

# ANODIZED ALUMINUM

Cascadia Metals offers a wide variety of Anodized Aluminum products in various thicknesses and colors in mill and brushed finishes.

Anodizing is an electrochemical process that modifies the aluminum surface to create an exceptionally durable, corrosion resistant, wear resistant and aesthetically pleasing oxide layer.

The anodic oxide surface on anodized aluminum is composed entirely of aluminum oxide that is built-up from the aluminum substrate. Because it is created from and is fully integrated with the base aluminum, it does not chip, peel or flake.

## Product Benefits

Anodized Aluminum offers several benefits when compared to other metals.

These include...

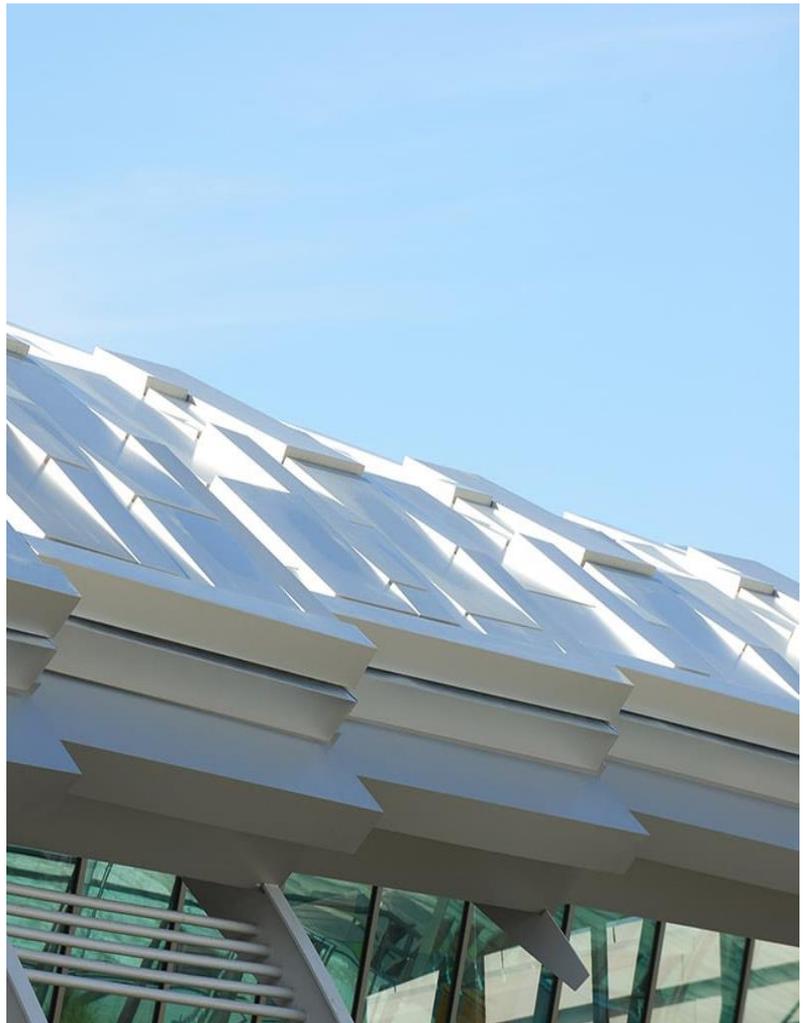
**Corrosion Resistance** – The anodic oxide layer on Anodized Aluminum protects the aluminum substrate against pitting and atmospheric corrosion.

Anodized aluminum will not patina like copper or rust like steel.

**Durability** – The surface of Anodized Aluminum is much harder than the aluminum itself and provides a natural wear and abrasion resistance.

**Environmental** – Anodized Aluminum contains no volatile organic compounds, is cost effective, long lasting and 100% recyclable.

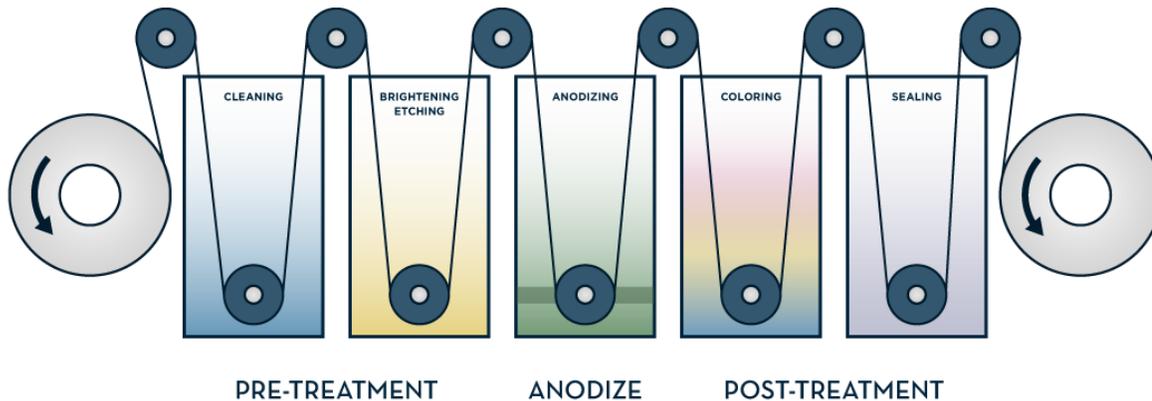
**Light Weight** – With its high strength to weight ratio and at a third the weight of steel, Anodized Aluminum is an excellent choice.



## ASTM Specifications

ASTM Designation B137 is used for quality control during the production of anodized aluminum and outlines the test methods for determining coating mass on anodically coated aluminum. Included in this specification are the composition requirements of the test solution, the dimensional requirements of the test specimen and the procedure for testing.

## Aluminum Coil Anodizing Line



## Anodized Surface

Sulfuric anodizing is the most common method of anodizing and utilizes sulfuric acid to produce anodic oxide layers up to 1 mil (25 micron).

**Architectural Class I** coatings have a minimum thickness of 0.7 mil [18 $\mu$ ]

**Architectural Class II** coatings are between 0.4 mil to 0.7 mil [10 $\mu$  - 18 $\mu$ ]

**Protective and Decorative** coating thicknesses are less than 0.4 mil [10 $\mu$ ]

## End-Use Applications

With its excellent corrosion resistance, durability and light weight, anodized aluminum is frequently used in commercial architecture, ceiling systems, wall panels and automotive trim.

Because it can be produced to any color in the visual spectrum, Anodized Aluminum is a common choice for point of sale displays, signage, name tags and lighting applications.



Contact your Cascadia Metals Sales Representative today to learn how Anodized Aluminum can satisfy your material needs.

## Available Finishes

### Clear Satin Finish

Natural metallic color and smooth matte finish.

Base alloy: 5005-H34

Exterior Standard 1 (Commercial Clear)

Film Thickness: 0.250 mils [6 µ] minimum

Architectural Class II

Film Thickness: 0.400 mils [10 µ] minimum

Architectural Class I

Film Thickness: 0.700 mils [17.8 µ] minimum

Available as special order.

### Bright Brushed Clear

Clear, bright aluminum with brushed finish.  
Suitable for interior and exterior applications.

### Specular

Highly reflective, mirror-like finish anodized for signage, transportation, lighting and displays.

Base alloy: 1090-H19, 99.9% Aluminum

### AlumaPlus SL

Short line brushed surface with a touch of grey that provides the look of stainless steel. Suitable for interior applications.

Base alloy: 5205-H18

Film Thickness: 0.175 mils [4.4 µ]

### Black Matte

Architectural Class II, UV fade resistance.

### L.A. Extra Dark Bronze

Architectural Class II, UV fade resistance & matte finish

### Dark Bronze

Architectural Class II, UV fade resistance & matte finish

### Medium Bronze

Architectural Class II, UV fade resistance & matte finish

### Light Bronze

Architectural Class II, UV fade resistance & matte finish

**PROCESSING CAPABILITIES: CUT-TO-LENGTH, SLIT COIL, NARROW WIDTH AND CHANNEL LETTER COIL**

ALUMINUM									
<b>ANODIZED</b>									
MILL & BRUSH FINISH									
FINISHES	ENVIRONMENT			.025"	.032"	.040"	.050"	.063"	.080"
	UV Stable	Interior	Exterior	48"	48"	48"	48"	48"	48"
AlumaPlus SL		●			✓	✓			
Black Anodized	●	●	●			✓	✓		
Brite Brushed Clear	●	●	●		✓	✓			
Clear Anodized	●	●	●	✓	✓	✓	✓	✓	✓
Commercial Clear	●	●	●			✓			
Light Bronze	●	●	●			✓	✓		
Medium Bronze	●	●	●			✓	✓		
Dark Bronze	●	●	●			✓	✓		
L.A. Extra Dark Bronze	●	●	●			✓	✓		
Specular	●	●	●			✓			

Sheets supplied with protective (PVC) film on finished side.  
Inquire about finishes, widths and thicknesses not shown.  
ITEM ID: ANO

## Benefits of coil anodizing

Continuous coil anodizing is the process of anodizing aluminum while still in coil form.

Coil anodizing achieves exceptional color consistency as compared to single sheet (batch) anodizing.

Coil anodizing provides edge to edge coverage with no holes from hanging hooks, as occurs with batch anodizing.

This is how Cascadia Metals sources all of its anodized aluminum.

As a coil processor, Cascadia Metals can supply master coils, slit coils and PVC protected sheets from 2 ft. – 15 ft. long.

Contact your Cascadia Metals Sales Representative today to learn how Anodized Aluminum can satisfy your material needs.