

ANODIZING AND ITS USES



The next time you walk into a fast food establishment, a shopping mall, the local grocery store, your bank, or just about any business that occupies a high-rise office complex, take a few minutes to admire the “bronze” metal surface of the building. Most people do not know or understand what the surface is composed of or how it is generated. However, it is a highly weather- and abrasion-resistant coating that is a chemically integrated part of the aluminum surface. Other finishes rely on adhesion to bond to the base metal surface, but not so with anodizing.



This feat is based in a simple process known as electrochemistry, which combines the chemical and electrical forces necessary to convert aluminum metal into a porous aluminum oxide layer, which is still a part of the original metal. The aluminum oxide has some amazing properties that make it harder (abrasion resistant) and more weather resistant, in other words far more durable, than untreated metal. Normal dirt and film buildup can be readily removed with various common cleaning products. Anodizing has been so successful over a period of 75 years that it is commonly used in building construction all over the world. Other anodized products that one frequently encounters are: metal shower door frames; automotive parts – both internal and external; heat sinks in computers and other electrical equipment; sports equipment; cookware; and even jewelry.

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Anodizing aluminum benefits from three characteristics of the aluminum oxide film: (1) its protective chemical resistance to the environment, inside or out; (2) the fact that it is transparent so that it does not call attention to itself but highlights the base metal; and (3) the ability to apply various colors, right into the pores of the aluminum surface.



Many common consumer goods are anodized.

The result of putting these properties together in a variety of combinations allows for a large range of choice for products that are both functional and attractive. This has ultimately made aluminum the choice of several generations of architects and builders, as well as product designers and specifiers, who use it so many ways. Please contact us for more information about aluminum anodizing and the many uses of anodized products.



Anodized aluminum is aesthetically pleasing as well as durable. Here it is used as a decorative element in a restaurant bar area.



Beauty, versatility, and ease of maintenance make anodized aluminum the choice of architects and builders throughout the world.