

The **Beaufort** Range

Guide to Sustainability



Aluminium delivers the best in sustainability

Aluminium is the perfect construction material -it combines superior performance, aesthetics and above all it benefits the environment.

www.beaufortsecure.com





Beaufort Aluminium

Caring for the environment



Company profile

Beaufort Secure Design is a supplier of Aluminium Systems for the production of commercial and residential entrance doors, windows and screening products. Our comprehensive and versatile product range is designed to provide solutions for all market sectors including education, healthcare, residential, public, leisure, government and retail.

We have established a reputation for innovative product design, unrivalled technical expertise and total commitment to the environment, while actively promoting sustainability. We currently operate the following audited management systems:

- BS EN ISO 14001 : 2004 Environmental Management Systems
- BS EN ISO 9001 : 2000 Quality Management Systems

What we offer

As well as an extensive product range and technical expertise, we offer advice and information on key topics such as:

- Recycling and Sustainability
- Caring for the environment
- Product longevity and life cycles
- The Green Guide
- BREEAM
- Code for Sustainable Homes
- Responsible Sourcing



Tested **Tried** Trusted

The Beaufort Range undergoes regular and extensive testing and we believe it is vitally important that the product not only performs, but also has a positive impact on our environment. We continue to produce fully recyclable, sustainable and environmentally sound products.

The Beaufort Range is capable of achieving:

- 1.3 'U' Value (Code for sustainable homes)
- 'A' Window Energy Rating (WER)

We currently hold accreditation for:

- Kitemark to BS7950
- Kitemark to BS4873
- Secured By Design
- PAS 23 General Performance for Doors
- PAS 24 Enhanced Security for Doors

We are current members of:

- Council for Aluminium in Building (CAB)
- Centre for Window and Cladding Technology (CWCT)
- National Building Specification (NBS)
- British Fenestration Rating Council (BFRC)



Please contact our technical department for more information regarding any of the above key topics.



The Aluminium lifecycle is best described as cradle to cradle, not cradle to grave

Helping **sustainability**

Today's world calls for us all to be more conscious of our environment. In 1998 the world recognised 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.

- Since 1888, over 700 million tonnes of aluminium have been produced
- Over three quarters of the aluminium is still in productive use
- 90% of the aluminium used in the construction industry is recycled
- Recycling the aluminium currently stored would equal 15 years' primary output
- Recycling aluminium requires 95% less energy than primary production
- Recycling aluminium from end-of-life products saves close to 80 million tonnes of greenhouse gas emissions per year

- Since the inception of aluminium recycling, we have avoided over one billion tonnes of CO₂ Emissions

Unlike some alternative building materials, aluminium offers an almost unlimited life expectancy.

Aluminium does not age like other organic materials and needs no protection from ultra-violet light. It's overall life-cycle is more environmentally friendly due to the minimum energy required in maintenance and the well established, proven design life of aluminium assures that aluminium will provide a long term solution year on year with the guarantee of 100% recyclability at the end of a building's life.



Source: IAI/EAA

We care about **our environment**

Beaufort recognises that environmental issues and sustainability are of paramount long term importance. We are actively involved in the promotion of the environmental advantages of aluminium and work with all stakeholders in the supply chain to maximise effective recycling. This ranges from 80% recycling of waste from the extrusion process and fabrication off-cuts, to the eventual recycling of end-of-life units.

Our business operates to the BS EN ISO 14001 : 2004 Environmental Management Systems standard. This provides a framework to control the environmental impacts of our activities, products and services, and to continually improve our environmental performance.

Responsible **Sourcing**

As part of our sustainable approach, we are committed to the principles of responsible sourcing of materials and encourage our suppliers to adopt a similar approach. We try to source the majority of our extrusions from recycled material, thus reducing our impact on the environment and helping to conserve valuable resources.

To help minimise our carbon footprint we try to source all extruded products within the United Kingdom and also utilise UK based Polyester Powder Coaters and Anodisers.

Recycling aluminium alloys can be summarised as the 95 rule - 95% is recovered from buildings, the process saves 95% of the energy needed to produce prime metal and typically 95% or more of the original material is recovered. (*Delft Report)

Over 95% of Aluminium removed from the old Wembley Stadium was recycled



Green Guide

The Green Guide to Specification is an easy-to-use publication, providing guidance for specifiers, designers and their clients on the relative environmental impacts of over 250 elemental specifications for roofs, walls, floors and fenestration.

The main environmental impact of windows is from the heat loss through them. Attention is drawn to the large number of credits available in BREEM, the Code for Sustainable Homes and EcoHomes for reducing fabric heat loss and improving operational CO₂ emissions compared to the small number available for materials specification.

The guide operates on a rating system with A+ ratings having the lowest overall environmental impact, followed by A, then B, C, D and E; with E being the worst performance overall.

BREEM

The Building Research Establishment Environmental Assessment Method (BREEM) was launched in 1990 and has been formally adopted by the Government as the benchmark to measure the environmental performance of buildings.

BREEM provides guidance on ways of minimising the adverse effects of buildings on the global and local environment. It aims to achieve this by reducing energy usage both in the construction and management of a building as well as promoting

a healthy and comfortable indoor environment for the end users.

BREEM has been used to assess the environmental performance of both new and existing buildings. It is regarded by the UK's construction and property sectors as the measure of best practice in environmental design and management.



Code for Sustainable Homes



The Code for Sustainable Homes (CSH) has 6 levels. Each level is an increasing reduction of carbon emissions, for example, Level 1 requires a 10% reduction of the Target Emission Rate (TER), Level 4 requires a 44% reduction, and Level 6 requires a 100% reduction and is deemed a 'zero carbon' structure.

Under the new CSH rules, your local Planning Officer has likely requested your planning application complies with one of the 6 Levels mentioned above. In fact many Local Authorities have bypassed Levels 1 and 2 and have a minimum requirement of Level 3 on all applications. To submit your planning application, you will need to either supply 'Pre-Assessment CSH' or, a full CSH to the required Level (1-6). Your Planning Officer will be able to inform which option is best.



BS 7950



BS 4873



EMS 523987



FM 37876



Tel: 01633 29 40 40 Fax: 01633 29 40 41

Beaufort Secure Design Ltd
25 Queensway Meadows | Newport | NP19 4SQ

www.beaufortsecure.com

