

ALUMINIUM COMPOSITE PANEL

Super Lite



Panel Thickness	Unit	2mm	3mm	3mm
Thickness of Aluminium	mm	0.21	0.21	0.15
Aluminum thickness deviation	mm	±0.01	±0.01	±0.01
Weight	Kg/m ²	2.66	3.54	3.31
Tolerance in length	mm	- 0 / +2	- 0 / +2	- 0 / +2
Tolerance in width	mm	- 0 / +1.5	- 0 / +1.5	- 0 / +1.5
Tolerance in thickness	mm	±0.15	± 0.10	± 0.10
Horizontal flatness	mm	5	4	4
Longitudinal roughness	mm	6	6	6
Technical Properties				
Section Modulus W	cm ³ /m	1.25	1.68	1.73
Rigidity (Poisson's ratio $\mu = 0.3$) E.I	kNm ² /m	0.04	0.08	0.06
Alloy	ENAW	EN AW3003	EN AW3003	1100
Temper of Cover Sheets		H16/H18	H16/H18	H16/H18
Modulus of Elasticity	N/mm ²	70000	70000	70000
Tensile Strength of Aluminium	N/mm ²	Rm ≥ 175	Rm ≥ 175	Rm ≥ 145
0.2% Proof Stress	N/mm ²	Rp0.2 ≥ 120	Rp0.2 ≥ 120	Rp0.2 ≥ 90
Elongation	%	A50 ≥ 2	A50 ≥ 2	A50 ≥ 3
Linear Thermal Expansion	mm/m/oC	2.4 at 100°C Temp difference	2.4 at 100°C Temp difference	2.4 at 100°C Temp difference
Core				
Polyethylene, Typ LD-PE	g/cm ³	0.935	0.935	0.935
Surface		Coil Coating	Coil Coating	Coil Coating
Lacquering		PE	PE	PE
Thickness of coating	µm	≥16	≥16	≥16
Gloss (initial value)	%	20-100	20-100	20-100
Pencil Hardness		2H	2H	2H
Acoustical Properties				
Sound Absorption Factor α_s		0.05	0.05	0.05
Sound Transmission Loss RW	DB	23	25	25
Loss Factor α		0.0062	0.0072	0.0072
Thermal Properties				
Thermal Resistance R	m ² K/W	0.0036	0.0069	0.0069
Heat Transition Coefficient U	W/m K	5.98	5.65	5.65
Temperature Range	°C	-50 ~ + 80	- 50 ~ + 80	- 50 ~ + 80

