

AYRLITE® 2084

Decorative Faced, Aluminium Honeycomb Panel

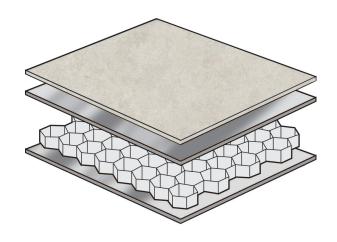
DESCRIPTION

AYRLITE® 2084 is an aluminium honeycomb panel with decorative vinyl faces reinforced with aluminium sheet.

Strain-hardened hexagonal cell aluminium honeycomb has optimum mechanical properties and is able to carry shear loads at much lower weight than foam or other core types.

Advanced adhesive technology has enabled AYRLITE® 2084 to achieve excellent fire performance.

AYRLITE® 2084 has been principally developed for highperformance marine vessel interior applications.



ACCREDITATIONS



 Fully compliant with European Union Marine Equipment Directive (EU-MED) 96/98/EC. May be used on vessels constructed, registered or operated in Europe



 DNV Type Examination Certificate, for C-Class applications (on SOLAS and HSC vessels)



 DNV Type Approval, for C-Class applications (on SOLAS and HSC vessels)



 US Coast Guard Certificate of Approval, as an Interior Finish



• IMO MSC 61(67) Fire Test Procedures Code compliant



- Meets IMO Res.A.653(16) Surface Spread of Flame test
- Meets ISO 1182 requirements for Non- Combustibility of aluminium honeycomb core
- Meets ISO 5659-2 requirements for Smoke and Toxicity
- Aluminium honeycomb core meets the requirements of AMS-C-7438 for salt fog anti-corrosion performance

FEATURES

- · Low weight
- · High stiffness
- Easy to fabricate
- Wide range of decorative options: colours, patterns, wood grains, etc.
- Panels are produced with the same decorative vinyl to one or both faces
- Decorative faces are reinforced with aluminium sheet.
 A broad range of reinforcement sheet thicknesses are available, including 0.3mm, 0.5mm, 0.8mm and 1.0mm*
- Aluminium reinforcement sheets can be selected with different thicknesses on different faces: for example, 0.8mm for front face, 0.3mm for back face
- Aluminium reinforcement sheets are 5000-series alloy for maximum strength and anti-corrosion performance
- Aluminium honeycomb cell size is 6.35mm or 12.7mm
- Wide selection of AYRLITE® Profiles & Assembly Accessories are available

PHYSICAL AND MECHANICAL PERMORMANCE

Thickness	Weight	Long Beam Flex Deflection		Flatwise Tensile	Flatwise Compression
(mm)	(kg/m2)	Max Load (N)	at Max Load (mm)	(MPa)	(MPa)
10	3.79	990	20	1.0	2.3
20	4.34	1947	10	1.0	2.3
30	4.89	2865	7	1.0	2.3

Typical room temperature properties for laminate faced panels, reinforced with 0.5mm aluminium sheet Mechanical test procedures to AMS-STD-401. Test report available on request

AVAILABILITY

Standard Dimensions

2400mm x 1200mm

Panel Thicknesss

Made to order, minimum thickness 6mm

SAFETY

As with cutting operations on most materials, avoid inhalation and eye contact with machining dust. Wear protective equipment such as hearing protection and safety glasses during any cutting operations. Use machine guards. Wear gloves to avoid cuts. Wash hands before eating, drinking or smoking and after finishing work.

APPLICATIONS

- Wall linings
- Furniture
- · C-class bulkheads
- · Internal modules eg. galleys, toilets, kiosks etc.
- Cabinetry
- · Partitions
- · Ceilings
- Tables
- Doors

FABRICATION

AYRLITE® 2084 can be easily cut and drilled with standard tools for laminate-faced boards, such as circular saws, routers, etc. Negative rake blades are recommended for circular saws.

Components and complete interiors can be fabricated using AYRLITE® Profiles & Assembly Accessories, cutters and polyurethane paste adhesives.



Ayres Composite Panels Pty Ltd

25-27 Clune Street Bayswater WA 6053, Australia +61 8 9279 3426 enquiries@ayrescom.com

Ayres Composite Panels USA LLC

5460 Business Parkway Theodore Alabama 36582, USA +1 251 653 0700 usa@ayrescom.com

www.ayrescom.com

2101

^{*} Registered Trade Mark of Ayres Composite Panels