

Alitherm Series

The Alitherm series of windows offer a range of high quality glazing solutions for side hung, top hung open out, top swing reversible and parallel opening casements, suitable for both the residential and commercial markets.

The series features products that achieve:

- Window Energy Rating A
- BRE Green Guide A
- U Values up to 1.2 W/m²K depending on system and glass unit
- Includes the Kitemarked systems Alitherm 600
 & 800 with PAS 24: 2012 Security







САВ







Alitherm Series

This versatile range of profiles can provide many solutions such as traditional casement windows inspired by the elegance and styling of timber products, or automatic parallel opening commercial windows designed to provide a balanced airflow in multi-storey commercial buildings.

All 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 of a product. Alitherm products are available in a choice of standard or non-standard colours, including metallic, dual colour, Smart's Sensations textured, and Alchemy anodised effect finishes. The series features the new Alitherm 300, Alitherm 600, Alitherm 700 and Alitherm 800 windows, designed to meet the exacting requirements of Document L 2010.

Alitherm 300

Application

All general light use applications

Features

- The system features an extended polyamide thermal break which improves the overall U Value of the profile, allowing Alitherm 300 to achieve a Window Energy 'A' Rating when used in conjunction with the correct double or triple glazed unit
- The system is suitable for both internally or externally beaded, side or top hung open out windows
- Profiles have the option of either ovolo, chamfered or square edges
- Frame options for both standard and slim-line stays
- Option of either multi-point or cockspur locking handles

Technical Performance

Finish

Single or dual colour, marine quality polyester powder coat as standard

U Value

WER
Air
Water
Wind
Document L Compliant

U Value 1.2W/m²K using 0.7 centre pane А Class 4, 600Pa Class E 1200Pa Class AE, 2400Pa

53mm & 76mm

& 36mm double

700mm

24mm, 28mm, 32mm

or triple gazed units

U Value 1.5W/m²K

using 1.0 centre pane

Dimensions

Frame Depth Glass

SH Max o/a Width SH Max o/a Height TH Max o/a Width TH Max o/a Height

(For sizes outside of these parameters, contact Smarts Technical).



Wate 1200Pa



59 53





Alitherm 600

Application

All general light use applications inc commercial.

Features

- An enhanced system designed to comply with the revisions to the Building Regulations
- Document L compliant ٠
- System can achieve Window Energy 'B' Rating
- Profiles feature an extended polyamide thermal break to enhance thermal performance
- Fabrication is by method of crimped or mechanical corners
- Ovolo, chamfered or square profiles
- British Standard Kitemarked system KM 81580 KM 81543

Technical Performance

Finish

Single or dual colour, marine quality polyester powder coat as standard

Alitherm 800

Application

All general light use applications

Features

- Highest thermal performance window suitable for all general use applications
- Will achieve U Values under 1.6w/m²K ٠ when used in conjunction with correct double glazed sealed unit
- Alitherm 800 windows achieve a Window Energy 'A' Rating
- Extended chambered polyamide thermal breaks provide excellent thermal performance
- British Standard Kitemarked system KM 81580 KM 81543

Technical Performance

Finish	Single or dual colour, marine quality
	polyester powder
	coat as standard
U Value	1.3W/m²K using 0.7
	centre pane
	1.5W/m²K using 1.0
	centre pane
WER	А

U Value

WER
Air
Water
Wind
Document L Compliant

1.3W/m²K using correct sealed unit R Class 4, 600Pa Class E, 1200Pa Class AE, 2400Pa

Dimensions

Frame Depth
Glass
SH Max o/a Width
SH Max o/a Height
TH Max o/a Width

double or triple glazed units 1000mm 1400mm 1400mm

59mm & 70mm

28mm to 38mm

TH Max o/a Height 1500mm

(For sizes outside of these parameters, contact Smarts Technical).



1200Pa









U Value 1.3W/m²K Water 1050Pa 2000Pa



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PAS 24:2012 70mm 24mm, 28mm double or triple glazed units

SH Max o/a Width
SH Max o/a Height
TH Max o/a Width
TH Mars a /a Hadaba

TH Max o/a Height

(For sizes outside of these parameters, contact Smarts Technical).

Class 3, 600Pa Class E, 1050Pa Class A5, 2000Pa

Document L Compliant

Dimensions

600Pa

Air

Water

Wind

Security

Frame Depth Glass 2

WER

600Pa

1400mm 1400mm 1300mm

700mm

Alitherm 700

Alitherm Parallel is an innovative solution for enhanced natural ventilation. The system allows for a balanced, effective airflow whilst maintaining security and safety. The system can also be either a side or top hung casement, or top swing reversible window.

Application

Commercial applications, suitable for multi-storey

Features

- Alitherm 700 is ideal for insertion into curtain wall facades in both low and high rise commercial buildings
- The system is suitable for use as either replacement windows in existing buildings, or for installation into new builds
- Alitherm 700 incorporates internally beaded vents suitable for either cockspur or shoot-bolt locking.
- The system is also suitable for use with chain-operators, operated either individually or as part of an integrated automated solution for building climate control



Technical Performance Finish Single or dual

U Value Air Water Wind Security

Dimensions

Frame Depth
Glass

PL Max o/a Width PL Max o/a Height SH Max o/a Width SH Max o/a Height TH Max o/a Width TH Max o/a Height Rev Max o/a Width Rev Max o/a Height

70mm
28mm double or
triple glazed units
2000mm
3000mm
838mm
1729mm
1729mm
2000mm
1500mm

1558mm

colour, marine quality

polyester powder coat

1.6W/m²K using correct

1.3W/m²K using triple

glazed unit of correct

as standard

sealed unit

sealed unit

BS 7950

Class 4, 600Pa

Class 9A, 600Pa

Class E. 2400Pa

(Casement and Parallels)

PAS24:2012 (Reversible)

*Parallel windows over 1500mm wide or weighing over 100kg should be motorised operation only



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Reversible

Side Hung

Drawings not to scale

Parallel

Top Hung

Smart Systems Limited

Arnolds Way | Yatton | Bristol | North Somerset | BS49 4QN | UK **T** +44 (0) 1934 876 100 | **F** +44 (0) 1934 835 169 |

W www.smartsystems.co.uk | E sales@smartsystems.co.uk

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