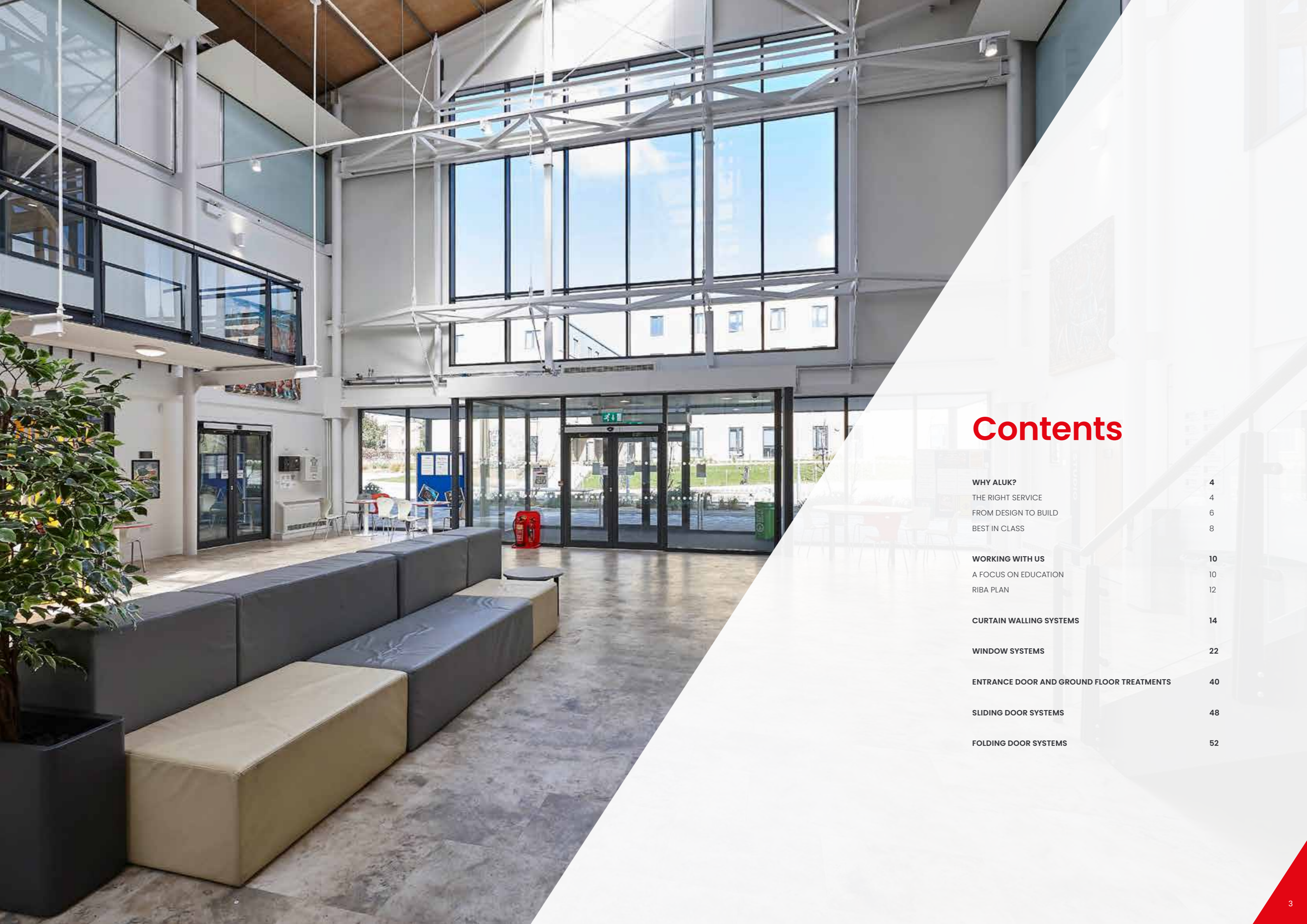


A guide to education



Contents

WHY ALUK?	4
THE RIGHT SERVICE	4
FROM DESIGN TO BUILD	6
BEST IN CLASS	8
WORKING WITH US	10
A FOCUS ON EDUCATION	10
RIBA PLAN	12
CURTAIN WALLING SYSTEMS	14
WINDOW SYSTEMS	22
ENTRANCE DOOR AND GROUND FLOOR TREATMENTS	40
SLIDING DOOR SYSTEMS	48
FOLDING DOOR SYSTEMS	52

The right service – customised, not compromised

At AluK, we understand the challenges of modern building construction. For more than sixty years we have been working around the globe to deliver the finest tailored aluminium façade systems.

As part of AluK International, we have over 2,500 clients worldwide that have different challenges, which is why we offer different solutions wherever your project may be. We don't provide a one-size-fits-all service, we work with you, detailing the

specification your project really needs to make it the best it can be – whilst adopting a 'right first time and on-schedule' attitude.

You will also have the support of a dedicated project consultant team from design through to installation, who will advise on legislation and provide guidance throughout the RIBA Plan of Work.

Expertise, customised.

AluK GB at a glance



150+
employees



350,000 sq. ft
factory space with
500 sq. ft design studio,
based in Chepstow



4,000 sq. ft
architectural design
studio in central London



35,000
orders processed
per year



4,500 tonnes
aluminium sold per year
£190M installed value



AluK International at a glance



1,800+
employees



Operations in
10 countries

Customers in
36 countries



41,000 tonnes
produced each year



1,000,000
windows produced
with our systems

From design to build

From our 350,000 square ft. facility at our UK headquarters we engineer the finest, tailored aluminium façade systems – comprising of windows, doors and curtain walling. All our market-leading systems are developed and produced by our own in-house research and development team. We also design, produce and manufacture our own fittings and hardware, ensuring a seamless end result.

The facility's three thermal break assembly lines enable us to produce over 3,000,000 linear metres (1m) per year. To optimise manufacturing over 1,400 tonnes of aluminium profile is held in stock at the facility.

We are the only aluminium systems house in the UK with our own fully integrated anodised pre-treatment and inline vertical finishing line. On average 3,000 tonnes are painted per year.

Our dedicated R&D and technical teams use the latest 3D and 2D CAD technology software. This is linked to prototyping machines that ensure we and efficiently realise your vision, saving you valuable time and money on the project.

We have a dedicated project consultant team, who can offer BIM support covering in-house designed REVIT and IFC Objects. As well as offering expert guidance on buildability, thermal and acoustic project calculations, budgeting and estimating, and NBS Specifications.

We can provide you with support and guidance at all stages of the RIBA Plan of Work, from initial brief through to the development being used. We can also aid in learning and development through a range of RIBA-approved CPDs.



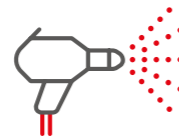
The capability to deliver



Dedicated
project consultant team



Global leader
in powder coating technology,
including in-house pre-
anodisation



3,000,000 m
powder coating
completed per year



Marine Grade
paint as standard



3 thermal break
assembly lines



1,400 tonnes
of aluminium profile in stock,
held in the UK



End-to-end
supply of our systems
managed in-house

Investing in success

Our aluminium expertise covers both new-builds and refurbishment projects, providing you with building systems that deliver industry-leading aesthetics, performance and reliability.

To ensure efficient and effective project delivery we are committed to continual investment in first-class design tools, software and personnel. This includes BRE BIM-accredited professionals, a range of REVIT and IFC Objects, fabrication, thermal, acoustic, structural calculation and NBS Specification software.

Driven by design

Our dedicated R&D and technical teams use the latest 3D and 2D CAD technology software. This is linked to prototyping machines that ensure we are able to quickly and efficiently realise your vision, saving you valuable time and money on the project.

We have a dedicated project consultant team, who are able to provide BIM support covering in-house designed REVIT and IFC Objects. We can also offer expert guidance on buildability, thermal and acoustic project calculations, budgeting and estimating. We can also aid in learning and development through a range of RIBA-approved CPDs.

Best in **class**

We're proud to support educational projects across the UK and beyond, delivering both new build and refurbishment solutions that consistently achieve top marks in performance and security. From modular school buildings and classroom extensions, right through to regional schools programmes, our experts are on hand every step of the way to provide all the product expertise, training and materials sourcing you require.

Whether we're providing integrated windows, commercial doors or curtain walling, you can be confident each and every one of our aluminium systems surpasses industry quality standards. However, what truly sets us apart is our collaborative and empathetic way of working.


That's because we understand a chaotic classroom is the last thing any educational facility needs, which is why we'll work closely with you to identify the most efficient and effective way to work. We'll then work tirelessly to make it happen on time, in budget with minimum disruption.

It also goes without saying our technical teams always do their homework when it comes to thermal data, wind calculations, environmental impact and all the other important factors required to successfully bring a project to life. So if you have any questions, don't hesitate to put them to the test.


A focus on education

We believe the design and construction of a building can seriously impact on the quality of education provided and the experience and wellbeing of those within. By taking into consideration factors such as noise, natural light and accessibility, we ensure our building envelope solutions provide a more effective, comfortable, distraction-free learning environment for students and teachers alike.


By engaging with our specialist projects teams at the earliest stages of your design, you can avoid common issues like overheating, poor ventilation and non-compliance, ensuring your project offers long-term comfort, safety, wellbeing and sustainability for everyone that uses it. Below are just a few examples of our tailored approach.




Comfort levels




Natural light




Acoustic performance



Easily accessible



Robust design



Safe and secure

Comfort Levels

Ensuring a classroom has efficient natural ventilation and flexible temperature control is integral to creating a productive studying environment. Correctly designed with appropriate shading to take into account the level of solar gain, our glazed aluminium façade systems can provide a steady, comfortable temperature whether in the height of summer or cold of winter. Optional manual or automated ventilation can be specified with most AluK systems to comply with Part F of the Building Regs, reduce condensation, and achieve the minimum 5-8 litres per second requirement on occupant airflows, as well as reducing the demand on mechanical heating, ventilation and cooling systems.

We can even offer bespoke parallel opening options if required to optimise safety as well as airflow.

Natural Light

The concentration levels of students and teachers can be greatly impeded by a poorly lit classroom environment. By optimising the amount of natural light that enters the room our slim sightline aluminium systems can help to reduce classroom fatigue and minimise the requirements for artificial lighting. We also understand that when whiteboards, projectors and computers are in use it's important to be able to reduce the levels of natural light. It's why our systems have been designed to be able to adapt to the unique requirements of every type of lesson with a range of compatible blind and shading options.

Acoustic Performance

Noise from road traffic, playground chatter and neighbouring classrooms can result in an unproductive learning environment. Our bespoke systems provide impressive acoustic performance, with options such as 50mm acoustic glass to block out external noise and comply with DfE guidance to Regulation 7, resulting in a more productive and rewarding setting.

Accessibility

With student figures rising all the time, it's never been more important to find effective and safe ways of enhancing movement between classrooms. With this in mind, our aluminium door systems have been designed with lower thresholds to minimise trips, as well as automatic opening to speed up flow and satisfy all the requirements of Part M to guarantee easy access for students and teachers with reduced mobility.

Robust Design

In any environment where thousands of people pass through daily, it pays to have the most robust designs in place. Our aluminium façade systems can handle even the most demanding of environments and require only minimal maintenance. They are also available in a range of durable colours and finishes, include marine grade options with market leading warranties.

Safe and Secure

From nurseries to universities, it goes without saying that students of all ages should be able to travel around a campus safely. Our window and door systems and fittings feature intelligent design features and configuration options to prevent unlawful access, minimise trips, stop slamming and fingers being trapped, and reduce the risk of bags and clothing being caught.

We can advise on the fitting of specialised safety restrictors required to prevent windows opening more than 100mm to avoid the risk of falling, and on the requirements for safety glazing in fixed panels and glazed doors to comply with Approved Document K of the Building Regs.

For added peace of mind when it comes to security, every AluK system also holds PAS 24 and Secured By Design certification.



RIBA Plan of Work 2020

with AluK Consultancy benefits

AluK's Project Consultancy is a resource available to support architects and specifiers as they move through the definitive design and process management tool which is the RIBA plan of work.

Typically, our team are most often invited to get involved at stage 3 or 4 once a project has moved into developed and technical design, but experience shows us that architects and specifiers who talk to us even earlier in the plan can derive significantly more benefit.

That's not just in terms of avoiding technical problems on complex facades and unusual glazing elements, but also by adding value with straightforward advice on budget expectations and cost implications.



Concept Design

Architectural Concept approved by the client and aligned to the Project Brief

CORE TASKS

Preparing Architectural Concept incorporating Strategic Engineering requirements and aligned to Cost Plan. Also preparing Project Strategies and Outline Specification. To Agree Project Brief Derogations and Undertake Design Reviews with client and Project Stakeholders. Finally Prepare stage Design Programme.

THE ALUK DIFFERENCE

Our clarity and expertise at Concept Design stage can help with calculating budgets and, where necessary, we can bring in trade contractors to develop an even more robust cost plan early on. Our consultants can also guide specifiers on how best to achieve regulatory requirements, by focusing on the key drivers. We can provide input on preliminary structural viability and initial acoustic, thermal and ventilation considerations for instance, as well as reviewing strategies for fire egress

and long-term maintenance. We can obviously prepare routine NBS outline specifications and generate generic CAD & BIM models which we know are helpful but, for us, the real value comes from being able to provide bespoke samples and a detailed programme of delivery and suitability of bespoke elements, which can be key factors in the decision-making process at Stage 2.



Spatial Coordination

Architectural and engineering information Spatially Coordinated

CORE TASKS

Undertake Design Studies, Engineering Analysis and Cost Exercises to test Architectural Concept resulting in Spatially Coordinated design aligned to updated Cost Plan. Prepare Project Strategies and Outline Specification. Initiate Change Control Procedures and Prepare stage Design Programme

THE ALUK DIFFERENCE

At Stage 3, AluK's consultants will guide specifiers through the information required to gain regulatory compliance, while trying to help them stick as closely as possible to their Concept Design. If we have been involved at Stage 2, then the process is more streamlined, as issues arising around the structural design of the glazing façade and building systems will have already been considered. However, we can still make the coordination and updating of proposals fairly straightforward.

During Stage 3, the role of our consultants typically comes in more specific design and technical support. At this point, we will help develop tender information, such as project specific ventilation, thermal and acoustic specification reports, together with project specific CAD drawings and relevant BIM models. We can even provide valuable validation test data derived from our own in-house testing facility and provide updated NBS specifications into virtually any chosen format.



Technical Design

All design information required to manufacture and construct the project completed

CORE TASKS

Develop architectural and engineering technical design, Then prepare and coordinate design team Building Systems information, whilst preparing and integrating specialist subcontractor Building Systems information. Finally Prepare stage Design Programme

THE ALUK DIFFERENCE

There is real value to be derived from working with our team, particularly if there is a requirement to consider Value Engineering on the project. We can bring together all the elements from Stage 2 & 3 and help identify opportunities for Value Engineering that might otherwise have been overlooked. On several occasions, we have generated alternative proposals for consideration and even invited specialist subcontractors to tender on that basis to give specifiers a direct like-for-like comparison.

An AluK consultant at Stage 4 will always work closely with the project team and provide valuable technical and design support to help in the qualification of tenders and ensure full compliance with the specification. Again, they will help to develop the NBS and offer detailed guidance on the implementation of any Value Engineering opportunities identified.



Manufacturing and Construction

Manufacturing, construction and Commissioning completed

CORE TASKS

Finalise Site Logistics and manufacture Building Systems and construct building. Monitor progress against Construction Programme whilst Inspecting Construction Quality. Resolve Site Queries as required then Undertake Commissioning of building and prepare Building Manual

THE ALUK DIFFERENCE

In a continued support role through manufacturing and Construction stage AluK can even ensure fabrication and installation training for all operatives and management that have not passed through our Training Academy.

Curtain Walling Systems

At AluK we understand the integral role curtain wall plays in façade design, from absorbing building sway and resisting wind to dictating thermal efficiency and controlling light. It's why our systems have been specified and installed in many of the world's most prestigious buildings.

We also appreciate the importance of flexibility in the design process. Our unique lightweight solutions offer you the freedom to bring your vision to life without compromising on the performance, functionality and safety demanded by modern buildings. They can be faceted, curved or angled to create your desired finish, with sightlines minimised to offer maximum light transmission into the building. All profiles are thermally broken to optimise performance.

We have a range of systems from unitised to stick build construction that can be built to accommodate large single span atriums, enabling impressive expanses of uninterrupted glazing. Systems are available in a range of finishes and colours for further design flexibility.

A comprehensive range of options is available for our curtain walling systems, including capped and structurally bonded systems. Fully integrated insert options include: Parallel Opening Vent (POV), Tilt-Before-Turn (TBT), Side Hung and Top Hung. Swinging and sliding doors are also available for multiple applications.

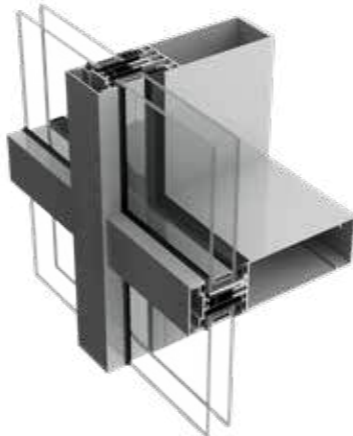
Our technical experts will provide you with comprehensive wind calculations, thermal data and safety information to enable you to turn your building design into an efficient and impactful reality.

OUR UNIQUE SOLUTIONS
OFFER YOU THE FREEDOM TO
BRING YOUR VISION TO LIFE
WITHOUT COMPROMISING
ON THE PERFORMANCE,
FUNCTIONALITY AND SAFETY
DEMANDED BY MODERN BUILDING
SPECIFICATIONS.

SL52 Curtain Walling System

The SL52 is a capped, thermally broken system and has been designed to offer a flexible, high performance solution. This enables specifiers to create impressive façades that not only enhance the aesthetics of a building but also provide the functionality and performance required to meet and exceed current standards.

This system has been tested to CWCT Sequence B and has been designed to be fully integrated with AluK window, doors and brise soleil systems to provide a complete façade solution.



DESIGN FEATURES

- › 52mm capped high rise curtain walling system
- › Can be faceted, curved or angled
- › Mullion or zonal drainage available
- › Wide range of face caps to meet your design requirements
- › Fully integrated vent options including POV, TBT, Top Hung, Side Hung, Fixed Light
- › Large range of box sizes to optimise small to large spans of glazing

OPTIONS

- › Glazing and infill range from 6mm - 50mm
- › Fully integrates with all AluK window and door ranges
- › Available in single or dual colour option, polyester powder coating and anodised finishes

SPECIFICATIONS

PERFORMANCE AND ACCREDITATIONS	
Air Permeability	600Pa
Water Tightness	600Pa
Wind Resistance	2400Pa
Acoustic Performance	37 Rw dB
CWCT Certified	Sequence B

SYSTEM	
Width	52mm
Depth	50mm - 260mm

INSERTED WINDOW AND DOOR CONFIGURATIONS	
Fixed Light	✓
Tilt & Turn	✓
Top Hung	Concealed & Framed
Side Hung	Concealed & Framed
Parallel Opening Window	Concealed & Framed
Single Door	Swinging & Sliding
Double Door	Swinging & Sliding

WEIGHT LIMITS	
Fixed Light Max Weight	400kg
Tilt & Turn Max. Weight	130kg
Top Hung Max. Weight	180kg
Side Hung Max. Weight	55kg
Parallel Opening Window Max. Weight	200kg
Single Door Max. Weight	160kg

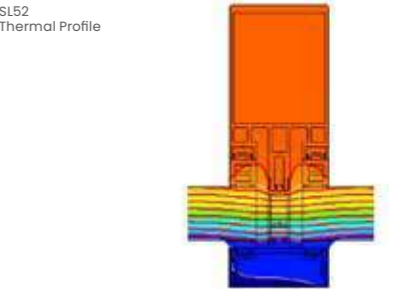
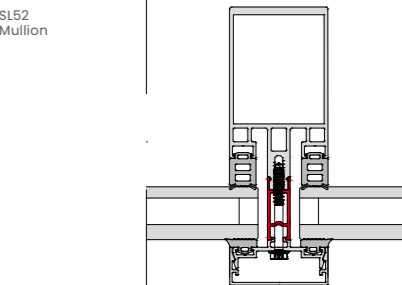
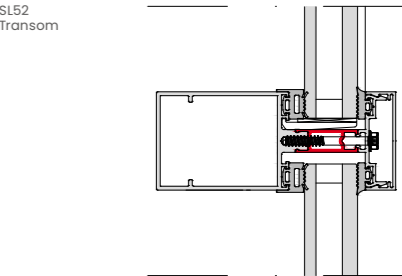
GLAZING	
Glazing Options	Capped
Glazing Thickness	6mm - 50mm

DESIGN	
Drainage	Mullion & Zonal
Faceted	✓
Sloped	x
Curved	✓

CAPPING OPTIONS	
Aerofoil	✓
Square	✓
Rectangular	✓
Round	✓
Fin	✓

CAD CROSS SECTIONS AND THERMAL PROFILE

Additional details are available on request.



SG52 Curtain Walling System

The SG52 is a structurally bonded, toggle glazed and thermally broken system which enables specifiers to create impressive, continual expanses of glass.

This system has been tested to CWCT Sequence B and has been designed to be fully integrated with AluK window, doors and brise soleil systems to provide a complete façade solution.

DESIGN FEATURES

- › Structurally bonded finish to minimise external sightlines
- › 52mm high rise curtain walling system
- › Fully integrated vent options including POV, TBT and Top Hung
- › Large range of box sizes to optimise small to large spans of glazing

OPTIONS

- › Glazing and infill range from 32mm - 40mm as standard
- › Fully integrates with AluK window and door ranges
- › Available in a range of polyester powder coating and anodised finishes

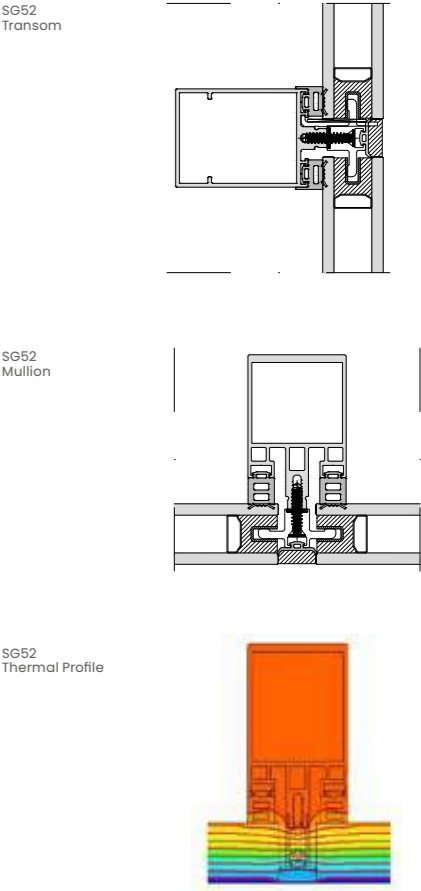


SPECIFICATIONS

PERFORMANCE AND ACCREDITATIONS	
Air Permeability	600Pa
Water Tightness	Static 1500Pa, Dynamic 600Pa
Wind Resistance	2400Pa
CWCT Certified	Sequence B
SYSTEM	
Width	52mm
Depth	50-260mm
INSERTED WINDOW AND DOOR CONFIGURATIONS	
Fixed Light	✓
Tilt & Turn	✓
Top Hung	Concealed & Framed
Side Hung	Concealed & Framed
Parallel Opening Window	Concealed & Framed
Single Door	Swinging & Sliding
Double Door	Swinging & Sliding
WEIGHT LIMITS	
Tilt & Turn Max. Weight	130kg
Top Hung Max. Weight	180kg
Side Hung Max. Weight	55kg
Parallel Opening Window Max. Weight	200kg
Single Door Max. Weight	160kg
GLAZING	
Glazing Options	Silicone Front Seal
Glazing Thickness	32mm - 40mm
DESIGN	
Drainage	Face
Dry Glazed Option	✓
Faceted	✓
Sloped	x
Curved	✓

CAD CROSS SECTIONS AND THERMAL PROFILE

Additional details are available on request.



Case Study

Torfaen Learning Zone



The £24m Torfaen Learning Zone in Cwmbran is a showcase for AluK's SL52 capped, mullion drained curtain walling system, complete with punched open-in windows in the thermally efficient AluK 77IWE casement system.

Procured within the SEWSCAP 2 Framework, Torfaen Learning Zone has been developed by Interserve on behalf

of Coleg Gwent and Torfaen Council. It features four-storeys of study and training facilities, including extendable classrooms with moveable walls, two atriums, performance and social spaces and an enclosed roof garden.

AluK's specification team worked directly with Torfaen Council's architects to review the system options on the project

and produce the specification clauses and structural analysis of the profiles required ahead of the tender. They also provided the thermal calculations required to demonstrate that the SL52 and 77IWE systems could meet the project design and the 1.4Wm2K thermal performance requirements.

Window Systems

We understand when it comes to designing and specifying glazing solutions that performance, flexibility and security are all key drivers in the decision-making process. All our window systems are designed with advanced thermal break technology to ensure maximum comfort related to thermal, acoustic, light transmission and security – making them perfect for any commercial or residential project.

Our ongoing commitment to innovation sees us recognised as a leader in the design and manufacture of aluminium windows across the UK and beyond. This ensures when choosing our systems for your project you can be confident they will meet the aesthetic demands of building occupiers, in addition to exceeding building regulations and standards.

As with our range of aluminium systems, we don't provide a one-size-fits-all service, but instead work closely with specifiers to provide bespoke solutions designed around specific performance requirements.

All our window systems include high quality multi-point locking mechanisms alongside other key security features. Our systems are certified under the Secured by Design scheme managed by the UK Association of Chief Police Officers.

OUR WINDOWS ARE AMONG THE
MOST ADVANCED ON THE MARKET
AND PROVIDE EXCEPTIONAL
THERMAL PERFORMANCE, AS
DEMANDED BY ALL MODERN
BUILDING CONSTRUCTION.



77IW Open-In Window System

Our highest performing window, the 77IW Open-In Window System is ideal for new build and refurbishment developments. The versatility of the system also makes it suitable for use in both high-rise and low-rise buildings. The system has been specifically designed to meet the most demanding British and European performance requirements in terms of thermal, weathering and security.

A wide variety of styles and configurations are available to choose from, all of which deliver high levels of thermal performance through incorporating technologies such as thermal polyamides, insulated centre seals and foam insertions. The 77IW system also fully integrates with our curtain walling and door systems, ensuring greater installation ease.

For optimal design flexibility, the 77IW is available in single or dual colour options, including anodised finishes.

DESIGN FEATURES

- › High levels of thermal performance
- › Multi chamber polyamide thermal breaks, insulated centre seals and foam insertions provide excellent performance
- › Integrates with AluK curtain wall and door systems
- › Dedicated groove for EPDM mounting
- › 77mm frame depth
- › Suites with open-out system
- › Concealed window available

OPTIONS

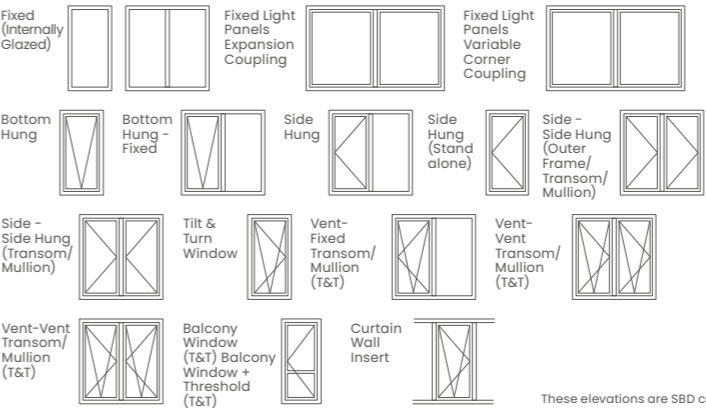
- › Wide variety of configurations
- › Range of locking options with patented AluK Groove
- › Trickle ventilation available
- › Choice of restrictors
- › Available in single or dual colour polyester powder coating, texture and anodised finishes



SPECIFICATIONS

	77IW (Hi)	77IW
PERFORMANCE AND ACCREDITATIONS		
U-Value (Double Glazing)	1.2 W/m²K	1.4 W/m²K
U-Value (Triple Glazing)	1.0 W/m²K	1.1 W/m²K
BRE Green Guide Rating	A, B Rated	A, B Rated
Air Permeability	Class 4 (600 Pa)	Class 4 (600 Pa)
Water tightness	E1200 (1200 Pa)	E1200 (1200 Pa)
Wind Resistance	C5 (2000 Pa)	C5 (2000 Pa)
Acoustic Performance	Rw = 45 (-2;-6) dB	Rw = 45 (-2;-6) dB
Security	PAS 24 & SBD	PAS 24 & SBD
3rd Party Certification Q-Mark	✓	✓
SYSTEM		
Depth	77mm	77mm
CONFIGURATIONS		
Side Hung	✓	✓
Bottom Hung	✓	✓
Tilt & Turn	✓	✓
SIZE AND WEIGHT LIMITS		
Side Hung		
Max Size (mm)	1400w x 2350h	1400w x 2350h
Min. Size (mm)	500w x 600h	500w x 600h
Max Weight	100kg	100kg
Bottom Hung		
Max Size (mm)	2000w x 1800h	2000w x 1800h
Min. Size (mm)	460w x 500h	460w x 500h
Max Weight	80kg	80kg
Tilt & Turn		
Max Size (mm)	1500w x 2200h	1500w x 2200h
Min. Size (mm)	460w x 550h	460w x 550h
Max Weight	130kg	130kg
GLAZING		
Glazing Thickness	24mm - 50mm	24mm - 50mm
SYSTEM FEATURES		
Single Colour	✓	✓
Dual Colour	✓	✓
Textured Finish	✓	✓
Anodised Finish	✓	✓
Multi-Point / Single Locking	Multi-Point	Multi-Point
Standard Hardware Groove	AluK Groove	AluK Groove
EPDM Groove	✓	✓
Locking Handles	✓	✓
Espagnolette Handle	No (Fork Drive)	No (Fork Drive)
Punched Out Openings	✓	✓
100mm Restriction	✓	✓
Trickle Ventilation	✓	✓

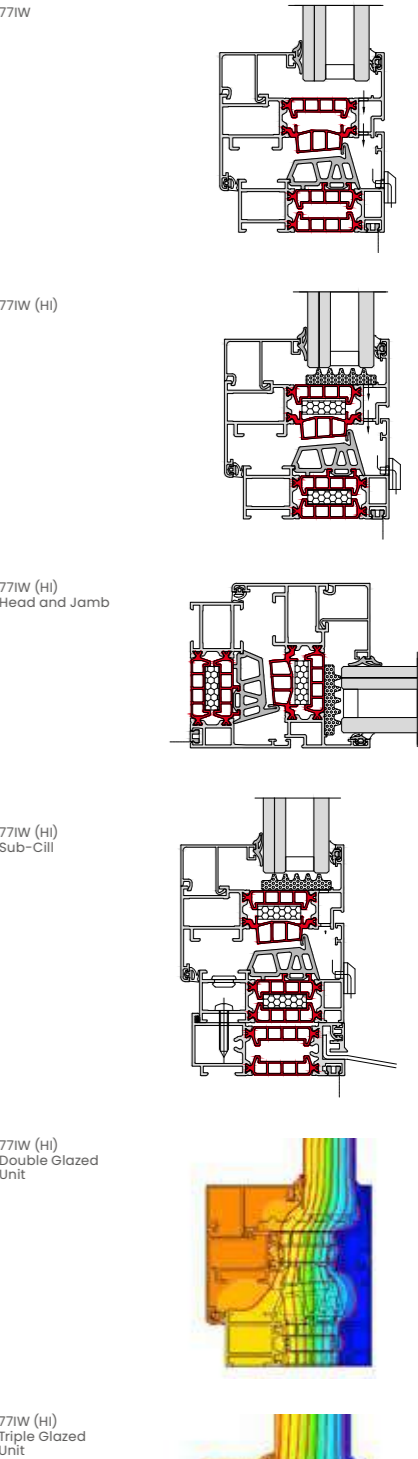
CONFIGURATIONS



These elevations are SBD compliant.

CAD CROSS SECTIONS AND THERMAL PROFILE

Additional details are available on request.



77IWE Open-Out Window System

Our high performance 77IWE Open-Out Window System is perfectly suited for a wide number of applications including hospitals, schools and high-rise apartments. The 77IWE shares the same impressive performance figures as our Open-In variant, making it our most efficient casement window.

The system is available in a wide variety of configurations, all of which offer exceptional levels of thermal performance as a result of incorporating technologies such as thermal polyamides, insulated centre seals and foam insertions. For ease of installation, the 77IWE system has been designed to fully integrate with our aluminium curtain walling and door systems.

DESIGN FEATURES

- › High levels of thermal performance
- › Multi chamber polyamide thermal breaks, insulated centre seals and foam insertions provide excellent performance
- › Integrates with AluK curtain wall and door systems
- › Dedicated groove for EPDM mounting
- › 77mm frame depth
- › Suites with open-in system

OPTIONS

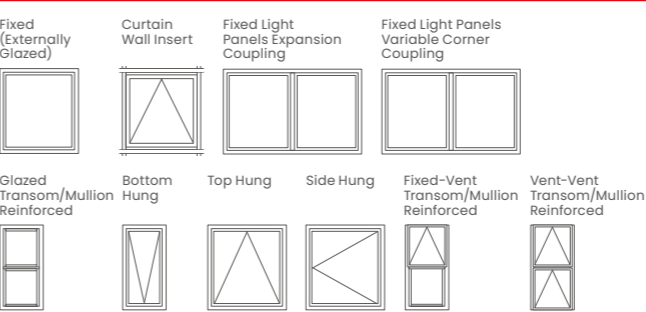
- › Wide variety of configurations
- › Range of locking options with patented AluK Groove
- › Trickle ventilation available
- › Choice of restrictors
- › Available for actuators and teleflex opening options
- › Folding openers with link bar for safety
- › Available in single or dual colour polyester powder coating, texture and anodised finishes



SPECIFICATIONS

	77IWE (HI)	77IWE
PERFORMANCE AND ACCREDITATIONS		
U-Value (Double Glazing)	1.3 W/m²K	1.4 W/m²K
U-Value (Triple Glazing)	1.0 W/m²K	1.2 W/m²K
BRE Green Guide Rating	A, B Rated	A, B Rated
Air Permeability	Class 4 (600 Pa)	Class 4 (600 Pa)
Water Tightness	E1050 (1050 Pa)	E1050 (1050 Pa)
Wind Resistance	C5 (2400 Pa)	C5 (2400 Pa)
Acoustic Performance	-	-
Security	PAS 24 & SBD	PAS 24 & SBD
3rd Party Certification Q-Mark	✓	✓
SYSTEM		
Depth	77mm	77mm
CONFIGURATIONS		
Top Hung	✓	✓
Side Hung	✓	✓
Bottom Hung	✓	✓
SIZE AND WEIGHT LIMITS		
Top Hung		
Max Size (mm)	1500w x 2400h	1500w x 2400h
Min. Size (mm)	460w x 460h	460w x 460h
Max Weight	180kg	180kg
Side Hung		
Max Size (mm)	838w x 2400h	838w x 2400h
Min. Size (mm)	460w x 460h	460w x 460h
Max Weight	55kg	55kg
Bottom Hung		
Max Size (mm)	-	-
Min. Size (mm)	460w x 460h	460w x 460h
Max Weight	90kg	90kg
GLAZING		
Glazing Thickness	24mm - 50mm	24mm - 50mm
SYSTEM FEATURES		
Single Colour	✓	✓
Dual Colour	✓	✓
Textured Finish	✓	✓
Anodised Finish	✓	✓
Multi-Point / Single Locking	Multi-Point	Multi-Point
Standard Hardware Groove	AluK Groove	AluK Groove
EPDM Groove	✓	✓
Locking Handles	✓	✓
Folding Openers	✓	✓
Espagnolette Handle	No (Fork Drive)	No (Fork Drive)
Friction Stays	✓	✓
Butt Hinges	✓	✓
Punched Out Openings	✓	✓
100mm Restriction	✓	✓
Trickle Ventilation	✓	✓
Variable Angle Corner Post	✓	✓

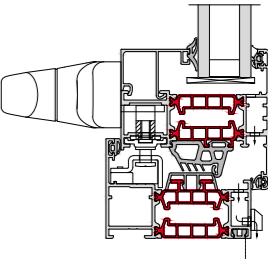
CONFIGURATIONS



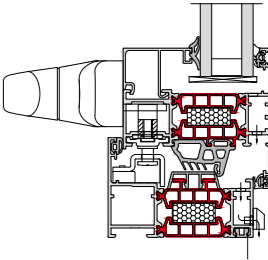
CAD CROSS SECTIONS AND THERMAL PROFILE

Additional details are available on request.

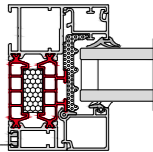
77IWE



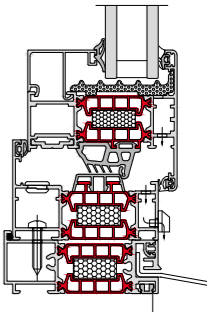
77IWE (HI)



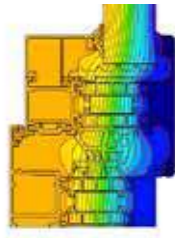
77IWE (HI)
Fixed Light



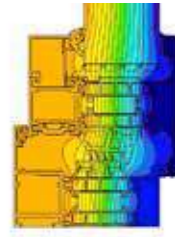
77IWE (HI)
Sub-Cill



77IWE (HI)
Double Glazed Unit



77IWE (HI)
Triple Glazed Unit



AluK C70s

Window System

Beautifully engineered and brilliantly functional, the C70S delivers class-leading performance with U-values of 1.3 W/m2K, advanced water tightness and a range of features to simplify fabrication and installation.

Meeting and exceeding the key thermal, acoustic and performance demands of the commercial specifiers, the C70S is the perfect aluminium solution for residential and commercial projects.

DESIGN FEATURES

- › Universal EPDM carrier groove – allows clip-in EPDM strip and direct lug fixing to be used on all outer frames, frame extenders and sub cill profiles
- › Outer Frames, Transoms/Mullions, Beads, Gaskets, Ancillary profile parts used across both Open-in and Open-out
- › Consistent sightlines with 58BW system offering maximum project flexibility
- › Euro groove (16mm full depth) allowing for a wider choice of hardware
- › 5-day lead time in 9910HG, 7016M, 9005M and key dual colour options

OPTIONS

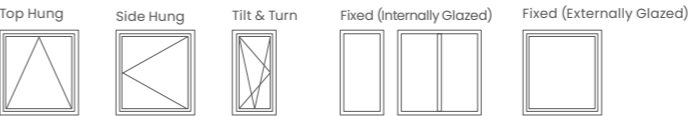
- › Three levels of insulation: standard, partial and HI
- › Glazing options 24mm-50mm
- › Side Hung, Top Hung, Fixed Light & Tilt Before Turn configurations available
- › Trickle ventilation available



SPECIFICATIONS

	C70S HI Open-in	C70S HI Open-out
PERFORMANCE AND ACCREDITATIONS		
Uw (Double Glazing)	1.3W/m²k	1.3W/m²k
Uw (Triple Glazing)	1.1W/m²k	1.1W/m²k
Window Energy Rating	A Rated	A Rated
Air Tightness (Pa)	Class 4 (600Pa)	Class 4 (600Pa)
Water Tightness (Pa)	E900 (900Pa)	E1500 (1500Pa)
Wind Load (Pa)	Class E2400 (2400Pa)	Class E2400 (2400Pa)
Security	PAS 24 & SBD	PAS 24 & SBD
SYSTEM		
Depth	70mm	70mm
CONFIGURATIONS		
Top Hung	-	✓
Side Hung	✓	✓
Tilt before Turn	✓	-
Bottom Hung	✓	✓
Fixed Light - internally glazed (Reversers available)	✓	✓
Fixed Light - externally glazed (Reversers available)	✓	✓
SIZE AND WEIGHT LIMITS		
Top Hung		
Max Size (mm)	1680w x 2500h	1680w x 2500h
Min. Size (mm)	320w x 267h	320w x 267h
Max Weight	180kg	180kg
Side Hung		
Max Size (mm)	1000w x 1680h	1000w x 1680h
Min. Size (mm)	300w x 320h	300w x 320h
Max Weight	55kg	55kg
Tilt & Turn		
Max Size (mm)	1300w x 2300h	1300w x 2300h
Min. Size (mm)	480w x 375h	480w x 375h
Max Weight	130kg	130kg
Fixed Light		
Max Size (mm)	2300w x 2300h	2300w x 2300h
Min. Size (mm)	300w x 300h	300w x 300h
Max Weight	300kg	300kg
GLAZING		
Glazing panel options: double and triple	24mm - 50mm	24mm - 50mm
SYSTEM FEATURES		
Single Colour	✓	✓
Dual Colour	✓	✓
Anodised	✓	✓
Textured	✓	✓
Locking Handles	✓	✓
Friction Hinges	-	✓
Butt Hinges	-	✓
Groove type	PVC Euro 16mm	PVC Euro 16mm
Variable Handle Position	✓	✓
Trickle ventilation	✓	✓
Sightlines	89mm	89mm
Frame to Vent	89mm	89mm
Vent to Mullion	103mm	103mm
Fixed Light	43mm	43mm

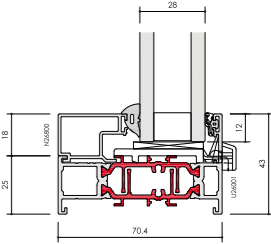
CONFIGURATIONS



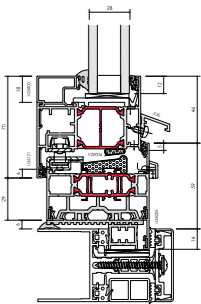
CAD CROSS SECTIONS AND THERMAL PROFILE

Additional details are available on request.

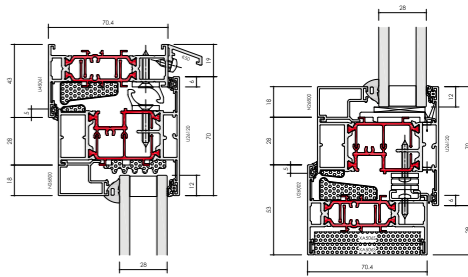
C70S Open-in frame detail



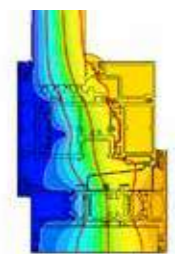
C70S Open-in curtain wall adaptor



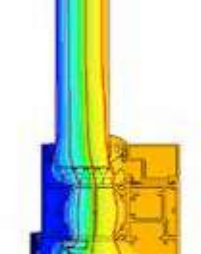
C70S Open-out frame and vent details



Open-out



Open-in / TBT



58BW Open-In Window System

Built to the highest UK standards, the 58BW Window System delivers a high performance and cost-effective solution with impressively narrow profiles. Equally at home on residential and commercial projects, the system is available in a number of formats including Side Hung and Tilt-Before-Turn.

The system’s clean lines and advanced functionality meet the demands of almost every modern building construction. Its competitive pricing also makes it a highly popular choice with specifiers both in the UK and around the globe. In addition to being certified under Secured By Design and tested to PAS 24, the 58BW also holds a Green Guide ‘A’ rating.

DESIGN FEATURES

- › Certified under the Secured By Design scheme
- › Tested to PAS 24
- › Integrated deep head profiles for ease of trickle ventilation
- › Unique polyamide thermal break design to improve thermal performance
- › Tilt-Before-Turn system sightlines to match the casement window sightlines

OPTIONS

- › Available in two frame depths: 58mm or 70mm
- › Supports both open-in and open-out projects
- › Glazing 24mm-40mm
- › Available in the following configurations: Side Hung, Bottom Hung, Fixed Light, Multi-light and Tilt-Before-Turn
- › Available for Lifetime Homes (LFT)
- › Dedicated fixing straps for ease of installation
- › Designed with a Euro Groove to accommodate standard locking hardware
- › Available in single or dual colour polyester powder coating, texture and anodised finishes



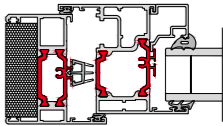
SPECIFICATIONS

PERFORMANCE AND ACCREDITATIONS	
U-Value (Double Glazing) (Ug: 1.0 W/m²K)	1.5 W/m²K
U-Value (Triple Glazing) (Ug: 0.7 W/m²K)	1.3 W/m²K
Window Energy Rating (WER)	B - C
BRE Green Guide Rating	A Rated
Air Tightness	Class 4 (600 Pa)
Water Tightness	Class 8a (450 Pa)
Wind Resistance	Class E2400 (2400 Pa)
Acoustic Performance	Rw (C;Ctr) 44 (-1;-4) dB
Security	PAS 24 & SBD
3rd Party Certification Q-Mark	✓
SYSTEM	
Depth	58mm & 70mm
CONFIGURATIONS	
Opening	Open-In
Top Hung	x
Side Hung	✓
Bottom Hung	✓
Tilt & Turn	✓
Fixed Light	✓
Multi-Light	✓
French Casement	x
SIZE AND WEIGHT LIMITS	
Side Hung	
Max Size (mm)	1725w x 2300h
Min. Size (mm)	380w x 575h / 480w x 375h
Max Weight	150kg
Bottom Hung	
Max Size (mm)	1725w x 2300h
Min. Size (mm)	380w x 575h / 480w x 375h
Max Weight	150kg
Tilt & Turn	
Max Size (mm)	1725w x 2300h
Min. Size (mm)	380w x 575h / 480w x 375h
Max Weight	150kg
Fixed Light	
Max Weight	250kg
GLAZING	
Glazing Options	Internal Bead
Glazing Thickness	24mm-40mm
SYSTEM FEATURES	
Single Colour	✓
Dual Colour	✓
Textured Finish	✓
Anodised Finish	✓
Multi-Point Locking	✓
Lifetime Homes	✓
Sightline (Frame to Vent)	86mm
Sightline (Vent to Mullion)	100mm
Sightline (Fixed Light)	43mm

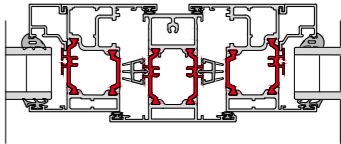
CAD CROSS SECTIONS AND THERMAL PROFILE

Additional details are available on request.

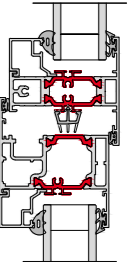
58BW Open-In Jamb detail



58BW Open-In Mullion detail



58BW Open-In Transom detail



58BW Open-Out Window System

Built to the highest UK standards, the 58BW Window System delivers a high performance and cost-effective solution with impressively narrow profiles. Equally at home on residential and commercial projects, the system is available in a number of formats including Top Hung, Side Hung and French Casement.

The system’s clean lines and advanced functionality meet the demands of almost every modern building construction. Its competitive pricing also makes it a highly popular choice with specifiers both in the UK and around the globe. In addition to being certified under Secured By Design and tested to PAS 24, the 58BW also holds a Green Guide ‘A’ rating.



DESIGN FEATURES

- › Certified under the Secured By Design scheme
- › Tested to PAS 24
- › Integrated deep head profiles for ease of trickle ventilation
- › Unique polyamide thermal break design to improve thermal performance
- › Casement system sightlines to match the Tilt-Before-Turn window sightlines
- › Reverse rebate option for internal glazing throughout

OPTIONS

- › Available in two frame depths: 58mm or 70mm
- › Supports both open-in and open-out projects
- › Internally or externally glazed to accommodate low and high-rise projects
- › Glazing 23mm–40mm
- › Available in the following configurations: Top Hung, Side Hung, Bottom Hung, Fixed Light, Multi-light and French Casement
- › Available for Lifetime Homes (LFT)
- › Dedicated fixing straps for ease of installation
- › Designed with a Euro Groove to accommodate standard locking hardware
- › Smoke vent certification compliance to EN12101-2:2003 Annex G
- › Available in single or dual colour polyester powder coating, texture and anodised finishes

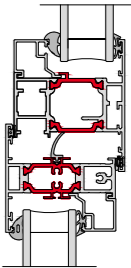
SPECIFICATIONS

PERFORMANCE AND ACCREDITATIONS	
U-Value (Double Glazing) (Ug: 1.0 W/m²K)	1.4 W/m²K
U-Value (Triple Glazing) (Ug: 0.7 W/m²K)	1.2 W/m²K
Window Energy Rating (WER)	B - C
BRE Green Guide Rating	A Rated
Air Permeability	Class 4 (600 Pa)
Water Tightness	Class 9a (600 Pa)
Wind Resistance	Class E2400 (2400pa)
Acoustic Performance	Rw (C;Ctr) 42 (-1;-5) dB
Security	PAS 24 & SBD
3rd Party Certification Q-Mark	✓
SYSTEM	
Depth	58mm & 70mm
CONFIGURATIONS	
Opening	Open-Out
Top Hung	✓
Side Hung	✓
Bottom Hung	✓
Tilt & Turn	x
Fixed Light	✓
Multi-Light	✓
French Casement	✓
SIZE AND WEIGHT LIMITS	
Top Hung	
Max Size (mm)	1750w x 2500h
Min. Size (mm)	300w x 200h
Max Weight	180kg
Side Hung	
Max Size (mm)	1300w x 1750h
Min. Size (mm)	300w x 300h
Max Weight	55kg
Bottom Hung	
Max Size (mm)	1750w x 2500h
Min. Size (mm)	300w x 200h
Max Weight	50kg (2 hinges)
Fixed Light	
Max Weight	250kg
GLAZING	
Glazing Options	Internal & External Bead
Glazing Thickness	23mm-40mm
SYSTEM FEATURES	
Single Colour	✓
Dual Colour	✓
Textured Finish	✓
Anodised Finish	✓
Multi-Point Locking	✓
Smoke Vent Compliance	✓
Sightline (Frame to Vent)	75mm
Sightline (Vent to Mullion)	89mm
Sightline (Fixed Light)	43mm

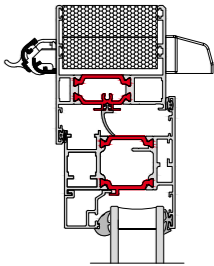
CAD CROSS SECTIONS AND THERMAL PROFILE

Additional details are available on request.

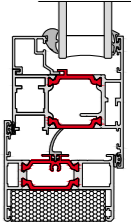
58BW Mullion Transom



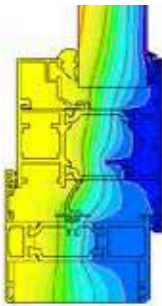
58BW Head



58BW Cill



58BW Thermal Profile



58BW ST Steel Replacement System

Ideal for projects where planning or design requires the installation of sympathetic materials, our 58BW ST Steel Replacement Window System provides the look of steel with the benefits of aluminium. Designed to replace and complement existing steel windows, the range has been specifically developed for use on listed buildings, warehouses and similar buildings, where steel windows have always traditionally been fitted.

Available in a wide range of styles including Top Hung, Side Hung, Fixed Light and French Casement, the system cleverly replicates the narrow sight lines associated with steel windows whilst providing superior performance and security. The system also includes hardware that is sympathetic to traditional steel window designs.

The range is available in a wide range of standard and RAL colours. Anodised finishes are also available, with marine grade guarantees on request.

DESIGN FEATURES

- › Slim sightlines to match existing steel windows
- › Internally and externally beaded for ease of site glazing on high-rise applications
- › Unique polyamide thermal break design to improve performance
- › Integrated deep head profiles for ease of trickle ventilation
- › Accommodates standard hardware including friction stays and shoot bolt locking
- › Certified under the Secured By Design scheme
- › Ideal for Heritage, Listed Buildings and steel window replacements

OPTIONS

- › Accommodates up to 28mm 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
- › Four different sash profiles to acheive design and planning permission requirements
- › Available in single or dual colour polyester powder coating, texture and anodised finishes



SPECIFICATIONS

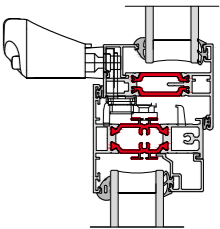
PERFORMANCE AND ACCREDITATIONS	
U-Value (Double Glazing) (Ug: 1.0 W/m²K)	1.4 W/m²K
U-Value (Triple Glazing) (Ug: 0.7 W/m²K)	1.2 W/m²K
Window Energy Rating (WER)	A – B
BRE Green Guide Rating	A rated
Air Permeability	Class 4 (600 Pa)
Water Tightness	Class 9a (600 Pa)
Wind Resistance	Class E2400 (2400 Pa)
Acoustic Performance	Rw (C;Ctr) 43 (-2;-5) dB
Security	PAS 24 & SBD
3rd Party Certification Q-Mark	✓
SYSTEM	
Depth	58mm & 70mm
CONFIGURATIONS	
Opening	Open-Out
Top Hung	✓
Side Hung	✓
Bottom Hung	✓
Fixed Light	✓
Multi-Light	✓
SIZE AND WEIGHT LIMITS	
Top Hung	
Max Size (mm)	1400w x 1200h
Min. Size (mm)	350w x 250h
Max Weight	35kg
Side Hung	
Max Size (mm)	700w x 1400h
Min. Size (mm)	300w x 350h
Max Weight	26kg
Bottom Hung	
Max Size (mm)	-
Min. Size (mm)	-
Max Weight	50kg (2 hinges)
Fixed Light	
Max Size (mm)	-
Min. Size (mm)	-
Max Weight	250kg
GLAZING	
Glazing Options	Internal & external
Glazing Thickness**	25mm-28mm
SYSTEM FEATURES	
Single Colour	✓
Dual Colour	✓
Textured Finish	✓
Anodised Finish	✓
Multi-Point Locking	✓
Sightline (Frame To Vent)	66mm
Sightline (Vent To Mullion)	79mm
Sightline (Fixed Light)	43mm

**Glazing thickness: Other thicknesses may be possible dependant on profile combinations specified. Fabricators should refer to AluK technical manual glazing section for details.

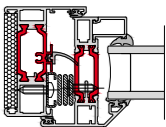
CAD CROSS SECTIONS AND THERMAL PROFILE

Additional details are available on request.

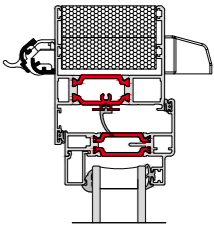
58BW ST Flat



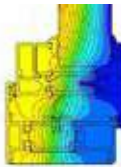
58BW ST Jamb



58BW ST Head



58BW ST Thermal Profile



Student Accommodation Window

The Student Accommodation Window System is uniquely designed to create uniform interfaced details. Ideal for both low-rise and high-rise projects that require purge ventilation, the system can use a range of ventilation inserts including: perforated panels, grills, aluminium louvres and timber slats, as well as bespoke design panels.

Designed in line with the 58BW windows series, the system maintains the same high performance, sightlines and aesthetics and can be integrated with all AluK systems.

DESIGN FEATURES

- › No mechanical fixings required for the louvre, which is held within the glazing rebate – a much more robust detail for fixing opposed to bolted solutions
- › Certified under the Secured By Design scheme
- › Inward opening
- › Maintains the same sightlines as the 58BW series
- › Integrated with AluK systems
- › 94mm frame depth
- › Concealed hardware (no visible hinges)
- › Multi-point locking
- › Ease of on-site installation due to the integrated ventilation insert panel within the design

OPTIONS

- › Available for Lifetime Homes (LFT)
- › Ventilation insert options include: perforated panels, grills, louvres, timber slats and bespoke design ventilation panels
- › Configurations include Tilt-Before-Turn, Side Hung and Bottom Hung
- › Multi-point locking
- › Glazing 24mm–40mm
- › Available in single or dual colour polyester powder coating, texture and anodised finishes

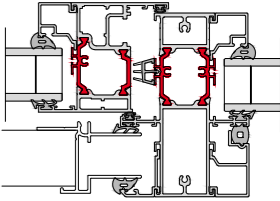
SPECIFICATIONS

PERFORMANCE AND ACCREDITATIONS	
U-Value (Double Glazing) (Ug: 1.0W/m2K)	1.6 W/m²K
U-Value (Triple Glazing) (Ug: 0.7 W/m2K)	1.4 W/m²K
BRE Green Guide Rating	-
Air Permeability	Class 4 (600 Pa)
Water Tightness	Class 8a (450 Pa)
Wind Resistance	Class E2400 (2400 Pa)
Acoustic Performance	-
Weather Performance	(BS 6375: 1-3)
Security	PAS 24 & SBD
3rd Party Certification Q-Mark	✓
SYSTEM	
Depth	97mm
CONFIGURATIONS	
Opening	Open-in
Side Hung	✓
Bottom Hung	✓
Tilt & Turn	✓
Fixed Light	✓
SIZE AND WEIGHT LIMITS	
Side Hung	
Max Size (mm)	1725w x 2300h
Min Size (mm)	380w x 575h
Max Sash Area	3m²
Max Weight	100kg
Bottom Hung	
Max Size (mm)	1725w x 2300h
Min Size (mm)	380w x 575h
Max Sash Area	3m²
Max Weight	100kg
Tilt & Turn	
Max Size (mm)	1725w x 2300h
Min Size (mm)	380w x 575h
Max Sash Area	3m²
Max Weight	150kg
GLAZING	
Glazing Thickness	24mm – 40mm
SYSTEM FEATURES	
Single Colour	✓
Dual Colour	✓
Textured Finish	✓
Anodised Finish	✓
Punched Out Openings	✓
100mm Restriction	In Tilt Mode or with Separate Restrictor Fitted
Trickle Ventilation	✓
Multi-Point / Single Locking	Wrap Around Perimeter Locking
Standard Hardware Groove	Euro Groove
Locking Handles	✓
Hinges	Concealed Hinges

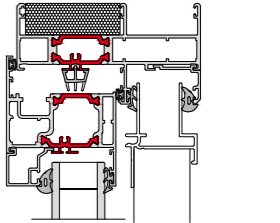
CAD CROSS SECTIONS AND THERMAL PROFILE

Additional details are available on request.

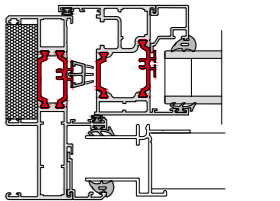
Student Accommodation Window Mullion



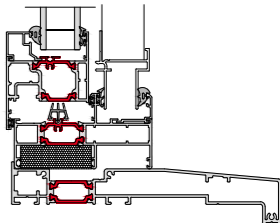
Student Accommodation Window Head



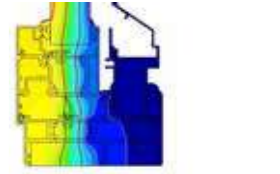
Student Accommodation Window Jamb



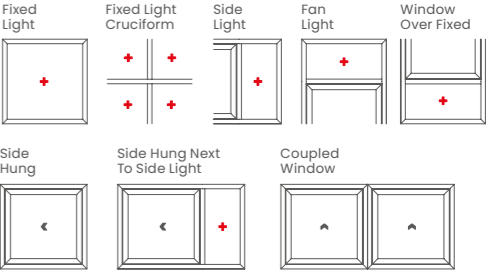
Student Accommodation Window Cill



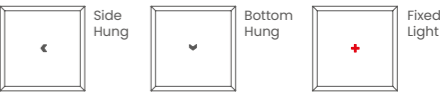
Student Accommodation Window Thermal Profile



CONFIGURATIONS



KEY



Case Study

Far Gosford Student Accommodation



New student accommodation complex Far Gosford Street is an iconic development in a historic area of Coventry which has been a focus of recent regeneration work, and is now home to around 300 University students, alongside new restaurant and retail space.

This contemporary development, with its striking, curved facade showcases AluK's 58BW Student Accommodation windows and GT55 TB commercial doors. The project was supplied and installed by commercial fabricators, EYG Commercial over a 3 month period. Delivered for client, Unite, the scheme comprised of a student

accommodation building with 286 rooms and three commercial units at ground floor level. The student accommodation area at ground floor consists of a main reception area & office, common room & games area, quiet study room, laundry and waste facilities as well as an internal and external cycle stores.

Entrance Doors and Ground Floor Treatments

For over six decades we have worked across the UK and around the globe to deliver performance-driven aluminium solutions. Our wealth of experience means we understand the challenges of modern building construction, and that every project demands a unique solution.

Our commitment to delivering innovative, bespoke systems has seen us recognised as an industry leader in the design and manufacture of aluminium doors.

AluK systems are widely used across a range of sector applications including: healthcare, education, accommodation, multi-residential, leisure and retail. Our aluminium doors are inherently strong and offer exceptional flexibility, reliability and security. They are also near maintenance-free and can last up to six times longer than other building materials, helping you meet ever-tightening building and environmental legislation.

Each and every one of our systems is certified under the Secured By Design scheme managed by the UK Association of Chief Police Officers. All feature high quality multi-point locking mechanisms in addition to a wealth of other leading security features for added peace of mind. This, coupled with the natural strength of aluminium itself, ensures our doors are among the most robust and secure available on the market today.

A wide variety of configurations, functions and design features are available when specifying, guaranteed to both enhance and complement your designs. Our dedicated project team will also work closely with you to provide a bespoke specification that meets your unique performance requirements.

**THIS ENSURES YOU HAVE THE
FREEDOM TO BRING COMMERCIAL
AND RESIDENTIAL DESIGNS TO LIFE
WITHOUT EVER COMPROMISING
PERFORMANCE FOR STYLE, OR
AESTHETICS FOR EFFICIENCY.**



GT55 TB Commercial Door

An effective choice for shop fronts, entrances and ground floor treatments, the GT55 TB provides exceptional security and performance. Delivering high levels of energy efficiency thanks to its thermally broken profiles, the system has been designed in a ladder frame construction to provide a flexible solution for low-rise glazing applications. This means sealed units of 6mm up to 28mm can be accommodated to improve thermal and acoustic performance.

The system offers PAS 24 rating and is Secured By Design-accredited across a suite of configurations including single and double doors, screening, and side and fan lights. It also features a range of PAS 24 hardware including panic, mechanical and electro-mechanical locking for both single and double doors. Easily integrated with other AluK systems, the GT55 TB includes an integrated range of high traffic, anti-finger trap doors suitable for single storey applications.

DESIGN FEATURES

- ▶ Pocket or bead glazed for ease of site glazing
- ▶ 110mm frame depth to accommodate varying types of applications
- ▶ Slim 55mm profile width for increased glazing and light transmission
- ▶ Fully compatible with other AluK systems
- ▶ Mullion drainage options
- ▶ The most comprehensive PAS 24 and Secured By Design certified system on the market today
- ▶ Robust mechanical connection detail between rail and stile for ultimate strength in high traffic environments
- ▶ GT55 TB can be used to create louvred and panelled doors with a variation of inserts

OPTIONS

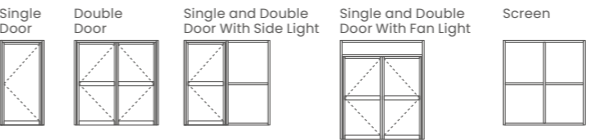
- ▶ Wide range of hardware available offering full customisation
- ▶ Available in single or dual colour polyester powder coating, texture and anodised finishes
- ▶ Ability to accommodate various architectural pull handles from other manufacturers



SPECIFICATIONS

	SINGLE	DOUBLE	GT55 TB SCREENING
PERFORMANCE AND ACCREDITATIONS			
U-Value (Double Glazing) (Ug: 1.0 W/m²K)	1.9 W/m²K	1.8 W/m²K	1.3 W/m²K
U-Value (Triple Glazing) (Ug: 0.7 W/m²K)	1.7 W/m²K	1.6 W/m²K	1.1 W/m²K
Air Permeability	-	-	Class 4 (600 Pa)
Water Tightness	-	-	Class E1200 (1200 Pa)
Wind Resistance	-	-	Class B4 (1600 Pa)
Durability EN 1191 Category	50,000 Cycles	50,000 Cycles	-
Security	PAS 24 & SBD	PAS 24 & SBD	PAS 24 & SBD
3rd Party Certification Q-Mark	✓	✓	✓
SYSTEM			
Depth	110mm	110mm	110mm
SIZE AND WEIGHT LIMITS			
Maximum Door Leaf Size (mm)	1250w x 2400h	2500w x 2400h	-
Maximum Door Leaf Weight	110kg	110kg	-
GLAZING			
Glazing Thickness (Single Glazing)	-	-	6mm - 12mm
Glazing Thickness (Double Glazing)	24mm - 40mm	24mm - 40mm	24mm - 30mm
SYSTEM FEATURES			
Single Colour	✓	✓	✓
Dual Colour	✓	✓	✓
Textured Finish	✓	✓	✓
Anodised Finish	✓	✓	✓
Thermally Broken	✓	✓	✓
Fire Exit option	✓	✓	✓
Part M compliant low threshold	✓	✓	-
Part M compliant closer	✓	✓	✓
Anti-Finger Trap	✓	✓	-
Sightlines	145mm	176mm	55mm
Mid-Rail and Lay Bar	✓	✓	✓
Panel Door	✓	✓	-
Multi-Point Locking	✓	✓	-
Single Point Locking	✓	✓	-
Concealed Hinges	✓	✓	-
Barrel Hinges	x	x	-
Electro Mechanical Locking	✓	✓	-
APPLICATIONS			
New Build - Residential	✓	✓	✓
New Build - Commercial	✓	✓	✓
Refurbishment	✓	✓	✓
Heavy Commercial	✓	✓	✓

SBD CONFIGURATIONS

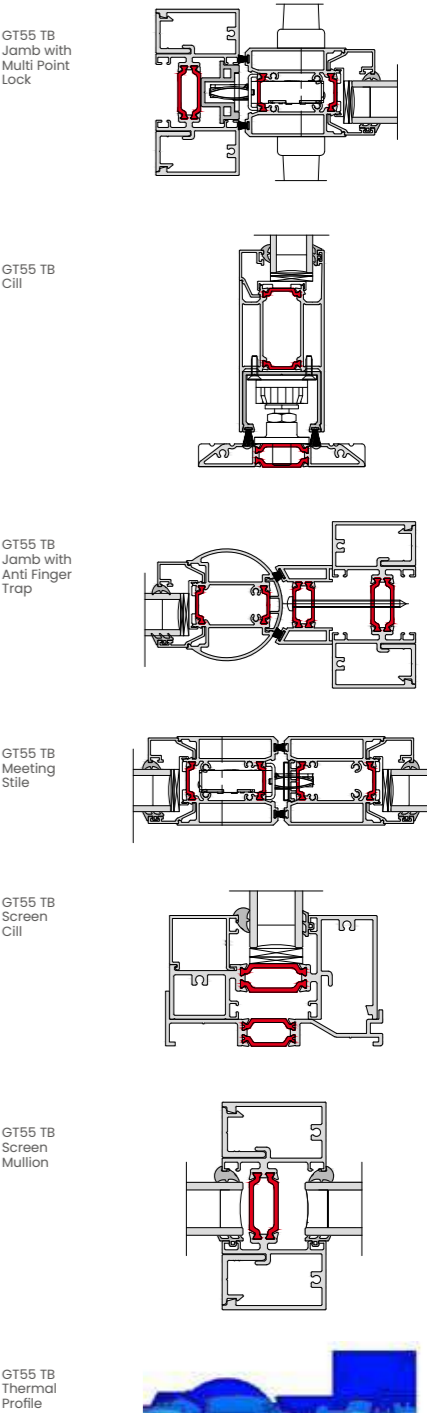


PAS 24 SECURITY RATED LOCK

ALUK PART REF	SINGLE DOOR					DOUBLE DOOR			
	RELEVANT	MIN (W)	MIN (H)	MAX (W)	MAX (H)	MIN (W)	MIN (H)	MAX (W)	MAX (H)
Electronic access locking	1,2,3,4,5	500	-	1200	2400	500	-	1200	2400
Panic Doors (Dorma)	1,2,3,4,5	500	-	1200	2400	500	-	1200	2400
Electronic access panic doors (Dorma)	1,2,3,4,5	500	-	1200	2400	500	-	1200	2400
Panic Doors (Sentinel)	1,3,5	500	1882*	1200	2400	Not available for Double Door			
Manual locking	1,2,3,4,5	500	1882*	1000	2400	500	1882*	1000	2400

CAD CROSS SECTIONS AND THERMAL PROFILE

Additional details are available on request.





58BD Door System

Suitable for both new build and refurbishment projects, the 58BD is ideal for light and medium-duty use and is available in a wide range of styles and formats. Designed for optimal security and flexibility, every door in the range is available in single and double configurations.

Certified under Secured By Design and fully PAS 24 tested, the system includes glazing options of 24mm–40mm with two frame depths available: 58mm or 70mm. The 58BD is available in single or dual colour options, with a choice of anodised finishes also available.



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
- › Suites with window profile to give ultimate design flexibility
- › Slim profile design

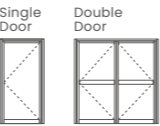
OPTIONS

- › Glazing 24mm–40mm
- › Available in two frame depths, 58mm or 70mm, to accommodate varying types of applications
- › Available in single or dual colour polyester powder coating, texture and anodised finishes
- › Available for new build or refurbishment projects
- › Available in single or double door configuration
- › Available in open-in and open-out options

SPECIFICATIONS

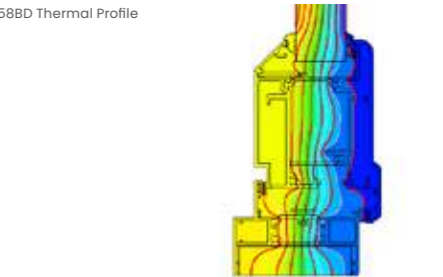
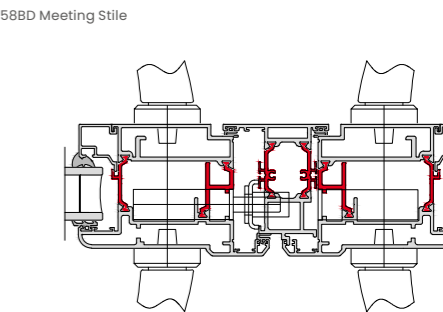
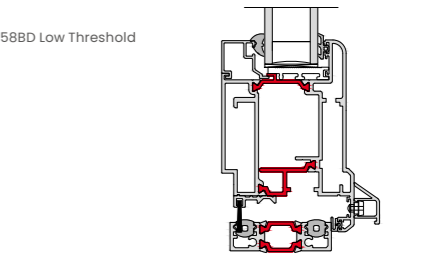
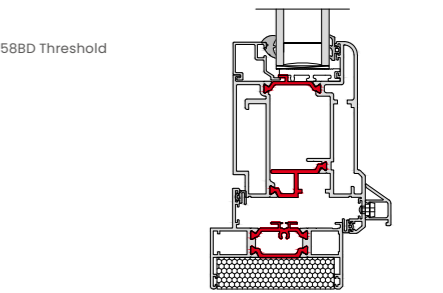
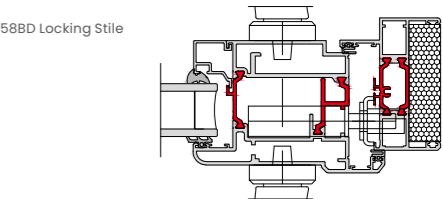
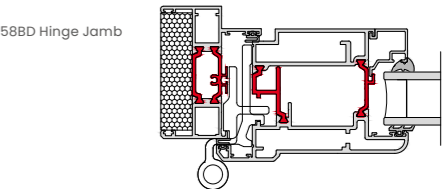
	SINGLE OPEN-IN	SINGLE OPEN-OUT	DOUBLE OPEN-IN	DOUBLE OPEN-OUT
PERFORMANCE AND ACCREDITATIONS				
U-Value (Double Glazing) (Ug: 1.0 W/m²K)	1.7 W/m²K	1.7 W/m²K	1.7 W/m²K	1.7 W/m²K
U-Value (Triple Glazing) (Ug: 0.7 W/m²K)	1.4 W/m²K	1.4 W/m²K	1.5 W/m²K	1.5 W/m²K
Air Permeability	Class 4 (600 Pa)	Class 4 (600 Pa)	Class 2 (300 Pa)	Class 2 (300 Pa)
Water Tightness	Class 3a (100 Pa)	Class 7a (300 Pa)	Class 7a (300 Pa)	Class 9a (600 Pa)
Wind Resistance	Class A3 (1200 Pa)	Class AE2400 (2400 Pa)	Class A2400 (2400 Pa)	Class A2400 (2400 Pa)
Building Regulations Part L Compliant	✓	✓	✓	✓
Building Regulations Part M Compliant	✓	✓	✓	✓
Security	PAS 24 & SBD	PAS 24 & SBD	PAS 24 & SBD	PAS 24 & SBD
Durability EN1191 Category	50,000 Cycles	50,000 Cycles	50,000 Cycles	50,000 Cycles
3rd Party Certification Q-Mark	✓	✓	✓	✓
SYSTEM				
Depth	58mm – 70mm	58mm – 70mm	58mm – 70mm	58mm – 70mm
SIZE AND WEIGHT LIMITS				
Maximum Door Size (mm)	1200w x 2400h	1200w x 2400h	2400w x 2400h	2400w x 2400h
Maximum Door Weight	3 Hinges 67.5kg 4 Hinges 90kg	3 Hinges 67.5kg 4 Hinges 90kg	3 Hinges 67.5kg 4 Hinges 90kg	3 Hinges 67.5kg 4 Hinges 90kg
GLAZING				
Glazing Thickness	24mm–40mm	24mm–40mm	24mm–40mm	24mm–40mm
SYSTEM FEATURES				
Single Colour	✓	✓	✓	✓
Dual Colour	✓	✓	✓	✓
Textured Finish	✓	✓	✓	✓
Anodised Finish	✓	✓	✓	✓
Thermally Broken	✓	✓	✓	✓
Sightline (Head)	129.5mm	129.5mm	129.5mm	129.5mm
Sightline (Cill)	111mm	111mm	111mm	111mm
Sightline (Jamb)	129.5mm	129.5mm	129.5mm	129.5mm
Sightline (Meeting Stile)	n/a	n/a	209.5mm	209.5mm
Panel Door	✓	✓	✓	✓
Multi-Point Locking	✓	✓	✓	✓
Barrel Hinges	✓	✓	✓	✓
Low Threshold	✓	✓	✓	✓
APPLICATIONS				
New Build	✓	✓	✓	✓
Refurbishment	✓	✓	✓	✓

CONFIGURATIONS



CAD CROSS SECTIONS AND THERMAL PROFILE

Additional details are available on request.



Case Study

Pitville Campus



The University of Gloucestershire faced tough local opposition when they wanted to create a new £38m student accommodation campus in the heart of historic Cheltenham. As a result, the architects Willmore Isles of Bristol had to work closely with the local planners to demonstrate a design for the Pittville Campus which was sympathetic to the

surrounding buildings and would sit comfortably within the streetscape. Our AluK aluminium window and door systems were integral to that design, providing a timeless, contemporary aesthetic which suited both the refurbished and new build areas of the development, faced largely in honey coloured brickwork. Products included;

top swing casement windows in the 58BW system for the 577 student rooms, commercial entrance doors and fire exits in the GT55 TB door system for the eight separate accommodation blocks, and curtain walling for the refurbished communal areas in the SL52 aluminium curtain walling system. All were specified in a smooth anthracite grey finish.

Sliding Door Systems

Our sliding aluminium door systems provide a highly versatile way of bringing together indoor and outdoor spaces.

Combining narrow profiles and high thermal efficiency, all of our systems create wide expanses that flood spaces with natural light. This ensures you have the freedom to bring your designs to life without ever compromising performance for style, or aesthetics for efficiency.

As with our other products, security and reliability remains a key driver in every one of our designs. Concealed mechanisms, burglary-resistant locks and class-leading water tightness are just some of the features available that will ensure your designs surpass industry standards.

COMBINING NARROW PROFILES
AND HIGH THERMAL EFFICIENCY,
ALL OF OUR SYSTEMS CREATE
WIDE EXPANSES THAT FLOOD
SPACES WITH NATURAL LIGHT,
WHILE MAINTAINING INTERNAL
TEMPERATURES AT ALL TIMES.

SC156 Lift and Slide Door System

The premium SC156 Door has been designed to meet the demands of projects that require the highest levels of thermal and weathering performance. Delivering a U-Value of 1.0W/m²K (triple glazed), alongside superior water tightness of (1500 Pa), this highly sought-after system delivers enhanced capability without sacrificing style.

The elegant design features a slim interlock of 50mm and have been specifically created to provide greater design flexibility by enabling larger glazing areas to be achieved. The system's Lift and Slide technology uses high quality fittings that both ensure ease of operation and enables panel weights of up to 400kg to be incorporated into designs.

The SC156 is PAS 24-accredited and available in a range of configurations and options.

DESIGN FEATURES

- › Lift and Slide for smooth operation
- › PAS 24 Accredited
- › Exceptional AWW ratings
- › Low threshold of 23mm
- › Max 400kg panel weight

OPTIONS

- › Slimmer sightline of 50mm interlock
- › Accepts 24mm – 50mm double or triple glazing
- › Multiple sliding configurations
- › Mono or Dual rail options
- › Range of hardware and security features
- › Available in a range of single and dual colours, textured and anodised finishes

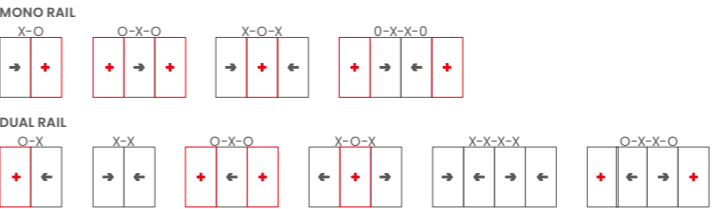


SPECIFICATIONS

	SC156	SC156 SLIM
PERFORMANCE AND ACCREDITATIONS		
U-value (Double Glazing) (Ug = 1.0 W/m²K) (Mono Rail)	1.4 W/m²K	1.4 W/m²K
U-value (Triple Glazing) (Ug = 0.6 W/m²K) (Mono Rail)	1.0 W/m²K	1.0 W/m²K
U-value (Double Glazing) (Ug = 1.0 W/m²K) (Dual Rail)	1.5 W/m²K	1.6 W/m²K
U-value (Triple Glazing) (Ug = 0.6 W/m²K) (Dual Rail)	1.2 W/m²K	1.3 W/m²K
Air Permeability	Class 4 (600 Pa)	Class 4 (600 Pa)
Water Tightness	Class E1500 (1500Pa)	Class E1500 (1500Pa)
Wind Resistance	Class 4 (1600 Pa)	Class 4 (1600 Pa)
Acoustic Performance	Rw(Ct;Ctr) = 44 (-2;-6) dB	Rw(Ct;Ctr) = 44 (-2;-6) dB
Security	PAS 24	PAS 24
SYSTEM		
Depth	156mm	156mm
CONFIGURATIONS		
Opening	Lift & Slide	Lift & Slide
Mono Rail	✓	✓
Dual Rail	✓	✓
SIZE AND WEIGHT LIMITS		
Max Frame Height	3100mm	3100mm
Max Vent Height	3100mm	3100mm
Max Vent Width	2700mm	2700mm
Max Vent Weight*	300kg	300kg
GLAZING		
Glazing Options	Internal	Internal
Glazing Thickness	24mm-50mm	24mm-50mm
SYSTEM FEATURES		
Single Colour	✓	✓
Dual Colour	✓	✓
Textured Finish	✓	✓
Anodised Finish	✓	✓
Multi-Point Locking	✓	✓
Threshold	23mm	23mm
Sightlines	95mm	50mm

* 300kg on standard roller sets, 400kg with additional roller set

CONFIGURATIONS



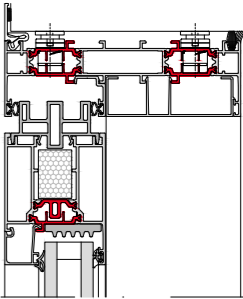
KEY



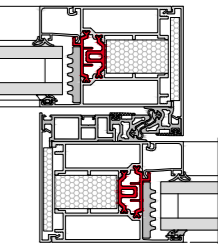
CAD CROSS SECTIONS AND THERMAL PROFILE

Additional details are available on request.

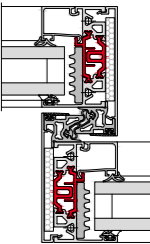
SC156 Head



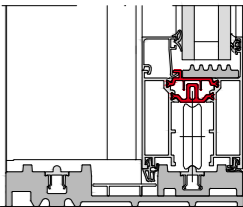
SC156 Interlock



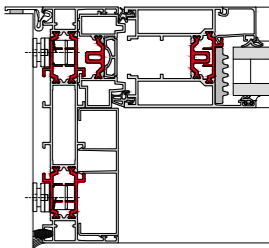
SC156 Interlock Slim



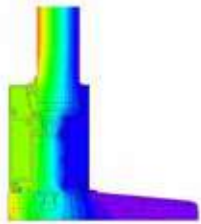
SC156 Cill



SC156 Jamb



SC156 Thermal Profile



Folding Door Systems

We have developed a series of strong, lightweight and thermally broken folding door systems that enable the opening of large expanses and consequently brings together indoor and outdoor living spaces. This allows specifiers to design spaces that truly engage with their surroundings.

We also believe aesthetics should never compromise performance, which is why all our folding door systems have been designed to create living and working environments that are comfortable and efficient in equal measure.

As with all AluK products, security and reliability remains a key driver in our folding door systems. All have been rigorously tried and tested to exceed industry standards in terms of weather and water tightness, and are certified under the Secured By Design scheme.

OUR FOLDING DOOR SYSTEMS
BOAST THE HIGHEST STANDARDS
OF BOTH FORM AND FUNCTION,
DELIVERING LIVING AND WORKING
ENVIRONMENTS THAT ARE
COMFORTABLE AND EFFICIENT
IN EQUAL MEASURE.



F82 Folding Door System

The F82 Folding Door System puts high performance and security front of mind, offering a wide range of configurations to support the bespoke requirements of your project. Multiple doors can be combined with open-in or open-out options in a variety of styles to create a wide expanse of opening.

The system is fully PAS 24 and Secured By Design-accredited, making it Document Q compliant. The full frame and cill have been designed to create a slimmer, symmetrical frame of 97mm combined with a reduced interlock sightline of 122mm, providing larger glazing areas without compromising performance. Thermal U-Values of 1.3 W/m2K (double glazed) and 0.9 W/m²K (triple glazed) assist with meeting the latest energy efficiency requirements.

Other key design features include a flush pop-out handle and contemporary traffic door handles. A new floating corner offers a true inside-out design, while the 110mm mid rail allows the creation of transoms in the door or solid panels in single and double doors for a uniform aesthetic.

DESIGN FEATURES

- Unique pop-up handle, cycle tested to 25,000 operations for up to 80 years of reliable use
- Integrated cill profile clips onto the outer frame sides, reducing sightlines
- Heavy-duty stainless steel compact rollers as standard
- Full symmetrical frame sightline of 97mm
- 122mm slimline interlock
- Larger glazing area

OPTIONS

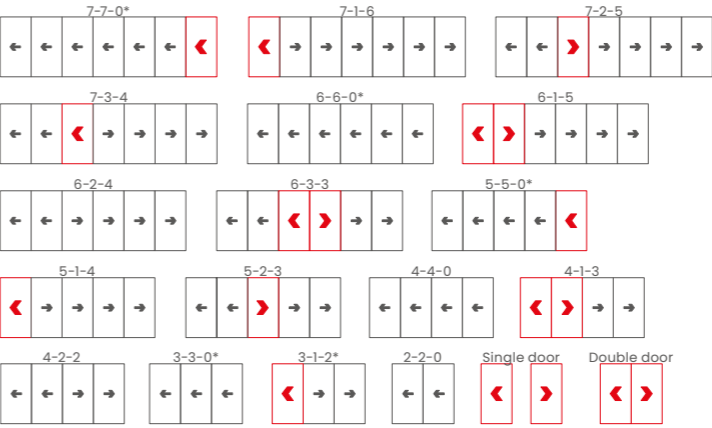
- Square bead
- Glazing sizing range of 28mm-44mm
- Available in a range of opening configurations, including a floating corner
- Available in single or dual colour polyester powder coating, texture and anodised finishes
- All configurations available open-in and open-out
- 110mm midrail - make single or double doors using transoms or solid panels
- New sub cill range - position onto varying widths of construction using the 225mm, 150mm or 95mm options



SPECIFICATIONS

	OPEN-IN	OPEN-OUT
PERFORMANCE AND ACCREDITATIONS		
U-Value (Double Glazing) (Ug: 1.0 W/m²K)	1.3 W/m²K	1.3 W/m²K
U-Value (Triple Glazing) (Ug: 0.5 W/m²K)	0.9 W/m²K	0.9 W/m²K
Air Permeability (Standard Threshold)	Class 3 (600 Pa)	Class 4 (600 Pa)
Water Tightness (Standard Threshold)	Class 5a (200Pa)	Class E900 (900 Pa)
Wind Resistance	Class B3 (1200Pa)	B3 (1200 Pa)
Security	PAS 24 & SBD	PAS 24 & SBD
SYSTEM		
Depth	82mm	82mm
SIZE AND WEIGHT LIMITS		
Max Leaf Height	2500mm std > 3000mm*	2500mm std > 3000mm*
Max Leaf Width	1200mm	1200mm
Max Vent Weight	150kg	150kg
GLAZING		
Glazing Options	Internal Bead	Internal Bead
Glazing Thickness	28mm - 44mm	28mm - 44mm
SYSTEM FEATURES		
Single Colour	✓	✓
Dual Colour	✓	✓
Textured Finish	✓	✓
Anodised Finish	✓	✓
Multi-Point Locking	✓	✓
Sightline (Head)	97mm	97mm
Sightline (Cill)	97mm	97mm
Sightline (Jamb)	97mm	97mm
Sightline (Interlock)	122mm	122mm

CONFIGURATIONS



*Opposite handling available on all configurations. For more options, refer to the Technical Manual.

KEY



OTHER OPTIONS AVAILABLE

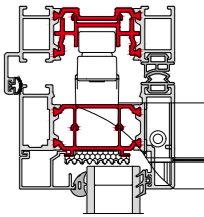


*The maximum height and panel width for the F82 Folding Sliding Door System are co-dependent and also dictated by the design wind load where the doors are being installed. Based on the site design wind load that the doors are subjected to this will influence the maximum height and width [per panel] to which the doors can be manufactured.

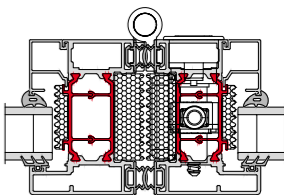
CAD CROSS SECTIONS AND THERMAL PROFILE

Additional details are available on request.

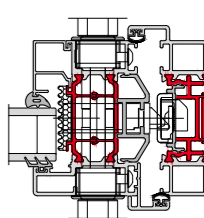
F82 Head



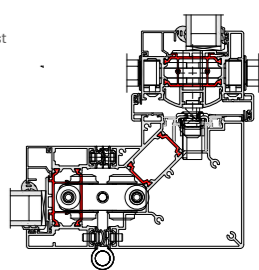
F82 Interlock



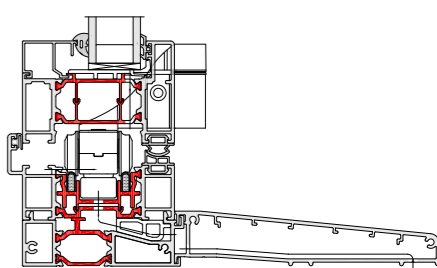
F82 Locking Jamb



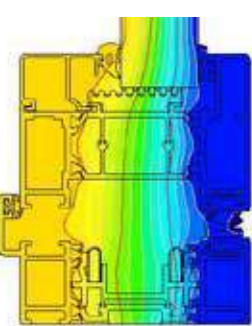
F82 Floating Corner Post



F82 Cill



F82 Thermal Profile





BSF70 Folding Door System

The BSF70 Folding Door System gives maximum control over the style and operation of the doors. Multiple panels can be added to accommodate the unique design specifications of the building, with the option to open-in or out as required. The system's narrow profile ensures that maximum glazing is achieved, flooding spaces with natural light.

In addition to the inherent strength of aluminium, the BSF70 combines security hinges and locking mechanisms with a unique heavy-duty roller design to provide the security and reliability demanded in high traffic applications. The system also incorporates a pop out T-handle design that allows for square flush stacking panels when doors are fully open.



DESIGN FEATURES

- › Internally beaded with a softline or square detail to all external doors and panels
- › Four stainless steel wheels ensures smooth and consistent operation
- › Unique, flush line pop-out handle that allows maximum door opening and square stacking of panels
- › Tested to PAS 24 and certified under the Secured By Design scheme

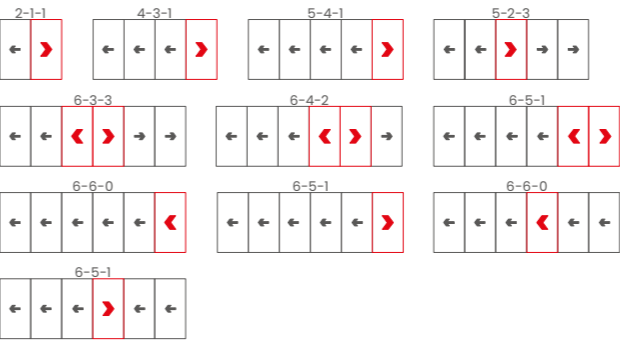
OPTIONS

- › Heavy-duty roller options
- › Chamfered and square bead options
- › Low threshold option that can be configured to achieve DDA and Part M compliance
- › Doors and panels can be used in a variety of configurations, style and design
- › All configurations are available in both open-in and open-out options
- › Full range of bespoke hardware available
- › Glazing sizing range of 24mm-40mm
- › Available in single or dual colour polyester powder coating, texture and anodised finishes

SPECIFICATIONS

	BSF70	BSF70 HD
PERFORMANCE AND ACCREDITATIONS		
U-Value (Double Glazing) (Ug: 1.0 W/m²K)	1.6 W/m²K	1.6 W/m²K
U-Value (Triple Glazing) (Ug: 0.7 W/m²K)	1.4 W/m²K	1.4 W/m²K
Air Permeability (Standard Threshold)	Class 4 (600 Pa)	Class 4 (600 Pa)
Water Tightness (Standard Threshold)	Class 9a (600 Pa)	Class 9a (600 Pa)
Wind Resistance	Class AE2400 (2400 Pa)	Class AE2400 (2400 Pa)
Security	PAS 24 & SBD	PAS 24 & SBD
Cycle Testing	50,000	50,000
3rd Party Certification Q-Mark	✓	✓
SYSTEM		
Depth	70mm	70mm
CONFIGURATIONS		
Opening	Open-In & Open-Out	Open-In & Open-Out
SIZE AND WEIGHT LIMITS		
Max Leaf Height	2400mm	2400mm
Max Leaf Width	1200mm	1200mm
Max Vent Weight	100kg	130kg
GLAZING		
Glazing Options	Internal Bead	Internal Bead
Glazing Thickness	24mm-40mm	24mm-40mm
SYSTEM FEATURES		
Single Colour	✓	✓
Dual Colour	✓	✓
Textured Finish	✓	✓
Anodised Finish	✓	✓
Multi-Point Locking	✓	✓
Sightline (Head)	110mm	110mm
Sightline (Cill)	130mm	130mm
Sightline (Jamb)	110mm	110mm
Sightline (Meeting Stile)	140mm	140mm

CONFIGURATIONS



KEY



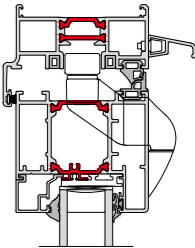
OTHER OPTIONS AVAILABLE



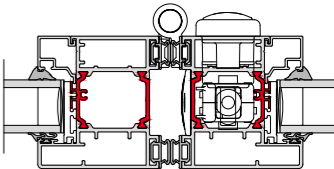
CAD CROSS SECTIONS AND THERMAL PROFILE

Additional details are available on request.

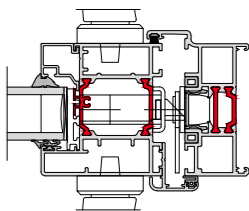
BSF70 Head



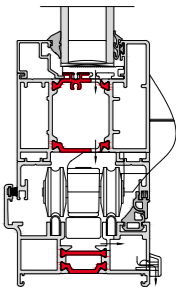
BSF70 Interlock



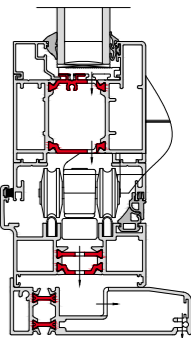
BSF70 Locking Jamb



BSF70 Face Drainage



BSF70 Cill and Subcill



BSC70 Thermal Profile



Case Study

Woodland Primary School



Built as part of the Education Funding Agency's £38 million Priority School Building Programme, Woodland Primary School first opened its aluminium doors in 2016.

AluK windows, doors and curtain walling were all chosen for the project thanks to their enhanced security and proven reliability. The slimmer sightlines

provided by the window systems also ensured classrooms were flooded with natural light, helping pupils maintain concentration for longer.

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

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

London Office:
AluK Design Studio
5-11 Worship Street
London
EC2A 2BH

Registered Number:
02881320