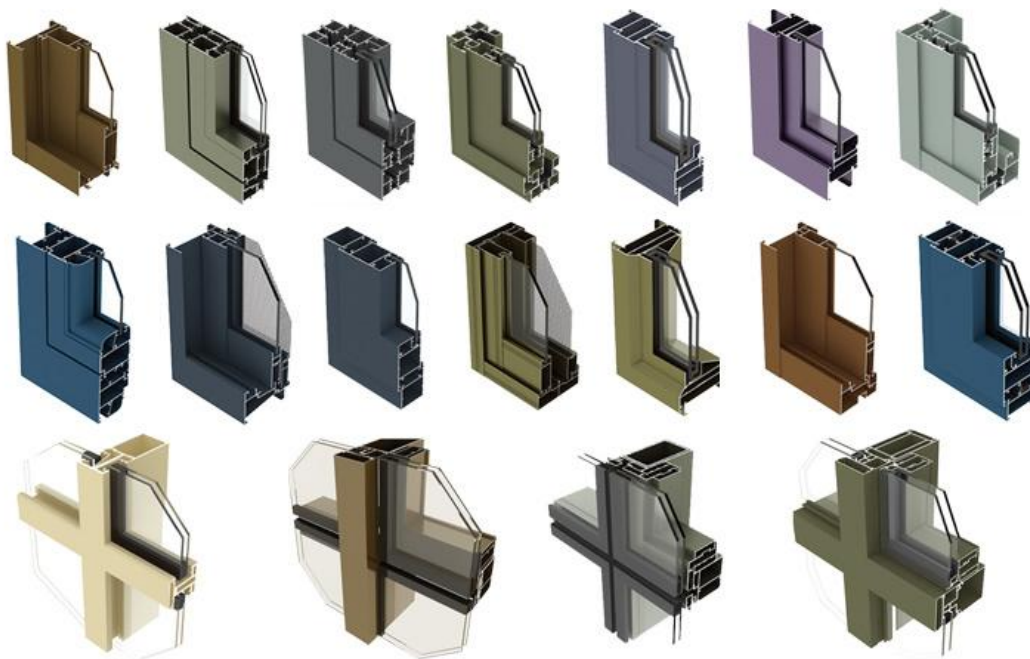


Your Reliable Aluminium Profiles for Windows and Doors Supplier

WJW aluminium profiles for windows and doors are made of Aluminum 6063 Alloy Number, it is the most common alloy number for producing aluminum window and door profile. 6063 aluminum alloy is widely used in building aluminium window extrusions and aluminum profiles doors, It has good surface decoration after Powder coated surface treatment. And it has good corrosion resistance.

Finished Projects



Item Type	Aluminium Profiles for Windows and Doors
Material	6000 Series
Temper	T3-T8
Application	Windows, doors, curtain walls, rails, decoration profile.
Color	Customized Color
Thickness	<p>1.General profiles thickness: 0.8mm—1.4mm</p> <p>2.Anodizing protection thickness: 8-12 micron</p> <p>3.Normal powder coated thickness: 60-100 micron</p>
Shape	Square, angled, flat, hollow, oval, triangle, U-profile, L-profile, T-profiles, H-profiles, or customized available.
Quality Control	<p>1. Inspection at Site.</p> <p>2. Inspection Before Shipping.</p> <p>3. Testing Machine.</p>
Surface treatment	Anodizing, Mill finish, Electroplating, Polishing, Sandblasted, Powder coating, Silver plating, Brushed, Painted, PVDF, etc.
Deep process	CNC,drilling,milling,cutting,stamping,welding,bending,assembling,Custom Aluminum Fabrication
MOQ	Low MOQ
OEM & ODM	Available. our engineer can check and discuss your design, great help !
Free Samples	Yes, we can provide free sample
Delivery time	15-20 days after sample confirmed & down payment, or negotiated
Port	Shenzhen Port



Applications

Powder Coating is by far the most popular used in commercial and residential aluminium doors and windows. Powder coated aluminum windows have a top feature that makes the window clean, durable, weather-resistant, and comes in a variety of colors. The most common is the RAL color which has about 200 standard colors.

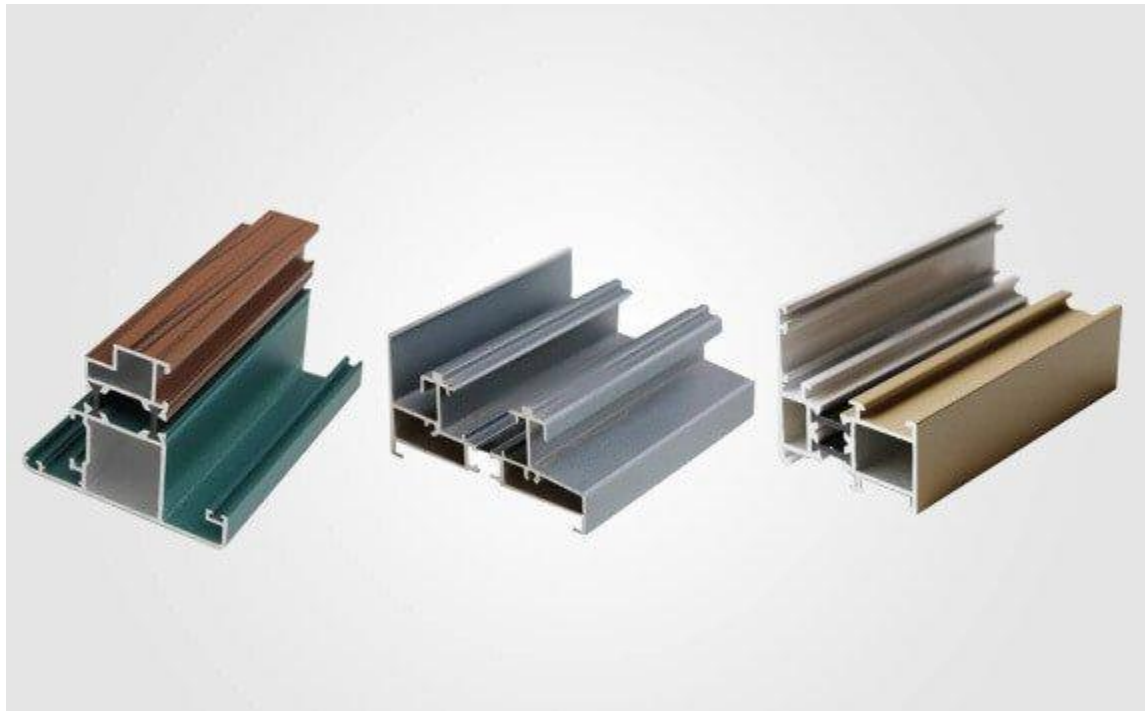
Beside powder coated finishing, wellste has anodizing (polishing, brushed), PVDF, and electrophoresis coating as well.

WJW Aluminium: Your Top Aluminium Profiles for Windows and Doors Manufacturer

WJW aluminium profiles for windows and doors can make thermal Break as well, thermal break aluminum windows are more popular adapt by high-end

building construction's facade recent year. It will remain your inside room warmly and won't let inside temperature down due to cold weather.

WJW aluminium adopted high-quality Thermal Break raw material as an insulation bar, an insulation bar will be added through the aluminum section to create an insulated barrier to prevent heat conduction from outside and inside. The material of the insulation bar is PA66 Nylon, which has good toughness and strength, thus it has a good insulation effect.



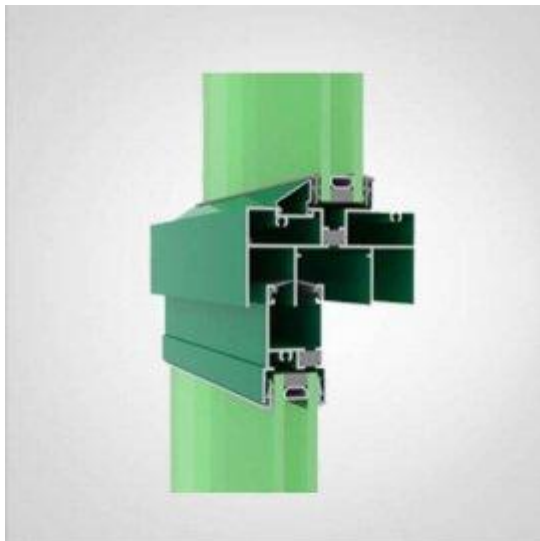
As professional aluminium profiles for windows and doors manufacturer, WJW supports all types customized design to manufacturing based on your specific details.

WJW is an expert on Aluminum profiles for windows and doors since 2006. We manufacture and supply high-quality aluminium profiles for windows and doors for home and construction applications, such as office buildings, [Field hospital](#), [Prehab house](#) windows and so on.



WJW owns advantage powder coated production line with horizontal spraying, and we have vertical spraying production line in 2016 that increase a lot with powder-coated productive efficiency, WJW can speed up your delivery time by updating the production line.

WJW aluminium profiles for windows and doors have been exported to many foreign countries and gain highly praises over 20 years quality assurances, furthermore, WJW gain top-level sales amount in the domestic market.



Thermal Break Aluminium Profiles

WJW aluminum profile for windows and doors has a various price range that depends on different surface finishes and the cross-section size. Contact us today to get a free quote from our sales engineers in 24hours.

Choose WJW aluminium profiles for windows and doors that we are a partner you can trust for sound advice and excellent customer service.

Aluminum Profiles for Windows and Doors: The Complete FAQs Guide

Aluminum profiles for windows and doors refer to aluminum products featuring different section shapes often produced through [extrusion process](#). They are used for structural purposes in different construction, architectural and industrial settings.

This FAQs guide presents in-depth information regarding various aspects of these aluminum products.

It allows you to understand numerous elements to facilitate your decision-making process when shopping for the most suitable pieces.



Aluminum Profile for Windows and Doors

How Do You Manufacture Aluminum Profiles For Windows and Doors?

Notably, extrusion is the primary technique used for making these designs of [aluminum profiles](#).

It is quite a detailed process, which starts with designing every profile.

The designing process involves documenting specific functions of the profiles, shapes, dimensions, and material specifications.

Machinability, finishing, and durability are also other crucial aspects considered during design process.

After completing the designing process using computer software, steel die for producing the design is also produced.

It involves using a hydraulic press to push the billet through the die to create the desired window or door aluminum profile.

The actual extrusion process involves the following details;

Extrusion Billets

A typical extrusion billet comes in form of a solid or hollow cylindrical shape.

In most instances, the billets are cast in an electric arc furnace with aluminum scraps. They are cut into ideal sizes to match the required profile length.

Preheating Billet

Preheating of the billet and extrusion die takes place before the actual extrusion process starts. The essence is to soften the billet to allow it to be forced through the die?

While at it, you should be careful not to overheat it to a melting point, often about 1200° F. An ideal heating point should be approximately 900° F.

Direct Extrusion

This stage entails actual extrusion process, which begins immediately after the ram starts exerting pressure on the billet. Extrusion machine features a hydraulic press, which can exert pressure of up to 15,000 tons on the billet and die.

Ideally, the more the pressure, the greater the extrusion it can produce. The machine applies the initial pressure crushing the billet against the die.

This die becomes shorter and wider until it can never expand anymore due to container wall restriction. That's when the aluminum material starts forcing its way out through the die's orifice and form a particular profile.

Length of an extruded profile is dependent on billet and die opening sizes. There is a runout conveyor, which supports the formed extrusion profile as it comes out of the extrusion press.

Extruded profile may be passed into a cooling bath as it comes out depending on the type of alloy. Cooling is a critical step since it retains adequate metallurgical properties in the metal.

After cooling, you can use the stretcher to stretch these profiles and straighten any twisted part.

Surface Treatment

These profiles are taken through a special surface treatment module to attain the ideal surface finishing. It varies based on user preference and actual setting of the windows and doors.

Cutting

After special finishing operations, you may cut the profiles into shorter lengths depending on the actual dimensions of the windows and doors. While at it, you may use special devices to clamp the profiles, cut and transfer them to a conveyor.

Aging

This process helps to strengthen the aluminum profiles for windows and doors. You can attain natural aging by exposing the profiles to room temperature.

Alternatively, you can go for artificial aging in an oven. Essentially, the aging process design is to ensure there is uniform precipitation of fine particles through the metal.

It allows the metal to obtain full strength, elasticity, and hardness.

How Can You Connect Aluminum Profiles For Windows And Doors?

There are several techniques you can use to connect windows and doors **aluminum** profiles. However, the most suitable one is dependent on the actual framing design of the specific window or door.

Some of the commonly used ways include the following;

Screw Port

It is quite popular and can be used with self-tapping screws or merely threaded to take a machine screw.

This mode of connection offers a strong and robust fix and allowing easy disassembly. You should always consider giving clearance for screw head.

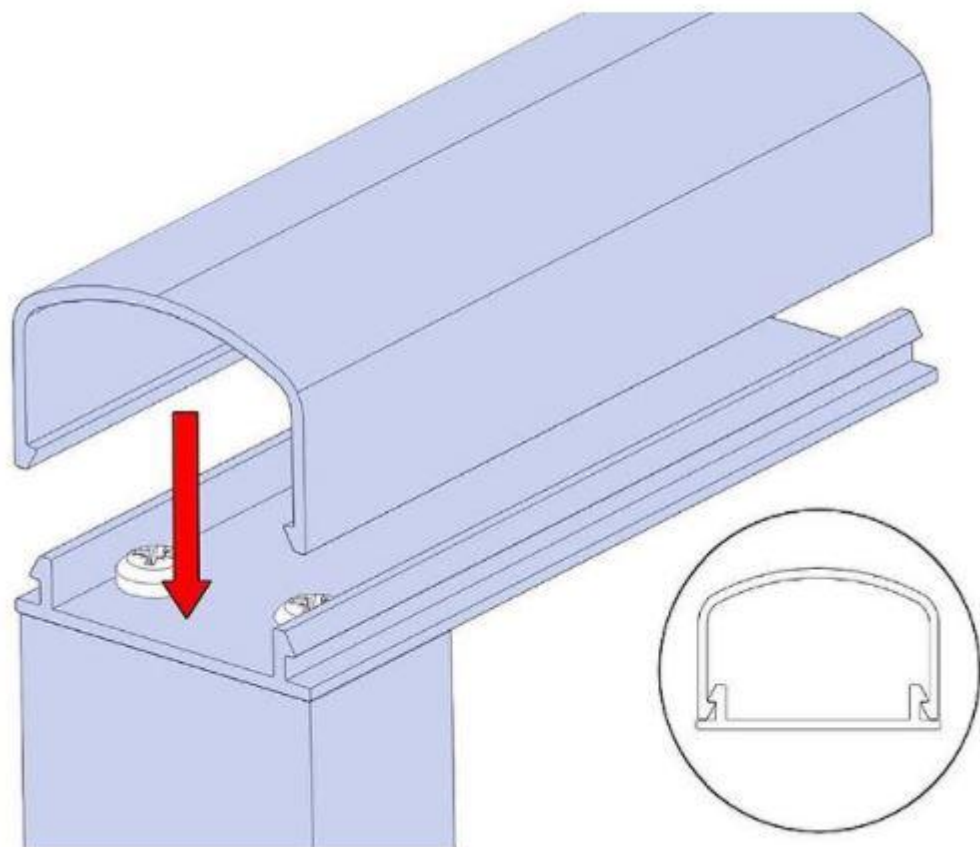
Snap-fit

This is regarded as the easiest and fastest way to fix different aluminum profiles.

You can use it as a decorative feature for hiding unsightly screw heads on the surface material.

It hardly requires foreign fixing, which facilitates recycling. Snap-fit technique features lead-in barbs allowing the top extrusion to slide and clip over the bottom one.

Since aluminum has a natural flex, it provides a positive snap. However, you should take note that a barb without reverse chamfer may form a permanent snap-fit.



Snap Fitting of Aluminum Windows and Door Profile

Interlocking

Relatively simple and effective method for connecting aluminum profiles for windows and doors. It allows two profiles to attain a strong and quick fix.

You can attain this by sliding one feature over the other.

Notably, window and door aluminum profiles often have both male and female features in same profile.

It thus implies that you can use same extrusion for top and bottom.

However, this technique requires sliding its entire length. As such, it may be unsuitable to use in somewhat confined spaces.

Normally, it is a perfect choice for [sliding window aluminum frame](#).

Corner Cleat

It is the ideal method for connecting two identical extrusion profiles at a particular angle. The profile has a channel allowing the cleat often made of another aluminum profile or sheet steel.

This cleat may have a few barbs on each side, cutting into the aluminum to create a friction fit. Alternatively, you can add screws to fix the cleat in position.

Nut Track

This method features a channel designed to fit a nut or bolt head firmly between the flats.

The essence is to prevent nut or bolt head from spinning. You can use multiple fasteners in a single track and position freely.

Hinge

It is the ideal method to fix aluminum profiles while allowing movement. You can attain this in many ways by using two cylindrical features.

Why Is Aluminum Best For Windows And Door Profiles?

Aluminum windows and doors are presently used in a wide range of commercial, industrial, and residential structural products.

Essentially, these components have enhanced efficiency, durability, and performance in various applications.

They also provide better aesthetics and longevity compared to traditionally used materials like PVC.

Here are other vital reasons, which make aluminum material the most suitable for making windows and door profiles;

Optimum Safety

Aluminum offers exceptional strength making it difficult for intruders and unauthorized people to break in.

The framing holds high-quality hardware and multipoint locking systems offering good security for the windows and doors.

Incredible Strength To Weight Ratio

Aluminum is ideal for contemporary windows and doors framing since the material is strong and bears a substantially large amount of weight.

Its low density enables you to have slim profiles sturdy enough to hold the glass weight.

Superior strength of aluminum material allows you to create unique shapes and designs. These profiles may also hold multiple glass panes without compromising operation.

Excellent Durability And Low Maintenance

Aluminum windows and doors profiles are easy to maintain.

You only require a mild detergent and washcloth to clean and restore the surface material to its original appearance and lustre.

Additionally, [powder coated aluminum profiles for windows](#) and doors can withstand corrosion and other harsh environmental conditions.

Thus, you can use it in any environment and still attain desirable results.

Offers A Wide Range Of Shapes And Designs

You can easily choose the specific design or shape of aluminum profile suitable for your windows and doors.

Moreover, they also come in various colors, thus increasing your choice options based on your taste and preference.

Exhibits Ideal Energy Efficiency

Aluminum features thermal breaks or strips, which can stop heat gain or loss coming from the windows and doors.

What Are The Mechanical Properties Of Aluminum Profiles For Windows and Doors?

Technically, making aluminum profiles for windows and doors involves altering most of its physical characteristics. However, definitive cross-sections are introduced in the profile to boost its versatility.

Here are some of the mechanical features of aluminum profiles for windows and doors;

Lightweight

Extruded aluminum is about 1/3 less than iron or brass, a clear indication it is comparatively a lightweight material.

Moreover, the lightweight nature of this material hardly compromises its strength. As such, it becomes suitable for making different designs of windows and doors profiles for usage in various settings.

Recyclable

Ideally, any recyclable material is fundamental. It means you can use the substance many times, which reduces production costs significantly.

Aluminum is recyclable irrespective of the number of years the piece has served.

Sturdy

Typical aluminum material for windows and doors profiles is often taken through aging process during extrusion. The process strengthens the material, and as temperature reduces, its strength increases.

Thus, this material can withstand high pressure without running its form or dimensions, making it ideal for windows and doors profiles.

Flexible

You can easily tune aluminum material to form different preferred shapes. Ideally, the extrusion process allows aluminum for making windows and doors relatively flexible.

Moreover, the material features definitive cross-sections allowing an easier machining process, which increases flexibility.

Non-corrosive

Extruded aluminum material is immune to corrosion thus can withstand harsh environmental conditions. Of course, this is advantageous since it means the resultant windows and doors profiles can last several years without deformation.

Non-combustible And Non-sparking

This material can tolerate high temperatures without burning or emitting toxic fumes. In essence, this property makes it eco-friendly and ideal for industrial applications.

Moreover, extruded aluminum hardly produces sparks irrespective of the friction it is subjected to.

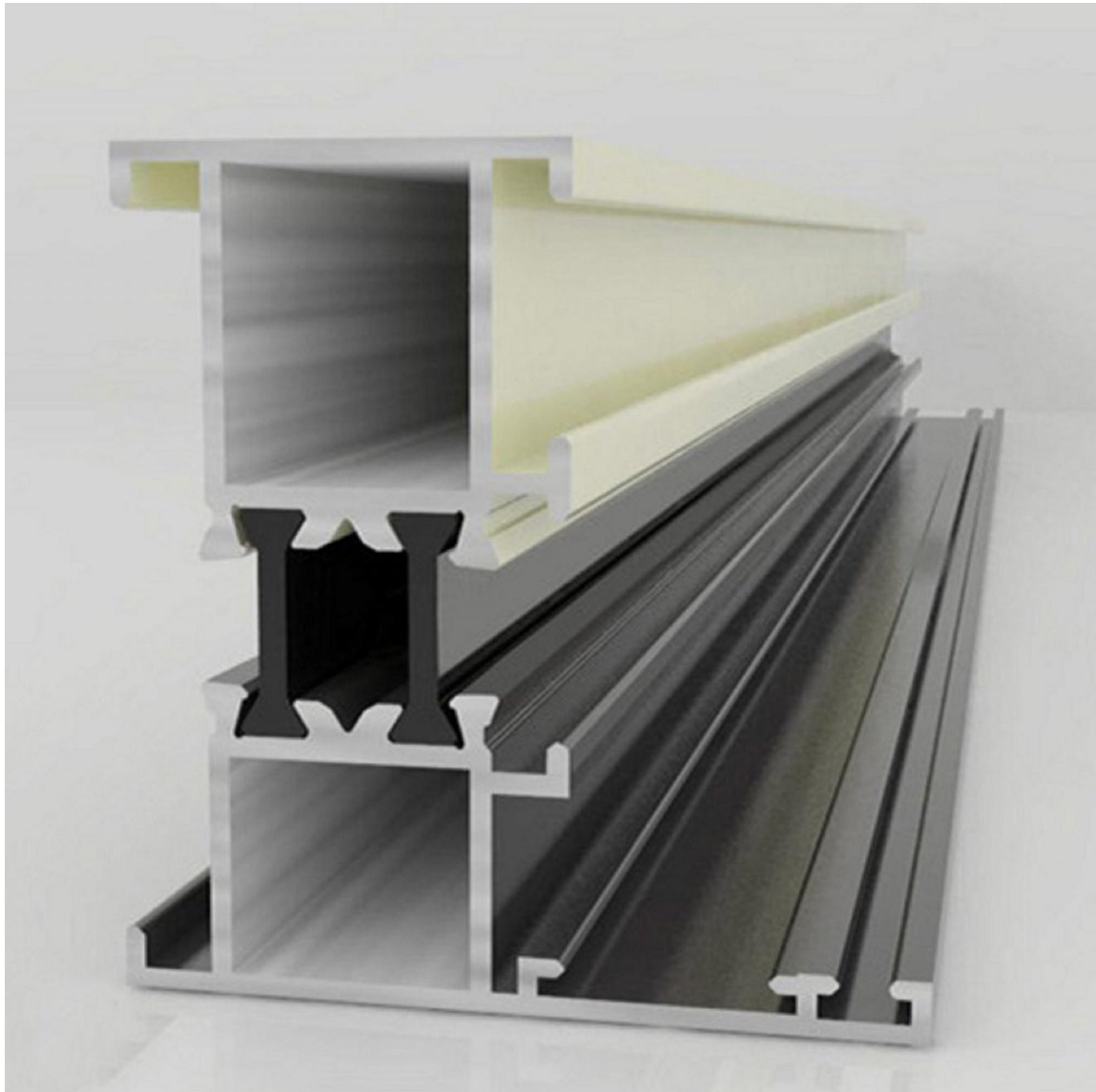
Easy Alloying

Notably, aluminum material is compatible with various metals making it easy to form different alloys.

You can use simple formation processes such as riveting, welding, brazing, and adhesive bonding to create different aluminum alloys.

Ideally, aluminum features favorable texture making it easy to form alloys with different metals using simple means.

What Is The Life Span Of Aluminum Profiles For Windows And Doors?



Extruded Aluminum Profile for Windows and Doors

Generally, they are durable since the material is solid and exhibits high resistance to many mechanical and environmental conditions.

The type of aluminum material used for windows and doors profiles undergo extrusion process. During the process, they are taken through aging, which is a process for strengthening and enhancing the material's elasticity.

Ideally, aging during extrusion process ensures there is even precipitation of particles on the surface material.

As such, it makes the material hardy and thus can withstand different harsh environmental and mechanical conditions.

Nonetheless, typical aluminum profiles for windows and doors can last for more than 10 years.

How Much Do Aluminum Profiles For Windows And Doors Cost?

There is no absolute cost for aluminum profiles for windows and doors. Notably, several factors influence the specific amount you pay to obtain these components, such as follows;

Design And Shape

You can always find aluminum profiles for windows and doors in various designs and shapes.

Of course, there are standard designs and shapes, but most users go for customized pieces depending on their projects. As such, the cost will vary since the latter is usually more expensive than the former.

Quantity

Most manufacturers often offer discounted rates on high quantity purchases as opposed to purchasing low volume.

Therefore, purchasing more aluminum profiles for windows and doors is seemingly more cost-effective and vice versa.

Brand

Various manufacturers price their specific aluminum profiles for windows and doors differently.

In most instances, the pricing is usually based on the company's reputation in providing quality aluminum profiles

Ideally, relatively known manufacturers tend to be costlier than less known companies.

However, it doesn't in anyway imply that the less known brands in the market do not produce quality aluminum profiles for windows and doors.

Material Thickness

Essentially, aluminum profiles with relatively thick materials tend to be costlier than vice versa.

Surface Finishing

You can find these types of profiles in a wide range of surface finishing.

Ideally, each type of surface finishing determines the specific cost of the profiles since they are unique and have different specifications.

In other words, the actual cost of your ideal aluminum profiles for windows and doors is dependent on numerous factors, including the aforementioned ones.

Which Material Grade Do You Use For Aluminum Profiles For Windows And Doors?

Aluminum profiles for windows and doors use a wide range of aluminum grades.

However, it is vital to understand only a few grades can provide high quality components.

The most suitable and commonly used grades for windows and doors are 6000 series, which include the following;

6061 Aluminum Grade

Arguably, one of the most popular and preferred aluminum grades for making window and door profiles. It is an alloy featuring highest level of corrosion resistance in the heat-treated aluminum alloy family.

6061 grade exhibits somewhat low strength compared to other grades in the 6000 series. Moreover, it has wide-ranging mechanical properties giving it incredible forming capabilities.

This specific aluminum grade is highly machinable, weldable, and cold-worked. Additionally, you can use heat treatment, and it also offers suitable joining characteristics.

You can drill, weld, stamp, bend, cut, and deep draw 6061 aluminum grade quite easily using cold working methods when in the annealed state.

Furthermore, it is easy to strengthen it by heat treatment by placing it at a temperature of at least 320° F for several hours.

6063 Aluminum Grade

It is arguably, the strongest aluminum grade in the 6000 series used for making aluminum profiles for windows and doors. 6063 grade is extruded and features some of the ideal properties for doors and windows.

For instance, it features excellent corrosion resistance making it suitable for doors and windows applications. It is comparatively lightweight and exhibits incredible weldability, workability, and machinability.

6063 also offers a relatively fine finish and strength to weight ratio, thus a suitable choice for making profiles for windows and doors.

6262 Aluminum Grade

This aluminum grade is an alloy of silicon and magnesium. It offers excellent machinability properties and is usually extruded and cold-worked.

Mechanical strength and corrosion resistance of this aluminum grade is incredible. You can easily form this grade using conventional methods, but cold-working is seemingly the ideal technique in some tempering conditions.

6262 is highly weldable and often strengthens in aging process.

Which Features Do You Consider When Buying

Aluminum Profile For Windows And Doors?

When shopping for an ideal aluminum profile for windows and doors, you need to factor in several elements.

The crucial ones, which you must never overlook, include the following;

Architectural Design

Your structural design determines the type of profiles you will select.

Most modern building designs may have some floor-ceiling windows.

Such designs often have sliding or bi-folding windows; thus, they need double solid pane profiles to provide necessary strength.



Aluminum Profile for Window

Surface Finish

It is an important element, especially when considering an aluminum profile for decorative purposes.

You'll always find them in various surface finishing, but the ideal one is dependent on your preference.

Size

Ordinarily, aluminum profiles for windows and doors are available in both standard and customized sizes. You can choose either one depending on the needs of your project.

Thickness

You must also consider the material thickness of the specific aluminum profiles you are purchasing.

Ideally, thickness usually determines the overall appearance and durability of these aluminum profiles.

In other words, aluminum profiles with relatively thick surface material often look better and sturdier than the reverse.

Grade

The specific aluminum grade you choose is another essential factor to consider when buying aluminum profiles.

Always select ones made from material grade that is compatible with most of your project requirements.

Quality Standards

Aluminum profiles for windows and doors have varied quality standard specifications.

It is an essential element to consider since it enables you to establish whether the component meets stipulated requirements.

You can also be sure the material will be allowed within your region or country if you are importing from a different country.

What Is The Ideal Tolerance For Aluminum Profiles For Windows And Doors?

The ideal tolerance for aluminum profiles for windows and doors is what is outlined by BS EN 755-9:2001. However, most of the tolerances we offer to improve this particular standard.

In essence, where tighter tolerances are required, the manufacturer may work on the standards as set out in BS EN 12020.

Some circumstances, depending on the size and complexity of the profile, make it difficult to improve the tolerance as outlined in BS EN 755.

Thus, the ideal way to determine the ideal tolerances achievable on your aluminum profiles is by reviewing your proposed blueprint. Technically, achievable tolerances on these aluminum profiles is dependent on a particular profile.

Nevertheless, it can range from +/- 0.2mm to +/- 0.5mm as standard but still subject to improvement if need be.

What Are The Available Designs Of Aluminum Profiles For Windows And Doors?

They are pretty several and have become more popular among different users all over the world nowadays.

You can find them in various configurations such as the following;

- Sliding aluminum windows and doors profiles
- Casement aluminum windows and doors profiles
- Folding aluminum windows and doors profiles
- Luxury aluminum windows and doors profiles
- Stripping laces aluminum windows and doors profiles
- Glue injection aluminum windows and door profiles
- Standard aluminum windows and doors profiles
- Customized aluminum windows and doors profiles
- Colored aluminum windows and doors profiles

What Is The Difference Between Anodized And Mill Finished Aluminum Profiles For Windows And Doors?

Aluminum profiles for windows and doors with mill finished is the raw state of the extruded material without any surface treatment.

In essence, it is the natural finish the extruded aluminum profiles have the moment they emerge from the extruder die.

Primarily, this is a bare minimum aluminum profile.

This type of finished aluminum often oxidizes with a light white powder the more it is exposed to air and moisture.

Under moist and salty environments, mill finishes aluminum profiles for windows and doors tend to oxidize a lot.

Anodized finished aluminum profile, on the other hand, refers to surface finish on the material containing a layer of oxide.

Typically, this layer is infused into the aluminum surface material through an electrolytic process.

This process applies chemicals and electricity on the surface of extruded aluminum profile to form a relatively thick layer of oxide.

Thus, aluminum profiles for windows and doors with anodized finish are resistant to corrosion since the layer prevents it from occurring.

In a nutshell, the main difference between these two types of surface finish is the oxide layer. Anodized finish has a layer of oxide, whereas mill finish does not have the oxide layer.

What Are The Anodizing Options Available For Aluminum Profiles For Windows And Doors?

There are different types of anodizing you can always use on aluminum profiles for windows and doors.

Even so, the most commonly used ones include the following;

Type I Chromic-Acid Anodize

It is also referred to as chromic acid anodizing, often resulting in the thinnest anodic coat of all the main options available. Typically, it yields about 20 to 100 micro-inches per material surface.

If properly sealed, chromic acid anodize affords the aluminum equivalent to corrosion protection to the relatively thick sulfuric and Hardcoat type anodize.

This particular anodizing option appears a bit grayish and often absorbs less color when dyed. In essence, it limits its decorative finish, but you can dye it black, especially in applications surrounding windows and doors.

Some of the pertinent features of Type I chromic-acid anodize include the following;

- Non-conductive
- Can be black dyed
- Ideal for tight tolerance parts
- Suitable for bonding
- Excellent for welded parts and assemblies

All these make it an ideal anodizing option to consider for aluminum profiles for windows and doors.

Type II-Sulfuric Acid Anodize

It is commonly referred to as Boric-Sulfuric Acid Anodizing (BSAA), often considered a better alternative to chromic acid anodize. This anodizing offers better environmental, health, and safety concerns than Type I chromic-acid anodize.

BSAA offers excellent corrosion protection and paint adhesion features compared to chromic-acid anodize. It is suitable for tight tolerances, bonding, corrosion protection, and it is non-conductive.

Type III Hard Anodize

Also known as Hardcoat, it is relatively thick and denser than both chromic and sulfuric acid anodize.

It is ideal for specific aluminum components prone to extreme wear environments and applications. You may also consider it in window and door applications, which require enhanced electrical insulation.

Hard anodize exhibits improved wear resistance and sturdiness.

Electrolytic Two-Step Anodize

The essence of this anodizing option is to form aluminum oxide layer to protect the aluminum material underneath it. In essence, the oxide layer formed has much higher corrosion and abrasion tolerance than aluminum.

This anodizing method often takes place in a tank with sulfuric acid and water solution. Once anodizing process is over, you can immerse the components in an optional coloring tank to attain the ideal deep black hue.

Bright Dip Anodizing

This type of anodizing method is used to attain polished aluminum profile surfaces, which resemble an electroplated surface.

It involves a chemical electrolytic process, which brightens the aluminum surface without leaving any debris or deposits on it. The brightness extent is influenced by type of aluminum alloy and original surface finish of aluminum profile being processed.

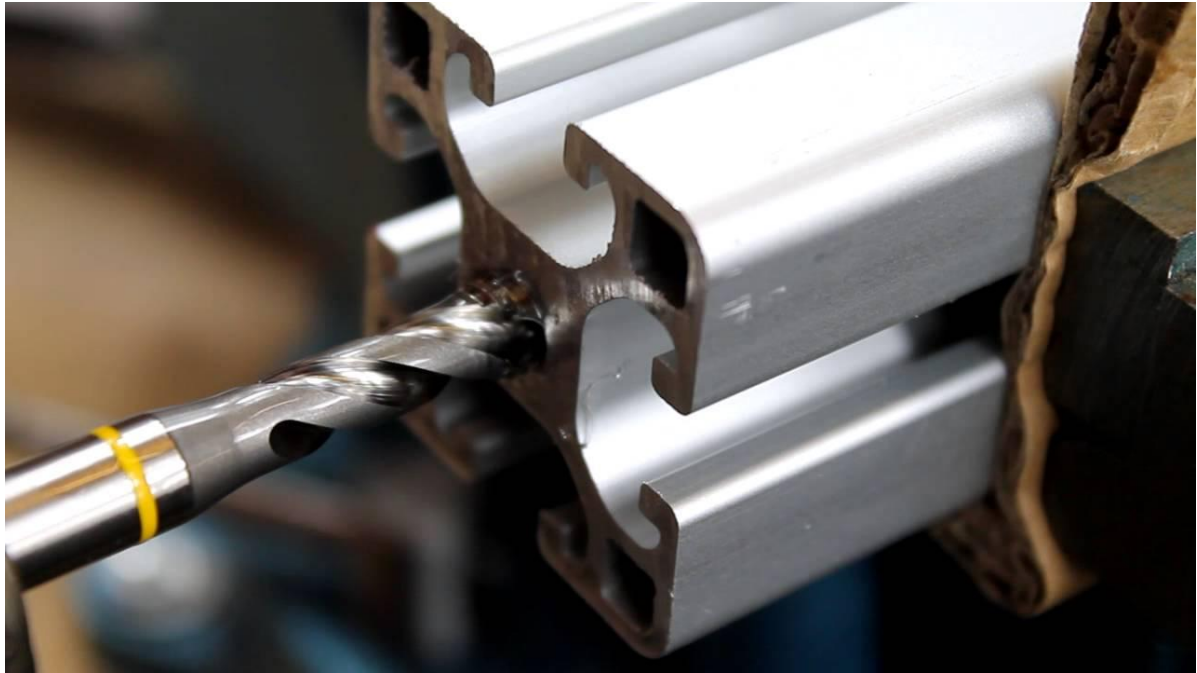
What Are The Machining Options For Aluminum

Profiles For Windows And Doors?

They are several, and the ideal one is dependent on the specific shape or design of the part you need for your project.

The commonly used ones include the following;

- **Drilling** – This is a cutting process using a drill bit to create a circular cross-section hole in these respective aluminum profiles.



Drilling of Aluminum Profile for Windows and Doors

- **Milling** – It is a machining process, which uses rotary cutters to remove material by advancing a blade into an aluminum profile workpiece.
- **Cutting-to-size** – Refers to slicing the size of the aluminum profiles by reducing its dimensions to attain the necessary measurements.
- **Stamping** – It is a process, which entails placing a sheet metal material in a coil or blank form to a stamping press. As a result, the tool and die surface form the material into a net shape.
- **Welding** – This is a fabrication method for joining different materials using high heat to melt components together. Once the parts cool, they fuse and become intact.
- **Bending** – Refers to a machining process producing and U-shape, V-shape, or channel shape along a straight axis in these material profiles.
- **Assembling** – It is a process, which involves fitting different aluminum profiles to form a single useful component.
- **CNC Machining** – This is an automated control of different machining tools which use computer-generated prompts or software.

It enables the aluminum profiles to obtain the necessary specifications by conforming to the coded computer instructions.

How Do You Check Quality Of Aluminum Profiles For Windows And Doors?

Technically, numerous measures are in place to ensure the quality of the final product meets the required specifications.

In most instances, most of these quality control measures are stipulated by the government through its various appointed agencies.

Nevertheless, at the manufacturing level, there are also other quality control ways often varying from one company to another.

As a manufacturer, we ensure the fabricated aluminum profiles for windows and doors meet minimum quality specifications.

We have a meticulous inspection process, including custom gauging, to guarantee they fit the respective function.

Additionally, we observe a wide range of aluminum extrusion services while preserving ISO 9001:2015 across all facilities involved in manufacturing process.

In essence, we offer a thorough inspection of finished parts at the site and before shipping using advanced testing devices.

Our team comprises of qualified, knowledgeable, and experienced workforce adept in all critical quality control measures.

What Is The Suitable Color For Aluminum Profiles For Windows And Doors?

It is primarily dependent on your project demands and your taste and preference. Ideally, you can always find aluminum profiles for windows and doors in a variety of color hues.

Often, you can dip the material into a particular paint color to attain the preferred hue.

It is the reason you can get as many customized colored aluminum profiles for windows and doors.

Of course, this is advantageous since it allows you to attain the necessary color shade, which suits your unique demands.

Nevertheless, the most common color hues for aluminum profiles for windows and doors include the following;

- Silver
- Bronze

- Golden yellow
- Black
- Grey
- White
- Green
- Champagne
- Nickel
- Titanium



Colored Aluminum Windows and Doors Profile

Is There Size Limitation For Aluminum Profiles For Windows And Doors?

No, essentially different structural projects require different sizes for windows and doors aluminum profiles.

In many instances, the design and size of windows and doors in various structures would also vary based on several factors.

It thus, implies that each batch of these aluminum profiles will be of different dimensions.

You can find standard sizes, which are also common for standard windows and doors dimensions. However, customized sizes always come in handy to ensure you get a particular length of these parts, which fit your structure.

Which Quality Standards Should Aluminum Profiles For Windows And Doors Conform to?

Typical windows and doors aluminum profiles comply with several quality standards specifications.

Ideally, these specifications are published and ratified based on several factors on and off manufacturing process.

However, they apply to different markets depending on specific quality specifications.

Some also apply at national, regional, and international levels.

The commonly used ones for these parts include the following;

BS EN 12020

It is a European standard specifying tolerance on the dimensions and form of extruded precision profiles.

However, there are some aluminum profiles for windows and doors often preventing some manufacturers from producing this standard.

It is the reason you need to engage the technical team to review the drawings carefully and verify whether they can produce them.

EN 755-9

This is a European standard specifying tolerance on dimensions and forms for aluminum, and its related alloy extruded profiles. It applies to extruded profiles for general engineering and structural applications.

EN 12020-2

It is a European quality standard, which specifies tolerances and dimensions, and forms of extruded precision profiles. Mostly, it applies to extruded aluminum profiles supplied without additional surface treatment.

ISO 9001

This is a standard issued by the International Standards Organization specifying requirements for a quality management system.

Ideally, it allows manufacturers to demonstrate the ability to offer quality products consistently.

Nevertheless, you need to check with your country to determine the specific quality standards certificates before importing these parts.

Are Aluminum Profiles For Windows And Doors

Weather Resistant?

Yes, a typical extruded aluminum profile has a layer, which protects the surface material from any form of harsh climatic conditions.

The oxidation, which is a relatively clear coat, protects the aluminum profiles for windows and doors from the environment

This material is naturally highly resistant to weathering. It can withstand even the unfavorable industrial atmospheres, which can corrode other metals.

As such, it is a suitable choice for windows and doors profiles, whether for indoor or outdoor structures.

The reliability it offers for structures, which may need to spend several years weathering elements, is exceptional.

What Is The Recommended R-Value For Aluminum Profiles For Windows And Doors?

Ideally, R-value refers to the measurement of a material's capacity to resist heat flow from one side to another.

This value measures the insulation effectiveness, and the highest number often represents more effective insulation.

R-value is commonly applicable to a wide range of building and construction materials, including aluminum profiles for windows and doors.

Technically, there is no specific R-value for aluminum profiles for windows and doors.

The frame and gasketing of these components tend to influence the overall thermal transmittance. As such, there is a new standard for testing the entire door and window assembly, including the frame and hardware.

The new standard, ASTM C1363, offers relatively low results but is more accurate to the actual installed conditions.

Additionally, the thickness of insulating material on the surface of aluminum profiles also determines its actual R-value.

Nevertheless, the R-value for an insulated ½ “ aluminum profile is about 1.80° F ft² h/BTU and 0.61° F ft² h/BTU for non-insulated material.

What Is The Best Surface Treatment For Aluminum Profiles For Windows And Doors?

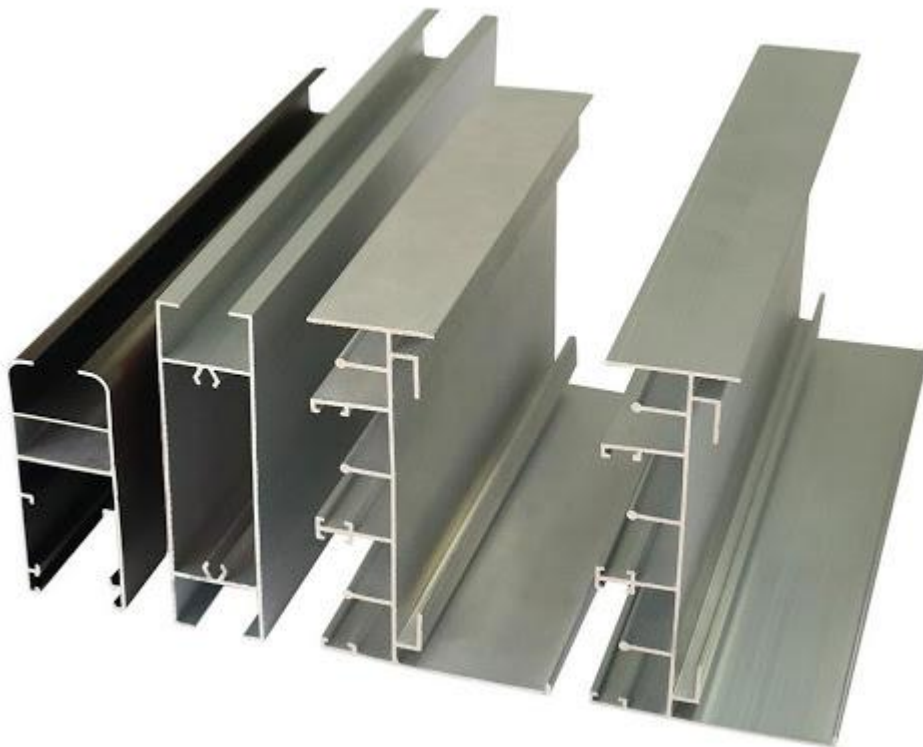
It depends on many factors surrounding the project and your preference.

Even so, here are the commonly used surface treatment finish for these types of aluminum profiles;

Anodized Surface

It is an electrochemical process for preserving aluminum profile finish and enhancing corrosion resistance by a formed oxide layer.

This coating creates a decorative dirt-resistant surface with durable gloss and color. It also gives the surface an electrically insulating layer.



Anodized Aluminum Profile for Doors and Windows

Powder Coating Finish

This surface coating electrostatically charges powder and spraying it on aluminum profile, and fusing it to a smooth painted coating in a curing oven.

The powder is a mixture of pigment and a finely milled resin. It provides ideal resistance to UV and corrosion but with varied color selections.

Triacid Polished Surface

It is a chemical polishing technique involving dipping aluminum profiles into a strong oxidizer to attain ultra-bright mirror surface glossiness.

Primarily, triacid means three acid liquor of nitric, sulfuric, and phosphoric acids.

The process entails mechanically polishing the profiles before triacid polishing to enable the surface to attain various glossy styles.

Sandblasting Finish

This is an aluminum surface pretreatment that forms a matt dull surface by forcing a stream of abrasive steel beads at high pressure. It allows the surface to attain smooth mill finish profiles without causing damage.

Mill Finish

It is primarily bare aluminum in its natural appearance without any surface treatment as it comes from extrusion die. This finish exhibits a natural aluminum color without any surface treatment.

Brushed Aluminum Profile Finish

Brushing forms a unidirectional satin finish and providing a silky matt finish on the aluminum profile surface.

Ideally, it gives aluminum a distinctive appearance as it retains some metallic lustre. This surface gets a pattern of fine lines parallel to brushing direction.

Electroplating

It is surface finish attained by fusing aluminum profile on another by hydrolysis typically by applying a direct electric current. This partially dissolves the metals and forms a chemical bond between the materials.

What Are The Main Applications For Aluminum

Profiles For Windows And Doors?

These components can be used in several applications, but the main ones include the following;

- Commercial windows and doors
- Residential windows and doors
- Industrial windows and doors
- Curtain walls
- Decoration profiles
- Rails

Do You Have MOQ When Purchasing Aluminum Profiles For Windows And Doors?

Yes, generally MOQ is often determined by several prevailing factors.

For customized aluminum profiles, we tag a relatively low MOQ since these require a somewhat detailed and intensive approach.

Thus, we offer low MOQ on our products enough to cover the overhead costs.

Moreover, custom designs require thorough quality checks, which eventually adds to the overall production cost.

Nevertheless, we are flexible regarding MOQ, and we can always negotiate and agree based on specific parameters.

Can You Get OEM and ODM Aluminum Profiles For Windows And Doors?

Yes, however, your preferred OEM or ODM aluminum profiles must be unique and have never been produced before.

This is important since we also adhere to the stipulated patent regulations and avoiding infringing copyright issues.

We have a team of experts who review your OEM or ODM needs to ensure they meet the requirements before manufacturing the items.

What Is The Average Lead Time For Manufacturing Aluminum Profiles For Windows And Doors?

It usually varies based on several factors.

First, if you choose [custom aluminum profiles for windows](#) and doors, there is a high likelihood they'll take longer than standard designs.

Ideally, the former is quite intensive and utilizes more resources in the production process, thus taking more time than the latter.

Secondly, the number of pending orders also determines the specific lead time for manufacturing these components.

In many instances, the manufacturers often fulfill orders on a first-come-first-served basis.

Thus, the more the orders, the longer the lead time.

And importantly, the company policy also influences the actual lead time for making these components.

Some manufacturers adhere strictly to their lead time policies, whereas others tend to be relatively flexible depending on prevailing factors.

Nevertheless, our average lead time is about 15-20 days once you confirm the sample and place the order.

Is There Recommended Thickness For Aluminum Profile For Windows And Doors?

Not necessarily. It depends on the project and your preference.

However, the minimum recommended thickness for these components should be 0.8mm.