	R <sub>m</sub> ≥ 135	R <sub>m</sub> ≥ 140	R <sub>m</sub> ≥ 145		
18	0.2% Proof Stress	EN 485-2	N/mm2	R <sub>po</sub> ≥ 85	R <sub>po</sub> ≥ 90	R <sub>po</sub> ≥ 95		
19	Elongation	EN 485-2	%	A <sub>50</sub> ≥ 6	A <sub>50</sub> ≥ 5	A <sub>50</sub> ≥ 5		
20	Linear Thermal Expansion	EN 1999 1-1	mm/m @100°C	2.4				
CORE PROPERTIES								
21	Core	ASTM D 1238	.....	Excellent performance of LDPE Standard core				
22	Density	ASTM D792	G/cc	0.920-0.940				
23	Hardness	ASTM D 2240	Type shore D scale	55-65				
24	Color	.....	.....	Off white				
SURFACE FINISH PROPERTIES								
25	Type/finish	.....	.....	PVDF / FEVE				
26	Gloss @60°C	ECCA T2	%	20-45 / 20-80				
27	Pencil hardness	ECCA T4	.....	min HB				
28	Back coat	.....	micron	5 to 13				
ACOUSTICAL PROPERTIES								
29	Sound absorption factor	ISO 354	....	0.05				
30	Sound transmission Loss (Rw)	ASTM E90	dB	STC: 26				
THERMAL PROPERTIES								
31	Thermal resistance R	ASTM C518	M <sup>2</sup> K/W	0.007		0.009		
32	Temperature resistance		°C	-50....+80				