

# HCP HONEYCOMB PANEL

AS 1530.1 and AS1530.3

***STRENGTH + STIFFNESS***

***SUPERIOR FLATNESS***

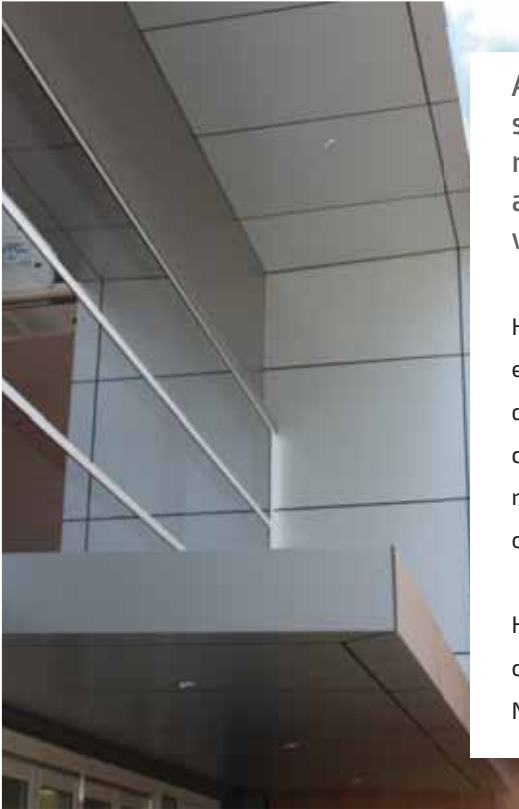
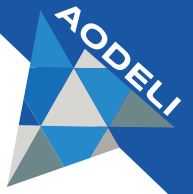
***SOUND/HEAT INSULATION***

***FIRE RATED***

***ANTI-CORROSION***

# AODELI - PRODUCT SPECIFICATIONS

## for HCP Honeycomb Panel

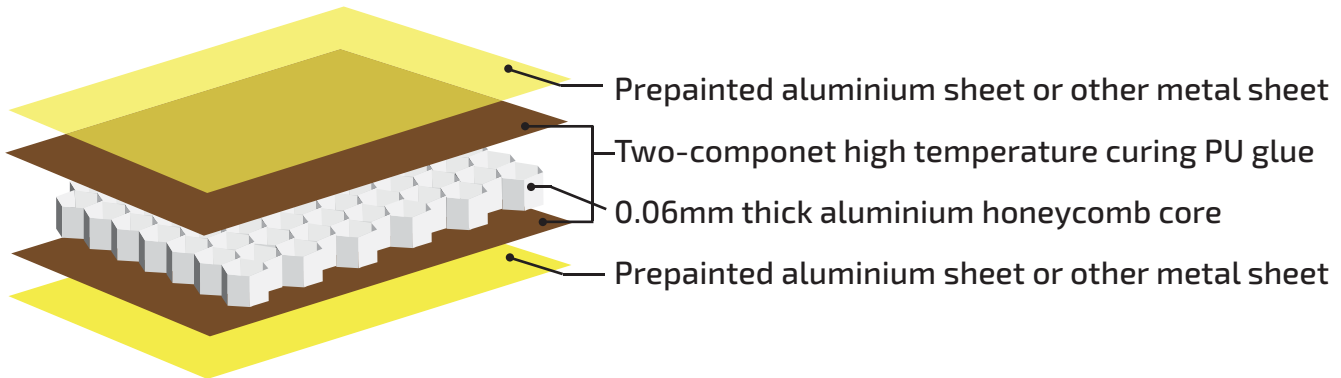


AODELI HCP is oriented from aviation industry. It's durable, large span and super flat. HCP also features in fabrication-friendly, multiple surface solutions and colour options. It is widely applied for architectural area such as façade, roof, partition as well as transportation, voyage and equipment industry.

HCP panel's interior is firmly joined to the external aluminium skins providing exceptional strength and the consistent flat, straight surfaces needed for quality finishes. It can be used to fabricate a wide range of shapes, including curved panels, folded panels and trapezoidal panels according to the requirements of the architectural design. These shapes are produced by one-step forming using dies.

HCP's thickness varies from 6mm to 50mm with 100% Aluminium construction and it is compliant to AS1530.1 BCA Deemed to Satisfy Non- Combustibility.

## HCP HONEYCOMB PANEL STRUCTURE



## HCP HONEYCOMB PANEL CORE

Al Alloy: A3005/Cell size b: from 6.5 to 9.5mm

H: total thickness

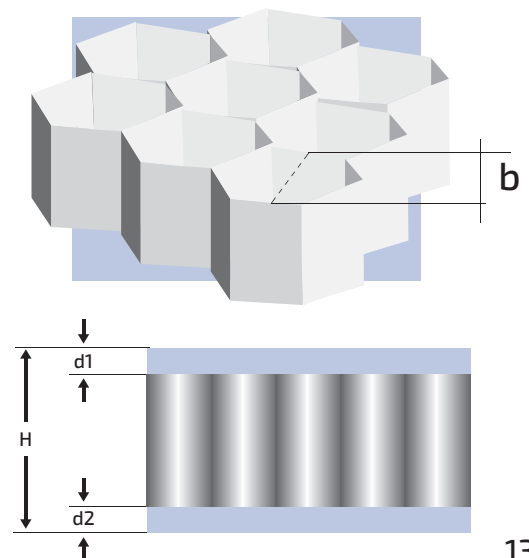
d1: thickness of AL front sheet

d2: thickness of AL back sheet

Thickness: 6 / 10 / 15 / 20 / 25 / 50mm

Width: 1250 / 1500 / 2100mm

Length: up to 10000mm



# HCP HONEYCOMB PANEL SPECIFICATION



Face Panel	<p><i>Material: High-Grade Alloy 3003, 5005</i></p> <p>Thickness: 0.7mm or 1.0mm (other thicknesses available)</p> <p>Other Metal: Stainless Steel, Natural Copper and Titanium-Zinc</p>
Back Panel	<p><i>Material: High-Grade Alloy 3003,5005</i></p> <p>Thickness: 0.7mm or 1.0mm (other thicknesses available)</p> <p>Other Metal: Stainless Steel, Natural Copper and Titanium-Zinc</p>
Core	<p><i>Material: Anti-corrosion honeycomb core</i></p> <p>Thickness: 0.06mm</p> <p>Core Diameter: 12mm or 19mm</p>
Sealant	YEBOND 2053
Surface Coating	PVDF (other coatings available upon request)
Panel Specs	<p>Length: 2500mm &amp; 3200mm (other lengths <math>\leq 10000</math>mm available upon request)</p> <p>Width: 1250mm &amp; 1500mm (other widths <math>\leq 2100</math>mm available upon request)</p> <p>Thickness: 6mm to 50mm</p>
Weight	Approx. 5.00~9.5kg/m <sup>2</sup>
Colour	<p>Solid, Metallic, Wood or Marble design. Spectra, Anodized or Special effect.</p> <p>Matched colour according to RAL or Pantone. Customized colour to meet your design idea.</p>
Fire Standard	AS1530.1

## HCP HONEYCOMB PANEL TEST RESULT

### Items

Modulus of elasticity	69000 (N/mm <sup>2</sup> )
0.2% Proof Stress	115 (N/mm <sup>2</sup> )
Elongation	>3 %
Linear Thermal Expansion	2.3 mm/m @ 100°C temp. difference
Surface Strength	AA 5754A (ALMg3)
Thermomechanical Analyzer (TMA)	-30° ~ 30°C : 28.89x10 <sup>6</sup>
Sound Resistance	<p>Sound Transmission Class: Volume reverberation room</p> <p>10mm – 19dB    25mm – 20dB    Room Absorption – 100m<sup>3</sup></p>

# HCP HONEYCOMB PANEL EDGE



Open Edge



Foiled Edge embedded with Alu profile

## HCP HONEYCOMB PANEL FEATURES

### Fire Resistant

Excellent Producing technology which make the panel's fire-resistant property for use where a Non-Combustible panel is require by the NCC

### Light in Weight

5.0 – 9.5kg/sqm. The light weight honeycomb panel reduces the loading force on a Buildings and Facade, Ceilings, Vehicles, Boats, Caravans and any application.

### Easy to Install

Easy to install for structural stability, good flatness and stiffness with selectively inserting cassette fixing, this adding to the clean finish.

### Sound Reducing

The Honeycomb core is sandwiched with high grade Aluminium sheeting locking the honeycomb cells and the air layer is an airtight space which lock out sound waves and heat temperatures making this product widely used in many industries.

### Design

Honeycomb panel can be cut to any shape, rolled, angled and designed with elegance of Architectural inspiration.

## HCP HONEYCOMB PANEL APPLICATION

Honeycomb panels have good performance, very light weight, high strength, stiffness, structural stability, wind pressure strength, sound insulation, heat insulation, fire resistant, waterproof and shockproof features and decorative highlights.

Application - Honeycomb's strong easy installation is an ideal material for ceilings, interior wall and external wall façade. It is widely used in boats and shipping, caravans, car trailers, the list is endless.

