

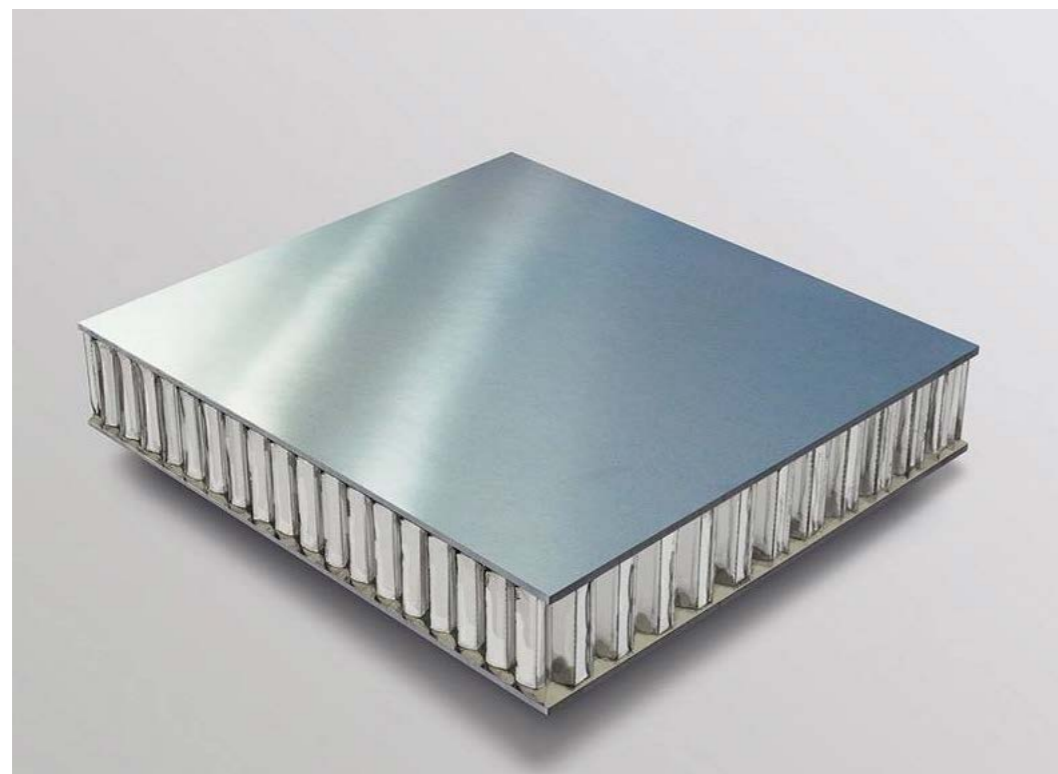
HONEYCOMB

Aluwedo Aluminium Honeycomb Panels consist of two aluminium face sheets enclosing a hexagonal honeycomb aluminium core.

This innovative structure produces a lightweight panel featuring an incredibly flat surface with both heat and sound proof properties.

The strong core structure and smooth surface makes our Honeycomb panels the preferred choice for professionals in façade cladding, interior design, partitioning, vehicle building and many other industries.

Our Honeycomb panes offer outstanding reliability, excellent strength and impressive fire retardant properties. These attributes combined produce first-rate performance and a quality result time after time.



PROCESSING



Screen Printing/ Laminating

Honeycomb panels will produce professional results with suitable screen printing inks and laminating materials



Routing

Honeycomb can be easily routed on conventional routing machines and CNC machining centres.



Rolling

Honeycomb panels of 6 and 10mm thickness can be bent using a three and four-roll bending machine



Folding

Honeycomb can be folded on a bending press.



Lacquering

Honeycomb can be lacquered although it is advisable to be familiar with coating systems and materials



Drilling

Honeycomb can be drilled with twist drills normally used for aluminium



Sawing

Tooth thickness approx. 2 - 4 mm, tapered to the side to prevent jamming



ALUWEDO®
ALUMINUM COMPOSITE PANEL

PROPERTIES FOR HONEYCOMB

Thickness mm	6	10	15	20	25
Front sheet thickness mm		1.0		1.0	
Reverse sheet thickness mm		0.5		1.0	
Width mm	1000; 1220; 1250; 1500				
Length mm	Any Length				

TECHNICAL PROPERTIES

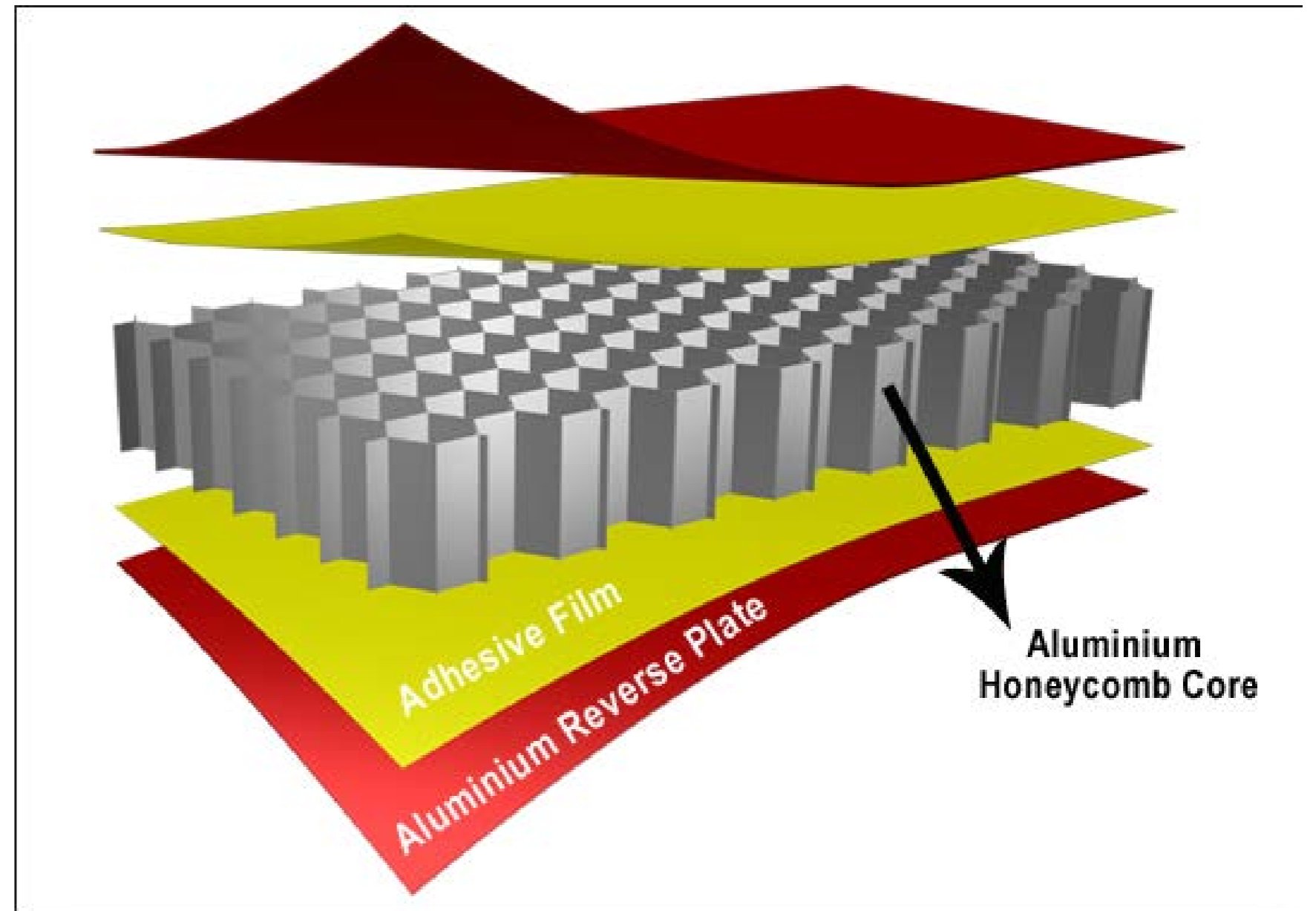
Section modulus W (cm ³ /m)	2.6	4.6	14.0	19.0	24.0
Rigidity E-I (kNcm ² /m)	7100	21900	75500	138900	221600
Modulus of Elasticity (N/mm ²)	70000				
Linear Thermal Expansion	2.4mm/m at 100°C temperature difference				
Surface Pencil hardness	HB - F				

ACOUSTICAL PROPERTIES

Sound Absorption Factor	0.05				
Airborne sound insulation index (acc. to ISO 717-1, ISO 140-3)	21	21	22	23	25

THERMAL PROPERTIES

Thermal conductivity (W/mK) (dependant on total panel thickness)	21	21	22	23	25
Thermal resistance (m ² K/W)	0.0063	0.0074	0.0084	0.0089	0.0093
Heat transition coefficient (W/m K)	5.67	5.64	5.605	5.59	5.575
Temperature Resistance	-40 to +80°C				



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HONEYCOMB INFORMATION

EXCELLENT STRENGTH

The unique Honeycomb structure features many interconnecting shapes creating a very strong panel, resistant to adverse weather conditions and other pressures.

EXCEPTIONALLY FLAT SURFACE

The aluminium surface panel is supported by the unique Honeycomb vertical cell structure therefore producing an exceptionally flat panel, available in various colours.

LIGHT WEIGHT

Unlike other composite panels featuring a solid core, the Honeycomb structure in our panel dramatically reduces the weight of the finished product.

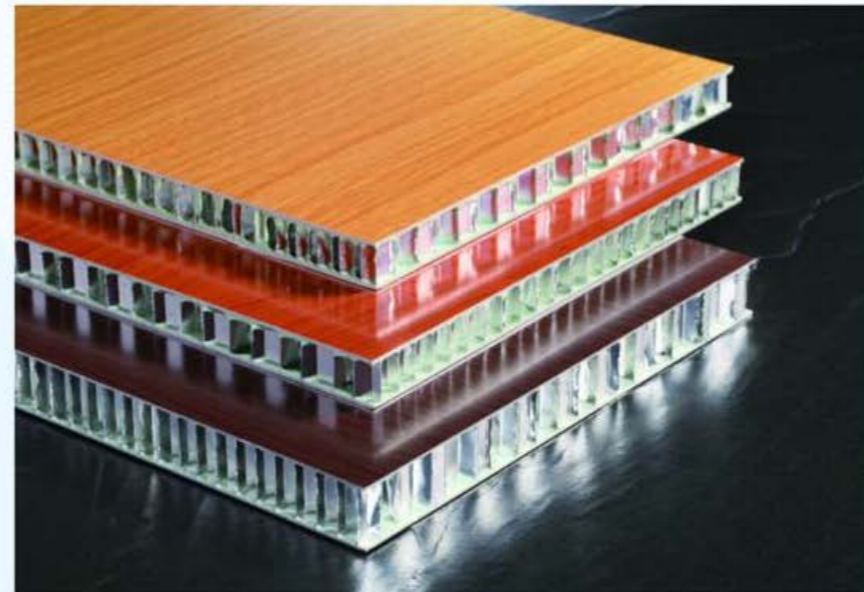
FIRE RETARDENT

The Honeycomb panel is made solely of Aluminium and can therefore prevent fire spreading and increase the safety index.

INSULATING AND SOUND PROOF

The Honeycomb structure absorbs sound well and can be used in sound damping and sound proofing applications. The structure will also act as a insulating material.

—ALUMINUM HONEYCOMB PANEL



For all fixing applications please refer to the thermal and physical properties detailed previously



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