



# AYRLITE® 2054

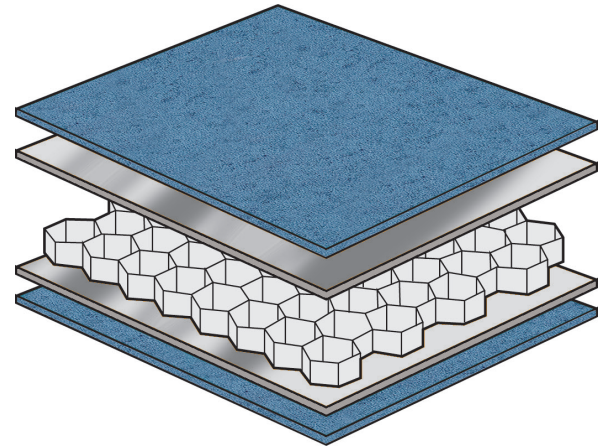
Decorative Faced, Aluminum Honeycomb Panel

## DESCRIPTION

AYRLITE® 2054 is an aluminum honeycomb panel with decorative laminate faces reinforced with aluminum sheets.

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

AYRLITE® 2054 has been 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



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



- 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
- Wide range of decorative options: colours, patterns, wood grains, etc.
- Panels are produced with the same decorative laminate on both faces, or with a backing/ laminate on the reverse face
- Decorative faces are reinforced with a minimum of 0.012" (0.3mm) of aluminum sheet. Thicker reinforcements are available as required. 0.020" (0.5mm) is the standard reinforcement thickness
- Aluminum reinforcement sheets can be selected with different thicknesses on different faces: for example, 0.040" (1.0mm) for front face, 0.020" (0.5mm) for back face
- Aluminum reinforcement sheets are 5000-series alloy for maximum strength and anti-corrosion performance
- Aluminum honeycomb cell size is 6.35mm
- Wide selection of AYRLITE® Joiners & Assembly Accessories are available



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## PHYSICAL AND MECHANICAL PERFORMANCE

Thickness (inches   mm)	Weight (lb/ft <sup>2</sup>   kg/m <sup>2</sup> )	Long Beam Flex		Flatwise Tensile (psi)	Flatwise Compression (psi)
		Max Load (lbf   N)	Deflection at Max Load (inches   mm)		
0.4   10	0.995   4.86	214   954	0.78   20	145	325
0.8   20	1.100   5.37	421   1875	0.37   9	145	325
1.2   30	1.222   5.97	632   2810	0.26   7	145	325

Typical room temperature properties for laminate faced panels, reinforced with 0.020" (0.5mm) aluminum sheet. 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)

## 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® 2054 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® Joiners & Assembly Accessories and polyurethane paste adhesives.



# AYRES

Lightweight Panel Systems

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