smart
architectural aluminium

Windows & Doors

from the UK's leading supplier of aluminium systems

Old meets new…

This unique development brings together modern and traditional designs, showcasing Smart's extensive range of windows and doors.

Project: Purifier House and The Boat House, Bristol

Featured Products: Alitherm Heritage Windows, Smart Commercial Doors and Ground Floor Framing

The Smart choice

Our range of aluminium windows and doors has been developed to provide a wide choice of high quality solutions, that not only deliver beautiful aesthetics, but also long-life, low-maintenance and high performance.

Whether you want to replace traditional, art-deco steel windows with the slim lines of a modern, high-performance aluminium system, or to install a thermally-efficient flush casement solution to update the bulkier frames of a tired U-PVC system, we have a modern, high-quality solution to meet your needs.

With a range that includes casement, tilt & turn and pivot window options, together with a complementary choice of door styles and configurations, our systems are suitable for a host of applications – both new build and refurbishment.

Each comes with all the assurances you would expect from the UK's leading supplier of aluminium systems. The elegant aluminium profiles are designed to provide strength, security and durability, ensuring an elegant and robust solution that requires minimal maintenance and delivers outstanding performance over a lifetime of use.

With over 40 years' experience, we are the UK's leading supplier of aluminium window and door systems.

Choosing the right window and door for your home

When you are considering which window type to choose, either for a new build or replacement project, there are a number of styles that you can select from.

Of course, you'll need to think carefully about the style that suits your home and your needs as well as the thermal performance that you want to achieve. You will also want to take care to choose the right colour (both for the outside and inside if you select a dual-colour option) and to think about the style and colour of the window and door furniture.

Once you've chosen your system and colour, it's important to see a sample to make completely sure the tone and shade are exactly what you want. You can then accurately assess the texture, lustre and finish before making your final decision. If you speak to your supplier, they will arrange with us for a sample to be sent directly to you.

Where can I buy from?

Our systems are supplied through a nationwide network of window and door fabricators who carry out installation in accordance with best practices.

You can obtain a list of your nearest Smart fabricator and installer from our website:
www.smartsystems.co.uk/findinstaller

Our systems are supplied through a UK-wide network of experienced fabricators and installers.

Why choose Aluminium

Renowned for its perfect combination of light weight and high strength, aluminium is the ideal material for windows and doors, providing slim, elegant designs and outstanding, long-life performance.

With a life-span measured in decades rather than years, together with extremely low maintenance requirements, aluminium has become the perfect choice for home owners.

All our systems are designed with performance, style and efficiency in mind, with each frame incorporating a 'thermal-break' to insulate it against heat loss, raise the internal temperature of your house and help reduce the risk of condensation.

Maintenance for aluminium systems is simple and straightforward, with a routine 'wipe-clean' all that is required to keep the products looking their best. With no requirement for re-painting or re-varnishing, aluminium windows and doors will never fade, deteriorate or rust, even in harsh environments or coastal locations.

Smart are Qualicoat Marine Approved Powder Coat Applicators

Our systems deliver the perfect combination of aesthetics, performance, durability and security.

How do I assess performance?

When assessing and comparing the performance of a window or door, there are a number of things that you should consider, including the following:

Security – Most windows and doors will be certified to PAS 24. This means the system has been tested by an accredited certification body.

Weather – As part of a building's 'envelope', windows and doors contribute to its overall weather performance, including its water and wind resistance and air-tightness. Smart test their window and door systems to make sure they meet the required performance standards.

Thermal Performance 'the U-value' – This depends on a number of factors, including your system and glazing choice. When comparing systems, U-values will give you a good guide as they are simply a standard measure of how good products are at insulating and so retaining heat within a room. The lower the U-value, the better insulator it is.

What are my Window Options?

When you are considering which window type to choose, either for a new build or replacement project, there are a number of styles that you can select from:

Casement Windows

Casement windows are the most common form of opening window and are attached to their frames by one or more hinges. Depending on the position of the hinge, the opening can be side-hung or top-hung.

Casement windows continue to be the most popular choice, largely due to their enhanced weathering especially for the UK climate. Ease of operation and the wide range of styles that are available.

Available in the following systems:

- **Alitherm 300**
- **Alitherm 500**
- **Alitherm 600**
- **Alitherm 700**
- **Alitherm 800**
- **Alitherm Heritage**
- **EcoFutural**

Reversible

With a sash that can effectively be rotated through 180 degrees, this reversible window can be easily cleaned from the inside.

Available in the following systems:

- **Alitherm 700**

Parallel Casement

Enabling air to flow through all four sides of the opening, our parallel opening windows are a safe and secure option for natural ventilation.

Available in the following systems:

- **Alitherm 700**

Sash Windows
(Vertical Sliding)

Sash, or vertical sliding windows consist of one or more movable sashes that open on a sliding mechanism. Sash windows are a popular option, often found on Victorian and Georgian style buildings. They combine a flush opening with easy operation and excellent natural ventilation.

Available in the following system:

- **VS600**

Pivot Windows

Pivot windows are hung on one hinge on two opposite frames, enabling the window to completely revolve when opened. The hinges may be fixed to the top and bottom frames (vertical pivot) or to each side frame (horizontal pivot). They again allow a wide, versatile opening and easy maintenance access.

Available in the following system:

- **EcoFutural**

Tilt & Turn Windows

Tilt & turn windows can be opened inwards either by tilting the window vertically (to provide a ventilation opening) or by turning the whole window inwards from hinges on a side frame, to provide a complete opening. When opened in this way, they provide easy access for cleaning.

Available in the following systems:

- **Alitherm Heritage**
- **EcoFutural**

Tilt & Turn Windows as viewed from inside

Our products: Alitherm

Our proven Alitherm systems provide a range of high-quality window solutions for side-hung, top-hung, open-out, top-swing reversible and parallel opening casements.

The range combines elegance with outstanding performance, and features products that achieve an 'A' Window Energy Rating, BRE Green Guide 'A', U-values up to 1. 2W/m²K (depending on the glass) and PAS 24: 2016 security.

Thermal Break (highlighted in blue)
The system features a polyamide thermal break which improves the overall U-value of the profile, allowing Alitherm 300 to achieve a Window Energy 'A' Rating.

Certified KM 81580 | Certified KM 81543 | Certified BS 4873:2016 | Certified PAS 24: 2016 | WER A | U Value 1.5W/m²K | Air 600Pa

Water 1200Pa | Wind 2400Pa | TH Max Width 1400mm* | TH Max Height 1500mm* | SH Max Width 900mm* | SH Max Height 1400mm*

*Refer to fabrication manual for correct hardware & size range to PAS24

Alitherm 300

Alitherm 300 provides a high-performance window system that delivers exceptional value across the life of the system. The system is suitable for residential properties and offers a choice of casement options for both traditional and contemporary properties.

- **British Standard Kitemark KM81580**
- **British Standard Kitemark KM81543**
- **PAS 24:2016**
- **BS 4873:2016**
- **Window Energy Rating A**
- **Typical U Value 1.5 W/m²K** (using 1.0 W/m²K centre panel)
- **U Value 1.1 W/m²K** (using 0.3 W/m²K centre panel)

Alitherm 500

Alitherm 500 flush casement window offers a range of high quality styles. Providing a 'French mullion' solution for traditional, cottage-style properties, the range included side hung and top hung flush casement windows.

- **British Standard Kitemark KM81580**
- **British Standard Kitemark KM81543**
- **PAS 24:2016**
- **BS 4873:2016**
- **Window Energy Rating B**
- **Typical U Value 1.5 W/m²K** (using 1.0 W/m²K centre pane)

Flush Casement

The timelessly elegant Alitherm 500 casement window features a profile that is flush to the window frame.

Certified KM 81580	Certified KM 81543	Certified BS 4873:2016	Certified PAS 24: 2016	WER B	U Value 1.5W/m²K	Air 600Pa
Water 1050Pa	Wind 2400Pa	SH Max Width 700mm*	SH Max Height 1400mm*	TH Max Width 1400mm*	TH Max Height 1400mm*	

*Refer to fabrication manual for correct hardware & size range to PAS24

Certified KM 81580 | Certified KM 81543 | Certified BS 4873:2016 | Certified PAS 24: 2016 | WER B | U Value 1.6W/m²K | Air 600Pa | Water 1200Pa | Wind 2400Pa | SH Max Width 1000mm* | SH Max Height 1400mm* | TH Max Width 1400mm* | TH Max Height 1500mm*

*Refer to fabrication manual for correct hardware & size range to PAS24

Alitherm 600

An enhanced system designed to comply with the revisions to the Building Regulations Document L 2010, Alitherm 600 can achieve Window Energy 'B' rating.

- **British Standard Kitemark KM81580**
- **British Standard Kitemark KM81543**
- **PAS 24:2016**
- **BS 4873:2016**
- **Window Energy Rating B**
- **Typical U Value 1.6 W/m²K** (using 1.0 W/m²K centre pane)
- **U Value 1.1 W/m²K** (using 0.3 W/m²K centre pane)

Traditional Detailing

Delivering outstanding performance, Alitherm 600 features a sculptured 'ovolo' profile, designed to echo the traditional look of timber windows.

Certified KM 81580 | Certified KM 81543 | Certified PAS 24: 2016 | Certified BS 4873:2016 | U Value 1.6W/m²K | Air 600Pa | Water 600Pa | Wind 2400Pa | TH Max Width 2000mm* | TH Max Height 2500mm* | SH Max Width 840mm* | SH Max Height 1500mm* | PL Max Width 2000mm* | PL Max Height 3000mm* | RV Max Width 1500mm* | RV Max Height 1558mm*

*Refer to fabrication manual for correct hardware & size range to PAS24

Alitherm 700

Alitherm 700 is an innovative solution for enhanced natural ventilation, allowing for a balanced, effective airflow whilst maintaining security and safety. The system includes side and top hung casements, parallel opening, as well as a top-swing, reversible option.

- **British Standard Kitemark KM81580**
- **British Standard Kitemark KM81543**
- **PAS 24:2016**
- **BS 4873:2016**
- **Typical U Value 1.6 W/m²K** (using 1.0 W/m²K centre pane)
- **U Value 1.0 W/m²K**
  (for the reversible using 0.3 W/m²K centre pane)

Profile
Alitherm 700 incorporates internally beaded vents, to suit both 'cockspur' handle and shoot-bolt locking.

Reversible
With a sash that can effectively be rotated through 180 degrees, this reversible window can be easily cleaned from the inside.

Parallel Casement
Enabling air to flow through all four sides of the opening, our parallel opening windows are a safe and secure option for natural ventilation.

Certified KM 81580 | Certified KM 81543 | Certified PAS 24: 2016 | Certified BS 4873:2016 | WER A | U Value 1.3W/m²K | Air 600Pa | Water 1050Pa | Wind 2000Pa | SH Max Width 865mm* | SH Max Height 1400mm* | SH Max Width 865mm* | SH Max Height 1400mm* | TH Max Width 1400mm* | TH Max Height 1300mm*

*Refer to fabrication manual for correct hardware & size range to PAS24

French Mullion

Alitherm 800 features a 'French mullion' option, enabling both windows to be opened without a central mullion, providing uninterrupted views.

Alitherm 800

Providing a 'French mullion' option for contemporary properties, the premium Alitherm 800 flush casement window delivers outstanding thermal performance, with achievable U-values of up to 1.3W/m²K, depending on the choice of glazing.

- **British Standard Kitemark KM81580**
- **British Standard Kitemark KM81543**
- **PAS 24:2016**
- **BS 4873:2016**
- **Window Energy Rating A**
- **Typical U Value 1.5 W/m²K**
  (using 1.0 W/m²K centre pane)
- **U Value 1.0 W/m²K**
  (using 0.3 W/m²K centre pane)

Alitherm Heritage

The Alitherm Heritage ranges have been designed specifically to meet the needs of refurbishment projects, particularly in sensitive planning areas. Ideal for Victorian and Art Deco projects, our windows and balcony doors are proven in a wide range of renovation and heritage projects across the UK.

Providing a modern, like-for-like replacement for traditional steel materials, Alitherm Heritage is the ideal solution for projects where planning or design demands dictate the installation of sympathetic materials - even for listed buildings.

The Alitherm Heritage door and window ranges both feature the slim profiles and sight lines that are associated with traditional steel doors and windows. However, the system's timeless elegance is also accompanied by the outstanding thermal performance of a modern aluminium system – each delivering a 'B' Energy Rating.

Alitherm Heritage Windows are also available as a tilt turn option.

Suitable for both single and double door application, Alitherm Heritage balcony doors are available in a wide range of sizes and are supplied with a number of locking and security options.

*Refer to fabrication manual for correct hardware & size range to PAS24

Certified KM 81580	Certified KM 81543	Certified BS 4873:2016	Certified PAS 24: 2016	WER	U Value 1.5W/m²K	Air 600Pa	Water 1050Pa	Wind 2400Pa	SH Max Width 865mm	SH Max Height 1400mm*	TH Max Width 1400mm*	TH Max Height 1500mm*

Alitherm Heritage is perfect for sensitive refurbishment and renewal work and is ideal for Art Deco and Victorian projects – even listed buildings.

Our products: EcoFutural

Our outstanding, high-performance window and door range is brought together under the EcoFutural name, offering a wide choice of options for the ultimate in thermal performance and weather protection.

Offering choices including tilt & turn, pivot, and fixed and open-out casement windows, as well as single and double doors, the EcoFutural system features our proven chambered polyamide thermal break that creates a barrier between the cold air outside and the warm air inside. This technology significantly reduces thermal transmittance and enhances the overall U-values of every EcoFutural window and door.

EcoFutural is available in a choice of standard and non-standard colours, with single and dual colour options including our own Naturals, Sensations, Alchemy and Cotswold colour ranges.

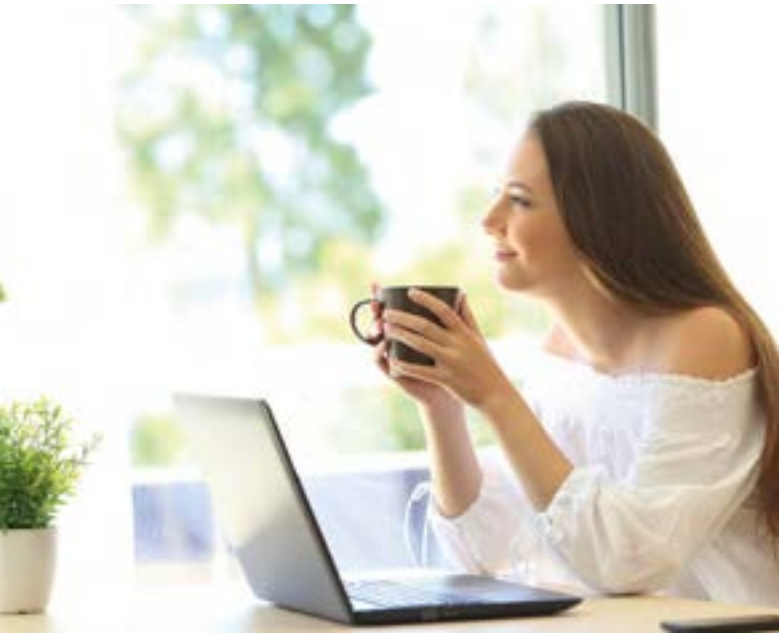
Certified KM 81580	Certified KM 81543	Certified PAS 24: 2016	Certified BS 4873:2016	U Value 1.4W/m²K	Air 600Pa
Water Class E1050	Wind AE2400	TH Max Width 1440mm*	TH Max Height 2500mm*	TT Max Width 1700mm*	TT Max Height 2400mm*

*Refer to fabrication manual for correct hardware & size range to PAS24

Pivot

Casement

Tilt/Turn



EcoFutural provides a wide range of options for the ultimate in thermal performance and weather protection.

Certified
BS 4873

WER

U Value
1.6W/m²K

Air
600Pa

Water
300Pa

Wind
1600Pa

SH Max Width
1600mm

SH Max Height
2800mm

*Refer to fabrication manual for correct hardware & size range to PAS24

VS600

This vertical sliding window is a recent addition to our range and incorporates the traditional styling of sash windows with the advantages of a modern thermal aluminium profile. Perfect for both new build and for use in heritage and conservation areas where Georgian and Victorian architecture is predominant.

Make it yours

Window Accessories

Our range of modern hardware is available in any RAL colour, enabling products either to be colour matched or to be specified in contrasting, or complementary finishes.

Available in a range of both traditional and modern designs to suit all home styles, our high quality locking handles have been developed to provide a lifetime of smooth and robust performance.

We have a range of window handles that can be painted in the colour of your choice. Just let us know the handle colour you want to provide the perfect finishing touch to your new door and we'll provide it. It really is as easy as that!

Smart Standard Hardware

The hardware is available in a number of different colour and finish options, each item selected to complement not only the systems' aesthetics, but also their high standards of quality and performance.

ACET465
BLACK, POLISHED CHROME, BRUSHED SATIN CHROME, SMOKEY CHROME & WHITE

ACET460
BLACK, POLISHED CHROME, BRUSHED SATIN CHROME, SMOKEY CHROME & WHITE

ACSM002
BLACK & WHITE

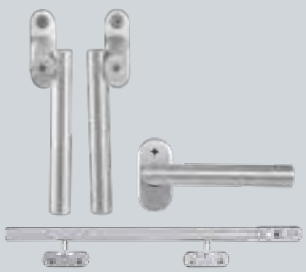
ACW20165
NICKEL & BRASS

ACET165
BLACK & WHITE

ACET080
BLACK & WHITE

ACW20101
BLACK & PEWTER

ACW20100
BLACK & PEWTER



ACSM010, ACSM011, ACW20108
STAINLESS STEEL

ACW20102, ACW20105
BLACK & PEWTER

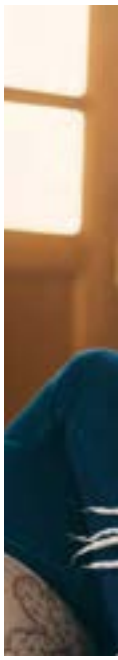
Our products: Doors

Our new Designer Door range has been developed to provide stylish and secure entrance doors to suit any home, with a rich variety of styles, configurations and hardware options.

We also have a wide range of high-quality, high-performance doors in a wealth of configurations and styles, including open-in and open-out options, as well as single, double and French doors. All these systems are available with an extensive selection of colour, glazing and hardware options to provide the perfect finishing touches and virtually limitless design possibilities.

Each door provides a strong, durable and low maintenance solution, designed to enhance the beauty of your home while keeping it light, elegant and secure.

For more information visit **www.smartdesignerdoors.co.uk**



Door Panels

This new range has been developed to provide a wide variety of styles and options for our Alitherm Plus entrance doors, engineered to deliver long-life, robust performance.

With elegant good looks, the door panels are available in ten designs, two sizes and three thicknesses, each fully-insulated panel offering high security and low maintenance.

Our stylish Designer Door Panels have been engineered to deliver long-life and robust performance. As well as being low-maintenance. each panel offers high security and durability.

Alitherm Plus

The high-quality Alitherm Plus residential doors provide elegance, durability and longevity. Featuring both single and double entrance door options, the doors are available in a broad range of formats and sizes and are suitable for a wide variety of house and apartment styles.

With added strength and multi-point locking mechanisms, the doors have been developed to deliver safety and security over a lifetime of robust performance.

Designed to make installation quick and easy, Alitherm Plus doors feature adjustable hinges and lock keeps. The doors have also been designed to make installation quick and easy.

ALITHERM PLUS
Shown above as glazed unit
Shown right with PM006T panel

*Refer to fabrication manual for correct hardware & size range to PAS24

Certified	Certified	Certified	Certified	U Value	Air	Water	Wind	Sash Max Width	Sash Max Height
KM 530838	BS 4873:2016	PAS 24: 2016	BS 6375	1.8W/m²K	600Pa	450Pa	AE1200	1000mm*	2500mm*

Certified	Certified	Certified	Certified	U Value	Air	Water	Wind	Sash Max Width	Sash Max Height
KM 530838	BS 4873:2016	PAS 24: 2016	BS 6375	1.5W/m²K	600Pa	450Pa	Class 2400	900mm*	2100mm*

*Refer to fabricators manual for correct hardware & size range to PAS24

Alitherm Heritage

Flexible and versatile, our Alitherm Heritage doors provide the perfect complement to the window system.

Available in single and double formats, as well as a new French door option, Alitherm Heritage doors feature the slim profiles and sight lines that are associated with traditional steel products. Also suitable for use as an internal screening system, the timeless elegance of Alitherm Heritage doors is accompanied by outstanding thermal performance.

EcoFutural

Our new range of high-performance, high-quality doors has been added to the established EcoFutural window range

The system is available in both single and double door variants, complementing the tilt & turn, pivot and fixed and open-out casement window options.

Available in open-out and open-in formats, EcoFutural doors are weather tested to PAS24:2016 and BS4873:2016 – delivering outstanding performance and assured peace of mind.

ECOFUTURAL DOORS
Shown right as glazed unit
Shown far right with PM006P panel

*Refer to fabrication manual for correct hardware & size range to PAS24

Certified	Certified	Certified	Certified	U Value	Air	Water	Wind	Sash Max Width	Sash Max Height
KM 530838	BS 4873:2016	PAS 24: 2016	BS 6375	1.4W/m²K	600Pa	450Pa	AE1200	1000mm*	2500mm*

Make it yours
Door Accessories

Available in a range of colours and finishes, our door furniture has been selected to equal the high quality and performance standards of our door systems, as well as to complement their aesthetic style.

Available in a range of both traditional and modern designs to suit all home styles, our high quality locking handles have been developed to provide a lifetime of smooth and robust performance.

We have a range of door handles that can be painted in the colour of your choice. Just let us know the handle colour you want to provide the perfect finishing touch to your new door and we'll provide it. It really is as easy as that!

Smart Standard Hardware

The hardware is available in a number of different colour and finish options, each item selected to complement not only the systems' aesthetics, but also their high standards of quality and performance.

ACET486
BLACK, WHITE, CHROME

ACET484
BLACK, WHITE, CHROME

ACET480
BLACK, WHITE, CHROME

ACET488
BLACK, WHITE, CHROME

ACET487
BLACK, WHITE, CHROME

ACW20061
BLACK, WHITE, CHROME

ACW20062
ANTIQUE BRASS, SATIN NICKEL

ACSM001N
BLACK, WHITE

ACSM013
BRUSHED SATIN CHROME

ACSM014
BRUSHED SATIN CHROME

Our extensive colour palette provides virtually unlimited choice, with options to suit every style of property.

An unrivalled range of colours

Our unrivalled range of colour options provides inspiration for all types of properties. Options range from traditional white to pastel shades of blue, through to vibrant reds and greens.

Our complete range includes our Naturals, Sensations and Alchemy collections, as well as the all new Creations range of ever-popular, vibrant colours (pillar box red, sunshine yellow etc) and the Cotswold colour palette, developed specifically to suit traditional projects in conservation areas.

The Smart Spark – Our Mark of Quality

As a visible sign of our commitment to quality, we now stamp the 'Smart Spark' on every one of our hinges, rollers and other hardware before they leave our factory.

When you see a product carrying the 'Smart Spark', you can be sure that it has been through our exhaustive system testing programme – and it comes with our assurance of quality.

Throughout our operation, we carry out extensive testing to ensure our products perform to the highest standards and meet relevant standards – providing long-life, high performance.

We monitor, measure and assess every aspect of our business with the aim of continually improving our products, services, working practices and environmental impact and we fully support independent certification and assessment schemes such as those offered by the British Standards Institute.

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