

SunFrame

Facade System One Stop Solution

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Aluminum Sheet Series

Specializing in aluminum sheets: Aluminum veneers, Aluminum honeycomb panels, Imitated marble panels, Imitated wood grain panels, Corrugated panels, Modeling ceiling panels, Hyperboloid aluminum veneers.

Product Catalog

Production Equipment

01-04

Aluminum Veneer Series

05-06

Modeling Aluminum Veneer

07-08

Hyperbolic Aluminum Veneer

09-10

Punched Aluminum Veneer

11-12

Carved Aluminum Veneer

13-14

Pulled-net Aluminum Veneer

15-16

Aluminum Panel Display

17-22

Project Case Studies

23-32





Production Equipment

Fabrication Process

CNC punch automatic open material → Shaped(Curve,Arc-rolling) → Jointing → Burnishing
→ Assembly → Polishing → Checking → Qualified → Turn spray



☑ Arc-rolling



☑ Jointing



☑ Burnishing



☑ Assembly



☑ Polishing



☑ Checking



Production Equipment

The company's fluorocarbon coating production line is a world-class computer numerical control fully enclosed continuous automatic line built by introducing foreign advanced technology. The total length of the production line is nearly 460 meters, and the annual spraying production capacity is 1 million square meters. The computer numerical control automatic spraying US permanent production line strictly follows ASTM specifications, adopts suspended chain transportation, and the water curtain spraying room is equipped with three sets of Japanese Ransburg numerical control electrostatic spray gun systems. American Eclipse proportional combustion system is used for heating the drying tunnel, and the whole production line is equipped with online detection systems such as British Sheen temperature tracker and Japanese Minolta color difference meter. This production line has a high degree of automation, reaching the international first-class level. The coating technology has passed AAMA26505 in the United States, and the warranty period for fluorocarbon aluminum veneer under normal outdoor conditions is fifteen years.

Spraying process

Parts Installation → Derosination → Alkaline Etching → Blare-elimination(by acid)
→ Chromium impregnation → Test(packing) → Parts Removing → Solidifying → Spraying → Drying



Aluminum Veneer Series

Surface Treatment of Aluminum Veneer

Generally, the surface of aluminum veneer of curtain wall is pretreated by cleaning and chromizing, and then it is sprayed with fluorocarbon. Fluorocarbon coatings are divided into primer, topcoat and varnish, and the main component is polyvinylidene fluoride resin (KYNAR500), normally varied as 2nd coating, 3rd coating or 4th coating. Fluorocarbon coating has excellent corrosion resistance and weather resistance, can resist acid rain, salt spray and various air pollutants, etc., and has excellent cold and heat resistance, can resist strong ultraviolet radiation, can remain colorfast and non-pulverization for a long time, and has long service life. The surface is made of high-quality fluorocarbon coatings from world-renowned fluorocarbon coatings manufacturers such as PPG, DNT, AKZO, NIPPON, etc., with a wide range of colors. Customers can directly select according to the color swatches provided by the manufacturers or provide color swatches.



Aluminum Veneer Series

Performance Table

Test Item	Detection Content		Technical Requirements
Physical Dimension	Length and Width Dimensions		≤2000mm, with allowable deviation of ±1.0mm >2000mm, with allowable deviation of ±1.5mm
	Diagonal Line		≤2000mm, with allowable deviation of ±2.0mm >2000mm, with allowable deviation of ±3.0mm
	Flatness		Allowable deviation ≤1.5mm/1.5m.
	Average Dry Film Thickness		2nd coats ≥30um, 3rd coats ≥40um and 4th coats ≥55um.
	Chromatism		Visual inspection shows that there is no obvious color difference or monochromatic point tested by computer color difference meter shall be ΔE<2NBS.
	Glossiness		The error of the limit value is ±5
	Pencil Hardness		≥±1H
	Dry Adhesion		Drawing grid method, 100/100, reaching 0 grade
Fluorocarbon Coating	Impact Resistance (Frontal Impact)		50kgf.cm(490N.cm), no cracks, no paint peeling
	Chemical Resistance	Hydrochloric Acid Resistance	15 minutes dripping, no bubbles
		Nitric Acid Resistance	Color change ΔE≤5NBS
		Mortar Resistance	24 hours without any change.
		Detergent Resistance	72 hours without bubbles and shedding.
	Corrosion Resistance	Humidity Resistance	4,000 hours, reaching above Grade II of GB1740.
		Salt Spray Resistance	4,000 hours, reaching above Grade II of GB1740.
	Weather Resistance	Colour Fading	After 10 years, ΔE≤5NBS
		Pulverization	After 10 years, Grade I of GB1766.
		Gloss Retention	After 10 years, the retention rate is ≥50%.
		Film Thickness Loss	After 10 years, the film thickness loss rate is ≤10%.

Inspection Report



Modeling Aluminum Veneer

Products with different shapes, unique styles, novel structures and fashionable art processed from aluminum veneers are collectively called modeling aluminum veneers, which allows the products not only integrate modern decorative functions, but also have great artistic effects of the times. The biggest difficulty in molding aluminum veneer processing is how to make full use of various sheet metal processing equipment through sheet metal processing technology and means, to make it realize the essence of design. The processing of molding panel fully embodies the comprehensive ability of the company, and the application of molding aluminum veneer provides rich aesthetic effect and artistic enjoyment for the interior and exterior decoration of buildings.



**Take science and technology as the driving force,
and seek development by quality.**



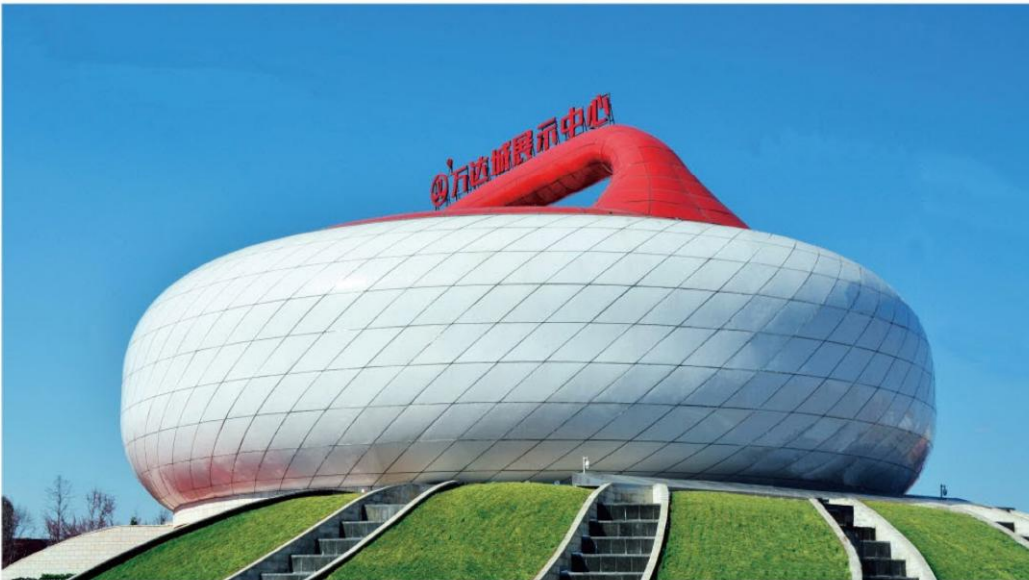
Hyperbolic Aluminum Veneer

Hyperbolic aluminum veneer is a modeling aluminum panel composed of arcs with different axial directions overlapping on the same surface, which is applied to the interior and exterior decoration of buildings with strong personalized style and has excellent appearance display effect. In addition to the superior performance of conventional aluminum veneer, hyperbolic aluminum veneer has elegant appearance, rich colors and convenient installation due to various geometric shapes such as arc shape and spherical surface, etc.

It is difficult to process hyperbolic aluminum veneer, which requires high precision of machine and operation of skilled workers, possessing strong technical content. Our company can design and process all kinds of curved surfaces according to customers' needs, highlighting our technological level and enable us to meet the personalized requirements of building decoration.

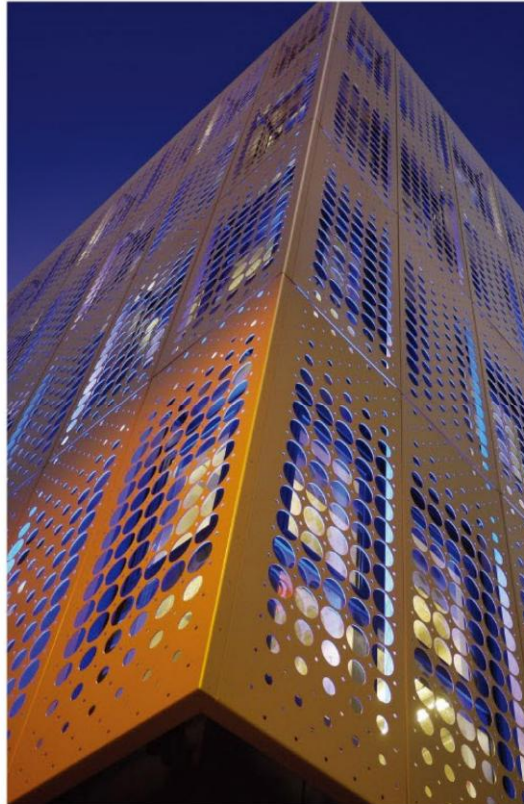
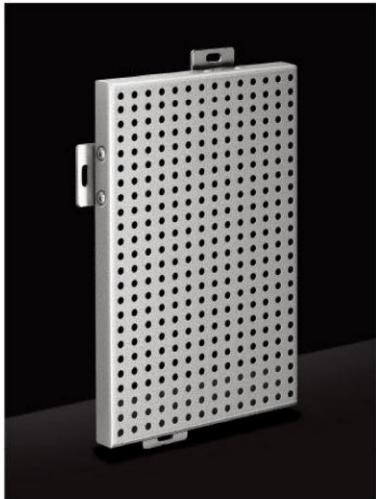


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Punched Aluminum Veneer

Punched aluminum veneer is made of computer numerical control stamping equipment, with selection of high-quality metal materials, and beautified the metal panel surface through punching processes with different specifications or flower, which can relieve the sense of depression caused by closure and make the product looming with a sense of broadening the field of vision. Features and advantages of the product: elegant appearance, fire-proof and moisture-proof, convenient installation, durability, sound absorption and sound insulation, not affected by positive and negative wind pressure, and with features such as conducive to the heat dissipation of vents or other devices, transparent, lighting, etc.

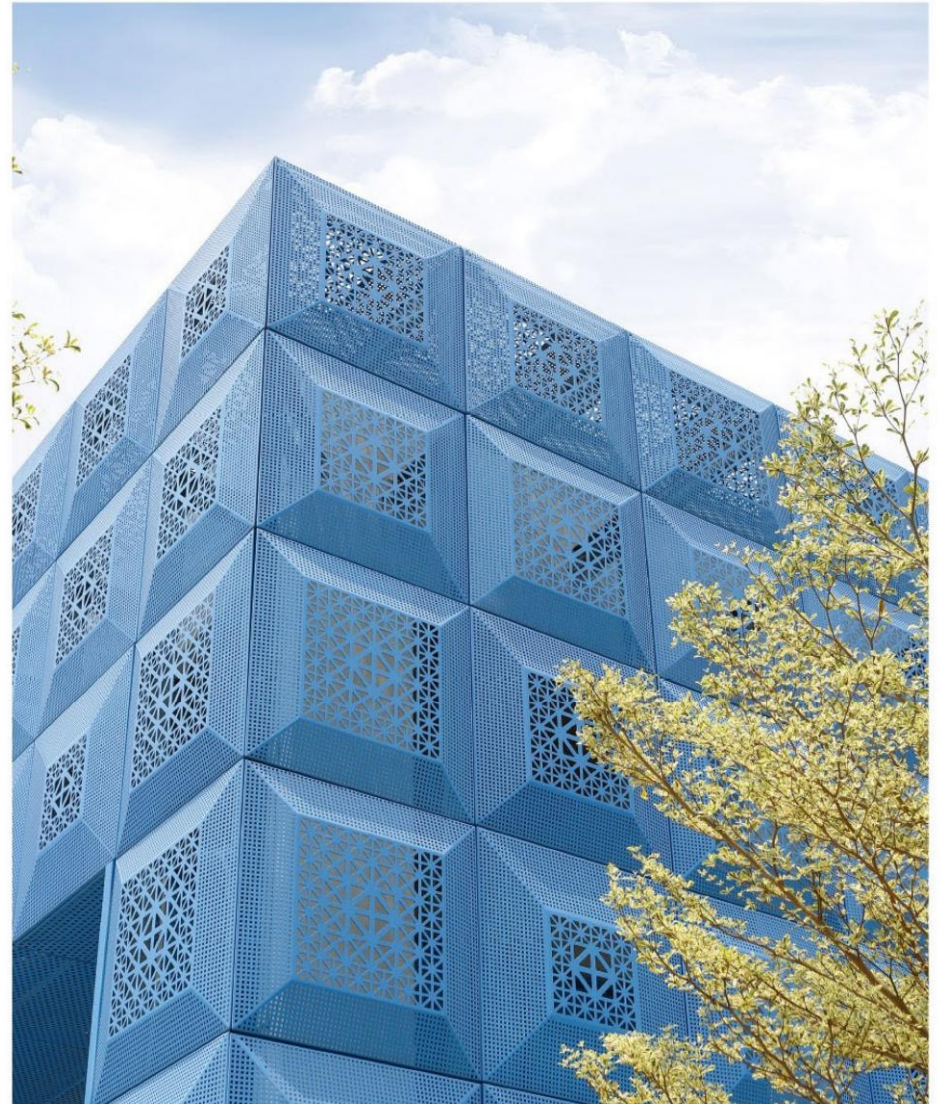


Those who touch people with sincerity
would be responded with sincerity.



Carved Aluminum Veneer

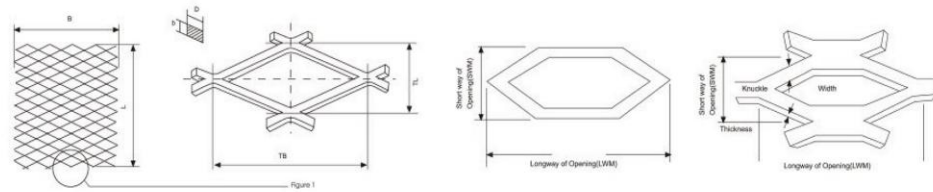
Panels processed with various hole patterns on metal panels are collectively called "Metal Art Hollowed-out Panels". Through hollowing-out processing, plane panels can present a sense of being continuously extended into space, which gives the functions of light transmission and air permeability. The combination of hole shape changes with different patterns and sizes makes the object surface dynamic, and the lines are brighter and more elegant through special-shaped treatment matched with different external environment. Breaking through the traditional concept of modeling, it is more suitable for all kinds of modern high-end clubs, home decoration, office and other occasions, and opens up endless thinking space for energetic fashion people. It is indeed a new decorative form that is both practical and beautiful.





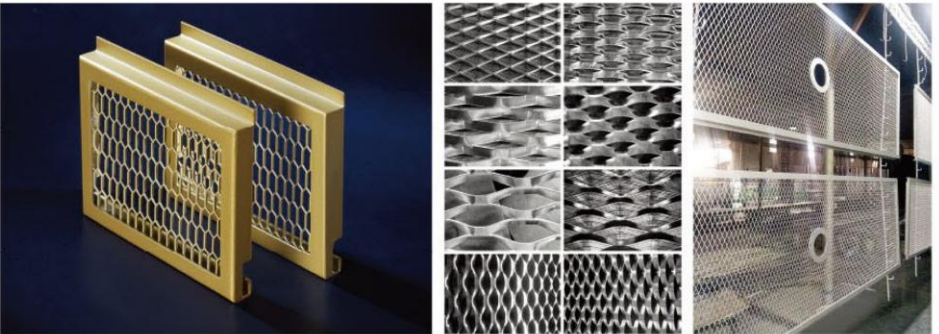
Pulled-net Aluminum Veneer

Metal mesh ceiling has an open and transparent field of vision; It is a kind of suspended ceiling system which can be used in various architectural designs and has unique visual effects. There are a wide selection of styles, materials and colors to ensure that each project has a unique appearance. The metal mesh is a diamond-shaped mesh made by simultaneously cutting and stretching on the surface of metal sheet through a special manufacturing process. Through the change of mesh hole shape, mesh hole direction, lighting and color, the suspended ceiling can be more transparent and dynamic. Different mesh hole types and materials make the suspended ceiling design more personalized and fashionable. This product is suitable for areas with many facilities and many people, such as subways, airports, stations, corridors, modern shopping centers, exhibition centers and other large open public places.



Aluminum mesh size diagram

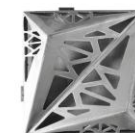
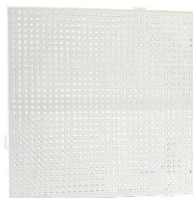
Those who touch people with sincerity
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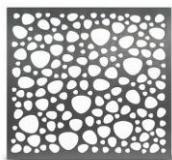
Aluminum Panel Display



Aluminum Panel Display



Aluminum Panel Display





Project Case Studies

•Burj Al Mana Tower

Year: 2017 till now

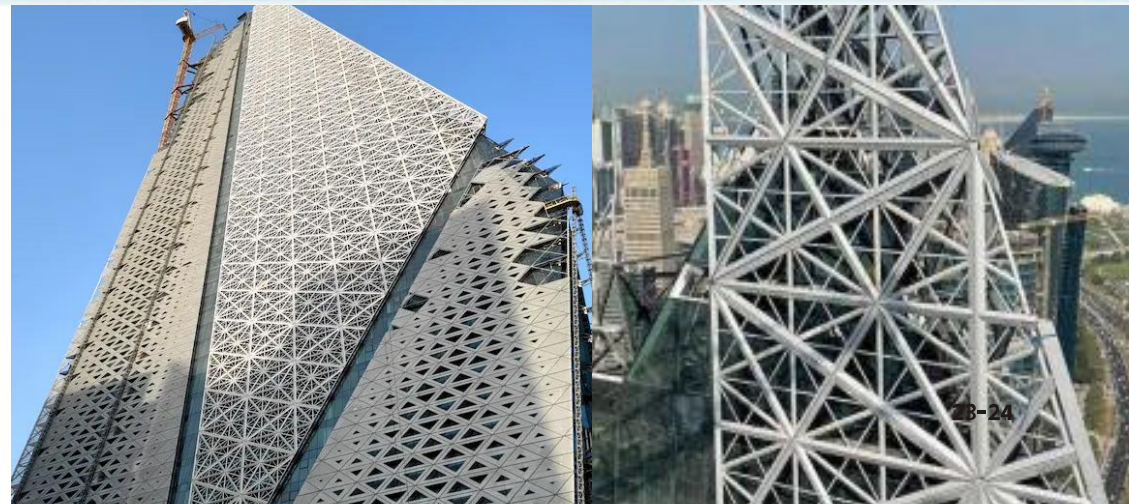
Height: 812ft/ 247.4m Facade area:

42,000 sqm unitized glass facade;

37,000 sqm Mashrabiya sunshade system facade

Type: Residential & office

Location: West Bay, Doha, Qatar.





Project Case Studies

•Project Name: QET-JMA (OETAIFAN ISLAND NORTH PHASE 1 JUMMA MOSQUE)

Location: Lusail City, Doha, Qatar

Client: Qetaifan Projects

Consultant: WS Atkins & Partners Overseas

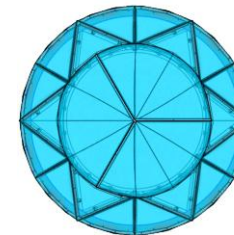
Main Contractor: Qatar Building Engineering Co.

Façade Area: 1,014.13 m²

Main Products of This Facade System



QET JMA Project-Perforated Aluminum Panel



QET JMA Project-Dome skylight structure



QET JMA Project - Aluminum Panel



Project Case Studies

• **Project Name:** Mohamed Hamad Al Mana Group Headquarters

Project Scope: Full Façade Supply & Installation

Consultant: DSG / MZP

Location: Salwa Road, Doha, Qatar

Façade System: 3,200 m² Straight & Curved Mashrabiya





Project Case Studies

◆Project Name: G+1 CENTRO MALL

Location: Doha, Qatar

Owner: GHANIM SULTAN H. KUWARI

Architectural Consultant: DSG / MZP

Main Contractor: K AND H SONS OF ALMANA

System Type: B1 & B2 Perforated Aluminum Panel Façade

Total Area: 5,500+ sqm

Service Scope: Full-cycle service (from design to installation)





Project Case Studies

•Project Name: West Hospital

Location: Ghandi Avenue, Nairobi, Kenya

Curtain Wall Area: 9,600 m²

Scope: Site Measurement, Curtain Wall Material Supply, Installation

Facade System: Structurally Glazed Glass Facade, Aluminum Windows, ACP Cladding

