



# WINDOW SYSTEMS

**ALUK**<sup>®</sup>

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AluK is a leader in the design and engineering of aluminium windows. Through our continual innovation we have developed some of the most aesthetic and performance driven aluminium windows products available in the UK and across the world.

We provide a complete range of aluminium window systems to suit the needs of any project, commercial or residential, providing the flexibility, style and performance that designers are looking for when specifying glazing solutions. Manufactured to the highest standards, our aluminium windows are inherently strong, lightweight and sustainable.

Our unique window profiles have been designed to meet and exceed the performance standards expected in modern building design, whilst also providing the aesthetic appeal

designers are looking for. A range of design features and functions enable specifiers to choose the aluminium window system that suits the needs and design of their project, whilst being assured of the quality and performance that is integral to all our innovative building systems.

AluK aluminium window systems are available in Casement, Tilt before Turn, Parallel Opening Vent, Fully Reversible and Steel Replacement window formats, as well as varying levels of performance and frame profiles, providing the configuration to meet your project requirements. We are also able to work with specifiers to provide bespoke architectural window and glazing solutions for particular projects, where required.





## ➤ 72BW WINDOW SYSTEM

The 72BW is a three chamber aluminium window system that offers high performance alongside a wide range of adaptable features, formats and configurations to meet the demands of your project.

Combining high performance with stylish design, this fit for purpose window system is tried and tested, exceeding many industry standards for safety and security.

### Design Features

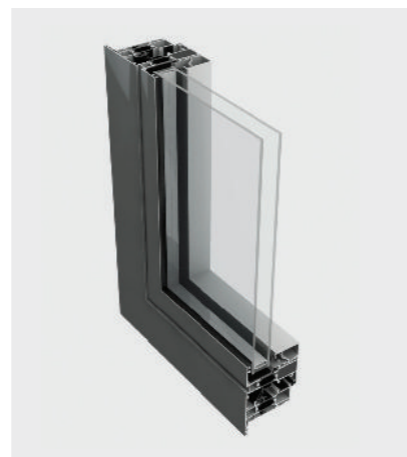
- Three chamber window system for strength and performance

### Options

- Windows can be manufactured to suit any configuration, style and design
- Full range of high quality hardware available
- Glazing depth from 8mm - 60mm
- Wide range of security and safety mechanisms to fully customise your window functionality
- Available in single or dual colour option, polyester powder coating and anodised finishes

### Configurations

- Top Hung and Side Hung (Open Out)
- Side Hung and Bottom Hung (Open In)
- Tilt/Turn
- Fully reversible

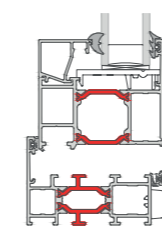


## 72BW window system technical specifications

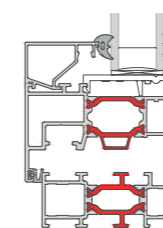
	OUTWARD OPENING	INWARD OPENING	PIVOT	PARALLEL OPENING VENT
<b>PERFORMANCE AND ACCREDITATION</b>				
U-Value (Double Glazing)*	1.7 W/m <sup>2</sup> K	1.7 W/m <sup>2</sup> K	1.8 W/m <sup>2</sup> K	1.7 W/m <sup>2</sup> K
U-Value (Triple Glazing)**	1.4 W/m <sup>2</sup> K	1.3 W/m <sup>2</sup> K	1.5 W/m <sup>2</sup> K	1.3 W/m <sup>2</sup> K
Green Guide Rating	B Rated	B Rated	B Rated	B Rated
Acoustic Performance (dB)	Rw (C;Ctr) 40 (-2;-6) dB	Rw (C;Ctr) 44 (-2;-6) dB	npd	npd
Air Tightness (Pa)	Class 4 (600 Pa)	Class 4 (600 Pa)	Class 4 (600 Pa)	Class 4 (600 Pa)
Water Tightness (Pa)	Class E1050 (1050 Pa)	Class 7a (300 Pa)	Class 6a (250 Pa)	Class E1950 (1950 Pa)
Wind Load (Pa)	Class E2400 (2400 Pa)	Class 4 (1600 Pa)	Class 4 (1600 Pa)	Class E2400 (2400)
Security	PAS24	PAS24	EN 1627	npd
Secured By Design	Yes	Yes	No	No
<b>CONFIGURATIONS</b>				
Opening	Open Out	Open In	Open In / Out	Open Out
Top Hung	●	-	-	-
Side Hung	●	●	-	-
Bottom Hung	●	●	-	-
Fixed Light	●	●	●	●
Multilight	●	-	-	●
Tilt and Turn	-	●	-	-
Life Time Homes (LTH)	-	●	-	-
Tilt and Slide	-	●	-	-
Vertical Pivot	-	-	●	-
Horizontal Pivot	-	-	●	-
Parallel Opening Vent	-	-	-	●
<b>SIZE LIMITS</b>				
Top Hung (max weight)	130 Kg	-	-	-
Side Hung (max weight)	180 Kg	-	-	-
Bottom Hung (max weight)	55 Kg	100 Kg	-	-
Fixed Light (max weight)	250 Kg	250 Kg	-	250 Kg
Tilt and Turn (max weight)	-	130 Kg	-	-
Life Time Homes (LTH) (max weight)	-	100 Kg	-	-
Tilt and Slide (max weight)	-	100 Kg	-	-
Vertical Pivot (max weight)	-	-	120 Kg	-
Horizontal Pivot (max weight)	-	-	180 Kg	-
Parallel Opening Vent (max weight)	-	-	-	200 Kg
<b>SYSTEM FEATURES</b>				
Frame Options	72mm	72mm	72mm	105mm
Dual Colour Option	●	●	●	●
Multi-Point Locking	●	●	●	●
Glazing Options	Internal	Internal	Internal	Internal
Glazing Thickness	13mm - 57mm	18mm - 66mm	13mm - 57mm	8mm - 56mm

## CAD cross sections and thermal profile

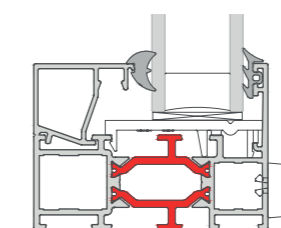
Casement Open Out



TBT



Fixed



\* Window Energy Ratings and U-Values based on CEN size windows (1230mm x 1480mm) using 1.2 W/m<sup>2</sup>K double glazing with warm edge Swisspacer V bar. \*\* U-Values based on CEN size windows (1230mm x 1480mm) using 0.7 W/m<sup>2</sup>K triple glazing with warm edge Swisspacer V bar. Corresponds to the BRE Global Green Guide online generic specification for commercial windows and achieves a summary rating of B-E. [www.thegreenguide.org.uk](http://www.thegreenguide.org.uk) Element Number 831500018/831500006. Sound insulation values are Rw reduction values and are based on tests using acoustic glazing.

Please visit [www.aluk.co.uk](http://www.aluk.co.uk) to download all BIM components and CAD files.



## ➤ 72BW HI WINDOW SYSTEM

This three chamber aluminium window system has been designed to offer the highest levels of performance, alongside the flexibility to tailor configurations to your requirements.

The 72BW HI aluminium window system incorporates our patented Spidertechnology® ABS strips that allow you to achieve high thermal insulation. The system has been certified under the Secured by Design scheme and incorporates high security multipoint-locking systems and a range of window and door furniture.

The 72BW HI window system provides complete flexibility and the ultimate performance to meet the needs of the most demanding project. Available in a wide range of configurations, finishes and colours, the system can be adapted and configured to complement the design of your building.



### Design Features

- Three chamber high performance window system for exceptional stability
- Both aluminium and PVC groove hardware available
- Wide range of styles and configurations to choose from
- A variety of finishes and detailing are available to suit your project
- Customisable components to reach desired thermal performance specification
- All certified under Secured by Design scheme

### Options

- EPDM gasket seals can be inserted to create a multi-chambered "insulation block" between frame and vent profile and prevent localised heat convection
- A continuous insulation strip in PE foam can be introduced between the glazing and aluminium profile during glazing to significantly reduce heat loss
- Full range of hardware and security locking mechanisms available
- Glazing sizes of 8mm - 60mm
- Available in single or dual colour options including anodised finishes

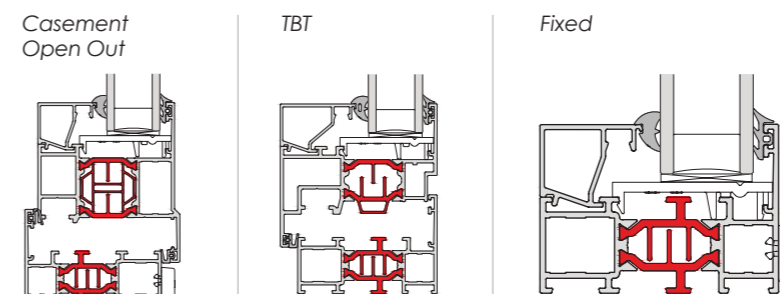
### Configurations

- Side Hung and Bottom Hung (Open In)
- Tilt/Turn
- Vertical and Horizontal Pivots
- Parallel opening vents
- Lifetime Homes (LTH)

## 72BW HI window system technical specifications

	OUTWARD OPENING	INWARD OPENING	PIVOT	PARALLEL OPENING VENT
<b>PERFORMANCE AND ACCREDITATION</b>				
U-Value (Double Glazing)*	1.6 W/m²K	1.4 W/m²K	1.6 W/m²K	1.4 W/m²K
U-Value (Triple Glazing)**	1.3 W/m²K	1.0 W/m²K	1.3 W/m²K	1.0 W/m²K
Green Guide Rating	B Rated	B Rated	B Rated	B Rated
Acoustic Performance (dB)	Rw (C;Ctr) 40 (-2;-6) dB	Rw (C;Ctr) 44 (-2;-6) dB	npd	npd
Air Tightness (Pa)	Class 4 (600 Pa)	Class 3 (600 Pa)	Class 4 (600 Pa)	Class 4 (600 Pa)
Water Tightness (Pa)	Class E1050 (1050 Pa)	Class 7a (300 Pa)	Class 6a (250 Pa)	Class E1950 (1950 Pa)
Wind Load (Pa)	Class E2400 (2400 Pa)	Class 4 (1600 Pa)	Class 4 (1600 Pa)	Class E2400 (2400 Pa)
Security	PAS24	PAS24	EN 1627	PAS24
Secured By Design	Yes	Yes	No	Yes
<b>CONFIGURATIONS</b>				
Opening	Open Out	Open In	Open In / Out	Open Out
Top Hung	●	-	-	-
Side Hung	●	●	-	-
Bottom Hung	●	●	-	-
Fixed Light	●	●	●	●
Mullight	●	-	-	●
Tilt and Turn	-	●	-	-
Life Time Homes (LTH)	-	●	-	-
Tilt and Slide	-	●	-	-
Vertical Pivot	-	-	●	-
Horizontal Pivot	-	-	●	-
Parallel Opening Vent	-	-	-	●
<b>SIZE LIMITS</b>				
Top Hung (max weight)	180 Kg	-	-	-
Side Hung (max weight)	55 Kg	-	-	-
Bottom Hung (max weight)	90 Kg	100 Kg	-	-
Fixed Light (max weight)	250 Kg	250 Kg	-	250 Kg
Tilt and Turn (max weight)	-	130 Kg	-	-
Life Time Homes (LTH) (max weight)	-	100 Kg	-	-
Tilt and Slide (max weight)	-	100 Kg	-	-
Vertical Pivot (max weight)	-	-	120 Kg	-
Horizontal Pivot (max weight)	-	-	180 Kg	-
Parallel Opening Vent (max weight)	-	-	-	200 Kg
<b>SYSTEM FEATURES</b>				
Frame Depth	72mm	72mm	72mm	105mm
Dual Colour Option	●	●	●	●
Multi-Point Locking	●	●	●	●
Glazing Options	Internal bead	Internal bead	Internal bead	Internal bead
Glazing Thickness	13mm - 57mm	18mm - 66mm	13mm - 57mm	8mm - 56mm

## CAD cross sections and thermal profile



\* Window Energy Ratings and U-Values based on CEN size windows (1230mm x 1480mm) using 1.2 W/m²K double glazing with warm edge Swisspacer V bar. \*\* U-Values based on CEN size windows (1230mm x 1480mm) using 0.7 W/m²K triple glazing with warm edge Swisspacer V bar. Corresponds to the BRE Global Green Guide online generic specification for commercial windows and achieves a summary rating of B-E. [www.thegreenguide.org.uk](http://www.thegreenguide.org.uk) Element Number 831.500018/831.500006. Sound insulation values are Rw reduction values and are based on tests using acoustic glazing.

Please visit [www.aluk.co.uk](http://www.aluk.co.uk) to download all BIM components and CAD files.



## ➤ 58BW WINDOW SYSTEM

The 58BW window system is the perfect choice for residential or commercial projects, offering a cost effective, high performance solution in a wide range of configurations and formats to suit your building design. The window system is available in Top Hung, Side Hung, Tilt before Turn, Fully Reversible and Steel Replacement formats with a range of glazing and hardware options. With clean lines and advanced functionality, this superior window and door system offers you the choice and flexibility to meet your needs.

The 58BW window system has been designed to offer a high performance, narrow profile solution that has the range and flexibility to suit most projects, in a complete variety of colours and finishes.

### Design Features

- Accommodates 24mm - 40mm glazing units for thermal and acoustic performance
- Windows available in internally or externally glazed options
- Flat, chamfered or Ovolo details to achieve contemporary or traditional appearance
- 58mm or 70mm frame depth to accommodate varying types of applications
- Unique polyamide thermal break design to improve thermal performance
- Certified under Secured by Design scheme
- Multi-point locking mechanisms for security
- Cloaking feature conceals lock and prevents any access to locking points

### Options

- Dedicated fixing straps for ease of installation
- Available in single or dual colour option, polyester powder coating and anodised finishes
- Internal or external glazing beads
- Integrated deep head profiles for integration of trickle ventilation
- Accepts a full range of restrictors and access control devices
- Available as a standard option or with PAS24 upgrade



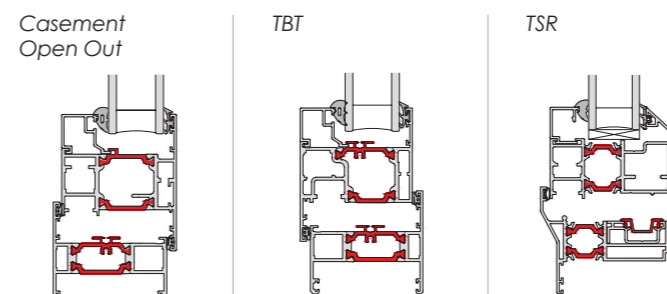
### Configurations

- Top Hung and Side Hung (Open Out)
- Side Hung and Bottom Hung (Open In)
- Tilt/Turn
- Fully reversible

## 58BW window system technical specifications

	OUTWARD OPENING	INWARD OPENING	FULLY REVERSIBLE
<b>PERFORMANCE AND ACCREDITATION</b>			
U-Value (Double Glazing)*	1.4 W/m <sup>2</sup> K	1.6 W/m <sup>2</sup> K	1.7 W/m <sup>2</sup> K
U-Value (Triple Glazing)**	1.2 W/m <sup>2</sup> K	1.2 W/m <sup>2</sup> K	1.4 W/m <sup>2</sup> K
Window Energy Rating (WER)	B - C	B - C	-
Green Guide Rating	A+ - A Rated	A+ - A Rated	B Rated
Acoustic Performance (dB)	Rw (C;Ctr) 42 (-1;-5) dB	Rw (C;Ctr) 44 (-1;-5) dB	npd
Air Tightness (Pa)	Class 4 (600 Pa)	Class 4 (600 Pa)	Class 4 (600 Pa)
Water Tightness (Pa)	Class 9a (600 Pa)	Class 9a (600 Pa)	Class 6a (250 Pa)
Wind Load (Pa)	Class E2400 (2400 Pa)	Class E2400 (2400)	Class 5 (2000 Pa)
Security	PAS 24	PAS 24	PAS 24
Secured By Design	Yes	Yes	Yes
<b>CONFIGURATIONS</b>			
Opening	Open Out	Open In	Open Out
Top Hung	●	-	-
Side Hung	●	●	-
Bottom Hung	●	●	-
Fixed Light	●	●	-
Multilight	●	●	-
Tilt and Turn	-	●	-
Life Time Homes (LTH)	-	●	-
Tilt and Slide	-	●	-
Top Swing	-	-	●
Side Swing	-	-	●
<b>SIZE LIMITS</b>			
Top Hung (max weight)	180 Kg	-	-
Side Hung (max weight)	55 Kg	●	-
Bottom Hung (max weight)	60 Kg (3 Hinges)	100 Kg	-
Fixed Light (max weight)	250 Kg	-	-
Tilt and Turn (max weight)	-	100 Kg	-
Life Time Homes (LTH) (max weight)	-	100 Kg	-
Top Swing (max weight)	-	-	60 Kg
Side Swing (max weight)	-	-	50 Kg
<b>SYSTEM FEATURES</b>			
Frame depth	58mm and 70mm	58mm and 70mm	70mm
Dual Colour Option	●	●	●
Multi-Point Locking	●	●	●
Glazing Options	Internal and External	Internal	Internal
Glazing Thickness	24mm - 40mm	24mm - 40mm	28mm

### CAD cross sections and thermal profile



\* Window Energy Ratings and U-Values based on CEN size windows (1230mm x 1480mm) using 1.2 W/m<sup>2</sup>K double glazing with warm edge Swisspacer V bar. \*\* U-Values based on CEN size windows (1230mm x 1480mm) using 0.7 W/m<sup>2</sup>K triple glazing with warm edge Swisspacer V bar. Corresponds to the BRE Global Green Guide online generic specification for commercial windows and achieves a summary rating of B-E. [www.thegreenguide.org.uk](http://www.thegreenguide.org.uk) Element Number 831500018/831500006. Sound insulation values are Rw reduction values and are based on tests using acoustic glazing.

Please visit [www.aluk.co.uk](http://www.aluk.co.uk) to download all BIM components and CAD files.



## ➤ 58BW ST WINDOW SYSTEM

The 58BW ST window system provides an ideal slimline solution for the replication of existing steel windows. The system is available in a range of styles and can be top, bottom or side hung to meet the needs of your project. The design replicates the narrow sight lines associated with steel windows whilst providing superior performance and security.

The 58BW ST range has been developed to retro fit mansion blocks, warehouses and similar buildings where steel windows have been traditionally fitted. The range is available in a wide variety of standard colours as well as any RAL colour and includes hardware that is sympathetic to traditional steel window designs.



### Design Features

- Slim sightlines to match existing steel windows
- Unique polyamide thermal break design to improve performance
- Accommodates standard hardware including friction stays and shoot bolt locking and safty features
- Tested to PAS 24 and certified under the Secured by Design scheme

### Options

- Accommodates 24mm - 32mm glazing units for thermal and acoustic performance
- Casement clips available for easy fit and removal of dummy vents
- Dedicated fixing straps for ease of installation
- Available in single or dual colour option, polyester powder coating and anodised finishes
- Internally beaded option for ease of site glazing on high-rise applications
- Integrated deep head profiles for ease of trickle ventilation

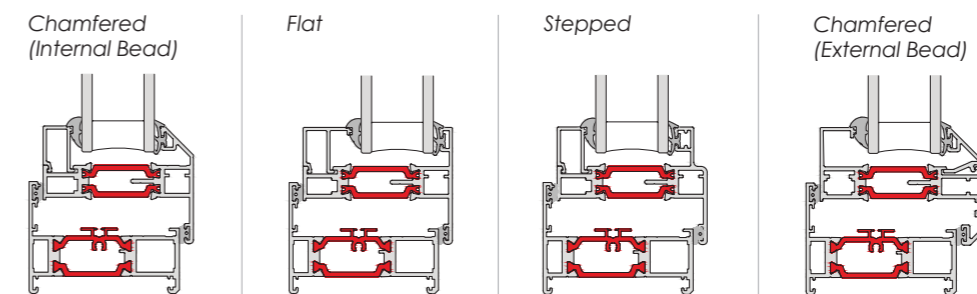
### Configurations

- Top, Bottom, Side Hung and Outward Opening
- Fixed Lights

## 58BW ST window system technical specifications

	STEEL REPLACEMENT
<b>PERFORMANCE AND ACCREDITATION</b>	
U-Value (Double Glazing)*	1.3 W/m <sup>2</sup> K
Window Energy Rating (WER)	A-B
Green Guide Rating	A+ - A Rated
Acoustic Performance (dB)	43dB
Air Tightness (Pa)	Class 4 (600 Pa)
Water Tightness (Pa)	Class 9a (600 Pa)
Wind Load (Pa)	Class E2400
Security	PAS 24
Secured By Design	Yes
<b>CONFIGURATIONS</b>	
Opening	Open Out
Top Hung	●
Side Hung	●
Bottom Hung	●
Fixed Light	●
Multilight	●
<b>SIZE LIMITS</b>	
Top Hung (max weight)	50 Kg
Side Hung (max weight)	24 Kg
Bottom Hung (max weight)	60 Kg (3 Hinges)
Fixed Light (max weight)	250 Kg
<b>SYSTEM FEATURES</b>	
Frame Options	58mm - 70mm
Dual Colour Option	●
Multi-Point Locking	●
Glazing Options	Internal
Glazing Thickness	24mm - 32mm

## CAD cross sections and thermal profile



\* Window Energy Ratings and U-Values based on CEN size windows (1230mm x 1480mm) using 1.2 W/m<sup>2</sup>K double glazing with warm edge Swisspacer V bar. \*\* U-Values based on CEN size windows (1230mm x 1480mm) using 0.7 W/m<sup>2</sup>K triple glazing with warm edge Swisspacer V bar. Corresponds to the BRE Global Green Guide online generic specification for commercial windows and achieves a summary rating of B-E. [www.thegreenguide.org.uk](http://www.thegreenguide.org.uk) Element Number 831500018/831500006. Sound insulation values are Rw reduction values and are based on tests using acoustic glazing.

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