

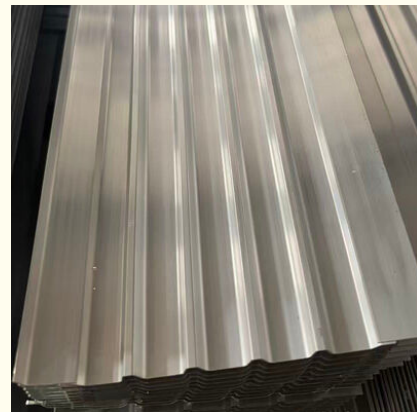
6063-T5 Aluminum Roofing Profile with Hollow Thermal Insulation Structure and Customizable Length for Outdoor Architectural Roofing

Our Product Introduction

for more products please visit us on aluminumextrusion-profiles.com

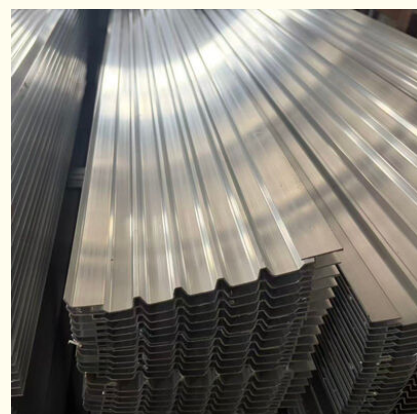
Basic Information

- Certification: SONCAP, ISO, RoHS, TUV
- Minimum Order Quantity: 500
- Price: 1

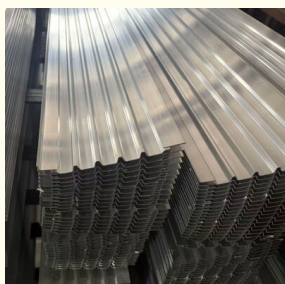
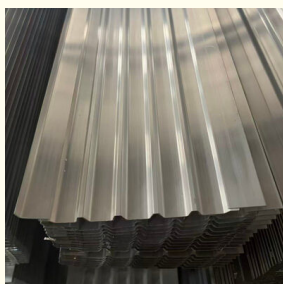
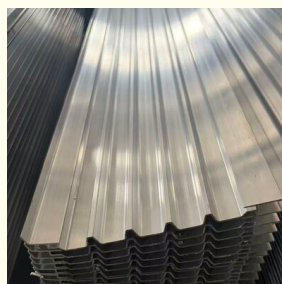
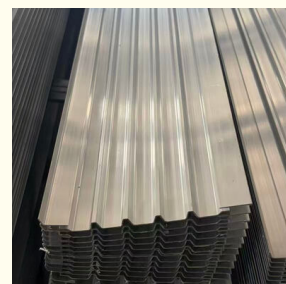


Product Specification

- Customization: Available
- Type: Window & Door Aluminium Profile, Decoration Aluminium Profile, Glass Wall Aluminium Profile, Industrial Aluminium Profile
- Shape: Square
- Grade: 6000 Series
- Temper: T3-T8
- Window & Door Aluminium Profile: 60 Series
- Alloy: Alloy
- Surface Finishing: Anodic Oxidation
- Alloying Ingredient: 6063
- Polished Aluminum Profile: Mechanical Polishing
- Surface Treatment: Anodizing/Powder Painting /Electrophoresis
- Logo: Silk Screen /Laser



More Images



Product Description

6063 Aluminum Extruded Great Wall Profile for Outdoor Roof Architectural

Product Description

Our **6063 extruded aluminum corrugated roofing profile** is a solid hollow extrusion roof panel, different from traditional roll-formed thin aluminum tiles. Manufactured with premium 6063-T5 aluminum alloy, this structural aluminum roof tile features integral extrusion forming, hollow thermal insulation cavity, excellent weather resistance and high structural stability. It is a premium roofing solution widely used for villa rooftops, self-built houses, sunrooms, canopy shelters and commercial building roof renovation projects.

As a professional aluminum extrusion factory, we provide fully customized extrusion profiles in arbitrary lengths, various surface finishes and exclusive structural optimization for long-term outdoor roofing applications.

Product Specification

6063-T5 Grade Aluminum Alloy: Adopts standard architectural-grade 6063 aluminum, featuring smooth extrusion performance, uniform texture, high toughness and strong oxidation resistance. Far more stable than 1060/3003 roll-formed aluminum tiles for long-term outdoor exposure.

Integral Extrusion Hollow Structure: One-piece extruded molding with hollow cavity design. Effectively reduces roof heat transfer, achieves outstanding heat insulation and sound insulation performance, solving the heat and noise problems of traditional metal roofs.

Zero Rust & Long Service Life: Aluminum alloy natural anti-corrosion property plus optional anodizing, powder coating and fluorocarbon coating treatments. Waterproof, anti-aging, wind-resistant and corrosion-resistant.

High Structural Strength: Extruded profile integral structure improves overall roof load-bearing capacity, strong wind resistance and pressure resistance, not easy to deform or dent compared with thin roll-formed aluminum tiles.

Customizable Size & Finish: Custom profile cross-sections, arbitrary cutting length, multiple color and surface treatment options to match architectural design requirements.

Easy Installation & Low Maintenance: Standard profile structure for fast splicing and installation. No frequent maintenance required after installation, greatly saving later operating costs.

Applications:

6063 extruded aluminum corrugated roofing profiles are specially designed for high-end outdoor roofing scenarios. Widely applied in residential villas, rural self-built houses, sunshade sunrooms, courtyard canopies, scenic spot buildings, hotel exterior roofs and old building roof replacement projects. It is the ideal upgraded substitute for color steel tiles and ordinary thin aluminum corrugated sheets.

Competitive Advantage:

Modern sunrooms serve as ideal leisure and extension spaces for residential and commercial buildings, yet persistent overheating remains one of the most common and troublesome issues worldwide. Most traditional sunroom roofing solutions, including ordinary roll-formed aluminum tiles and single-layer metal panels, feature simple flat structures with no heat insulation design. Under intense outdoor sunlight and high-temperature weather, these conventional roofs rapidly absorb and transfer heat inward, turning sunrooms into sweltering spaces in summer. Additionally, thin roll-formed metal roofs easily generate loud rain noise, suffer from surface aging, slight deformation, and weak weather resistance after years of outdoor exposure, greatly reducing the comfort and service life of sunroom structures. To completely resolve sunroom overheating and related auxiliary problems, Metalplus provides professional 6063-T5 extruded aluminum roofing panels tailored for long-term sunroom outdoor applications.

Different from ordinary sunroom roofing materials, Metalplus sunroom roof profiles adopt premium architectural-grade 6063-T5 aluminum alloy raw materials, which boast uniform texture, high toughness, and excellent oxidation resistance. Compared with common 1060 and 3003 roll-formed aluminum products, our extruded aluminum panels maintain more stable physical and chemical properties under long-term ultraviolet radiation and temperature changes, avoiding fading, aging, and corrosion. The core advantage lies in its integral extrusion hollow cavity structure, a unique structural design completely different from single-layer metal roofs. This hollow thermal insulation cavity effectively blocks external heat conduction, forming a stable thermal barrier that significantly reduces indoor temperature rise and fundamentally solves sunroom overheating troubles.

Beyond outstanding thermal insulation performance, Metalplus hollow aluminum roof panels integrate multiple practical functional advantages. The one-piece extrusion molding process greatly enhances the overall structural strength and load-bearing capacity of the roof, delivering strong wind resistance and pressure resistance without deformation or denting. Equipped with optional anodizing, powder coating, and fluorocarbon surface treatments, the panels achieve excellent waterproof, anti-aging, and corrosion-resistant effects, adapting to all kinds of complex outdoor climates. Meanwhile, the hollow cavity structure also provides remarkable sound insulation performance, effectively isolating rain impact noise and outdoor noise interference to create a quieter sunroom environment.

For personalized sunroom construction, Metalplus supports full customized services, including arbitrary cutting lengths, exclusive profile cross-section structural optimization, and diverse color surface finishes to match different architectural styles. The standardized profile structure enables fast splicing and efficient installation. After construction completion, the high-stability aluminum roof requires almost no frequent maintenance, greatly saving long-term operation and maintenance costs. For homeowners and builders pursuing comfortable, durable, and low-maintenance sunroom spaces, Metalplus 6063-T5 hollow extruded aluminum roof is the most reliable thermal insulation roofing solution.

Primary Technical

Data

1) Chemical composition

Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Impurity	Al
6063	0.2-0.6	0.35	0.1	0.1	0.45-0.9	0.1	0.1	0.15	Rest	

6061	0.4-0.8	0.7	0.15-0.40	0.15	0.8-1.2	0.04-0.35	0.25	0.15	0.15	Rest
6060	0.3-0.6	0.1-0.3	0.1	0.35-0.6	-	0.15	0.1	0.15		Rest
6005	0.6-0.9	0.35	0.1	0.1	0.40-0.60	0.1	0.1	0.15		Rest

2) Mechanical property

Alloy Temper Tensile strength Yield strength Elongation

6063	T5	≥ 160Mpa	≥ 110Mpa	≥ 8%
	T6	≥ 205Mpa	≥ 180Mpa	≥ 8%
6061	T6	≥ 265Mpa	≥ 245Mpa	≥ 8%

Technical Support

1. Based on the customer's requirements, we help design the appearance of the extruded profiles, provide CAD drawings and 3D models for customer confirmation, customize the molds, and extrude the aluminum profiles that meet the customer's requirements.

2. For customers with design capabilities, our professional R&D team will analyze and optimize the design based on the customer's drawings and our experience in extrusion processing, using the most reasonable design to reduce production costs and improve product performance.

3. Our company adopts a "one-stop" service and production model, including product design, customized molds, aluminum bar melting and casting, extrusion profiling, precision machining, and surface treatment. We can effectively control the alloy composition of raw materials and maintain product accuracy throughout the production process, providing you with high-quality products.

Factory

Equipment

Extrusion

Equipped with 44 aluminum extrusion lines, MetalPlus is capable of producing various standards of commercial aluminum profiles and industrial aluminum profiles with maximum outer diameter of 350mm.

MetalPlus has 44 aluminum profile extrusion lines equipped with PLC control systems and precise molds. The largest extruder used in the MetalPlus factory is a 6800 ton unit. The machine is used for the production of industrial profiles in various shapes with a maximum diameter of 600mm. This allows us to satisfy the different requirements of our various customers. Some of the aluminum products produced by MetalPlus include radiators, industrial fan blades, motor enclosures, solar cell frames, doors, and windows.

MetalPlus can produce custom molds according to customer requirements. We have the abilities and experience to produce aluminum profiles with complex structures. We have our own R&D team so we can provide reasonable suggestions for our customers in order to create superior products at affordable prices.

Anodizing

Anodizing is a process in which a layer of aluminum oxide is formed on the surface of aluminum alloy products when they are placed in an electrolyte solution and then an electrical current is applied. Oxidized aluminum profiles feature improved corrosion resistance so that the surface can withstand various weather conditions. Meanwhile, the aluminum oxide also increases the product's hardness and wear resistance.

MetalPlus has 6 anodizing production lines. The profiles processed in our anodizing lines feature uniform oxidation film thickness and color giving them a beautiful appearance. The oxidized profiles come in various color options including silver, black, gold, champagne, and imitation steel. Other colors can be customized upon request.

The anodized products will all be inspected by highly trained professional inspectors. Defective products which cannot be re-processed will be directly scrapped. Products with uneven color will be de-coated and re-anodized until they can meet the requirements. This ensures that there is no color difference among each batch of products.

Painting

Our factory is equipped with 4 powder spraying lines and all of them are using high-quality spray nozzles from Gema Switzerland. In the meantime, MetalPlus only uses safe and environmental friendly paint with strong adhesive force as well as durable color retention.

CNC Machining

MetalPlus is equipped with highly advanced machining equipment sets. All fine machining processes are accomplished by technicians with rich industry experience. Strict industrial standards are adopted during production to ensure fine machining precision and product quality.

1. MetalPlus has 12 PRATIC machining centers which can be used for the milling, drilling or tapping of profiles from different angles. They are especially suitable for the production of long profiles up to 6 meters. The equipment sets can realize machining of complex profiles with the simplest methods

2. MetalPlus has fully automatic cutting machines from Wegoma which can accomplish precise cutting with automatic and continuous material feeding, which means that the machines feature low labor cost and high production efficiency. Therefore, the cutting price of MetalPlus is significantly lower than that of the other enterprises in the industry.

3. We have 30 punching machines of which the punching pressure ranges from 50 to 100 tons. They can be used for the punching of relatively thick profiles of which the thickness can be over 5MM. There are also 10 stretch bending machines/bending machines which can realize bending of profiles to arc or different angles. The machining angle is highly precise. The factory is also equipped with 10 milling machines, realizing machining of different planes, bevels or grooves so that we can satisfy different machining requirements of our customers.

Packing and Shipping

Finished products are packaged manually and ready for delivery. MetalPlusadopts strict warehouse management procedures; the finished product warehouse is divided into sections to store specific products, any in & out transactions have to be recorded and each product has to be examined before delivering.

Certifications

Company History

In 2004 "THE RECOGNIZED BRAND OF THE BUILDING INDUSTRY MATERIAL MARKET"

In 2006 "CERTIFICATE FOR PRODUCT EXEMPTION FROM QUALITY SURVEILANCE INSPECTION " and "ISO9001"

In 2009 "ADVANCED COMPANY "

In 2009 "JIANGSU FAMOUS BRAND CERTIFICAT "

In 2009 "CERTIFICATE FOR CREDIBLE PRODUCT OF QUALITY IN JIANGSU PROVINCE"

In 2012, Established the business relation ship with Panasonic , LG .

In 2015, be and inovative producer an supplying partner for Germany Client .

In 2017, Developed the new products of baseboard heaters .

In 2019, Cooperate with the world's largest Heater Manufacturers , and supply the Aluminum Shells for them .Won a good reputation !

In 2023, We will confidence to develop oversea distributor , to expand market for win-win benefits .

Project

The Soccer City Stadium, in Johannesburg is one of the major project of south African ,the 94 000 seat stadium is the largest capacity stadium in Africa .

We are very honored to participate in the construction of the project as the main supplier of aluminum!

The Soccer City Stadium won unanimous praise after it was built!

Lobster Trailers is a Nordic trailer giant ,we are very pound to cooperate with them .
Our professional R&D team analyze and improve upon Lobster's designs and then process them with our excellent processing equipment , exquisite technology . We minimize production costs and improve product performance thanks our optimization proficiencies.

We are very glad that our local customer Dadnwon the bid of the school project , and we supplied the Aluminum Legs of the school desks for them .

With our strong design and mature technics ,we will help more customers to get the tender .



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