**PRODUCT PROFILE**

**Cellite™ 220 and 620 Panels**

The Cellite™ range of Sandwich Panels have been used over many years to manufacture bonded assemblies, lightweight structures and composite components for the Rail, Aerospace, Defence, Marine and Motor Sports industries. Panels can be machined, fabricated and assembled into various structures for a wide range of applications in many different industries.

The unique characteristics of Sandwich Panels are derived from a combination of core and facing skins, bonded with high performance adhesive. By tailoring the separate elements to suit individual criteria, the resulting advantages can be used for numerous applications where high stiffness and low weight are particular requirements.

TRB Lightweight Structures provide a range of standard Cellite Panels, listed below, as well as offering tailor-made products to suit individual requests.

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### **Cellite™ 220**

**Aluminium Faced Aluminium Honeycomb Sandwich Panels**

**Size availability**

- **Width**: 2500mm ± 4mm
- **Length**: 1250mm ± 3mm
- **Overall thicknesses**: 13.70mm, 26.40mm, 51.80mm

**Construction**

- **Skins (both faces)**: Aluminium alloy 5251 H22/24 at 0.5mm thick
- **Core**: Aluminium honeycomb 5.2-¼ 25N (3003)
- **Adhesive**: High performance epoxy film adhesive (80°C service temperature) - others available upon request.

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### **Cellite™ 620**

**Fibre Faced Aluminium Honeycomb Sandwich Panels**

**Size availability**

- **Width**: 2440mm ± 5mm
- **Length**: 1220mm ± 4mm
- **Overall thicknesses**: 13.70mm, 26.50mm, 51.90mm

**Construction**

- **Skins**: Woven Glass Cloth, weight 380gsm, impregnated with an epoxy resin system which also acts as the adhesive bond to the core. 2 ply each face.
- **Core**: Aluminium honeycomb 5.2-¼ 25N (3003) (80°C service temperature) - others available upon request.
PRODUCT PROFILE

Cellite™ 220 and 620 Panels

Cellite™ 220 Aluminium Faced Aluminium Honeycomb Sandwich Panels

<table>
<thead>
<tr>
<th>Overall panel thickness (mm)</th>
<th>Core thickness (mm)</th>
<th>Approximate weight (Kgs)</th>
<th>Long Beam deflection @445n (mm)</th>
<th>Climbing Drum Peel (N/76mm)</th>
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</thead>
<tbody>
<tr>
<td>13.70</td>
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<td>13.70</td>
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<td>26.40</td>
<td>25.40</td>
<td>17.00</td>
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<td>23.60</td>
<td>0.20</td>
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</table>

The Cellite 220 Panel is qualified to IMO Resolution A653 (16) amendment resolution 61 (67) and IMO Resolution MSC 61 (67) 1996. Copies of Warrington Fire Research Centre test reports 72119 and 72120 are available upon request.

Cellite 220 style panels with decorative FR grade laminates are compliant with BS6853:1999 for Rail Interiors.

Cellite™ 620 Fibre Faced Aluminium Honeycomb Sandwich Panels

<table>
<thead>
<tr>
<th>Overall panel thickness (mm)</th>
<th>Core thickness (mm)</th>
<th>Approximate weight (Kgs)</th>
<th>Long Beam deflection @445n (mm)</th>
<th>Climbing Drum Peel (N/76mm)</th>
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<tr>
<td>51.90</td>
<td>50.80</td>
<td>20.80</td>
<td>1.00</td>
<td>300</td>
</tr>
</tbody>
</table>

The core thicknesses have been specifically chosen to facilitate the use of aluminium extrusion and other standard imperial dimensioned materials for panel edging, inserts and joining methods. Please see separate Product Profile Sheet entitled Edging, Joining and Attachments.

For further advice on Cellite Honeycomb Sandwich Panels, alternative sizes, material types and construction methods, please call our Technical Sales Team on 01480 447400.

The data provided is believed to be accurate but is given without acceptance of liability. Users should make their own assessment as to the suitability of any product for the purpose required. All sales are made subject to our standard terms and conditions which are available upon request.

For more information
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