



# ALCLAD®

## 1. Product Name: ALUMINUM HONEYCOMB PANEL (AHP)

**Manufacturer:**  
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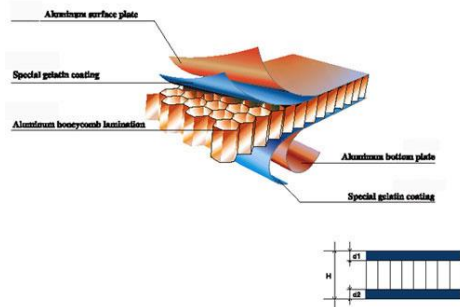
## 2. Product Description

### BASIC USE

ALCLAD® AHP is a lightweight, rigid and durable aluminum composite material, it's high structural stability gives you incredible smooth surface and pressure resistant (wind load resistant), widely used as interior and exterior wall cladding, aviation material, vehicle body coverage, ocean projects and so on.

### COMPOSITION & MATERIALS

ALCLAD® AHP consists of a core of aluminum honeycomb bonded to face sheets, DuPont (America) or Henkel (Germany) adhesives as bonding layer, fabricated of aluminum alloy, coated by more than 70% PVdF color coating.



### TYPES

Several types of AHP panels are available including:

- ≠ ALCLAD® standard flat panel
- ≠ ALCLAD® curved panel
- ≠ ALCLAD® Stone finish honeycomb panel
- ≠ ALCLAD® Stone honeycomb panel
- ≠ ALCLAD® Steel honeycomb panel

ALCLAD® AHP Curved panels and double face curved panels made by the world's advanced technology, have been widely used in the wall cladding these years.

ALCLAD® SAHP consists of a core of aluminum honeycomb bonded to perforated aluminium sheets backed with sound absorption layer, back side coated by polyester for protection purpose.



### FINISHES

- ≠ PPG INDUSTRIAL COATINGS
- ≠ BACKER INDUSTRIAL COATINGS
- ≠ VALSPAR INDUSTRIAL COATINGS

Standard ALCLAD® AHP with KYNAR 500® or HYLAR5000® Polyvinylidene Fluoride (PVDF) finishes is available in wide range of colors and a broad spectrum of gloss levels, from 15 - 35%. For high spectrum of gloss levels of more than 60%, please contact the manufacturer for details.

Contact our sales department for minimum quantities and availability.

Complete custom color matching, available in each industrial coatings, is subject to minimum order quantities.

### SIZES

ALCLAD® AHP panels are available from 8mm to 30mm thicknesses in standard widths of 1220mm, 1250mm and 1500mm and in standard lengths of 2440mm, 2500mm, 5000mm.

A range of custom sizes is available:

- ≠ Width : 800mm- 1500mm
- ≠ Length : 800mm-5000mm

### 3. Technical Data

#### APPLICABLE STANDARDS

- > ASTM: American Society for Testing and Materials.
  - > DIN: German Industrial Standard.
  - > GB: Chinese National Standard.
- Details please refer to our Mechanical and Physical property.

### SHAPES & FABRICATION

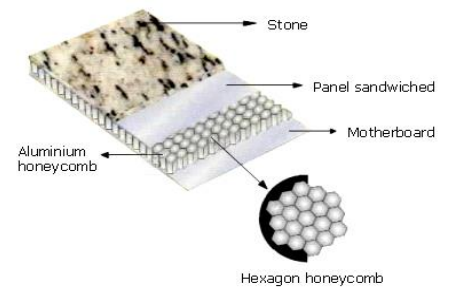
ALCLAD® AHP panels can be cut, routed and formed with conventional woodworking tools. Angle bends are formed by routing the back of the panel prior to shaping. The common pan shape is formed by routing the back edges, trimming the corners and bending and reinforcing the edges.

Pre-shipment fabrication is available in the factory, for large quantity to be fabricated, please contact our sales department.

Details of on site fabrication, please refer to our Material Processing Manual.

### 4. ALCLAD® Stone honeycomb panels

ALCLAD® SHP consisting of natural marble or granite stone face (approximately 3-5mm) bonded to AHP, SHP preserved the natural appearance of the stone face, has overcome the fragility and heavy weight of the real stone.



- Maximum size: 800mm × 2000mm
- Temperature range: -35°C to 80 °C
- Bending strength: ≥ 17.8Mpa
- Wind load resistant: >10KN/m²
- Sound Insulation: 32dB
- 15mm SCP Panel weight: 3.54lb./sq. ft., 17.3kgs/sqm

Shape & fabrication can only be done by special equipment in factory. Please contact our sales department for details.

### 5. Installation

ALCLAD® AHP can be attached to one another or to other materials by conventional methods of attachment - rivets, bolts or screws. For edge covered panels, please contact our sales department for pre-shipment treatment.

### ALCLAD® Sound absorption AHP (SAHP) ALUMINUM HONEYCOMB PANEL (AHP)

IN CONFIRMATY TO QUALITY MANAGEMENT SYSTEM STANDARD GB/T 19001-2000/ISO9001-2000, GB/T24001-2004 IDT ISO 14001:2004 STANDARD





**6. Pricelist:**

Contact our sales department for price, or through our agents.

**7. Packing Terms.**

Fully loading packing in one 20' container:  
400 pcs of 10mm AHP, size of 1220mm by 2440mm.

Fully loading packing in one 40' container:  
800 pcs of 10mm AHP, size of 1220mm by 2440mm.

Otherwise please contact sales department for more details.

**8. Delivery Time:**

The date of the delivery is depend on your order quantity, please contact our sales department for details.

**9. Warranty**

We guarantee when correctly mounted and properly operated and maintained, shall give satisfactory performance for a period of 20 years counting from the date on which the commodity delivered from the company.

Details please refer to our Certificate of Quality Guarantee

**10. Maintenance**

PVDF is a long-term, maintenance-free finish. Under normal exposure and use, it is self-cleaning through rain washing. Water flush or power washing with a mild deter-gent is recommended to remove heavy soil.

**11. Technical Services**

Contact ALCLAD® for technical assistance with design and specification or for the name of a nearby representative.



AHP PHYSICAL PROPERTIES

Properties	Test value
Aluminum thickness, in (mm)	1.0
Weight, in (lb./sq. ft.   kg/sq. m.)	1.37   6.67
Coefficient of expansion, (mm/mm/°C)	2.36x10 <sup>-5</sup> C <sup>-1</sup>
Rigidity of 10mm AHP (kNm <sup>2</sup> /m)	2.16
Peeling strength (N/mm)	10.8
Shearing strength (Mpa)	3.64
Shearing elastic modulus (Mpa)	10.8
Thermal resistance:	-40°C to 80°C
Average airborne sound (dB)	29
Film thickness ( E.C.C.A T1,27μ) (μ)	28
Coating flexibility ( E.C.C.A T7,T=1) (ASTM D 4145-83, T=1) (T)	1



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