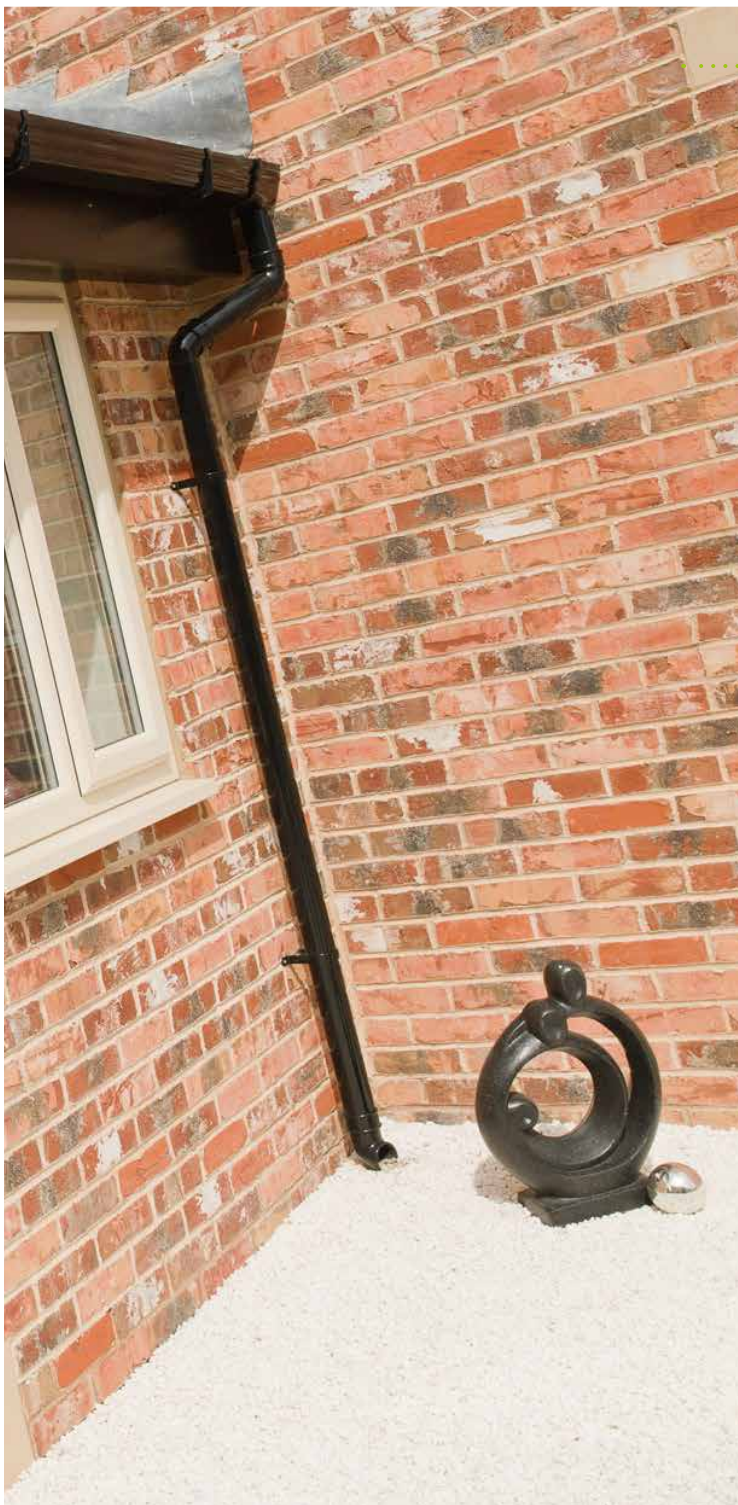




Love your home... Love Liniar 





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Designed for saving energy

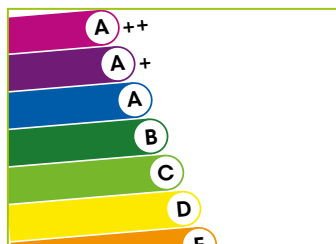
When you choose Liniar, not only are you assured of a high quality product, you'll be taking advantage of the most technically advanced range available in the UK.

PVCu windows may look similar – but it's the bits you don't see, tucked away inside the frames, that make a huge difference to how the windows perform, and how much energy they save – or waste – over their life cycle.

First introduced to the UK in the early 1980s, PVCu (or UPVC as they were known then) windows were unattractive and bulky – and only available in white. Being more cost effective to produce than alternative materials, they were soon used extensively in new buildings all over the country.

Most other PVCu window systems have been updated since then – but Liniar is the only range to have been designed completely from scratch combining extensive industry experience with the most modern window technology.

Launched in 2008, Liniar frames are not only beautifully slim and available in a huge choice of styles, colours and finishes – they contain a huge number of hidden features to make them the most energy efficient frames you can choose.



Safe and secure

Linlar windows are fitted with high security multi-point locking as standard and are independently tested to the requirements of PAS 24 and Secured by Design.



Energy Efficient

With unique multi-chambered PVCu profile, Linlar windows can achieve the very latest A++ energy rating, helping retain heat within your property.



Fully tested

Linlar products are put through exhaustive testing processes to ensure they are robust, durable and built to last.



Eco-friendly

Each PVCu product in the Linlar range is made from lead-free, energy efficient, recyclable PVCu, making it a sustainable choice.



Made in Britain

The Linlar range is designed, tooled, extruded and tested at an award-winning, purpose-built, state-of-the-art factory in Derbyshire.



Low maintenance

Linlar products won't rot, rust, or require painting - just an occasional clean with warm soapy water, even with our foiled colours.

Window supply chain

There are four main steps in the process of producing a PVCu window in the UK.



1. Design

Each product design is painstakingly crafted and created by the systems house (Linlar), using the latest software and 3D print technology, then tested before the manufacturing process can commence. Unique designs are patented to ensure the innovation is protected and only Linlar customers benefit from the investment and effort that goes into designing our products.



2. Extrusion

The systems house also manufactures the profile, or the PVCu parts of the window, through a process called extrusion. At Linlar's extrusion plant, which features the biggest PVCu mixing plant in Europe, raw materials are heated and squeezed through shaped dies, then cooled as they come out – forming perfect lengths of the correct profile for each piece of the window system.



3. Fabrication

The different lengths of PVCu profile, together with other components needed to make the finished product, are ordered by and shipped to a specialist window fabricator. The fabricator cuts and welds the window together using Linlar's strict design specifications. Glazing units are added, together with hardware such as hinges and handles, and accessories such as astragal bars, resulting in a finished window.



4. Installation

Some fabricators also offer an installation service; others sell windows and doors onto specialist installers to fit into your home. You should always ensure your window fitter has a card demonstrating his Minimum Technical Competency, or is a Corgi Fenestration registered installer – this offers reassurance that your installer has been properly trained.





About Liniar

The most up-to-date system on the market.

Liniar was created by bringing together some of the most knowledgeable and forward thinking designers and experts in the window industry – with more than 500 years of experience between them.

Liniar is an award-winning Derbyshire firm, whose parent company Quanex Building products is listed on the New York Stock Exchange.

Continued investment in infrastructure, technology, machinery and a great team of people has helped Liniar to become one of the UK's market leading window systems with a customer base of specialist fabricators, all creating beautiful products to supply to installers and homeowners.

The design team behind the Liniar brand is constantly pushing the boundaries of product innovation, with a focus on research, many new products in development and a string of patents and Registered Designs. As a result, Liniar has developed a well-earned reputation for innovation.

By being agile and responsive to customer feedback, Liniar has developed an impressive portfolio of products. The range spans not only windows, doors and roofs, but lots of clever design ideas, such as bi-folding doors to give your home that real 'wow' factor. Liniar's range of trims, fascias and soffits also ensures a perfect finish with fully matching colours, and a recycled outdoor range provides matching, low maintenance products for landscapers, developers and homeowners.



Focus on Sustainability

Liniar is committed to the protection of the planet for future generations. That's why Liniar has worked for nearly three decades to ensure no PVCu waste is sent to landfill. Liniar creates fully or partially recycled products, designs energy-efficient and eco-friendly products and continually works towards the smallest carbon footprint possible.

The environmental friendliness and energy efficiency of Liniar's windows, doors and conservatories set the standard for the rest of the industry. Not only can Liniar products save homeowners money on their energy bills, they're also manufactured using the smallest carbon footprint possible.

Liniar works alongside the Environment Agency to shrink its carbon footprint. So far during this agreement it has surpassed environmental targets by 54% and achieved ISO14001 accreditation for excellence in Environmental Management.



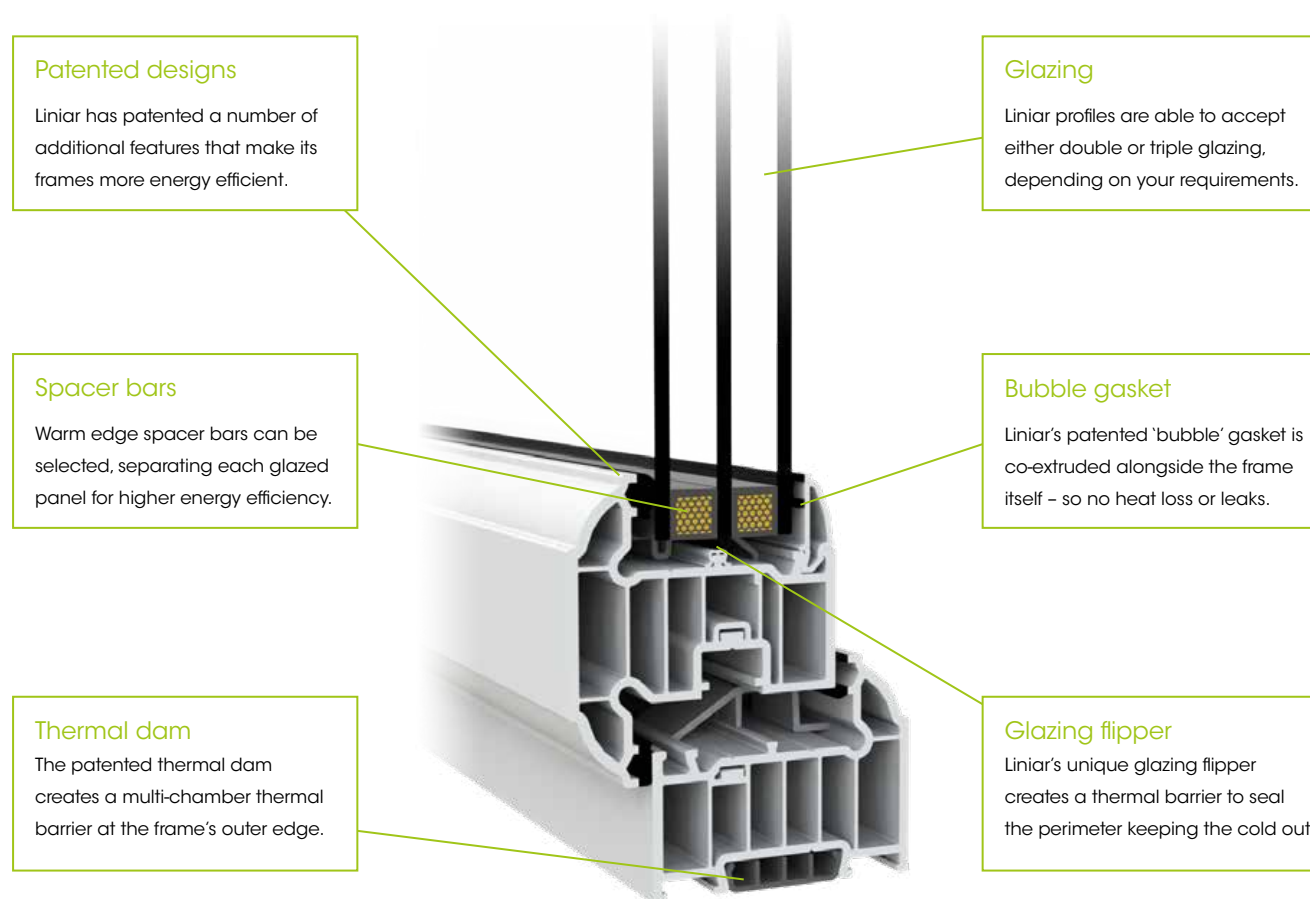
Liniar's Sustainability Focus:

- Operational waste-neutral production facility.
- Recycling scrap from production into new fully or partially-recycled outdoor products since 1994.
- Underground water recycling facility recycles nearly 3 billion litres of water per year.
- Incandescent bulbs have been replaced with low-energy LED bulbs across the entire site.
- Heating across the site requires no fossil fuels or electricity.
- Constant investment in energy-efficient machinery, methods and transportation.

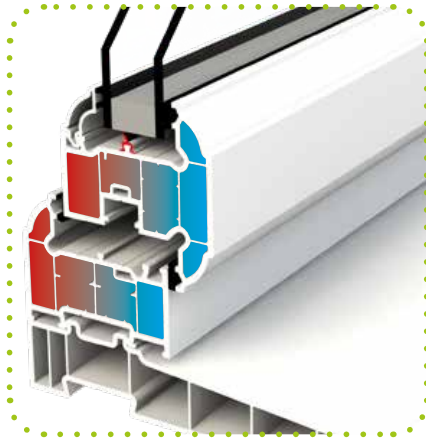
How Liniar PVCu profiles work

PVCu is a natural insulator, so it's one of the most energy efficient materials for a window frame. Inside a Liniar frame (or profile), multiple chambers act as barriers, making it difficult for the heat inside your home to be transferred through and escape outside.

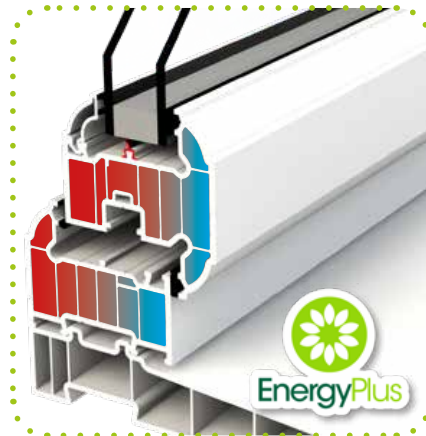
The drawings opposite show the inside of a Liniar standard, an EnergyPlus frame and an EnergyPlus90 frame, the colours representing heat and cold – with red symbolising the heat from your home and blue the cold air coming from the outside.



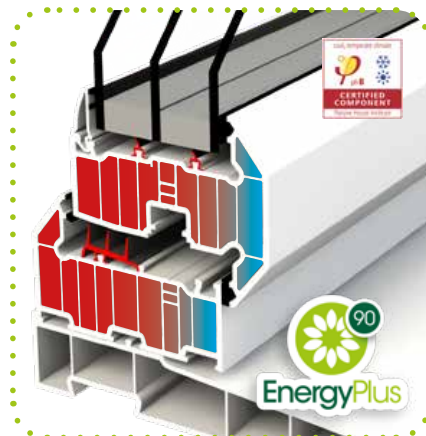
The result is a supremely energy efficient glazed product, capable of achieving the highest possible Windows Energy Rating of A++ or a U-value as low as 0.5 W/m²K with quad glazing*. Ask your Liniar fabricator or installer for more information, or use the Liniar WER Calculator at www.liniar.co.uk/WER-calculator to find out all the different options available.



Standard



EnergyPlus



EnergyPlus90

Profile comparison

Why pay to heat your home and lose up to 20% of the heat through your windows and doors?

Linar PVCu window and door profiles are available in three formats – all designed to be extremely energy efficient.

- Standard – 70mm front to back, 4 symmetrical chambers, achieving U-values as low as 1.2 W/m²K
- EnergyPlus – 70mm front to back, 6 symmetrical chambers, achieving U-values as low as 0.8 W/m²K
- EnergyPlus90 – 90mm front to back, 9 symmetrical chambers, achieving U-values as low as 0.5 W/m²K - PassivHaus compliant.

Both standard and EnergyPlus profiles are completely interchangeable and look exactly the same from the exterior – the only difference you'll see as your windows are fitted is the protective tape, which will feature the EnergyPlus logo if you've ordered 6-chamber windows.

Linar standard profile offers a cost effective option with energy efficiency that still beats most similar types of PVCu window.

Linar EnergyPlus profiles can achieve an A++ rating without the need for expensive low-iron glass on the outer pane of glass or the need for costly thermal inserts, making it a cost effective choice overall.

Launched in 2018, EnergyPlus90 is a 90mm window system that looks and acts as a 70mm system - but which is the first PVCu window in the UK to achieve the exacting Passive House standard, for the highest possible thermal efficiency. Available from selected fabricators nationwide.

Both standard and EnergyPlus profiles are available in either chamfered (bevelled) or sculptured (curved) styles, depending on the product, whilst EnergyPlus90 comes in chamfered only. Please see individual product pages for more details.

Security and accreditations

The Liniar system has been designed to maximise energy efficiency without compromising security. This is backed up by the ongoing security testing of Liniar products, together with third party accreditation where applicable.

ModLok™

Developed by Liniar in conjunction with the world's leading lock manufacturers, the revolutionary patented ModLok™ (*patent pending: 1306594.1*) technology is built into Liniar's bi-folding and patio door systems. ModLok™ is a highly innovative combined reinforcing and locking mechanism, bringing additional strength and rigidity to the doors and enabling wider configurations of sliding and folding doors.

With hook bolts, shootbolts, anti-lift technology, anti-bump cylinders and optional anti-snap cylinders, ModLok™ products are extremely secure. Even hinge fixings are hidden inside the doors so they can't be unscrewed from the outside. Combining frame reinforcing within bi-fold and patio doors with a high security locking mechanism, Liniar's ModLok™ offers the structural benefits of an aluminium door.

See page 41-49 for more details.

Alumina by Liniar

The Alumina bi-fold system is manufactured from aluminium and offers similar high security features to ModLok™. The addition of an innovative high density polymer (*patent pending: 1522501.4.1*) lock ensures no heat is lost through this vital component. Unlike other aluminium doors, the lock itself creates a thermal break to help the Alumina bi-fold achieve low U-values.

See page 50-51 for more details.





Secured by Design

Linlar Secured by Design products are designed with exceptional security features and confirmed as meeting the requirements of the Association of Chief Police Officers.



PAS 24:2012

The British Standard for enhanced security performance, PAS 24 testing also includes testing for air and water tightness and wind loading to BS 6375.



BBA Approval

Linlar's whole window system is BBA (British Board of Agrément) Approved, verifying an impartial and unbiased review on the performance of products.



BS EN 12608:2003

Holding the British Standard for quality, consistency and performance required for PVCu extruded hollow profiles, Linlar's systems are tested to ensure continued compliance.



BuildCheck

An independent testing house conforming to British standards and accredited by UKAS and the BFRC. Linlar's ModLok™ bi-fold door was first to pass its Folding/Sliding Door Scheme.



BS EN ISO 9001 (Quality)

Linlar's factory has BS EN ISO 9001:2008 accreditation for quality management systems - proving its strong customer focus and continuous improvement cycle.



BS EN 14001 (Environmental)

Linlar has been certified for the latest BSI (British Standards Institute) ISO 14001 Environmental Management System (EMS), thanks to a continued focus on sustainability.



BS EN 6375

Parts 1, 2 & 3 relate to the requirements of windows and doors, including weather testing inclusive of wind loading, functionality testing and cyclic testing.

Before choosing windows and doors ensure they comply with the latest building regulations. See www.linlar.co.uk/building-regulations for more information.

The Liniar range



Casement Window

The most popular choice, casement windows may include top or side opening sashes, arched tops, mock sash horns or astragal bars.



Tilt & Turn Window

Perfect as a fire escape, the 'open in' style offers great options for cleaning from within as well as maximising ventilation.



French Window

With both sashes opening out from the centre, Liniar French windows have a dummy centre mullion, resulting in a fully open aperture.



Flush Sash Window

Offering both a sleek, contemporary appearance or the realism of a traditional timber window – with 21st century thermal benefits.



Reversible Window

Rotating a full 180°, this window style is ideal for high-rise applications and hard to reach areas as it can be safely cleaned from the inside.



Resurgence Window

A new concept in PVCu windows, Resurgence offers a unique timber replica design with double-rebated weatherproof seals.



Bi-fold Window

Popular in conservatories and orangeries, bi-folding windows fold back to one side of the opening for uninterrupted views.



Bay/Bow Window

A great way to bring more light into your home, bay or bow windows can be made from standard or flush sash casements.



Residential Door

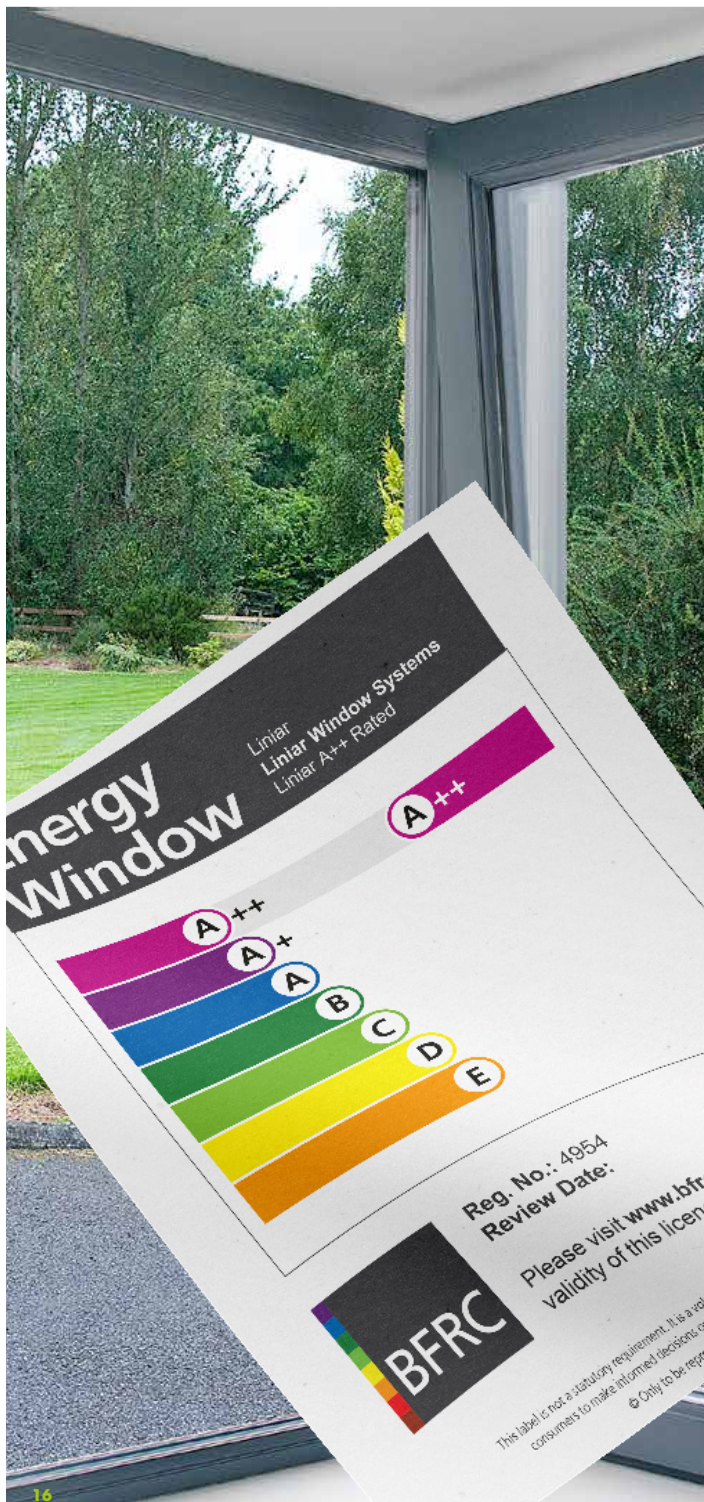
Liniar's PVCu residential doors are available as opening in or opening out, designed to match perfectly with the window range.



Composite Door

Offers up to six times the insulation of a timber door, combining the appearance of timber with superb thermal performance.

For the full range of colours, styles and options available, contact your Liniar stockist.



Window Energy Ratings

Up to 20% of your home's heat can be lost through your windows.

That's why it's important to make sure your new windows are as energy efficient as possible

The Window Energy Ratings scale is designed by the British Fenestration Ratings Council (BFRC) to measure the thermal performance of windows, and enables different windows to be compared on a scale that runs from A++ down to E.

Your windows may be supplied with a document to confirm how efficient they are – and the higher the rating, the more heat they'll keep inside your property.

The BFRC rating indicates how well a product will:

- help you contain and conserve heat within your property when it's cold outside
- keep out the elements
- resist condensation on the inside of the window
- contribute to improved sound insulation.

Linar's EnergyPlus90 window system is the first in the UK to achieve Passive House standard, together with noise reduction to 42 decibels



Linar helps generate energy for eco-house project

A house featured on the BBC programme 'The House that £100k Built' was designed with Linar EnergyPlus windows, due to their incredible thermal efficiency. U-values of 0.8W/m²K were achieved, with the house actually generating more electricity than its owners consume.

You can read the full story on the Linar website at www.linar.co.uk/case-studies.



The Liniar window range

Don't compromise between security and energy efficiency – choose Liniar.

The Liniar 70mm window system was created from scratch, building in innovative design features intended to reshape the accepted standards for PVCu windows.

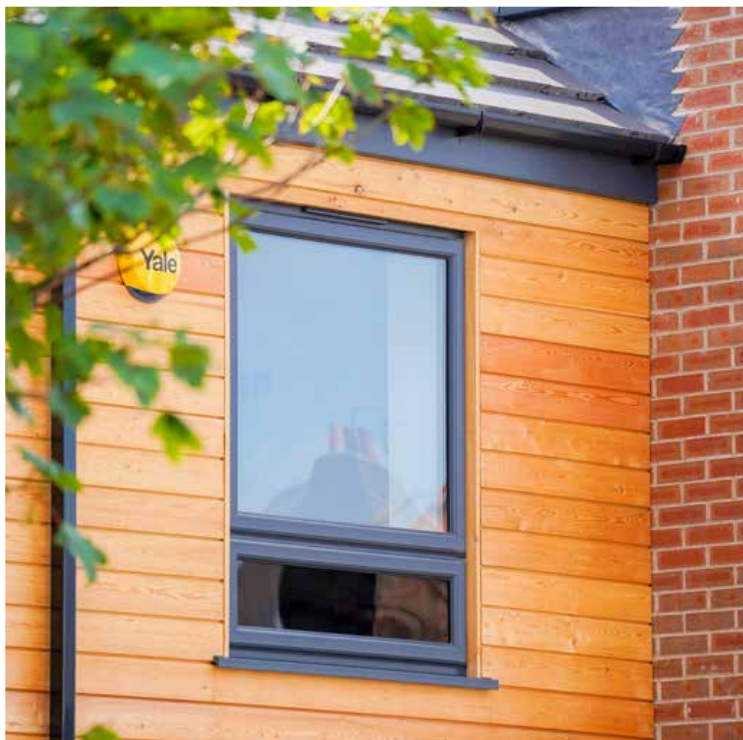
Multi-chambered frame technology means Liniar windows can achieve the highest energy ratings of A++ whilst at the same time attaining Secured by Design status. Standard 4-chamber, EnergyPlus 6-chamber and EnergyPlus90 9-chamber frames all deliver supreme thermal efficiency.

Liniar window styles are available in a choice of sculptured (curved) or chamfered (bevelled) frames and can be manufactured with either 28mm double or 36mm triple glazing. A huge range of colours and finishes means you can personalise your windows to your own requirements.

Why choose Liniar windows?

- Designed from scratch to achieve the pinnacle of thermal performance.
- Engineered with built-in security features and fully tested.
- Backed with quality assurance and accreditation for peace of mind.
- 100% lead-free, fully recyclable and fully guaranteed.

For more information visit www.liniar.co.uk/windows



Casement windows

Still the most popular choice for homes all over the UK, Liniar casement windows offer total versatility and either classic or contemporary style.

This traditional British window style offers slim sight lines to let in maximum light. It's available in a wide choice of configurations, including top or side hung windows, so you can personalise each window to your requirements. Adding moulded sash horns gives Liniar casement windows the appearance of traditional vertical sliders – or for additional character you can add astragal or Georgian bars to your windows.

You could also add arched tops, coloured or bevelled glass, and there's a wide range of colours and finishes to choose from. With matching cills and either traditional or contemporary handles, the choices are almost endless. Liniar's patented bubble gasket is used in all products and delivers a continuous seal – even in the corners – resulting in draught-free, weather proof and leak-free windows, all with high security features.

Your installer will be able to advise you on the options available, or visit the Liniar website at www.liniar.co.uk/windows/casement to see the stocked colours and find out more about Liniar casement windows.



Options at a glance:

- Choose from standard, EnergyPlus or EnergyPlus90 frames
- Sculptured (curved) or chamfered (bevelled)
- Add Georgian bars and/or patterned glass
- Wide choice of coloured and foiled frames
- Wide choice of handle and hinge options.

7 great reasons to choose Liniar

Innovative - continued investment in infrastructure, technology and a great team of people results in forward-thinking designs.

Energy efficient - designed from scratch to achieve the pinnacle of thermal performance and retain more heat in your property

Safe and secure - engineered with built-in security features and approved by independent testing facilities

British made - frames are extruded in our state-of-the-art factory in the heart of Derbyshire

Sustainable - Liniar sends zero operational wastage to landfills, instead using its scrap to create full or partially recycled PVCu products for more than three decades

Quality assured - backed with ISO 9001 accreditation for your peace of mind

Guaranteed - all Liniar frames are guaranteed to not warp, split or discolour for a minimum of 10 years



Your Liniar stockist is:

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Flamstead House
Denby Hall Business Park
Denby
Derbyshire DE5 8JX

Tel: +44 (0)1332 883900
Email: sales@liniar.co.uk

www.liniar.co.uk

