



ALUMINIUM FINISHING ASSOCIATION

Other Coating Methods

Where architectural powder coating is not appropriate, aluminium can be finished using wet spraying or electrophoretic processes. As with other aluminium finishing processes, rigorous pretreatment of the metal surface is crucial to the final quality.

Polyvinyl Fluoride Coatings - PVDF (or PVF2) Coating Systems are based on a mixture of Polyvinylidene Fluoride resin (min. 70%) and acrylic resin (max 30%). This is not commercially available in powder form and therefore requires to be sprayed using conventional wet techniques. As PVDF is a multicoat system requiring a colour coat and a top clear coat, and PVDF paints are expensive, this method is less economical than architectural powder coating. However, as PVDF coatings have very high resistance to UV light, they became popular in sundrenched countries such as the Middle East and parts of the USA. Colour ranges are limited as is abrasion resistance. PVDF coatings are not as scratch resistant as polyester powder coatings but offer greater resistance to staining, chalking, weathering and fading.

Air drying wet spays – Although inappropriate for architectural projects, the benefit of traditional wet spray paints is that a relatively small amount of paint can be mixed in almost any colour. They have occasional usage in interior work but are generally unsuitable for architectural metal work owing to their comparative lack of durability. One benefit is that specially formulated liquid paints can be used for on-site remedial work.

Electrophoresis - Electrophoretic painting is a dipping process that results in a very uniform and stable coating being achieved. It has been superseded by more efficient technologies and is no longer used for architectural finishing. The colours available are generally limited to white and brown because of the size of the paint baths used and the quantity of paint wasted during a colour change.