

# ALUMINUM COMPOSITE PANEL

### **ACP Panel**

ACP is a composite panel consisting of two aluminum cover sheets and a polyethylene (LDPE) core. The properties of this material offer architecture an inspiring new range of solutions — whether your project is a private home or a public building, corporate headquarters, office, or a trading/industrial complex — everything is possible with our ACP. Available in a wide range of colours. Our Aluminium Composite Panel is extremely rigid, yet can be formed into many shapes to suit any design.

It is also used extensively by organizations planning to create a new corporate design for retail chains, car showrooms, banks, petrol stations, etc.

Since the company was founded, the enterprise has been certified by ISO9001:2008 International Quality Management System, ISO14001:2004 International Environment Management System, OHSAS18001:2001 Occupation Health Safety Management System, and the products quality get approvals of CE, The products have been approved by SGS Fireproof Grade B1, and excellently approved by the sampling inspections by China Building Material Testing Center and China Quality Supervision & Testing Center, the Insurance Company PICC insure for our products. The quality and marketing of our products have been upgraded to a higher level.

Choose us, Choose Future!





# **Production Machines**















# Aluminum Coil Coating





# Aluminum Coil Warehouse





# Warehouse and Packing





### **Our Certificate**

# CERTIFICATE





# **Quality Test**

### **Quality Assurance**

From the material outsourcingtothe production of semifinished products and to the packaging and release of products, Technology is provided with the first-rate testing center of China for the control over every link to stop unacceptable products from flowing into the market.





### **Research and Development**



#### **Technical** Expertise



# **Material Information Sheet**

Popular Width Size	Panel thickness	Aluminum thickness
1000/1220/1250/1500/2000mm	2mm	0.05-0.20mm
1000/1220/1250/1500/1525/2000mm	3mm	0.10-0.30mm
1000/1220/1250/1500/1575/2000mm	4mm	0.20-0.50mm
1220/1500mm	5mm	0.20-0.50mm
1220/1500mm	6mm	0.20-0.50mm
1220/1500mm	7mm	0.35-0.50mm

Another 8mm ,10mm, 12mm etc, Max 15mm.

Length can make as your demand, such as 2440mm,3660mm,4880mm,5000mm,6000mm etc,Max as 11500mm.

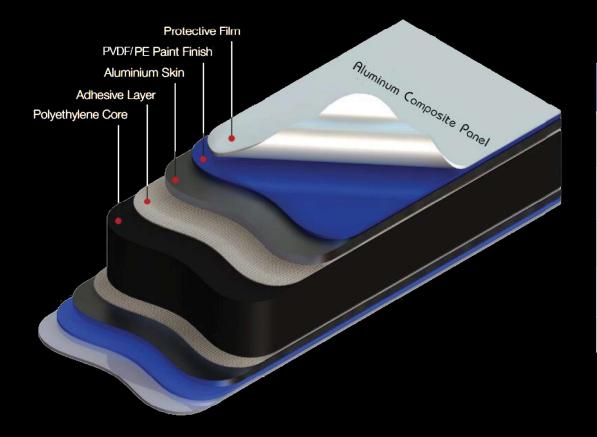
Color: our color card or Sample matching or RAL, Pantone etc.

MOQ: 50 sheets in one normal color if in stock, welcome to contact for inquiry.



### **ALUMINUM COMPOSITE PANEL STRUCTURE**

Composite panel has a three layer composite structure, The top and bottom layers are covered aluminum sheet. The middle core is low-density polyethyliene. Panel is painted in colour of choice



Coating	PE/PVDF/Nano/FEVE		
Protection film	OEM/Aludream/Neutral		
Aluminum Skin	0.10/0.20/0.30/0.40/0.50mm		
Middle Core	LDPE/B2,B1Fireproof/A2 FR		
Back side	Primer/PE/PVDF		
Can make Special Demand			

### **Aluminum Composite Panel Coating kinds**

#### 1.PE(polyester) Coating

PE coating is an UV-resistant coating. It can be classified matte and glossy according to coating gloss. The compact molecule structure, makes paint surface luster and smooth, which assure good printing on the panel surface.

With an warranty of 8-10 years for weather resistance, it is specially applied for internal decoration, signage and shop front etc.









#### 2. PVDF Coating

PVDF it is made of fluorine carbon resin, pigment, ester solvent, after high temperature roasting and baking, the paint is solidified to dry film with super weather resistance. PVDF coating also can be classified as traditional PVDF and nano PVDF coating.

- . Traditional PVDF coating, it is with KYNAR500 PVDF, two or three times for coating and baking, has good properties of anti-acid, anti-alkali and is durable in atrocious weather and environment, keeping 15 years no unwonted fading. In view of these facts, we recommend this panel applied for exterior wall cladding.
- . Nano PVDF coating, it is different with traditional PVDF is the clear coating. It contains nano element, which can protect panel from pollution, because nano has self-cleaning effect, It easy to get rid of dust and pollution by raining or water.



**PVDF** Coated ACP



#### 3. Nacreous coating

Nacreous coating is formed by adding one more layer of nacreous paint on the basis of high-quality PE coating, and the surface glossiness is around 90°. The combination of glossy coating and nacreous coating makes the panel surface brilliant when the light irradiate on the panel. Premium material particularly applied to curtain wall construction, indoor as well as outdoor decoration, exhibition display, shop front, cabinet etc. It is an excellent choice for the places which highly demand the surface glossiness. The weather resistance tenor is eight to ten years.

#### 4. Other Special colors coating

- ① Brushed panel. It has silver, gold, brown brushed etc.
- ② Granite panel.
- 3 Mirror finish panel.silver, gold and black mirror are popular.
- 4 Wood finish panel.



#### **Product Features**

#### 1.ECONOMY

With the use of quality coating, aluminum-plastic panels are dispensed with longtime maintenance, thus having saved the maintenance expenditures of modem high-rise constrictions. Due to the serious pollution in cities in our country, they may need to be maintained and cleaned several years later. Being easily cleanable, they can be cleaned by neutral cleaning agent and clean water, and come out to be fairly new after cleaned.

#### 2.DURABILITY

Fluorocarbon coated aluminum plastic composite panels are featured by high durability, good resistance against weather, high temperature, wear and pollution etc.

#### 3.FLATNESS

Aluminum plastic composite panels are given smooth surface to meet the top-grade enjoyment of modem constructions.

#### 4.LIGHT WEIGHT

Aluminum plastic composite panels are composite of aluminum and plastics, which is lighter than other decorating materials, thereby to facilitate the installation work and shorten the construction period.

#### 5. EASYINSTALLATION

Aluminum plastic composite panels can be easily cut, grooved, and bent into arc or rightangled shapes to meet the requirements of decoration.

#### 6.NON INFLAMMABLE

The non inflammable external aluminum sheets offer protection to polyethylene core material, and cut off heat conduction in the initial stages of combustion, with flame resistance up to international standard.

#### 7. DESIGN PERFORMANCE

If requested by customers, aluminum-plastic panels can be made to different colors.

#### 8. ENVIRONMENTAL - FRIENDIY

No changes in surface coating, no pollution to the environment.

### **Technical Properties**

Thi	ickness		2mm	3mm	4mm	5mm	6mm
Aluminum skin		[mm]	0.	20		0.50	
Weight		[kg / m <sup>2</sup> ]	2.60	4.0	4.68	6.55	7.60
Section modulus	W	[cm <sup>3</sup> / m]	0.91	1.25	1.75	2.10	2.75
Rigidity	EJ	[kNcm <sup>2</sup> /m]	880	1250	2400	3250	5900
Width (standard s	ize)	[mm]		12	220 / 1250 /	1500	

### Mechanical Properties of Aluminum Cover Sheets:

Alloy		A1100/A3003
Modulus of elasticity	•	7,000 kg / mm2
Tensile strength of cover sheets	[N/mm <sup>2</sup> ]	Rm ≥ 130
Proofstress	[N/mm <sup>2</sup> ]	Rp0.2≥90
Elongation		A50 ≥ 5%
Linear expansion		2.4mm/m at 100°C temperature
Yield strength		15.5 kg / mm2

# **Physical Properties:**

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	Test Value	
Bending strength	119 Mpa	
Bending modulus of elasticity	3.48 x 10 <sup>4</sup>	
Penetrating resistance	9.9KN	
Shearing strength	32.8Mpa	
180° peel strength	11.4N / mm	
Thermal expansion coefficient	1.6 x 10 <sup>-5</sup>	
Temperature of thermal	112 °C	
Temperature resistance	-40 °C to +80 °C	

### **Application**

- Signage
- Advertising Boards
- Exterior Cladding
- Metal Facades
- Interior Decoration
- Industrial Usage
- Architechture











# **Aluminum Composite Panel Projects**













### **ACP Solid/Metallic Color Chart**



### ACP Glossy/Special Colors



### **ACP Marble/Wooden Color**



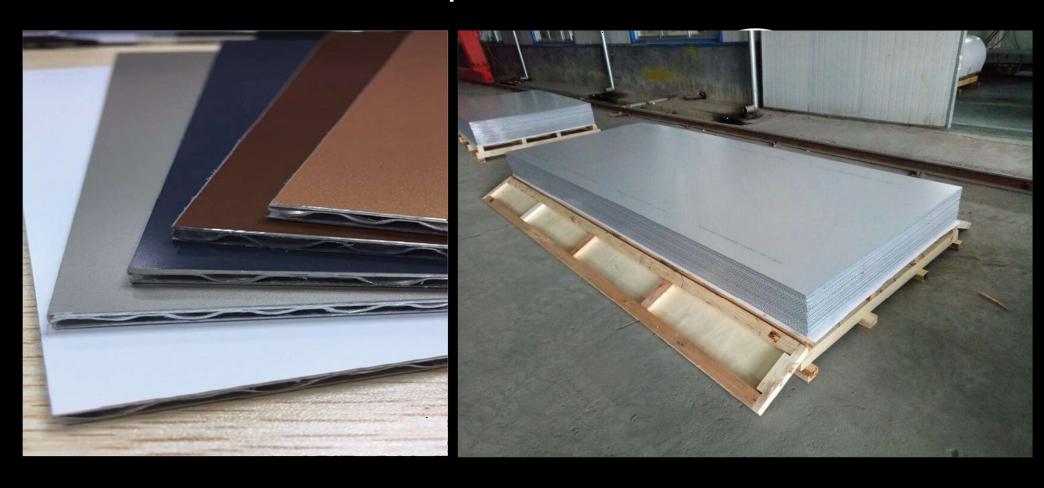


### **Customized Color-RAL/PANTONE/MATCH AS YOUR SAMPLE**





# A2 FR Aluminum Lattice Composite Panel



# **Aluminum Honeycomb Panel**





# Aluminum Sheet











# Mill finish Aluminum Coil





### **Color Coated Aluminum Coil**













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