

# PODELI

## AODELI - PRODUCT SPECIFICATIONS for HCP Honeycomb Panel

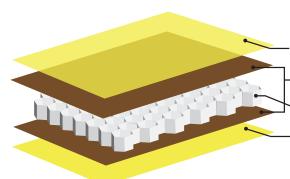


AODELI HCP is oriented from the Aviation industry. It's durable, large span and super flat. HCP also features in fabrication-friendly, multiple surface solutions and colour options. It is widely applied for Architectural area such as façade, roof, partition as well as transportation, voyage and equipment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



Prepainted aluminium sheet or other metal sheet

-Two-componet high temperature curing PU glue

0.06mm thick aluminium honeycomb core

Prepainted aluminium sheet or other metal sheet

## HCP HONEYCOMB PANEL CORE

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

H: total thickness

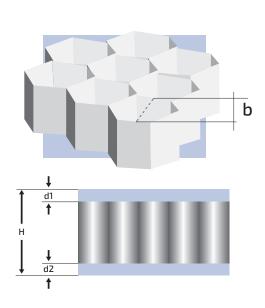
d1: thickness of AL front sheet

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

Material: High-Grade Alloy 3003, 5005

Face Panel Thickness: 0.7mm or 1.0mm (other thicknesses available)

Other Metal: Stainless Steel, Natural Copper and Titanium-Zinc

Material: High-Grade Alloy 3003,5005

**Back Panel** Thickness: 0.7mm or 1.0mm (other thicknesses available)

Other Metal: Stainless Steel, Natural Copper and Titanium-Zinc

Material: Anti-Corrosion Honeycomb Core

Core Thickness: 0.06mm

Core Diameter: 12mm or 19mm

Sealant **YEBOND 2053** 

**Surface Coating** Mill Finish or available in PVDF colour coatings upon request.

Length: 2500mm & 3200mm (other lengths ≤10000mm available upon request) Panel Specs

Width: 1250mm & 1500mm (other widths ≤2100mm available upon request)

Thickness: 6mm to 50mm

Approx. 5.00~9.5kg/m2 Weight

Solid, Metallic, Wood or Marble design. Spectra, Anodized or Special effect.

Matched colour according to RAL or Pantone. Customized colour to meet your

design idea.

Fire Standard AS1530.1

Colour

## HCP HONEYCOMB PANEL TEST RESULT

#### Items

Modulus of elasticity 69000 (N/mm2)

0.2% Proof Stress 115 (N/mm2)

>3 % Elongation

2.3 mm/m @ 100°c temp. difference Linear Thermal Expansion

Surface Strength AA 5754A (ALMg3)

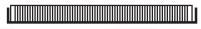
Thermomechanical Analyzer (TMA) -30° ~ 30°C : 28.89x106

Sound Resistance Sound Transmission Class: Volume reverberation room

> 10mm – 19dB 25mm – 20dB Room Absorption – 100m3

## HCP HONEYCOMB PANEL EDGE







Open Edge

## 



Foiled Edge embedded with Alu profile

## **HCP HONEYCOMB PANEL FEATURES**

Fire Resistant Excellent Production Technology which makes 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 buildings and facades, 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.



