



AYRLITE® 2022

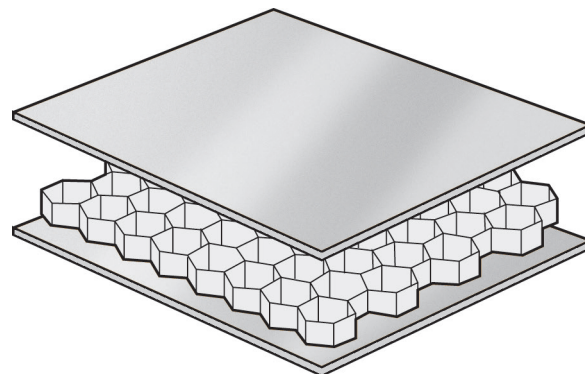
Aluminum Faced, Aluminum Honeycomb Panel

DESCRIPTION

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

Strain-hardened hexagonal cell aluminum 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



- ABS Type Approved Product



- High Speed Naval Craft Guide Approved



- US Coast Guard Certificate of Approval, as a Non-Combustible material



- Transport Canada Approved Product



- 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 aluminum honeycomb core

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

FEATURES

- Low weight
- High stiffness
- Easy to fabricate
- Recyclable
- Mill finish aluminum face sheets are 5000 series alloy, for maximum strength and anti-corrosion performance
- Aluminium face sheets are available in a range of thicknesses from 0.012" (0.3mm) upwards. 0.020" (0.5mm) is the standard thickness
- Panels can be produced with different aluminum sheet thicknesses on front and back faces: 0.040" (1.0mm) front face, 0.020" (0.5mm) back face; for weight saving on back face
- Aluminum faced panels are chemically cleaned: suitable for painting or the application of decorative laminates
- Brushed and anodised aluminum finishes are also available
- Aluminum honeycomb cell size is 1/4" (6.35mm)
- Wide selection of AYRLITE® Joiners & Assembly Accessories are available



AYRLITE® 2022

Aluminum Faced, Aluminum Honeycomb Panel

PHYSICAL AND MECHANICAL PERMORMANCE

Thickness (inches mm)	Weight (lb/ft2 kg/m2)	Long Beam Flex		Climbing Drum Peel (in lb/3 inch)	Flatwise Compression (psi)
		Max Load (lbf N)	Deflection at Max Load (inches mm)		
0.4 10	0.698 3.41	239 990	0.78 20	52	325
0.8 20	0.810 3.96	438 1947	0.41 10	52	325
1.2 30	0.924 4.51	644 2865	0.28 7	52	325

Typical room temperature properties for 0.020" (0.5mm) aluminum faced panels. Mechanical test procedures to AMS-STD-401
Test report available on request

AVAILABILITY

Standard Dimensions
96" x 48" (2440mm x 1220mm)
Panel Thickness
Made to order, minimum thickness 1/4" (6mm)

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 aluminum 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 AYRLITE® Joiners & Assembly Accessories and polyurethane paste adhesives.

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.



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

Ayres Composite Panels Pty Ltd
25-27 Clune Street, Bayswater
WA 6053, Australia
+61 (0) 8 9279 3426
enquiries@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](#).