



What is anodising?

Aluminium naturally protects itself by forming a protective layer whenever the base metal is exposed to air. The anodising process produces even thicker protective layers, resulting in a finish that's as hard as ruby or sapphire and provides good protection against sunlight, corrosion, heat and moisture. This process differs from powdercoating in that anodising is a thickening of the base metal itself, rather than adding a coating, like paint.

Key Facts



A popular aluminium surface finish is anodising, a process that forms a protective layer on the metal and improves its resistance to weather and corrosion.



Anodising is one of the most durable joinery finishes available.



Aluminium joinery with an anodised finish comes in a range of colours, from natural (silver) through to bronze and black.



With regular maintenance, anodised aluminium can stay looking as good as new for at least 20 years.

The anodising process

The anodising process involves passing a controlled electric current through extruded aluminium that is immersed in an acidic solution. This forms a protective anodic film on the surface. The thickness of the anodic layer produced affects its anti-corrosion performance and longevity: the thicker the layer, the longer the life of the metal. Thinner finishes are used for interior aluminium, so it's important to choose a finish that will suit the placement of your joinery, as well as the conditions and environment of your site. The use of incorrect or less expensive anodising options may result in a less desirable or effective finish.



Benefits of anodised aluminium joinery

- **Durable and weather-resistant.**
- **Extremely hard and will not flake or chip off.**
- **Has an even film thickness, even around sharp edges.**
- **Cost-efficient over its lifetime.**
- **Deep, lustrous metallic finishes are available.**
- **Gloss levels range from deep matt to bright and polished.**
- **A wide selection of fade-resistant colours is available for exteriors.**

Choosing colours and textures

The natural colour of anodised aluminium is silver, but by adding three more processing steps a wide range of shades can be achieved. In window joinery, the range typically starts off with a very light bronze (champagne), and deepens through to medium and dark bronze, and on to black.

Anodic treatment can sometimes highlight naturally occurring grain in the surface of the aluminium, not unlike timber or stone. This grain affects the way the surface refracts light and can lead to minor differences in the brightness of different components of your joinery. However, these won't affect the performance or durability of the joinery itself. Because anodising colour-processing varies, not all colours will match up from one supplier to another.

Durability

The natural beauty and lustre of anodised aluminium can be maintained for at least 20 years with proper maintenance. Accumulated dirt and grime retains contaminated moisture, which can attack the surface and damage the finish, so it's important to follow the manufacturer's instructions and keep your anodised aluminium joinery clean.