INTRODUCTION

ABOUT ALYCLAD

Alyclad is a 3mm non-combustible solid aluminium cassette cladding system, deemed non-combustible cladding solutions; perfectly suitable for constructions where non-combustible products are required.

Alyclad is a high impact resistant, solid panel which can be fabricated, curved and rolled. The pre-finished large format cladding panels feature a PVDF coating system well proven for its superior quality, extensive colour range and design integrity.

KEY FEATURES

Alyclad’s versatility is achieved due to the combination of high-quality considerations and industry leading components. It is an ideal product for application in type A and B developments where non-combustible building materials are critical.

Alyclad is one of the few large format cladding panels that are deemed non-combustible when tested to AS1530.1.

PRODUCT DNA

Pre-finished solid aluminium panel

FINISH

Alyclad uses only the highly recognised paints known for their high durability; providing the optimum resistance to weather and industrial pollution.

FIXING SYSTEM

A cassette style concealed fixing system which is the same to fabricate and install as traditional ACPs.

APPLICATION

Type A and B constructions where non-combustible materials are required such as mixed-use developments, residential construction, and large-scale government infrastructure projects like hospitals.

Test Standard | Result
--- | ---
AS1530.1 | Non-combustible

NON-COMBUSTIBLE

15 YEAR WARRANTY

OUTSTANDING DURABILITY

HIGH QUALITY MARINE GRADE

ABRASIVE RESISTANT

SUSTAINABLE

NO VISIBLE EXTERNAL JOINTS

100% RECYCLABLE

WEATHER PROOF

AS1530.1 CERTIFIED

PRODUCT BROCHURE
**TECHNICAL INFO**

**ALYCLAD**

**TECHNICAL DATA SHEET & FIRE PERFORMANCE**

**CUTTING**

Alyclad sheets can be fabricated into panels using various sawing, routing and drilling techniques. For best results it is recommended that:

- The right equipment is used according to the manufacturer’s instruction manual.
- Drill bits and blades selected are intended for use with aluminium.

**FABRICATION**

- Alyclad is an aluminium product. The 3mm thick panels weigh in at 8.1 kilograms per square metre, making the product ideal for large infrastructure developments such as schools and hospitals.

- Alyclad is available in a variety of width and length combinations to suit almost any project and custom sizes are also available on request.

- The material is rigid, resistant to blows, breakage and pressure and has high bending, buckling and breaking strengths.

**DIMENSIONS**

<table>
<thead>
<tr>
<th>WIDTH</th>
<th>LENGTH</th>
<th>THICKNESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2400/2500</td>
<td>2400</td>
<td>3mm</td>
</tr>
<tr>
<td>3000/3600</td>
<td>3600</td>
<td>3mm</td>
</tr>
</tbody>
</table>

**CUSTOM SIZES ARE AVAILABLE, PLEASE SPEAK TO THE WINTEC SYSTEMS TEAM.**

*NOTE: may not be available in all finishes.

**COATING TECHNOLOGY**

Alyclad uses only the highly recognised PVDF paints known for their high durability. These premium paints provide the ultimate resistance to weather and industrial pollution on commercial, industrial, infrastructure and residential developments.

More than 50 years of Australian Exposure Testing is continuing to confirm the superior chemical and physical properties of fluoropolymer coatings.

Alyclad has virtually an unlimited colour range with the possibility of matching almost any panel colour, which provides a fully customisable option to achieve your dream design.

**PROPERTIES**

<table>
<thead>
<tr>
<th>PROPERTY</th>
<th>UNITS</th>
<th>VALUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alloy</td>
<td></td>
<td>5052</td>
</tr>
<tr>
<td>Temper</td>
<td></td>
<td>H32</td>
</tr>
<tr>
<td>Standard thickness</td>
<td>mm</td>
<td>3</td>
</tr>
<tr>
<td>Raw density</td>
<td>kg/m³</td>
<td>2880</td>
</tr>
<tr>
<td>Tensile minimum radius</td>
<td>mm</td>
<td>5.5</td>
</tr>
<tr>
<td>Tensile strength</td>
<td>MPa</td>
<td>235</td>
</tr>
<tr>
<td>0.2% Proof stress</td>
<td>MPa</td>
<td>163</td>
</tr>
<tr>
<td>Elongation</td>
<td>%</td>
<td>15</td>
</tr>
<tr>
<td>Linear thermal expansion</td>
<td>2.38mm at 100°C temperature difference</td>
<td></td>
</tr>
<tr>
<td>Hardness</td>
<td>Brinell</td>
<td>60</td>
</tr>
<tr>
<td>Melting range</td>
<td>%</td>
<td>607-650</td>
</tr>
<tr>
<td>Modules of elasticity – Tension</td>
<td>GPa</td>
<td>69.3 @ 20°C</td>
</tr>
<tr>
<td>Modules of elasticity – Tension</td>
<td>GPa</td>
<td>25.9 @ 20°C</td>
</tr>
<tr>
<td>Modules of elasticity – Compression</td>
<td>GPa</td>
<td>70.7 @ 20°C</td>
</tr>
<tr>
<td>Electrical resistivity</td>
<td>micro-ohm.m</td>
<td>10.7 @ 20°C</td>
</tr>
<tr>
<td>Electrical conductivity – Equal volume</td>
<td>MS/m</td>
<td>20 @ 20°C</td>
</tr>
<tr>
<td>Electrical conductivity – Equal weight</td>
<td>MS/m</td>
<td>17 @ 20°C</td>
</tr>
<tr>
<td>Sound absorption factor</td>
<td>Noise Reduction Co-efficient</td>
<td>0.05</td>
</tr>
<tr>
<td>Sound reflection</td>
<td>%</td>
<td>4%</td>
</tr>
</tbody>
</table>

**TECHNICAL SHEET**

**VERTICAL PANEL SAW**

Use for cutting and routing sheets.

When creating a V groove for folding, the minimum thickness left in the bottom of the groove should be 0.7mm.

**FOLDING**

After the V groove has been formed, fold the return leg back in one movement.

A portable folding tool for small panels and a folding machine for larger panels is recommended.

**SHEARING**

Alyclad sheets can be guillotined to the required size.

**ROLL BENDING**

To create curved surfaces, use a suitable bending machine. In order to minimise damaging the material use a protective film. Ensure rollers are clean and dent free.

**FIXING**

Blind and solid rivets along with stainless steel screws can be used to secure Alyclad sheets. Always consider the effects of thermal expansion and potential building movement.

**WELDING**

TIG and MIG welding are common welding methods used on Alyclad sheets. Consult with your local welding specialist for advice.

**PERFORATING**

Alyclad sheets can be perforated by punching, drilling or milling.

**CNC ROUTER**

Used for straight and contour cutting along V Grooving for folding. When creating a V groove for folding, the minimum thickness left in the bottom of the groove should be 0.7mm.

**DRILLING**

A high quality HSS centre point drill bit is suitable for drilling Alyclad.