

# POWDER COATED ALUMINIUM CARE & MAINTENANCE



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## Material Properties

Aluminium is a light and tough metal with an excellent strength to weight ratio and corrosion resistance - making it an ideal material for outdoor furniture. The aluminium is coated with an electro-statically applied, powder coat finish. The electro-static application method ensures 100% coverage of the metal's surface area and provides a consistent and tough finish that far exceeds other conventional paint finishes. The resulting finish is knock and scratch resistant, impervious to moisture, highly resistant to corrosion and easy to clean.

The process of powder coating involves a lengthy pre-treatment process. First, the material is thoroughly sanded with abrasive paper much in the same way that wood is sanded. Then the frames and components are immersed in a series of chemical baths to clean and degrease the metal before the corrosion resistance of the aluminium is enhanced by pre-treating with a chrome conversion coating that deposits a thin layer of chrome on the surface. The powder coat (normally this is Polyester) is then applied using electrostatic spraying equipment. A thin layer of powder is deposited over the entire frame before the frame is put into an oven at approximately 200°C (392°F) for 15-20 minutes, depending on the size of the component.

The advantage of using powder coat over a paint finish is that the coating is harder and can be thicker than that of paint. Also, there are no solvents involved. The disadvantage of powder coat over paint finishing is that powder coat is very difficult to repair if it becomes damaged. It is not possible to perfectly match the appearance of powder coat with a repair made using a liquid paint.

## Cleaning

Powder coated aluminium should require very little maintenance, other than to gently clean with water and a mild liquid detergent to remove any dirt or splashes. A microfibre cloth or sponge should be used to wipe over the surfaces of the furniture. Removing surface water with a drying cloth (like you would use on your car) will help avoid water spots. Avoid using any abrasive cleaning agents or materials, as these could mark the surface of the powder coat. Do not use steel wool or Scotchbrite on powder coated surfaces.