



AYRLITE® 2022

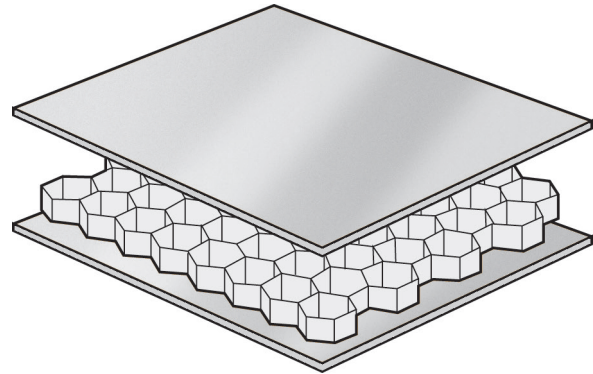
Aluminium Faced, Aluminium Honeycomb Panel

DESCRIPTION

AYRLITE® 2022 is an aluminium honeycomb panel **faced with aluminium sheets**. The panel is very lightweight and non-combustible.

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

AYRLITE® 2022 is principally developed for high-performance marine vessel interior applications.



ACCREDITATIONS



0575

- 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 a Non-Combustible material



- 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

- Aluminium honeycomb core meets the requirements of AMS-C-7438 for salt fog anti-corrosion performance

FEATURES

- Low weight
- High stiffness
- Easy to fabricate
- Mill finish aluminium face sheets are 5000 series alloy, for maximum strength and anti-corrosion performance
- Aluminium face sheet are available in a range of thicknesses including 0.3mm, 0.5mm, 0.8mm, 1.0mm. 0.5mm is the standard reinforcement thickness
- Panels can be produced with different aluminium sheet thicknesses on front and back faces: for example, 1.0mm for front face, 0.5mm for back face
- Aluminium faced panels are chemically cleaned: suitable for painting or the application of decorative laminates
- Brushed and anodised aluminium finishes are also available
- Aluminium honeycomb cell size is 6.35mm
- Wide selection of AYRES® Profiles & Assembly Accessories are available



AYRLITE® 2022

Aluminium Faced, Aluminium Honeycomb Panel

PHYSICAL AND MECHANICAL PERFORMANCE

Thickness (mm)	Weight (kg/m ²)	Long Beam Flex		Climbing Drum Peel (N/76mm)	Flatwise Compression (MPa)
		Max Load (N)	Deflection at Max Load (mm)		
10	3.41	990	20	461	2.3
20	3.96	1947	10	461	2.3
30	4.51	2865	7	461	2.3

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

AVAILABILITY

Standard Dimensions
2400mm x 1200mm
Panel Thickness
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® 2022 can be easily cut and drilled with standard tools, such as circular saws, routers etc. Negative rake blades are recommended for circular saws. Caution should be taken in case of aluminium burrs on cut edges. Face sheets must be kept clean and free from any oil or grease before painting or bonding.

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



AYRES
Lightweight Panel Systems

Ayres Composite Panels Pty Ltd
21-23 Clune Street
Bayswater WA 6053, Australia
T: +61 8 9279 3426
enquiries@ayrescom.com

Ayres Composite Panels USA LLC
5460 Business Parkway
Theodore AL 36582, USA
T: +1 251.653.0700
usa@ayrescom.com

www.ayrescom.com

* Registered Trade Mark of Ayres Composite Panels

IMPORTANT All information is given in good faith but without acceptance of liability. Ayres Composite Panels reserves the right to alter specification without prior notice. It remains the responsibility of the customer to ensure the suitability of any product for the purposes intended. All sales are made subject to Ayres Composite Panels [standard terms and conditions of sale](#). Please direct all [enquiries here](#).