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# INTRODUCTION

# SUNSHINE ALUTRADE

YOUR PARTNER IN HIGH-QUALITY ALUMINIUM MANUFACTURING

Sunshine Alutrade is known for delivering reliable, high-quality aluminium solutions tailored to the needs of various industries. We specialize in crafting custom aluminum products for sectors such as furniture, transportation, and more, with a steadfast commitment to sustainability at every stage of production. By supporting local businesses and fostering strong community ties, we ensure that our operations contribute positively to the local economy while maintaining the highest standards of environmental responsibility. At Sunshine Alutrade, quality, reliability, and sustainability are not just goals-they are the foundation of everything we do.



- Professionalism
- Responsibility
- Convenience
- Innovation
- Proactiveness
- Collaboration



To provide customers with high-quality aluminium products, fabrication services, and project solutions at competitive prices, delivered on time and with a commitment to environmental sustainability.



To become a leading and reputable brand in the supply of aluminium fencing systems and the extrusion of bespoke aluminium profiles for the Australian market.



# COMPANY INFORMATION

# SUNSHINE ALUTRADE

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# ALUMINIUM AND APPLICATION

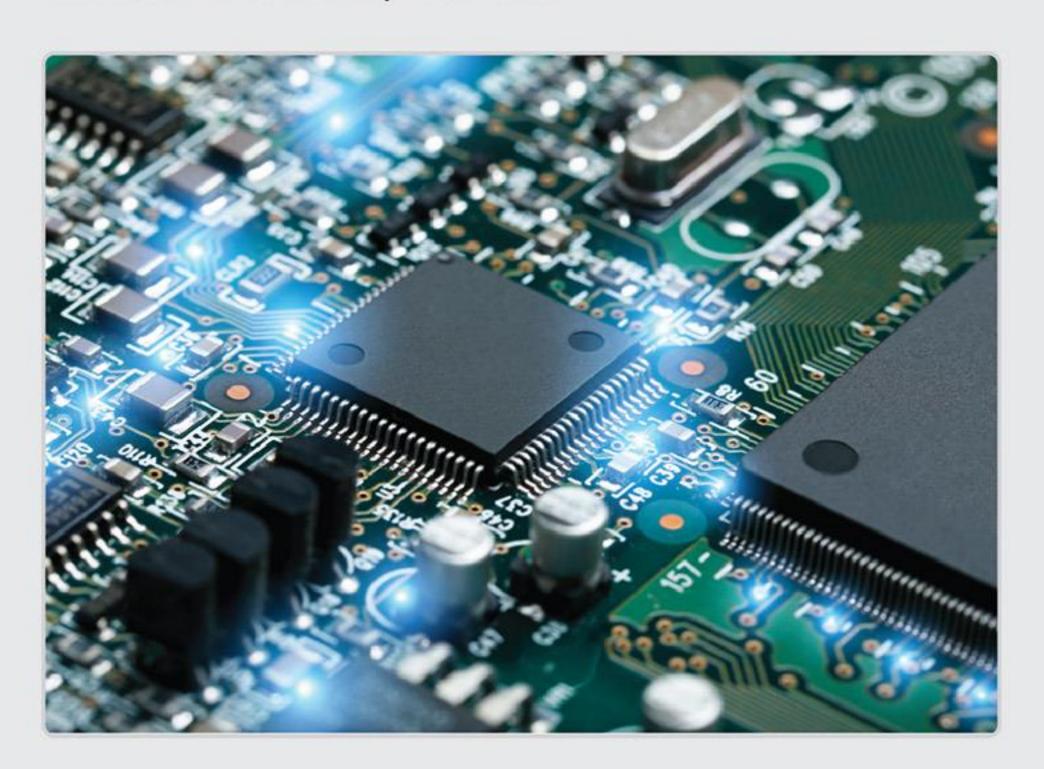
ALUMINUM IS WIDELY USED IN VARIOUS INDUSTRIES DUE TO ITS LIGHTWEIGHT, STRENGTH, CORROSION RESISTANCE, AND RECYCLABILITY. HERE ARE SOME KEY APPLICATIONS:

Custom aluminum products find applications across a broad spectrum of industries:



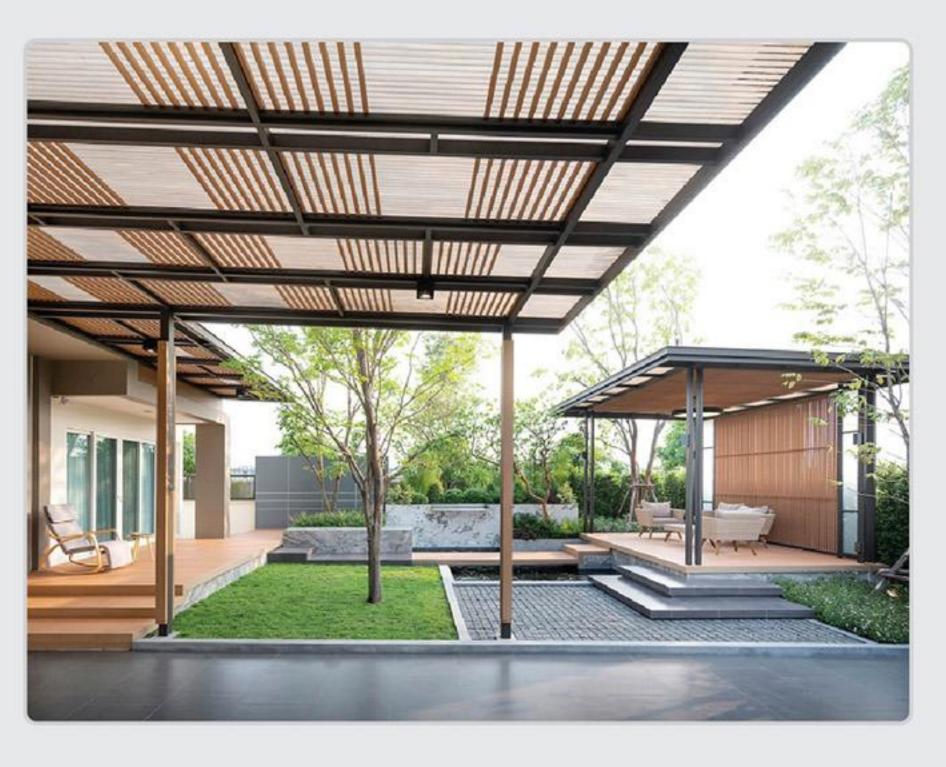
**AUTOMOTIVE AND AEROSPACE** 

Creating lightweight and durable components for the future of transportation.



**ELECTRONICS AND CONSUMER GOODS** 

Creating innovative solutions for a connected world.



CONSTRUCTION AND ARCHITECTURE

Creating Timeless Beauty.



MARINE AND OTHER NICHE INDUSTRIES

Providing specialized solutions for unique challenges.

These applications demonstrate the versatility of aluminum across different sectors, making it a critical material in modern technology and infrastructure.



# Aluminum offers several benefits that make it a highly valued material across various industries:



### LIGHTWEIGHT



CORROSION RESISTANCE, STANDING STRONG **AGAINST TIME** 

- Aluminum is about one-third the weight of steel, making it ideal for applications where reducing weight is crucial, such as in transportation and aerospace industries. Despite being lightweight, aluminum has excellent strength, especially when alloyed with other metals, making it suitable for structural applications.
- Aluminum naturally forms a protective oxide layer when exposed to air, preventing corrosion and making it highly durable, especially in harsh environments.
- The superior corrosion resistance and durability of aluminum ensure that your structures remain resilient against the effects of weather and the environment. You no longer have to worry about deterioration, rust, or termites, ensuring that your projects retain their beauty and value over time.



RECYCLABILITY

Aluminum is 100% recyclable without losing its properties. Recycling aluminum requires only about 5% of the energy needed to produce new aluminum from raw materials, making it environmentally friendly.



THERMAL AND **ELECTRICAL CONDUCTIVITY** 

Aluminum is an excellent conductor of electricity and heat, making it ideal for use in electrical transmission lines, heat exchangers, and electronics.

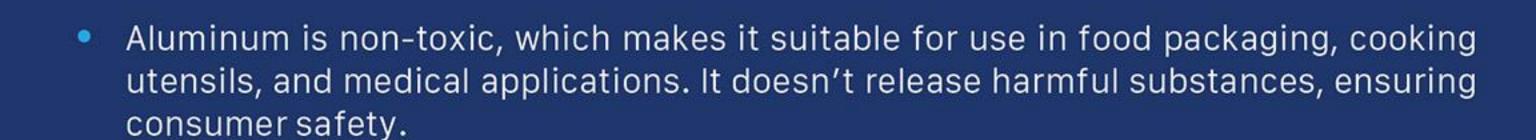
Aluminum can be easily formed into a wide range of shapes through processes like

rolling, extrusion, and forging, allowing for versatile design and manufacturing



**MALLEABILITY AND DUCTILITY** 







**NON-TOXIC AND SAFE** 



# **COST-EFFECTIVE**

Given its abundance and the efficiency of recycling processes, aluminum is relatively cost-effective compared to other metals like copper or titanium, especially in large-scale applications.

These benefits contribute to aluminum's widespread use in industries ranging from construction and transportation to electronics and consumer goods.

options.

# **UNDERSTANDING ABOUT ALUMINIUM**

Aluminum is categorized into various grades based on its alloy composition and properties. Each grade is designed for specific applications. Here's an overview:



# 1000 SERIES (PURE ALUMINUM - 99% OR HIGHER)

- Applications: Electrical and chemical applications due to high conductivity, excellent corrosion resistance, and workability.
- Example: Electrical cables, heat exchangers and chemical tanks.









# 2000 SERIES (ALUMINUM-COPPER ALLOYS)

- Applications: Aerospace components where high strength is required but with a reduced need for corrosion resistance.
- Example: Aircraft structures, truck wheels.





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# 3000 SERIES (ALUMINUM-MANGANESE ALLOYS)

- Applications: General-purpose applications where moderate strength and good corrosion resistance are necessary.
- Example: Beverage cans, roofing sheets, heat exchangers.







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# 4000 SERIES (ALUMINUM-SILICON ALLOYS)

- Applications: Automotive industry for its excellent wear resistance and lower melting point.
- Example: Automotive engine components, welding wire.







# 5000 SERIES (ALUMINUM-MAGNESIUM ALLOYS)

- Applications: Marine and automotive industries due to its high corrosion resistance in marine environments and good weldability.
- Example: Marine structures, pressure vessels and pipelines.









# 6000 SERIES (ALUMINUM-MAGNESIUM-SILICON ALLOYS)

- Applications: General-purpose applications with a need for medium strength and good corrosion resistance.
- Example: Structural components, bridges, railings, and truck frames.











# 7000 SERIES (ALUMINUM-ZINC ALLOYS)

- Applications: High-performance applications like aerospace and sporting equipment, where high strength is crucial.
- Example: Aircraft, aerospace components, bike frames, and climbing equipment.









# 8000 SERIES (MISCELLANEOUS ALLOYS)

- Applications: Specialized applications with unique property requirements.
- Example: Aluminum foil for packaging, electrical cables.





Each aluminum grade offers a balance between strength, corrosion resistance, workability, and other properties, making it suitable for specific applications.



# WHAT ARE WE OFFER

ALUMINUM FENCING SUPPLIES

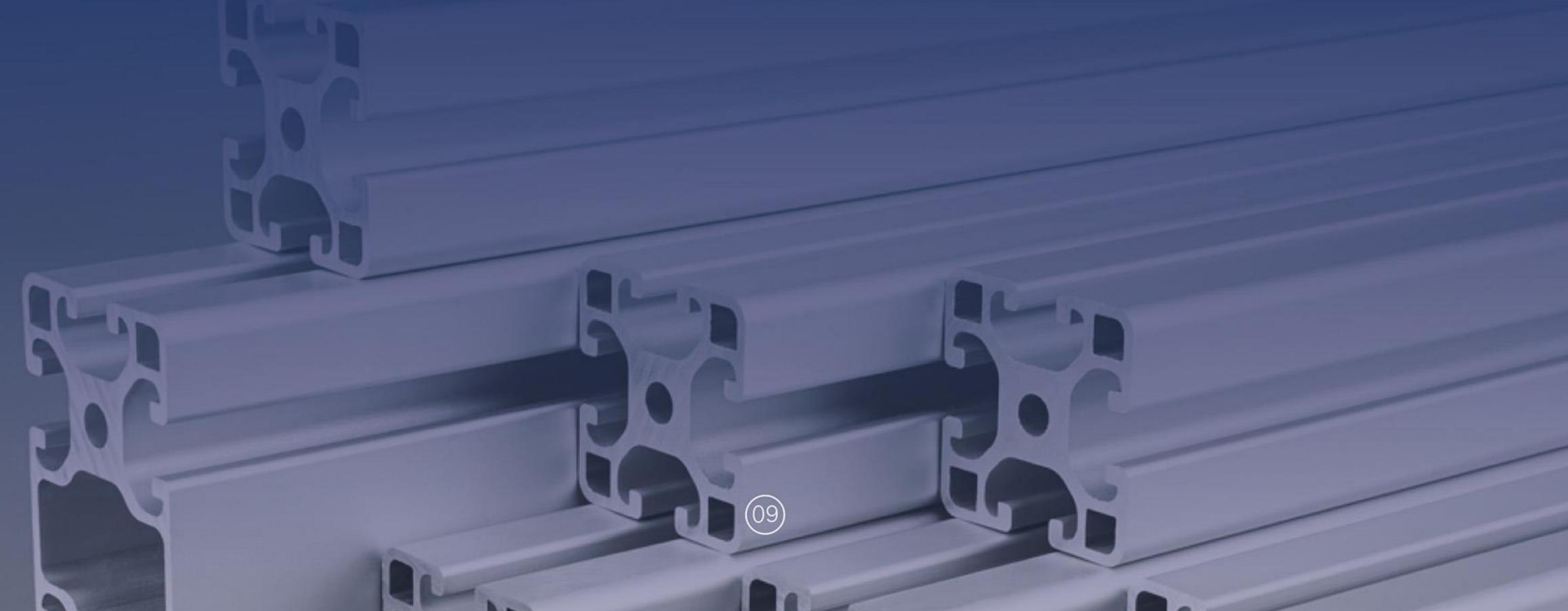


ALUMINUM EXTRUSION



SURFACE TREATMENT AND FINISHING

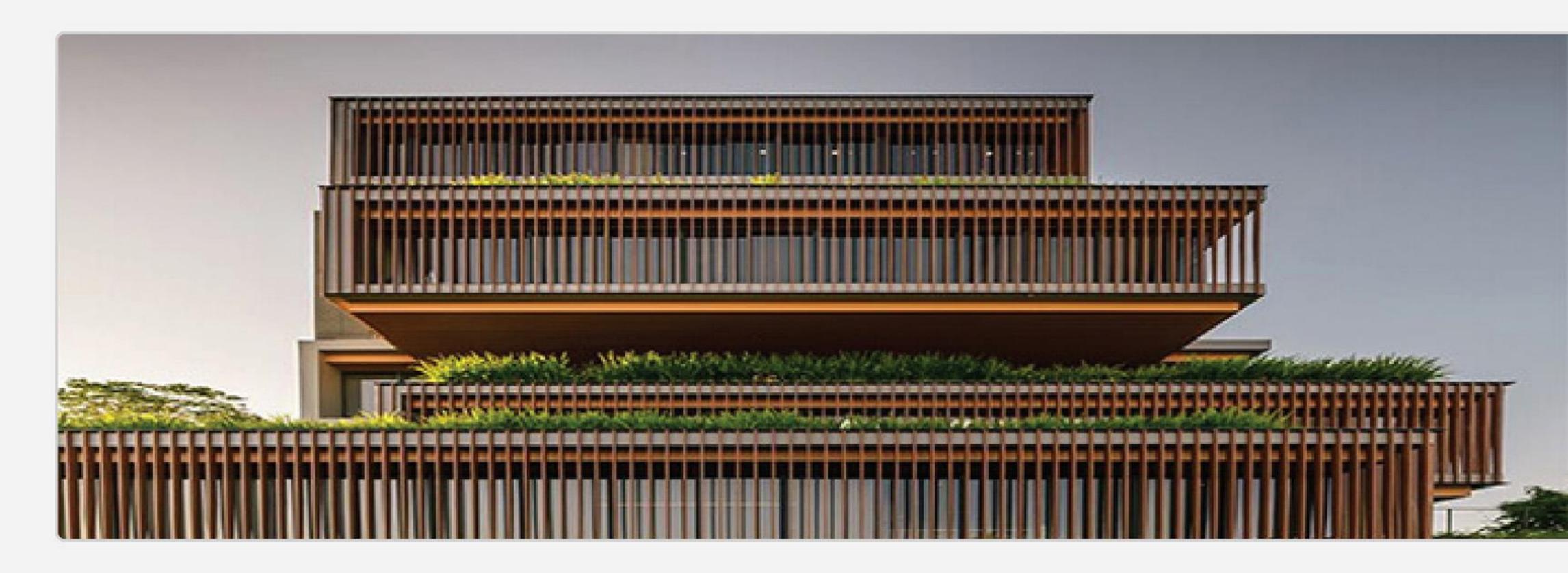




# **ALUMINUM FENCING SUPPLIES**

# THE BENEFITS OF ALUMINUM FENCING: A MODERN, SUSTAINABLE CHOICE.

Aluminum fencing has become increasingly popular as homeowners and businesses look for durable, low-maintenance, and environmentally friendly alternatives to traditional materials like timber. Offering a blend of quality, ease of installation, and sustainability, aluminum fencing products are now the go-to choice for those seeking a long-lasting and eco-conscious solution.



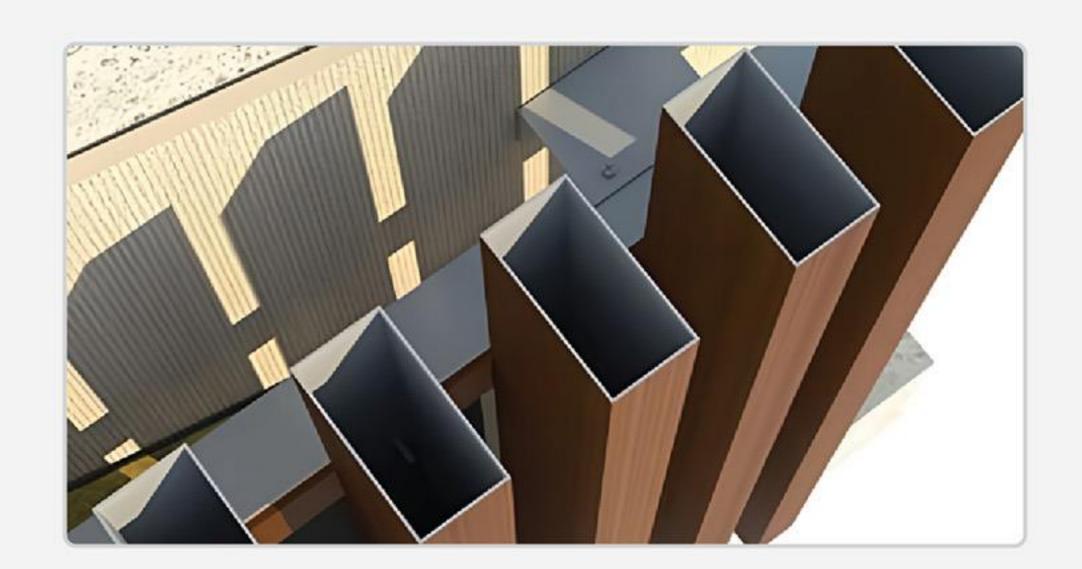
# SUPERIOR QUALITY AND DURABILITY

One of the standout features of aluminum fencing is its superior quality. Unlike timber, which can warp, rot, or be affected by pests over time, aluminum is incredibly resilient. It's naturally resistant to rust and corrosion, making it ideal for various climates, including coastal areas where saltwater can be particularly damaging. The strength of aluminum also ensures that your fence will stand the test of time, providing reliable security and aesthetic appeal for years to come.



# EASY TO INSTALL

Aluminum fencing is designed with ease of installation in mind. Most aluminum fencing products come in pre-assembled panels or modular systems, allowing for quick and straightforward assembly. Whether you're a seasoned DIY enthusiast or a professional installer, the lightweight nature of aluminum means that the fencing can be handled and installed without the need for heavy machinery or specialized tools. This not only saves time but also reduces installation costs.





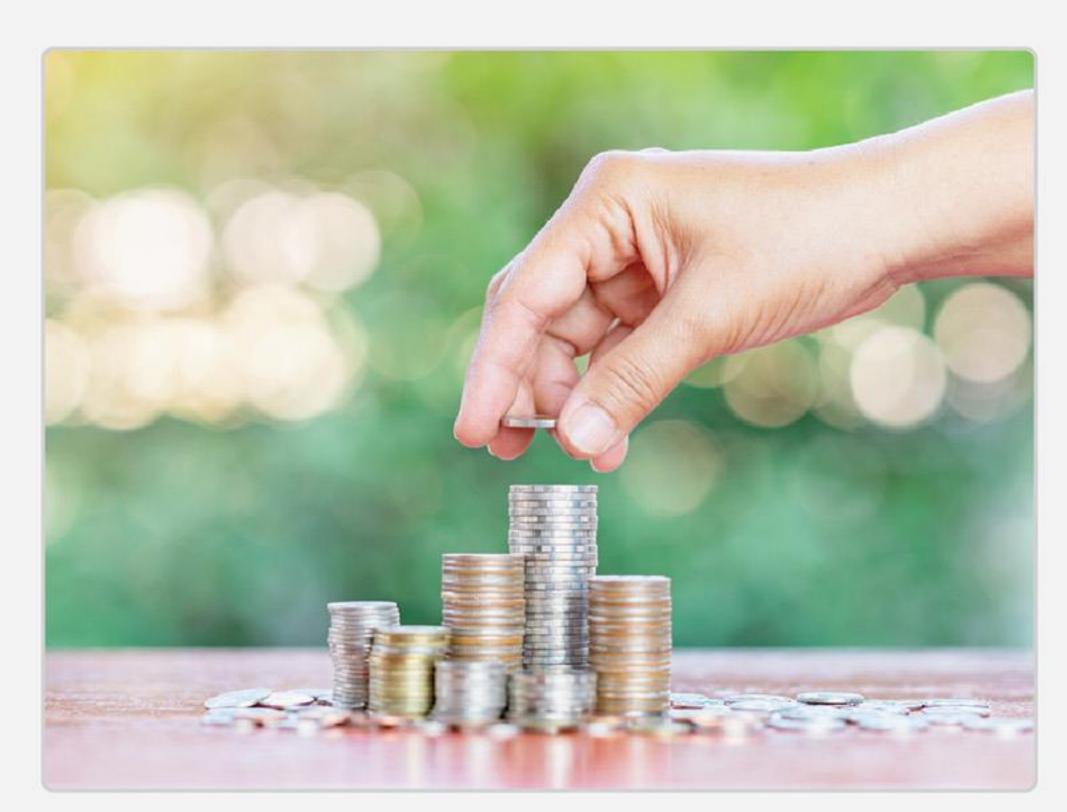


#### MINIMAL MAINTENANCE NO WELDING EASY TO REPLACE

One of the key advantages of aluminum fencing is its low maintenance requirements. Unlike timber, which requires regular staining, painting, and treatment to prevent decay, aluminum fencing retains its appearance and functionality with minimal effort. Most aluminum fences are coated with a powder finish that resists fading, chipping, and peeling. To keep your aluminum fence looking pristine, a simple wash with soap and water is usually all that's needed.

#### **COST SAVINGS**

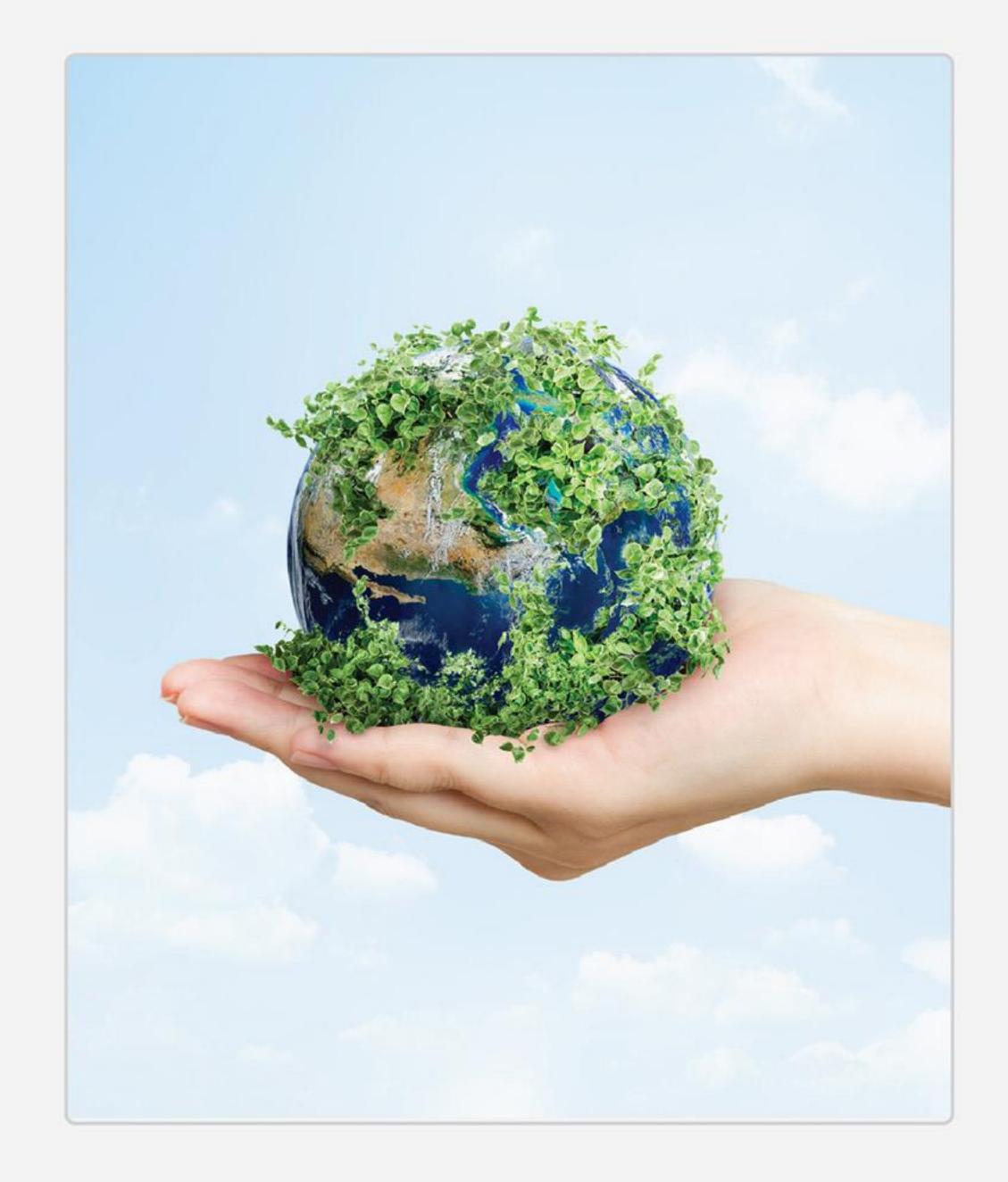
No need for painting, coating, or regular maintenance, Sunshine Alutrade aluminum fences save you considerable time and maintenance costs. A simple cleaning is all it takes to keep your fence looking as good as new.



#### **ENVIRONMENTAL SUSTAINABILITY**

As environmental concerns become increasingly important, many are turning to aluminum as a sustainable alternative to timber fencing. The production of aluminum fencing has a lower environmental impact compared to the harvesting and processing of timber. Additionally, aluminum is 100% recyclable, meaning that old or damaged fences can be recycled and reused, further reducing waste.

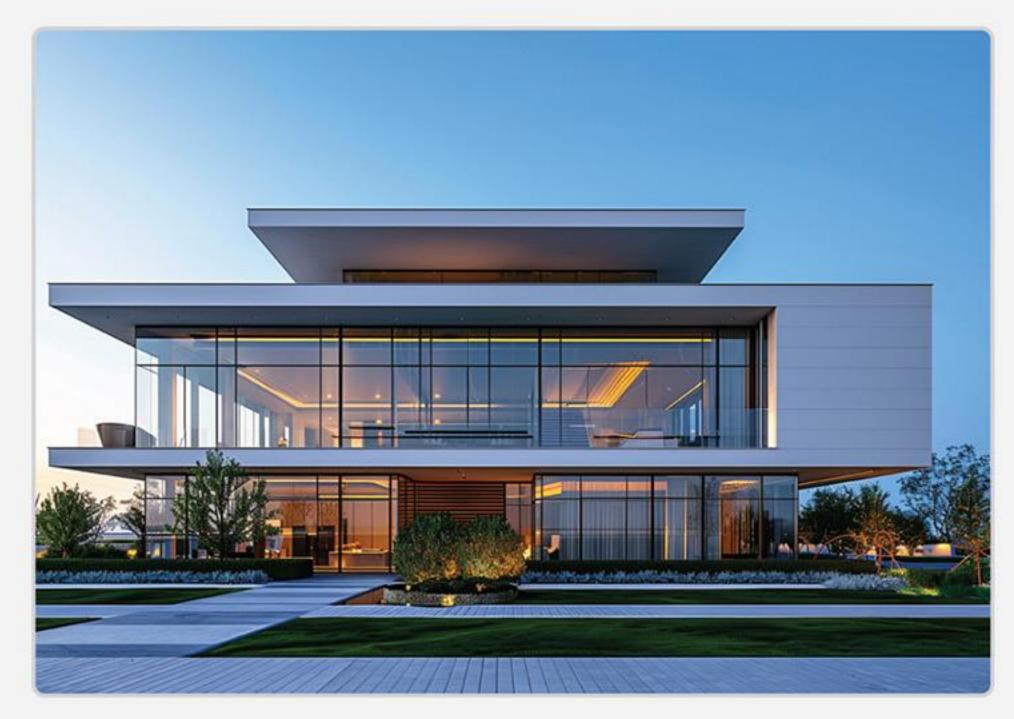
By choosing aluminum over timber, homeowners can help protect forests and reduce the demand for deforestation. This shift not only preserves natural habitats but also contributes to the fight against climate change by reducing the carbon footprint associated with timber production.





### HIGHLIGHTING AESTHETIC APPEAL AND VERSATILITY

**Exquisite Designs, Diverse Styles:** Sunshine Alutrade aluminum fences are not just protective barriers; they are works of art that elevate your living spaces. With a wide variety of styles, colors, and patterns, we cater to all architectural styles, from classic to modern, from simple to elaborate.



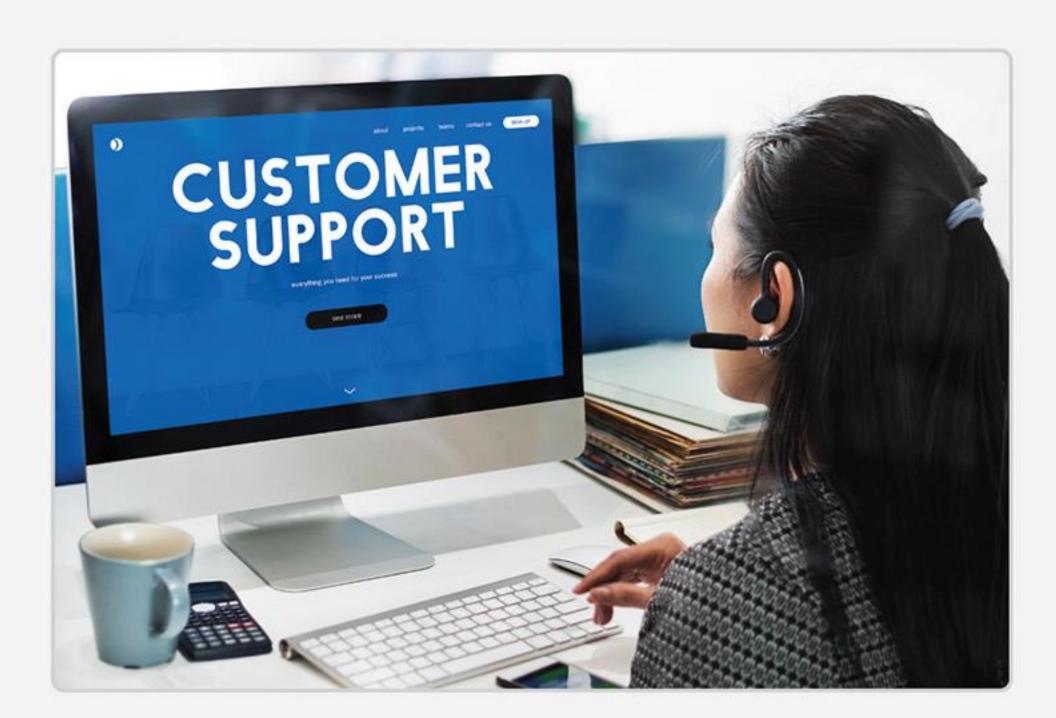
#### **LONG-TERM WARRANTY**

We are confident in the quality of our products, which is why we offer a long-term warranty on all of our aluminum fence products.



## **DEDICATED CUSTOMER SERVICE**

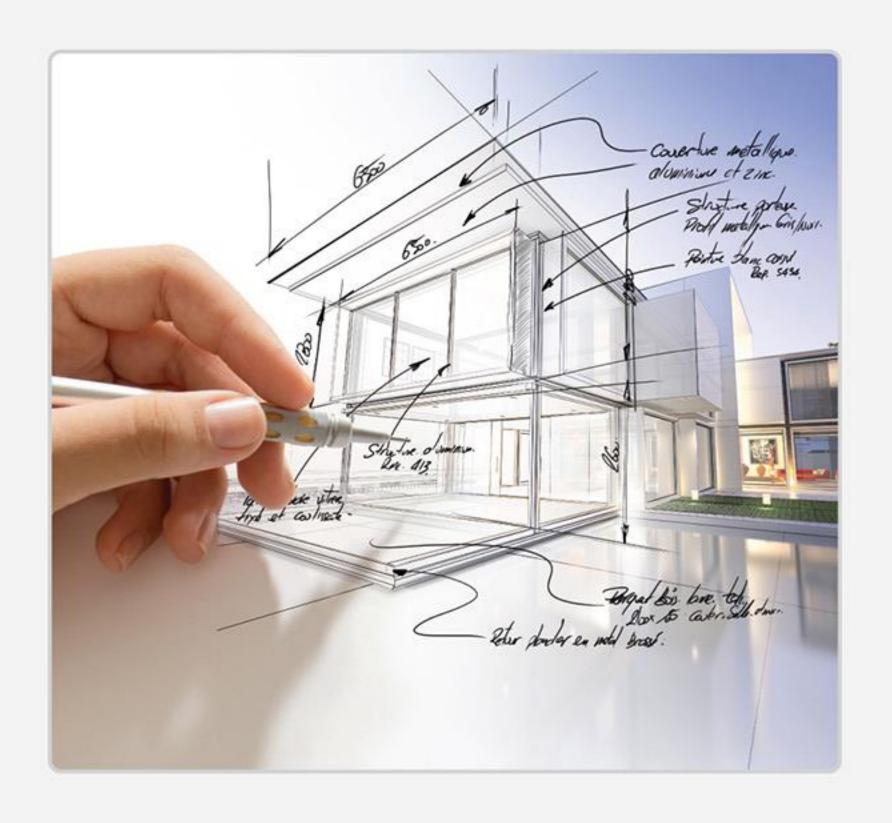
Our team of professional and dedicated staff is always ready to provide advice, support, and answer any questions you may have.





Aluminum fencing offers a high-quality, easy-to-install, and low-maintenance solution that is also environmentally friendly. By opting for aluminum, you're choosing a product that will not only provide long-lasting beauty and security but also contribute to a more sustainable future. As the demand for eco-conscious building materials continues to grow, aluminum fencing stands out as a smart and responsible choice for today's homeowners and businesses.

# CUSTOM ALUMINUM EXTRUSION



# UNLOCKING THE POWER OF CUSTOM ALUMINIUM FROM IMAGINATION TO REAL PRODUCTS

In today's fast-paced and competitive world, innovation and customization are key drivers of success across various industries. One of the most versatile materials that cater to these needs is aluminium, particularly when used in custom extrusion processes. Custom aluminium extrusion allows businesses to transform their ideas into tangible products with unparalleled precision, efficiency, and sustainability. This article delves into the concept of custom aluminium extrusion, explores its wide-ranging applications, and highlights the benefits of a fully customized service in bringing imaginative designs to life.



# PRECISION AND FLEXIBILITY IN DESIGN

One of the most significant advantages of custom aluminium extrusion is the ability to achieve precision in design. Whether you need intricate shapes, varying thicknesses, or unique profiles, custom extrusion allows for exact specifications. This level of precision is particularly important in industries where tight tolerances and specific functionalities are required, such as in aerospace or medical devices.





#### **ENHANCED PRODUCT PERFORMANCE**

Custom extrusions are designed to meet specific functional requirements, resulting in enhanced product performance. For example, in the automotive industry, custom aluminium components contribute to lighter vehicles with improved fuel efficiency and safety. In electronics, custom-designed heat sinks ensure optimal thermal management, protecting sensitive components from overheating.



#### **COST-EFFECTIVE PRODUCTION**

While custom tooling and die creation may involve an initial investment, the long-term benefits often outweigh the costs. Aluminium extrusion is a highly efficient process, minimizing material waste and reducing the need for additional machining. Moreover, the durability and low maintenance of aluminium products mean lower lifecycle costs, making it a cost-effective solution for many applications.



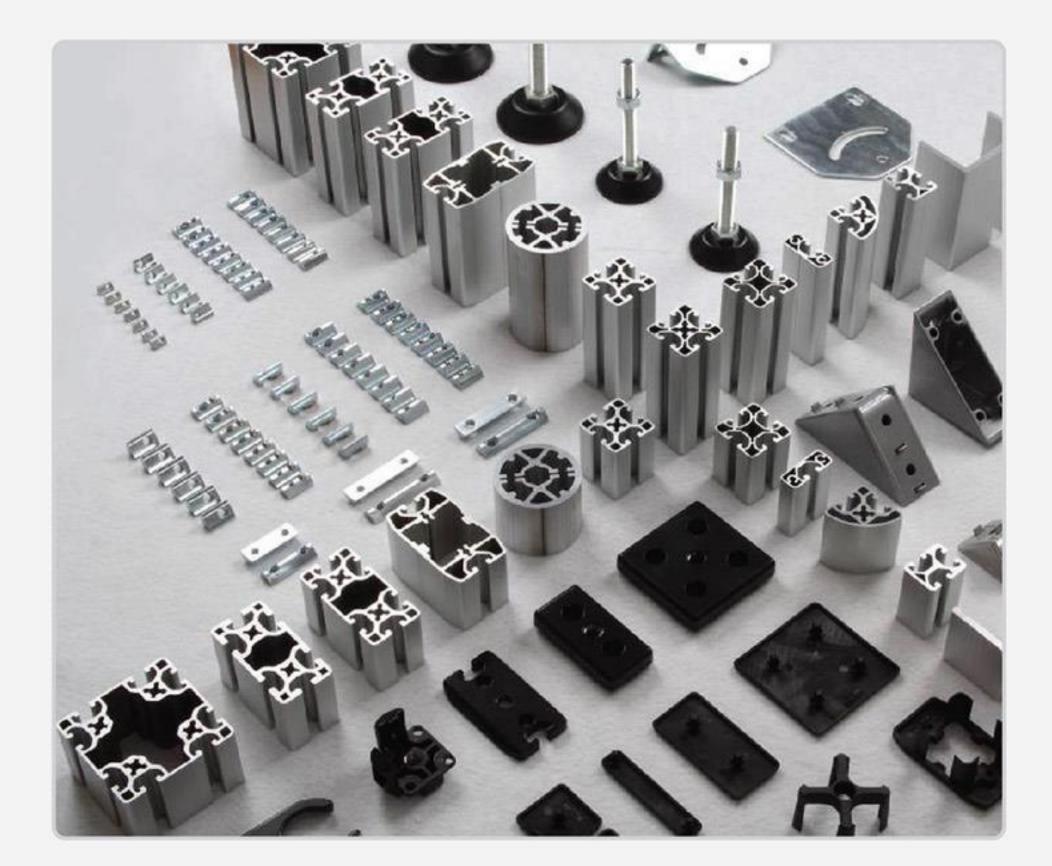


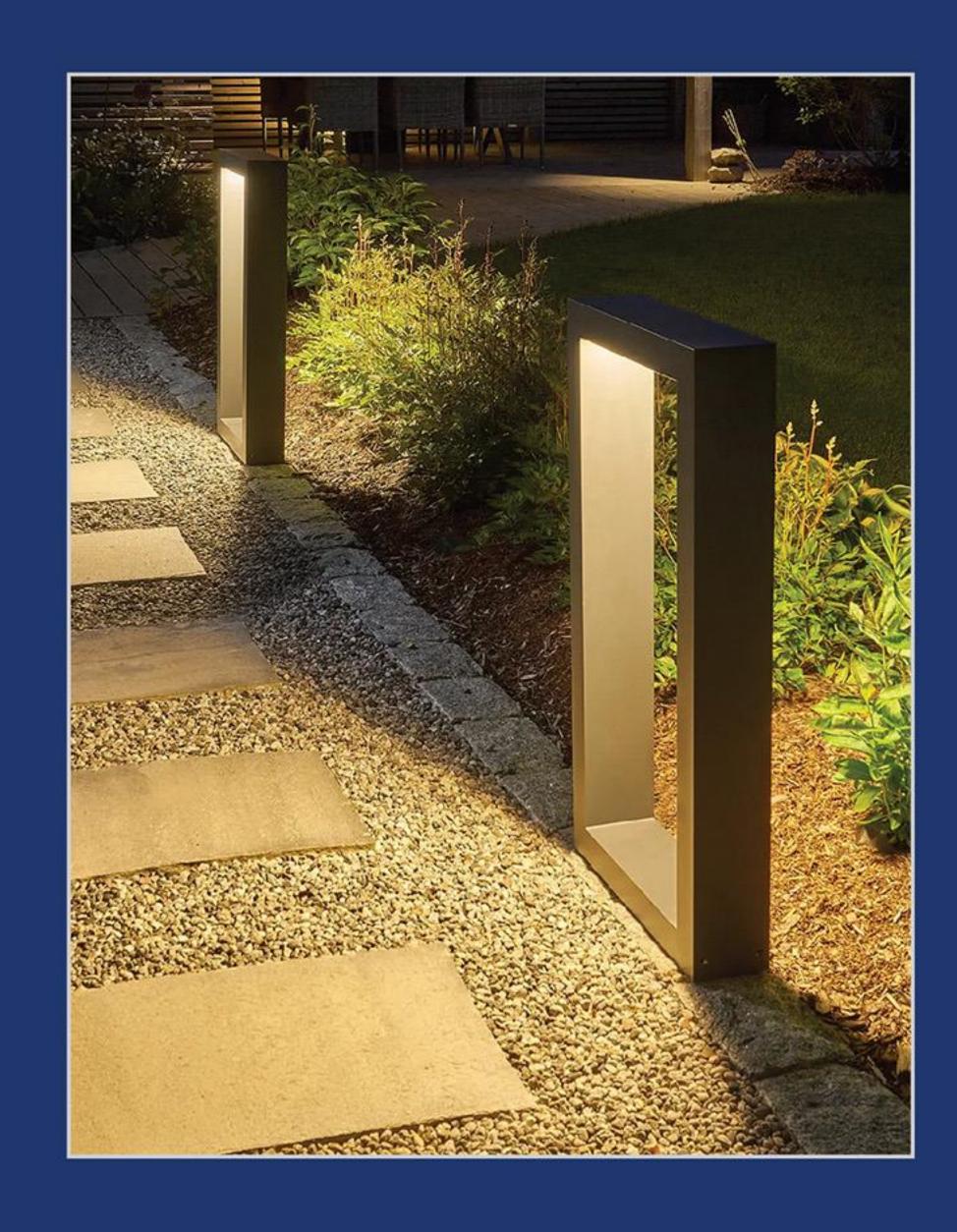


#### **BRINGING IMAGINATION TO LIFE**

Perhaps the most exciting aspect of custom aluminium extrusion is the ability to turn imaginative ideas into real products. Designers and engineers can explore creative possibilities, knowing that their concepts can be realized with precision and quality. From innovative architectural designs to cutting-edge electronic devices, custom aluminium extrusion empowers creativity, allowing businesses to differentiate themselves in the marketplace.





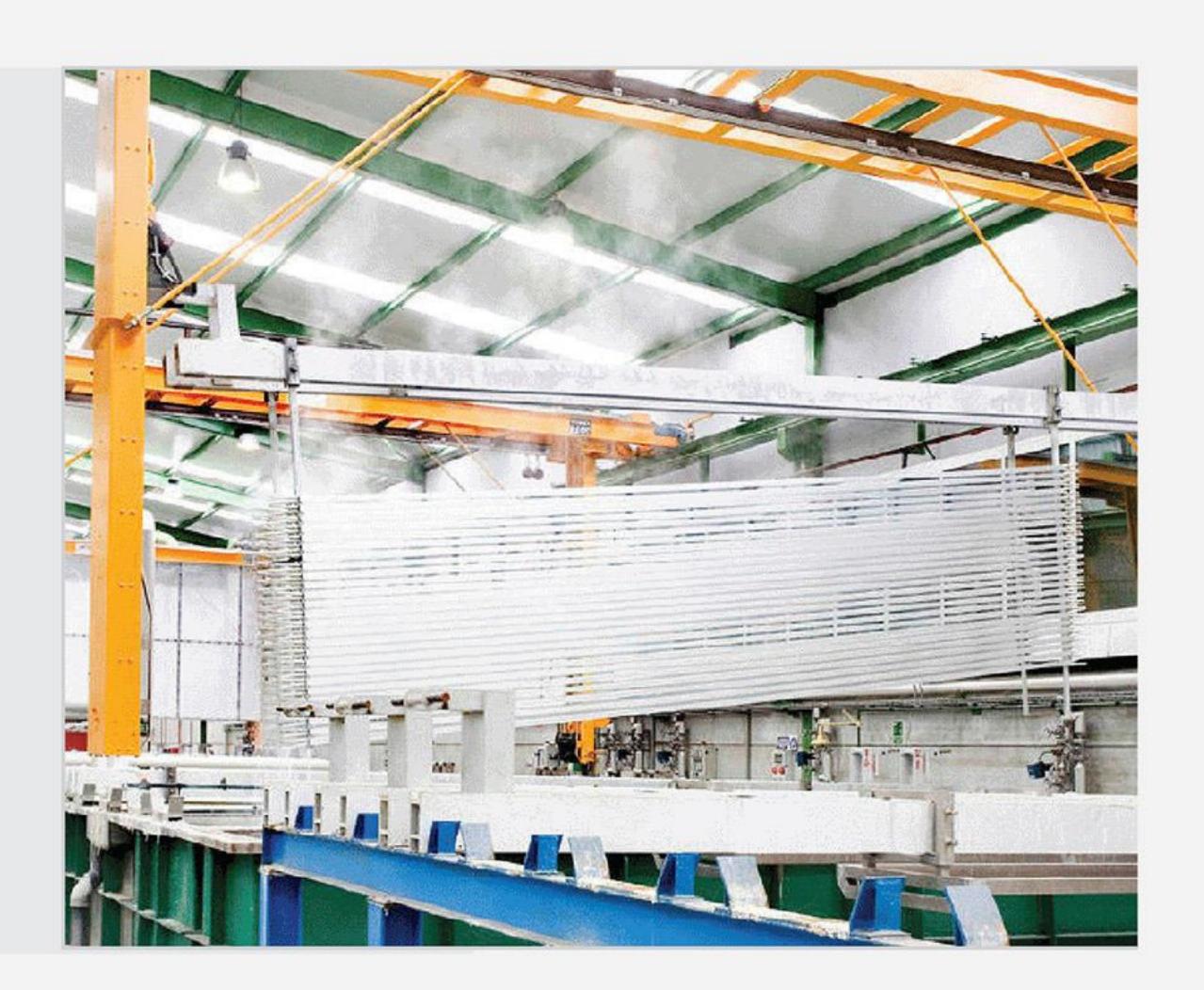


Custom aluminium extrusion is more than just a manufacturing process; it's a gateway to innovation and creativity. By offering precision, flexibility, and sustainability, custom extrusion services allow businesses to bring their most imaginative ideas to life, resulting in products that are not only functional but also aesthetically pleasing and environmentally responsible. Whether you're designing a new product, improving an existing one, or exploring new market opportunities, custom aluminium extrusion provides the tools and expertise needed to turn your vision into reality. In a world where customization is key to success, embracing the possibilities of custom aluminium extrusion can set your business apart and drive it toward future growth and sustainability.



# 3 SURFACE TREATMENT AND FINISHING

Surface treatment and finishing are crucial in enhancing the appearance, durability, and functionality of aluminum custom products. Anodizing is a popular surface treatment that increases corrosion resistance and allows for the application of color finishes. It involves creating a thick oxide layer on the aluminum surface through an electrolytic process. Powder coating is another common finishing technique, where a dry powder is applied to the aluminum surface and then cured under heat. Other finishes include brushing, polishing, and painting, each offering unique benefits depending on the product's requirements.



# ► ANODIZING:





The anodizing process requires a significant amount of electricity, especially during the electrochemical reactions. This can lead to a higher carbon footprint if the electricity is not sourced from renewable energy.



#### 2. Chemical Use

Anodizing involves the use of acids, such as sulfuric or chromic acid, which can be hazardous if not properly managed. The disposal of these chemicals must be carefully controlled to prevent environmental contamination.



# 3. Waste Management

The process generates wastewater that contains metal ions and other pollutants. This wastewater needs to be treated before it can be released into the environment.



# 4. Longevity

The resulting anodized layer is very durable, which can extend the life of the product and reduce the need for replacement or recoating, ultimately reducing long-term environmental impact.

# ► POWDER COATING:

# 1. Energy Consumption



Powder coating typically involves curing in an oven, which consumes energy. However, the energy requirement is generally less intensive compared to anodizing.

# 2. Chemical Use



Powder coating does not use solvents or volatile organic compounds (VOCs), which makes it less hazardous to the environment compared to traditional liquid coatings.

# 3. Waste Management



Excess powder can often be collected and reused, resulting in minimal waste. However, any non-recyclable powder waste must be properly disposed of.

# 4. Longevity



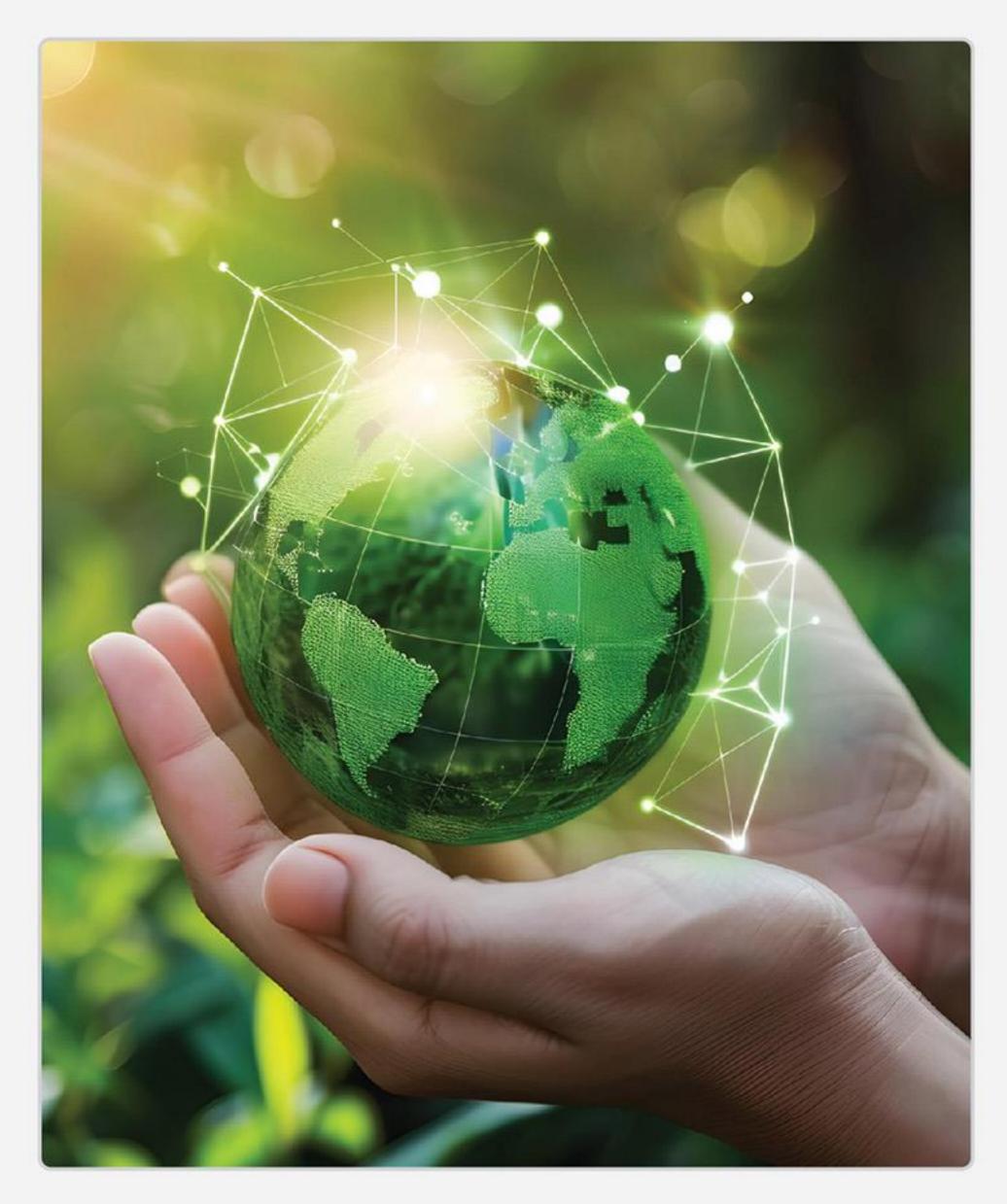
Powder coating also provides a durable finish, but it may not last as long as anodizing in certain harsh environments, potentially leading to more frequent recoating.

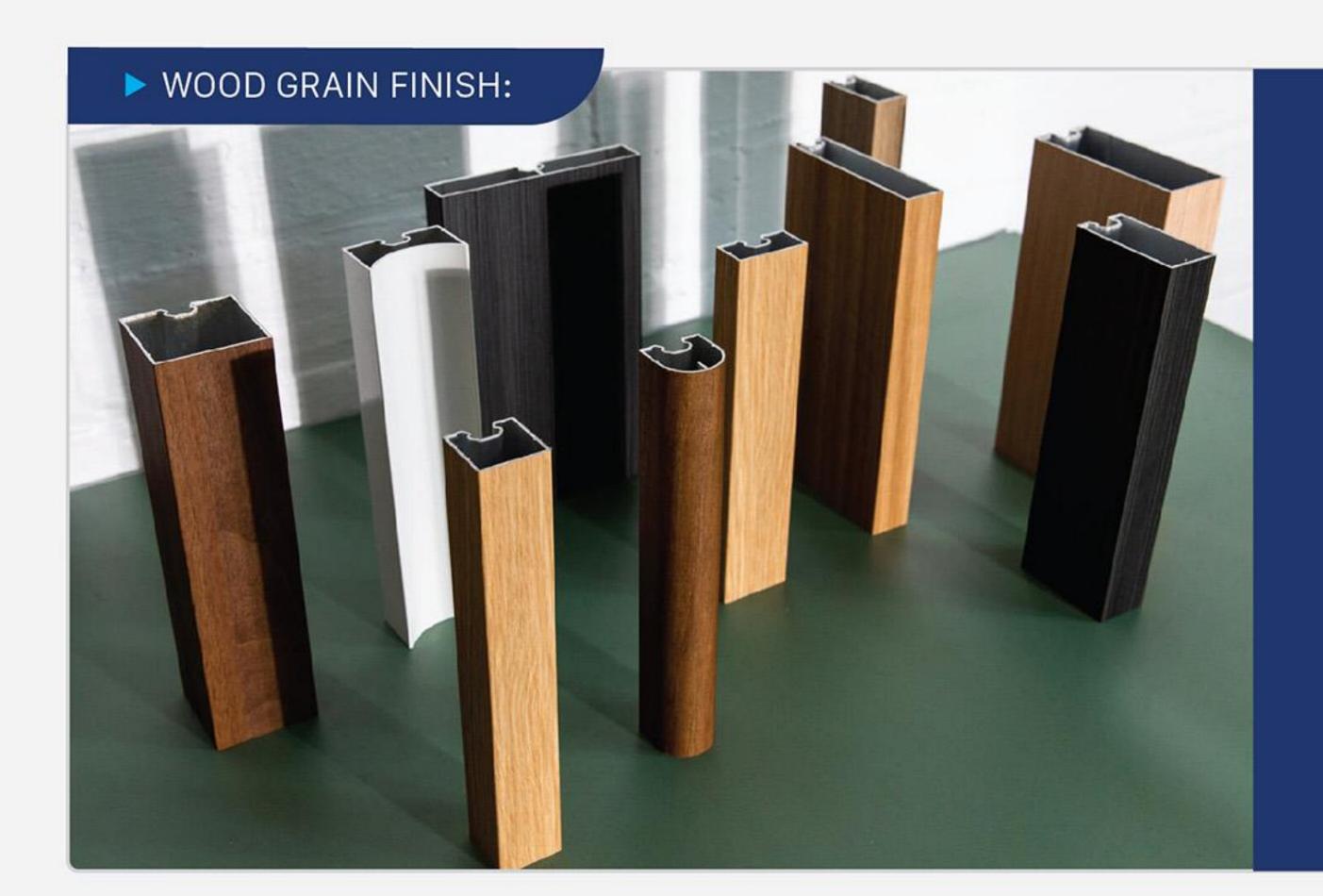
# **OVERALL ENVIRONMENTAL IMPACT:**

- Anodizing tends to have a higher environmental impact due to its energy use and the need to handle hazardous chemicals.
- Powder Coating is generally considered more environmentally friendly, particularly because it avoids the use of harmful chemicals and generates less waste.

Choosing between the two processes should consider not only the environmental impact but also the specific application and performance requirements of the finished product.







Wood grain finish on metal products involves applying a decorative finish that mimics the appearance of wood on a metal surface, usually aluminum or steel. This finish is popular for applications where the aesthetic appeal of wood is desired, but the durability and structural advantages of metal are needed. Below is an analysis of the wood grain finish on metal products:

#### **ENVIRONMENTAL IMPACT:**

Using a wood grain finish on metal can be more sustainable than using natural wood, as it reduces the demand for hardwood, thus preserving forests. Additionally, the metal can often be recycled at the end of its life, whereas wood products may not be as easily recyclable. The process involves energy consumption for coating and curing, but it is generally considered efficient, especially with powder coating, which can have low environmental impact when waste is minimized and energy-efficient curing methods are used.



Wood grain finish on metal products offers a unique combination of aesthetic appeal, durability, and environmental benefits, making it an attractive choice for a wide range of applications. The process does involve some environmental and cost considerations, but its long-term advantages often outweigh these concerns.







# PRODUCTION CAPACITY



# **MELTING FURNACE**



03
Smelting furnace





EXTRUSION MACHINE	
ALUMINUM PRESSES 1800T	500 tons /month
ALUMINUM PRESSES 1100T	300 tons /month
ALUMINUM PRESSES 880T	250 tons /month
ALUMINUM PRESSES 800T	250 tons /month
ALUMINUM PRESSES 600T	150 tons /month

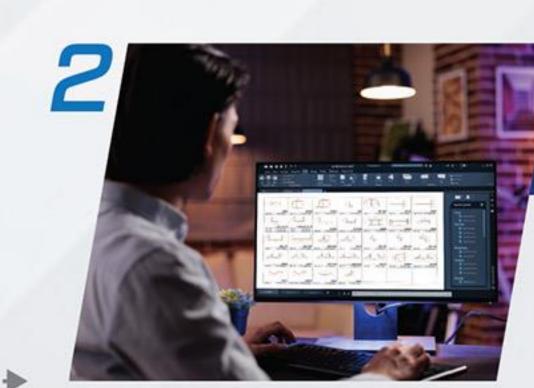


# PROJECT WORKFLOW OVERVIEW



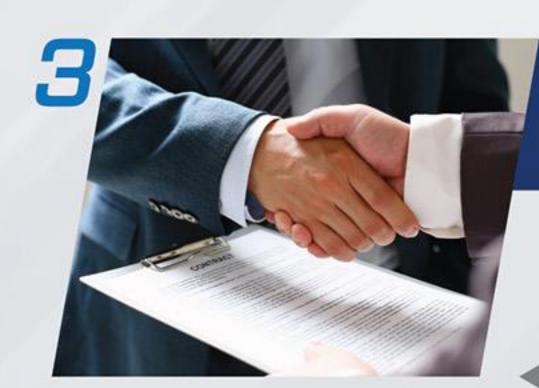
Stage 1: Initial Collaboration

IDEA/CONCEPT SKETCHING & SAMPLE REVIEW



Stage 1: Initial Collaboration

CAD DESIGN & QUOTATION



Stage 2: Prototype Development

CONTRACT & DEPOSIT



Stage 2: Prototype Development

MOLD/TOOLING CREATION (FOR NEW PROJECT ONLY)



Stage 2: Prototype Development

PROTOTYPE PRODUCTION



Stage 2: Prototype Development

CLIENT REVIEW & FEEDBACK





Stage 3: Finalizing Design & Pre-Production

FINAL DESIGN ADJUSTMENTS



Stage 3: Finalizing Design & Pre-Production

FINAL CLIENT APPROVAL



Stage 4: Production and Quality Control

MASS PRODUCTION



Stage 4: Production and Quality Control

FINAL INSPECTION



# Stage 5: Delivery

SHIPPING & LOGISTICS



Stage 5: Delivery

CLIENT DELIVERY & FINAL FEEDBACK



# WHY CHOOSE US



PERSONALIZED SERVICE



HIGH-QUALITY PRODUCTS



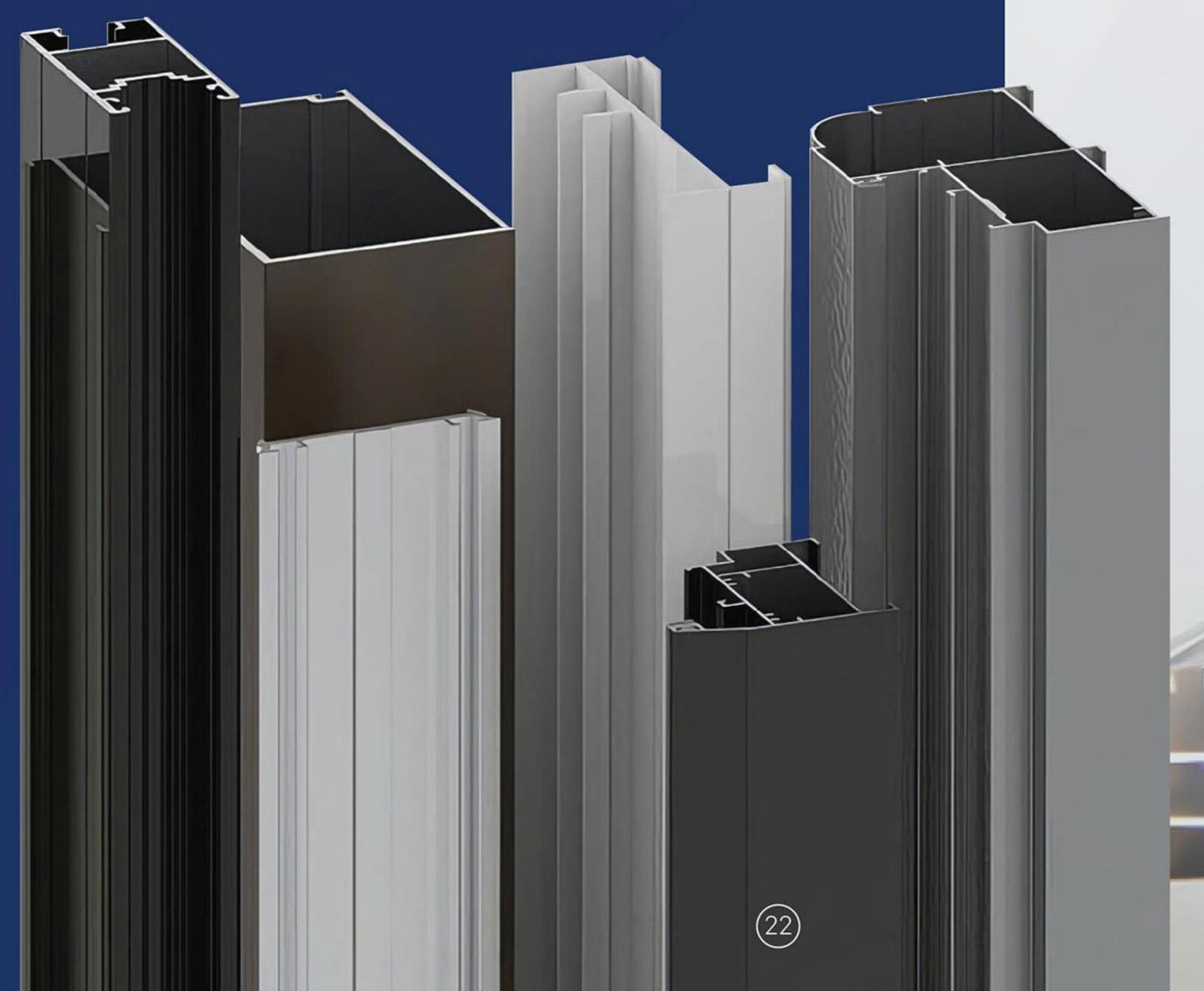
COMPETITIVE PRICING



SUSTAINABILITY



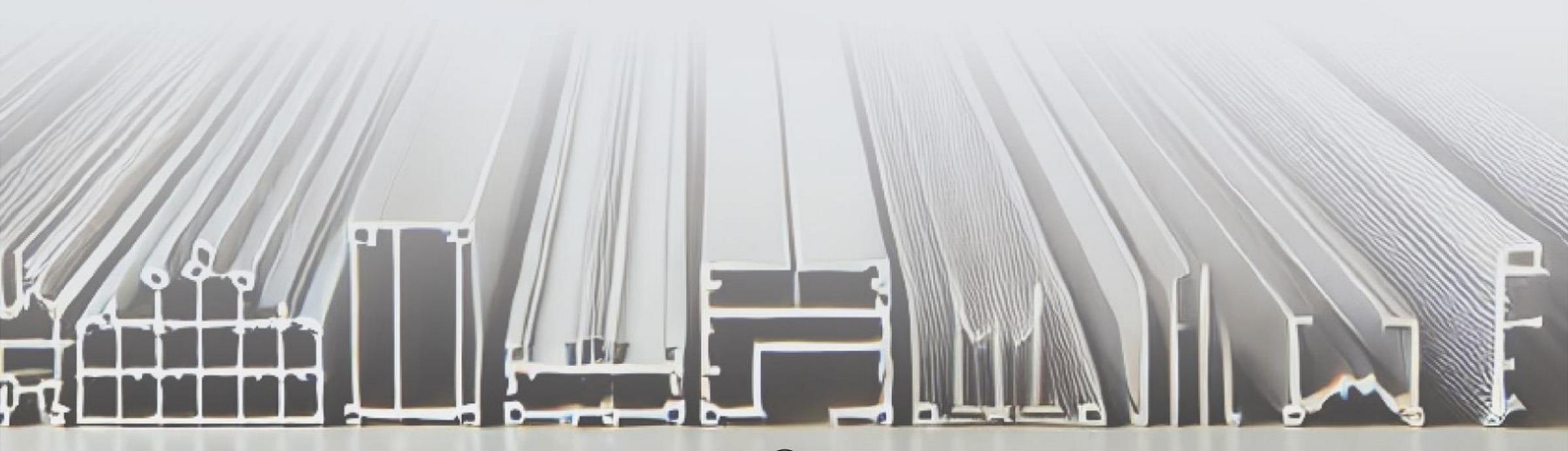
EXPERTISE IN ALUMINIUM







SINCERELY THANK!









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