

AYRLITE® 2031

Stainless Steel Faced, Aluminium Honeycomb Panel



AYRES
Lightweight Panel Systems
www.ayrescom.com

DATA SHEET Issue 1

Description

AYRLITE 2031 is an aluminium honeycomb panel with stainless steel sheet faces bonded to the core.

A glassfibre epoxy layer is used to protect against galvanic corrosion between the stainless steel faces and the aluminium honeycomb.

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

Features

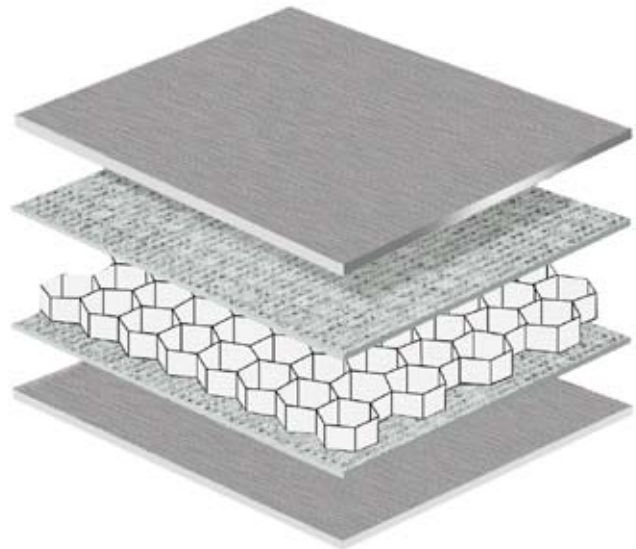
- Stainless Steel 304 2B, 0.55mm sheets are bonded to both faces. Other thicknesses and finishes including 304 No 4, 0.7mm sheets are available.
- Meets ISO 1182 for Non-Combustibility of core.
- 6.35mm cell size, aluminium honeycomb core.
- Aluminium honeycomb core meets the requirements of MIL- C - 7438 salt fog anti-corrosion performance.
- High stiffness and strength.
- Easy to fabricate.
- Recyclable.

Applications

- Wall linings.
- Internal modules eg. galleys, toilets, kiosks etc.
- Doors.

Fabrication

AYRLITE 2031 requires specialised stainless steel fabrication tools and techniques. Glassfibre dust is an irritant, the use of a good dust extraction system is recommended.



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Physical and Mechanical Performance

Typical room temperature properties for 0.55mm 304 2B Stainless Steel Sheets to both faces.

| Thickness (mm) | Weight (Kg/m2) | Long Beam | | Climbing Drum Peel (N/76mm) | Flatwise Compression (MPa) |
|-------------------|-------------------|--------------------------|-----------------------------------|-----------------------------------|----------------------------------|
| | | Max Load (Newtons) | Deflection at Max Load (mm) | | |
| 10 | 14 | 1054 | 25 | 375 | 2.6 |
| 20 | 15.6 | 2005 | 12 | 375 | 2.6 |
| 30 | 17.2 | 2776 | 9 | 375 | 2.6 |

Availability

| |
|--------------------------------------|
| Standard Dimensions |
| 2400 x 1219mm |
| Panel Thickness |
| Made to order, minimum thickness 6mm |

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Lighten Up!

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