

Material Information Sheet –

Aluminium Composite Panel (Dibond®, Alupanel®, Reynobond®)



Description

Aluminium composite panel material (ACP) is formed by laminating a central core of thermoplastic material with an outer skin of aluminium sheet. The process bonds the aluminium to the central core in such a way that the resultant panel is exceptionally rigid and dimensionally stable for its weight.

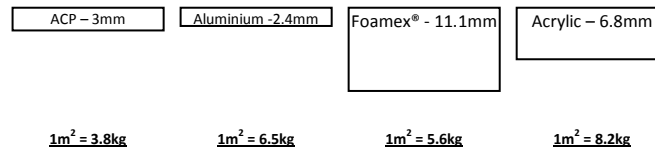
The material is generally supplied with an Aluminium finish but is also available coated with a hard-wearing polyester film in a variety of primary colours.

Other important characteristics of ACP are:-

- Smooth surface finish
- Excellent impact resistance
- Outstanding weather resistance
- Class 0/Class 1 fire retardant
- Excellent dimensional stability
- Erosion resistant
- Exceptionally rigid against comparable traditional sign materials

Rigidity

A comparison of the rigidity of various sheet materials indicates that ACP sheet is equivalent to:-



ACP offers an exceptionally lightweight and extremely rigid solution against many conventional sign-making materials.

Applications in Sign-making

ACP is traditionally used for large mid-long-term signage where exceptional rigidity is required whilst maintaining an overall light structure. ACP can also be formed and bonded in a similar fashion to other composite materials to produce a variety of shapes and constructions.

The lightness and rigidity of ACP and the ease in which it can be cut and machined makes it comparatively easy to install.

It is particularly suited to printing using a variety of techniques (such as wide-format digital printing, screen printing etc.). ACP can also be readily engraved.

Special Grades

ACP can be supplied in a variety of formulated grades for specific applications:-

- High-performance construction grade with 20 year product warrant (also available fire retardant)
- Alternative finishes – Timber, granite, metallics
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Physical Properties (Typical)

The data are typical values and are not intended to represent specifications. Their aim is to guide the user towards a material choice. All statements, technical information and recommendation in this product data sheet are presented in good faith, based upon test believed to be reliable and practical experience. However, Bay Plastics Ltd cannot guarantee the accuracy or completeness of this information, and it is the buyer's responsibility to determine the suitability of products in any given application. Therefore no liability whatsoever shall attach to Clarity Sign and Design limited for any infringement of the rights owned or controlled by a third party in intellectual, industrial or other property by reason of application, processing or use of the aforementioned information or products by the buyer.

Property	Unit	Test Method	Value
Weight per sqm 2mm/3mm/4mm	KG	-	2.8/3.8/4.75
Thermal Expansion	Mm/m @ 100°c variance	-	2.4
Modulus of elasticity in tension	MPa	-	2400
Impact strength	Kg/cm ²	-	50
Service temperatures	°c	-	-50°c to +90°c
Water absorption by volume	%	-	0.01
Fire Performance	-	-	Class 1 (BS476 Pt7) & Class 0 (BS476 pt6&7)

Availability

ACP is commonly supplied in sheet form in thicknesses of 2, 3 and 4mm. It is available in a range of colours:-



Further information

For further information contact:-

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