

PRODUCT CATALOGUE

HUARUI HONEYCOMB TECHNOLOGY CO.,LTD

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HUARUI HONEYCOMB TECHNOLOGY CO.,LTD

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Post-coated honeycomb panel	Fiberglass honeycomb panel
Stone honeycomb panel	Mill finish honeycomb panel
Porcelain honeycomb panel	Anti-slip honeycomb panel
Anodized honeycomb panel	HD Wood/stone pattern honeycomb panel

7 HONEYCOMB PANELS APPLICATIONS

Architecture Building	Marine
Furniture	Flooring
Commercial Cabinet	Rooftop Cargo Carrier



As an industry leader in aluminum honeycomb technology, we are dedicated to making increasingly eco-friendly products with this material. We utilizing the latest honeycomb technology to achieve ultra-lightweight tables, durable cabinets, sturdy rooftop tents, interior and exterior modular wall cladding.

COMPANY PROFILE

Huarui Honeycomb is an ISO9001:2015, ISO14000, ISO45001 and IMO MED certified company located in Foshan city, Guangdong province. We are the leading manufacturer of aluminum honeycomb and honeycomb composites in Southern China. We have been supplying quality materials and solutions for many industries such as construction, vehicle, railway, marine, aviation, furniture, military and so on since 2009.

PRODUCTS :

aluminum honeycomb core, steel honeycomb core, aluminum honeycomb panel, stone honeycomb panel, aluminum foam, modular wall panels

PRODUCTION EQUIPMENT :

10 production lines of aluminum honeycomb
2 automatic aluminum honeycomb panel production lines

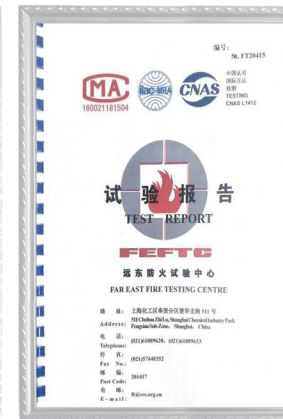
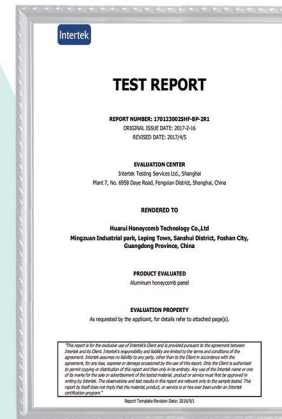
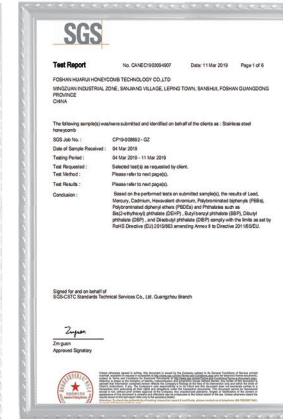
R & D CAPABILITIES :

An engineering center and laboratory



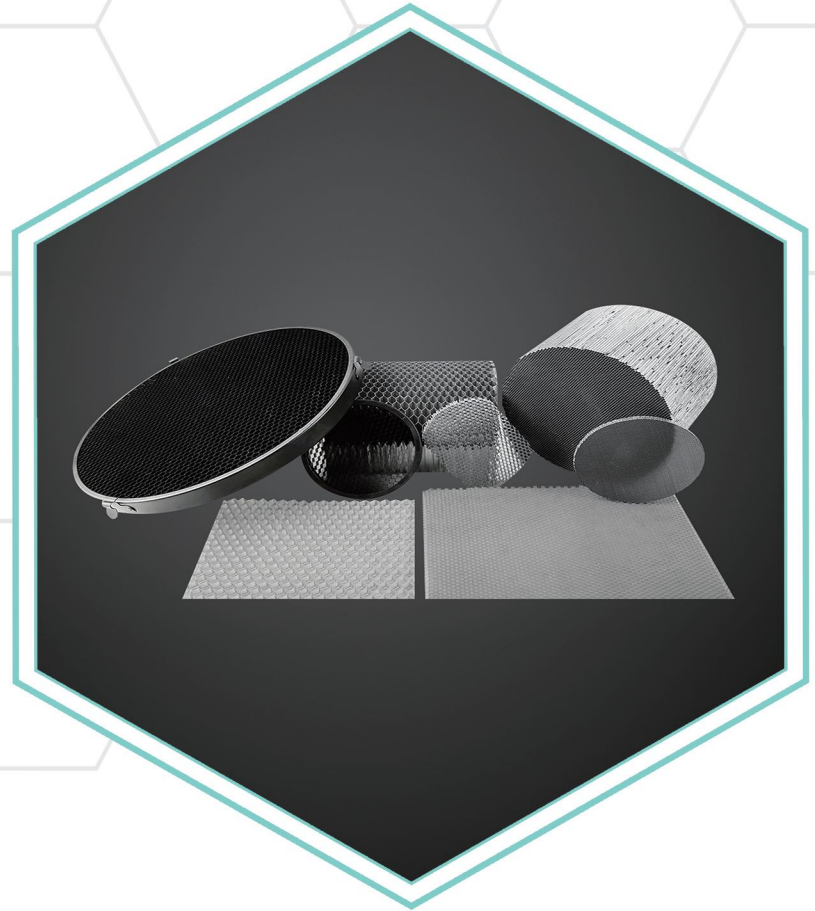
CERTIFICATION

Based on the ISO9001 system, Huarui promotes the continuous improvement of enterprises, production conditions, management methods, and living environment, continuously improves research and development capabilities, and further enhances market competitiveness.



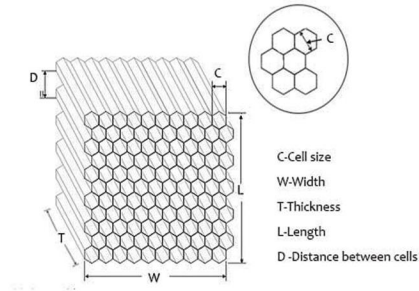
Aluminum

Honeycomb

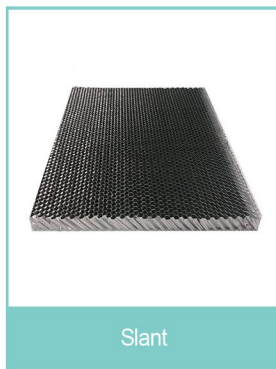
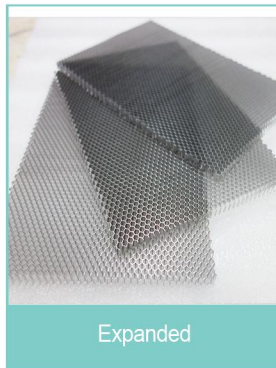


ALUMINUM HONEYCOMB CORE

Aluminum honeycombs are made by bonding aluminum foil, and the properties can be controlled by changing the foil thickness and cell size.



SUPPLY CONDITIONS



SPECIFICATION: ALUMINUM ALLOY:3003H18,5052H18

Micro-aperture honeycomb						
Cellsize available						
	1/30"	1/25"	1/10"	1/8"	1/6"	1/5"
	0.87mm	1.04mm	2.6mm	3.17mm	3.47mm	5.2mm
Alu foil thk(mm)	0.025, 0.03	0.025, 0.03	0.04, 0.05, 0.06		0.04, 0.05, 0.06 0.07, 0.08, 0.1	

Reguar honeycomb						
Cellsize available						
	1/4"	1/3"	1/2"	3/4"	4/5"	1"
	6.35mm	8.47mm	12.7mm	19.05mm	20.32mm	25.9mm
Alu foil thk(mm)	0.04, 0.05, 0.06, 0.07, 0.08, 0.1					

Aluminum honeycomb is used in a number of applications.

EMI shielding

Energy absorber

Filter and purification

Lighting

For composite panel

Aerospace

Steel Honeycomb



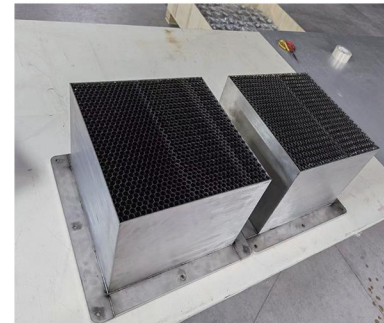
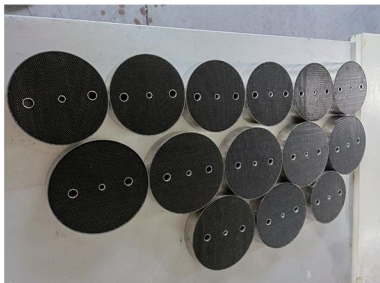
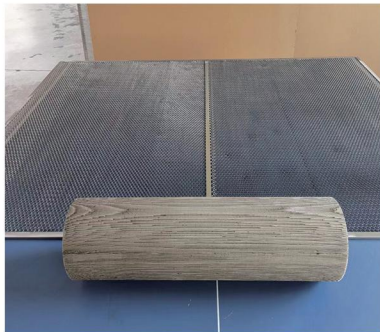
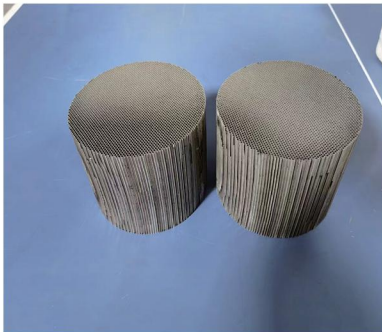
STEEL HONEYCOMB

Steel honeycomb produce one of the important emerging material with excellent performance, unique structure and resource saving. Due to its special structure and performance, it has been widely used in aerospace, powder, petrochemical, transportation, electronics and other high end industry.

Our steel honeycomb is laser spot welded and optionally can be further soldered to increase the shielding defectiveness when application requires.

FEATURE

- Corrosion and moisture resistance
- Fungi resistance
- Fire resistance



SPECIFICATION

- Material: Mild steel/Carbon steel, SUS304 stainless steel, SUS316 stainless steel, HX
- Cellsize: 1.6, 3.2, 6.9, 5.2, 10, 20
- Core thickness(mm): 5-80
- Standard size(mm): 300x300, 600x600, 900x900, 1200x1200, 1200x2400
- Standard thickness(mm): 6.35, 12.7, 25.4, 30, 40, 45
- Wall thickness: 0.08mm, 0.13mm, 0.15mm

Aluminium

Metal Foam



ALUMINUM FOAM

Aluminum foam is an engineering material with the properties of metal and air bubbles. Aluminum foam is divided into two structural forms: open cell and closed cell.

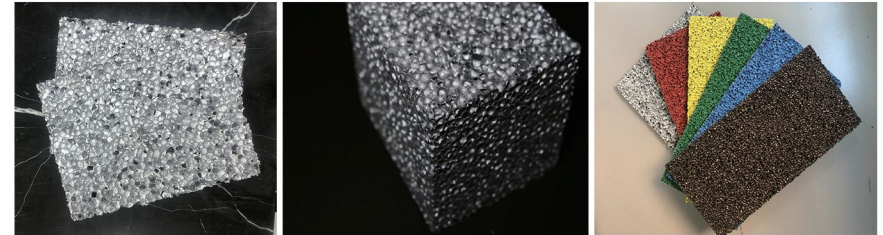


SPECIFICATION

- Pore diameter: 3-8mm
- Density: 0.2-0.6g/cm³
- Size availability: 520*520, 1000*2000, 1200*600

- Acoustic absorption coefficient NRC: 0.7
- Fire-proof level: A1
- Sound absorption (1000Hz -2000Hz): 40% ~ 80%
- Compressive strength: 3-10Mpa
- Specific stiffness: 1Gpa/gcm³

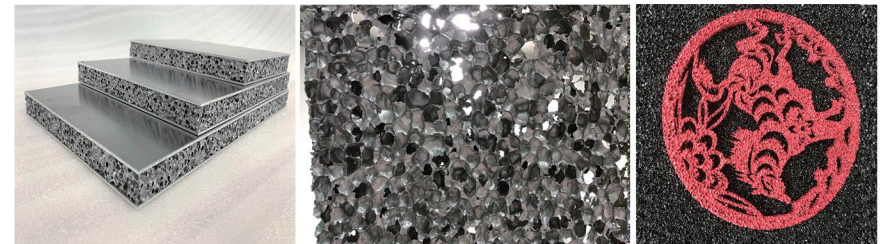
Depending on the manufacturing process, aluminum foam can deliver different levels of texture, transparency, brightness, and opacity.



Open cell

Close cell

Color



Sandwich panel

Translucent aluminum

Shaped

FEATURE

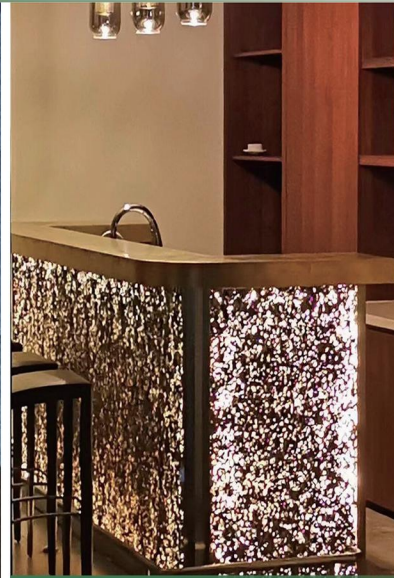
- Lightweight
- High specific stiffness
- Excellent sound insulation
- Good thermal properties
- High damping and shock absorption performance
- Excellent electromagnetic shielding performance

ALUMINUM FOAM IN ARCHITECTURE

Aluminum foam have the advantages of light weight, fireproof, and noise reduction, it can be used for architectural decoration, including exterior walls, interior walls, ceilings, floors and stairs.



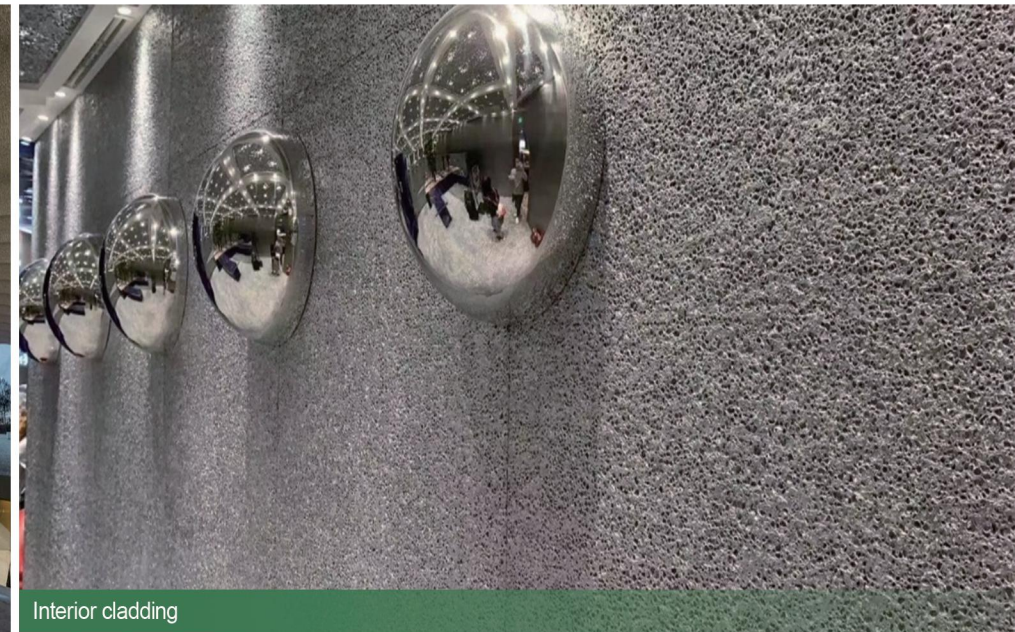
Exterior cladding



Translucent decoration

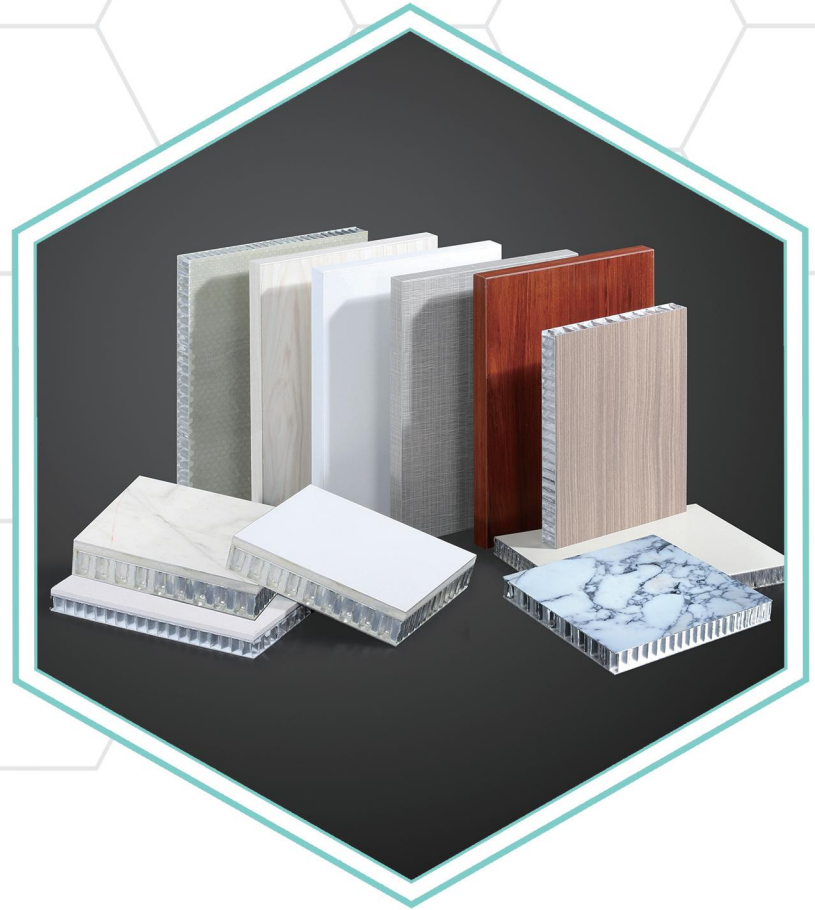


Ceilings

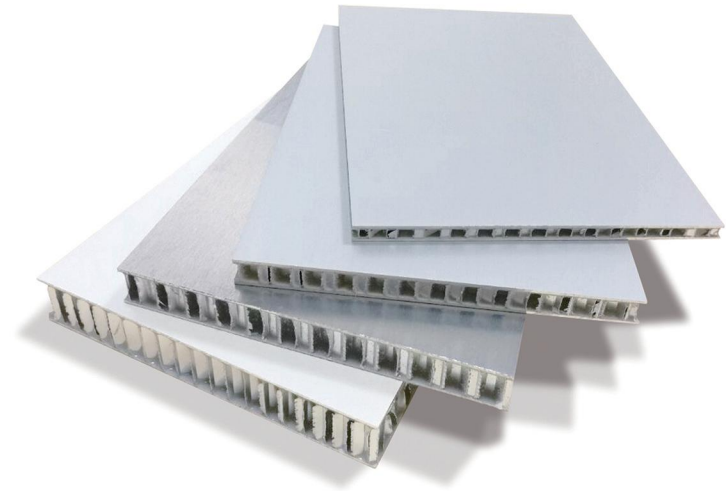
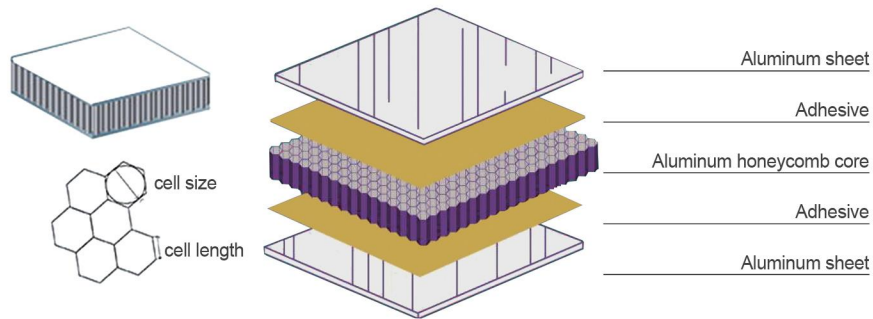


Interior cladding

Honeycomb Panel



HONEYCOMB PANEL STRUCTURE



Faced sheets	aluminum, fiberglass, carbon fiber, zinc, HPL, galvanized sheet, stainless steel	→	PVDF coating/painting, wood pattern, stone pattern, powder coating, anodized, mirror finish, printing
Adhesive	Adhesive film, Epoxy, Polyurethane	→	Working temperature: 1)-40°C to 117°C for general application 2)-40°C to 200°C for high temperature working conditions
Honeycomb	aluminum honeycomb AA3003H18, AA5052H18	→	Standard cell size: 1/4", 3/8", 1/2"

CPL/HPL HONEYCOMB PANEL



Finish: HPL/CPL

Standard thickness: 13mm, 18mm

Furniture or floors with CPL or HPL coatings are not only easy to care for, but also extremely durable, thus perfectly protected against minor impacts and abrasion. Surfaces with these coatings are also solvent-resistant, heat-resistant, smudge-proof and scratch-resistant.

Honeycomb cell size: 1/5"

Standard size: 1200x 2420, 1200x3000mm

Panel edge: ABS/PVC edge banding

Temperature resistance: -40°C -90°C

Color/pattern: refer to our color chart

POST-COATED HONEYCOMB PANEL

This honeycomb panel is sandwich structured composites comprising of aluminum honeycomb core and two skin sheets in mill finish, bonded together by aviation grade adhesive film that can resistant temperature up to 200 °C. The panel can be processed to custom size and special shape, as well as be welded and sanded to meet the industry design. It is finally powder coated to individual color regardless of quantity demand.



Finish: Powder coated

Standard thickness: 13mm, 20mm

Honeycomb cell size: 1/4"

Max size: 1200x4000mm

Panel edge: solid aluminum

Temperature resistance: -40°C -200°C

PRE-COATED HONEYCOMB PANEL



Color: solid color, wood pattern, stone pattern

Thickness of coating: 25um

Standard thickness: 10mm, 15mm, 20mm, 25mm

Temperature resistance: -40°C-110°C

The panel is an aluminum composite panel comprising of a non-combustible aluminum honeycomb core sandwiched between two aluminum alloy skins.

The front skin is always finished with Fluorocarbon or polyethylene coating applied through a continuous coil coating process that ensures uniform paint layers at all times, with virtually no shade variation whatsoever to deal with.

Max size: 1600x6000mm

Panel edge: open edge or closed edge

Honeycomb cell size: 1/4", 3/8", 1/2"

FRP HONEYCOMB PANEL

The fiberglass honeycomb panel is made of fiber skins impregnated with epoxy resin and aluminum honeycomb core in between. They are with excellent application performance in decorative construction, automotive, marine industries. It is also widely used as a substrate panels to provide full size support for lightweight stone panels.



Finish: rough, or gel coated

Standard thickness: 10mm, 20mm, 30mm, 40mm

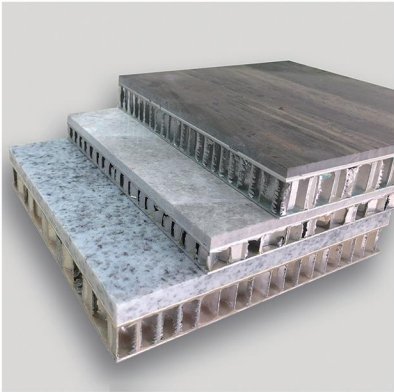
Honeycomb cell size: 1/4", 3/8"

Max size: 2500x4000mm

Panel edge: open edge (saw cut)

Temperature resistance: -40°C -90°C

STONE HONEYCOMB PANEL



Finish: marble, granite, onyx, limestone, travertine, sandstone

Stone honeycomb are composite panels made up of a thin natural stone veneer reinforced with aluminum honeycomb or fiberglass honeycomb backing. The stone veneer can be made from almost any stone available on the markets.

Thickenss of the stone veneer:

3mm -8mm

Standard thickness:

10mm, 15mm, 20mm, 25mm

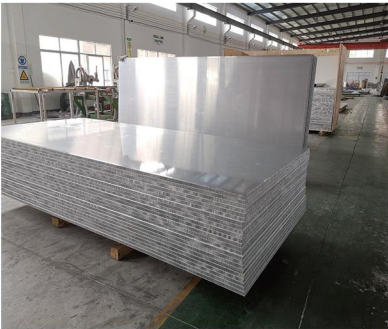
Honeycomb cell size: 1/4"

Max size: 1500x3000mm

Panel edge: open edge or solid stone

Temperature resistance: -40°C -90°C

MILL FINISH HONEYCOMB PANEL



Color: solid color, wood pattern, stone pattern

Thickness of coating: ≥25µm

Standard thickness: 10mm, 15mm, 20mm, 25mm

Temperature resistance: -40°C -110°C

The panel is an aluminum composite panel comprising of a non-combusible aluminum honeycomb core sandwiched between two aluminum alloy skins.

The front skin is always finished with Fluorocarbon or polyethylene coating applied through a continuous coil coating process that ensures uniform paint layers at all times, with virtually no shade variation whatsoever to deal with.

Max size: 1600x6000mm, 2000x3000mm

Panel edge: open edge or closed edge

Honeycomb cell size: 1/4", 3/8", 1/2"

PORCELAIN HONEYCOMB PANEL



Finish: porcelain, ceramic

Thickness of the porcelain veneer:

3mm -5mm

By taking sheets of porcelain veneer (between 3-5mm) and gluing it over the top of honeycomb panel, we can create an ultra-lightweight panel that is impact resistant, quick to install, incredibly durable and outstanding choice for interior or exterior cladding.

Standard thickness:

10mm, 15mm, 20mm, 25mm

Honeycomb cell size: 1/4"

Max size: 1600x3000mm

Panel edge: open edge

Temperature resistance: -40°C -90°C

ANTI-SLIP HONEYCOMB PANEL

The anti-slip honeycomb panel is made of 2mm anti-slip aluminum sheets with aluminum honeycomb core. The panels are used as floor and stage where high mechanical properties are required. It is widely used for ramps, lifts, truck and clean room floor.

Finish: mill finish, powder coated, or anodized

Honeycomb cell size: 1/5", 1/4", 3/8", 1/2"

Standard size: 1200x2400mm

Panel edge: closed edge

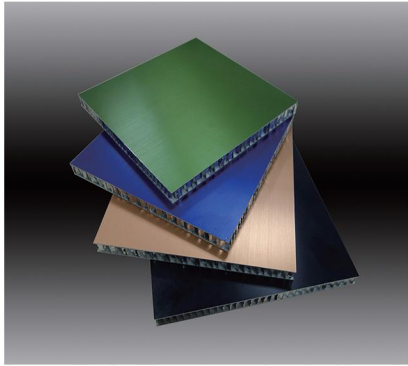
Temperature resistance: -40°C -90°C



Standard thickness:

10mm, 20mm, 30mm, 40mm

ANODIZED ALUMINUM HONEYCOMB PANEL



Finish: anodizing

Thickness of anodizing: 15-25µm

Anodizing is a highly effective and desirable means of finishing aluminum. Anodizing offers a large number of gloss and color alternatives while allowing the metallic appearance of the extruded aluminum to show through.

Standard thickness:

10mm, 15mm, 20mm, 25mm

Honeycomb cell size: 1/4", 3/8", 1/2"

Max size: 1600x6000mm

Panel edge: open edge

Temperature resistance: -40°C -90°C

HD WOOD/STONE PATTERN HONEYCOMB PANEL



Finish: wood pattern, stone pattern

Thickness of coating: ≥25µm

We create our wood/stone series finishes by advanced fluoropolymer finish coating technology in an aluminum honeycomb composite panels.

The wood/stone grain panels provide the outstanding natural appearance and real touch you're looking for, along with the outstanding performance and value.

Standard thickness: 10mm, 15mm, 20mm, 25mm

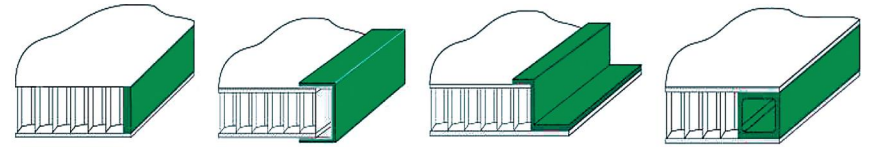
Honeycomb cell size: 1/4", 3/8", 1/2"

Max size: 1600x6000mm

Panel edge: open edge or closed edge

Temperature resistance: -40°C -110°C

EDGE CLOSURE DESIGN

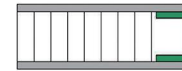


Edge Filler

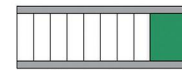
U Channel

Z Section

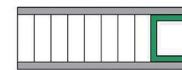
Extruded box



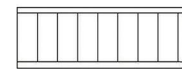
Legs in Channel edge, this option is great for strength and weight sensitive panels.



Solid edge enclosure comes in aluminum and wooden, this edge solution is common when drilling and tapping of.



Legs out Channel edge, this option allows us to square panels to final size.



Press Brake bend, this option is used commonly for walls and ceilings.

Honeycomb panel application



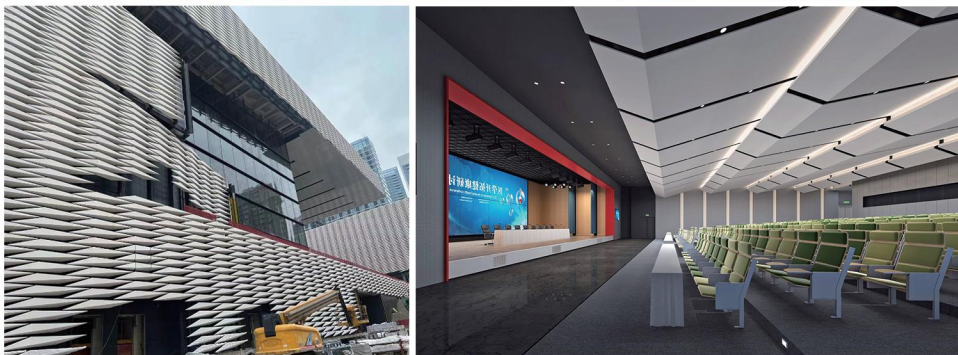
ARCHITECTURE BUILDING



Due to its good performance and elegant appearance, aluminum honeycomb panel has become the first choice materials for construction industry and home decoration designers. The surface of the honeycomb panel is made of aluminum alloy plate treated by fluorocarbon roller coating or general building rock face fireproof board, artificial marble, etc., and aluminum honeycomb as core material.

ADVANTAGES

- Lightweight and rigid
- Non-combustible material
- Easy to transport and assemble
- Sound insulation and heat insulation
- Customized size



APPLICATION



Office



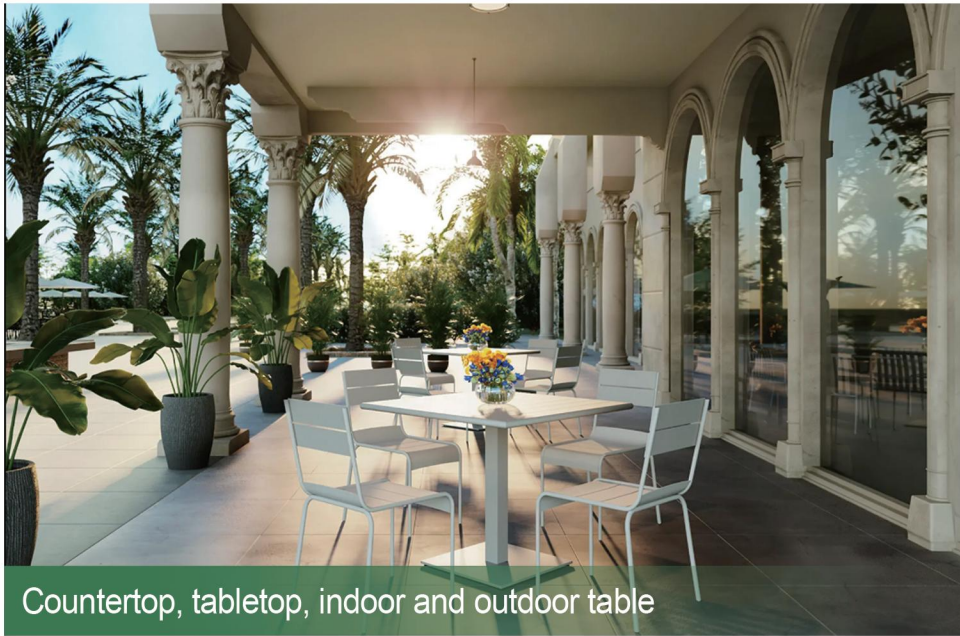
Concert hall



Airport



Hotel



Countertop, tabletop, indoor and outdoor table



FURNITURE

Honeycomb sandwich panels have the functions of light weight, high rigidity, and good bending resistance, so they are very suitable for furniture. The most important thing is that the furniture made of honeycomb sandwich panels can also be recycled, which is a new environmentally friendly material that meets the development of the 21st century.

ADVANTAGES

- Lightweight and high strength
- Non-combustible material
- Easy to transport and assemble
- Multi-finishes to choose: powder coated, cpl/hpl, natural stone
- Indoor and outdoor use

APPLICATION



Residence



Shopping mall



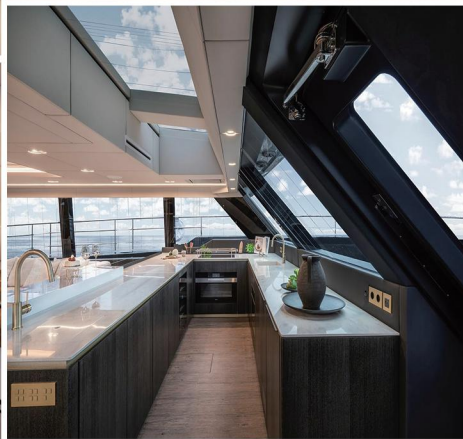
Office



Hotel



Kitchen cabinet, wardrobe, yacht/rv cabinets



COMMERCIAL CABINETS

From panels, to TV cabinets, sideboards, wine cabinets, cabinets, wardrobes, closets, cloak-rooms, overall wardrobes, and every home scene, we can use aluminum honeycomb panels to create and meet consumer requirements. With its advantages of excellent physical properties, sound insulation and noise reduction, moisture-proof and insect-proof, aluminum honeycomb panels are rapidly increasing in popularity in the commercial furnishing market.

ADVANTAGES

- Non-formaldehyde
- Fireproof and waterproof
- Environmentally friendly and recyclable
- Sound insulation and heat insulation
- High surface flatness, not easy to deform
- Customized size

APPLICATION



Marine



Shopping mall



Hotel



Residence



Cable car floor, elevator floor



FLOORING

Aluminum honeycomb material have low density, excellent sound and heat insulation performance, good shock absorption performance, and good flatness. In addition to the construction and furniture industry, honeycomb panels are also widely used in the floor industry, as elevator floors, car floors, cable car floors and so on.

ADVANTAGES

- Wear resistance
- Lightweight
- Sound proof and thermal insulation
- Easy to install
- Moisture-proof, non-deformed, dimensionally stable
- Customized size

APPLICATION



Scenic spot



Train



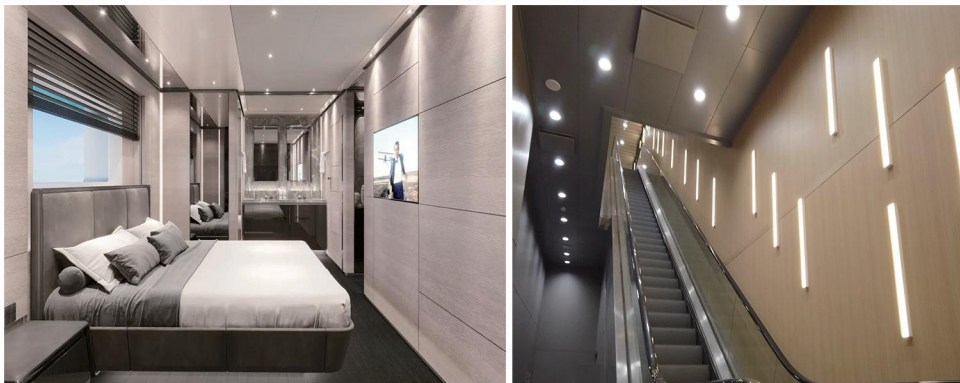
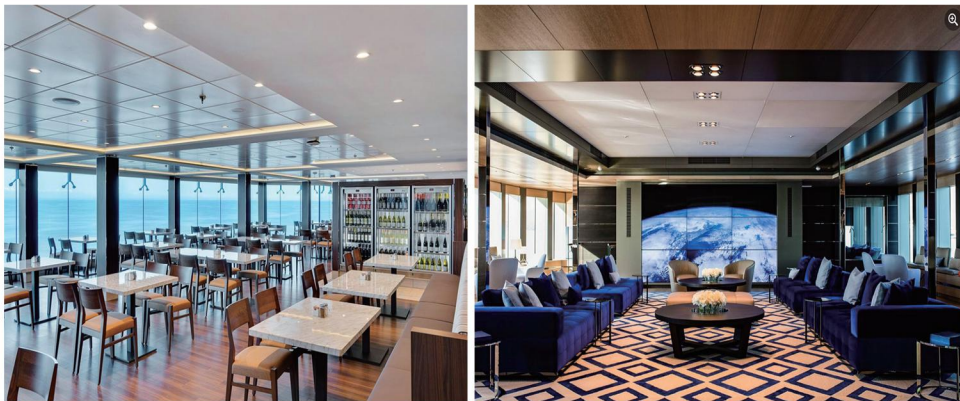
Cleanroom



Shopping mall



Interior wall cladding, ceilings



MARINE

Aluminum honeycomb sandwich panels have the advantages of fireproof, heat insulation, light weight, and strong weather resistance. This product has been widely used in the shipbuilding industry, especially for high-speed yachts and luxury passenger ships. The use of honeycomb panels can reduce the weight, greatly improve the sailing speed and load capacity of the ship, and play the role of saving energy and reducing pollution.

ADVANTAGES

- IMO MED Module B+D certification by LR
- Lightweight
- Sound proof and thermal insulation
- Corrosion resistance
- Fireproof
- 100 % recyclable

APPLICATION



Cruises



Liners



Ferries



Yachts



Cargo box, rooftop tent, truck bed cover



ROOFTOP CARGO CARRIER

Aluminum honeycomb panels can be used for cargo box, rooftop tent and truck bed cover. The lightweight and durable material help to reduce the vehicle weight.

ADVANTAGES

- Wear resistance
- Lightweight
- Sound proof and thermal insulation
- Easy to install
- High strength

APPLICATION



Camper van



Truck