



AYRLITE® 2023

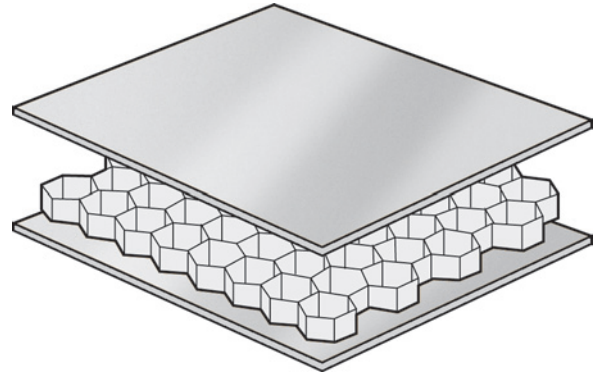
Aluminium Faced, Aluminium Honeycomb Panel

DESCRIPTION

AYRLITE® 2023 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® 2023 is principally developed for high-performance marine vessel interior applications.



ACCREDITATIONS



- 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
- Recyclable
- Mill finish aluminium face sheets are 5000 series alloy, for maximum strength and anti-corrosion performance
- Aluminium face sheets are available in a range of thicknesses including 0.3mm, 0.5mm, 0.8mm, 1.0mm. 0.5mm is the standard thickness
- Panels can be produced with different aluminium sheet thicknesses on front and back faces: for example 1.0mm front face, 0.5mm 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



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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

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® 2023 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.



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