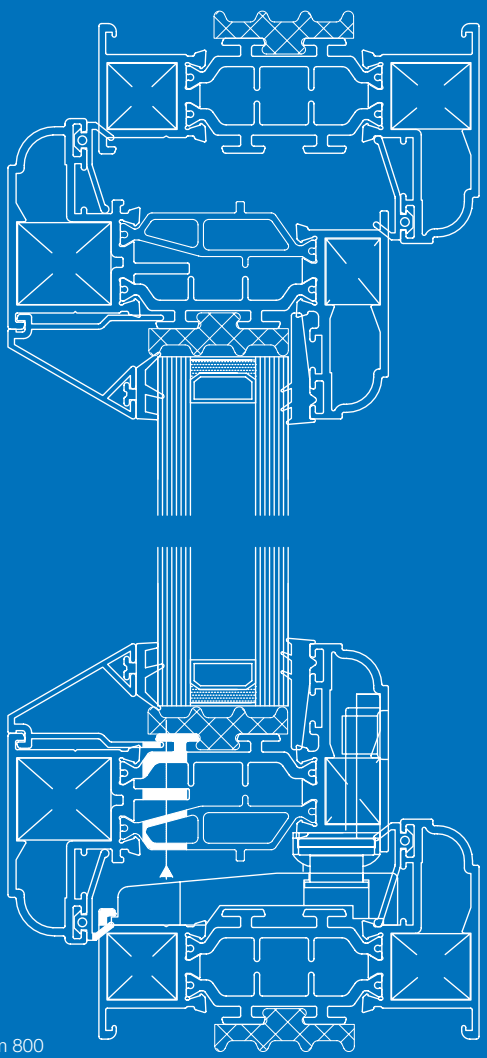
smart
architectural aluminium

# Alitherm Series

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

The series features products that acheive:

- Window Energy Rating A
- BRE Green Guide A
- U Value 1.6 W/m$^2$K



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 and Smart's unique Sensations range of textured 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.

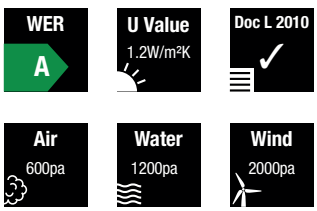
## Alitherm 300

### 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



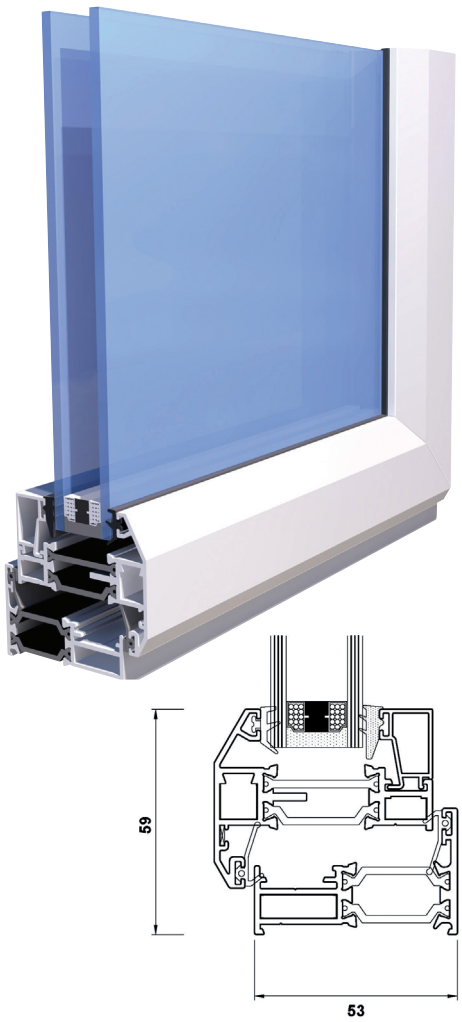

### Technical Performance

| | |
|---|---|
| **Finish** | Single or dual colour, marine quality polyester powder coat as standard ** |
| **U Value** | U Value 1.6W/m²K using correct sealed unit |
| **WER** | A |
| **Air** | Class 4 (600pa) |
| **Water** | Class E (1200pa) |
| **Wind** | Class 5 (2000pa) |
| **Doc L 2010** | Yes |

### Dimensions

| | |
|---|---|
| **Frame Depth** | 53mm |
| **Glass** | 24mm, 28mm or 32mm 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** | 1200mm |

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



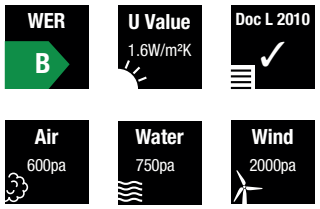
# Alitherm 600

## Application

All general light use applications.

## Features

- An enhanced system designed to comply with the revisions to the Building
- Regulations Document L 2010
- 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



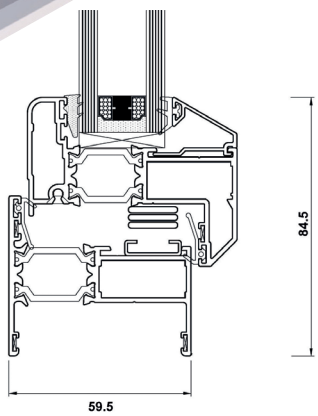

## Technical Performance

| | |
|---|---|
| **Finish** | Single or dual colour, marine quality polyester powder coat as standard ** |
| **U Value** | 1.6W/m²K using correct sealed unit |
| **WER** | B |
| **Air** | Class 4 (600pa) |
| **Water** | Class E (750pa) |
| **Wind** | Class 5 (2000pa) |
| **Doc L 2010** | Yes |

## Dimensions

| | |
|---|---|
| **Frame Depth** | 59mm |
| **Glass** | 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** | 1500mm |

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



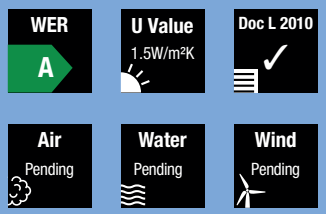

# Alitherm 800

## 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.



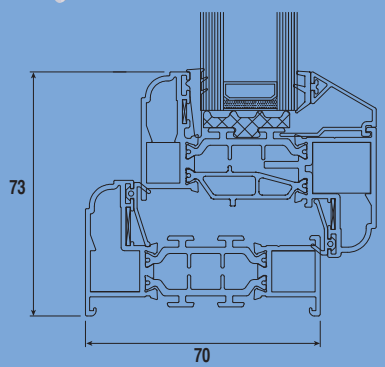

## Technical Performance

| | |
|---|---|
| **Finish** | Single or dual colour, marine quality polyester powder coat as standard ** |
| **U Value** | 1.6W/m²K using correct sealed unit |
| **WER** | A |
| **Air** | Test Result Pending |
| **Water** | Test Result Pending |
| **Wind** | Test Result Pending |
| **Doc L 2010** | Yes |

## Dimensions

| | |
|---|---|
| **Frame Depth** | 70mm |
| **Glass** | 2824mm, 28mm double or triple glazed units |
| **SH Max o/a width** | 700mm |
| **SH Max o/a height** | 700mm |
| **TH Max o/a width** | 1400mm |
| **TH Max o/a height** | 1500mm |

(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.

## Application

Commercial applications, suitable for multi-storey.

## Features

- Alitherm Parallel 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 Parallel 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.

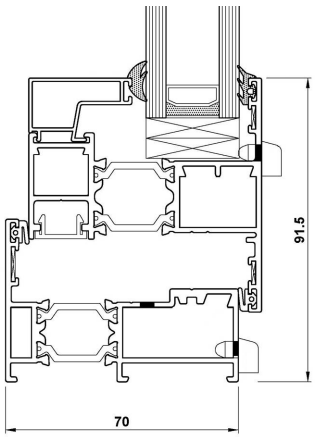
## Technical Performance

| | |
|---|---|
| **Finish** | Single or dual colour, marine quality polyester powder coat as standard ** |
| **WER** | A |
| **U Value** | 1.6W/m²K using correct sealed unit<br>1.3W/m²K using triple galzed unit of correct sealed unit |
| **Air** | Class 4 (600pa) |
| **Water** | Class 9A (600pa) |
| **Wind** | Class E (2400pa) |
| **BS 7950 Security** | Yes (Casement & Parallel) |

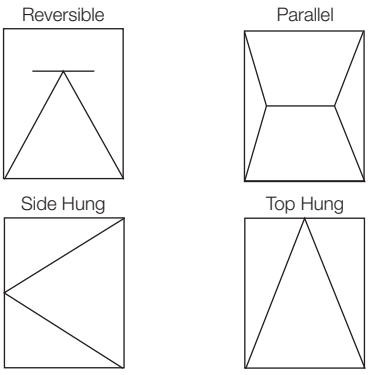
## Dimensions

| | |
|---|---|
| **Frame Depth** | 70mm |
| **Glass** | 28mm double or triple glazed units |
| **PL Max o/a width** | 200mm |
| **PL Max o/a height** | 3000mm |
| **SH Max o/a width** | 838mm |
| **SH Max o/a height** | 1500mm |
| **TH Max o/a width** | 1790mm |
| **TH Max o/a height** | 2000mm |

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




Drawings not to scale



WER A | U Value 1.3W/m²K | Doc L 2010 ✓

Air 600pa | Water 600pa | Wind 2400pa

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