



Aluminium Window & Door Systems

aluk.co.uk

Experts in Aluminium

ALUK



Contents

5 By experts

4 Why choose aluminium?

8 A system for every application

10 tried, tested and trusted

12 Functionality and flexibility

14 Window Systems

14 Optio 588W Casement

18 Optio 588W ST Heritage

20 Optio 588W Tilt & Turn

22 Optio 588W Top Swing Reversible

24 Door Systems

26 Luminia 588D Flush Entrance

28 Optio 588D Entrance

30 G155 TB Commercial Entrance

32 Infinium Sliding

34 Luminia SC154 Lift & Slide

36 Optio 85C94 Lift & Slide

38 Optio 85C94 In-line Sliding

40 Luminia FB2 Bi-fold

42 Optio 85F70 Bi-fold

44 Luminia Veranda

46 Hardware



WE BELIEVE
COLLABORATION IS KING.
IT'S WHY WE'RE PROUD OF
THE PARTNERSHIPS WE'VE
BUILT WITH FABRICATORS,
INSTALLERS AND
ARCHITECTS THROUGHOUT
THE UK AND BEYOND.

**By experts,
for experts**

It's fair to say we live and breathe aluminium at Aluk. From its melting point of 660.32°C, its vital role in the aerospace industry, to its remarkable low density, there's little we don't know about atomic number 13. More importantly, we're experts of using this versatile metal to create high performance and sustainable window and door systems that surpass the needs of fabricators and installers across the UK.

Russell Yates
Aluk Managing Director

Why choose AluK aluminium systems?

For over 20 years, we've been at the forefront of aluminium window and door design.

But why aluminium?

- Durable, efficient and cost effective
- It's used in most modern homes
- It's recyclable, sustainable and energy efficient
- It's available in a wide range of finishes



Design

Without compromising on strength, our aluminium window and door systems are designed to offer your customers the maximum 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.

Security

We understand the importance of security to our 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

This, combined with the high quality of seals and frames, ensures they can tackle the ever-changing British climate with ease.

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](#) or [aluk.co.uk](#).

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-

Colour

Across 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 intel@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 CPD's 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

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 finished sightlines and fixed fascia, there's our premium Infinium sliding door.

If outstanding quality and standout at a competitive price is desired, the Iomega 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.



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, 304873, Secured by Design and Qualicert for starters, not to mention ECO 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, HBS Specifications performance and environmental data.

ALWAYS ON TO YOU 1844 1447





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.

AluK's unique window system designs are based on a single principle: creating the best aluminium window system available. This is achieved through a combination of high quality materials, innovative design, and a focus on performance, security, and flexibility.

We understand that windows are more than just a great view; they are a key component of any building's exterior. That's why our aluminium window systems are designed to be both aesthetically pleasing and functional, providing the most advanced security features.

Very often, our first security design is selected by the Association of Chief Police Officers (ACPO) and the British Association of Security Services (BASS).

Functionality and flexibility

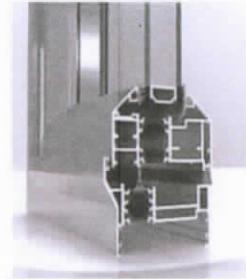
We offer a wide range of windows frame options that cater for various applications such as interface depths or bay angles.

Our double glazed units have:
• 30mm standard frame widths
• 30mm interface widths (max 300mm)
• 100mm deep head widths

Our triple glazing systems can accommodate frame widths up to 300mm and interface widths up to 300mm.

Our double glazed units have:
• 30mm standard frame widths
• 30mm interface widths (max 300mm)
• 100mm deep head widths

Our triple glazing systems can accommodate frame widths up to 300mm and interface widths up to 300mm.



Glazing options

Every project is different, which is why our systems allow for both internal and external glazing options. We also offer glazing options to suit heritage style applications.

DESIGN FEATURES

- Item odd leg and equal leg to deep head and frame recesses
- Internal and external glazing options
- PAS 24 certified
- Integrated systems for maximising profile and draft
- Three chamber profile for maximising strength while compacting - achieves perfect come assembly every time

Aesthetics

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

Our double glazed options allow for internal glazing without the use of dummy units.

Openings

All windows are available in a full range of opening options: from open in to open out, side hung, top hung, bottom hung result below turn, to French casement, fixed light and multi-light.



AluK door systems

Engineered to integrate seamlessly with our window system range, our aluminium door systems remain our most popular products and provide unrivalled safety, security and installation simplicity.

Our door systems feature a range of glass types and door finishes, along with a choice of frameless or framed door designs. However, like our windows, they are modular. This allows materials and methods being produced can be interchanged. You have full design freedom. A true one-stop solution.

In addition to meeting the needs of the residential market, our doors are also used throughout the leisure industry, including restaurants, bars, gyms, nightclubs and more.

Luminia

58BD Flush Entrance

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



DESIGN FEATURES AND OPTIONS

- 3 Accepts 2mm-40mm double or triple glazing
- 3 Max vent weight 10kg
- 3 Max Frame Height 2160mm
- 3 Multipoint locking mechanism
- 3 Available in single and dual colour

SPECIFICATIONS

Performance and Incompliance

	Single open in	Single open out
A4 permeability (Pa)	Class 4 (100 Pa)	Class 4 (100 Pa)
Water tightness (Pa)	Class 5A (750 Pa)	Class 7A (300 Pa)
Wind resistance (Pa)	Class A4 (1100 Pa)	Class A4 (1000 Pa)
Bulking regulations part L compliance	"	"
Building regulations part M compliance	"	"
Security	PAS 24	PAS 24
Univalue insulate glazing (tag 1.0 W/m²K)	1.7 W/m²K	1.7 W/m²K
Univalue triple glazing (tag 0.7 W/m²K)	1.4 W/m²K	1.4 W/m²K
3rd Party certification	Guaranteed	Guaranteed
Guarantee BH EHI category (years)	50,000	50,000
System sizes		
Width (mm)	38 / 70 mm	38 / 70 mm
Design features		
Thermocouple sensor	"	"
Low threshold	"	"
Signatures	119 mm	119 mm
Feature design - rounded contours lines	"	"
Panel sizes	"	"
Accessories		
Multi-point locking	"	"
Access handles	"	"
Finishes		
Single colour	"	"
Dual colour	"	"
Textured	"	"
Anodised	"	"
Dimensions sizes & weights		
Maximum door leaf size (mm)	1000 x 2160	1000 x 2160
Maximum door leaf weight	90 kg	90 kg
Minimum glazing thickness	24 - 40 mm	24 - 40 mm
Accessories		
New build	"	"
Replacement	"	"

For more information on the 58BD Flush Entrance system, please visit our website or contact us directly.
www.luminia.com
info@luminia.com
+44 (0)1256 811 111

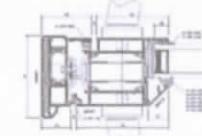
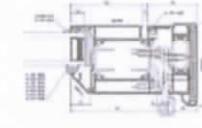
Double open in

Class 2 (300 Pa)	Class 2 (300 Pa)
Class A2 (400 Pa)	Class A2 (400 Pa)

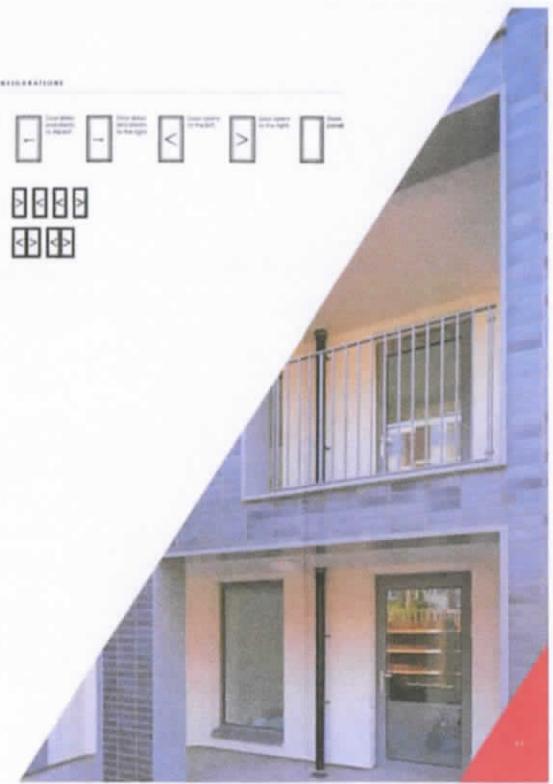
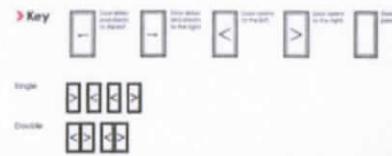
Double open out

Class 2 (300 Pa)	Class 2 (300 Pa)
Class A2 (400 Pa)	Class A2 (400 Pa)

CASE CROSS SECTIONS



CASE CONFIGURATIONS



Options

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 for domestic and light commercial applications. Not suitable for high security or high traffic areas. Please refer to our technical manual for full details.



DESIGN FEATURES

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

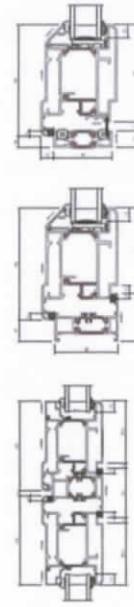
OPTIONS

- 3 Glazing (24mm – 40mm).
- 3 8mm or 10mm frame depth to accommodate varying types of applications.
- 3 Low threshold option for Part M – Building regulation.
- 3 Available in a range of single or dual colour and anodised finish.
- 3 Available for new build or refurbishment projects.
- 3 Available in single or double door configuration.

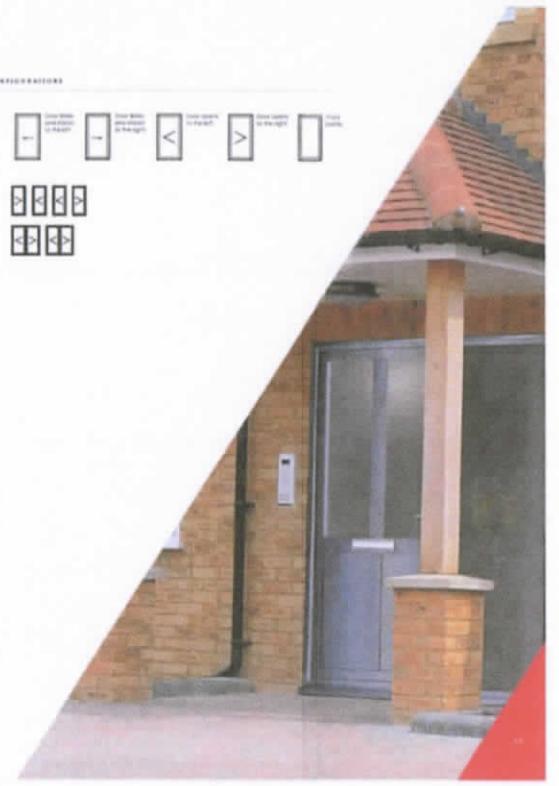
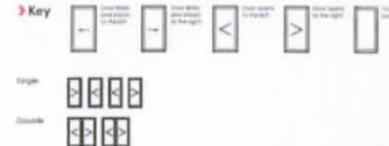
SPECIFICATIONS

Performance & specifications	Single open in		Single open out		Double open in		Double open out	
	Class 4 (4000 Psi)	Class 6A (1000 Psi)	Class 7A (1000 Psi)	Class 9A (4000 Psi)	Class 2 (2000 Psi)	Class 3 (2000 Psi)	Class 4A (2400 Psi)	Class 5A (2400 Psi)
AS2047 performance								
Water penetration								
Wind resistance								
Building regulations part E compliant	x	x	x	x	x	x	x	x
Building regulations part M compliant	x	x	x	x	x	x	x	x
Building regulations part L compliant	x	x	x	x	x	x	x	x
UV-tinted (optional glazing)	1.7 mm²/cm²	1.7 mm²/cm²	1.7 mm²/cm²	1.7 mm²/cm²	1.7 mm²/cm²	1.7 mm²/cm²	1.7 mm²/cm²	1.7 mm²/cm²
UV-tinted (optional glazing)	1.4 mm²/cm²	1.4 mm²/cm²	1.4 mm²/cm²	1.4 mm²/cm²	1.4 mm²/cm²	1.4 mm²/cm²	1.4 mm²/cm²	1.4 mm²/cm²
RDS (EN1433-1)	IP40	IP40	IP40	IP40	IP40	IP40	IP40	IP40
IPX5 (EN1433-2)	IPX5	IPX5	IPX5	IPX5	IPX5	IPX5	IPX5	IPX5
Security	PAS 24	PAS 24	PAS 24	PAS 24	PAS 24	PAS 24	PAS 24	PAS 24
SGI safety certification								
Secured by Design	We	We	We	We	We	We	We	We
Guaranty EN1154 categories	30,000 Cycles	30,000 Cycles	30,000 Cycles	30,000 Cycles	30,000 Cycles	30,000 Cycles	30,000 Cycles	30,000 Cycles
System depth								
Unit depth	80mm and 100mm	80mm and 100mm	80mm and 100mm	80mm and 100mm	80mm and 100mm	80mm and 100mm	80mm and 100mm	80mm and 100mm
Design features								
3 Certified under the Secured by Design scheme.								
3 Tested to PAS 24.								
3 Multi-point locking mechanism.								
3 Designed to incorporate standard and security hardware using the same prep detail.								
3 Cloaking feature conceals lock and prevents any access to locking points.								
Options								
3 Glazing (24mm – 40mm).								
3 8mm or 10mm frame depth to accommodate varying types of applications.								
3 Low threshold option for Part M – Building regulation.								
3 Available in a range of single or dual colour and anodised finish.								
3 Available for new build or refurbishment projects.								
3 Available in single or double door configuration.								
Accessories and weights								
Maximum door leaf size	1020mm x 2140mm	1020mm x 2140mm	1020mm x 2140mm	1020mm x 2140mm	1020mm x 2140mm	1020mm x 2140mm	1020mm x 2140mm	1020mm x 2140mm
maximum door leaf weight	90 kg	90 kg	90 kg	90 kg	90 kg	90 kg	90 kg	90 kg
maximum glazing thickness	24mm – 40mm	24mm – 40mm	24mm – 40mm	24mm – 40mm	24mm – 40mm	24mm – 40mm	24mm – 40mm	24mm – 40mm

CASE STUDIES



DOOR CONFIGURATIONS



GT55 TB Commercial Entrance

The Optio GT55 thermally broken aluminium commercial door system provides the most comprehensive PAS24 security for single sliding door and fixed panel.



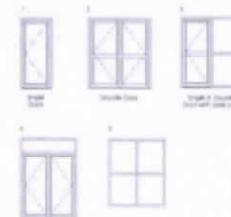
DESIGN FEATURES AND OPTIONS

- The most comprehensive PAS24 and SBQ certified system on the market today—panic, mechanical and electronic mechanical locking
- Accepts 2mm–31mm double or triple glazing
- Max door leaf (double): 2000mm x 2180mm
- Max panel weight 110kg
- Double acting central pivot door open-in and out options

PAS 24 SECURITY RATED DOORS

Adult Panel Ref.	Recessed Configuration	SLIDING DOOR			DOORSET DOOR			Area (m ²)
		Min (mm)	Max (mm)	Min (kg)	Max (kg)	Min (kg)	Max (kg)	
XAA001-199Pec Y 1000	1,2,3,4,5	800	—	2400	800	—	2400	
XAA04830-199m Panic	1,2,3,4,5	800	—	1200	2400	800	—	1200
XAB44845-199m Panic	1,2,3,4,5	800	—	1200	2400	800	—	1200
XAB60854-Slanted H Multifit	1,2,3	800	1802*	1200	2400	800	1802*	1200
XAB671-Slanted H Multifit Lock	1,2,3,4,5	800	1802*	1200	2400	800	1802*	1200

DOOR CONFIGURATIONS



OPTIONS

Options	GT55 TB Opening	GT55 TB Closing	GT55 HS Opening	GT55 HS Closing
Double acting central pivot door	+	+	+	+
Panel:				
Single colour	+	+	+	+
Dual colour	+	+	+	+
Textured	+	+	+	+
Anodised	+	+	+	+

SPECIFICATIONS

Performance and specification	GT55 TB		GT55 HS Opening		GT55 HS Closing	
	Single	Double	Single	Double	Single	Double
AIR permeability (Pd)	Class 2 (0 Pa)	Class 2 (0 Pa)	Class 2 (0 Pa)	Class 2 (0 Pa)	Class 2 (0 Pa)	Class 4 (480 Pa)
Water tightness (Pw)	Class 1a (0 Pa)	Class 1a (1200 Pa)	Class 1a (0 Pa)	Class 1a (1200 Pa)	Class 1a (0 Pa)	Class 8a (1000 Pa)
Wind resistance (Pv)	Class 2 (0 Pa)	Class 2 (0 Pa)	Class 2 (0 Pa)	Class 2 (0 Pa)	Class 2 (0 Pa)	Class 8 (1000 Pa)
Security	G-mass	G-mass	G-mass	G-mass	G-mass	—
U-value (inside glazing) (deg. 1.1 W/m ² K)	1.9 W/m ²	1.82 W/m ²	1.32 W/m ²	1.42 W/m ²	1.6 W/m ²	2.03 W/m ²
U-value (inside frame) (deg. 1.1 W/m ² K)	1.72 W/m ²	1.62 W/m ²	1.27 W/m ²	1.42 W/m ²	1.6 W/m ²	1.77 W/m ²
3rd party certification	G-mass	G-mass	G-mass	G-mass	G-mass	—
Certified by (EN), category tested	BS EN 1434	BS EN 1434	—	BS EN 1434	BS EN 1434	—
System depth	110 mm	110 mm	110 mm	110 mm	110 mm	110 mm
Units (mm)	—	—	—	—	—	—
Design features						
Thermal break	+	+	+	+	+	+
Low threshold	+	+	+	+	+	+
Anti-ligature	+	+	+	+	+	+
Signage	144 mm	174 mm	52 mm	144 mm	174 mm	52 mm
Feature design	+	+	+	+	+	+
Single point latching	+	+	+	+	+	+
Multi-point latching	+	+	+	+	+	+
Push and pull	+	+	+	+	+	+
Hinged door	+	+	+	+	+	+
Integrations						
Multi-point latching	+	+	+	+	+	+
Single point latching	+	+	+	+	+	+
Concealed hinges	+	+	+	+	+	+
Panel fixings	+	+	+	+	+	+
Electro-mechanical locking	+	+	+	+	+	+
Push and pull devices	+	+	+	+	+	+
Guards	+	+	+	+	+	+
Accessories & options						
Minimum door leaf size (mm)	1600 x 2180	2000 x 2180	2000 x 2180	1600 x 2180	2000 x 2180	2000 x 2180
Maximum door leaf size (mm)	—	—	—	80 kg	80 kg	—
Door weight (kg)	110 kg	110 kg	—	—	—	—
Opening/closing mechanism (single glazing) (kg)	npd	npd	8+12	8+12	8+12	8+12
Maximum glazing thickness (mm)	24+40	34+40	24+38	24+38	24+38	24+38
Applications						
New build	+	+	+	+	+	+
Refurbishment	+	+	+	+	+	+
Major commercial	+	+	+	+	+	+

GT55 entrance door system offers a range of door types, including sliding doors, doorsets, and fixed panels, designed to meet the highest security standards. The system is available in various configurations, such as single doors, double doors, and doorsets with side panels and glass. It features a range of options, including double acting central pivot doors, panel fixings, and concealed hinges. The system is suitable for new build, refurbishment, and major commercial applications.



© Optio Ltd. 2018. Optio is a registered trademark of Optio Ltd. All rights reserved. Optio Ltd. is a company registered in England and Wales under company number 04811205.

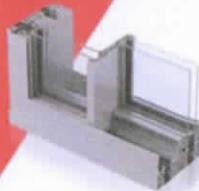
INFINIUM Sliding

Infinium brings together indoor and outdoor living spaces in exquisite harmony.

The Infinium sliding door system is designed to bring the outside in. It's a modular system that can be used to create a single or double door, or a large glass wall. It's perfect for creating a bright, airy space that's both functional and beautiful.

The Infinium sliding door system is made from high-quality materials, including a strong aluminum frame and a smooth, silent sliding mechanism.

The Infinium sliding door system is available in a range of colors and finishes, so you can choose the one that best suits your home.



DESIGN FEATURES

- Sliding door
- Fully concealed outer-frame
- 21mm central interlock
- One or more opening panels with large width dimensions up to 3000mm (W) and height dimensions up to 3000mm
- Holds up to 400 kg panel weight

OPTIONS

- Available in double or triple track
- Glazing options of 38mm - 52mm
- Rotating corner post option for larger opening spaces
- Single colour available as standard
- Available in a range of configurations
- Double or triple glazing solutions available on the same outer-frame

SPECIFICATIONS

Performance & Accreditations

Standard Double Glazing	1.2 W/m²K
Upstand Triple Glazing	< 1.0 W/m²K
A4 Rigidness	> Class 4 (200 Pa)
Wind load resistance	Class 4 (420 Pa)
Water load	Class C4 (1000 Pa; up to 1000mm)

Size limits

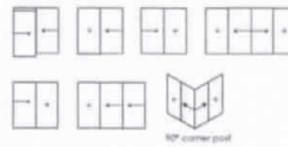
Max door height	4000mm
Max door thickness	300mm (W) + 500mm (H)
2-panel assembly	✓
Dual colour system	✓
Multi-point locking	✓
Glazing options	38mm - 52mm

INTERIOR CONFIGURATIONS

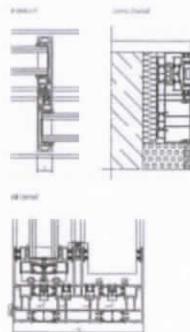
Key



The diagrams shown here illustrate some of the configurations achievable with ALU's Infinium system.



CAD CROSS SECTIONS



Lumina

SC156 Lift & Slide

A premium sliding door with slim sightlines, available in a variety of sliding configurations using single and double track systems.

The SC156 is a high quality sliding door system designed to offer a modern, clean look. It features a slim profile and can be used in a variety of configurations, including single and double track systems. The door is made from high-quality materials and is designed to be both functional and aesthetically pleasing. It is suitable for use in a range of applications, including residential and commercial buildings.



DESIGN FEATURES

- Access 24mm - 30mm double or triple glazing
- Abs 400g panel weight
- Low threshold of 23mm
- Exceptional AWW ratings

OPTIONS

- Slimmer sightline of 30mm available
- Multiple sliding configurations
- Motor or Dual rail options
- Available in single and dual colour: any other RAL also available
- Range of hardware and security features

SPECIFICATIONS

Performance and accreditation

Unidirectional (Category 1) (Up to 1000mm) (Innen-Roll)	1.4 seconds
Unidirectional (Phase Sliding) (Up to 1000mm) (Innen-Roll)	1.6 seconds
Unidirectional (Double Sliding) (Up to 1.6 metres) (Dashed Roll)	1.6 seconds
Unidirectional (Double Sliding) (Up to 2.4 metres) (Dashed Roll)	1.6 seconds
Air-consult Performance test	

A4 Ignition (100°)	
Water Ignition (100°)	
Wind load (100°)	Closure 1.000 (1.000Pa) Closure 1.000 (1.000Pa) Closure 1.000 (1.000Pa)
Configuration & Room	

Opening

SC156

Mount roll (1.6metres)	"
Double roll (1.6metres)	"

Size Guide

SC156S100M

Min vent height***	400mm
Min Home height***	2100mm

Common Features

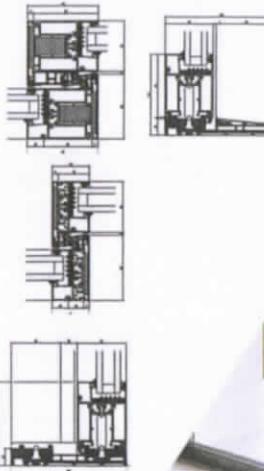
SC156

Sign-plate	98mm
Dust Cover Option	"
Multipoint locking	"
Closing surface	10mm
Closing thickness	3mm - 8mm
Threshold	3mm

OTHER SLIDE & SWING CONFIGURATIONS



CASE STUDY SECTION



Options

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.

External dimensions (mm) height x width. Please note that the overall door height includes the frame thickness. Internal opening dimensions (mm) height x width. Internal door height includes the frame thickness.



DESIGN FEATURES

- 3 Accepts 20mm-31mm double glazing
- 3 Max 40kg panel weight (double glazed)
- OPTIONS:
 - 3 Available as Hinge Sliding
 - 3 Slimmer sightline of 40mm available
 - 3 Multiple sliding configurations
 - 3 Memo or Dual rail options
 - 3 Available in angle and dual colour. Anodised finishes also available
 - 3 Range of hardware and security features

SPECIFICATIONS

Performance in terms of certification

U-value double glazing* (top + 1.0mm) (mm²/m²W)
U-value triple glazing* (top + 6.0mm) (mm²/m²W)
U-value double glazing† (top + 1.0mm) (mm²/m²W)
U-value triple glazing† (top + 2.0mm) (mm²/m²W)

Green glazing rating

Economic performance (BPI)

A1 Aggressiveness (Pa)***

Interior Aggressiveness (Pa)***

Water load (Pa)***

Configurations & Areas

Opening

sliding right (110mm)

Double rail (90mm)

Size limits

Max vent height***

Max frame height***

System features

Dual cassette option

Multi-point locking

Glassing corners

Glassing increased

Heightens

BSC94

U-value

1.4 W/m²K

1.7 W/m²K

1.8 W/m²K

C rated

A rated

Class 4 (300 Pa)

Class 14 (1000 Pa)

C4 (1400 Pa)

BSI A rated

U-value

1.4 W/m²K

1.7 W/m²K

1.8 W/m²K

C rated

A rated

Class 4 (300 Pa)

Class 14 (1000 Pa)

C4 (1400 Pa)

BSC94SLIM

U-value

1.7 W/m²K

1.8 W/m²K

C rated

A rated

Class 4 (300 Pa)

Class 14 (1000 Pa)

C4 (1400 Pa)

CASE CROSS SECTIONS



Double Rail - Internal handle

Double Rail - External handle



Options

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.

Intelligent control can be achieved through the simple automation of our building, with the option to control via remote control.

The system is designed for the smooth, trouble-free opening and closing of doors, providing a secure and safe environment.



DESIGN FEATURES

- Certified under the Secured by Design scheme.
- Tested to PAS 24.
- Unique, precision handle that allows for maximum door opening and panels to close square.
- Four starkest style rollers to ensure smooth and consistent operation.
- Chamfered and square bead options.
- Glazing 20mm - 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 11mm step height.
- All configurations available open in and open out.
- Chamfered and square beaded options.
- Short bolts top and bottom of the infill panel for enhanced security.
- Dedicated bottom barge guide for consistent operation and enhanced security.
- Double track threshold allowing greater stability.

SPECIFICATIONS

Performance and accreditation

	BSF70	BSF70 HD
Univolt (double glazing)	1.4 W/m²	1.4 W/m²
Vinylite (triple glazing)	1.4 W/m²	1.4 W/m²
A4 Strength (PAS)	Class 4 (600 N)	Class 4 (600 N)
Wind load (Pa)	Class A2/400 (2400 Pa)	Class A2/400 (2400 Pa)
Security	PAS 24	PAS 24
3rd party certificates	G-Index	G-Index
Focused by design	N/A	N/A

Configurations

Opening	Open In and open out
3-0-0	x
3-0-1	x
4-0-0	x
4-0-1	x
5-0-0	x
5-0-1	x
5-0-2	x
5-0-3	x
6-0-0	x
6-0-1	x
6-0-2	x
6-0-3	x
7-0-0	x
7-0-1	x
7-0-2	x
7-0-3	x
7-0-4	x
7-0-5	x
7-0-6	x
7-0-7	x
7-0-8	x
7-0-9	x
7-0-10	x
7-0-11	x

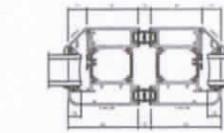
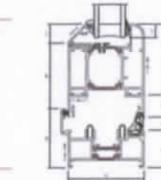
Design features

Max vent weight	110 kg
Signline (mead)	110 mm
Signline (CB)	130 mm
Signline (combi)	110 mm
Signline (mead 180)	140 mm
Maximum kerf height	2400 mm

System features

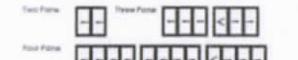
Frame depth	70mm
Dual colour option	x
Adjustable locking	x
Glazing options	Infill panel
Glazing thickness	20mm - 40mm

CASE STUDY FEATURES



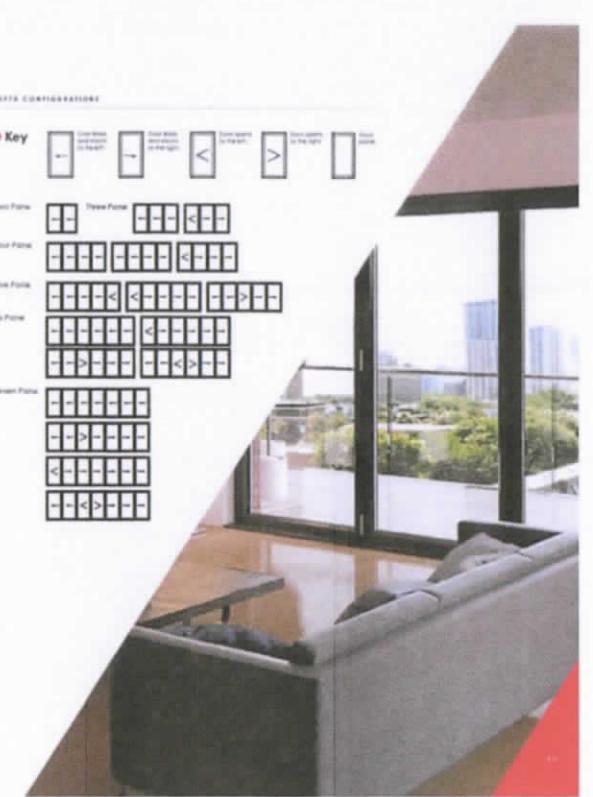
DOOR CONFIGURATIONS

Key



Notes

Configurations shown are not exhaustive. BSF70 Bi-fold doors are available in a wide range of configurations, including but not limited to those shown. Please refer to the technical manual for detailed information on all available configurations and their dimensions.



Luminia

Veranda

Our customers can now enjoy longer sunbathing sessions, brighter spaces and more late night fresh air while remaining sheltered and protected at all times.

With Luminia's new veranda system, you can now have a veranda that is both functional and aesthetic. It features a unique design that allows for large spans and easy maintenance. The system is made from high-quality materials and is designed to withstand harsh weather conditions.



PREMIUM TYPE 1

► Use of ALU designs, this Luminia system is inherently strong and neat. Monolithic profiles. The system also features thermal break, giving you the freedom to transform the veranda into an insulated living space.



MODERN TYPE 2

► Our most contemporary veranda, this system boasts slender aesthetic lines. A perfect example of form embracing function.



ENHANCED TYPE 3

► The most robust veranda in our range, this suspended design is ideal if you're looking for free passage and a brighter outside space. Thanks to additional steel reinforcement this system can stretch an impressive 10 metres in width with the support of only two posts.

*We also offer a Victorian style gutter for the type 4.



EDITION FEATURES

- Full aluminium system
- 3 different design colors
- Large span - up to 10m
- Hidden water drainage and flanges
- Optimized sliding doors and walls
- 5 colour choices
- Polycarbonate or glass glazing options

LUMINIA VERANDA

Specification	Type 1	Type 2	Type 3
Standard height	160	160	160
Height (mm)	24	24	24
Concealed storage	Yes	Yes	Yes
Gutter (300x14 mm)	No	No	No
Large glass sliding door	No	No	No
Integrated gutter	No	No	No
Integr. 100%	Yes	Yes	Yes
Rooflight profile	No	No	No
Pivot depth (mm)	142	173	200
Wall pane (mm)	210	170	170
4 metres span with no central post	No	No	No

Technical drawings available on request. Prices subject to change without notice.

Option

58BW Casement

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

INCLUDES: External dimensions depth integrated handle and执手 (handle) to suit internal dimensions. Double glazing, low-e, 14.02% solar reflectance. Thermal break, double glazing, multi-point locking.



STYLISH PROFILE

- Certified under the Secured by Design scheme.
- Tested to PAS 24.
- Green guide rated A.
- Integrated deep faced profiles for ease of triple ventilation.
- Unique polycarbonate thermal break design to improve thermal performance.

OPTIONS

- 38mm or 70mm frame depth to accommodate various types of applications.
- Project in or project out options.
- Internally or externally glazed to accommodate low and high rise projects.
- Glazing 33mm - 49mm.
- Available in a range of single or dual colour and oxidised finishes.
- Available in the following profiles: Top, Chamfered, Square and Oval.
- Available in the following configurations: top hung, side hung, bottom hung, fixed light, multi-light and french casement.
- Available for Lifetime Homes (LT).
- Double braced option allowing for internal glazing without the use of dummy vents.
- Dedicated fixing shape for ease of installation.
- Designed with a flange groove to accommodate standard locking hardware.



➤ Oval



➤ Chamfered



➤ Square

SPECIFICATIONS

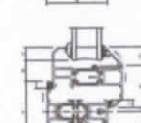
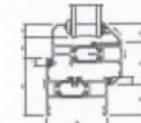
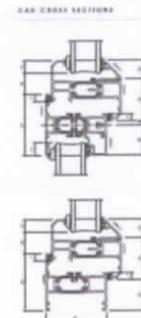
Performance and accreditation	Certified housing
U-value (inside glazing)	1.2 W/m²K
U-value (triple glazing)	0.2 W/m²K
Window energy rating (WERS)	B + C
Window class rating	A+
Acoustic performance (dB)	52 (Gloss) / 50 (Matte)
Visible lightness (%)	55 (Gloss) / 50 (Matte)
Wind load (Pa)	1000 Pa
Security	BSI Part 2:2007
BSI Part 3:2007	Secured by Design
BSI Part 4:2007	PAS 24
Glossary	None

Configurations	Outer size
Top hung	x
Side hung	x
Bottom hung	x
Fixed light	x
Multi-light	x
French casement	x
Size Guide	
Top hung (max weight)	180 kg
Side hung (max weight)	25 kg
Bottom hung (max weight)	40 kg (2 litred)
Fixed light (max weight)	250 kg

Custom features	Frame depth
Double colour system	38mm and 70mm
Multi-point locking	x
Bracing options	x
Glassing thickness	External width
Gloss (from 10 to 90%)	20mm - 40mm
Matte (from 10 to 90%)	20mm - 40mm
Satin (from 10 to 90%)	20mm - 40mm

Dimensions	Frame depth (mm)	Overall width (mm)	External width (mm)
Top hung	x	x	x
Side hung	x	x	x
Bottom hung	x	x	x
Fixed light	x	x	x
Multi-light	x	x	x
French casement	x	x	x

Product Data Sheets: [58BW Top Hung](#) | [58BW Side Hung](#) | [58BW Bottom Hung](#) | [58BW Fixed Light](#) | [58BW Multi-Light](#) | [58BW French Casement](#)



Options

58BW ST Heritage

The look of steel, the benefits of aluminium.
A win-win fit for designers and homeowners alike.

Traditionally styled windows and doors can often be a burden on the environment due to their heavy metal frames. Our 58BW ST Heritage window offers the look of steel without the weight, and the benefits of aluminium.

A modern interpretation of traditional designs, with a focus on the strength and durability of the frame, and the energy efficiency of the glass.



DESIGN FEATURES

- Certified under the Secured by Design scheme
- Tested to PAS 24
- Green glazing rated A
- Integrated deep head profiles for ease of triple ventilation
- Unique polycarbonate thermal break design to improve thermal performance
- Slim sightlines to match existing steel windows
- Internally beaded for ease of glazing on highrise projects

OPTIONS

- 35mm or 50mm frame depths to accommodate varying types of applications
- Internally or externally glazed
- Glazing 24mm – 38mm
- Available for Lifetime Homes (LH)
- Available in a range of single or dual colour and enameled finishes
- Available in the following aesthetics: Stepped Edge, Square and Puffy Line
- Available in the following configurations: top hung, side hung, bottom hung, fixed light, multi-light and french casement
- Double beaded option allows for internal glazing without the use of dummy vents
- Accommodates standard hardware



SPECIFICATIONS

Performance and accreditation	Current rating
U-value (permissible glazing)	1.4 W/m²
U-value (typical glazing)	1.2 W/m²
Window energy rating (WERS)	A (rated)
Glass glaze rating	A (rated)
Acoustic performance (WRC)	Rw (C;CD) 44 (2;CD) dB
Admittance (PA)	Claus e (2;PA)
Water tightness (PA)	Claus Fr (2;PA)
Wind load (PA)	Claus E3400 (3;PA)
Security	K12 (24)
3rd party certification	Guarantees
Secured by Design	Yes

Configuration	Open side
Opening	Open side
Top hung	x
Bottom hung	x
Side hung	x
Fixed light	x
Multi-light	x
French casement	x

Size limits	Max height
Top hung (max weight)	20 kg
Side hung (max weight)	20 kg
Bottom hung (max weight)	40 kg (2-hinged)
Fixed light (max weight)	20 kg

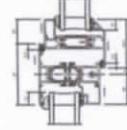
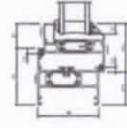
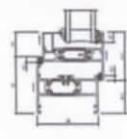
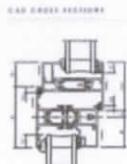
Construction	External depth
External depth	68mm and 70mm
Glazing option	x
Multi-point locking	x
Glazing options	Internal and external
Glazing thickness	24mm + 20mm
Sightline (from to vent)	48mm
Sightline (from to sash)	31mm
Sightline (head light)	48mm

Accessories	Optional
Puffy Line	x
Stepped Edge	x
Square	x

Notes	Notes
Configurations	External depth
Glazing options	Internal and external
Glazing thickness	24mm + 20mm
Sightline (from to vent)	48mm
Sightline (from to sash)	31mm
Sightline (head light)	48mm

Configurations: External depth, Glazing options, Glazing thickness, Sightline (from to vent), Sightline (from to sash), Sightline (head light).

Notes: External depth, Internal and external, 24mm + 20mm, 48mm, 31mm, 48mm.



Optio

58BW Top Swing Reversible

Easy to clean and effortless to operate, our ever-popular top swing reversible windows, increase thermal performance, improve safety and exceed modern building design performance standards.

Our top swing reversible windows are designed to be the easiest to open and close windows on the market. Our unique profile design allows for a smooth and quiet opening and closing action. Our top swing reversible windows are available in a range of sizes and configurations, including single and multi-light windows, and are suitable for both new build and renovation projects.



FEATURES

- Certified under the Secured by Design scheme
- Tested to PAS 24
- Green guide rated A
- Integrated deep head profile for ease of triple ventilation
- Unique polycarbonate thermal break design to improve thermal performance
- A clean, flat appearance to give a true contemporary aesthetic
- Design allows the windows to be profiled without intruding the internal building line

OPTIONS

- Glazing 24mm – 38mm
- Available in a range of single or dual colour and anodised finishes
- Available in the following aesthetics: Flat, Contemporary and Chamfered
- Available in the following configurations: top swing, side swing, fixed light and multi-light
- Dedicated fixing strips for ease of installation
- Full range of customisable hardware available

SPECIFICATIONS

Performance and accreditation

U-value (double glazing)	1.7 W/m²
Green guide rating	A rated
A1 tightness (Pa)	Class 4 (100 Pa)
Water ingress (Pa)	Class A (2000 Pa)
Wind load (Pa)	PAS 24
Security	3rd party certified
Secured by design	Yes

Configurations

Opening	Open left
Top swing	✓
Side swing	✓
Fixed light	✓
Multi-light	✓

Size limits

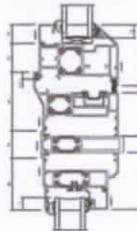
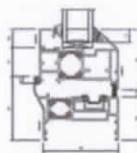
Top swing (max weight)	40 kg
Side swing (max weight)	45 kg
Fixed light (max weight)	100 kg
External widths	
Frame depth	70mm
Double glazed option	✓
Multi-point locking	✓
Obscure sections	Internal
Glass thickness	24mm, 30mm, 38mm
Highline (frame to head)	100mm
Spigot (frame to wall)	147mm

Esthetics

Flat	✓
Contemporary	✓
Chamfer	✓

Optio 58BW Top Swing Reversible windows are manufactured from high quality materials and components. All Optio products are subject to strict quality control processes and are designed to meet relevant industry standards. Optio is a registered trademark of Optio Windows Ltd. © Optio Windows Ltd. 2018. All rights reserved.

CASE STUDY SECTION



Luminia

F82 Bi-fold

A contemporary, stylish bi-folding door. With thinner sightlines and interlock of 120mm that provide larger glazing panels without compromising on performance.

With a choice of four different opening configurations, the F82 Bi-fold door system offers a wide variety of options for your home or office. It's designed to fit into any space, whether you're looking for a large glass wall or a smaller, more compact solution.



DESIGN FEATURES

- Re-designed flush pop-out handle
- Unique traffic door
- HD composite rollers as standard
- 4 stainless steel rollers
- Both frame and glass sightlines of 17mm
- All configurations available open in and open out

OPTIONS

- Chamfered and square bead options
- Glazing 20mm - 5mm
- Available in a range of opening configurations
- Available in a range of single or dual colour and uncoloured finishes
- All configurations available open in and open out
- Chromed and square beaded options

SPECIFICATIONS

Performance and accreditation

	F82
U-value (double glazing)	1.4 W/m²
U-value (triple glazing)	1.2 W/m²
AIR Tightness (P40)	NPD (Meeting June 2017)
Water resistance (P40)	NPD (Meeting June 2017)
Wind load (P40)	NPD (Meeting June 2017)
Moisture	NPD (Meeting June 2017)
UV solar transmission	NPD (Meeting June 2017)
Sealed by design	NPD (Meeting June 2017)

Configurations

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

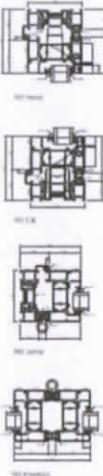
Design features

Max vent weight	130 kg
Sightline (max)	87 mm
Sightline (C4E)	87 mm
Sightline (Zorb)	87 mm
Sightline (Meeting 10E)	122 mm
Minimum vent height	2400 mm

System features

Profile depth	82 mm
Duo-colour option	x
Multi-point locking	x
Glassing system	Internal bevel
Glassing thickness	20 mm - 24 mm

CASE CROSS SECTIONS

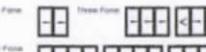


CASE CONFIGURATIONS

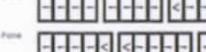
Key



Two Pane



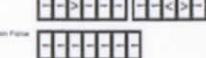
Four Pane



Five Pane



Six Pane



Seven Pane



Technical note: When calculating the number of panes required for a specific opening, it is important to consider the width of the door frame and the width of the glass panels. The door frame width is typically 120mm, while the glass panel width is 87mm. Therefore, for a 1200mm wide opening, you would need 14 glass panels (14 x 87mm = 1218mm) and 14 door frames (14 x 120mm = 1680mm). This results in a total width of 2358mm, which is slightly wider than the 2350mm opening. To account for this, it is recommended to add an extra frame to the opening, resulting in a total width of 2478mm.



T: 01291 639 739
E: info@aluk.co.uk

Registered Office:
AluK (GB) Ltd
Newhouse Farm Ind Est
Chepstow
NP16 6UD

Registered Number:
02881320

aluk.co.uk

Experts in Aluminium

ALUK