



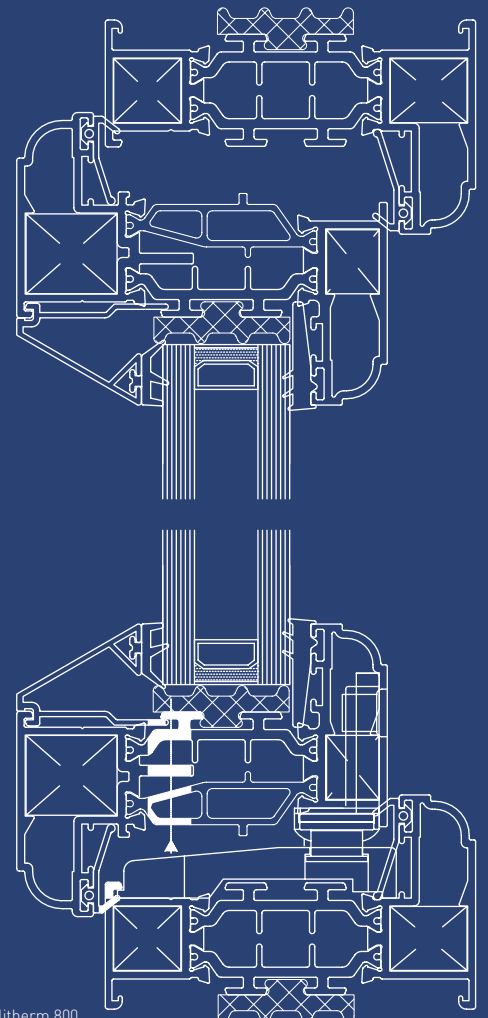
smart
architectural aluminium

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
- British Standard Kitemarked series achieving:
KM81580 PAS 24:2012
KM81543 BS4873



Alitherm 800



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

Finish

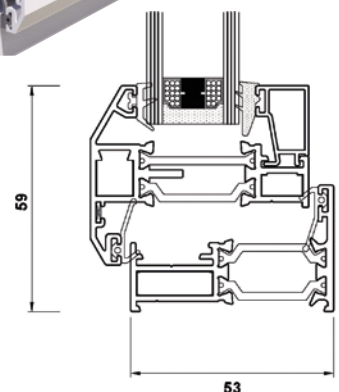
Single or dual colour, marine quality powder coat as standard

Technical Performance

U Value	U Value 1.5W/m ² K using 1.0 centre pane U Value 1.2W/m ² K using 0.7 centre pane
WER	A
Air	Class 4, 600Pa
Water	Class E 1200Pa

Wind	Class AE, 2400Pa
Document L Compliant	
Dimensions	
Frame Depth	53mm & 76mm
Glass	24mm, 28mm, 32mm & 36mm double or triple gazed 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 600

Application

- ◆ All general light use applications including 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

Finish

Single or dual colour, marine quality powder coat as standard

Technical Performance

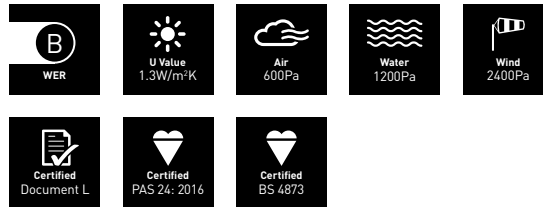
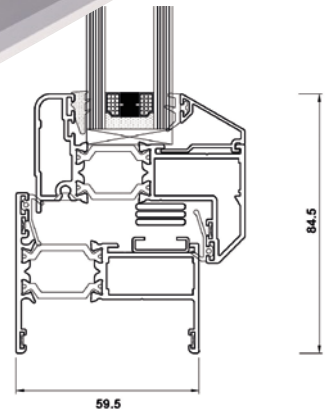
U Value	1.3W/m ² K using correct sealed unit
WER	B
Air	Class 4, 600Pa
Water	Class E 1200Pa
Wind	Class AE, 2400Pa

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
- ◆ New flush casement option

Finish

Single or dual colour, marine quality powder coat as standard

Technical Performance

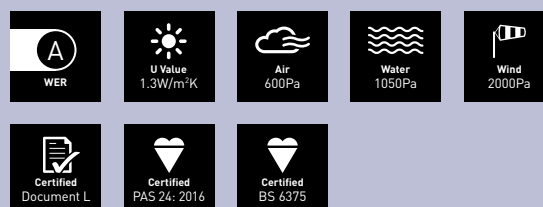
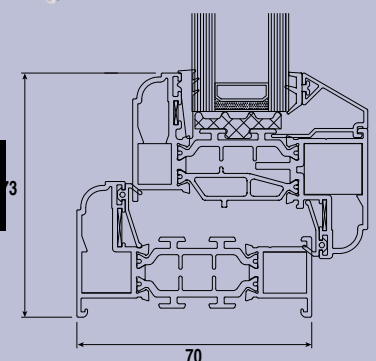
U Value	1.3W/m ² K using 0.7 centre panel 1.5W/m ² K using 1.0 centre panel
WER	A
Air	Class3, 600Pa
Water	Class E 1050Pa

Wind	Class A5, 2000Pa
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

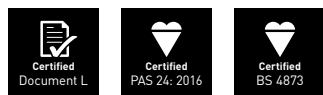
Finish

Single or dual colour, marine quality powder coat as standard

Technical Performance

U Value	1.6W/m ² K using correct sealed unit 1.3W/m ² K using triple glazed unit of correct sealed unit
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Air	Class 4, 600Pa
Water	Class 9A, 600Pa
Wind	Class E, 2400Pa
Security	BS 7950 (Casement and Parallels) PAS24:2012 (Reversible)



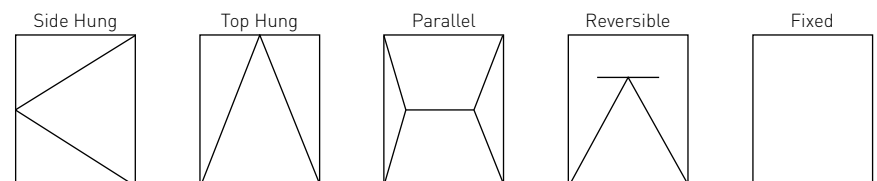
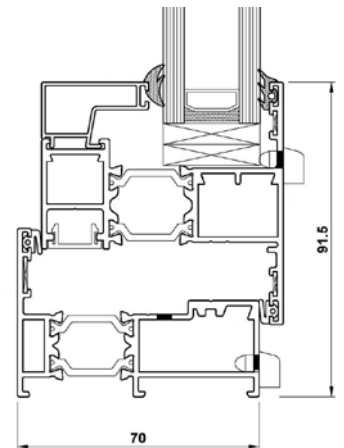
Dimensions

Frame Depth	70mm	
Glass	28mm double or triple glazed units	
Design Limitations	width	height
Side Hung	840mm	1500mm
Top Hung	1600mm	1600mm
Parallel 1800	1800mm	2100mm
Reversible	1500mm	1588mm
Fixed	2100mm	2100mm

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

PAS24:2016

Design Limitations	width	height
Side Hung	840mm	1500mm
Top Hung	1600mm	1600mm
Parallel 1800	2100mm	2100mm
Reversible	1500mm	1588mm
Fixed	2100mm	2100mm



Drawings not to scale