DECLARATION OF COMPLIANCE

PRODUCT SPECIFICATION / S082

Aluminium Composite Material (ACM) Board

Locus standard aluminium composite board is used across many of our visual management solutions, including shadow boards, KPI boards, quality standards boards, signage and more.

All visual management products using this board are direct printed, finished with a UV-cured coating and assembled in-house in Ipswich, UK. The board is a 3 mm panel combining 0.30 mm aluminium skins on both sides with a polyethylene core.

Shadows and labels are printed directly onto the panel and sealed with the UV-cured coating, which replaces laminate. The coating is tougher and more durable, cannot peel away to become foreign-body debris, and reduces the single-use plastic waste associated with laminating.

Technical data

PROPERTY	3 MM PANEL
PANEL	
Panel thickness	3 mm
Weight (kg/m²)	3.80
Section modulus W (cm³/m)	0.81
Rigidity E·I (kNcm²/m), Poisson's ratio μ = 0.3	865
ALUMINIUM SKINS	
Thickness of aluminium layers	0.30 mm
Alloy of aluminium layers	AlMg1 (EN AW-5005A) H44 to EN 485-2
Modulus of elasticity (N/mm²)	70,000
Tensile strength (N/mm²)	Rm 145–185
0.2% proof stress (N/mm²)	Rp0.2 110–175
Elongation (%)	A50 ≥ 3
Linear thermal expansion	2.4 mm/m at 100 °C temperature difference
CORE	
Low-density polyethylene (LDPE), density (g/cm³)	0.92
SURFACE AND FINISH	
Board surface	White matt both sides, optimised for digital printing
Print	Direct printed onto the panel
Protective finish	UV-cured coating (no laminate)

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PROPERTY	3 MM PANEL
ACOUSTIC PROPERTIES	
Sound absorption factor α_S	0.05
Sound transmission loss R_w (dB)	24
Loss factor d	0.0057
THERMAL PROPERTIES	
Thermal resistance R (m^2K/W)	0.0080
Heat transfer coefficient U (W/m^2K)	5.61
OTHER PROPERTIES	
Service temperature range (°C)	–50 to +80
Water absorption, DIN 43495 (%)	0.01
Static charge	No antistatic treatment required
Fire classification	Class B2 to DIN 4102-1
UV stability in sunlight	Yes

Cleaning

Clean boards using non-abrasive methods, working from top to bottom. Avoid prolonged exposure to strong alkaline cleaning agents. Once cleaned, rinse the board with cold water to remove all cleaning residues.

Disclaimer

This declaration was prepared on behalf of Locus Systems Ltd and the information included is, to the best of our knowledge, correct at the time of writing. It is offered as a guide only and does not represent a guarantee of the products described in the sense of legal guarantee regulations. It is the responsibility of the end user to ensure the items purchased are suitable for the intended application.

Supplier details

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