

Aluminium Windows



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SDB have been supplying and installing aluminium windows for over a decade. At SDB, we offer aluminium window frames from highly reputed and market leading manufacturers.



- **Aluminium Sliding Sash**
- **'Alitherm 500'**
- **Origin**
- **Alitherm 'Heritage' Aluminium**



All windows carry a 20 year product guarantee & 10 year (insurance backed) workmanship guarantee.

Stylish, slimline, secure, thermally efficient and highly durable, all installed by our professional in house team. All our aluminium windows are bespoke, designed to your measurements and requirements. So whether it be for a new-build, a period property or a modern apartment, SDB can supply and fit windows that will compliment the existing character of your home.

Why Aluminium?

Aluminium windows are highly resistant to corrosion and rust whilst offering strength, higher levels of security and durability. An aluminium window is maintenance free, built to last, it needs only an occasional wipe down to stay looking as good as new. Aluminium is extremely recyclable and very environmentally friendly – its life span is measured in **decades** instead of just years.



Aluminium Windows also allow you to have your windows coloured in one of **200 different RAL colours**. It's even possible to have your windows manufactured to have alternate colours on the inside and out. All our products are painted in a polyester powder coat finish, which is renowned for not fading or flaking.

Aluminium Sliding Sash Window

Clear View have been designing and manufacturing sliding sash windows in Britain for over 50 years, its all they do, and they do it well. Flush sight lines give more daylight and less visible frame. This ensures the maximum thermal benefit from the glass unit. The minimalist design of the frames work with both period & contemporary homes. The sash's can tilt inwards allowing you to easily clean the outer frames and glass and the concealed mechanism adds for a clean frame design and excellent thermal values.

- **Easy Clean Tilting Sash**
- **Concealed Mechanism**
- **Flush site lines**
- **Alumatherm Technology**
- **Gloss White frame finish as standard with 150 RAL colour options**



Aluminium Sliding Sash Window

FAQ's



- Our supplier has over fifty years experience in Aluminium sash windows and carries out continuous research and development to ensure their windows are thermally efficient and durable.
- They are dedicated sash window manufacturers whose features include:-
- Concealed balance covers, which means you can't see how the sashes slide. The secondary benefit is the reduction in any air infiltration
- Sashes have the ability to tilt inwards for cleaning the outside face.
- Available in a choice of powder coated finishes, Gloss white powder coated finish - RAL 9910 is the standard
- External sash profiles all have a putty line detail. This replicates the 45 degree chamfer found externally on traditional wood sash windows
- Rigorous testing to ensure weather resistance and thermal qualities – see following test report



Aluminium Sliding Sash Window Certification

Weather Testing

In July 2010 the Alumatherm Sash Window was weather tested at the BBA laboratory in Watford, Hertfordshire. A report was generated No 46675. The test was to BS 6375-1:2009 comprising of BS EN 1026 : 2000 Air permeability, BS EN 1027 : 2000 Watertightness and BS EN 1211 : 2000 Resistance to wind. The window size tested was 1200mm Wide x 1480mm High. The tests investigate the air permeability, water tightness and resistance to wind. From this data a class is given which indicates where the product is suitable for installation in the UK.

The window is calibrated for rig air leakage and then a sample settling in procedure. During the test the window is subjected to water soaking, water spray various air pressures and finally a gust test. All the gust tests are negative and positive. This means the window is sucked outwards and blown inwards. Results achieved were:

Air permeability, Class 3, 600 Pa, UK exposure category 2000

Water tightness, Class 6A, 250 Pa after 4 minutes. A repeat test later provided a 300 pa water tightness result.

Resistance to wind load, Class A5, 2000 Pa. The allowable deformation of the window profile is 7.2mm. Alumatherm 's slim design achieved 1.1mm with positive air pressure and 2.5mm with negative. This result is a fantastic design accolade.

A final safety test was carried out with a safety screen placed in front of the window. Air pressure + and - were applied up to 3600 Pa equivalent to over 150 mph gusts.

The written report stated '*No visible damage, beads stayed in place*'.

Thermal Performance

Alumatherm was put together like a puzzle. Each section was the result of compromises between aesthetics, strength, size, manufacture, cost and thermal performance. We have pushed materials to the limit joining thermal resin, Aluminium, glass and Upvc to produce a window that achieves only 1.7W/m².K. By reducing the air leakage figure even slightly will push the product in to band B. This is to be re tested later this year.

The result for the thermal performance was carried out by Mr Phil Davies from Azon UK Ltd accredited simulators.

Even when the window has a deep bottom rail which means slightly more Aluminium content and slightly less glass the window can still achieve a C rating. Alumatherm still has a C rating when one pane of 4mm Diamant glass is replaced with 6mm Diamant.

Diamant is a low iron glass which makes it clearer which allows more light in. The Inner pane is Planitherm total + which reflects the heat back in to the room. Argon gas insulates the cavity of the unit reducing cold transfer. Warm edge, glass fibre spacer bars reduce cold transmittance through the edge of the unit.

'Alitherm 500' Aluminium Windows



'Alitherm 500' Offers flush slimline frames with minimalist sight lines for a sleek and clean look that will compliment any period or contemporary property. The Thermally efficient and multi-point locking that exceeds British Standards for security and is PAS24 compliant.

- **Flush site lines (63.5mm)**
- **B window energy rating & 1.4 W/m²K U Value can be achieved.**
- **Slim line aluminium frame**
- **Various hardware options**
- **Gloss White frame finish as standard with 150 RAL colour options**
- **Security multi-point steel locking mechanism - PAS24 CERTIFICATED**

Key Features & Specifications:

- High-Security bi-directional pincer multi-point mechanism with key lockable night vent position.
- Fully compliant with Doc L of the Building Regulations (Conservation of Fuel and Power).
- Compliance with Document Q & PAS 24 certified.
- Window Energy Rating up to A.
- Concealed Night Ventilation available where required.
- Concealed mullions and Transoms with slim sash to sash sightlines of just 102mm.

Sash Sizes

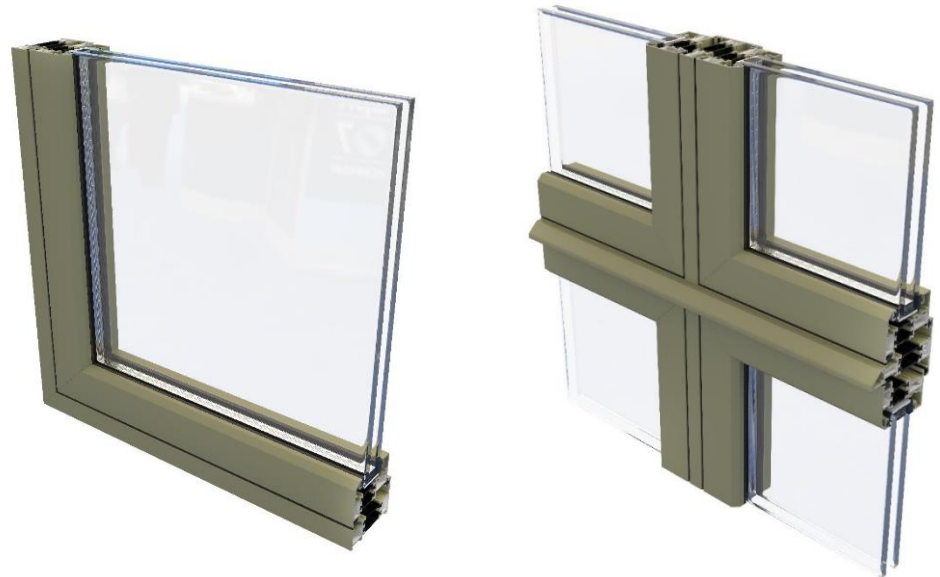
Top Hung – max. sash size: 1400x1300mm (40kg)

Friction Stays – (up to and including) 24"

Side Hung – max. sash size: 700*x1400mm (28kg)

Friction Stays – (up to and including) 16"

*800mm with Fire Escape Hinges





British made **Origin** windows are well renowned for high level of quality and attention to detail, excellent security, thermal values and general build quality. The aesthetics are very clean and sleek with minimal interruptions around the frames. Available as standard + 150 RAL colours

- **High Security – Windows installed with Yale’s renowned Encloser locking system, offering the highest level of security.**
- **Standard double glazing and thermally efficiency that exceeds current building regulations thanks to a sophisticated polyamide thermal break, built into the window frames.**
- **‘B’ window energy rating & 0.9 W/m²K U Value can be achieved.**
- **Many high end hardware options**
- **Standard frame finish options with 150 RAL colour + 4 woodgrain options**
- **Easi-clean mechanism on side hung configurations between 400-900mm**

Smarts Alitherm 'Heritage' Aluminium



Alitherm profiles utilise Smart's innovative polyamide thermal break technology which creates a barrier between the cold air outside and the warm air inside. This technology significantly reduces thermal transmittance and enhances the overall U Value.

- U Value - $1.5\text{W/m}^2\text{K}$ (using $1.0\text{W/m}^2\text{K}$ glass unit)
- WER Rating – B
- Air Class 4, 600Pa
- Water Class 9A, 600Pa
- Wind Class AE, 2400Pa

Available in Single or dual colour, marine quality polyester powder coat as standard or as non-standard colours, including metallic & dual colour options and in a range of opening options such as:-

- Fixed windows
- Single or double sash, side hung open out casements
- Top hung open out casements
- Tilt & turn windows
- Pivot windows*



Smarts Alitherm Heritage Aluminium Doors



Alitherm Heritage door profiles feature the system's signature slim sightlines and elegant lines that complement the Alitherm Heritage window and mimic those of steel doors.

The system has all the advantages of modern aluminium profiles that feature polyamide thermal breaks, allowing the system to achieve a U Value of 1.5 W/m²k when installed with a suitable sealed unit.

Features include;-

Slim sightlines

Tape or gasket glazed

Multi point locking and face mounted shoot bolts

Available in Single or dual colour, marine quality polyester powder coat as standard or as non-standard colours, including metallic & dual colour options





Lever/Lever Art-Deco Door Handle



Bulb-End Window Handle



Art-Deco Window Handle



Monkey-Tail Window Handle



Bulb-End Peg Stay



Both the window and door systems and accompanying hardware and accessories may be supplied in any colour from extensive Naturals and RAL ranges as well as Sensations colours from the recently launched Alchemy range.

Alchemy offers eight anodised colour matches, including shades of gold, bronze, silver, grey and black, and combines the unique style and aesthetics of traditional anodising, with the advantages of a high quality powder coating process.



Here at SDB Aluminium Glazing we only use the best glass, Pilkington Glass. The range of low-e energy-efficient glazing that we offer will suit every type of property, from the more modern home to period or traditional styled home, Pilkington glass is a household name and recognised as the world's leading manufacturer of glass and glazing. The clever technology inside Pilkington Activ Sunshade glass will help keep the warmth in during winter while keeping the sunshine glare out during summer. Installing low emissivity (low-e) energy-efficient glass will help reduce your heating bills by up to 20% each year. Several self cleaning glass options are also available.

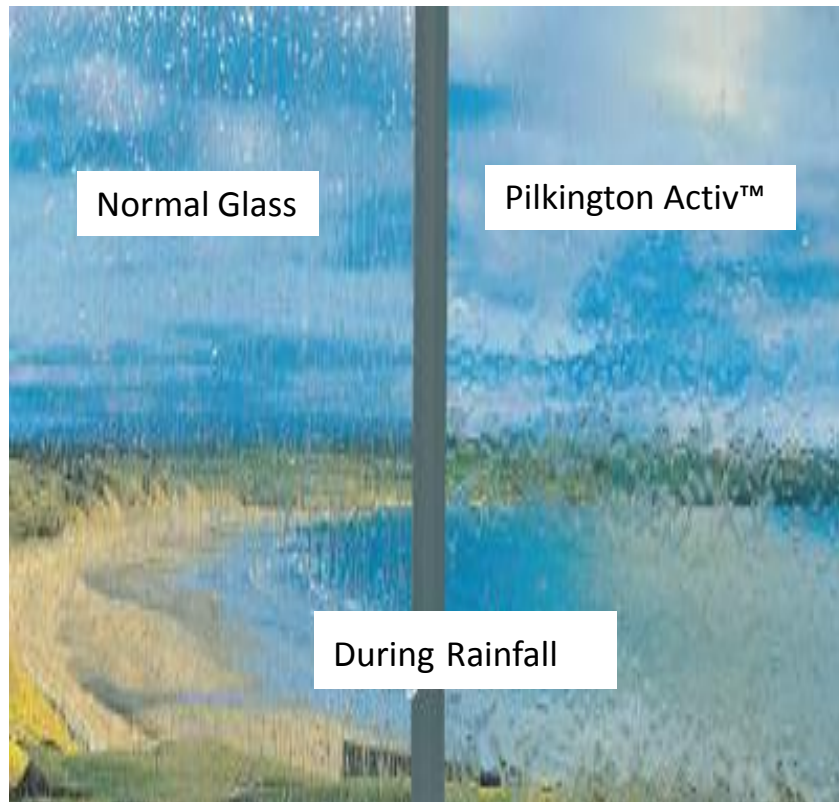
Pilkington Self-Activ™ cleaning and Solar Control Glass Range

- **Pilkington Activ™ Clear**
- **Pilkington Activ™ Blue**
- **Pilkington Activ™ Bronze**
- **Pilkington Activ™ SunShade Blue**
- **Pilkington Activ™ SunShade Neutral**

Pilkington Activ Glass V's Standard Glass



Pilkington **Activ™** is the world's first self- cleaning **glass**. It's basically the same as conventional **glass**, except for a unique dual action coating. It works in two ways: first it uses daylight to break down organic dirt (such as tree sap) and then uses rain to wash the dirt away.



Pilkington Active Glass Vs Standard Glass

The table below gives a simple comparison between standard double glazing, polycarbonate, and high performance Pilkington **Activ™** conservatory options.

Product	Light Transmittance	Solar Heat Rejection	Colour	U _g -value (W/m²K)	Self-cleaning Properties
Uncoated double glazing 4 mm / 12 mm air / 4 mm	0.82	22%	Clear	2.8	N
25 mm polycarbonate	0.68	45%	Clear	1.75	N
Pilkington Insulight Activ™ (4 mm Pilkington Optitherm™ S1 Plus inner pane 16 mm 90% argon filled cavity)					
Pilkington Activ SunShade™ Blue	0.27	80%	Blue	1.0	Y
Pilkington Activ SunShade™ Neutral	0.42	68%	Neutral*	1.0	Y
Pilkington Activ™ Blue	0.50	67%	Blue	1.0	Y
Pilkington Activ™ Bronze	0.49	64%	Bronze	1.0	Y
Pilkington Activ™ Clear	0.72	N/A	Clear	1.0	Y

*Note – Pilkington **Activ SunShade™** Neutral has a slightly grey appearance.

Pilkington **Activ™** is a durable online coating applied to the surface during float glass manufacture.

Pilkington **Activ SunShade™** is a combination of the Pilkington **Activ™** "online" coating on surface 1 with an additional "offline" coating on surface 2, which provides superior solar control.

The doors can be finished in one of our 4 standard colours or a choice of over 200RAL colours. The powder coat finish is applied to the aluminium extrusions in a controlled factory environment ensuring a high quality finish. For coastal locations the finish can be upgraded to marine grade. Our standard colour range is available in five subtle, natural matt finishes and a gloss white option.





Visit our showroom to find out more information

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Opening Times
Mon – Fri 9am – 5.30pm
Saturday 9am – 4.30pm

Sunday & Bank Holidays - Closed