



# Aluminium Window & Door Systems



Experts in Aluminium

# Why choose AluK aluminium systems?

For over 30 years, we've been at the forefront of aluminium window and door design.

## But why aluminium?

It's lightweight, strong and almost 100% recyclable. It doesn't warp or rust and is near maintenance-free.

Plus it's exceptionally versatile and easy to install. And that's really just for starters.

## Design

Without compromising on strength, our aluminium window and door systems are designed to offer your customers the narrowest of sightlines, allowing bigger glazing and providing greater light into their home.

Our integrated systems are designed for maximising profiles and parts, as well as to ensure fast fabrication and a wide range of installation options.

## Colour

Access a large spectrum of contemporary and classic colour choices and finishes.

We also offer a range of standard single and dual colour products from stock with our Colour+ offer

For full Colour+ details email [info@aluk.co.uk](mailto:info@aluk.co.uk)

## Security

We understand the importance of security to your customers. That's why all our window and door systems are independently tested to ensure they not only meet current security regulations for new builds, but that they're inherently burglar resistant too.

Most of our systems are also certified by PAS 24, Secured by Design and Q-marked accredited.

## Thermal efficiency

Our window and door systems offer award-winning U-value performance for both double and triple glazing.

In fact, we were the first company to ever gain an A-rated aluminium double glazed window system in the market.

## Performance

Each system includes water and acoustic barriers, and utilises the latest manufacturing technologies and techniques to provide long-term peace of mind.

They also have integrated drainage paths that allow water to pass through the system.

This, combined with the high quality air seals and barriers, ensures they can tackle the everchanging British climate with ease.

## Window Energy Ratings (WERs)

Our aluminium window systems are rated for their energy efficiency using the familiar A-G scale. This means homeowners and architects can instantly see which windows to choose.

WERs also affect fabricators, because in order to supply WER

products a fabricator must join an official and recognised scheme. This is to ensure that manufacturers can prove they have audited processes in place and that the ratings displayed are accurate. As you'd expect, we have our own group scheme at AluK.

This provides members fast track access to all our WER data, saving them valuable time and effort.

For a more detailed look at the ratings, download our **WER guide** at [aluk.co.uk](http://aluk.co.uk)

## Service excellence

Expert service is key at AluK, so our trained architectural technicians and engineers are always on hand to offer guidance and support from design through to installation.

We also have highly experienced Project Consultants able to help with design, system selection, construction details and project specifications for your specific sector.

## AluK Academy

Training is another key service we provide. From CPDs and toolbox talks to hands-on guidance at our Academy Centre, we provide a wide range of training options to all our customers.

To find out more simply email [training.uk@aluk.com](mailto:training.uk@aluk.com)

# An AluK system for every application

If there's one thing homeowners, architects, installers and fabricators all have in common, it's the desire for choice. That's why we've created our wide range of aluminium façade systems, which meets the needs of different applications, performance and aesthetic demands.

To make life easy for homeowners, we've created three product ranges based on their individual requirements.

► For those looking for the thinnest sightlines and finest finish, there's our premium Infinium sliding door.

► If outstanding quality and standout at a competitive price is desired, the Luminia range is the obvious choice.

► While stylish design and everyday practicality is provided by the Optio range.

From a fabricator and installer perspective, we offer systems that cover everything from heavy duty and light commercial new builds, to large-scale refurbishment projects and residential new builds.

Whatever choice you make, you can be confident that our systems offer the superior performance and quality of aluminium through and through.



Residential



Multi-Residential



Light commercial



Commercial

# Tried, tested and trusted

From trusted favourites to the latest innovations, our comprehensive range of aluminium window and door systems has been designed and developed with fabricators, installers and homeowners in mind at every stage.

Furthermore, every system delivers the aesthetic appeal and exceptional build quality demanded by the industry.

It also goes without saying they've all been tested and certified to the latest standards and accreditations.

These include PAS 24, BS4873, Secured By Design and Qualicoat for starters. Not to mention ISO 9001. They also hold Q-Mark Certifications for general

performance windows and enhanced security windows and doors. Should we go on?

Whichever system you choose, we'll work closely with you to ensure you have all the information you require for successful fabrication and installation.

All the latest structural, thermal and wind calculations are available, as is a comprehensive suite of CAD, NBS Specifications performance and environmental data.

ALWAYS UP TO THE TEST





# AluK window systems

For over two decades we've been designing unique aluminium window systems that exceed the performance standards expected in modern building design.

Manufactured to the highest standards, our systems are available in depths of 58mm, 70mm and 77mm, with a wide choice of colours and finishes customers desire, with the performance, quality and flexibility the trade demands.

An extensive range of complementary fittings is also available to ensure every design, whether commercial or residential, is exceptional.

We understand reputations are everything, so it goes without saying that all our aluminium window systems are rigorously tested and meet the most stringent security standards.

They also meet the Secured by Design standard issued by the UK Association of Chief Police Officers, and are BRE A-rated on the green guide.

# Functionality and flexibility

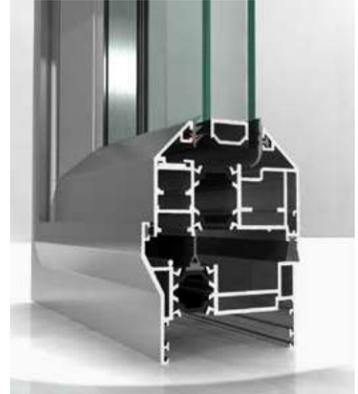
We offer a wide range of windows frame options that cater for various applications such as interface depths or bay angles.

We also understand that the ability to combine frame options is a major benefit to both the cost and appearance.

Our frame options include deep head profiles for trickle vents, odd leg frames for accommodating hardware timber and heritage for overcoming stone masonry and cill details.

Equal leg frame options are available from 25mm, 35mm and 55mm options.

Frame extenders are also available for our 70mm systems and for improved U-values.



## › Glazing options

Every project is different, which is why our systems allow for both internal and external glazing options.

We also offer glazing add-ons to suit heritage style applications.

## › Aesthetics

We offer a wide range of internal and external aesthetic styles. Chamfered, Ovalo, Square or Putty line options can really make any project look modern or traditional.

Our double beaded options allow for internal glazing without the use of dummy vents.

## DESIGN FEATURES

- › From odd leg and equal leg to deep head and frame reversers
- › Internal and external glazing options
- › PAS 24 certified
- › Integrated systems for maximising profiles and parts
- › Three chamber profile for maximising strength while crimping - achieves perfect corner assembly every time

## › Openings

AluK windows are available in a full range of opening options; from open in to open out, side hung, top hung, bottom hung and tilt before turn, to French casement, fixed light and multi-light.

Optio

# 58BW Casement

Built to the highest UK standards, this effective and high performance solution offers clean lines and advanced functionality.

Available in either 58mm or 70mm frame depth, casement windows are the perfect choice for both residential and light commercial projects, whether new build or renovation. Windows can also be made to project in or out.



#### DESIGN FEATURES

- ▶ Certified under the Secured By Design scheme
- ▶ Tested to PAS 24
- ▶ Green guide rated A
- ▶ Integrated deep head profiles for ease of trickle ventilation
- ▶ Unique polyamide thermal break design to improve thermal performance

#### OPTIONS

- ▶ 58mm or 70mm frame depth to accommodate varying types of applications
- ▶ Project in or project out options
- ▶ Internally or externally glazed to accommodate low and high rise projects
- ▶ Glazing 24mm – 40mm
- ▶ Available in a range of single or dual colour and anodised finishes
- ▶ Available in the following aesthetics: Bay, Chamfered, Square and Ovolo.
- ▶ Available in the following configurations: top hung, side hung, bottom hung, fixed light, multi-light and French casement
- ▶ Available for Lifetime Homes (LTH)
- ▶ Double beaded option allowing for internal glazing without the use of dummy vents
- ▶ Dedicated fixing straps for ease of installation
- ▶ Designed with a Euro groove to accommodate standard locking hardware



▶ Ovolo



▶ Chamfered



▶ Square

#### SPECIFICATIONS

Performance and accreditation	Outward opening
U-value (double glazing)	1.4 W/m <sup>2</sup> K
U-value (triple glazing)	1.2 W/m <sup>2</sup> K
Window energy rating (WER)	B - C
Green guide rating	A rated
Acoustic performance (dB)	Rw (C;Ctr) 42 (-1;-5) dB
Air tightness (Pa)	Class 4 (600 Pa)
Water tightness (Pa)	Class 9A (600 Pa)
Wind load (Pa)	Class E2400 (2400 Pa)
Security	PAS 24
3rd party certification	Q-mark
Secured by design	Yes

#### Configurations

Opening	Open out
Top hung	✓
Side hung	✓
Bottom hung	✓
Fixed light	✓
Multi-light	✓
French casement	✓

#### Size limits

Top hung (max weight)	180 Kg
Side hung (max weight)	55 Kg
Bottom hung (max weight)	60 Kg (3 hinges)
Fixed light (max weight)	250 Kg

#### System features

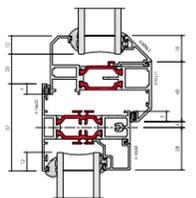
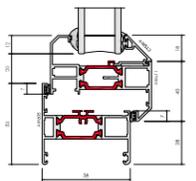
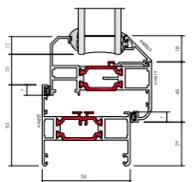
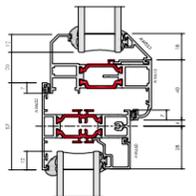
Frame depth	58mm and 70mm
Dual colour option	✓
Multi-point locking	✓
Glazing options	Internal and external bead
Glazing thickness	24mm - 40mm
Sightline (Frame to Vent)	75mm
Sightline (Vent to Mullion)	89mm
Sightline (Fixed Light)	43mm

#### Aesthetics

Bay	✓
Chamfered	✓
Square	✓
Ovolo	✓

U-value (Double Glazing) - Windows are calculated using EN ISO 10077 - Part 2, 1230mm x 1480mm Side hung next to fixed light with Ug: 1.0 W/m<sup>2</sup>K using AW603 outerframe and AW610 vent  
 U-value (Triple Glazing) - Windows are calculated using EN ISO 10077 - Part 2, 1230mm x 1480mm Side hung next to fixed light with Ug: 0.7 W/m<sup>2</sup>K using AW603 outerframe and AW610 vent  
 Green Guide Rating - Calculated using the Green Guide 2008 ratings for domestic windows, Powder Coated Aluminium window (Profile <math>\le 0.88\text{kg/m}^2</math>) double glazed  
 Acoustic Performance (dB) - Tested using AW 603 outerframe and AW 620 vent, 10/14/18.4mm Acoustic Laminated Glass  
 Top Hung (max weight) - Based upon Sterling SPT26 top hung friction stay  
 Side Hung (max weight) - Based upon Securityke Sterling SP5H16 side hung friction stay  
 Bottom Hung (max weight) - Based upon 3 x RW204H hinges

#### CAD CROSS SECTIONS



Optio

# 58BW Tilt Before Turn

Offering exceptional child safety and seamless operation, our tilt before turn windows are an ever-popular choice for both multi-residential and light commercial applications.

Made from high performance aluminium these sustainable systems are inherently strong and lightweight. They're also an ideal solution for high-rise buildings where internal glazing and ease of cleaning are essential.



#### DESIGN FEATURES

- ▶ Certified under the Secured By Design scheme
- ▶ Tested to PAS 24
- ▶ Green guide rated A
- ▶ Integrated deep head profiles for ease of trickle ventilation
- ▶ Unique polyamide thermal break design to improve thermal performance
- ▶ Sightlines match the casement window

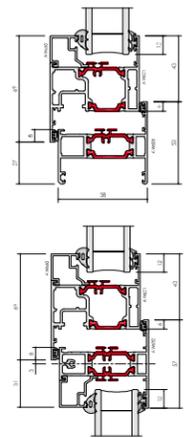
#### OPTIONS

- ▶ Glazing 24mm – 40mm
- ▶ Available in a range of single or dual colour and anodised finishes
- ▶ Available in the following aesthetics: Bay, Contemporary and Square
- ▶ Available in the following configurations: tilt-before-turn, side hung, fixed light and multi-light
- ▶ Available for Lifetime Homes (LFT)

#### SPECIFICATIONS

Performance and accreditation	Outward opening
U-value (double glazing)	1.5 W/m <sup>2</sup> K
U-value (triple glazing)	1.3 W/m <sup>2</sup> K
Window energy rating (WER)	B - C
Green guide rating	A rated
Acoustic performance (dB)	Rw (C;Ctr) 44 (-1;-4) dB
Air tightness (Pa)	Class 4 (600 Pa)
Water tightness (Pa)	Class BA (450 Pa)
Wind load (Pa)	Class E2400 (2400 Pa)
Security	PAS 24
3rd party certification	Q-mark
Secured by design	Yes
Configurations	Open out
Opening	Open out
Tilt before turn	✓
Side hung	✓
Fixed light	✓
Multi-light	✓
Size limits	
Tilt before turn (max weight)	100 Kg
Side hung (max weight)	100 Kg
Fixed light (max weight)	250 Kg
System features	
Frame depth	58mm and 70mm
Dual colour option	✓
Multi-point locking	✓
Glazing options	Internal and external
Glazing thickness	24mm - 40mm
Sightline (Frame to Vent)	86mm
Sightline (Vent to Mullion)	100mm
Sightline (Fixed Light)	43mm
Aesthetics	
Bay	✓
Contemporary	✓
Square	✓

#### CAD CROSS SECTIONS



U-value (Double Glazing) - Windows are calculated using EN ISO 10077 - Part 2, 1230mm x 1480mm Side hung next to fixed light with Ug: 0.7 W/m<sup>2</sup>K using AW603 outerframe and AW621 vent  
 U-value (Triple Glazing) - Windows are calculated using EN ISO 10077 - Part 2, 1230mm x 1480mm Side hung next to fixed light with Ug: 0.7 W/m<sup>2</sup>K using AW603 outerframe and AW621 vent  
 Green Guide Rating - Calculated using the Green Guide 2008 ratings for domestic windows, Powder Coated Aluminium window (Profile <1.08kg/m) double glazed  
 Acoustic Performance (dB) - Tested using AW604 outerframe and AW621 vent, 12/16/10.8mm Acoustic Laminated Glass  
 Tilt Before Turn (max weight) - Based upon Winkhaus Auto Pilot Gearing  
 Side Hung (max weight) - Based upon Winkhaus Auto Pilot Gearing

Luminia

# 58BD Flush Entrance

The NEW contemporary modern door system. Available in variety of formats, with slim sightlines and flush aesthetics.



#### DESIGN FEATURES AND OPTIONS

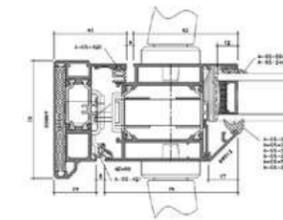
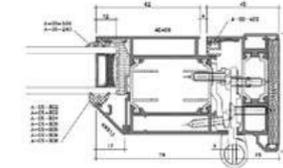
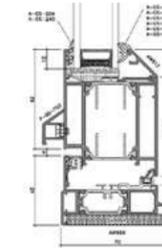
- Accepts 24mm – 40mm double or triple glazing
- Max vent weight 90kg
- Max Frame Height 2160mm
- Multi-point locking mechanism
- Available in single and dual colour

#### SPECIFICATIONS

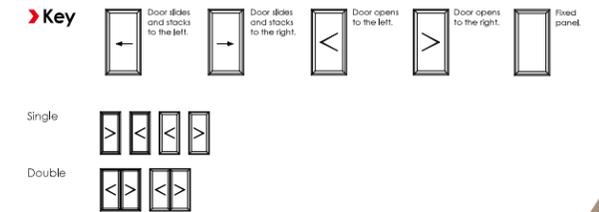
Performance and accreditation	Single open in	Single open out
Air permeability (Pa)	Class 4 (600 Pa)	Class 4 (600 Pa)
Water tightness (Pa)	Class 3A (100 Pa)	Class 7A (300 Pa)
Wind resistance (Pa)	Class A3 (1200 Pa)	Class AE2400 (2400 Pa)
Building regulations part L compliant	✓	✓
Building regulations part M compliant	✓	✓
Security	PAS 24	PAS 24
U-value (double glazing) (Ug: 1.0 W/m2k) <sup>1</sup>	1.7 W/m2K	1.7 W/m2K
U-value (triple glazing) (Ug: 0.7 W/m2k) <sup>2</sup>	1.4 W/m2K	1.4 W/m2K
3rd party certification	Q-mark	Q-mark
Durability EN 1191 category (cycles)	50,000	50,000
<b>System depth</b>		
Units (mm)	58 / 70 mm	58 / 70 mm
<b>Design features</b>		
Thermally broken	✓	✓
Low threshold	✓	✓
Sightlines	119 mm	119 mm
Feature design - rounded contours lines	✓	✓
Panel door	✓	✓
<b>Hardware</b>		
Multi point locking	✓	✓
Barrel hinges	✓	✓
<b>Finishes</b>		
Single colour	✓	✓
Dual colour	✓	✓
Textured	✓	✓
Anodised	✓	✓
<b>Maximum sizes &amp; weights</b>		
Maximum door leaf size (mm)	1020 x 2160	1020 x 2160
Maximum door leaf weight	90 Kg	90 Kg
Maximum glazing thickness	24 - 40 mm	24 - 40 mm
<b>Applications</b>		
New build	✓	✓
Refurbishment	✓	✓

<sup>1</sup> U-value in accordance EN 10077-2, single door size 1000mm x 2180mm.  
<sup>2</sup> U-value in accordance EN 10077-2, double door size 2000mm x 2180mm.  
 U-values based on CEN size door (1000mm x 2180mm) using 1.0 W/m2k double glazing with warm edge spacer V bar.  
 All weather test data taken from BS EN 6375-1 (Part of PAS 28) based upon the highest performing door configuration.  
 Sound insulation values are Rw reduction values and are based on tests using acoustic glazing.  
 Please visit [bjk.co.uk](http://bjk.co.uk) to download all BJK components and CAD files.

#### CAD CROSS SECTIONS



#### 58BD CONFIGURATIONS



Optio

# 58BD Entrance

Available in a wide range of styles and formats, our stylish aluminium entrance door system is suitable for both light and medium-duty use.

Designed with security and flexibility front of mind, every door in the range is available in single and double configurations making them ideal for almost any application.



#### DESIGN FEATURES

- Certified under the Secured By Design scheme
- Tested to PAS 24
- Multi-point locking mechanism
- Designed to incorporate standard and security hardware using the same prep detail
- Cloaking feature conceals lock and prevents any access to locking points

#### OPTIONS

- Glazing 24mm – 40mm
- 58mm or 70mm frame depth to accommodate varying types of applications
- Low threshold option for Part M – Building regulation
- Available in a range of single or dual colour and anodised finishes
- Available for new build or refurbishment projects
- Available in single or double door configuration

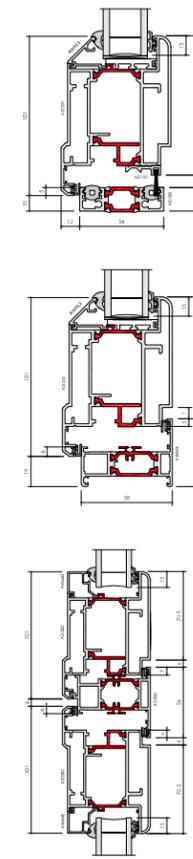
#### SPECIFICATIONS

Performance & accreditations	Single open in	Single open out
Air permeability	Class 4 (600 Pa)	Class 4 (600 Pa)
Water penetration	Class 3A (100 Pa)	Class 7A (300 Pa)
Wind resistance	Class A3 (1200 Pa)	Class AE2400 (2400 Pa)
Building regulations part L compliant	✓	✓
Building regulations part M compliant	✓	✓
Building regulations part Q compliant	✓	✓
*U-value (double glazing)	1.7 W/m²K	1.7 W/m²K
†U-value (triple glazing)	1.4 W/m²K	1.4 W/m²K
Fire (EN1631-3)	npd	npd
Smoke (EN1631-3)	npd	npd
Security	PAS 24	PAS 24
3rd party certification	Q-mark	Q-mark
Secured by design	Yes	Yes
Durability EN1191 category	50,000 Cycles	50,000 Cycles
<b>System depth</b>		
Units (mm)	58mm and 70mm	58mm and 70mm
<b>Design features</b>		
Thermally broken	✓	✓
Low threshold	✓	✓
Panel door	✓	✓
Feature design - rounded contours	✓	✓
Sightline (Head)	120mm	120mm
Sightline (Cill)	111mm	111mm
Sightline (Jamb)	120mm	120mm
Sightline (Meeting Stile)	208mm	208mm
<b>Hardware</b>		
Multi-point locking	✓	✓
Barrel hinges	✓	✓
<b>Finishes</b>		
Single colour	✓	✓
Dual colour	✓	✓
Textured	✓	✓
<b>Maximum sizes and weights</b>		
Maximum door leaf size	1020mm x 2160mm	1020mm x 2160mm
Maximum door leaf weight	90 Kg	90 Kg
Maximum glazing thickness	24mm - 40mm	24mm - 40mm

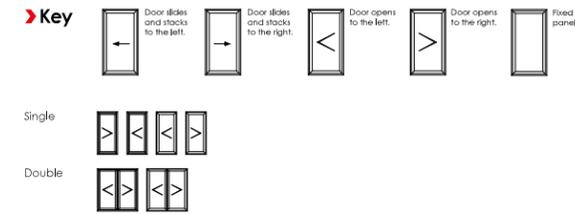
Double open in	Double open out
Class 2 (300 Pa)	Class 2 (300 Pa)
Class 7A (300 Pa)	Class 9A (600 Pa)
Class A2400 (2400 Pa)	Class A2400 (2400 Pa)
✓	✓
✓	✓
1.7 W/m²K	1.7 W/m²K
1.5 W/m²K	1.5 W/m²K
npd	npd
npd	npd
PAS 24	PAS 24
Q-mark	Q-mark
Yes	Yes
50,000 Cycles	50,000 Cycles
<b>System depth</b>	
58mm and 70mm	58mm and 70mm
<b>Design features</b>	
✓	✓
✓	✓
✓	✓
✓	✓
120mm	120mm
111mm	111mm
120mm	120mm
208mm	208mm
<b>Hardware</b>	
✓	✓
✓	✓
<b>Finishes</b>	
✓	✓
✓	✓
✓	✓
<b>Maximum sizes and weights</b>	
1020mm x 2160mm	1020mm x 2160mm
90 Kg	90 Kg
24mm - 40mm	24mm - 40mm

\* U-value (Double Glazing) - Single Doors are calculated using EN ISO 10077 - Part 2, 1000mm x 2180mm Single Door with Ug: 1.0 W/m²K, using AW604 outerframe and AD200/AD201 vent. Double Doors are calculated using EN ISO 10077 - Part 2, 2000mm x 2180mm Single Door with Ug: 1.0 W/m²K, using AW604 outerframe and AD200/AD201 vent.  
 † U-value (Triple Glazing) - Single Doors are calculated using EN ISO 10077 - Part 2, 1000mm x 2180mm Single Door with Ug: 0.7 W/m²K, using AW604 outerframe and AD200/AD201 vent. Double Doors are calculated using EN ISO 10077 - Part 2, 2000mm x 2180mm Single Door with Ug: 0.7 W/m²K, using AW604 outerframe and AD200/AD201 vent.

#### CAD CROSS SECTIONS



#### 58BD CONFIGURATIONS



Optio

# BSC94 Lift & Slide

For those looking for effortless operation, look no further than our premium lift and slide door. Its vital statistics are impossible to ignore.

Thermal U-Values of 1.5W/m<sup>2</sup>K (triple glazed). Panel weights of up to 400Kg. Sightlines as little as 45mm.

The list goes on. As do the benefits, including multiple configurations and a wide choice of colour finishes.



#### DESIGN FEATURES

- Accepts 20mm – 31mm double glazing
- Max 400kg panel weight (double bogey)

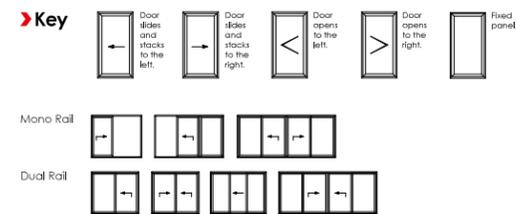
#### OPTIONS

- Available as Inline Sliding
- Slimmer sightline of 45mm available
- Multiple sliding configurations
- Mono or Dual rail options
- Available in single and dual colour  
Anodised finishes also available
- Range of hardware and security features

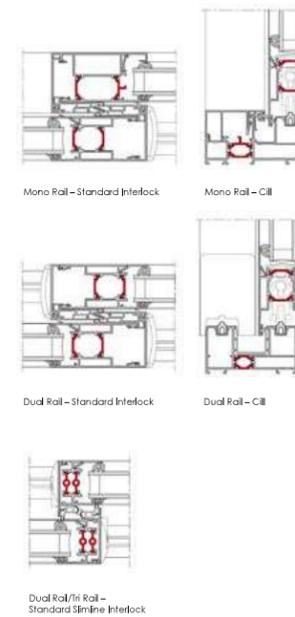
#### SPECIFICATIONS

Performance and accreditation	BSC94	BSC94SLIM
U-value (double glazing)* (Ug = 1.0W/m <sup>2</sup> K) (mono rail)	1.6 W/m <sup>2</sup> K	x
U-value (triple glazing)* (Ug = 0.7W/m <sup>2</sup> K) (mono rail)	1.4 W/m <sup>2</sup> K	x
U-value (double glazing)* (Ug = 1.0W/m <sup>2</sup> K) (dual rail)	1.7 W/m <sup>2</sup> K	1.7 W/m <sup>2</sup> K
U-value (triple glazing)* (Ug = 0.7W/m <sup>2</sup> K) (dual rail)	1.5 W/m <sup>2</sup> K	1.5 W/m <sup>2</sup> K
Green guide rating	C rated	C rated
Acoustic performance (dB)	npd	npd
Air tightness (Pa)**	Class 4 (600 Pa)	Class 4 (600 Pa)
Water tightness (Pa)**	Class 7A (300 Pa)	Class 7A (300 Pa)
Wind load (Pa)**	C4 (1600 Pa)	C4 (1600 Pa)
<b>Configuration &amp; frame</b>		
Opening	Lift & slide	Lift & slide
Mono rail (105mm)	✓	x
Dual rail (94mm)	✓	✓
<b>Size limits</b>		
Max vent weight***	400kg	400kg
Max frame height****	3000mm	3000mm
<b>System features</b>		
Dual colour option	✓	✓
Multi-point locking	✓	✓
Glazing options	Internal	Internal
Glazing thickness	20mm – 31mm	20mm – 31mm
Sightlines	100mm	45mm

#### BSC94 (LIFT & SLIDE) CONFIGURATIONS



#### CAD CROSS SECTIONS



\*U-values based on CEN size door (2000mm x 2180mm).  
 \*\*All weather test data taken from BS EN 6375-1 based upon highest performing door configuration.  
 \*\*\*Based on using a Tandem bogie kit.  
 \*\*\*\*Dependent on wind load and lock variation.  
 Note: npd = No performance declared  
 Please visit [www.djk.co.uk](http://www.djk.co.uk) to download all BHM components and CAD files.



Optio

# BSC94 In-line Sliding

Combining high performance with stunning design, our sliding aluminium door systems provide a versatile solution for any architectural project.

Manufactured to the highest UK standards, this multi-configuration in-line system offers outstanding thermal performance and a wide range of customisable options.



#### DESIGN FEATURES

- Accepts 20mm – 31mm double glazing
- Max 400kg panel weight
- Certified PAS 24
- Anti bi-metal polyamide strip to allow for varying expansion rates

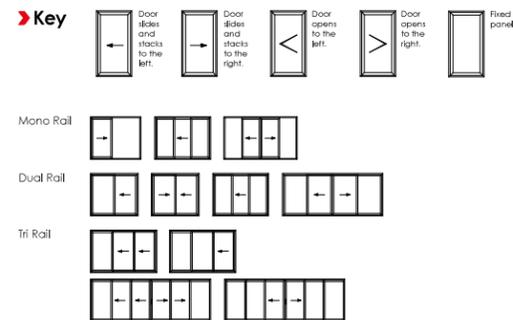
#### OPTIONS

- Available as Lift & Slide
- Slimmer sightline of 45mm available
- Multiple sliding configurations
- Mono, Dual or Tri rail options
- Available in single and dual colour
- Anodised finishes also available
- Range of hardware and security features

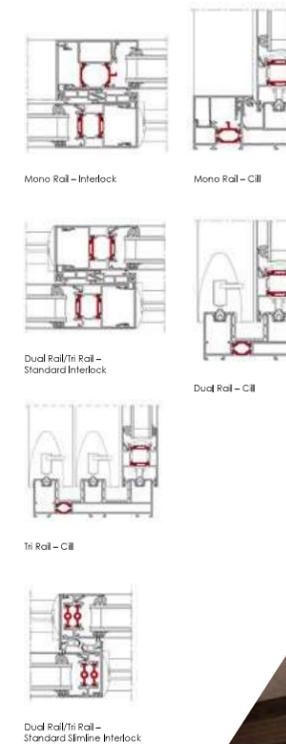
#### SPECIFICATIONS

Performance and accreditation	BSC94	BSC94SLIM
U-value (double glazing)* (Ug = 1.0W/m <sup>2</sup> K) (mono rail)	1.7 W/m <sup>2</sup> K	x
U-value (triple glazing)* (Ug = 0.7W/m <sup>2</sup> K) (mono rail)	1.5 W/m <sup>2</sup> K	x
U-value (double glazing)* (Ug = 1.0W/m <sup>2</sup> K) (dual Rail)	1.9 W/m <sup>2</sup> K	1.9 W/m <sup>2</sup> K
U-value (triple glazing)* (Ug = 0.7W/m <sup>2</sup> K) (dual Rail)	1.7 W/m <sup>2</sup> K	1.6 W/m <sup>2</sup> K
Green guide rating	C rated	C rated
Acoustic performance (dB)	Rw (C;Ctr) 36 (-1;-3) dB**	npd
Air tightness (Pa)***	Class 4 (600 Pa)	Class 4 (600 Pa)
Water tightness (Pa)***	Class 7A (300 Pa)	Class 7A (300 Pa)
Wind load (Pa)***	C4 (1600 Pa)	C4 (1600 Pa)
Security	PAS 24	x
Configuration & frame		
Opening	In-line sliding	In-line sliding
Mono rail (105mm)	✓	x
Dual rail (94mm)	✓	✓
Tri rail (155mm)	✓	✓
Size limits		
Max vent weight****	400kg	400kg
Max frame height*	3000mm	3000mm
Max frame height with security features	2600mm	x
System features		
Dual colour option	✓	✓
Multi-point locking	✓	✓
Glazing options	Internal	Internal
Glazing thickness	20mm - 31mm	20mm - 31mm
Sightlines	85mm	45mm

#### BSC94 (IN-LINE) CONFIGURATIONS



#### CAD CROSS SECTIONS



\*U-values based on CEI size door (2000mm x 2180mm)  
 \*\*Sound insulation values are Rw reduction values and are based on tests using acoustic glazing.  
 \*\*\*All weather test data taken from BS EN 6375-1 based upon highest performing door configuration.  
 \*\*\*\*Based on using double rollers.  
 \*Dependent on wind load and lock variation.  
 Note: npd = No performance declared.  
 Please visit [www.optio.co.uk](http://www.optio.co.uk) to download all BIM components and CAD files.



Optio

# BSF70 Bi-fold

An intelligent combination of form and function, our highly versatile and market-leading Bi-fold sliding door system gives you maximum control over the style and operation of the doors.

Multiple panels can be added to accommodate the design specifications of your building, with the option to open in or out as required.

The system also boasts a unique flush line pop-out handle that allows for square flush stacking panels when doors are fully open.



#### DESIGN FEATURES

- Certified under the Secured By Design scheme
- Tested to PAS 24
- Unique, pop-out handle that allows for maximum door opening and panels to stack square
- Four stainless steel rollers to ensure smooth and consistent operation

#### OPTIONS

- Chamfered and square bead options
- Glazing 28mm – 40mm
- Available in a range of opening configurations
- Available with heavy duty rollers: BSF70 HD
- Available in a range of single or dual colour and anodised finishes
- Low threshold 15mm step height
- All configurations available open in and open out
- Chamfered and square based options
- Shootballs top and bottom of the interlock for enhanced security
- Dedicated bottom bogey guide for consistent operation and enhanced security
- Double track threshold allowing greater stability

#### SPECIFICATIONS

##### Performance and accreditation

	BSF70
*U-value (double glazing)	1.6 W/m²K
*U-value (triple glazing)	1.4 W/m²K
Air tightness (Pa) (standard threshold)	Class 4 (600 Pa)
Water tightness (Pa) (standard threshold)	Class 9A (600 Pa)
Wind load (Pa)	Class AE2400 (2400 Pa)
Security	PAS 24
3rd party certification	Q-mark
Secured by design	Yes

##### Configurations

Opening	Open in and open out
2-2-0	✓
3-3-0	✓
3-2-1	✓
4-4-0	✓
4-2-2	✓
4-3-1	✓
5-5-0	✓
5-3-2	✓
5-4-1	✓
6-4-0	✓
6-3-3	✓
6-4-2	✓
6-5-1	✓
7-7-0	✓
7-4-3	✓
7-5-2	✓
7-6-1	✓

##### Design features

Max vent weight	100 Kg
Sightline (Head)	110 mm
Sightline (Cill)	130 mm
Sightline (Jamb)	110 mm
Sightline (Meeting Stile)	140 mm
Maximum leaf height	2400 mm

##### System features

Frame depth	70mm
Dual colour option	✓
Multi-point locking	✓
Glazing options	Internal bead
Glazing thickness	24mm - 40mm

##### BSF70 HD

U-value (double glazing)	1.6 W/m²K
U-value (triple glazing)	1.4 W/m²K
Air tightness (Pa)	NPD
Water tightness (Pa)	NPD
Wind load (Pa)	NPD
Security	NPD
3rd party certification	NPD
Secured by design	NPD

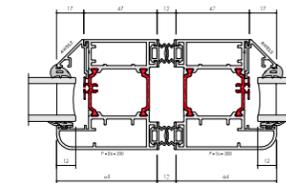
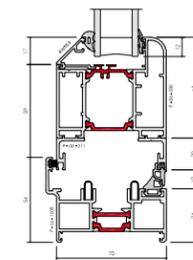
##### Configurations

Opening	Open in and open out
2-2-0	✓
3-3-0	✓
3-2-1	✓
4-4-0	✓
4-2-2	✓
4-3-1	✓
5-5-0	✓
5-3-2	✓
5-4-1	✓
6-4-0	✓
6-3-3	✓
6-4-2	✓
6-5-1	✓
7-7-0	✓
7-4-3	✓
7-5-2	✓
7-6-1	✓

Max vent weight	130 Kg
Sightline (Head)	110 mm
Sightline (Cill)	130 mm
Sightline (Jamb)	110 mm
Sightline (Meeting Stile)	140 mm
Maximum leaf height	2400 mm

Frame depth	70mm
Dual colour option	✓
Multi-point locking	✓
Glazing options	Internal bead
Glazing thickness	24mm - 40mm

#### CAD CROSS SECTIONS



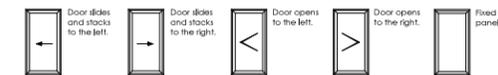
\* Folding Doors are calculated using EN ISO 10077 - Part 2, 3000mm x 2180mm, 3-3-0 Door with Ug: 1.0 W/m²K (double glazed) / 0.7 W/m²K (triple glazed) using P-66-100 outerframe and P-66-200 vent. Single and Double Door value is calculated using EN ISO 10077 - Part 2, 2000mm x 2180mm Double Door with Ug: 1.0 W/m²K (double glazed) / 0.7 W/m²K (triple glazed) using P-66-100 outerframe and P-66-200 vent.

\* U-value (Double Glazing) - Folding Doors are calculated using EN ISO 10077 - Part 2, 3000mm x 2180mm, 3-3-0 Door with Ug: 1.0 W/m²K using P-66-100 outerframe and P-66-200 vent. Single and Double Door value is calculated using EN ISO 10077 - Part 2, 2000mm x 2180mm Double Door with Ug: 1.0 W/m²K using P-66-100 outerframe and P-66-200 vent.

\* U-value (Triple Glazing) - Folding Doors are calculated using EN ISO 10077 - Part 2, 3000mm x 2180mm, 3-3-0 Door with Ug: 0.7 W/m²K using P-66-100 outerframe and P-66-200 vent. Single and Double Door value is calculated using EN ISO 10077 - Part 2, 2000mm x 2180mm Double Door with Ug: 0.7 W/m²K using P-66-100 outerframe and P-66-200 vent.

#### BSF70 CONFIGURATIONS

##### Key



##### Two Pane



##### Four Pane



##### Five Pane



##### Six Pane



##### Seven Pane

