



SUSTAINABILITY STATEMENT

Today's world calls for us all to be more conscious of our environment. In 1998 the world recognized this by signing the Kyoto Agreement. The Kyoto Agreement directly affected the construction industry by demanding that buildings become more thermally efficient. With these demands longevity, thermal efficiency, sustainability and recyclability are now critical factors in construction.

Why Aluminium...

Aluminium provides a unique solution for today's construction needs. Aluminium is light, strong, durable and flexible which provides tremendous potential for achieving even the most demanding design brief. Two-thirds of the energy required to extract aluminium is supplied by environmentally friendly, hydroelectric power. Couple this with the recyclability of aluminium and aluminium is the ideal choice for Windows, Doors and facades.

Longevity

Unlike some alternative building materials, aluminium offers an almost unlimited life expectancy. A notable example of this is the Statue of Eros in London's Piccadilly Circus, which has only just been cleaned and renovated, and The Empire State Building, the latter being the first building to use anodised aluminium. Aluminium does not age like other organic materials and needs no protection from ultra-violet light. Aluminium can be polyester powder coated or anodised to a variety of colours, which enhances the materials natural durability. Comar's powder coater's guarantee their finishes for 25 years and anodiser's for 30 years.

Sustainability...

The recycling process now produces high quality aluminium, which is very cost effective and can be carried out on an indefinite number of occasions without impairing the quality in any way. It is a very durable material and has very low maintenance requirements, therefore reducing the whole-life cost. It is long lasting and can withstand the ravages of the most extreme conditions. Aluminium is an excellent material to use in marine and coastal environments, as the effect of sodium chloride is minimal.

Sustainability concerns are alleviated by the knowledge that we have at least 300 years of known reserves of the raw material, Bauxite, and this does not allow for the fact that 75% of all aluminium used construction is from recycled sources.

Thus with ever increasing proportion of re-cycled material in use, aluminium can be accurately described as the ultimate sustainable material.

Choosing Aluminium...

The reason for specifying aluminium, as compared to other building materials, lay in its unique properties. No other building material can be re-used again and again in the same form. Its overall life-cycle is more environmentally friendly due to the minimum energy required in maintenance and the well established, proven design life of aluminium. Other materials will require replacement sooner and require more in-depth environmentally harmful maintenance. The longevity and proven design life of aluminium assures the specifier that aluminium will provide a long term solution year-on-year with the guarantee of 100% re-cyclability at the end of the buildings life.

Recycling Check List

"The recyclability of aluminium – one of its unique properties along with strength, durability and corrosion resistance – has led to its increased use in construction over recent years. Used aluminium is valuable and is easily and endlessly recycled without quality loss. The material is very rarely 'lost' entirely because of this."

Important issues to note are:

- The quality of aluminium is not impaired by endlessly recycling.
- Re-smelting aluminium saves up to 95% of the energy needed to produce the primary product.
- It is the most cost-effective material to recycle.
- The recycling rate of used aluminium products in building is over 80% (over 95% in transportation and 30% in packaging).
- 30% of the 1.9 million tonnes of aluminium used in Europe in 1997 came from recycling.

Sources: Council for Aluminium Building
European Aluminium Association