

Digital Printing & Signage Panels

	Unit	2mm	3mm	4mm	6mm
ALUMINIUM					
Thickness of Aluminium	mm	0.20			
Aluminum thickness deviation	mm	±0.02	±0.02	±0.02	±0.02
Alloy/ Temper		1100 H18, 3003 H22, 3105 H24, 5005 H32			
WEIGHT & SIZE TOLERANCE					
Panel Weight	Kg/m ²	3.10	4.26	5.44	7.80
Tolerance in length	mm	+/- 2	+/- 2	+/- 2	+/- 2
Tolerance in width	mm	+/- 2	+/- 2	+/- 2	+/- 2
Tolerance in thickness	mm	± 0.15	± 0.10	± 0.10	± 0.15
TECHNICAL PROPERTIES					
Section Modulus W	cm ³ /m	0.51	0.81	1.11	1.71
Rigidity (Poisson's ratio $\mu = 0.3$) E.J	kNcm ² /m	345	865	1620	3840
Modulus of Elasticity	N/mm ²	70,000			
Tensile Strength of Aluminium	N/mm ²	Rm \geq 145			
0.2% Proof Stress	N/mm ²	Rp0.2 \geq 100			
Elongation	%	A50 \geq 2			
Linear Thermal Expansion	mm/m/°C	2.4 at 100°C Temp difference			
CORE					
Light Density Polyethylene, LD-PE	g/cm ³	0.92 - 0.95			
COATING					
Polyester (PPG , Nippon, Valspar, Beckers)					
Thickness of coating	μ m	\geq 17 to 21	\geq 17 to 21	\geq 17 to 21	\geq 17 to 21
Surface		Coil Coating			
Color Variation Tolerance		$\Delta E \leq 1.0$			
Gloss (initial value)	%	20% - 95%			
Pencil Hardness		HB-F			
ACOUSTICAL PROPERTIES					
Sound Absorption Factor α_s		0.05			
Sound Transmission Loss R_w	DB	23	25	26	28
Loss Factor d		0.0062	0.0072	0.0087	0.0138
THERMAL PROPERTIES					
Thermal Resistance R	m ² K/W	0.0036	0.0069	0.0103	0.0172
Heat Transition Coefficient U	W/m ² K	5.98	5.65	5.54	5.34
Temperature Range	°C	-50 to +80 Deg C			