smart
architectural aluminium

Alitherm 500

The latest addition to the Alitherm suite of window and door systems, Alitherm 500 provides a range of high quality windows. With options including side hung and top hung flush casement windows, Alitherm 500 windows are suitable for both residential and light commercial applications.
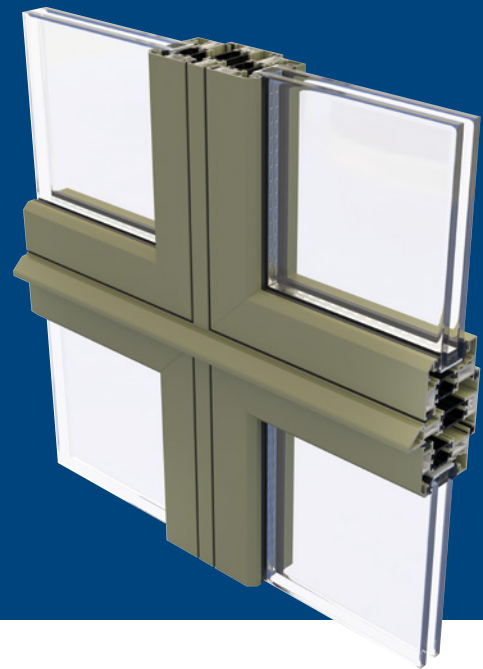
- Window Energy Rating B

- BRE Green Guide A+

- U Values up to 1.4 W/m²K (depending on design and glass unit)

- Kitemarked – which includes PAS24:2012 security and high weather performance

The images illustrate different types of suitable applications for Alitherm 500 and are not binding in detail or specification

bsi. BES 6001 Responsible Sourcing of Construction Products
BES 668681

bsi. ISO 9001 Quality Management
FM21582

bsi. ISO 14001 Environmental Management
EMS554307

bsi. OHSAS 18001 Occupational Health and Safety Management
OHS571955

bsi. ISO 50001 Energy Management
ENMS634370

CAB

CENTRE FOR WINDOW AND CLADDING TECHNOLOGY

Alitherm 500

In common with every profile in the Alitherm range, the Alitherm 500 window system incorporates Smart's innovative polyamide thermal break technology, which creates a barrier between the cold air outside and warm air inside. This technology significantly reduces thermal transmittance and enhances the overall U Value of the product. Alitherm 500 is available in a choice of standard and non-standard colours, with single and dual colour options including Smart's own Naturals, Sensations, Alchemy and Cotswold colour ranges.

Application

✦ All general light use applications, including light commercial

Features

✦ An enhanced system designed to comply with the revisions to the Building Regulations
✦ Document L compliant
✦ System can achieve Window Energy B Rating
✦ 316 Marine Grade Stainless Steel Hardware option
✦ Profiles feature an extended polyamide thermal break to enhance thermal performance
✦ Fabrication is by method of crimped corners
✦ Profiles are chamfered externally and flat internally (not flush)
✦ British Standard Kitemarked system – KM 81580

Finish

Single or dual colour, marine quality powder coat as standard

Technical Performance

U Value	Up to 1.4 W/m²K (depending on design and glass unit)
Air	Class 4, 600Pa
Water	Class E1050, 1050Pa
Wind	Class AE2400, 2400Pa
Security	PAS24: 2012
Document L Compliant	

Dimensions

Frame Depth	59.5mm
Typical Sight Line	63.5mm
Glass	24mm, 28mm

Recommended Design Limits

Side Hung Max o/a width	700mm
Side Hung Min o/a height	1400mm
Top Hung Max o/a width	1400mm
Top Hung Max o/a width	1400mm

U Value
1.4W/m²K

Air
600Pa

Water
1050Pa

Wind
2400Pa

KM 81580

PAS 24

Document L

SH Sight Line
63.5mm

SH Max Width
700mm

SH Max Height
1400mm