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
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
- U Value 1.5W/m²K using 1.0 centre pane
- U Value 1.2W/m²K using 0.7 centre pane

WER
- A

Air
- Class 4, 600Pa

Water
- Class E, 1200Pa

Wind
- Class AE, 2400Pa

Dimensions
- Frame Depth: 53mm & 76mm
- Glass: 24mm, 28mm, 32mm & 36mm double or triple glazed units
- SH Max o/a Width: 700mm
- SH Max o/a Height: 1400mm
- TH Max o/a Width: 1400mm
- TH Max o/a Height: 1300mm

(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 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
- System can achieve Window Energy 'A' 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
U Value  1.3W/m²K using correct sealed unit
WER  B
Air  Class 4, 600Pa
Water  Class E, 1200Pa
Wind  Class AE, 2400Pa

Document L Compliant

Dimensions
Frame Depth  59mm & 70mm
Glass  28mm to 38mm double or triple glazed units
SH Max o/a Width  1000mm
SH Max o/a Height  1400mm
TH Max o/a Width  1400mm
TH Max o/a Height  1500mm
(For sizes outside of these parameters, contact Smarts Technical).

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 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 1.0 centre pane
WER  A
Air  Class 3, 600Pa
Water  Class E, 1050Pa

Security  PAS 24:2012

Document L Compliant

Dimensions
Frame Depth  70mm
Glass  24mm, 28mm double or triple glazed units
SH Max o/a Width  700mm
SH Max o/a Height  1400mm
TH Max o/a Width  1400mm
TH Max o/a Height  1300mm
(For sizes outside of these parameters, contact Smarts Technical).
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 colour, marine quality polyester powder coat as standard

U Value
1.6W/m²K using correct sealed unit
1.3W/m²K using triple glazed unit of correct sealed unit

Air
Class 4, 600Pa

Water
Class 9A, 600Pa

Wind
Class E, 2400Pa

Security
BS 7950 (Casement and Parallels)
PAS24:2012 (Reversible)

Dimensions
Frame Depth
70mm

Glass
28mm double or triple glazed units

PL Max o/a Width
2000mm

PL Max o/a Height
3000mm

SH Max o/a Width
838mm

SH Max o/a Height
1729mm

TH Max o/a Width
1729mm

TH Max o/a Height
2000mm

Rev Max o/a Width
1500mm

Rev Max o/a Height
1558mm

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

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