Steel windows - the sustainable and stylish choice



Windows manufactured by Metali Window Services Ltd.

Steel is the most recycled material by weight on the planet

Genuine sustainability is about the kind of tomorrow we want to leave to our children and grandchildren – and onwards. It touches every facet of life and means making the right choices, so it is increasingly important to understand and evaluate materials from cradle to grave. In the case of steel windows, they combine high quality, attractive aesthetics, low maintenance and longevity with a design life of 70 years.

All steel windows from <u>Steel Window Association</u> members are manufactured in the UK, while the high-grade steel is imported from Switzerland, minimising its carbon footprint relating to transportation. Members even have the ability to refurbish steel products. At end of life, the windows can be systematically dismantled and the steel frames, fittings and glass recycled, reducing pressure on landfill.

Steel is inherently durable and recyclable and is easily recoverable from the waste stream by magnetic separation. Indeed, steel can be recycled and reused indefinitely with no diminution in quality; it is the most recycled material by weight on the planet. On average, new steel products have a 37% recycled content which minimises the use of virgin resources. In short, steel is a permanent material that plays a part in the circular economy, helping reduce the burden on nature by ensuring resources remain in use for as long as possible.

Embodied carbon is a factor in almost any product, and steel is no exception, but modern processes and business practices are designed to reduce energy consumption. They have resulted in one tonne of steel produced today requiring just 40% of the energy it did in 1960.

As well as reducing energy consumption and preserving resources, recycling steel cuts CO2 emissions and water usage. One tonne of steel recycled saves, on average, 1,400 kg of iron ore, 740 kg of coal and 120 kg of limestone. Today, almost every by-product formed during the steelmaking process is used in new products, ranging from fertilisers and asphalt to plastics and paints, minimising the amount of waste sent to landfill and preserving raw materials.

Along with steel's recyclability and durability, a significant benefit in the manufacture of windows is the superior strength-to volume ratio of the material. It contributes to the slim sightlines of the frames that ensure maximum light transmission and unmatched design versatility, resulting in steel windows being both a sustainable and stylish choice.