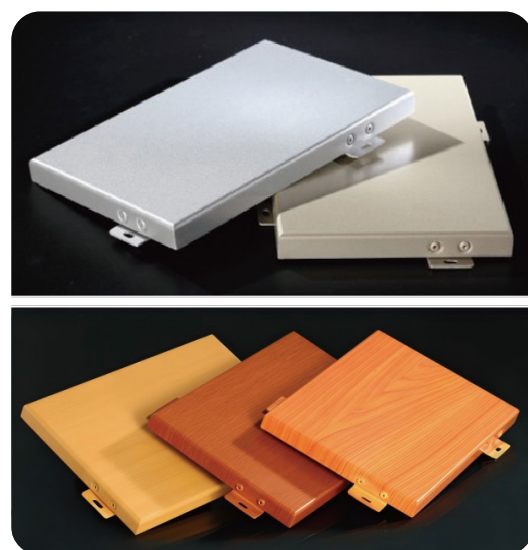


METAL CURTAIN WALL SYSTEM

02

Aluminum Solid Panel Product Introduction



Single-aluminum panel is a kind of depth processing series among the modern aluminum building material, It has the advantage of light weight, fine rigidity, high strength; good weather and corrosion resistance; fine processing technics. may weld strongly, can be made to flat shape, are shape and sphere shape etc; wide optional colour, good decoration effect, super pollution resistance, easy to clean and quick to fit and can be recycled, good for protecting environment, It fits for decorating the exterior wall of high-building, girder and columniation, balcony, clapboard interior decoration etc. it is received deeply by the most customers.

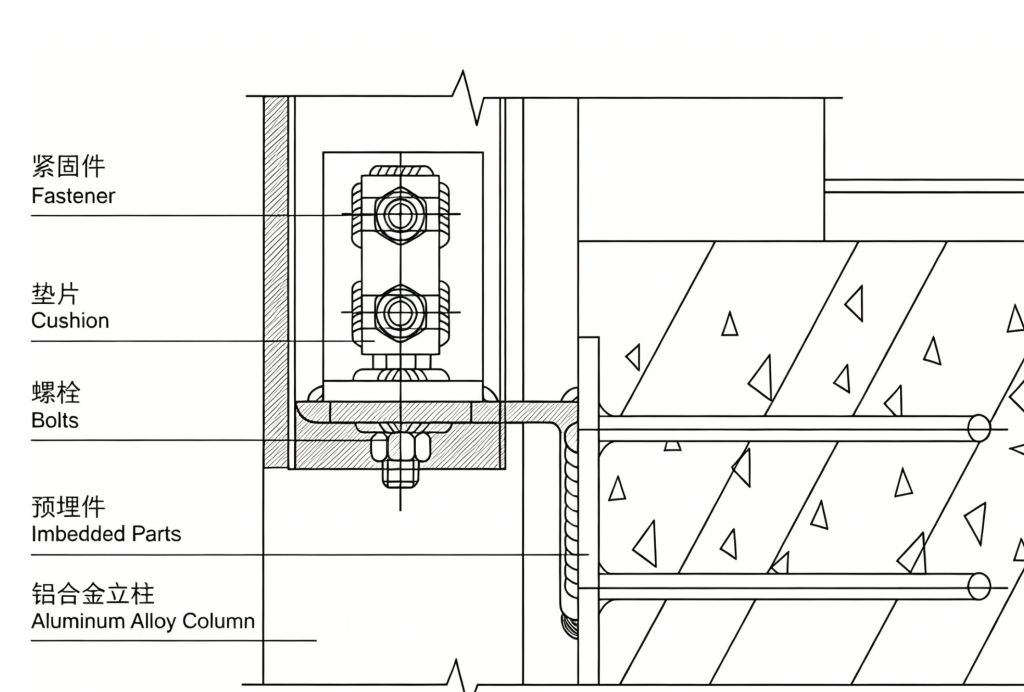
Application Fields of Aluminum Panels



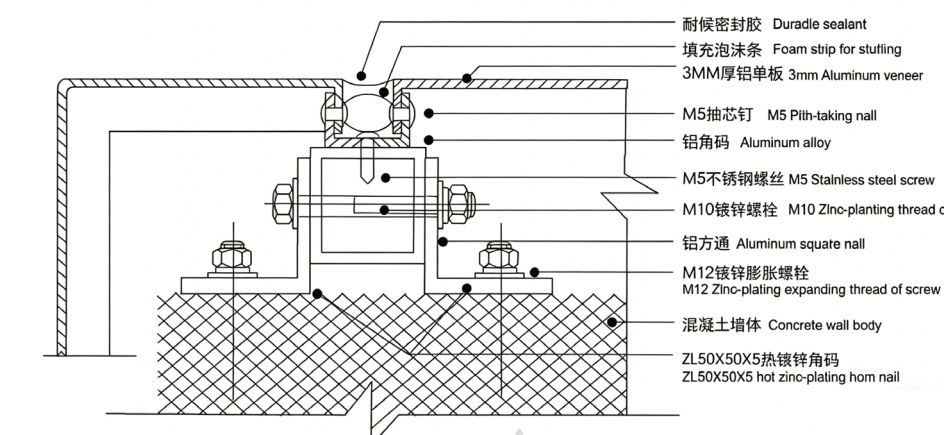
inspection report



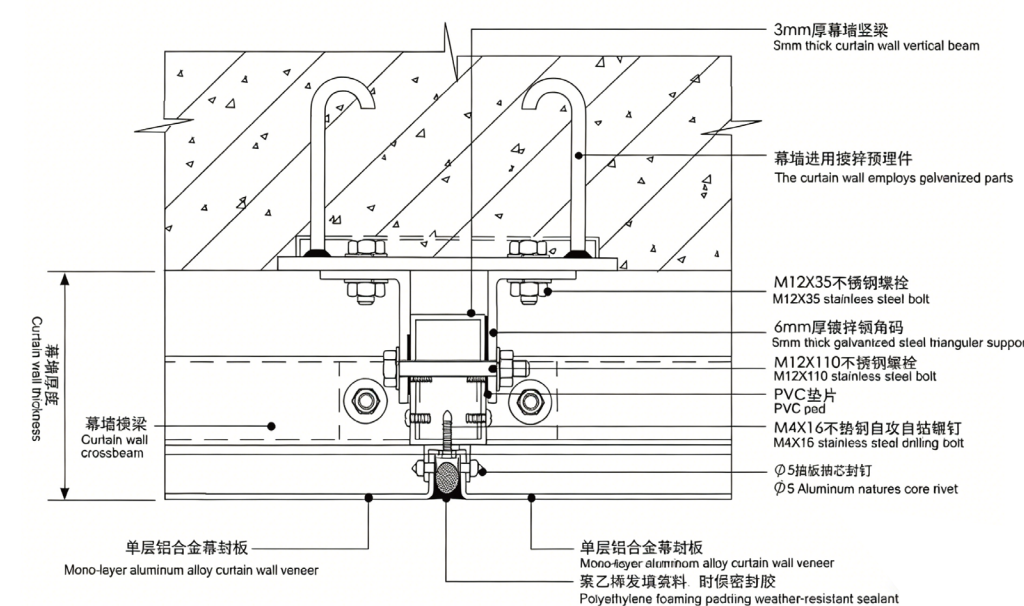
Introduction to Detail Drawings



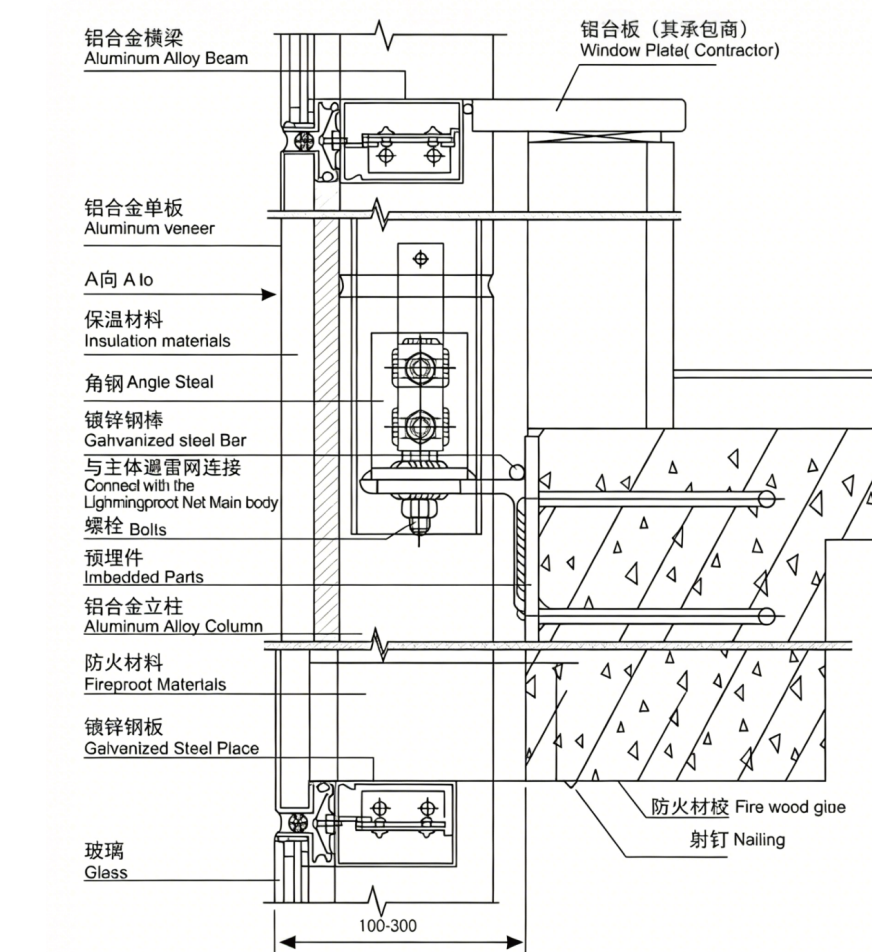
Installation node drawing of aluminum curtain wall



Single-phase of the node drawing of aluminum curtain wall and aluminum curtain wall

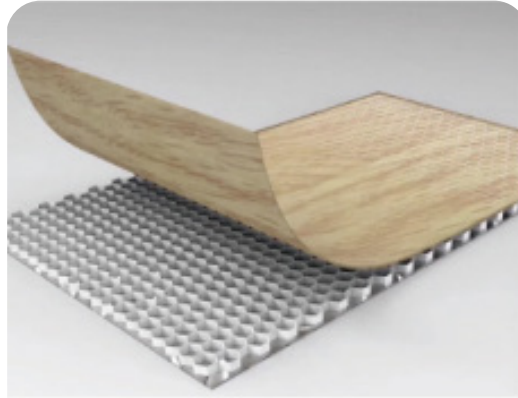


Installation node drawing of single-layer aluminum curtain wall veneer



Installation node drawing of aluminum curtain wall

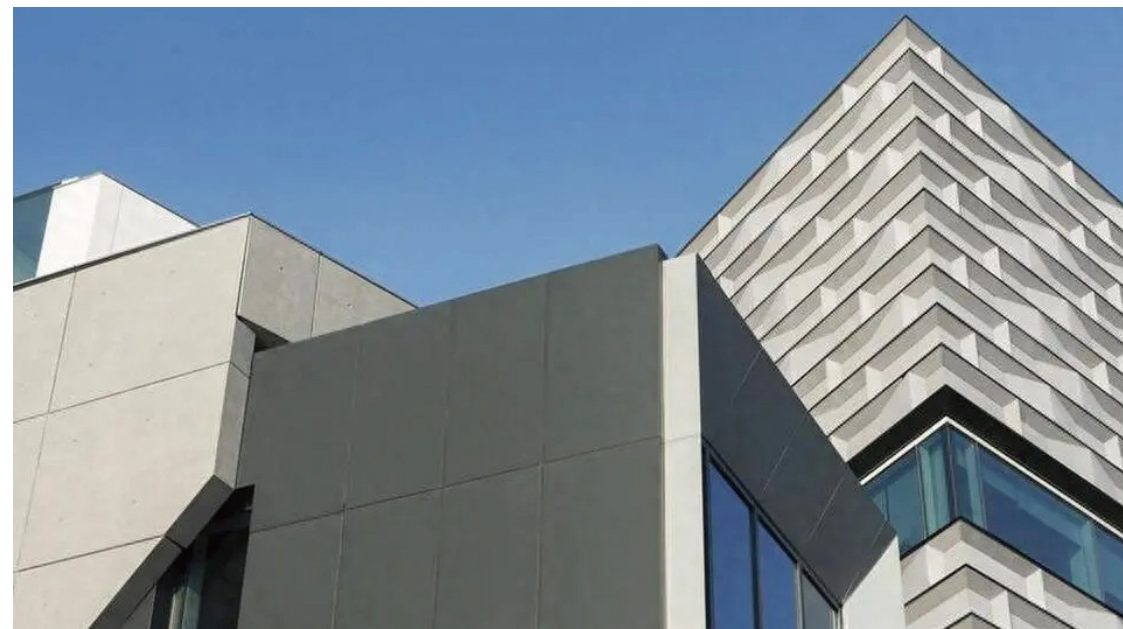
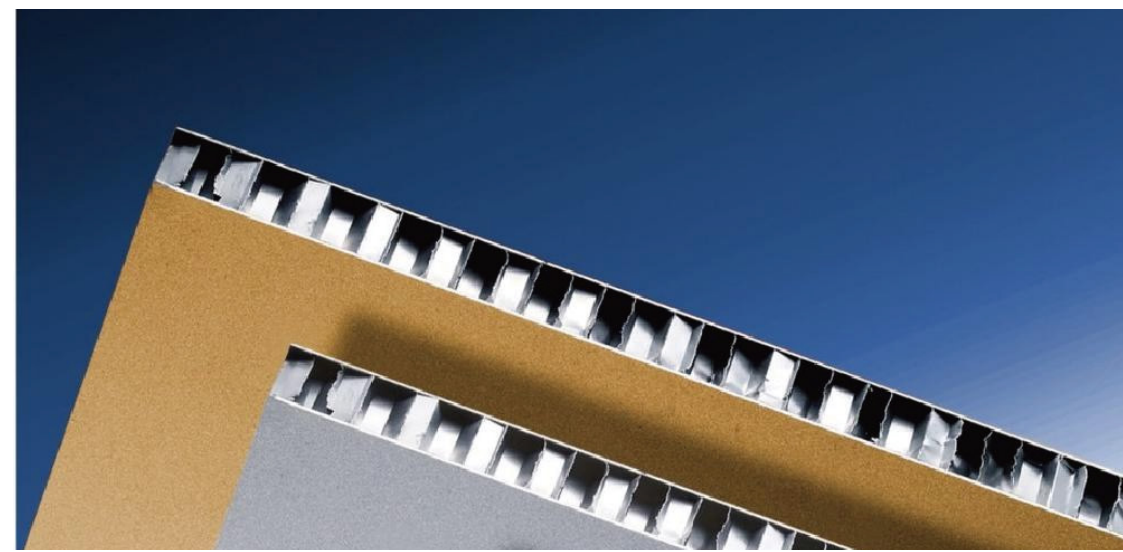
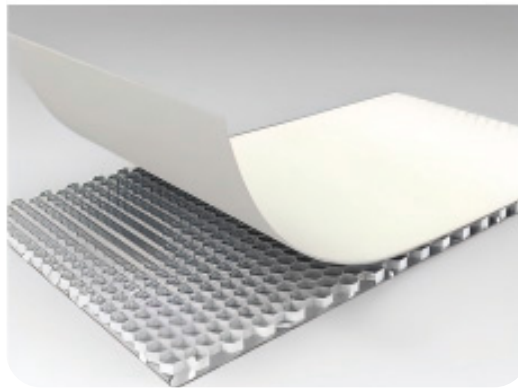
Honeycomb Panel Product Introduction



Lightweight: Aluminum honeycomb panel features a sandwich structure (panel, honeycomb core, bottom plate). Its weight per unit area is lower than that of stone, solid aluminum, and similar materials, significantly reducing building façade load and enabling safe use on high-rise buildings.

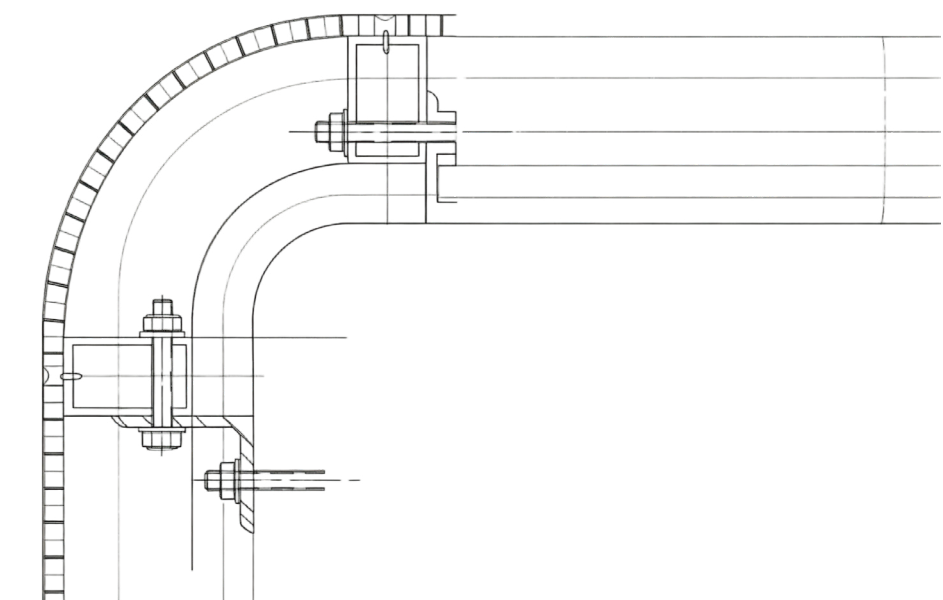
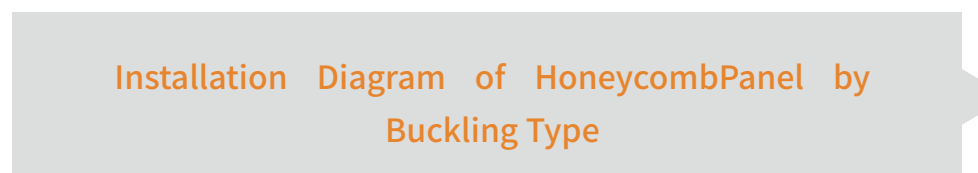
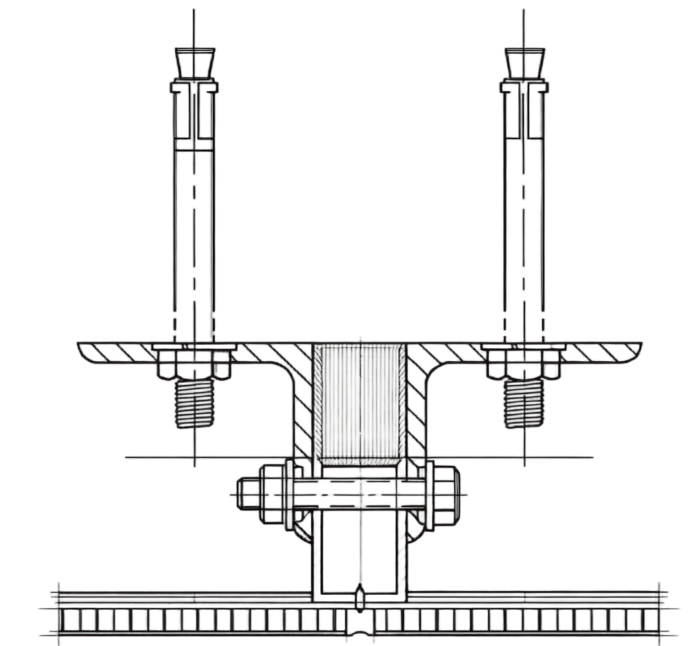
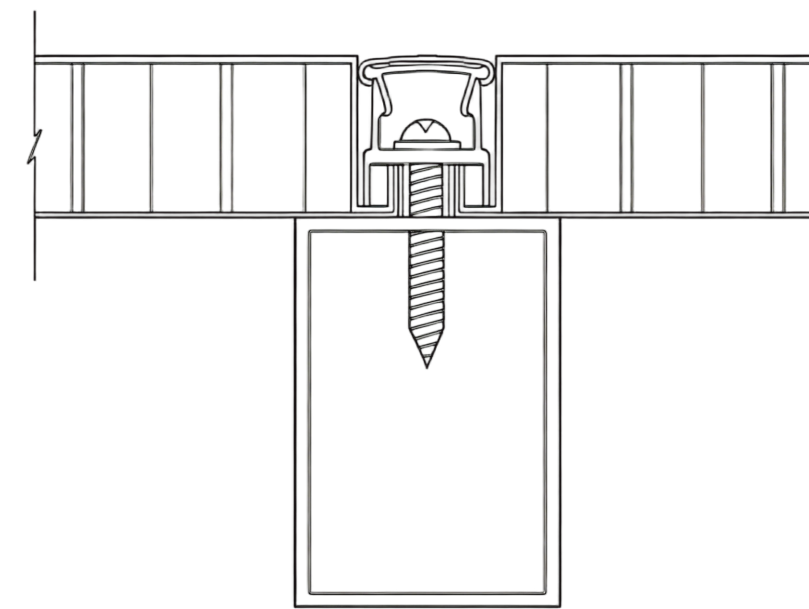
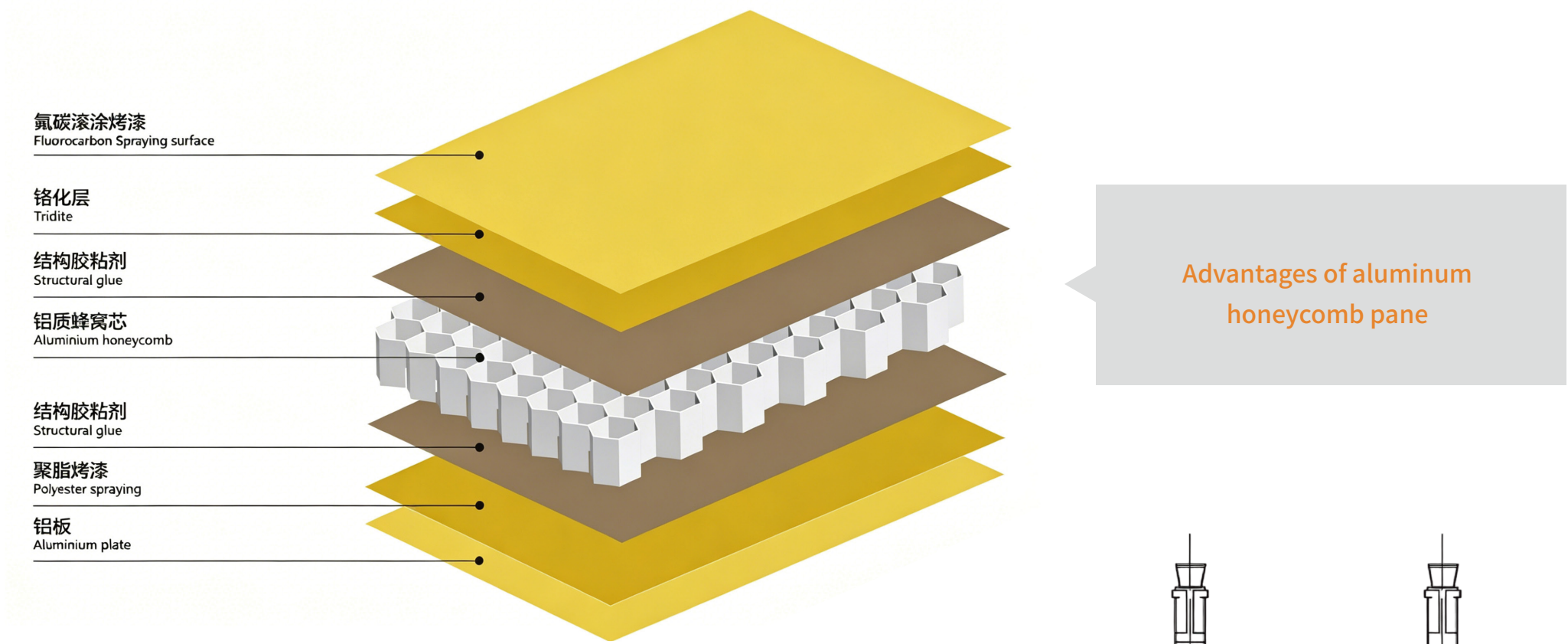
High Strength & Rigidity: The hexagonal honeycomb core is made of high-hardness aluminum foil. The interlocking honeycomb cells bear tangential pressure like numerous small beams, providing omnidirectional strength. This structure not only reduces overall weight but also exponentially increases rigidity as panel thickness increases.

Excellent Flatness: Honeycomb cores of various thicknesses are layered, then precisely cut and milled. When expanded to required specifications, the hexagonal area is much larger than the pre-expansion overlapping area, resulting in superior mechanical properties and outstanding flatness.

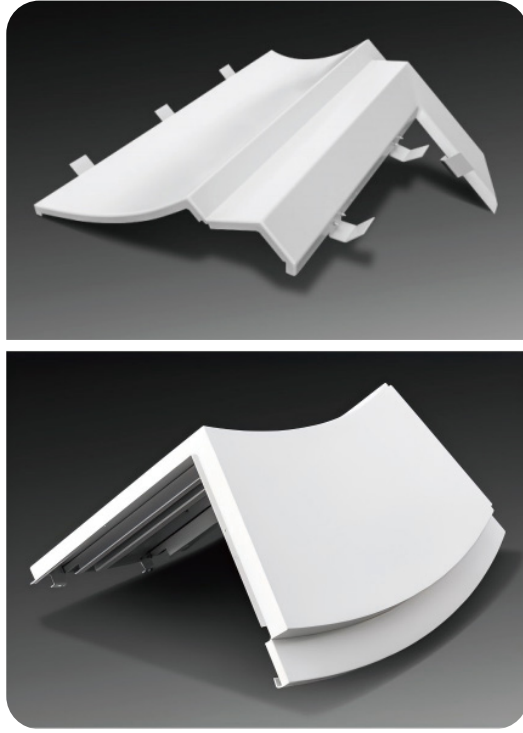


Aluminum Honeycomb Panel Applications

Introduction to Detail Drawings



Shaped Aluminum Solid Panel Product Introduction



Products made of aluminum veneers with different shapes, unique styles, novel structures and fashionable arts are collectively referred to as molded aluminum veneers, which makes the products not only integrate modern decorative functions, but also have great artistic effects of the times. The biggest processing difficulty in shaping aluminum veneer is how to make full use of all kinds of sheet metal processing equipment through sheet metal processing technology and means, make them helpful in realizing the essence of design. The processing of the molding board fully reflects the comprehensive ability of the enterprise. The application of molded aluminum veneer provides rich aesthetic effects and artistic enjoyment for the interior and exterior decoration of buildings.



Shaped Aluminum Panel Curtain Wall Applications

Shaped Aluminum Solid Panel Product Introduction

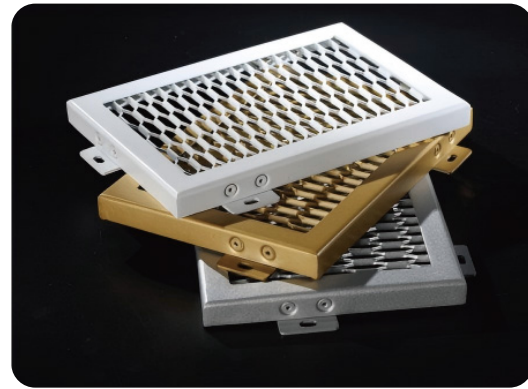


Hyperbolic aluminum veneer is a molded aluminum plate formed by overlapping arcs with different axial directions on the same surface. It is applied to the interior and exterior decoration of buildings with strong personalized style and has excellent appearance display effect. The hyperbolic aluminum veneer is light in weight, good in rigidity, high in strength, high in cleanliness, weather-resistant and corrosion-resistant, and is not easy to fade. Curved, spherical and other geometric shapes make the appearance elegant, colorful and easy to install. The processing of hyperbolic aluminum veneer is very difficult, which requires high precision of the machine and operation of skilled workers and has strong technical content. Our company can design and process various curvatures according to the needs of customers, highlighting the technological level and meeting the personalized requirements of building decoration.

Application Fields of Curved Curtain Walls

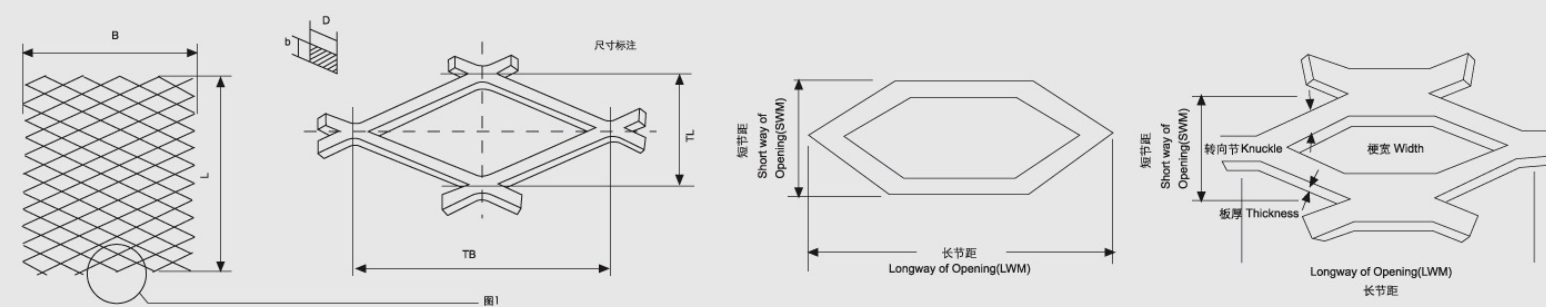


Perforated & Mesh Curtain Wall Product Introduction



CNC punching aluminum veneer using stamping equipment, selected high-quality metal materials to the punching process different specifications or spend money to beautify the metal plate surface, due to the closed-made, can relieve , A sense of oppression, indeed, broaden their horizons and feel of the space. Features and Benefits punching aluminum: elegant appearance, easy to fire proof, install, durable, acoustic noise, not the positive and negative air pressure affect beneficial vents or other device Heat, light and lighting features.

Application Fields of Perforated and Mesh Pattern Curtain Walls



铝板网规格示意图
Aluminum mesh size diagram

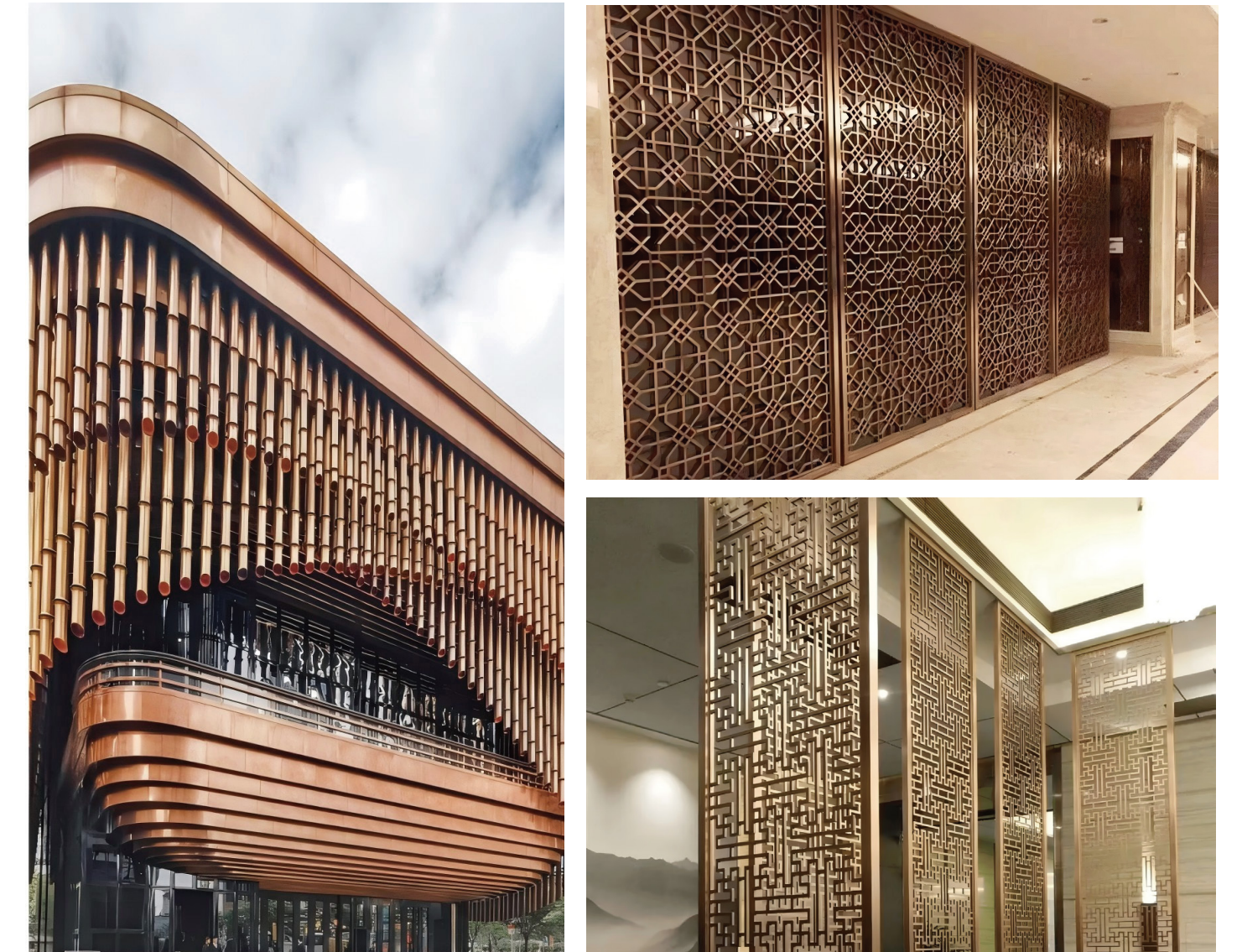
Introduction to Stainless Steel Curtain Wall Products



Stainless steel curtain walls are high-end building enclosure and decorative curtain wall systems mainly composed of 304/316L stainless steel plates as the main surface material, and are equipped with metal keels and connecting parts.

Combining metallic texture, weather resistance and structural safety, it is a signature facade choice for high-end public buildings and commercial Spaces.

Application Fields of Stainless Steel Curtain Walls



Material Properties of Stainless Steel 304

Property	Value	Property	Value
Density(ρ)	7.93 g/cm ³	Tensile strength (R _m)	≥ 515 MPa
Thermal conductivity (λ)	1398 ~ 1454°C	Yield strength (R _{p0.2})	≥ 205 MPa
Coefficient of linear expansion (α)	16.2 W/(m·K) (100°C)	Elongation after fracture (A)	≥ 40%
Elastic modulus(E)	17.2 × 10 ⁶ /°C (0 ~ 100°C)	Brinell hardness (HB)	≤ 201 HB
193 GPa	193 GPa	Electrical resistivity (ρ)	0.72 μΩ·m (20°C)

Aluminum-magnesium-manganese, titanium-zinc plate curtain walls, metal roofs



Product Introduction and Core Properties of Aluminum-Magnesium-Manganese Sheets

Aluminum-magnesium-manganese sheet is a high-performance lightweight metal sheet with **AA3004/3005 aluminum alloy** as the base material (aluminum 295%, magnesium 1.0%-1.5%, manganese 0.8%-1.3%), and it is the mainstream enclosure material in modern buildings.

Core performance:

Lightweight and high strength: Density 2.73g/cm³ (1/3 of steel), significantly reducing load), tensile strength 2230MPa, wind resistance > level 9.

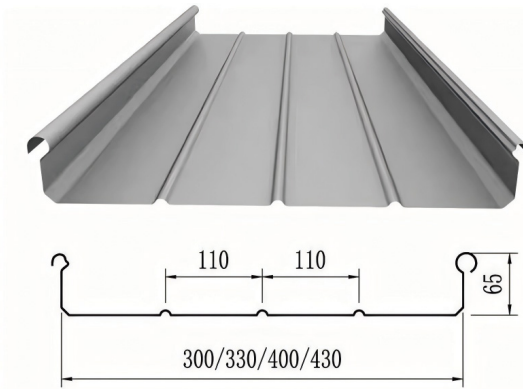
Ultimate waterproofing: Standing seam (65/75mm high standing seam), 270° mechanical interlocking, no nails, no glue, structural waterproofing.

Corrosion resistance and durability: Natural alumina film + fluorocarbon coating (PVDF), resistant to salt spray and acid rain, with a service life of over 50 years.

High plasticity: Cold-bent into straight plates, arc plates, hyperbolic plates, and fan-shaped plates, suitable for complex shapes!

Green and environmentally friendly: 100% recyclable, with recycling energy consumption being only 5% of that of primary aluminum.

Diverse surfaces: Fluorocarbon (color retention for 25 years), anodized, hammered texture, etc., with rich colors.



Product Introduction and Core Properties of Titanium-Zinc Sheets

Titanium-zinc plate is a high-end alloy based on 99.995% high-purity zinc, with 0.06% to 0.20% titanium and 0.08 to 1.00% copper added. It complies with the European EN1179/EN988 standards.

Core performance:

Extra-long service life: A dense zinc carbonate passivation layer forms on the surface, with an annual corrosion rate of less than 1μm; 0.7mm can be used for 80 to 100 year.

Self-healing ability: Minor scratches can be automatically repaired, and a new protective layer will form within 20 days.

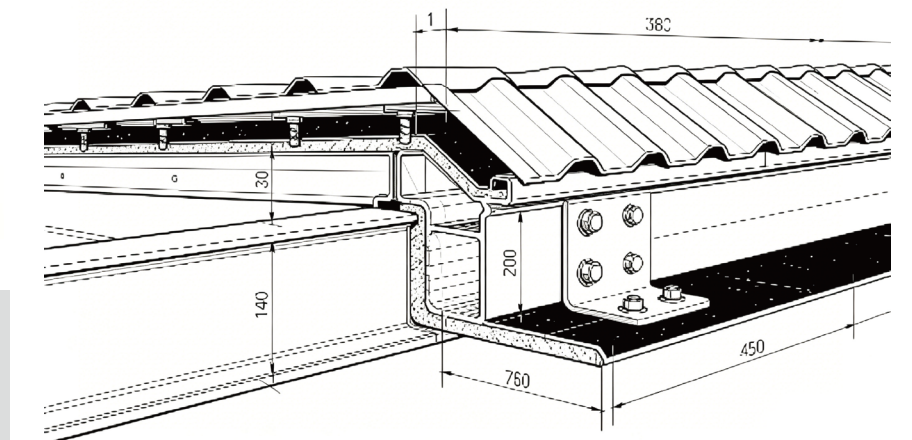
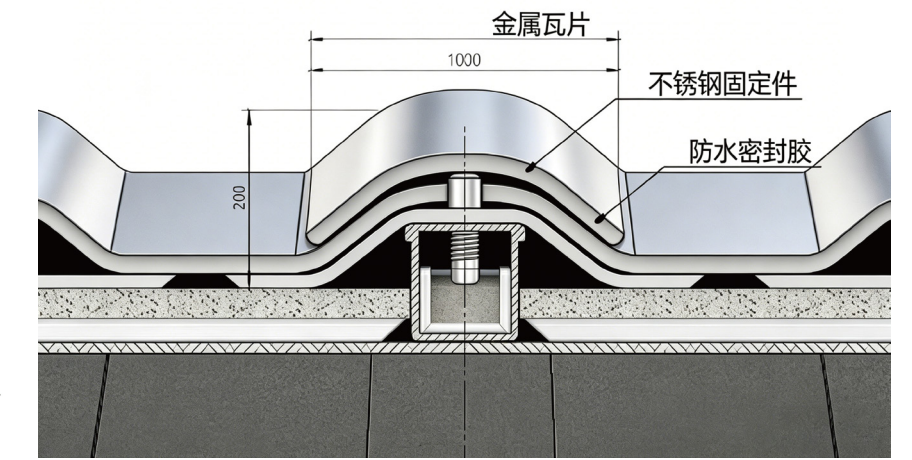
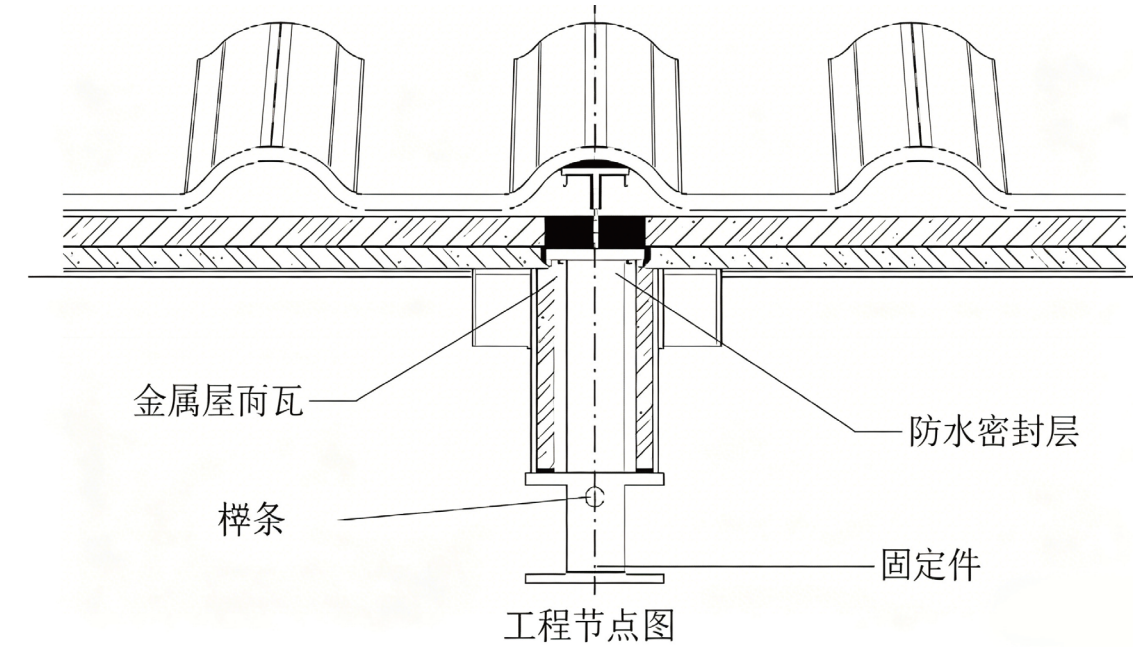
Natural texture: Initially bright silver, gradually turns into warm blue-gray, with a strong sense of the beauty of time.

Lightweight and low maintenance: Density 7.18g/cm³, 0.7mm approximately 5kg/m²; Rainwater self-cleaning, basically no maintenance required.

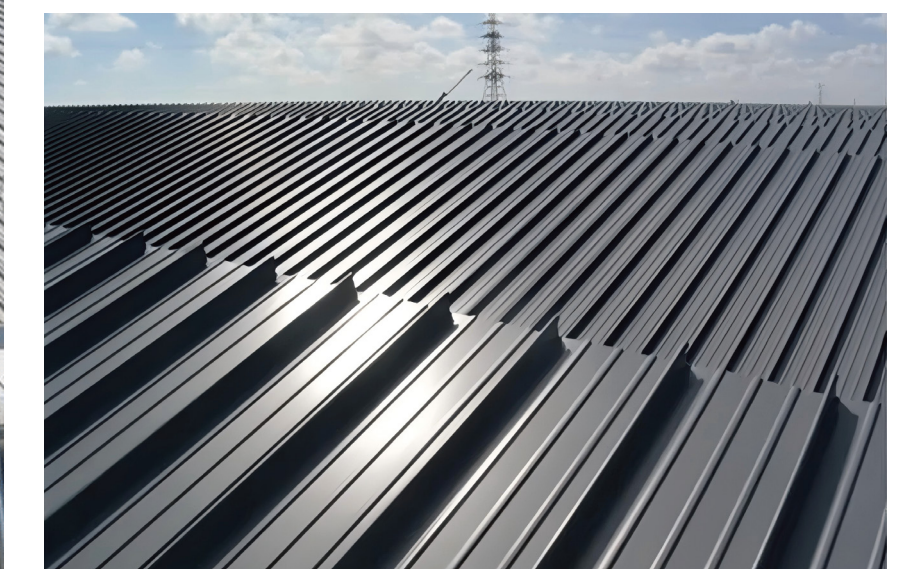
Good ductility: Elongation rate 15-35%, suitable for curved surfaces, irregular shapes and pitched roofs.

Environmentally friendly and recyclable: 100% recyclable, non-toxic and pollution-free.

Detail Drawings of Al-Mg-Mn, Ti-Zn Curtain Walls and Metal Roofing



Application Fields of Al-Mg-Mn Curtain Walls, Ti-Zn Curtain Walls and Metal Roofing



Aluminum honeycomb panel Main Technical Parameters of Sheet Metal Processing

Project	Size Range	Allowable Deviation
Length, width	≤2000mm	±1.0mm
	>2000mm	±1.5mm
Thickness of aluminum honeycomb panel	-	±0.5mm
Folding height	-	±0.5mm
Diagonal difference	Length of aluminum honeycomb panel ≤2000mm	±2.0mm
	Length of aluminum honeycomb panel >2000mm	±3.0mm
Folding angle	-	≤1°
Plane flatness	-	≤0.5mm/1000m

NOTE:1.The above parameters are applicable to aluminum honeycomb panels with rectangular or square shapes. Some requirements can be implemented according to other shapes.

2. When the aluminum honeycomb panel has curved surface, the maximum clearance between the curved surface and the standard template agreed by supply and requisitioning parties shall be ≤ 2mm.

Physical and Chemical Properties of Fluorocarbon Coatings

Test Project	AAMA 2605 Specification (98)	Allowable Deviation	Remarks
Glossiness (60°)	Low Specification: Minimum 19, Medium: 20-79, High Specification: Minimum 80	25-35	ASTM D523 60 Degree Gloss Meter
Hardness	Ainimur F	H	ASTM D3363 (Turquoise seagull pencil)
Adhesion	No Peeling off (100y100)	100/100	Cutting interval imm / Wet or Dny Film
Boiling Water Resistance	No Peeling off (100/100)	100/100	Cutting interval 1mm / 99-100°C x 20 min
Impact Resistance	No drop	No drop	Diameter 16 mm, Gardner impact test abrasion
Wear Resistance	Loss coefficient (V/T) 40Min	65Min	ASTM D968
Acid Resistance	No bubble, no change	No bubble, no change	Drop test at 18-27°C for 15 minutes (10% hydrochloric acid)
Mortar Resistance	Paint film has no loss, no change	Paint film has no loss, no change	24 hours pat test
Nitric Acid Resistance	Maximum chromatic aberration: 5-E	3-E	70% nitric acid for 30 minutes
Cleaning Resistance	No bubble, no change	No bubble, no change	Glass detergent
Glass Cleaning Resistance	No bubble, no change	No bubble, no change	3% detergent
Moisture Resistance	Rust Maximum No.8	No bubble	38°C x 72 hours
Salt-spray Resistance	corosion Max.1/32"	1/32"	ASTM D 2247
Weather Resistance	Maximum chromatic aberration: 5-E Exposure Lowest 50% (60°)	3-E 80%	ASTM B117
Aging Resistance	Maximum Aging Rate No.8 (Color other than white), Maximum No.6 (White)	Other colors: No 8 White: Mo 6	(5% saline, 100°F, 4000 HRS)
Corosion resistance	Maximum Loss 10%	5%	10 Years of 45°C Sun Exposure Experiment in South Florida, USA

Composition (%) and Mechanical Properties of AA3003 H24 Series Alloy

Mn	Cu	Mg	Fe	Si	Zn	Ti	Al	Impurity	
								Single	Total
1.0-1.6	≤0.2	≤0.05	≤0.7	≤0.6	≤0.1	≤0.15	Balance	≤0.05	≤0.1
Specific gravity		Expansion coefficient		Melting point		Elastic coefficient		Therm ductivity	
2.73g/m ³		21(-108)°C		680°C		71GPa		203.5W/M°C	
Mechanical Properties									
Tensile Strength MPa				Elongation%				State	
140-180				≥5				H24	

NOTE: At room temperature, the main phase composition is Cu(Al, n, Al₆). Possible impurity phases are (Fe, Mn)Al₆ or (Fe, Mn, Si)Al₆, etc.