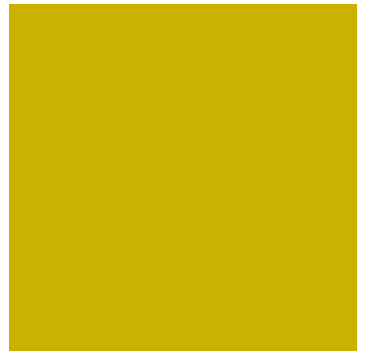
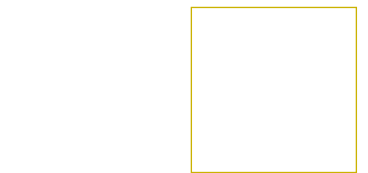
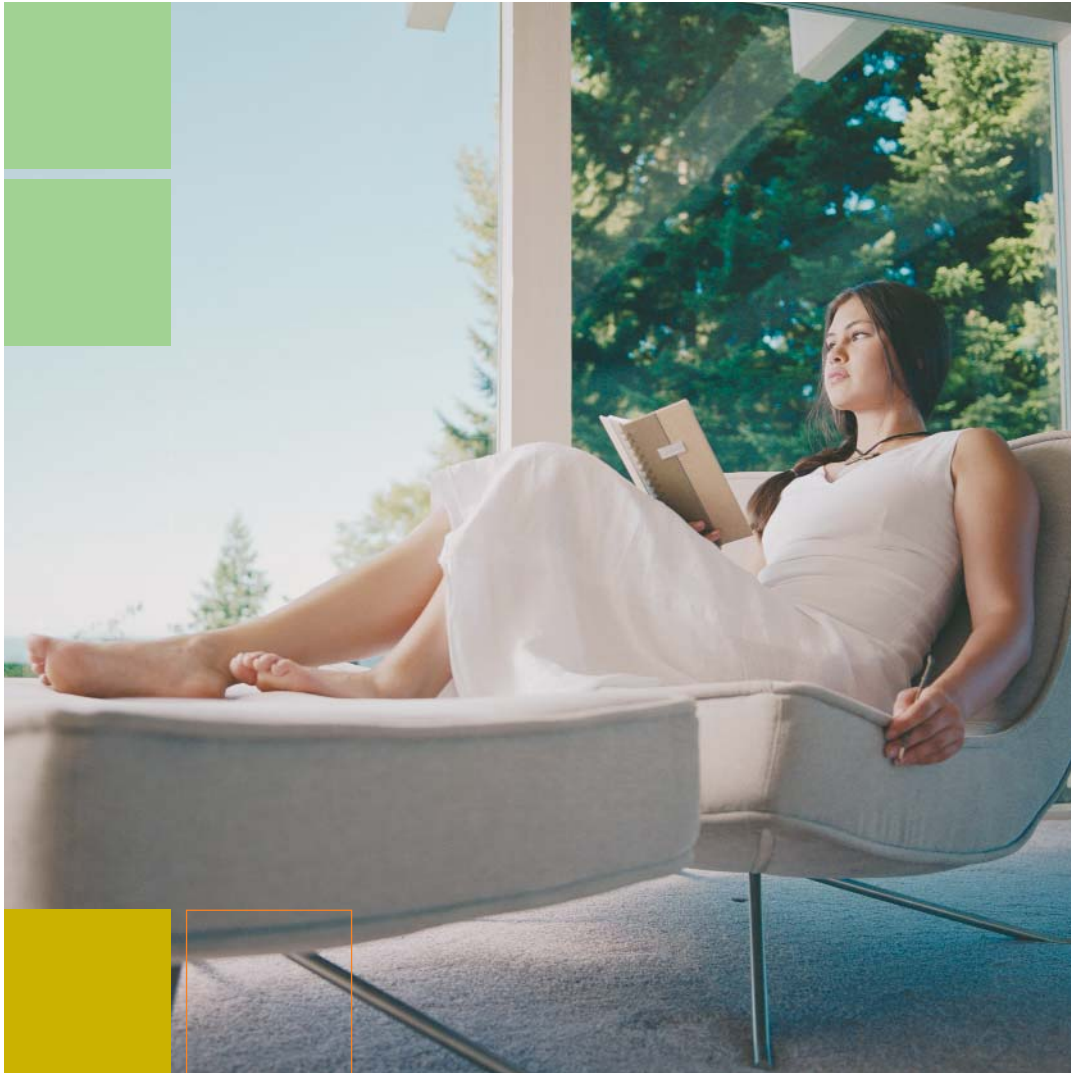


Choosing Aluminium

Windows, Doors and Conservatories



Council for Aluminium in Building





“ This guide will give you vital information about choosing Aluminium windows, doors and conservatories, including details of numerous technological advantages, environmental benefits and economic savings. ”

Why Aluminium?

- Great looking
- Easy maintenance
- Low in weight
- High in strength
- Frames do not shrink, warp, swell or twist
- Fully recyclable
- Enhances security
- Slim frames
- Reduced heating bills
- Does not rust
- Comprehensively tested
- Enhances the value of a home
- Meets building regulations for thermal efficiency

Why Aluminium



Aluminium is often the first choice for use in planes and cars as well as buildings:

- Aircraft - the Airbus A380
- Automotive - engines and car bodies for the Aluminium XJ Jaguar
- Aluminium is easy for manufacturers to shape, use and install
- Aluminium frames are now efficient when it comes to keeping the heat in

Aluminium is the ideal building material when it comes to windows, doors and conservatories. There have been significant advances in heat insulation, as well as security, colour choice and ease of installation. Aluminium is low in weight and high in strength, and needs the minimum of maintenance, it also looks great and enhances your property's value.



Aluminium – caring for your environment

There are sound environmental reasons for selecting Aluminium. Over 90% of the aluminium used in building can be recycled and re-used, with scrap Aluminium remaining very valuable. This scrap Aluminium is up to 100% recyclable, which means that it has a valuable part to play in improving the environmental performance of the building industry.

The act of recycling Aluminium requires only 5% of the original energy required to produce the primary Aluminium in the first place. Few building materials can be fully recycled – let alone recycled indefinitely.

Other materials cannot be as readily recycled as Aluminium and the original physical properties are not fully retained, as they are with Aluminium.



Case Study: Wembley – 96% recycled



- 96% of Aluminium removed from the old Wembley Stadium was recycled
- Proportion of aluminium recycled is growing
- Sustainable construction material
- Aluminium is the world's most abundant metal - the third element after silicon and oxygen
- Inexhaustible supply

Aluminium was an integral part of the old Wembley Stadium, particularly in the roof that was added in 1963. Now it has been pulled down to make way for the new 90,000-seater stadium, and an impressive 96% of the total Aluminium in the old stadium was collected for recycling – verified in an independent European study. As more Aluminium is used in construction, and as recycling increases, the need to extract the raw material for Aluminium will diminish.



Aluminium – naturally the better choice

Doors and windows provide the first and lasting impression of a building. For over 50 years, Aluminium frames have been used to create stylish and warm windows and doors, exceeding the thermal insulation standards set out in the Building Regulations.

There are very good reasons why Aluminium is the core material in most conservatory roofs.

- Strength
- Attractiveness
- Economic benefits
- Environmental plus-points
- Flexibility in design
- Lasts longer
- Less maintenance needed means lower long-term costs



All the advantages

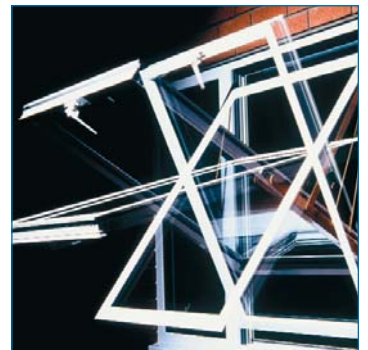
Insulation materials for windows, doors and roofing are under closer scrutiny than ever. You can be sure Aluminium windows are made so that they meet insulating requirements without compromising their appearance. Innovations in the way frames are made have minimised the formation of condensation. As Aluminium frames help keep the heat in, this leads to real energy savings.

Thanks to the versatility of Aluminium, there is plenty of choice on how to open your window – including inward with tilt and turn, and outward with casement hinges. You can even get arched windows with hardware to fit.

Security

- Aluminium's strength contributes significantly to security
- A robust box structure forms part of the slim, attractive frames
- The frames are close fitting and therefore hard to attack
- They cannot easily be cut and do not warp or rot
- No need for reinforcement, unlike other materials
- Internally glazed frames

“ All the very latest locks and security fittings can be used ”



Aluminium: versatile... durable... sustainable...



Aluminium frames are very popular in colours or woodgrain finishes, plus metallic and textured effects. There are many colours available, while there is the option of anodising (Aluminium with a protective oxide layer) and also foiling.

Dual colour – one colour on the inside and a different colour on the outside – can really add a striking appearance to your home. The inherent strength in Aluminium and the resulting slim frames provide another bonus – the slimmer the frame, the larger the glass size allowing more light into your room.



secure... imaginative!

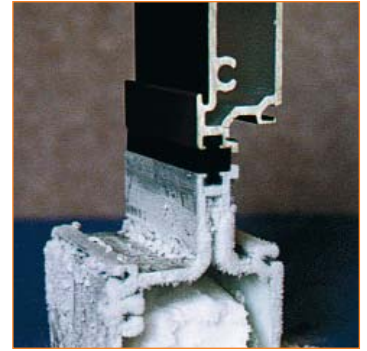
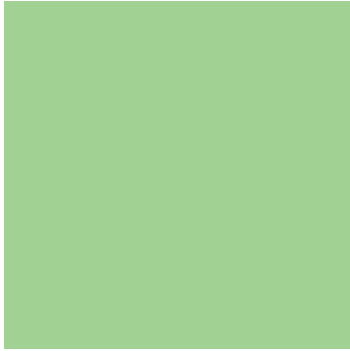


- Nationwide network of manufacturers and installers
- Superb aesthetic detailing and properties
- Flexible and fast production leading to creative shaping and colouring
- Low maintenance - just washing and wiping
- Naturally resistant to corrosion
- Dual colour - different colours inside and out
- Anodising or painting does not peel or flake off
- Does not attract dust electrostatically



Aluminium is a key material for windows, doors and conservatories because of its strength, low maintenance and other enviable qualities like colour options and heat insulation. All Aluminium needs to keep it clean is washing and wiping, which is a major plus with any homeowner. With a wide variety of window designs available and the many security features associated with Aluminium, coupled with being long lasting and low maintenance, it is easy to see why frames and Aluminium are a natural pairing.

Aluminium - tested and used everywhere



You don't have to look far to see Aluminium in action as its versatility means it is used in all types of building – including the new Selfridges in Birmingham. For new apartments at Neptune Quay on the former Ipswich docks, Aluminium windows were selected because of superior durability and weather resistance – critical given the exposed location.

Rigorous tests mean Aluminium complies with a wide range of standards:

- BS 4873: for Aluminium alloy windows
- BS 6375-1: performance of windows and doors – weathertightness and guidance on selection and specification
- BS 6375-2: performance of windows – operation and strength characteristics
- BS 7950: enhanced security performance of casement and tilt/turn windows
- BS 3987: for anodic oxide coatings on wrought Aluminium for external purposes
- BS 6496: for powder organic coatings for application and stoving to Aluminium alloy extrusions, sheet and perforated sections – for external applications
- PAS 23-1/PAS 24-1: general/enhanced performance requirements for door assemblies ... and many more

Today's Aluminium windows fully comply with Building Regulations' thermal insulation requirements. Insulating thermal barriers – polyamide or polyurethane – are used with high performance glass sealed units, and Aluminium-framed windows can already reach U-values as low as 1.6W/m²K. Aluminium systems can be designed to achieve band B of the BFRC (British Fenestration Rating Council) window energy rating system. Banded A-G, A is the best window energy performance category.



“ There are close to
3,000 Aluminium
Fabricators/installers
across the UK ”

Established in 2000, the Chrysalis Programme is a marketing initiative within the Council for Aluminium in Building (CAB). The Programme is aimed at the residential markets for aluminium-framed windows, doors and conservatories. It is supported by companies drawn from every aspect of the product supply chain – from extruders, thermal break suppliers and hardware specialists, through to system houses, finishers, fabricators and installers.

Chrysalis members are also involved with national organisations that shape the future of the window industry and regularly advise FENSA on matters and regulations that relate to the use of Aluminium in building.

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Thinking of replacing your windows this year?

From April 2002, all replacement glazing came within the scope of the Building Regulations. From then on, anyone who installs replacement windows or doors has to comply with strict thermal performance standards, to reduce energy loss. There are two ways to prove compliance:

(a) A certificate showing that the work has been done by an installer who is registered under the FENSA Scheme, or (b) A certificate from the Local Authority saying that the installation has approval under the Building Regulations.

The FENSA scheme, which stands for the Fenestration Self-Assessment Scheme, was set up with central Government approval in April 2002. It means that a sample of the work of every FENSA registered installer is inspected by FENSA appointed inspectors to ensure standards are maintained. FENSA also informs local authorities of all completed FENSA installations and issues certificates to householders to confirm compliance.

FENSA



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