



## Environmental Considerations

In general, modern finishes on aluminium are environmentally friendly. Aluminium can be 100% recycled without loss of quality and importantly can be recycled indefinitely.

Wet spray finishes, including PVDF paints, necessitate multiple coats and the use of volatile solvents. Solvent emissions from liquid paints are frequently dealt with by incineration, which itself releases carbon dioxide and thus provide a significant impact on the carbon footprint.

Architectural powder coating has the advantage that current technology allows the finish to be applied in one coat without the use of solvents. Oversprayed powder can be collected and recycled. There are no solvent emissions from architectural powder coatings.

Pre-treatment processes used for paints and powder coatings traditionally use chromates in solution, although metal salts deposited in the conversion coating from modern processes are in an environmentally sound form. Newer technologies are being introduced, which avoid the use of chromates.

Anodising uses water-based processes from which the main discharge is aluminium hydroxide, a non-toxic solid which is environmentally neutral. Very small quantities of heavy metals used during the process are recyclable.

Environmental auditing of the overall effect of finishing aluminium shows that the benefits of durability, low maintenance and recyclability of anodised and architectural powder coated aluminium greatly outweigh concerns expressed over previous, now largely superseded, treatment methods.

All AFA members comply with the relevant environmental standards, local discharge consent limits and environmental legislation including the requirements of the Environment Agency.