

SPECIFICATION GUIDE



MODERN INNOVATIVE ALUMINIUM

Designed around a wider thermal break than legacy aluminium systems, our windows and doors are designed to meet the latest requirements of the built environment. Available fully internally beaded, and packed full with clever innovation.

With matching aesthetics across all products, our systems are perfect for the most exacting projects. A modern system architecture, built around a patented corner jointing method, reduces fabrication waste and locks in quality. Designed and manufactured in the UK, by the UK's leading fenestration experts, Sheerline is available on agile lead-times, helping you meet contract schedules.

Insulated with
THERMLOCK[®]
technology

Performance
built-in as
standard

100%
aesthetically
matched
range

Patented
corner
construction

GB2569209†



Vertically
integrated UK
manufacturer

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SHEERLINE SYSTEM BENEFITS

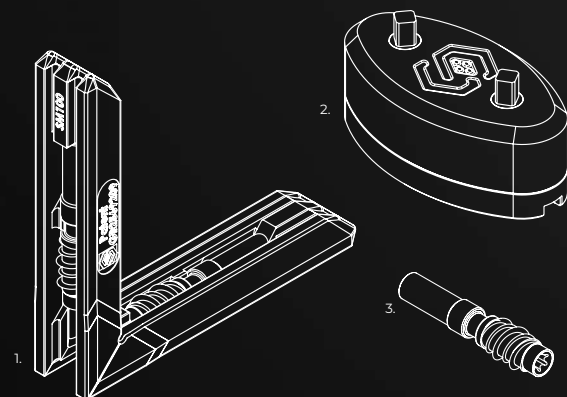
PATENTED CORNER CONSTRUCTION

Improved quality
and less waste.

Our unique, patented construction method
uses threaded screws to bind corners
tightly together in perfect unison.

This method eliminates the need for
crimping and specialised machinery
unlike other aluminium manufacturers.
Speeding up manufacturing, reducing
waste and drastically cutting down
on remedial site issues.

Our corner
construction method
also helps eliminate
misaligned frames
and stepping at
corners, allowing
sections damaged
during manufacture
to be replaced – again
reducing waste.



1. Classic Corner Cleat - manufactured in-house in a high impact polymer
2. Dual Drive for efficient fabrication 3. Stainless steel screw

CONSISTENT SYSTEM ARCHITECTURE

Across our entire range.

Many components are shared across our ranges, and
products are built from common system wide components.
Fewer components mean fewer issues, with less stock.
Reducing complexity and costs whilst increasing efficiency.



AGILE SUPPLY & DELIVERY

With greater control over our supply chain than competitors, we can offer customers more reliable supply and unbeatable service – mitigating against costly penalty clause charges.



MADE IN BRITAIN

Proudly designed and manufactured in the heart of the UK, we are passionate about every element that goes into producing the Sheerline system. We even source our aluminium directly from Wales.



VERTICALLY INTEGRATED

Since our formation, we have invested over £19 million in our state-of-the-art extrusion and powder coating facility.



**POWDER
COATED FINISH
25 YEARS**



**THERMLOCK®
PERFORMANCE
25 YEARS**



**PROFILE
INTEGRITY
25 YEARS**



**GASKET
INTEGRITY
10 YEARS**

COMPREHENSIVE GUARANTEE

Sheerline components are covered by a comprehensive guarantee*.

VERTICALLY INTEGRATED MANUFACTURE

FROM LOG TO PRESS TO PAINT TO PRODUCT,
WE MANUFACTURE EVERYTHING AT OUR SINGLE,
PURPOSE DESIGNED UK SITE.

The high level of control and agility this gives us,
translates into better quality products and a more
responsive service for our customers.

Along with the confidence that our comprehensive guarantee (detailed on
page 168) is provided by the original manufacturer of the products specified.



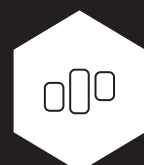
ALL DELIVERED IN HOUSE



ALL SHEERLINE ALUMINIUM SYSTEMS ARE BUILT AROUND OUR OWN UNIQUE THERMLOCK® TECHNOLOGY.

Our ultra-wide Thermlock® thermal breaks benefit from integrated multi-chambered designs, creating efficient insulation inside every Sheerline product. Far superior to smaller two-piece polyamide alternatives.

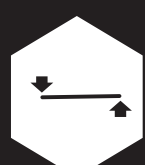
Designed and manufactured by us, Thermlock® offers almost double the insulation when compared to polyamide. Making our windows, doors, bi-folds and lanterns inherently more efficient than systems that use polyamide thermal breaks.



**MULTI
CHAMBERED
THERMAL
BREAK**



**WIDER
INTEGRATED
ONE-PIECE
DESIGN**



**RIGID AND
MORE
STABLE**



**WARMER
THAN
POLYAMIDE**

Working in conjunction with high-performance, double and triple glazing to create a thermal barrier that reduces heat transfer, Thermlock® helps keep buildings well insulated against the worst of the UK weather.



Polyamide



0.30 W/mK

THERMLOCK®



0.17 W/mK

Sheerline's cills, ancillaries and corner posts also feature this same technology combined with innovative in-built weather sealing that keep draughts and rain safely outside.

THIS ALL GOES TO MAKE SHEERLINE THE MOST THERMALLY EFFICIENT ALUMINIUM SYSTEM IN ITS CLASS.

PART L Compliant ✓

KEEPING COMPLIANCE SIMPLE

Our entire range complies with Part L regulations using standard 28mm double glazing.

Our S1 Lantern even includes a unique co-extruded perimeter seal to maintain weather-tightness.

U-VALUES*

1.4
W/(m²K)

**DOUBLE
GLAZED
U-VALUE**

1.0
W/(m²K)

**TRIPLE
GLAZED
U-VALUE**

*For Prestige and Index Ranges.

PRESTIGE RANGE

WINDOWS, DOORS, BI-FOLDS AND PATIOS

WIDE THERMLOCK®
Thermal Breaks

**UNIVERSAL
PRE-GASKETED
CLIP-IN BEADS**

that fit all products in the range
to reduce complexity and create
matching aesthetics

28, 36 & 44MM
glazing options

1.4
W/(m²K)

**DOUBLE
GLAZED**
U-VALUE

1.0
W/(m²K)

**TRIPLE
GLAZED**
U-VALUE

**FULLY INTERNALLY
GLAZED WINDOWS**

due to a patented
reverse butt joint

**SYSTEMS INCLUDE
INTEGRATED
SCREWPORTS**

for improved stability
and security

**WINDOWS FINISH
FLUSH TO CILLS**

to sit perfectly vertically
against plaster line

**CO-EXTRUDED
WEATHER SEALS**

on cills and other
ancillaries

**CHOICE OF
STEPPED AND
CONTEMPORARY
SASHES...**



**ALL SYSTEMS
FEATURE
CONCEALED
DRAINAGE FOR
IMPROVED
AESTHETICS**

CLASSIC RANGE

WINDOWS AND HERITAGE DOORS

**UNIVERSAL
ANCILLARY RANGE**

Corner posts and ancillaries
feature the same Thermlock®
technology and co-extruded
weather seals to lock-in thermal
performance and quality

28 & 36MM
glazing options

1.5
W/(m²K)

**DOUBLE
GLAZED**
U-VALUE



1.1
W/(m²K)

**TRIPLE
GLAZED**
U-VALUE



**MULTI-MATERIAL
GASKET**

Prevents shrinkage and
features low friction
coatings on bi-fold and
bubble gaskets

**BOTH SYSTEMS DESIGNED
AROUND EQUAL SIGHTLINES
AND SHADOW GAPS**

for consistent aesthetics with a consistent
6mm of cover across both systems

**CLASSIC ALSO AVAILABLE
AS A BEADLESS OPTION**

for run through mitres on internal
corners and enhanced security

**CILL COMPONENTS
CLIP TOGETHER**

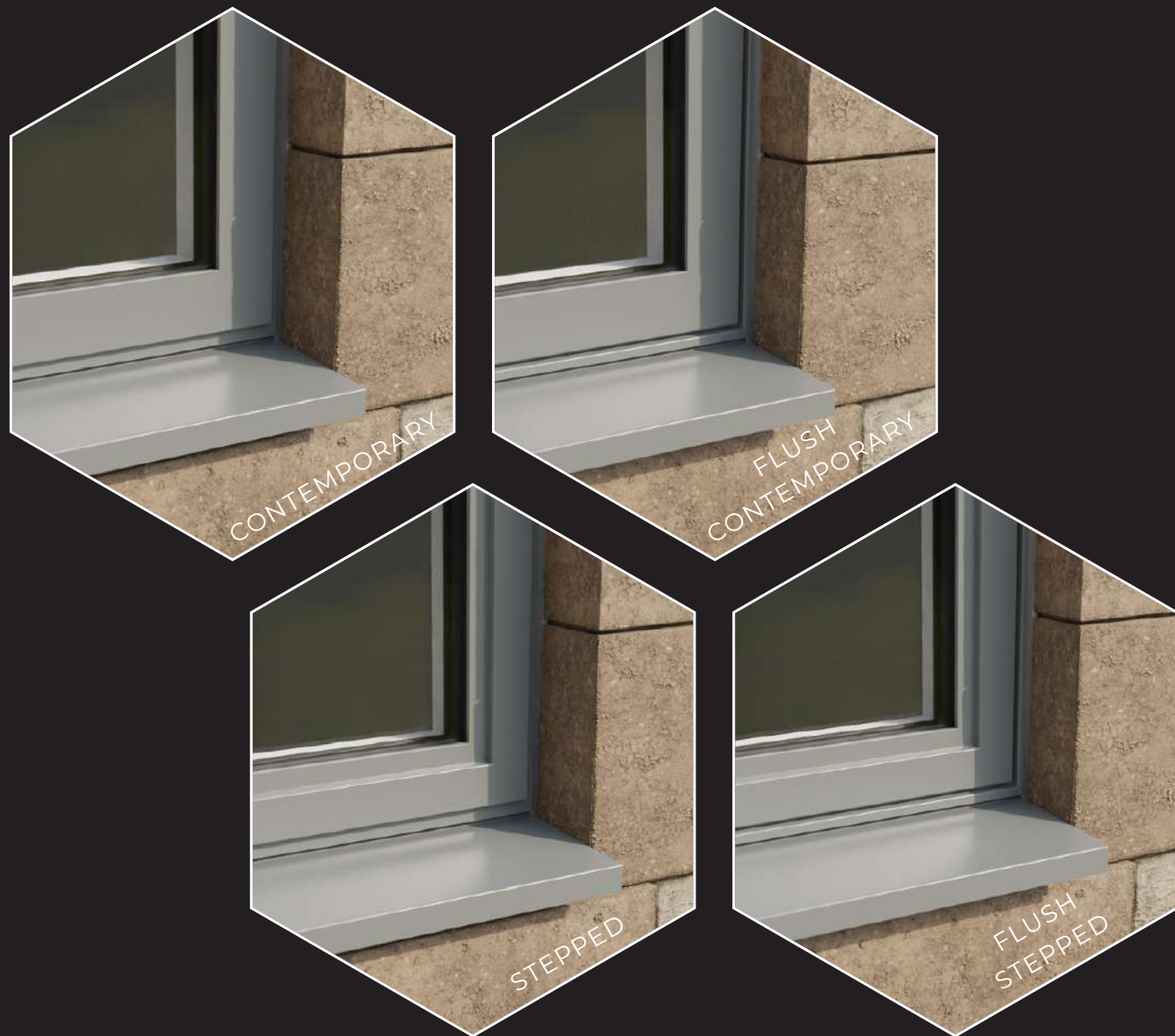
to reduce complexity. Available in stub,
standard, large and XL sizes and feature
an integrated cement key

**DIFFERENT
OUTER FRAME SIZES**

can be used together
if required

**...IN FLUSH
AND STANDARD
OUTER FRAMES**





4 STYLE OPTIONS

Whether you choose products from our Classic or Prestige range, **ALL SHEERLINE PRODUCTS ARE 100% MATCHED.**



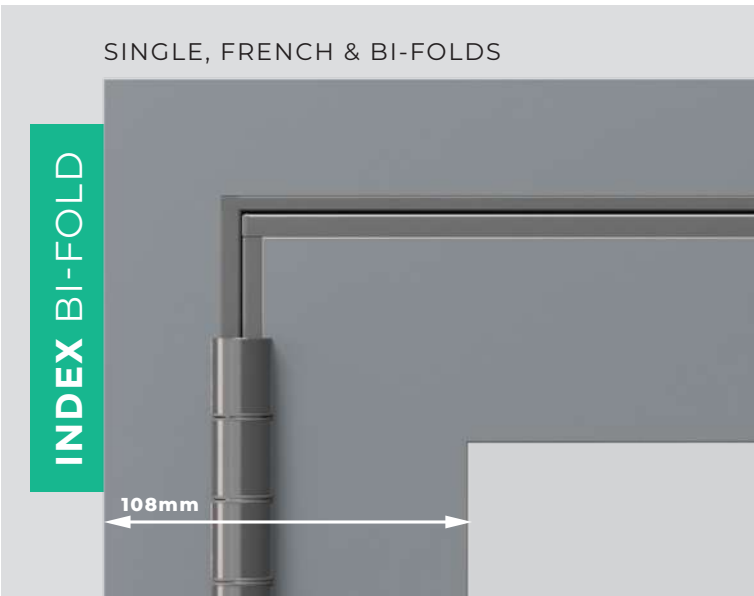
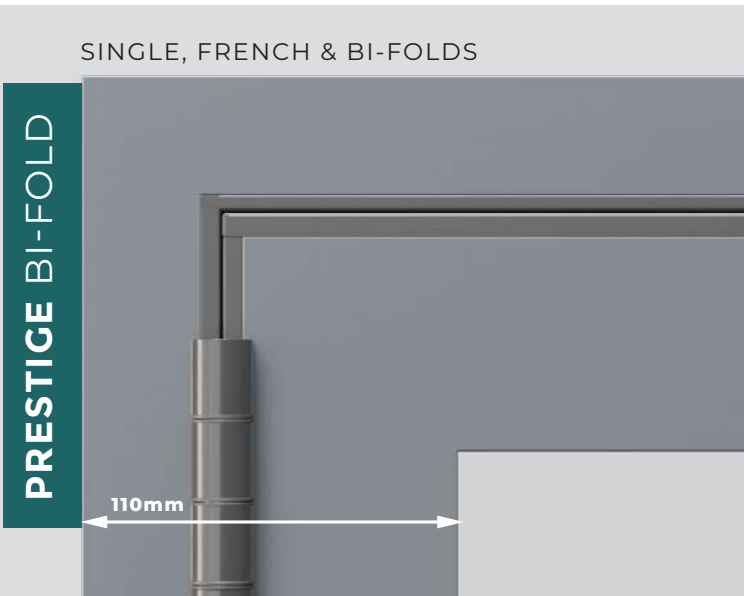
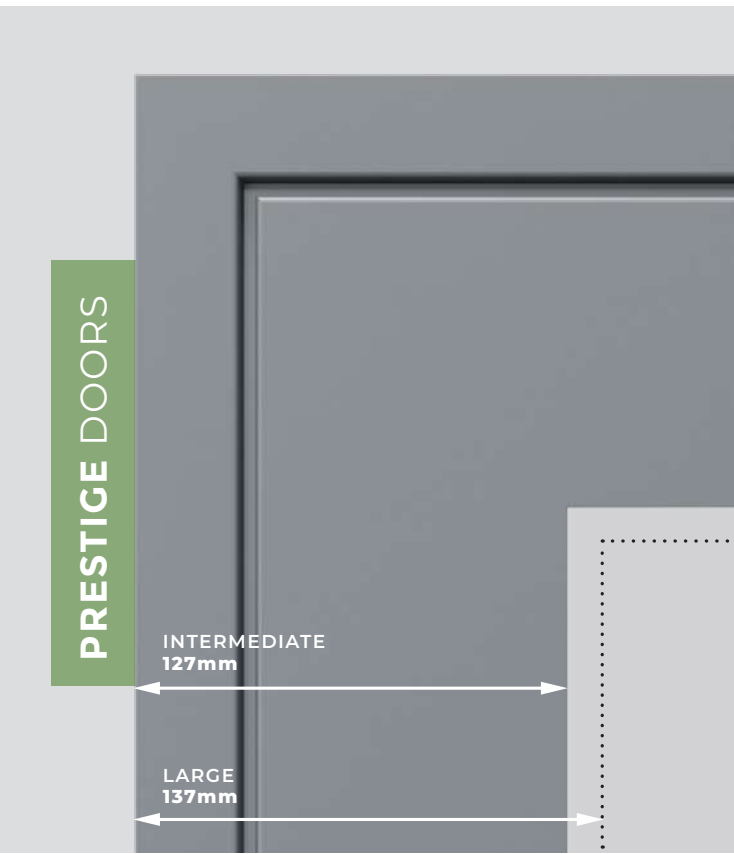
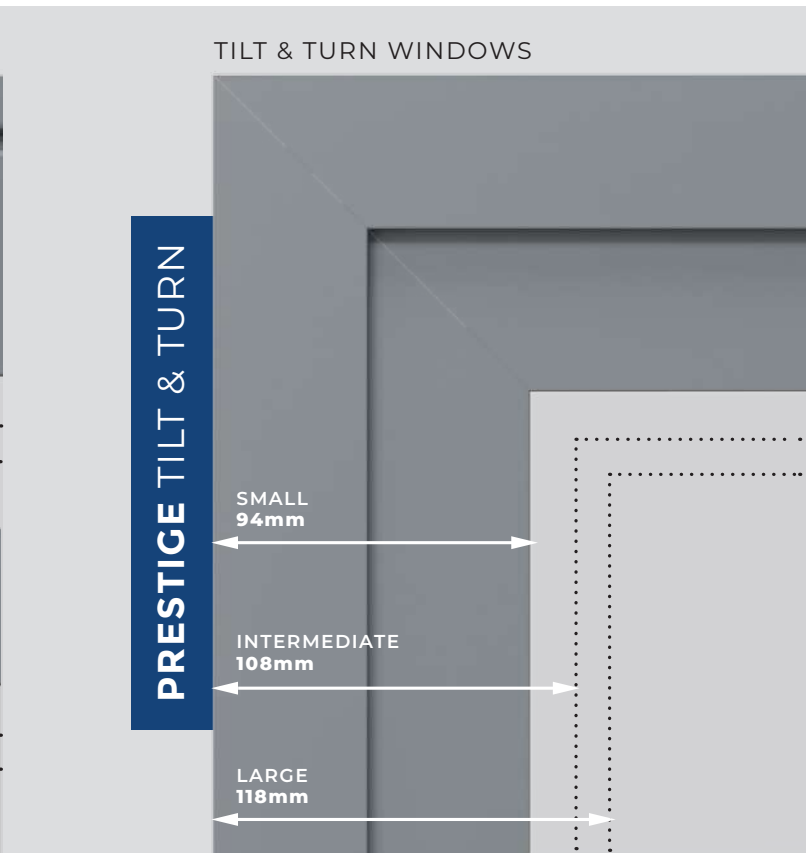
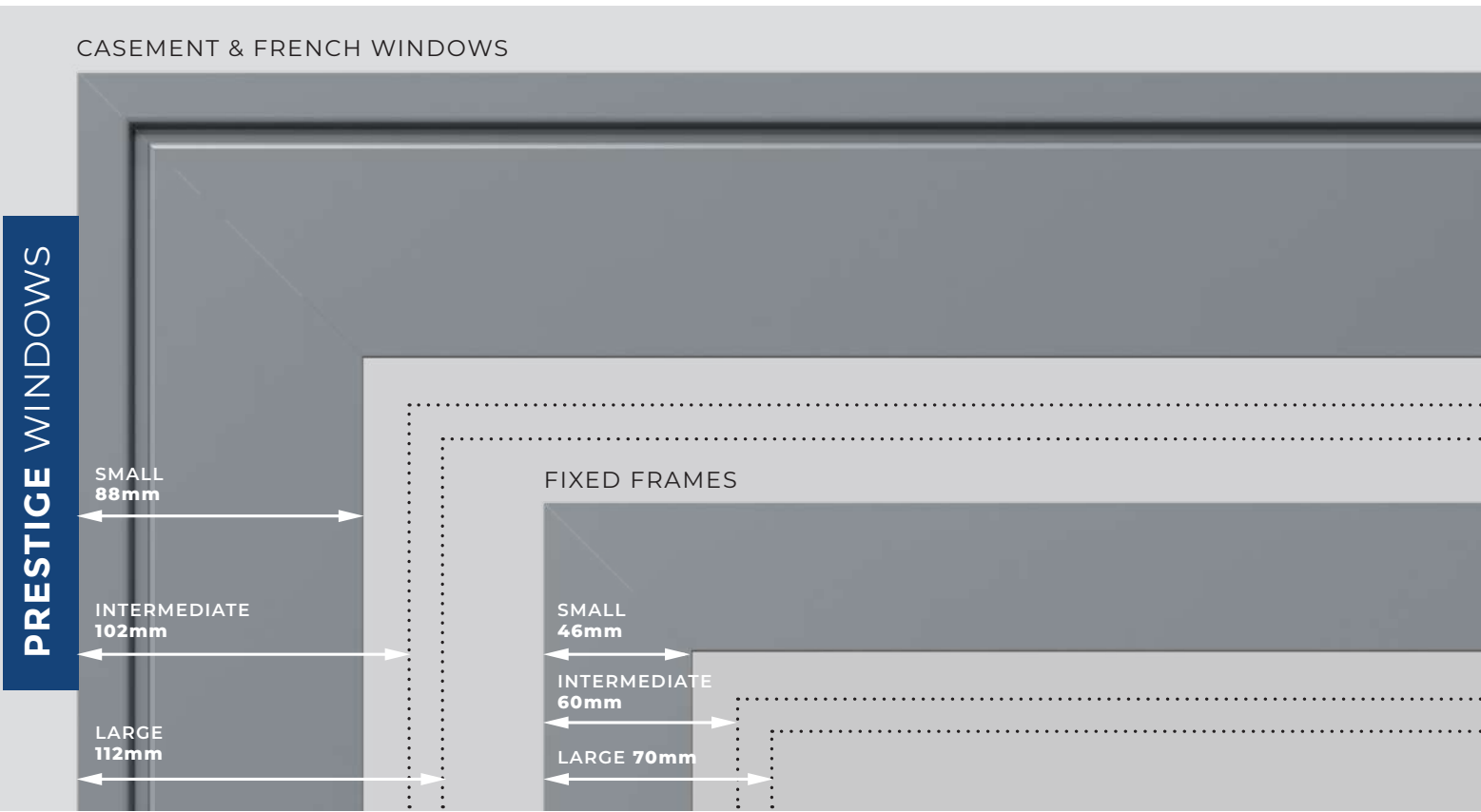
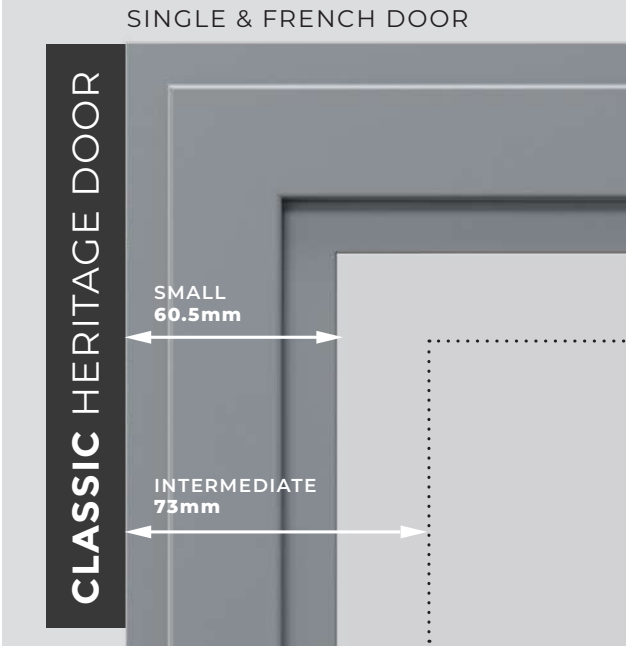
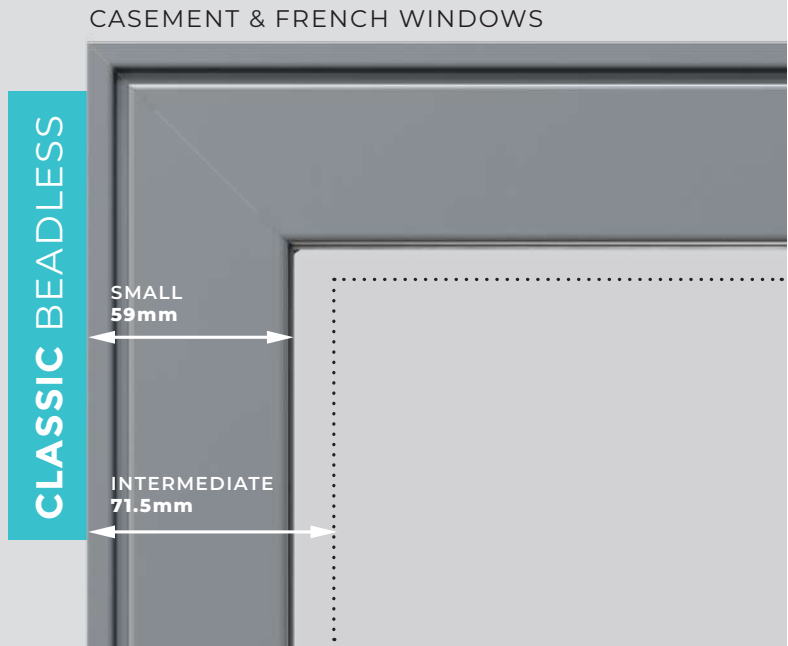
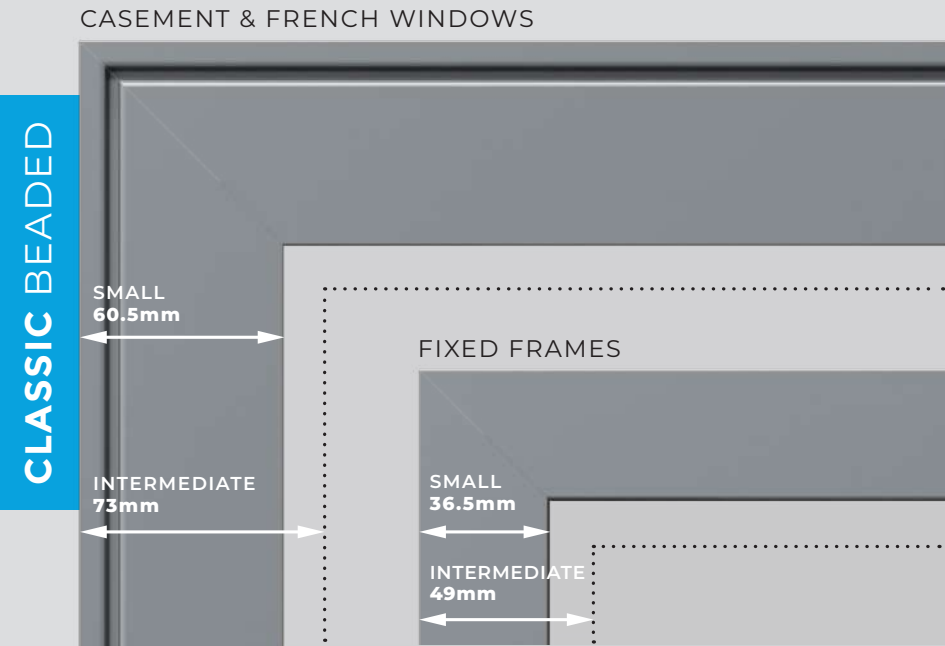
STEPPED
Distinctive
period styling

**CONSISTENT
SASH
OPTIONS
ACROSS ALL
SYSTEMS**

CONTEMPORARY
Flat faces to profiles

SIGHTLINES

We are committed to helping create light, airy interiors that maximise natural light.



5 day[†]
lead time
on stocked
colours including
combinations



BEAUTIFUL, CONSISTENT COLOUR BY OUR IN-HOUSE POWDER COATING PLANT

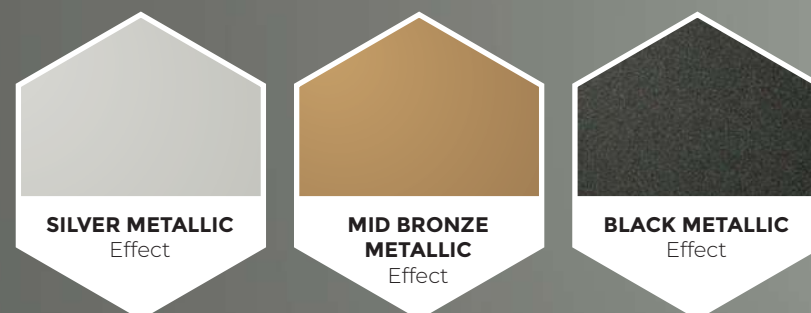
OUR TRADITIONAL COLOURS



THE CHARACTER RANGE OF PREMIUM COLOURS



THE PARAGON METALLIC EFFECT RANGE



**WE HAVE INVESTED
OVER £1.3 MILLION**
in a Qualicoat 'seaside
class', state-of-the-art
powder coating facility.

Our on-site powder coating facilities,
run to Qualicoat's most stringent quality
standard, helps us reduce our carbon
footprint, while ensuring we can offer
the very best finish quality possible.

SHERWIN-WILLIAMS.
APPROVED



This high level of vertical
integration ensures we are able
to fulfil orders on time and in
full, as well as giving us direct
control over quality checks, with
the ability to rectify any issues
in hours rather than weeks –
**ensuring Sheerline's service
levels are best-in-class.**



**DUAL COLOURS
AVAILABLE**
as standard.

Colour is just as important on the
outside and inside of a property.
That's why we offer dual colour options
on Sheerline aluminium products,
on the same short lead times.

DISCLAIMER Due to the variability of manufacturing processes and the differences in the methods used to represent these colours, we cannot guarantee an exact colour match between the actual paint colour and the colour as seen on-screen or when printed. The RAL colour references are also provided as a guide only and we recommend asking to see a physical sample prior to order if required. All colours and finishes are supplied within standard tolerance ranges.

[†]Delivered on fabricator's next scheduled delivery. Refers to working days.

COMBINE THE
COSY WARMTH
OF WOOD,
WITH THE SLIM,
ARCHITECTURAL
LOOK OF
ALUMINIUM

Laminated foils in realistic wood effects and block colours are available across our full range of aluminium window and door products.

Available in single and dual colours with our normal powder coated finishes, laminated aluminium is perfect for adding Scandinavian charm to an interior, or matching existing PVC-U frames in a renovation or extension.



7
stocked foils,
available on
10-day†
lead times



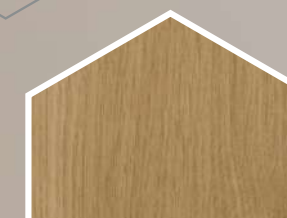
BLACK CHERRY
MX



GOLDEN OAK
MX



WHITE
PX



IRISH OAK
MX



ANTHRACITE GREY
7016 MX



BLACK BROWN
MX



CHARTWELL GREEN
MX

BESPOKE COLOURS AVAILABLE

Choose from an extensive selection of bespoke foils to meet the requirements of any project, available on a 15-day lead time.



Rely on it.



OUR FULLY SUITED PRODUCTS

Built as a truly integrated range, **100% matched.**



AESTHETICS, COLOURS, STYLES AND PERFORMANCE
THAT MATCH PERFECTLY ACROSS ALL PRODUCTS, IDEAL FOR ENSURING
CONSISTENCY ACROSS THE MOST DEMANDING PROJECT.



Classic

OUR SLIMMEST WINDOW AND DOOR SYSTEM

IDEAL FOR HERITAGE STYLE REPLACEMENTS OR CONTEMPORARY INSTALLATIONS.

PART L Compliant ✓

The entire Classic window range is Part L compliant, able to achieve a double-glazed U-value² of 1.5 W/m²K which easily achieves compliance for new homes and non-dwelling commercial projects.

DOUBLE GLAZING > 1.5 U-value | WER A > 36MM TRIPLE GLAZING > 1.1 U-value | WER A*

CLASSIC IS AVAILABLE AS:

BEADLESS OPTION

Our original, revolutionary beadless window system for projects requiring extra security and unrivalled aesthetics and reduced installation times.



SUPPLIED PRE-GLAZED
meaning there's no need to spend time wedge gasketing or beading on-site.



EASY ONE MAN INSTALL*
with hinges fitting into self-locating slots that hold sashes securely while they are screwed in place.



THE MOST BEAUTIFUL CORNERS
with run through mitres on internal joints for the perfect finish that also allows for on-site deglazing if required.

* Subject to weight limits

BEADED OPTION

The beaded option saves time during manufacture and provides the option to deliver frames and glazing separately to site.



EASY FIT CLIP-IN PRE-GASKETED BEADS
removes the need for wedge gasketing.



VERSATILE CONFIGURATIONS
of opening and fixed light combinations and picture windows.



OPTION FOR 36MM TRIPLE GLAZING
on contemporary styles and fixed frames. Allows for the slimmest picture windows with ultra-thin 36.5mm sightlines.



Classic
HERITAGE DOOR
**OUR ULTRA
SLIM CLASSIC
HERITAGE DOOR**

COMPLETING THE CLASSIC RANGE, OUR HERITAGE STYLE DOOR FEATURES A DISTINCTIVE 'RETRO' LOCKBOX FEATURE.

PART L Compliant ✓

The Classic door range is Part L compliant, able to achieve a double-glazed U-value of 1.4 W/m²K which easily achieves compliance for new homes and non-dwelling commercial projects.

DOUBLE GLAZING > 1.4 U-value > DOOR ENERGY RATING > A+

**CLASSIC HERITAGE DOOR
KEY BENEFITS**

**FEATURING A PERIOD
INSPIRED LOCKBOX DESIGN**

With Sheerline's signature 'stepped' look consistent across the outside of the door, art deco styling has never looked so good. The Classic Door also offers the modern levels of thermal performance homeowners and Building Regulations are demanding.

POCKET FEATURE
to the interior and exterior of the lockbox provides a unique heritage look.

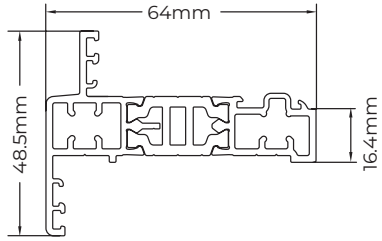


SHARED COMPONENTS
reduce stockholding and use standard Classic beads and tooling to simplify fabrication.

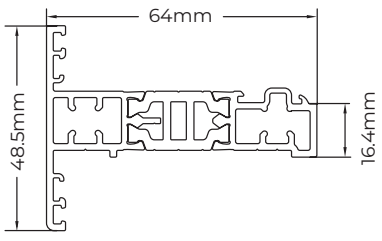
DUMMY TRANSOM BARS
create authentically styled single and French doors that homeowners and tenants love.



CLASSIC
BEADED STYLES



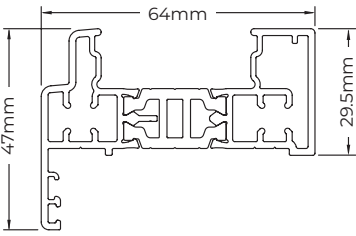
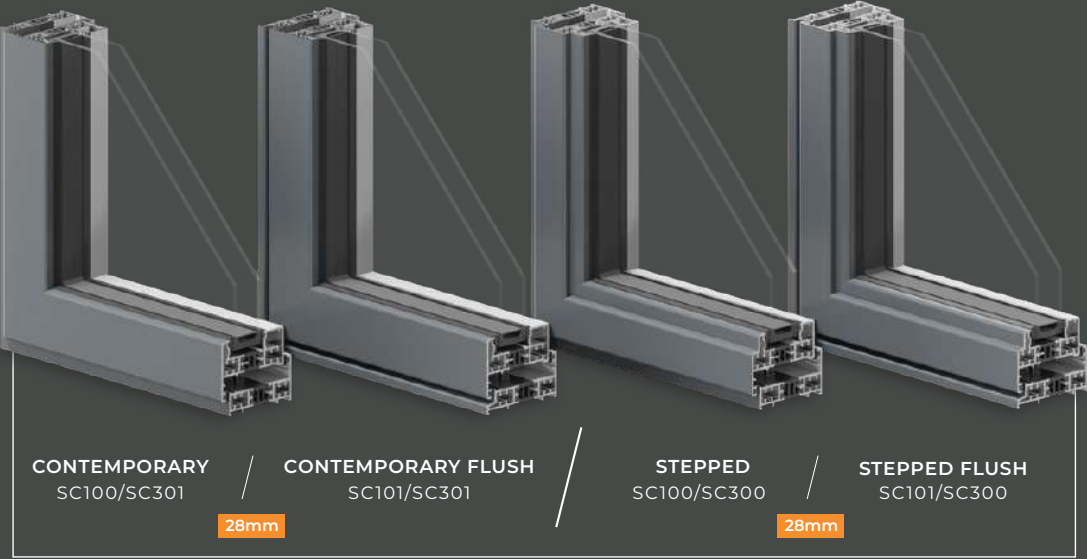
SC310 - STEPPED BEADED SASH



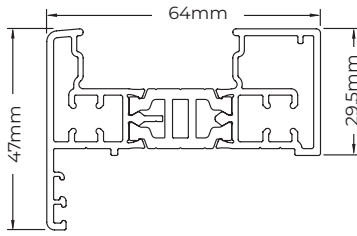
SC311 - CONTEMPORARY
BEADED SASH

BEADED SASHES

BEADLESS STYLES



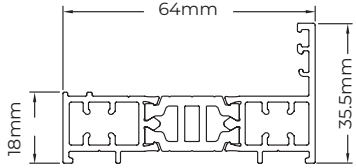
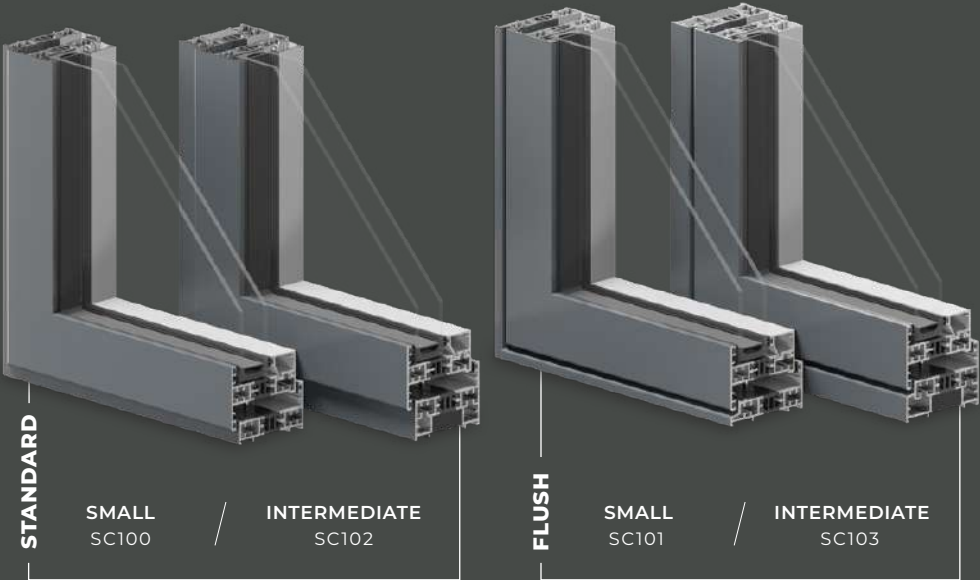
SC300 - STEPPED SASH



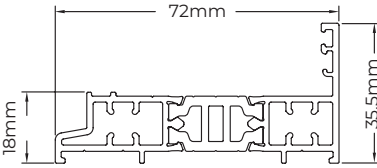
SC301 - CONTEMPORARY SASH

BEADLESS SASHES

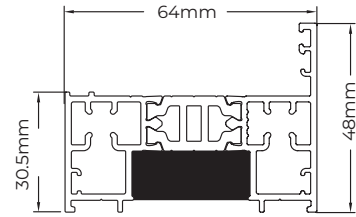
OUTER FRAMES



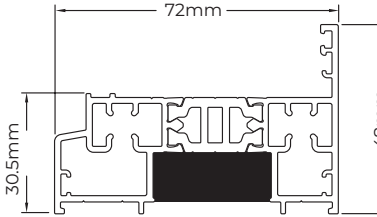
SC100 - SMALL OUTER FRAME



SC101 - FLUSH SMALL OUTER FRAME



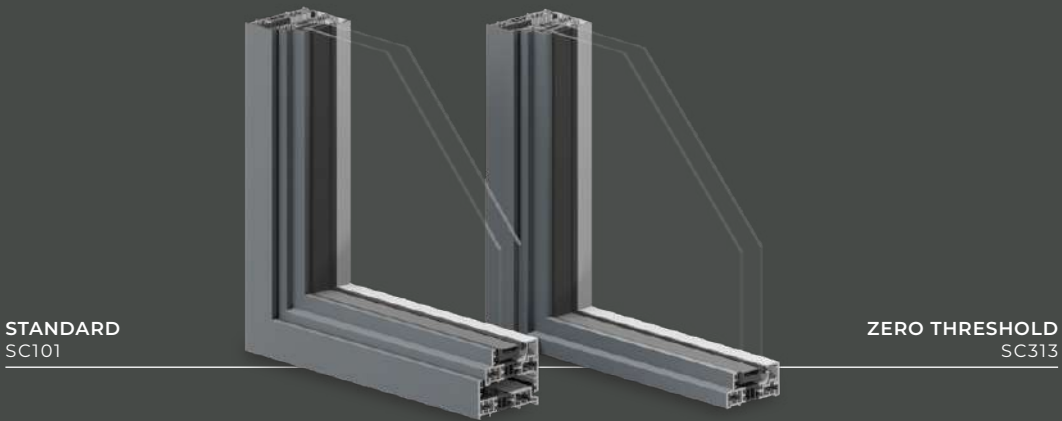
SC102 - INTERMEDIATE OUTER FRAME



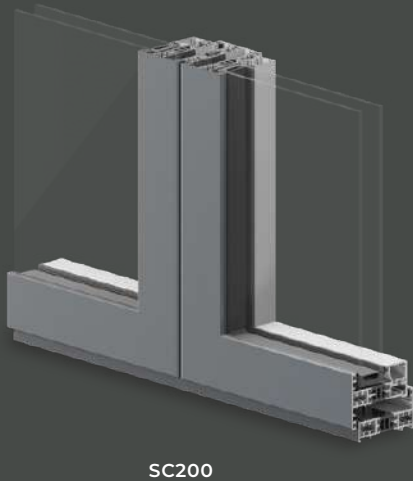
SC103 - FLUSH INTERMEDIATE OUTER FRAME

OUTER FRAMES

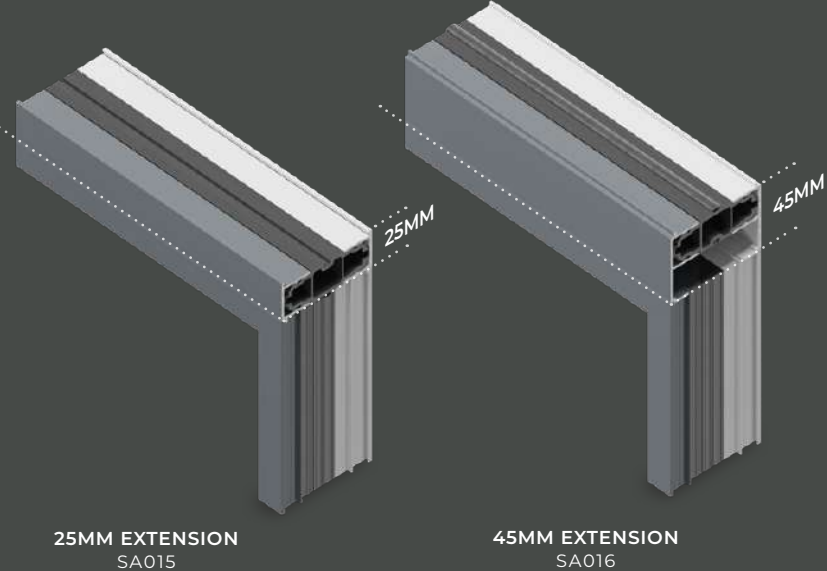
CLASSIC
DOOR THRESHOLDS / ZERO THRESHOLDS



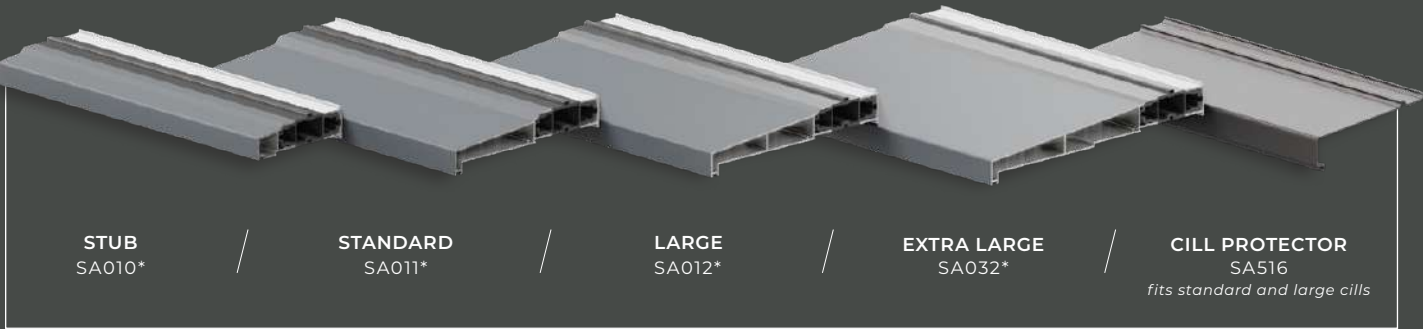
TRANSOM /
MULLION OPTION



EXTENSIONS

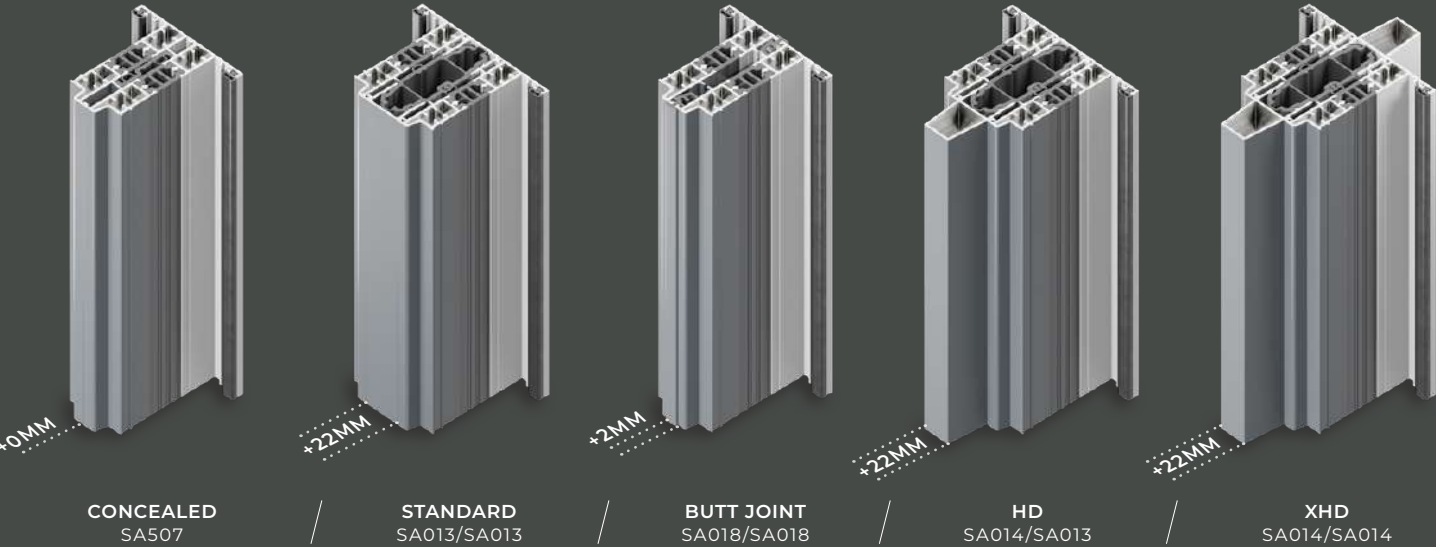


CILLS



*Cills are also comprised of a Thermlock® core and SA015 component.

JOINTS AND COUPLERS



CLASSIC CILL WIDTHS

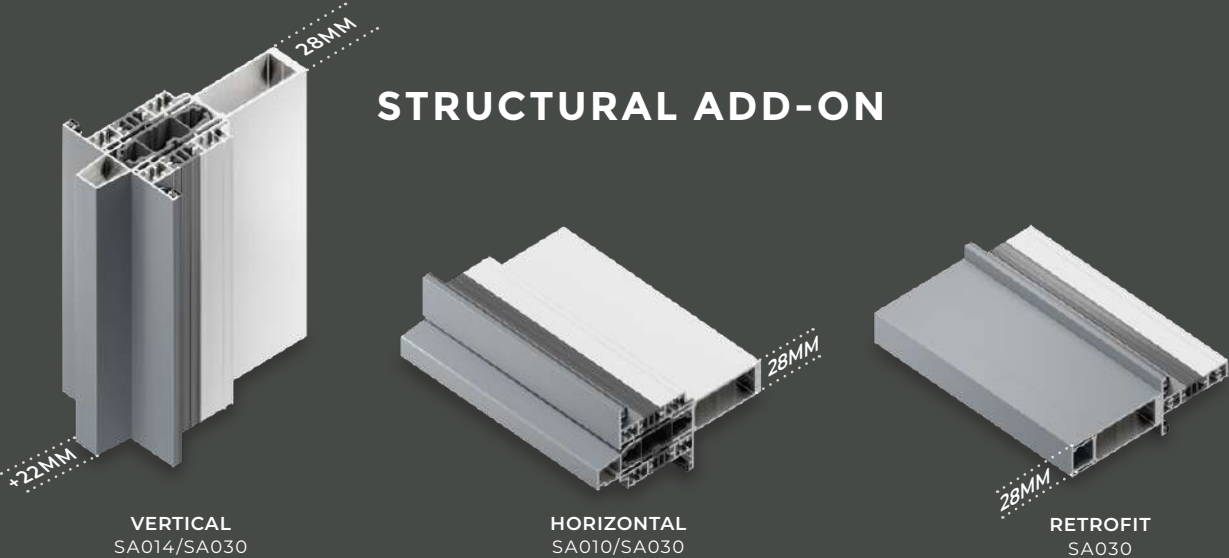
differ depending on which outer frame is used

CILL	CLASSIC STANDARD	CLASSIC FLUSH	PROJECTION*
STUB	85mm	93mm	21mm
STANDARD	150mm	158mm	77mm
LARGE	175mm	183mm	102mm
EXTRA LARGE	225mm	233mm	152mm

25MM UPSTAND

*Same for standard and flush outer frames

STRUCTURAL ADD-ON

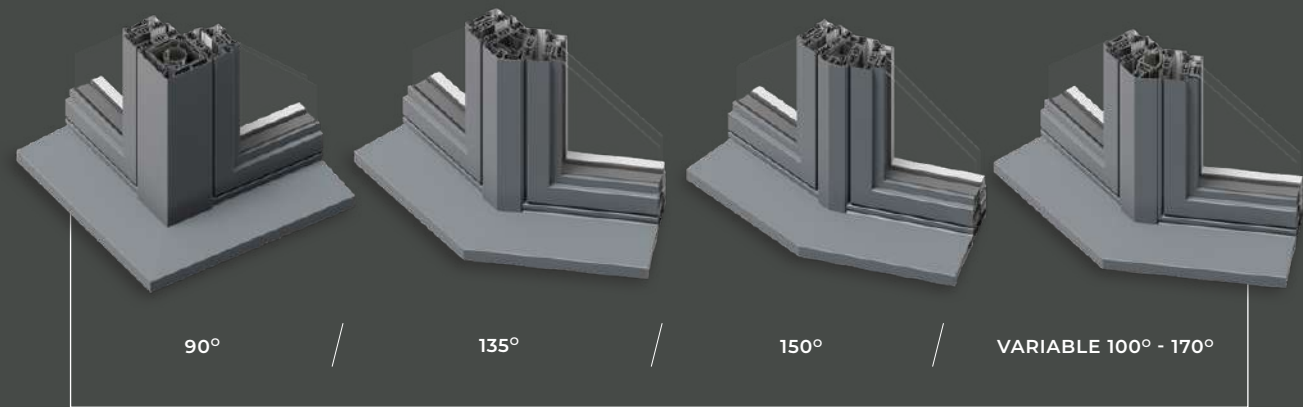


CLASSIC
DECORATIVE BAR OPTIONS



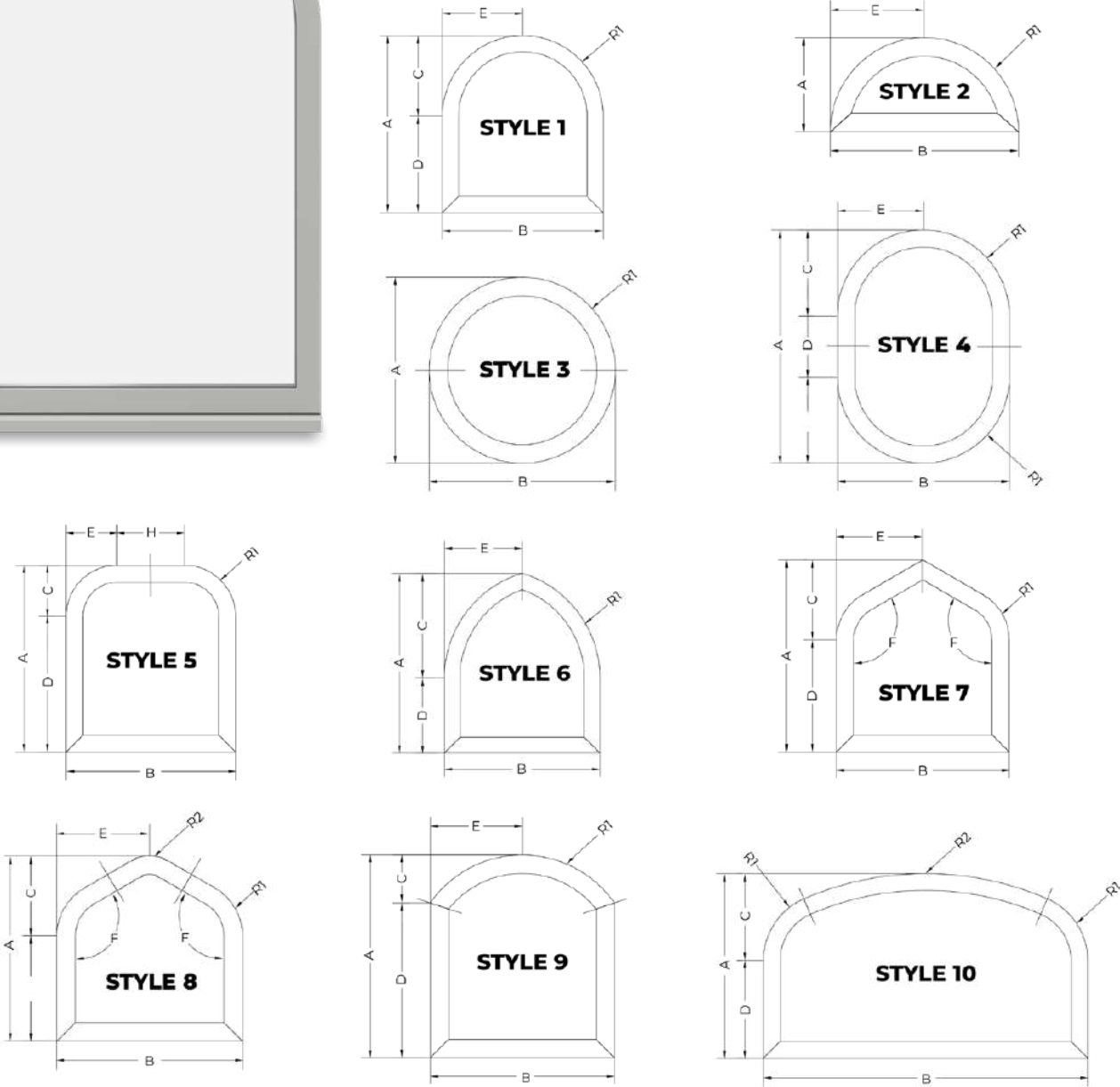
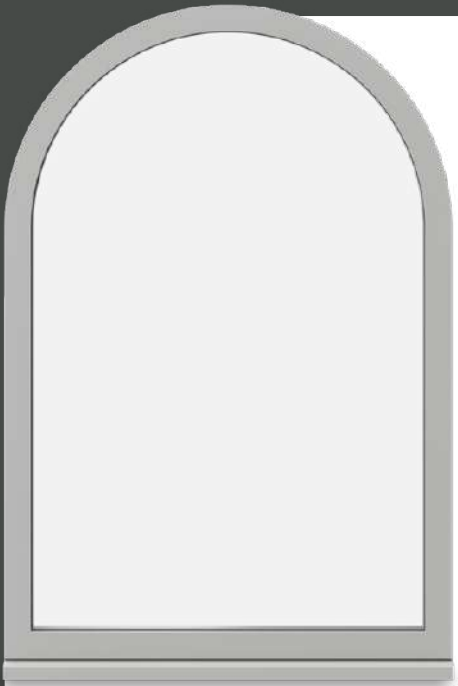
¹Suitable for both stepped and contemporary frames. ²Beadless stepped frame only. ³Beaded stepped frame only.

CORNERS

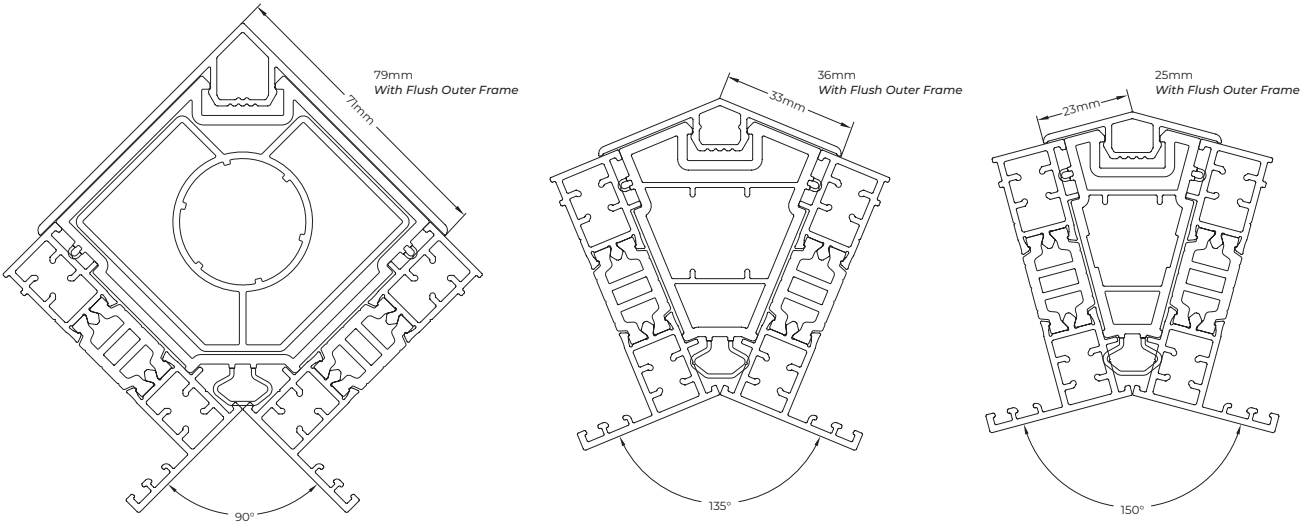


ARCHED FRAME

Arches, curves, gothic arches
and circles available



CORNERS





WINDOWS & PATIO
SHOWN IN:



Classic BEADED

The beaded option that's fabricator friendly, saving time during fabrication and allowing frames and glazing to be supplied separately.

Classic Casement

BEADED



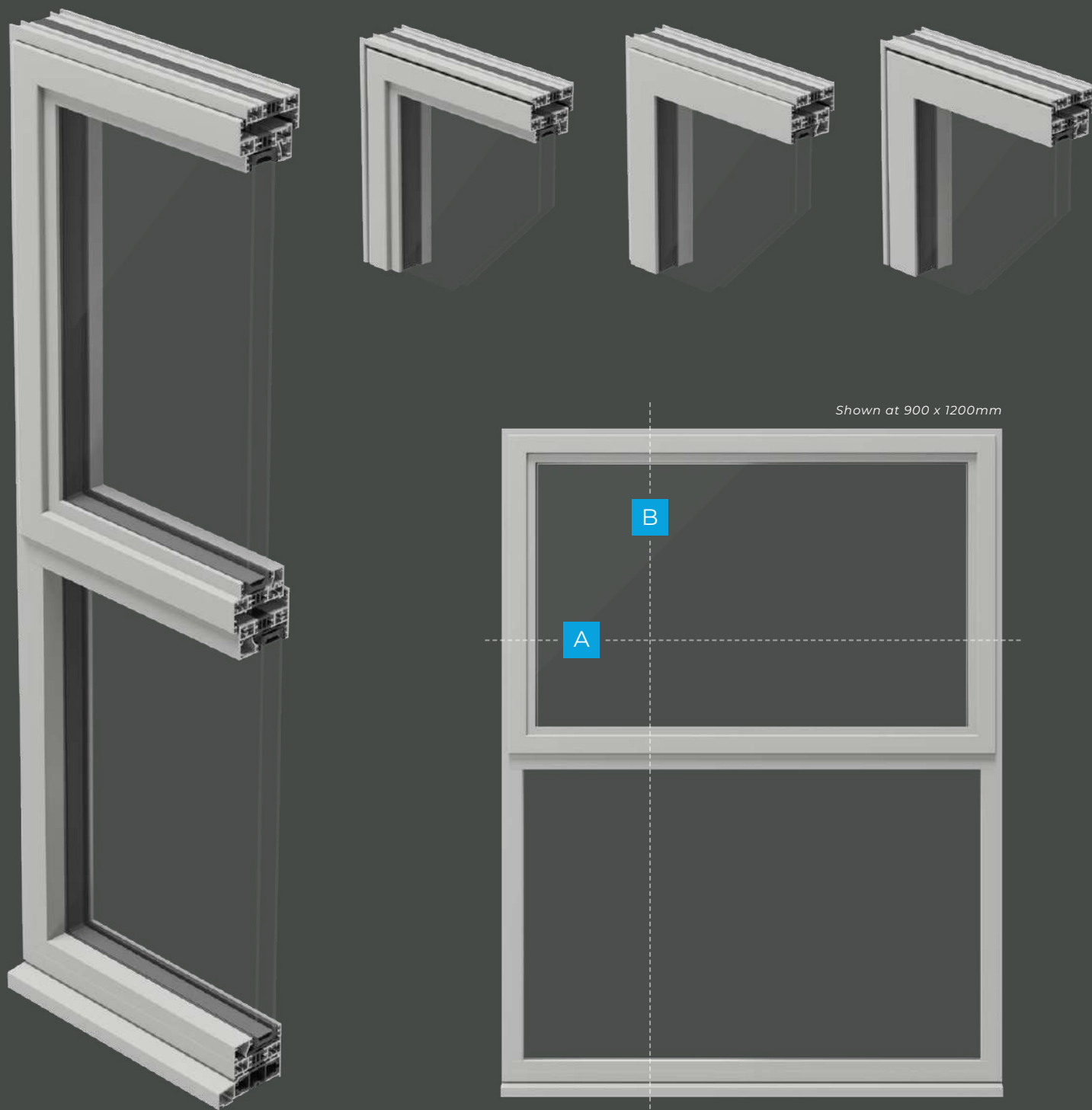
STYLES AVAILABLE

STEPPED
SC100/SC310

STEPPED FLUSH
SC101/SC310

CONTEMPORARY
SC100/SC311

CONTEMPORARY FLUSH
SC101/SC311



Shown at 900 x 1200mm

CLASSIC BEADED CASEMENT / TECHNICAL INFO

- Min Size* 426mm(w) x 732mm(h)
- Max Size* 1331mm(w) x 3376mm(h)
*with Small Outer Frame
- Max Top Hung Sash Size* 1300mm(w) x 1225mm(h)

OUTER FRAME†:	SMALL	INTERMEDIATE	LARGE
SIGHTLINES:	60.5mm	73mm	-

†page 30 for options

GLAZING	CONTEMPORARY	STEPPED
DOUBLE GLAZED	28mm	28mm
U VALUE	1.5	1.5
WER RATING	A	A
TRIPLE GLAZED	36mm	-
U VALUE	1.1	-
WER RATING	A+	-

See building regulation sections from page 144 for details



SECURITY
PAS 24 & SBD Certified



WATER TIGHTNESS
Class 7A



AIR PERMEABILITY
Class 2



WIND RESISTANCE
Class CE2400

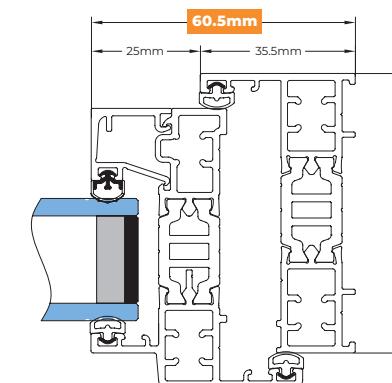
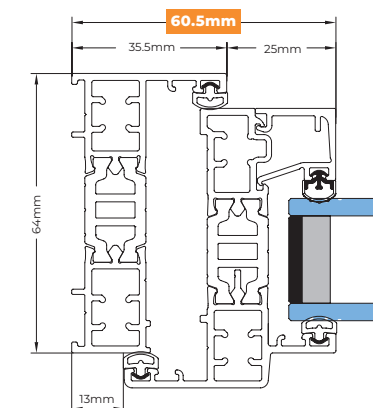
PART L Compliant



A

Cross section shown with
Small Outer Frame
SC100

Stepped Beaded Sash
SC310

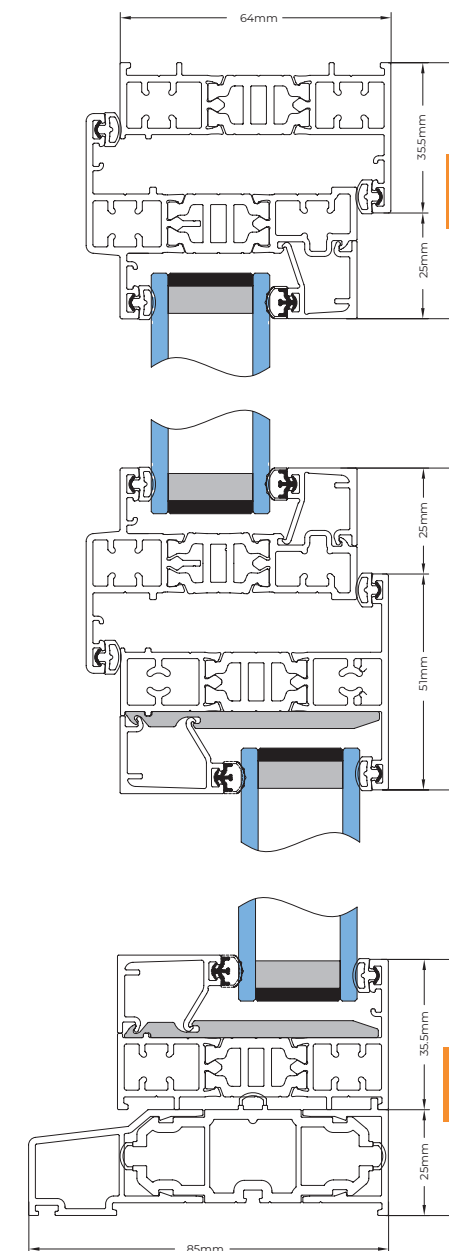


B

Cross section shown with
Small Outer Frame
SC100

Stepped Beaded Sash
SC310

Stub Cill
SA010

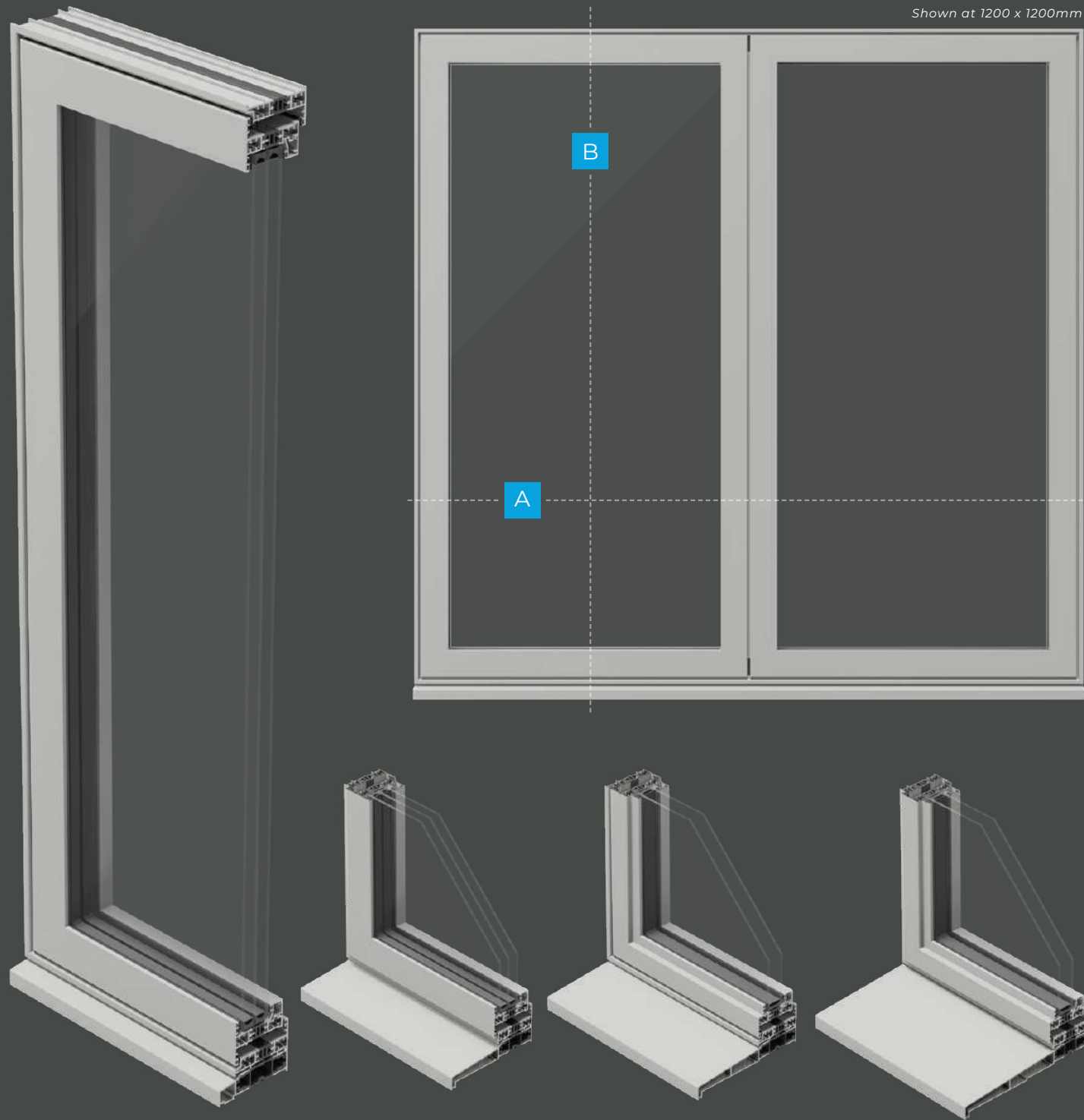


Classic French Window

BEADED



Shown at 1200 x 1200mm



CONTEMPORARY FLUSH
SC101/SC311
[Stub Cill SA010]

CONTEMPORARY
SC100/SC311
[Standard Cill SA011]

STEPPED FLUSH
SC101/SC310
[Large Cill SA012]

STEPPED
SC100/SC310
[XL Cill SA032]

STYLES AND CILLS AVAILABLE

CLASSIC BEADED FRENCH WINDOW / TECHNICAL INFO

- Matches standard casement sightlines
- Ideal for fire egress applications†
- Min Size* 732mm(w) x 426mm(h)
- Max Size* 1477mm(w) x 1501mm(h)
*with Small Outer Frame
- Max Side Hung Sash Size* 710mm(w) x 1450mm(h)

OUTER FRAME†:	SMALL	INTERMEDIATE	LARGE
SIGHTLINES:	60.5mm	73mm	-

†page 30 for options

GLAZING	CONTEMPORARY	STEPPED
DOUBLE GLAZED	28mm	28mm
U VALUE	1.5	1.5
WER RATING	A	A
TRIPLE GLAZED	36mm	-
U VALUE	1.1	-
WER RATING	A+	-

See building regulation sections from page 144 for details

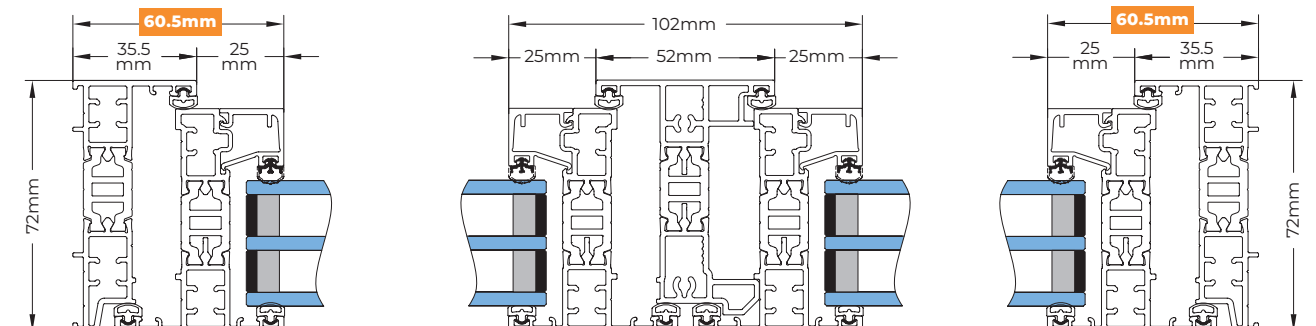
- SECURITY
PAS 24 & SBD Certified
- WATER TIGHTNESS
Class 9A
- AIR PERMEABILITY
Class 4
- WIND RESISTANCE
Class CE2400

PART L Compliant



A

Cross section shown with Small Flush Outer Frame **SC101** and Contemporary Beaded Sash **SC311**

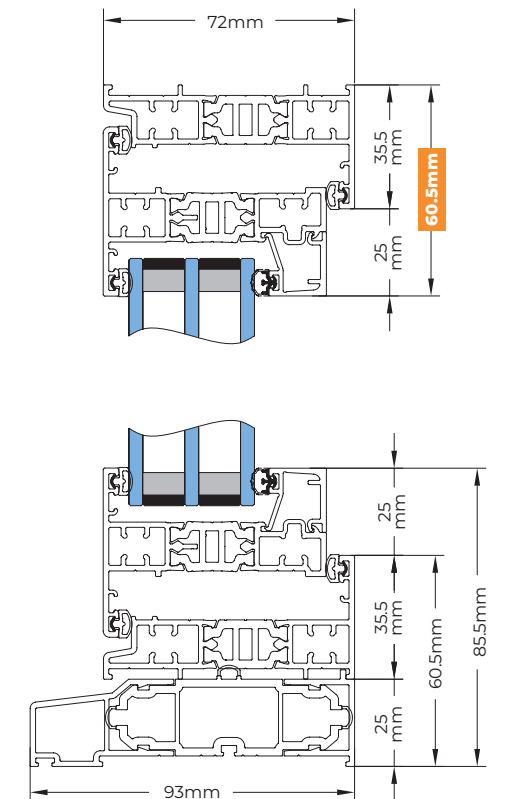


†Subject to minimum opening requirements

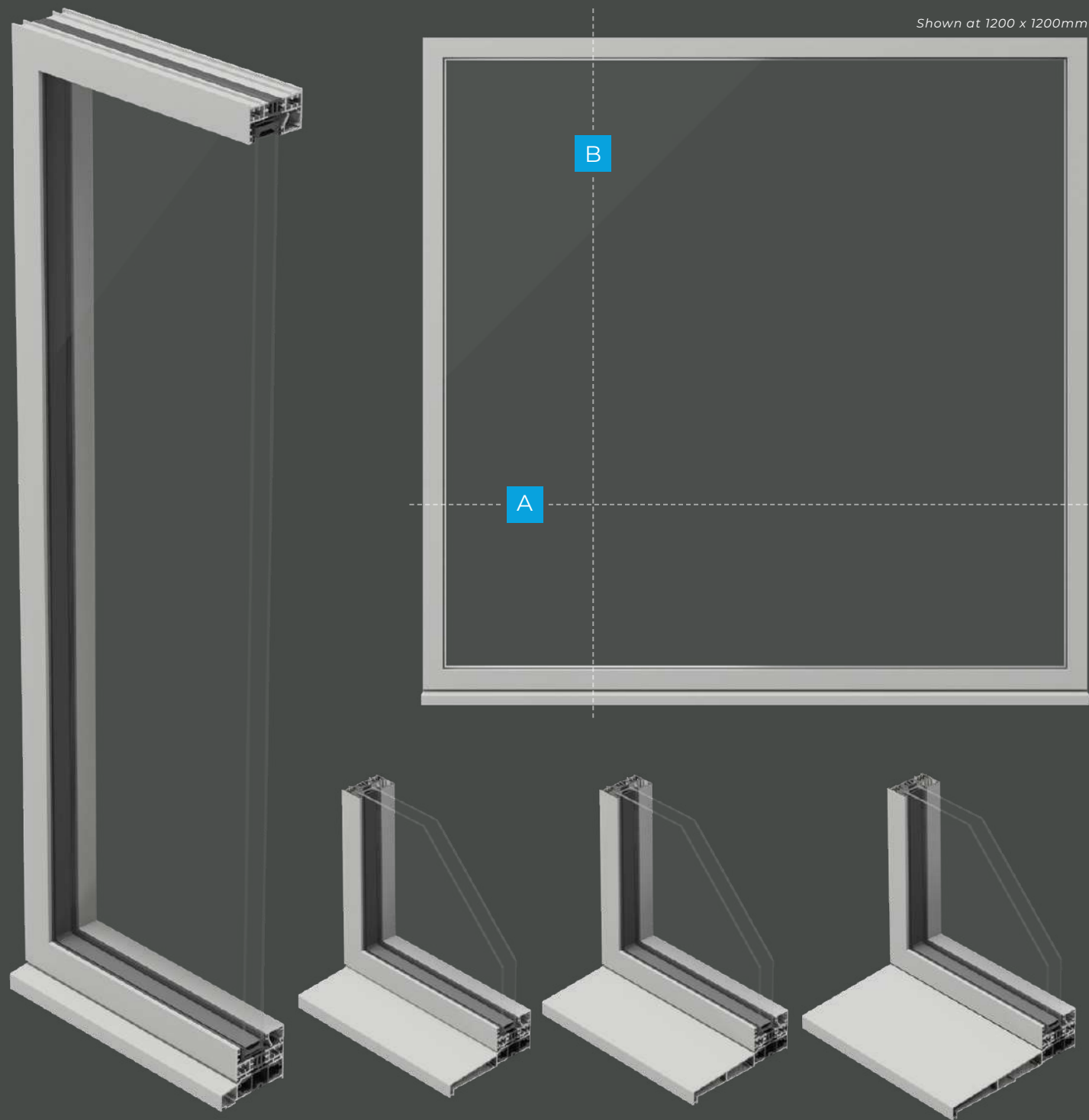
Cross section shown with
Small Flush Outer Frame
SC101

Contemporary Beaded Sash
SC311

Stub Cill
SA010



Classic Fixed BEADED



Shown at 1200 x 1200mm

B

A

FIXED
SC100

[Stub Cill SA010]

FIXED
SC100

[Standard Cill SA011]

FIXED
SC100

[Large Cill SA012]

FIXED
SC100

[XL Cill SA032]

CILLS AVAILABLE

CLASSIC BEADED FIXED / TECHNICAL INFO

- Min Size* 350mm(w) x 350mm(h)
- Max Size dependent on glazing, fixings and wind loadings

OUTER FRAME†:	SMALL	INTERMEDIATE	LARGE
SIGHTLINES:	36.5mm	49mm	-

†page 30 for options

GLAZING	FIXED
DOUBLE GLAZED	28mm
U VALUE	1.5
WER RATING	A
TRIPLE GLAZED	36mm
U VALUE	1.1
WER RATING	A+

See building regulation sections from page 144 for details



SECURITY
PAS 24 & SBD Certified



WATER TIGHTNESS
Class 7a



AIR PERMEABILITY
Class 2



WIND RESISTANCE
Class CE2400

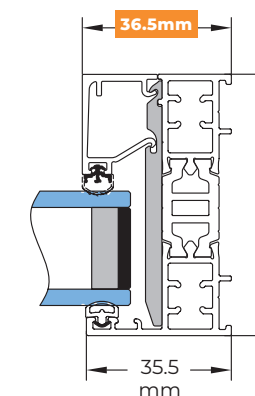
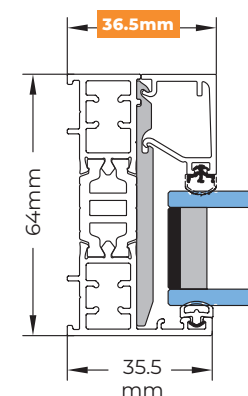
PART L

Compliant



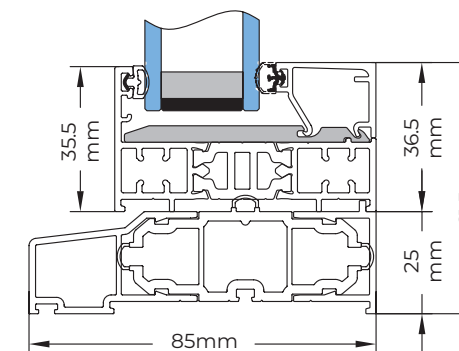
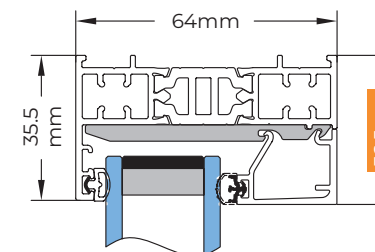
A

Cross section shown with
Small Outer Frame
SC100



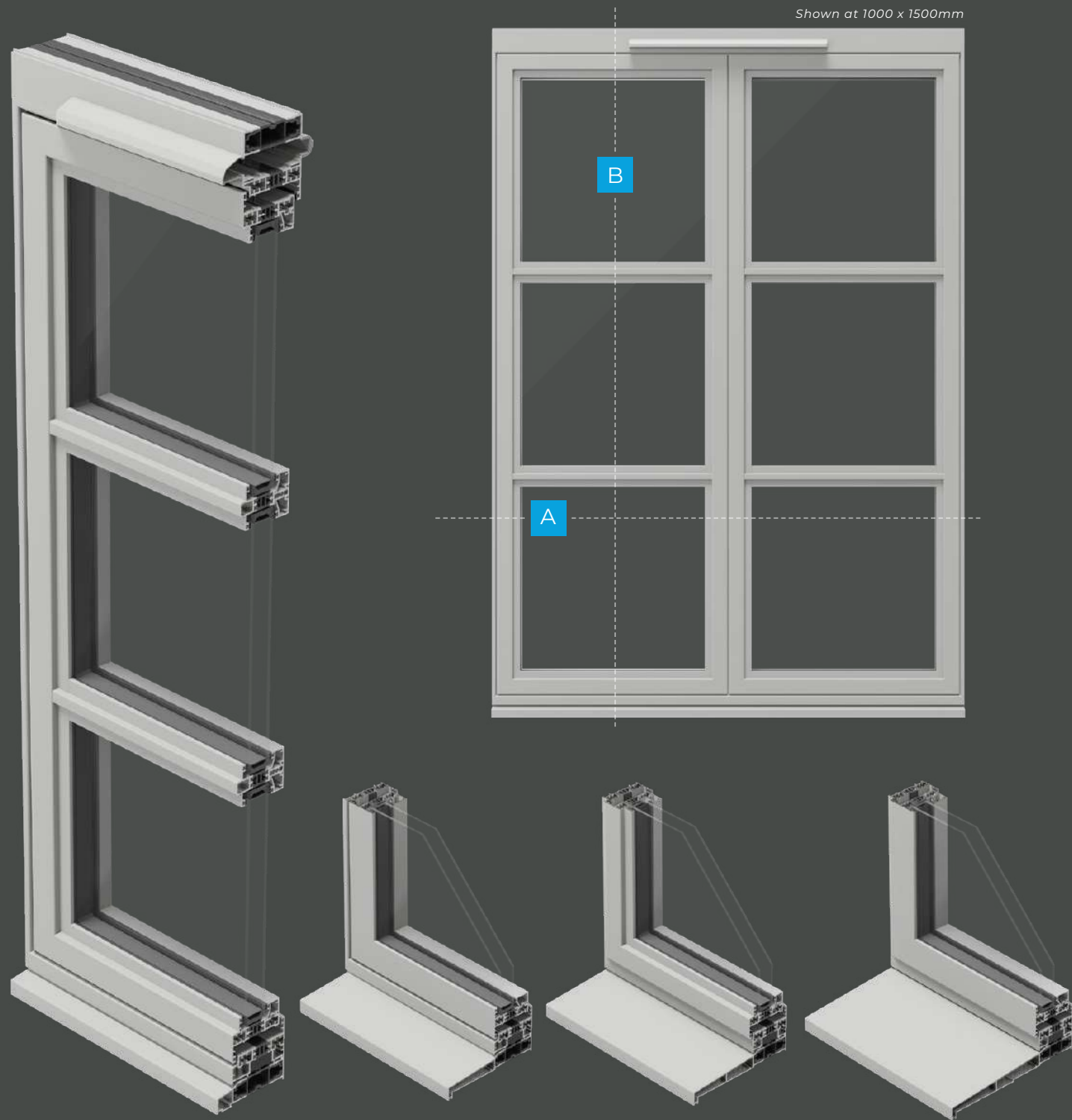
Cross section shown with
Small Outer Frame
SC100

Stub Cill
SA010



B

Casement with Dummy Stepped Transom



STEPPED FLUSH
SC101-SC103/SC310
[Stub Cill SA010]

CONTEMPORARY FLUSH
SC101-SC103/SC311
[Standard Cill SA011]

STEPPED
SC100-SC102/SC310
[Large Cill SA012]

CONTEMPORARY
SC100-SC102/SC311
[XL Cill SA032]

STYLES AND CILLS AVAILABLE

CLASSIC BEADED CASEMENT WITH DUMMY STEPPED TRANSOM / TECHNICAL INFO

- Stepped Mullion/Transom matches the Flush Outer Frame
- Option for deeper bottom Outer Frame
- Shown with trickle vent in 45mm add-on
- Min Size* 732mm(w) x 426mm(h)
- Max Size* 1477mm(w) x 1501mm(h)
*with Small Outer Frame
- Max Side Hung Sash Size* 710mm(w) x 1450mm(h)

OUTER FRAME†:	SMALL	INTERMEDIATE	LARGE
SIGHTLINES:	60.5mm	73mm	-

†page 30 for options

GLAZING	CONTEMPORARY	STEPPED
DOUBLE GLAZED	28mm	28mm
U VALUE	1.5	1.5
WER RATING	A	A
TRIPLE GLAZED	36mm	-
U VALUE	1.1	-
WER RATING	A+	-

See building regulation sections from page 144 for details



SECURITY
PAS 24 & SBD Certified



WATER TIGHTNESS
Class 9A



AIR PERMEABILITY
Class 4



WIND RESISTANCE
Class CE2400

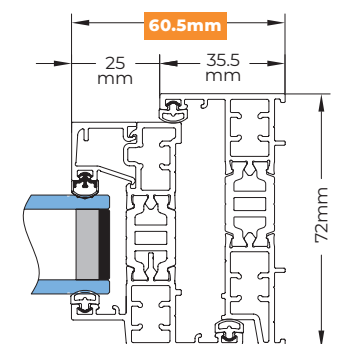
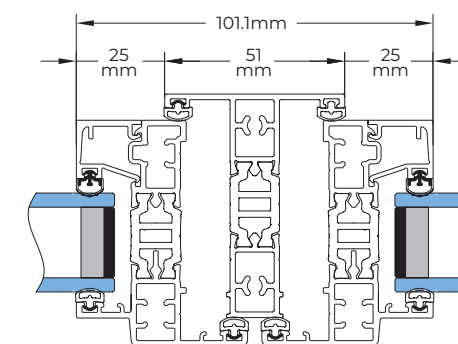
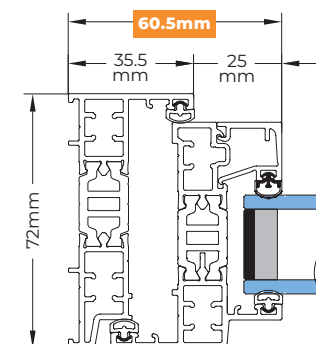
PART L Compliant



Official Police Security Initiative
OPTION

A

Cross section shown with Small Flush Outer Frame SC101, Stepped Sash SC310 and Transom/Mullion SC200



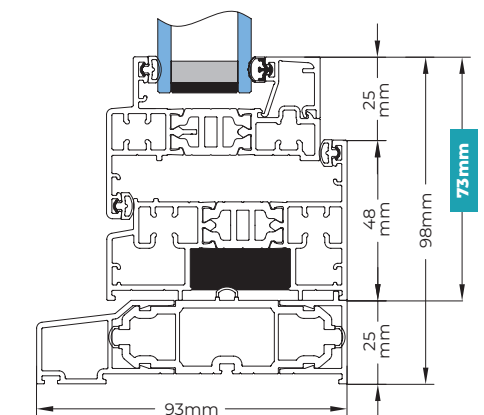
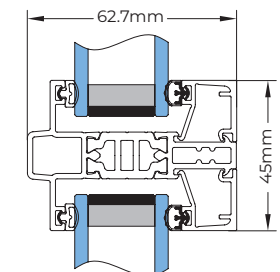
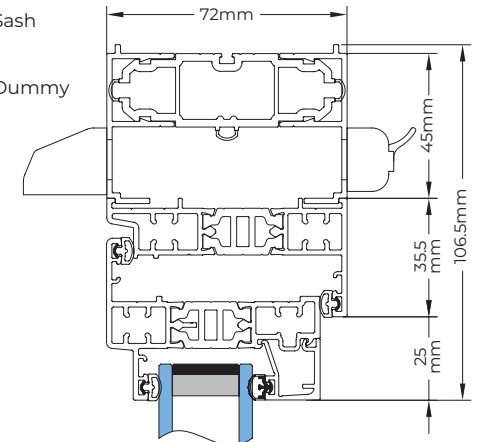
Cross section shown with
Small Flush Outer Frame
SC101

Intermediate Flush Outer Frame
SC103

Stepped Sash
SC310

Stepped Dummy
Mullion
SC230

Stub Cill
SA010



B

WINDOW SHOWN IN:

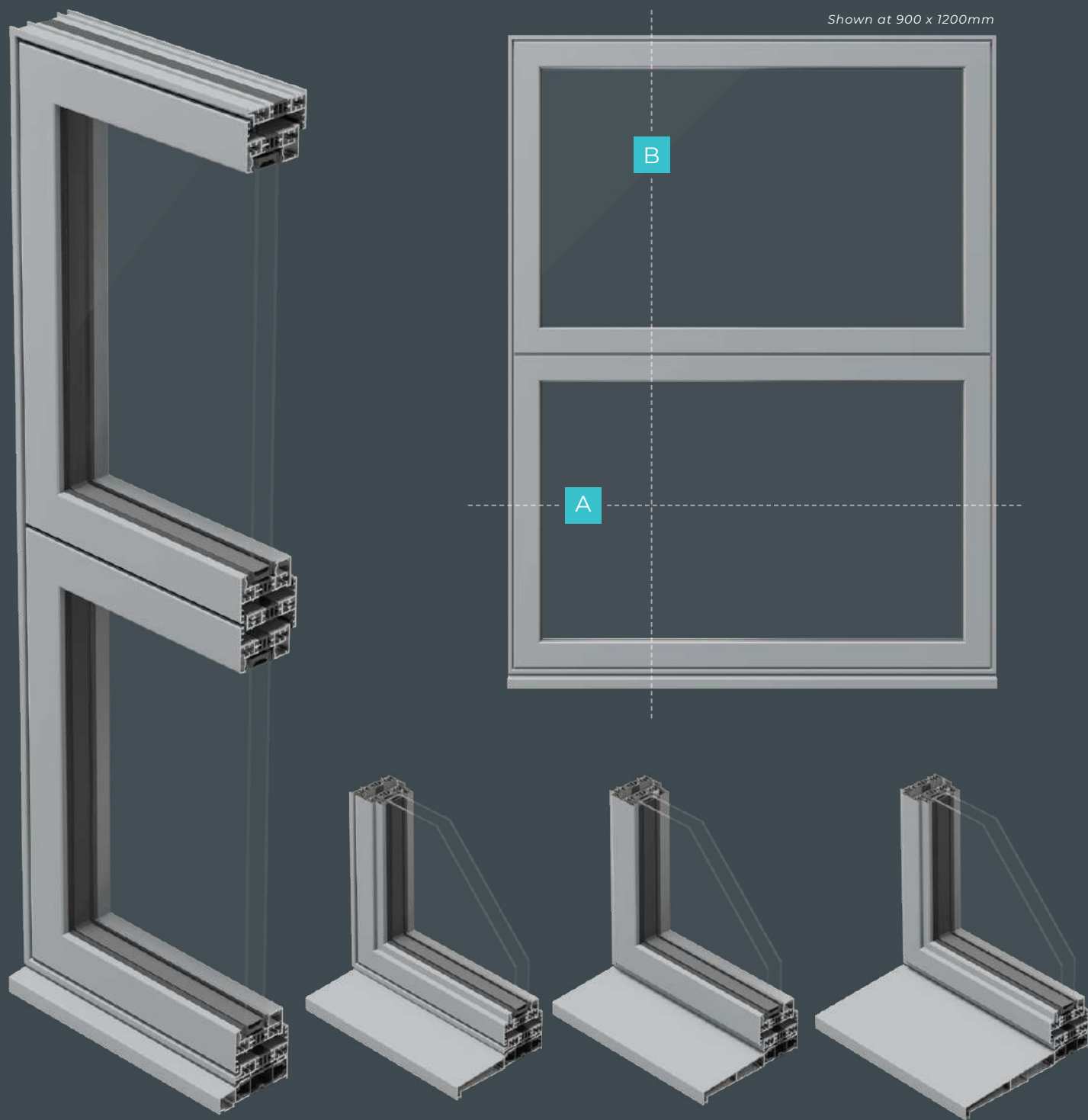
ANTHRACITE GREY
7016 Matt

Classic BEADLESS

Our original, revolutionary beadless window system for projects requiring extra security and unrivalled aesthetics with reduced installation times.

Classic Casement

BEADLESS



CONTEMPORARY FLUSH
SC101/SC301
[Stub Cill SA010]

STEPPED FLUSH
SC101/SC300
[Standard Cill SA011]

CONTEMPORARY
SC100/SC301
[Large Cill SA012]

STEPPED
SC100/SC300
[XL Cill SA032]

STYLES AND CILLS AVAILABLE

CLASSIC BEADLESS CASEMENT / TECHNICAL INFO

- Improved aesthetics with run through mitres on internal corners
- Min Size* 426mm(w) x 732mm(h)
- Max Size* 1351mm(w) x 3376mm(h)
*with Small Outer Frame
- Max Top Hung Sash Size* 1300mm(w) x 1225mm(h)

OUTER FRAME†:	SMALL	INTERMEDIATE	LARGE
SIGHTLINES:	59mm	71.5mm	-

†page 30 for options

GLAZING	CONTEMPORARY	STEPPED
DOUBLE GLAZED	28mm	28mm
U VALUE	1.5	1.5
WER RATING	A	A

See building regulation sections from page 144 for details

SECURITY
PAS 24 & SBD Certified

WATER TIGHTNESS
Class 8A

AIR PERMEABILITY
Class 2

WIND RESISTANCE
Class CE2400

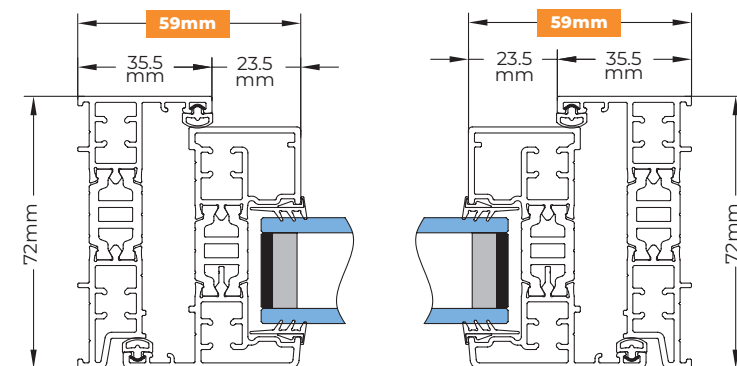
PART L Compliant



A

Cross section shown with
Small Flush Outer Frame
SC101

Contemporary Sash
SC301

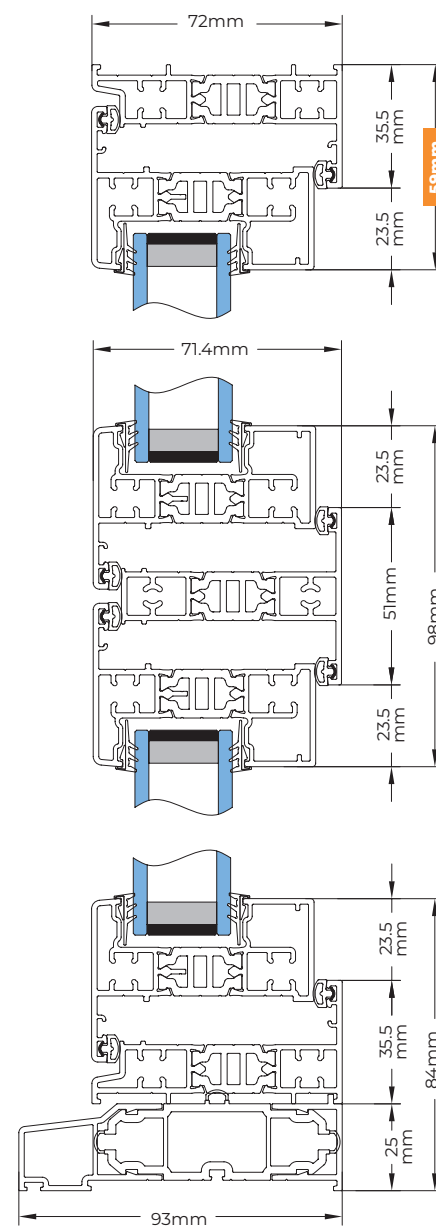


Cross section shown with
Small Flush Outer Frame
SC101

Contemporary Sash
SC301

Stub Cill
SA010

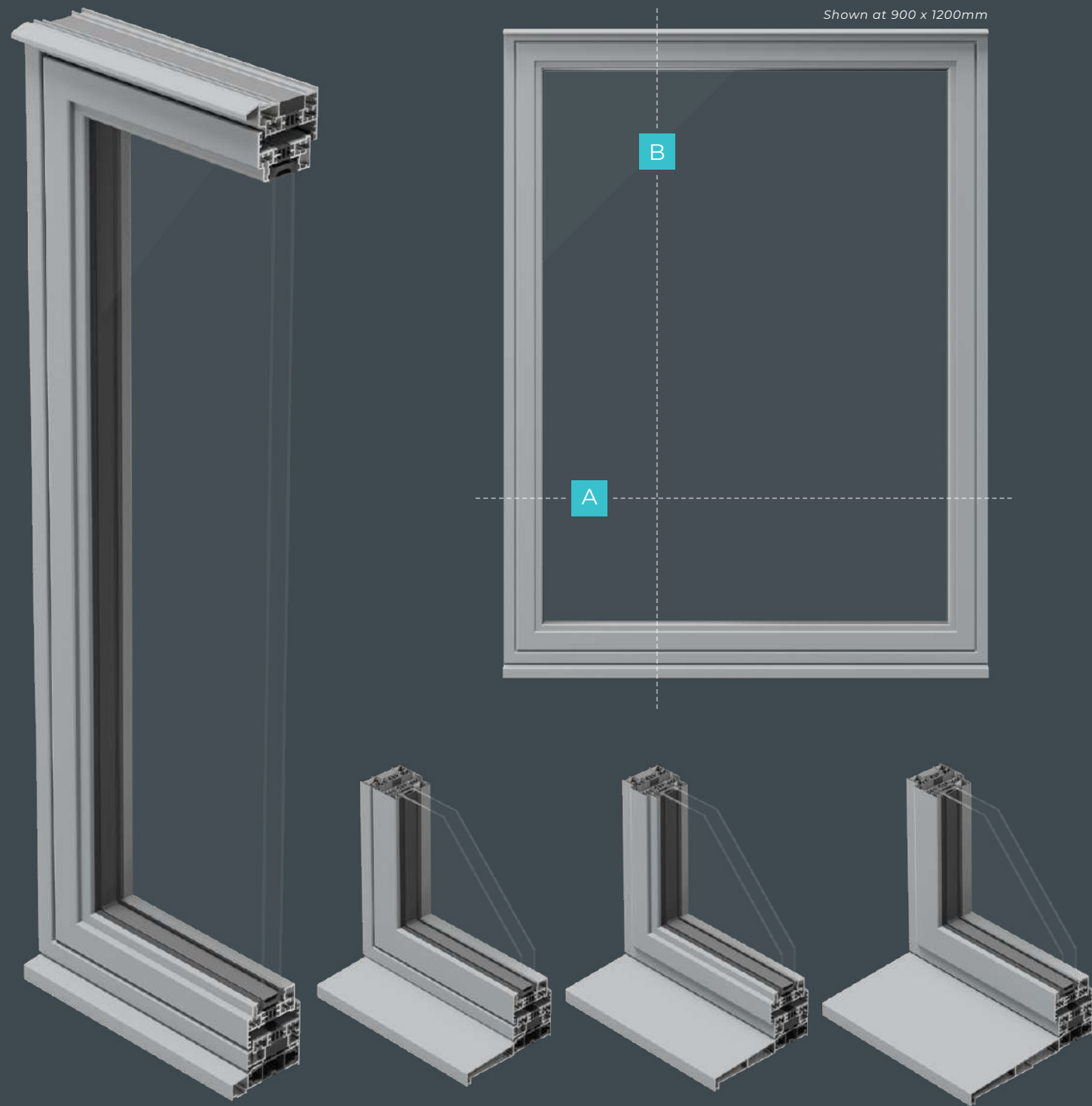
Transom
SC200



B

CLASSIC BEADLESS

Classic BEADLESS Casement Side



STEPPED FLUSH
SC103/SC300
[Stub Cill SA010]

CONTEMPORARY FLUSH
SC103/SC301
[Standard Cill SA011]

STEPPED
SC102/SC300
[Large Cill SA012]

CONTEMPORARY
SC102/SC301
[XL Cill SA032]

STYLES AND CILLS AVAILABLE

CLASSIC BEADLESS CASEMENT SIDE / TECHNICAL INFO

- Improved aesthetics with run through mitres on internal corners
- Optional Head Drip shown
- Min Size* 376mm(w) x 426mm(h)
- Max Size* 761mm(w) x 1501mm(h)
*with Small Outer Frame
- Max Side Hung Sash Size* 710mm(w) x 1450mm(h)

OUTER FRAME†:	SMALL	INTERMEDIATE	LARGE
SIGHTLINES:	59mm	71.5mm	-

†page 30 for options

GLAZING	CONTEMPORARY	STEPPED
DOUBLE GLAZED	28mm	28mm
U VALUE	1.5	1.5
WER RATING	A	A

See building regulation sections from page 144 for details



SECURITY
PAS 24 & SBD Certified



WATER TIGHTNESS
Class 9A



AIR PERMEABILITY
Class 4



WIND RESISTANCE
Class CE2400

PART L Compliant

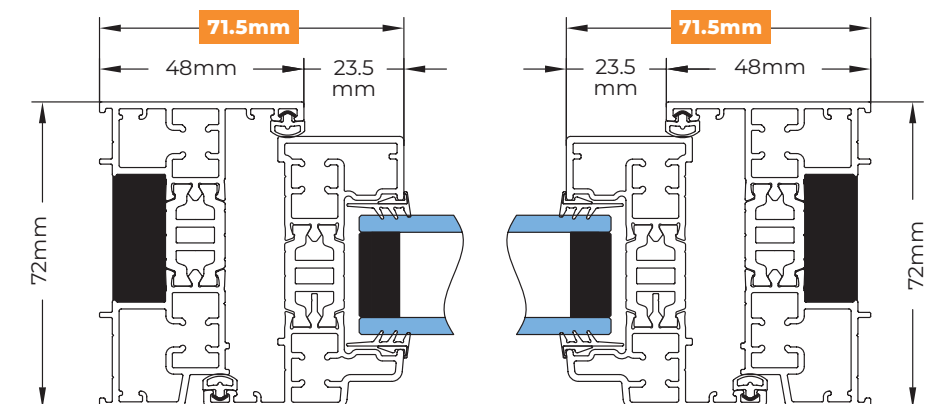


A

Cross section shown with
Intermediate Flush Outer Frame
SC103

Stepped Sash
SC300

Stub Cill
SA010

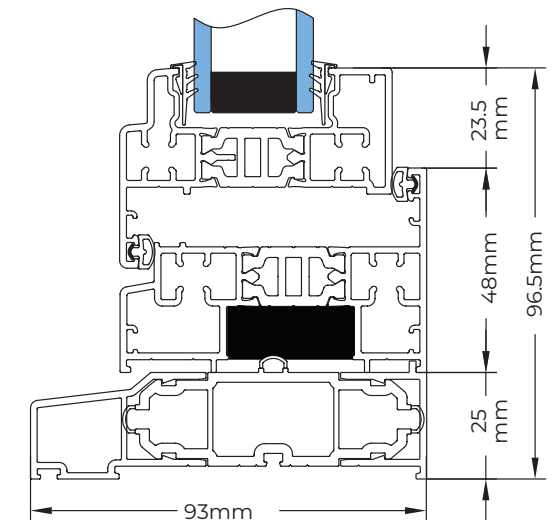
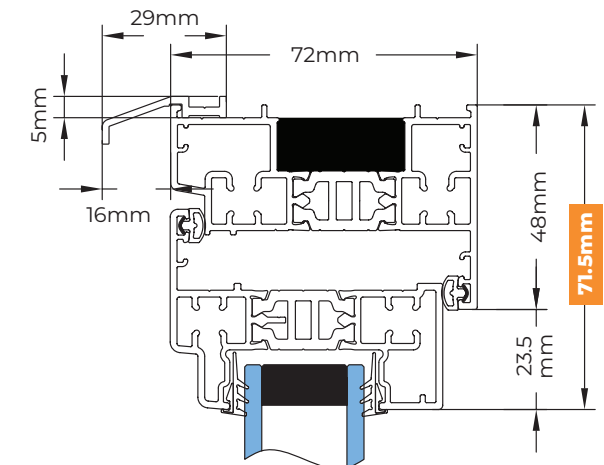


B

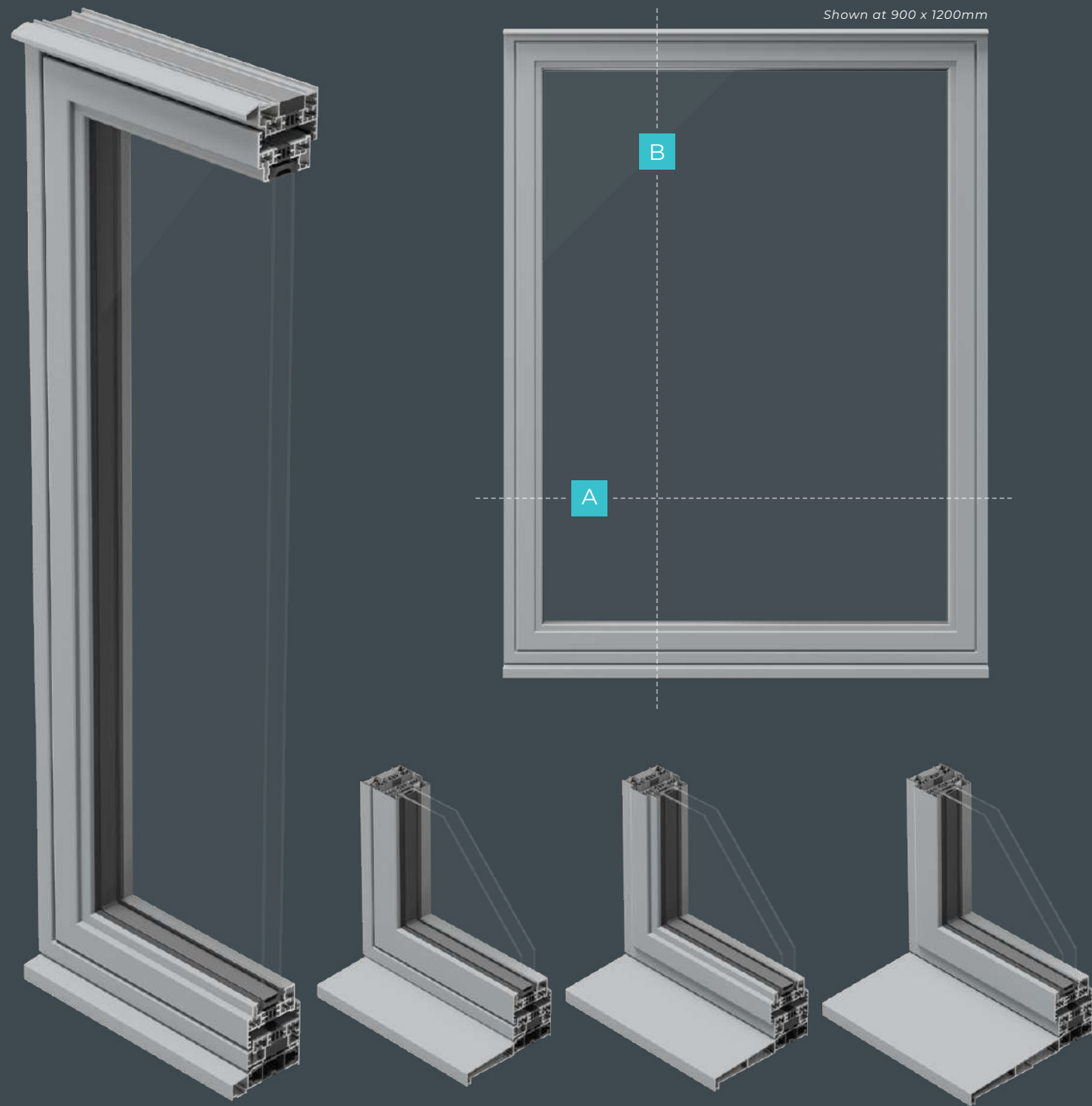
Cross section shown with
Intermediate Flush Outer Frame
SC103

Stepped Sash
SC300

Stub Cill
SA010



Classic BEADLESS Casement Side



STEPPED FLUSH
SC103/SC300
[Stub Cill SA010]

CONTEMPORARY FLUSH
SC103/SC301
[Standard Cill SA011]

STEPPED
SC102/SC300
[Large Cill SA012]

CONTEMPORARY
SC102/SC301
[XL Cill SA032]

STYLES AND CILLS AVAILABLE

CLASSIC BEADLESS CASEMENT SIDE / TECHNICAL INFO

- Improved aesthetics with run through mitres on internal corners
- Optional Head Drip shown
- Min Size* 376mm(w) x 426mm(h)
- Max Size* 761mm(w) x 1501mm(h)
*with Small Outer Frame
- Max Side Hung Sash Size* 710mm(w) x 1450mm(h)

OUTER FRAME†:	SMALL	INTERMEDIATE	LARGE
SIGHTLINES:	59mm	71.5mm	-

†page 30 for options

GLAZING	CONTEMPORARY	STEPPED
DOUBLE GLAZED	28mm	28mm
U VALUE	1.5	1.5
WER RATING	A	A

See building regulation sections from page 144 for details



SECURITY
PAS 24 & SBD Certified



WATER TIGHTNESS
Class 9A



AIR PERMEABILITY
Class 4



WIND RESISTANCE
Class CE2400

PART L Compliant

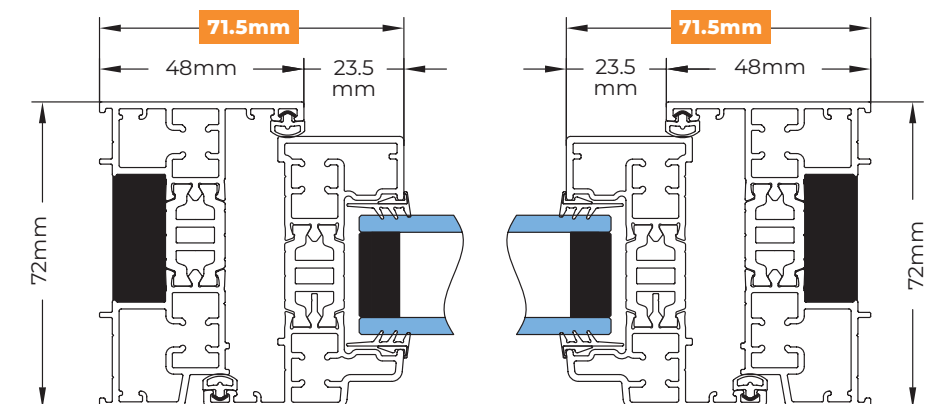


A

Cross section shown with
Intermediate Flush Outer Frame
SC103

Stepped Sash
SC300

Stub Cill
SA010

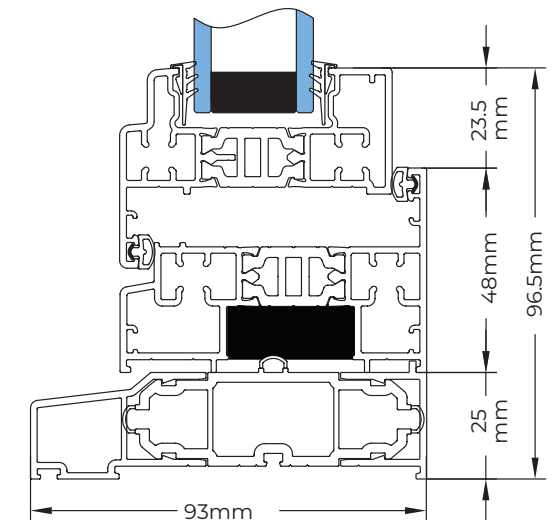
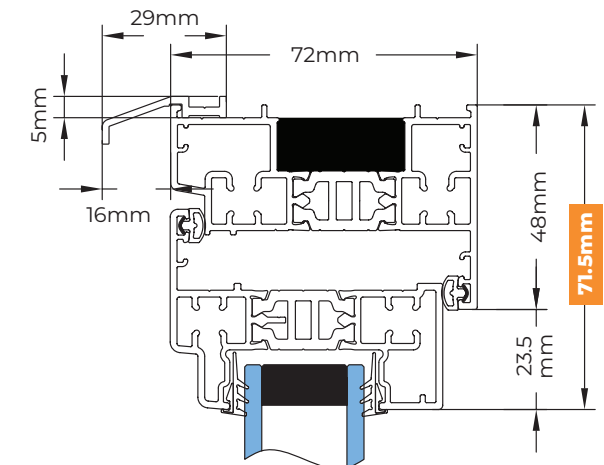


B

Cross section shown with
Intermediate Flush Outer Frame
SC103

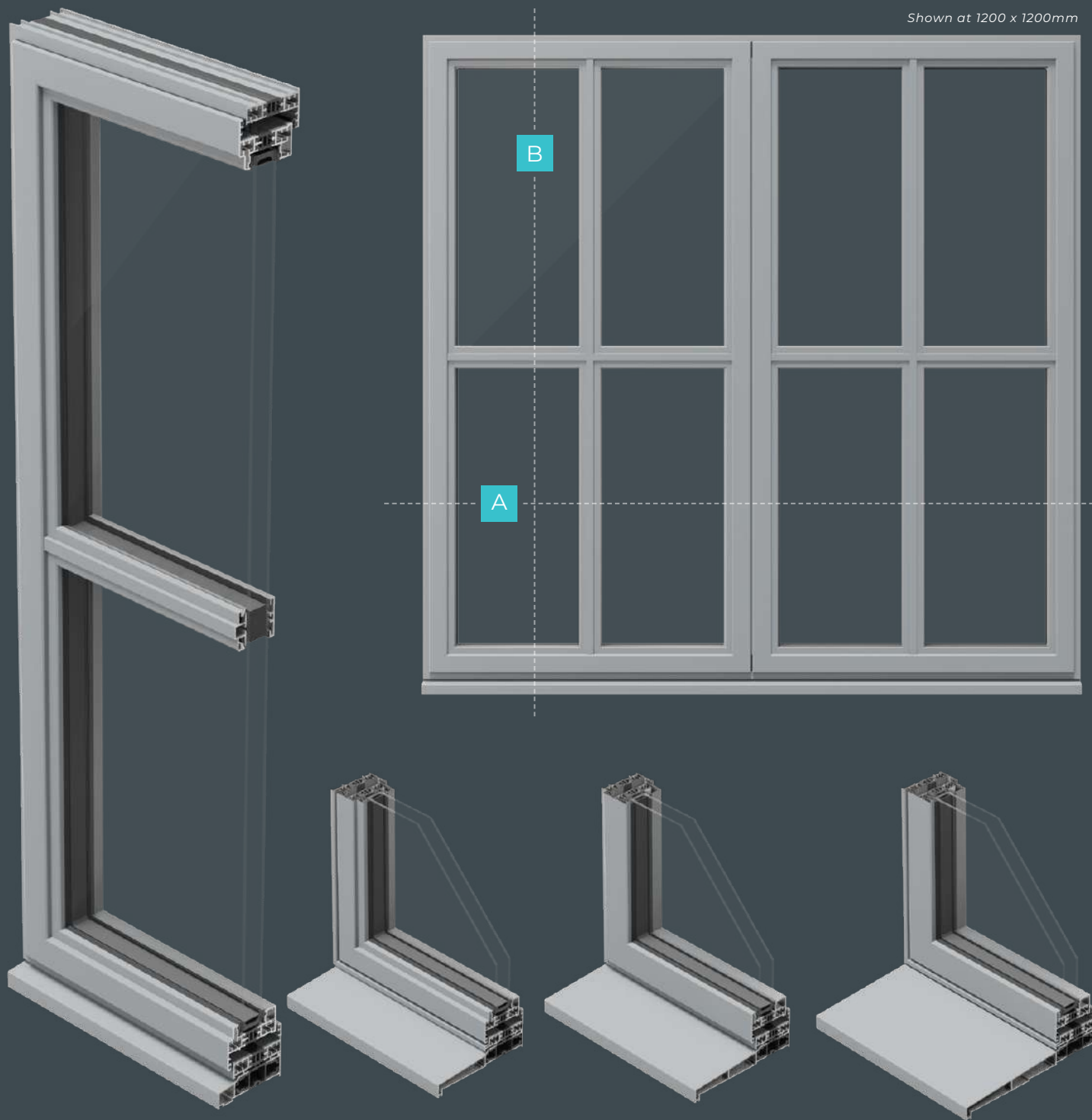
Stepped Sash
SC300

Stub Cill
SA010



Classic French Window

BEADLESS



Shown at 1200 x 1200mm

STEPPED
SC100/SC300

[Stub Cill SA010]

STEPPED FLUSH
SC101/SC300

[Standard Cill SA011]

CONTEMPORARY
SC100/SC301

[Large Cill SA012]

CONTEMPORARY FLUSH
SC101/SC301

[XL Cill SA032]

STYLES AND CILLS AVAILABLE

CLASSIC BEADLESS FRENCH WINDOW / TECHNICAL INFO

- Run through mitres on internal corners
- Matches standard casement sightlines
- Ideal for fire egress applications†
- Min Size* 732mm(w) x 420mm(h)
- Max Size* 1477mm(w) x 1501mm(h)
*with Small Outer Frame
- Max Side Hung Sash Size* 710mm(w) x 1450mm(h)

OUTER FRAME†:	SMALL	INTERMEDIATE	LARGE
SIGHTLINES:	59mm	71.5mm	-

†page 30 for options

GLAZING	CONTEMPORARY	STEPPED
DOUBLE GLAZED	28mm	28mm
U VALUE	1.5	1.5
WER RATING	A	A

See building regulation sections from page 144 for details



SECURITY
PAS 24 & SBD Certified



WATER TIGHTNESS
Class 9A



AIR PERMEABILITY
Class 4



WIND RESISTANCE
Class CE2400

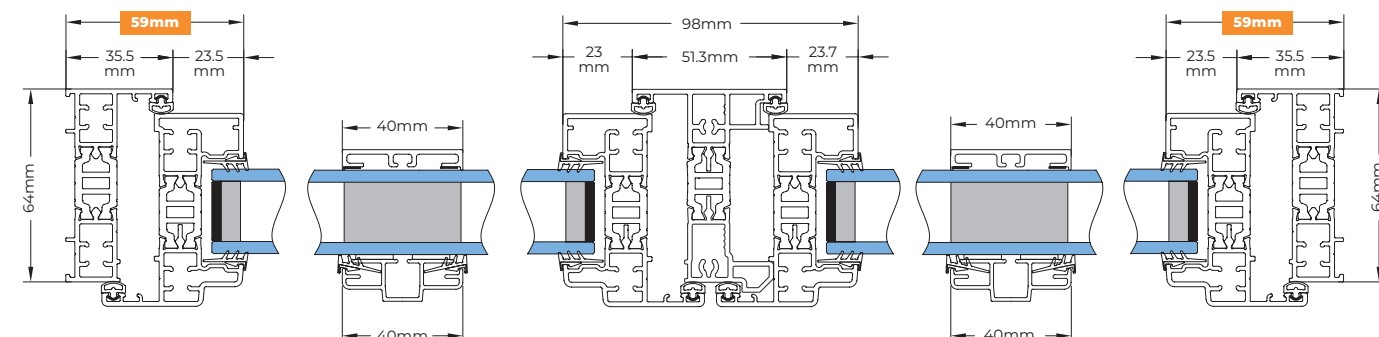
PART L

Compliant



A

Cross section shown with Small Outer Frame SC100, Stepped Sash SC300 and Stepped Glazing Bar SA028/SA037



†Subject to minimum opening requirements

B

Cross section shown with
Small Outer Frame
SC100

Stepped Sash
SC300

Stub Cill
SA010

Stepped Glazing Bar
SA028/SA037

CLASSIC BEADLESS

DOOR SHOWN IN:



Classic

HERITAGE DOOR

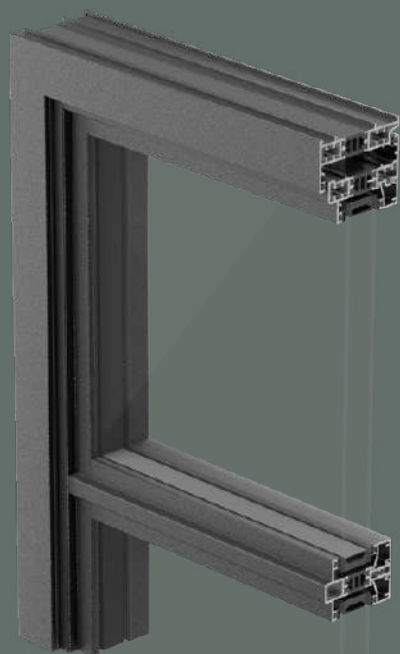
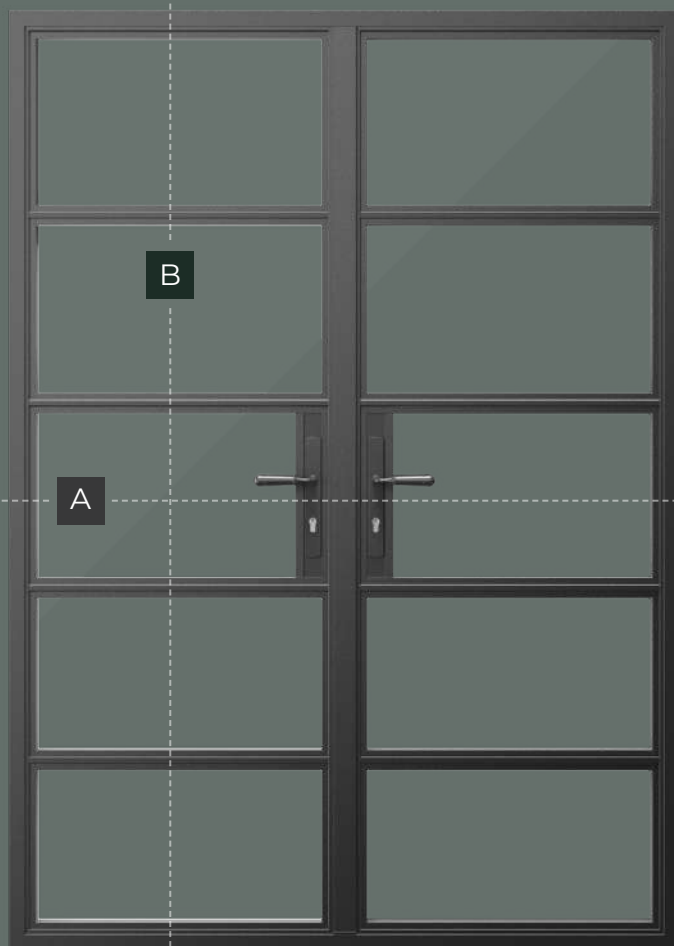
With Sheerline's signature 'stepped' look consistent across the outside of the door, art deco styling has never looked so good.

Classic French

HERITAGE DOOR



Shown at 1500 x 2100mm



FRAME THRESHOLD
SC101

ZERO THRESHOLD
SC313

LOCKBOX
SC280

FEATURES AND OPTIONS

CLASSIC HERITAGE DOOR FRENCH / TECHNICAL INFO

- Period inspired lockbox design, with a consistent aesthetic on internal and external sides
- Available as externally or internally opening
- Zero threshold option available
- Min Size* 1232mm(w) x 1776mm(h)
- Max Size* 2051mm(w) x 2251mm(h)
*with Small Outer Frame
- Max Sash Size* 1000mm(w) x 2200mm(h)

OUTER FRAME†:	SMALL	INTERMEDIATE	LARGE
SIGHTLINES:	60.5mm	73mm	-

†page 30 for options

GLAZING	STEPPED
DOUBLE GLAZED	28mm
U VALUE	1.4
DSER RATING	A+

See building regulation sections from page 144 for details

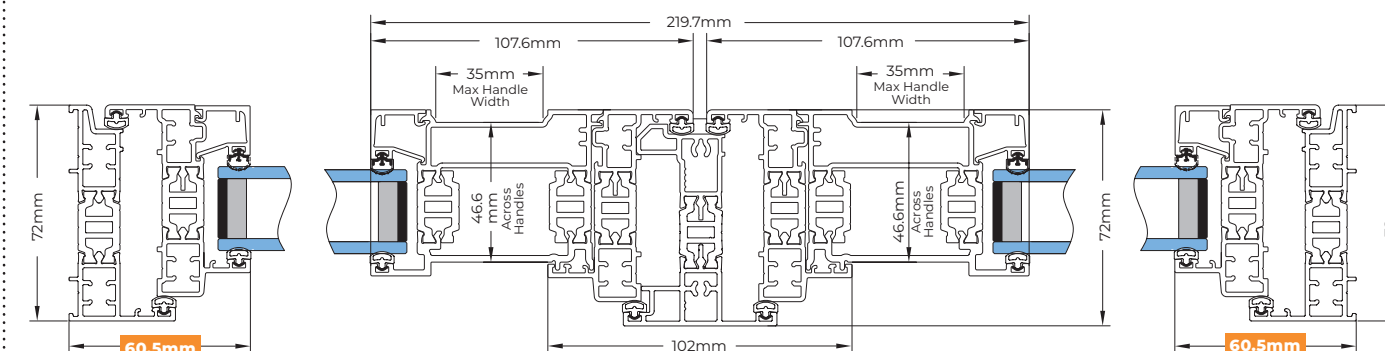
- SECURITY
PAS 24 & SBD Certified
- WATER TIGHTNESS
Class 3A
- AIR PERMEABILITY
Class 2
- WIND RESISTANCE
Class B3

PART L Compliant



A

Cross section shown with Small Flush Outer Frame SC101, Stepped Beaded Z Sash SC312, Lockbox SC280 and Meeting Stile SP250

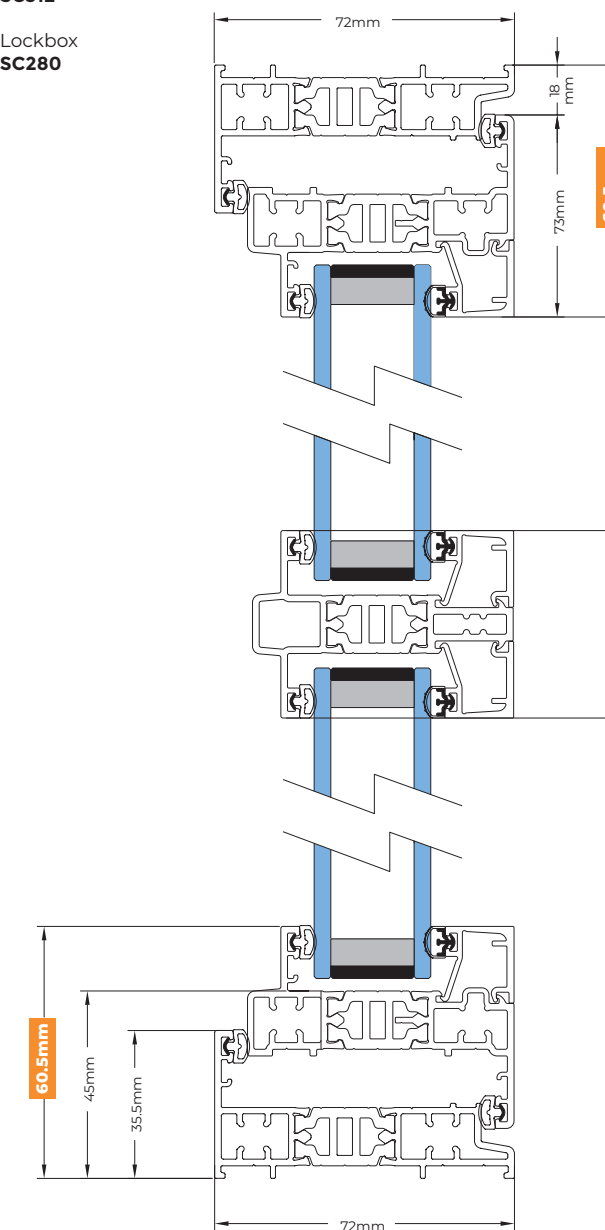


B

Cross section shown with
Small Flush Outer Frame
SC101

Stepped Beaded Z Sash
SC312

Lockbox
SC280



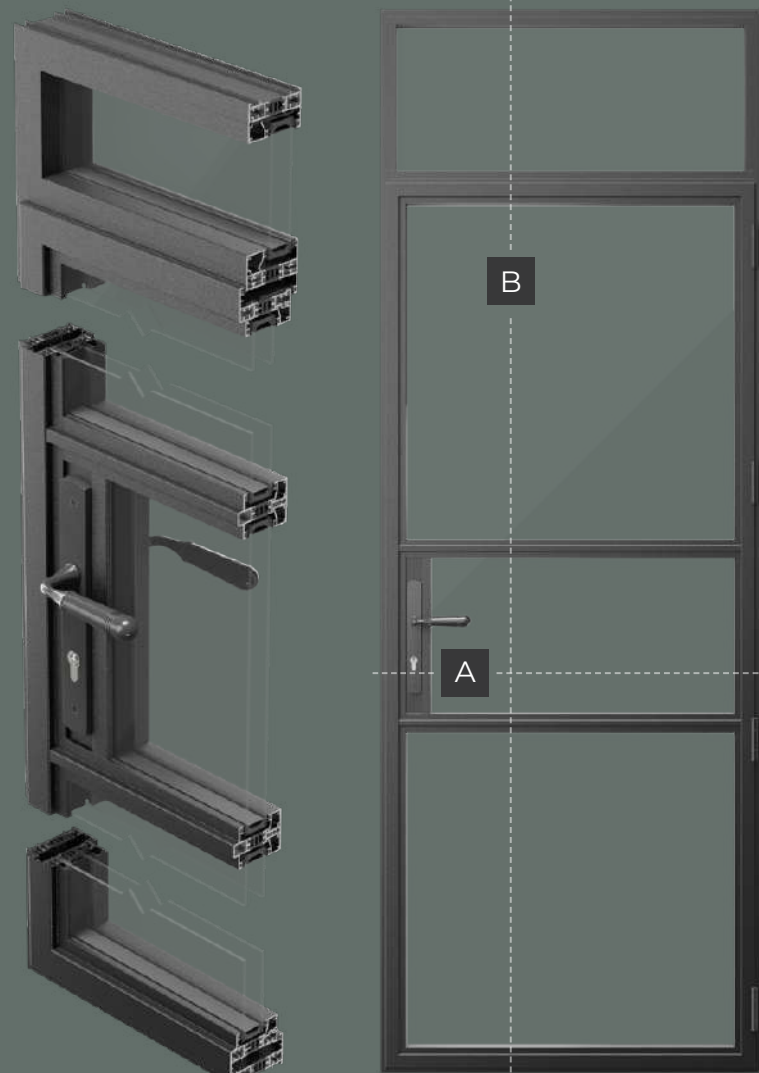
CLASSIC DOOR

Classic Single with Top Light

HERITAGE DOOR

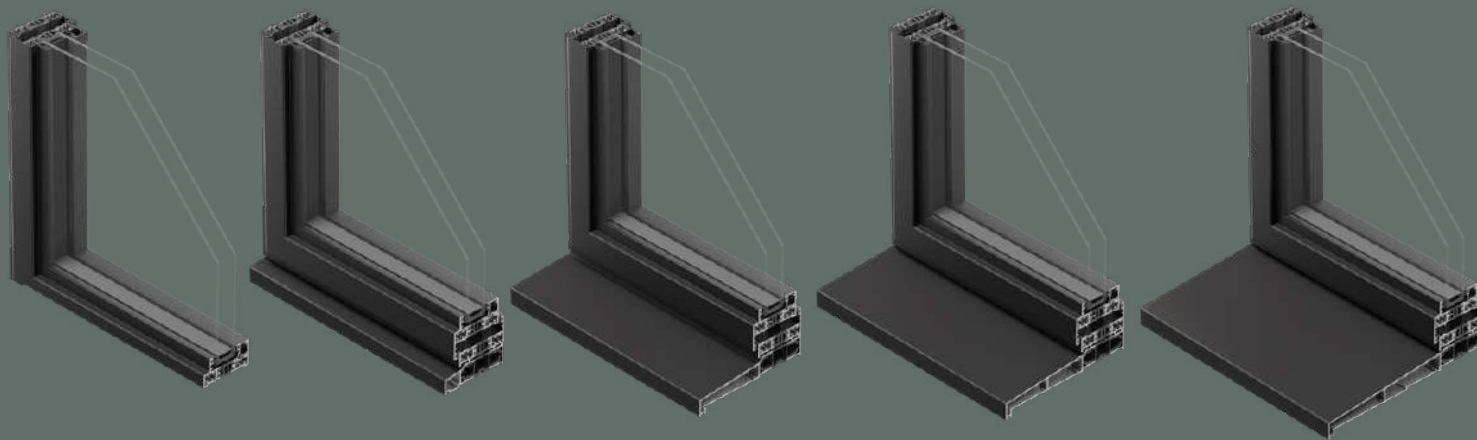


Shown at 900 x 2100/2400mm



B

A



ZERO
THRESHOLD
SC313

[Stub Cill SA010]

[Standard Cill SA011]

[Large Cill SA012]

[XL Cill SA032]

FRAME THRESHOLD
SC100/SC310

STYLES AND CILLS AVAILABLE

CLASSIC HERITAGE DOOR SINGLE / TECHNICAL INFO

- Period inspired lockbox design, with a consistent aesthetic on internal and external sides
- Zero threshold option available
- Min Size* 626mm(w) x 2126mm(h)
- Max Size* 1051mm(w) x 4357mm(h)
*with Small Outer Frame and Top Light
- Max Sash Size* 1000mm(w) x 2200mm(h)

OUTER FRAME†:	SMALL	INTERMEDIATE	LARGE
SIGHTLINES:	60.5mm	73mm	-

†page 30 for options

GLAZING	STEPPED
DOUBLE GLAZED	28mm
U VALUE	1.4
DSER RATING	A+

See building regulation sections from page 144 for details



SECURITY
PAS 24 & SBD Certified



WATER TIGHTNESS
Class 3A



AIR PERMEABILITY
Class 2



WIND RESISTANCE
Class B3

PART L Compliant

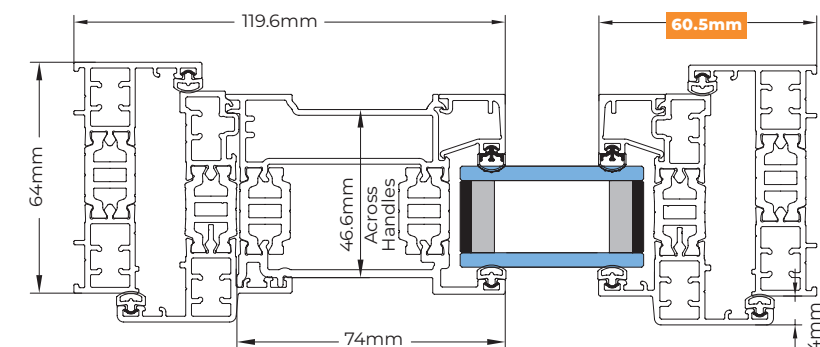


A

Cross section shown with
Small Outer Frame
SC100

Stepped Beaded Sash
SC310

Lockbox
SC280

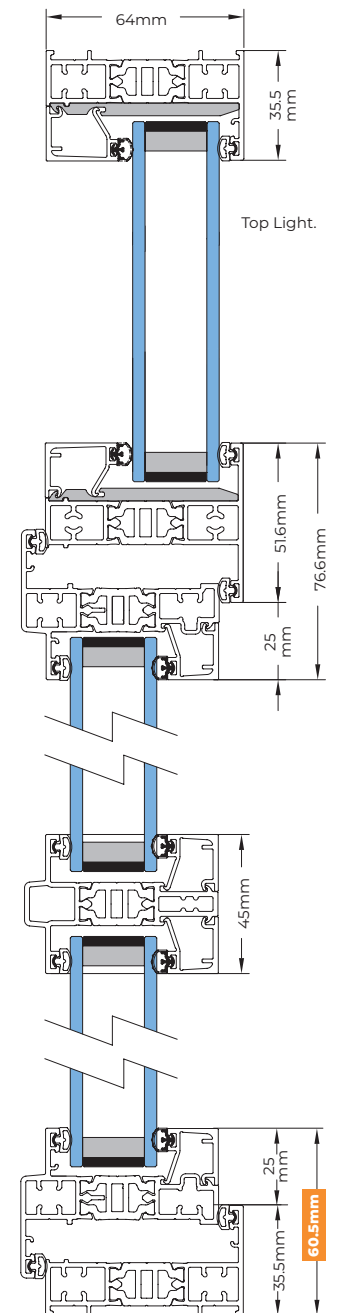


B

Cross section shown with
Small Outer Frame
SC100

Stepped Beaded Sash
SC310

Lockbox
SC280



OUR MOST THERMALLY EFFICIENT RANGE

PRESTIGE OFFERS THE WIDEST RANGE OF OPTIONS MEANING
IT'S SUITABLE FOR THE WIDEST RANGE OF PROJECTS.

PART L Compliant ✓

The entire Prestige window and door range is Part L compliant, able to achieve a double-glazed U-value of 1.4 W/m²K which easily achieves compliance for new homes and non-dwelling commercial projects.

DOUBLE GLAZING > 1.4 U-value > 44MM TRIPLE GLAZING > 1.0 U-value

PRESTIGE WINDOW & DOORS KEY BENEFITS



A CHOICE OF 3 OUTER FRAMES

enables Prestige to accommodate a wide variety of installation situations and plaster reveals.

FULL DEPTH EUROGROOVE

for a wide choice of hardware and cross compatibility with PVC-U window and door systems.



TILT & TURN AND AOV OPTIONS

(Automated Opening Vent) – perfect for commercial contract opportunities.

FULLY INTERNALLY GLAZED ALUMINIUM WINDOWS

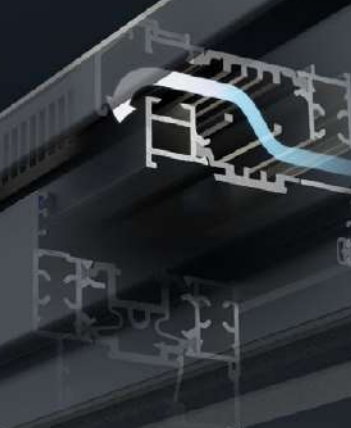
An evolution of our traditional corner cleat, our patented T cleats enable the manufacture of reverse butt jointed windows.

Our Z Transom allows for fully internally glazed, fixed next to opening, window combinations.

This elegant solution eliminates the need to use external glazing, costly reverse adaptors or dummy sashes, helping with competitive tenders.

GRILLE SHROUD VENTILATION OPTION

Offered as an elegant, perfectly colour-matched alternative to external trickle vents, the Prestige Grille Shroud works with Intermediate and Large Outer Frames.



Prestige
DOORS

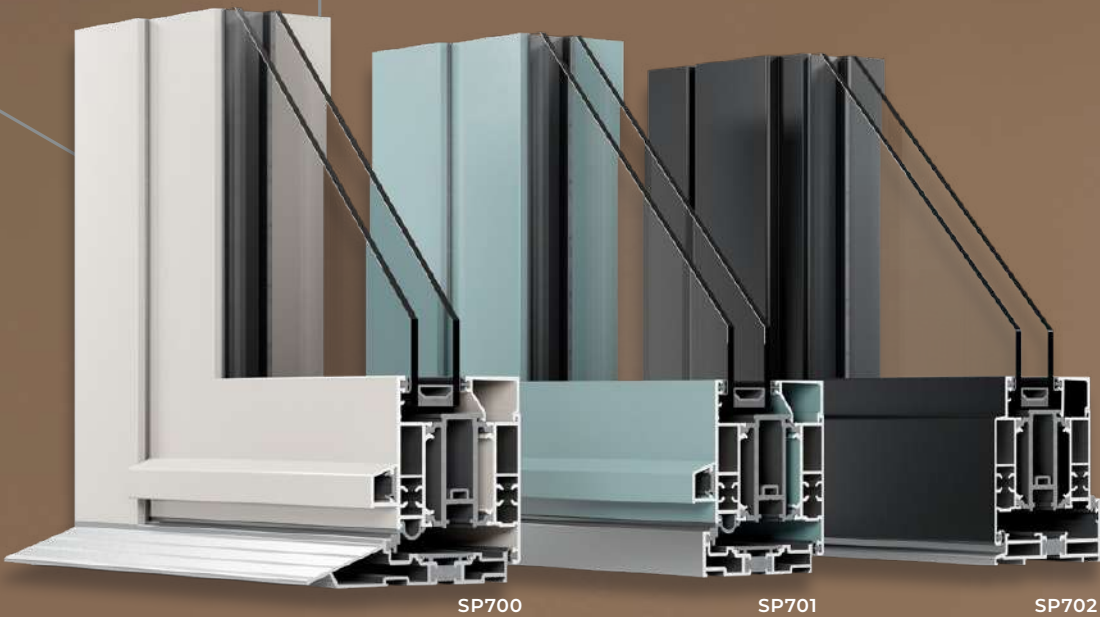
**THE PRESTIGE SYSTEM
COVERS BOTH SINGLE
AND FRENCH DOORS,**
perfectly complementing
Prestige and Classic windows.

Door sashes also support SFS 3D face
mounted PAS24 hinges and the door midrail
accommodates standard letterplates.

**MAXIMUM
HARDWARE
COMPATIBILITY
WITH A 35MM
BACKSET**



Door combinations can also be
manufactured with continuous
thresholds that continue across
any sidelights for neater and
higher quality installations.



3 PART M COMPLIANT DOOR THRESHOLDS

Door frames easily fix to these thresholds using a universal moulding that's
hidden from view externally. A cover strip continues the high-end aesthetics,
hiding the fixings, which can be slid under the moulding to aid removal.

PART M: Low Threshold Test Results

WHEELCHAIR REGS	SP700	SP701	SP702	SP710	SP711
ASSISTED SMALL CHAIR	LEVEL 7	LEVEL 9	LEVEL 9	LEVEL 7	LEVEL 7
NON ASSISTED LARGE CHAIR	LEVEL 9	LEVEL 9	LEVEL 9	LEVEL 9	LEVEL 9
ASSISTED LARGE CHAIR	LEVEL 9	LEVEL 9	LEVEL 9	LEVEL 9	LEVEL 9
LIGHTWEIGHT ELECTRIC	LEVEL 10	LEVEL 10	LEVEL 10	LEVEL 10	LEVEL 10
HEAVYWEIGHT ELECTRIC	LEVEL 10	LEVEL 10	LEVEL 10	LEVEL 10	LEVEL 10

Note: A scale of 1 to 10 (where standard of 1 = extremely difficult and 10 = very easy)
has been devised to determine the ease of operation over each low threshold with
each type of wheelchair provided.

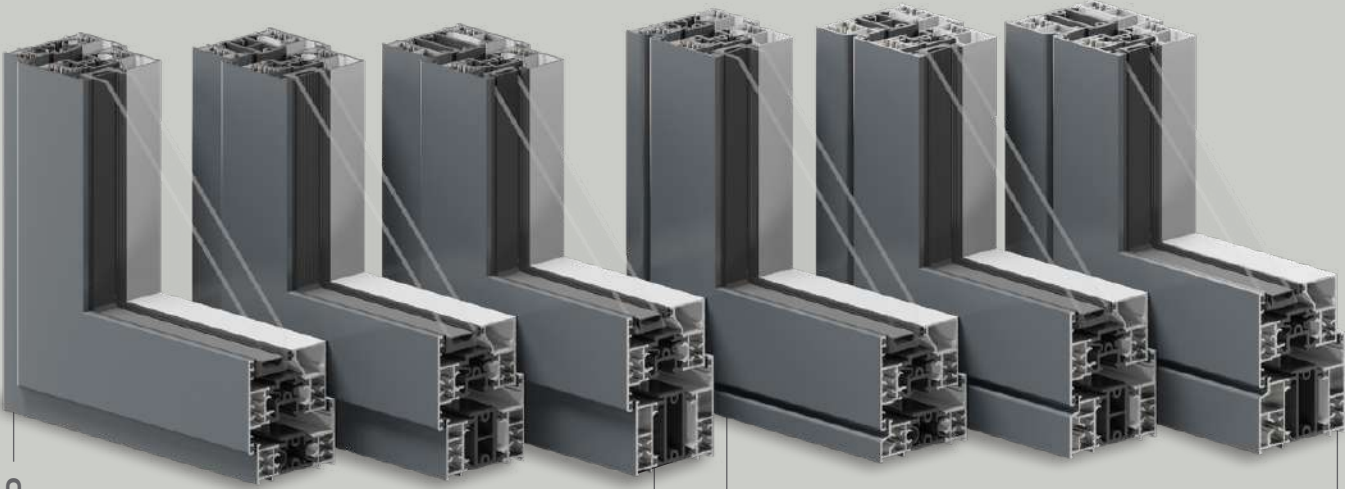
PRESTIGE
STYLES



CONTEMPORARY
SP100/SP301 / CONTEMPORARY FLUSH
SP101/SP301 / STEPPED
SP100/SP300 / STEPPED FLUSH
SP101/SP300

28mm 36mm 44mm 28mm 36mm

OUTER FRAMES



STANDARD SMALL SP100/SP301 / INTERMEDIATE SP102/SP301 / LARGE SP104/SP301

FLUSH SMALL SP101/SP300 / INTERMEDIATE SP103/SP300 / LARGE SP105/SP300

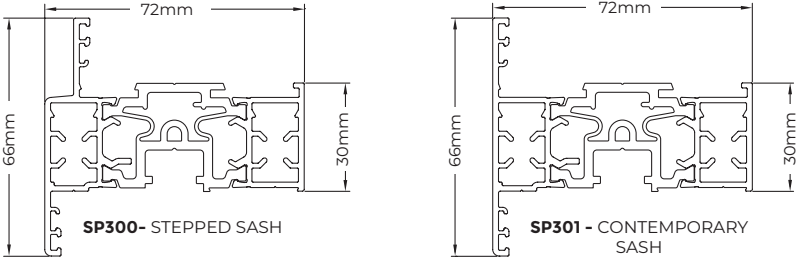
CILLS



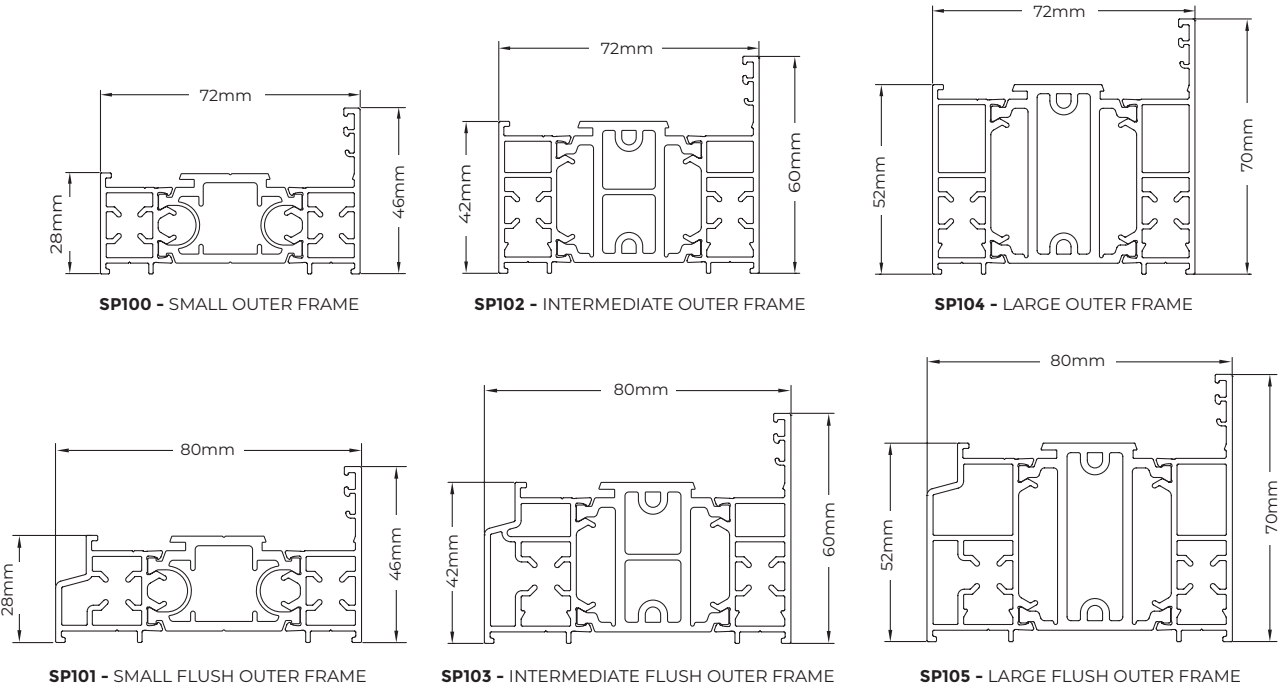
STUB SA010* / STANDARD SA011* / LARGE SA012* / EXTRA LARGE SA032* / CILL PROTECTOR SA016
fits standard and large cills

*Cills are also comprised of a Thermlock® core and SA015 component.

SASHES



OUTER FRAMES



PRESTIGE CILL WIDTHS

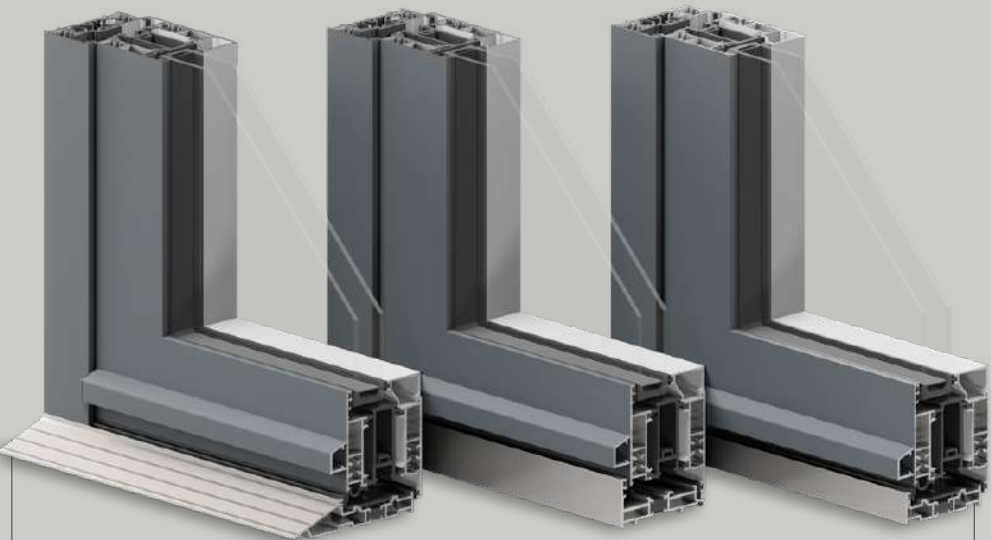
differ depending on which outer frame is used

CILL	PRESTIGE STANDARD	PRESTIGE FLUSH	PROJECTION*
STUB	93mm	101mm	21mm
STANDARD	158mm	166mm	77mm
LARGE	183mm	191mm	102mm
EXTRA LARGE	233mm	241mm	152mm

25MM UPSTAND

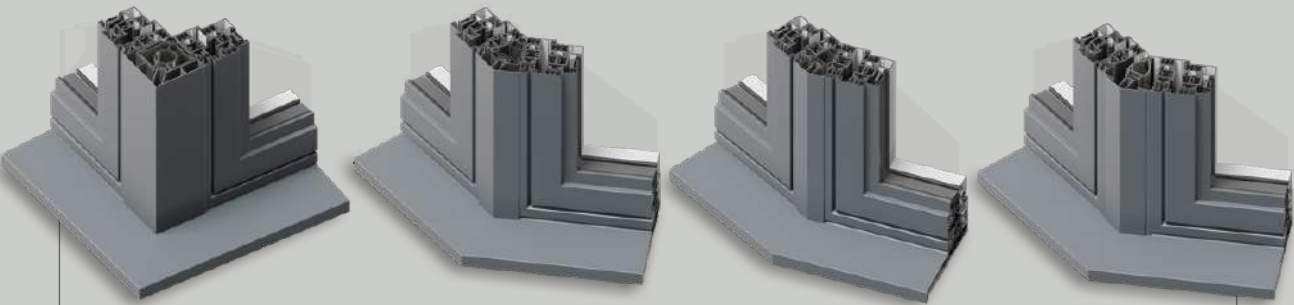
*Same for standard and flush outer frames

PRESTIGE
DOOR THRESHOLDS



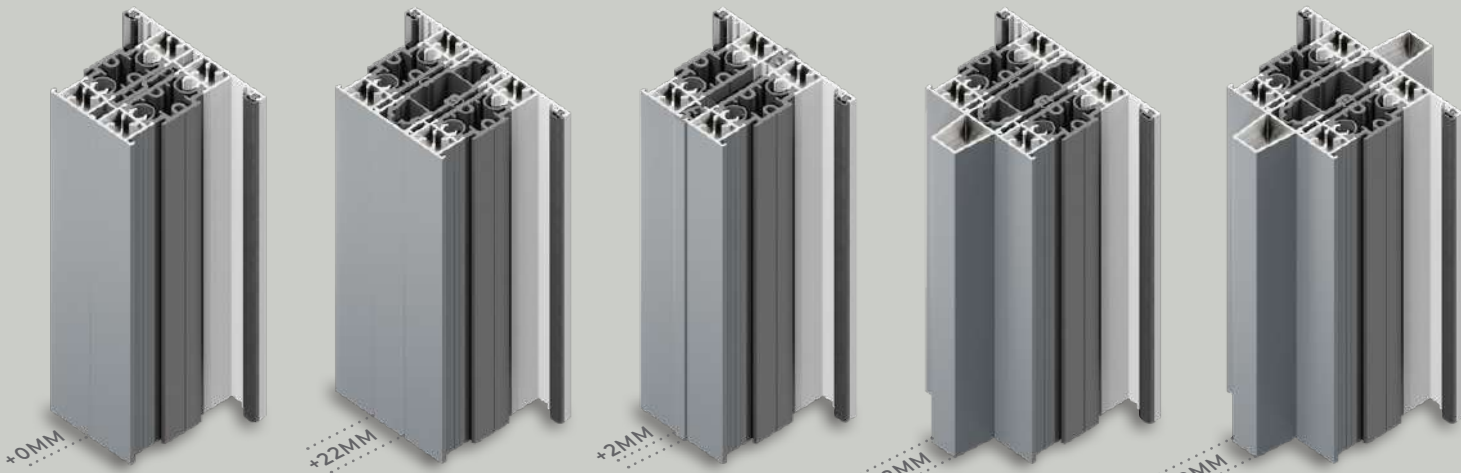
LOW THRESHOLD WITH RAMP
SP700 / LOW THRESHOLD
SP701 / FRAME LOW THRESHOLD
SP702

CORNERS



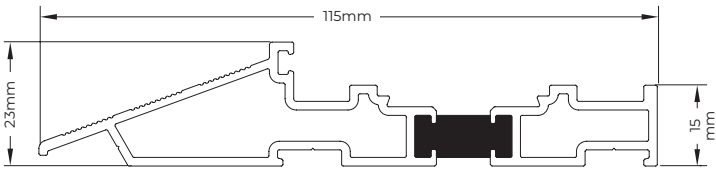
90° / 135° / 150° / VARIABLE 100° - 170°

JOINTS AND COUPLERS

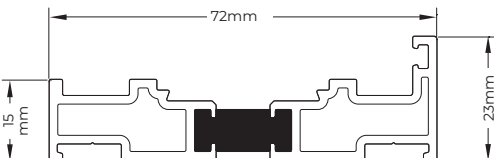


CONCEALED
SA507 / STANDARD
SA013/SA013 / BUTT JOINT
SA018/SA018 / HD
SA014/SA013 / XHD
SA014/SA014

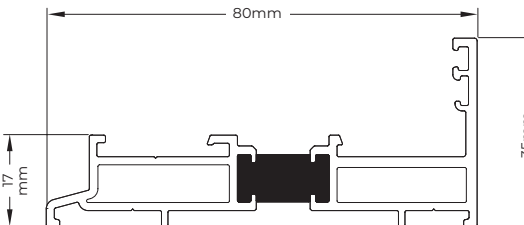
TESTED TO THE REQUIREMENTS OF PART M



SP700 - LOW THRESHOLD WITH RAMP



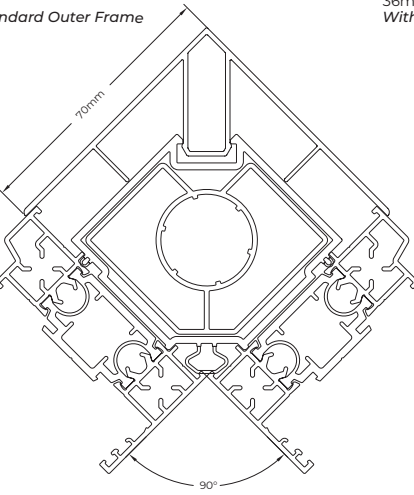
SP701 - LOW THRESHOLD



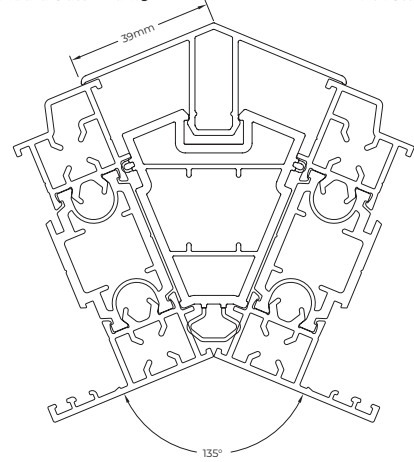
SP702 - FRAME LOW THRESHOLD

THRESHOLDS

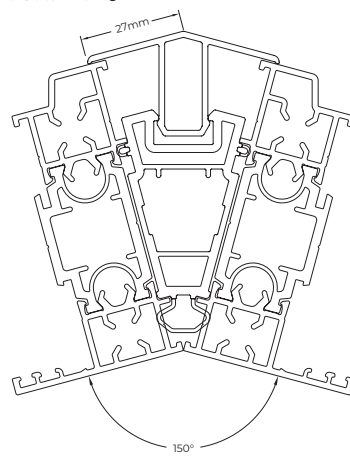
64mm
With Standard Outer Frame



36mm
With Standard Outer Frame

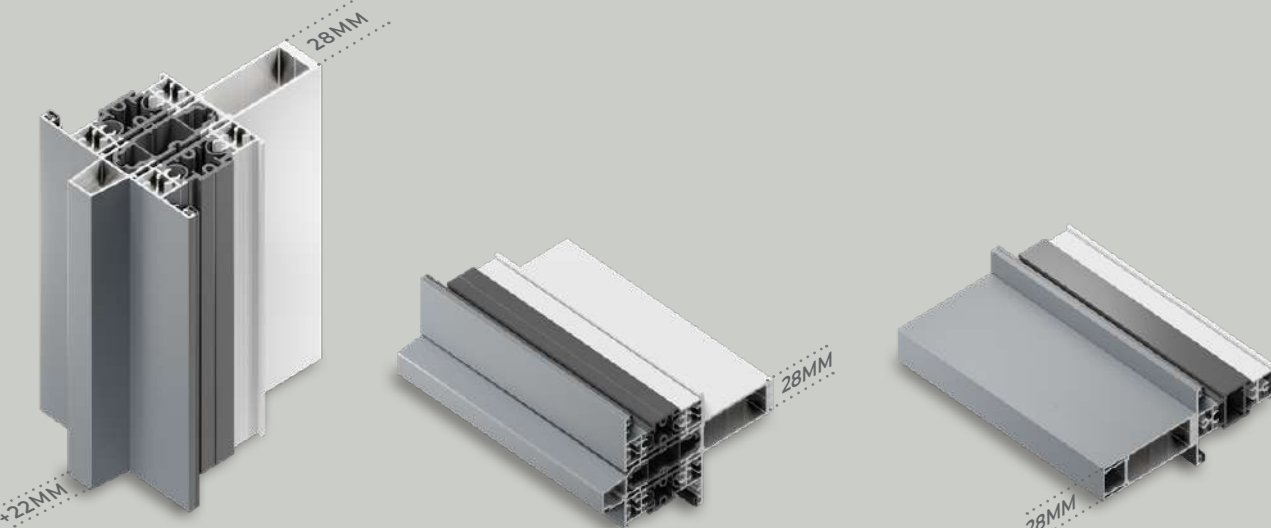


25mm
With Standard Outer Frame



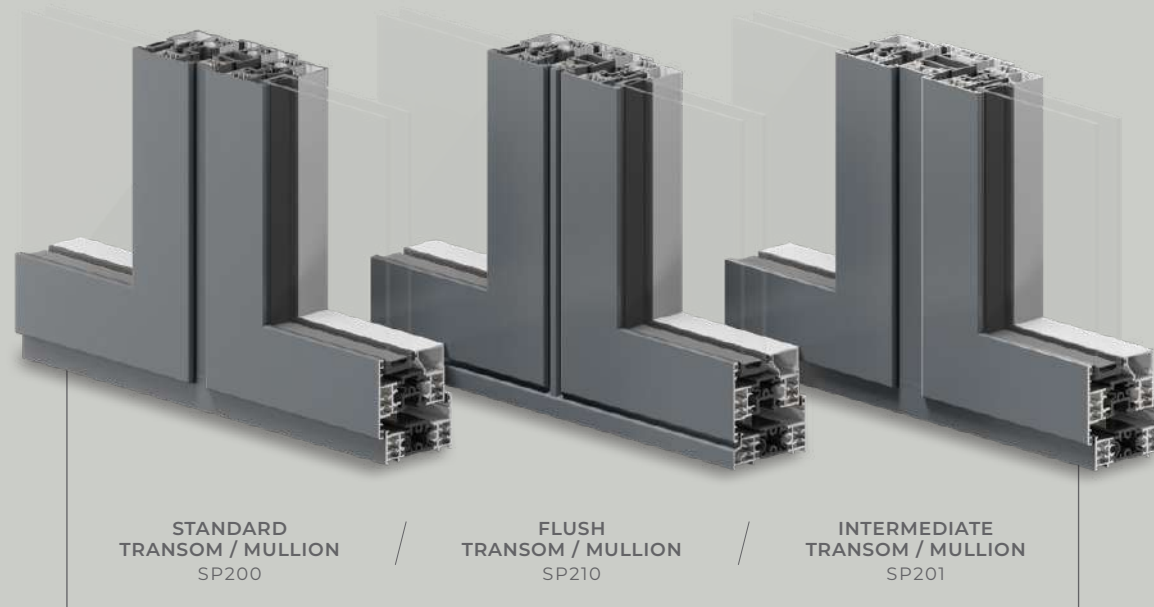
CORNERS

STRUCTURAL ADD-ON



VERTICAL
SA014/SA030 / HORIZONTAL
SA010/SA030 / RETROFIT
SA030

PRESTIGE TRANSOM / MULLION OPTION

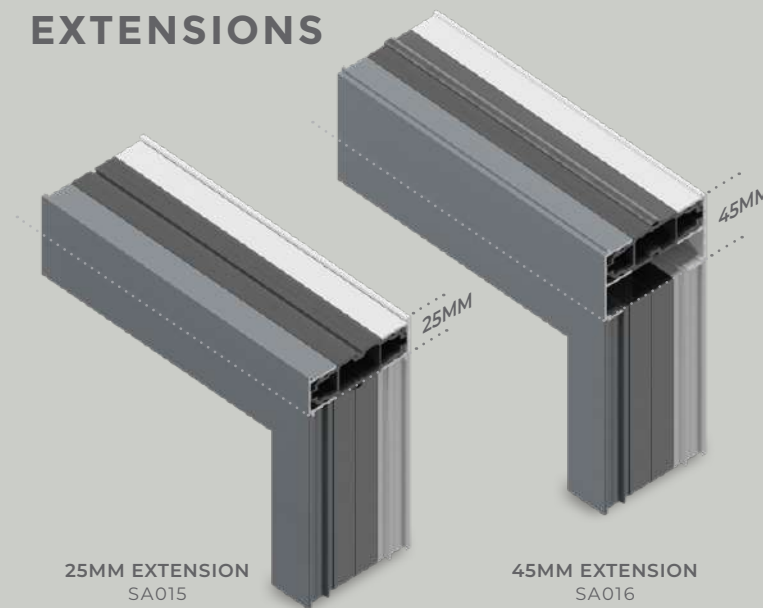


DECORATIVE BAR OPTIONS



†Suitable for both stepped and contemporary frames.

EXTENSIONS

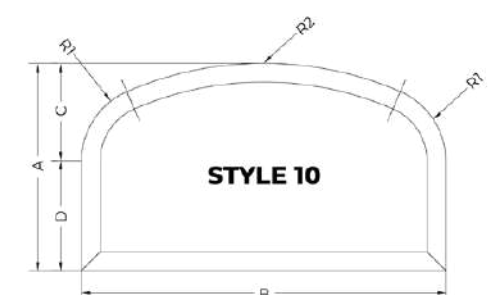
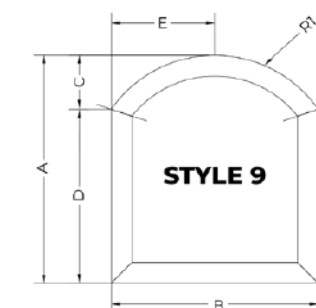
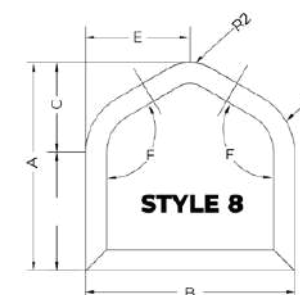
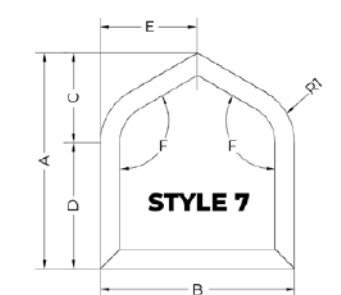
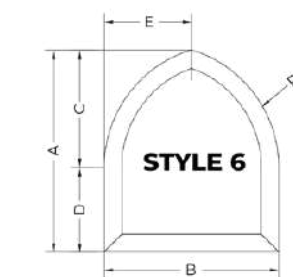
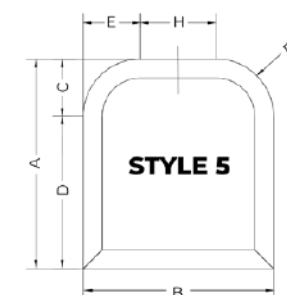
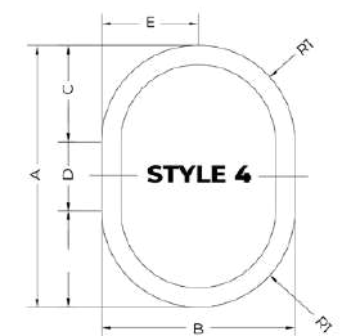
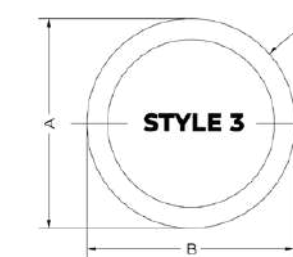
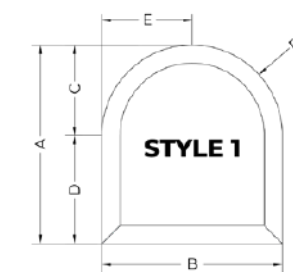


RAKED FRAMES

40° - 180° ANGLE RANGE

ARCHED FRAME

Arches, curves, gothic arches and circles available



WINDOWS SHOWN IN:



Prestige WINDOWS

Our most versatile window range.
Prestige offers the widest range of options
meaning it's suitable for the widest range
of projects.



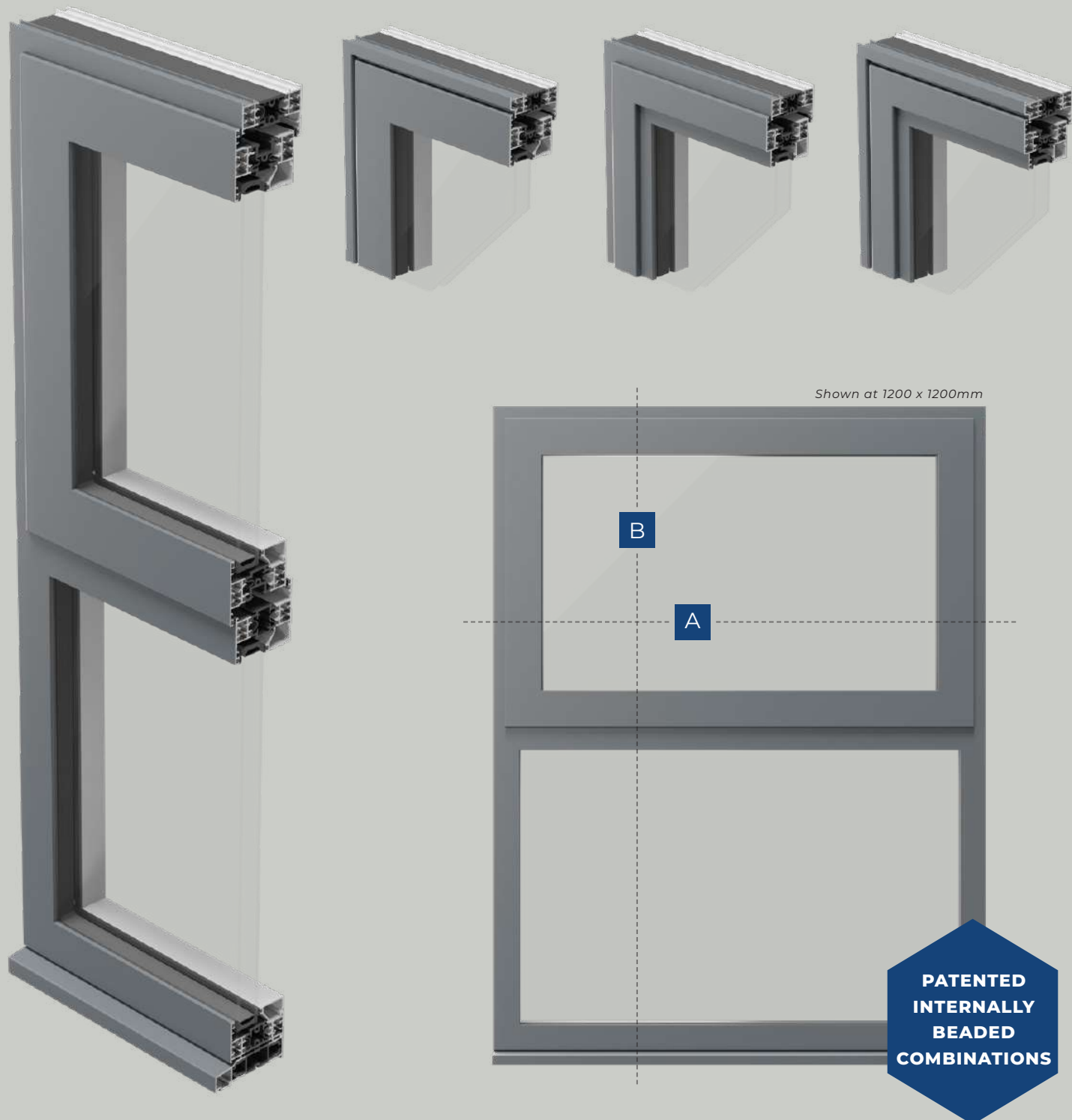
STYLES AVAILABLE

CONTEMPORARY
SP100/SP301

CONTEMPORARY FLUSH
SP101/SP301

STEPPED
SP100/SP300

STEPPED FLUSH
SP101/SP300



PRESTIGE CASEMENT WITH Z TRANSOM/MULLION / TECHNICAL INFO

- Fully internally beaded combination windows
- Eliminates the need to use external glazing, reverse adaptors or dummy sashes
- Saves on installation and remedial costs
- Min Size* 380mm(w) x 330mm(h)
- Max Size* 1500mm(w) x 6000mm(h)
- Max Top Hung Sash Size* 1430mm(w) x 1260mm(h)
*with Small Outer Frame

OUTER FRAME†:	SMALL	INTERMEDIATE	LARGE
SIGHTLINES:	88mm	102mm	112mm

†page 64 for options

GLAZING	CONTEMPORARY	STEPPED
DOUBLE GLAZED	28mm	28mm
U VALUE	1.3	1.3
WER RATING	B	B
TRIPLE GLAZED	44mm	36mm
U VALUE	1.0	1.1
WER RATING	A+	A+

See building regulation sections from page 144 for details



SECURITY
PAS 24 & SBD Certified



WATER TIGHTNESS
Class 7A



AIR PERMEABILITY
Class 3



WIND RESISTANCE
Class 4C

PART L Compliant



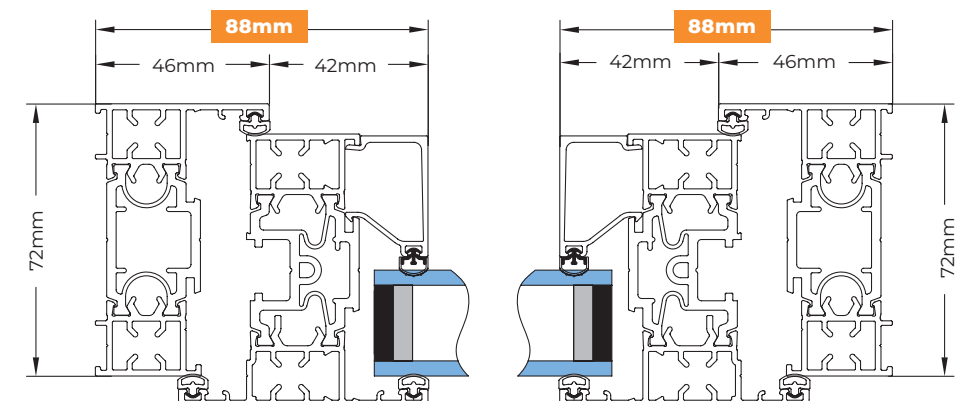
A

Cross section shown with
Small Outer Frame
SP100

Contemporary Sash
SP301

Z Transom
SP205

Stub Cill
SA010



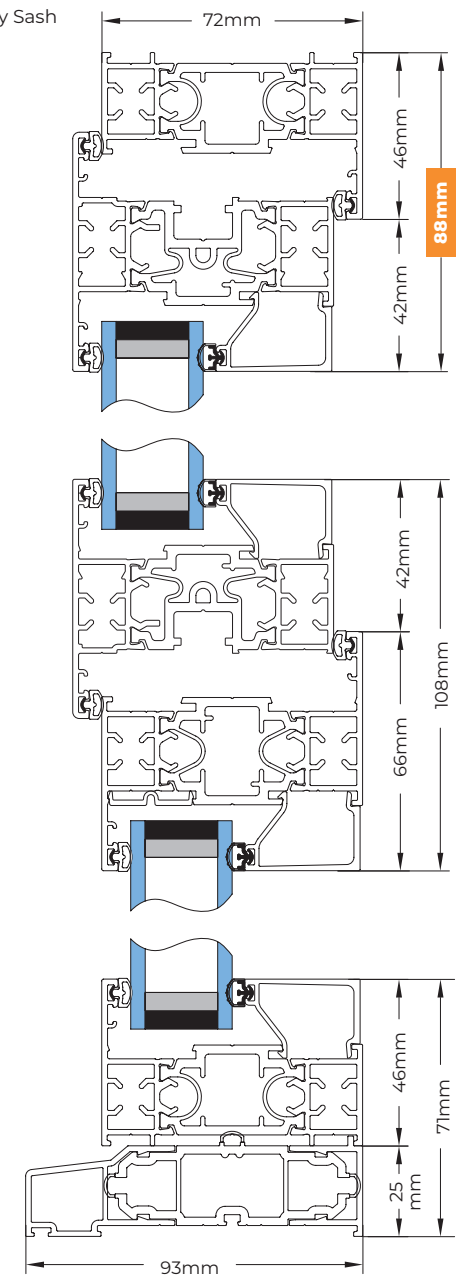
B

Cross section shown with
Small Outer Frame
SP100

Contemporary Sash
SP301

Z Transom
SP205

Stub Cill
SA010





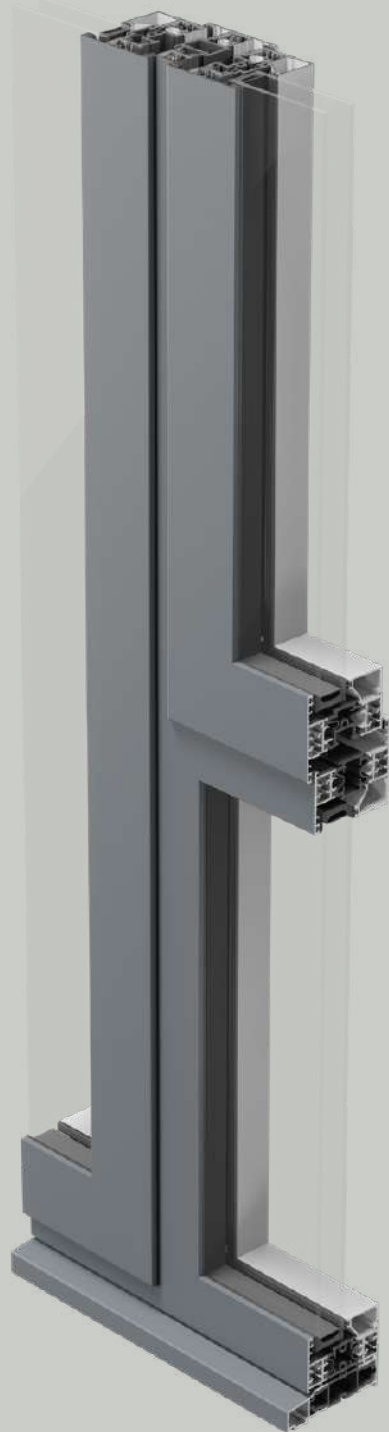
STYLES AVAILABLE

CONTEMPORARY
SP100/SP301

CONTEMPORARY FLUSH
SP101/SP301

STEPPED
SP100/SP300

STEPPED FLUSH
SP101/SP300



**PATENTED
INTERNALLY
BEADED
COMBINATIONS**

PRESTIGE CASEMENT WITH T INTERSECTION / TECHNICAL INFO

- Fully internally beaded combination windows
- Eliminates the need to use external glazing, reverse adaptors or dummy sashes
- Saves on installation and remedial costs
- Min Size* 380mm(w) x 330mm(h)
- Max Size* 1430mm(w) x 1260mm(h)
*with Small Outer Frame
- Max Side Hung Sash Size* 710mm(w) x 1450mm(h)
- Max Top Hung Sash Size* 1430mm(w) 1260mm(h)

OUTER FRAME†:	SMALL	INTERMEDIATE	LARGE
SIGHTLINES:	88mm	102mm	112mm

†page 64 for options

GLAZING	CONTEMPORARY	STEPPED
DOUBLE GLAZED	28mm	28mm
U VALUE	1.3	1.3
WER RATING	B	B
TRIPLE GLAZED	44mm	36mm
U VALUE	1.0	1.1
WER RATING	A+	A+

See building regulation sections from page 144 for details



SECURITY
PAS 24 & SBD Certified



WATER TIGHTNESS
Class 7A



AIR PERMEABILITY
Class 3



WIND RESISTANCE
Class 4C

PART L Compliant



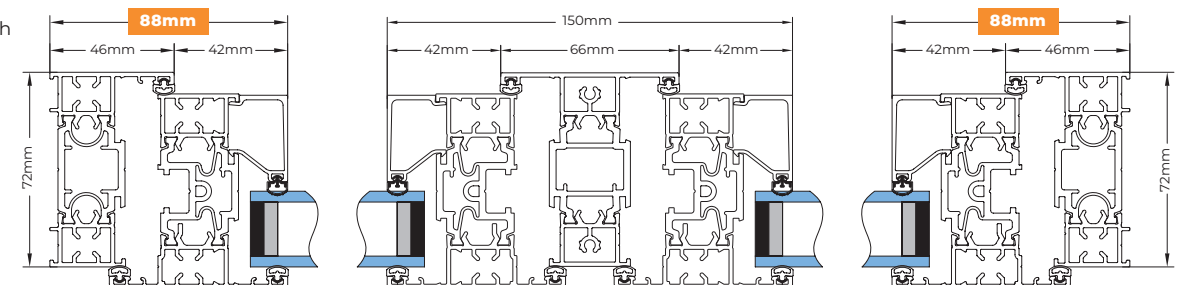
A

Cross section shown with
Small Outer Frame
SP100

Contemporary Sash
SP310

Z Transom
SP205

Stub Cill
SA010



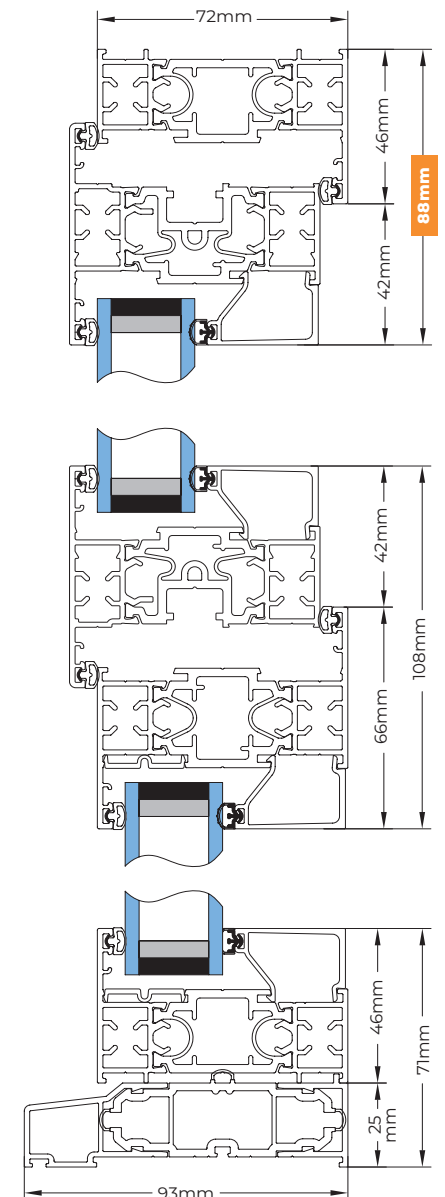
B

Cross section shown with
Small Outer Frame
SP100

Contemporary Sash
SP310

Z Transom
SP205

Stub Cill
SA010

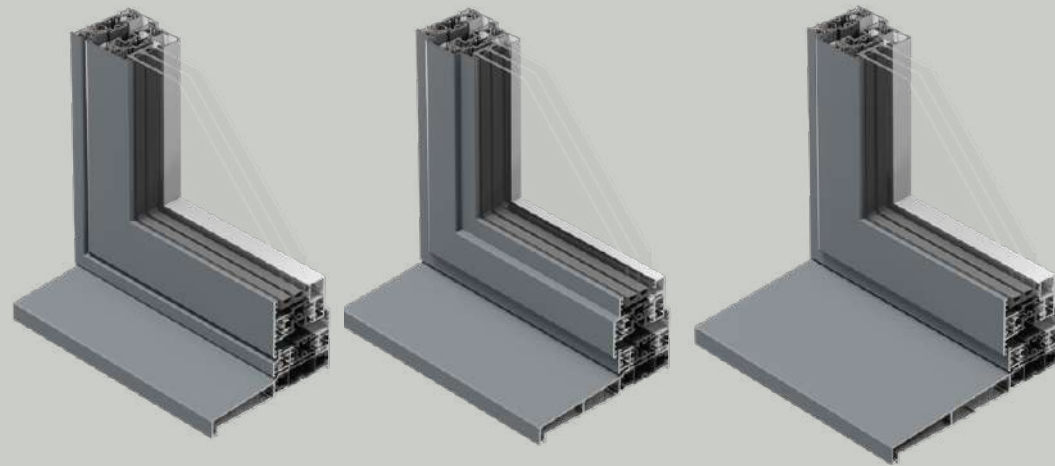




Shown at 1200 x 1200mm

B

A



STEPPED FLUSH
SP101/SP300
[Stub Cill SA010]

CONTEMPORARY FLUSH
SP101/SP301
[Standard Cill SA011]

STEPPED
SP100/SP300
[Large Cill SA012]

CONTEMPORARY
SP100/SP301
[XL Cill SA032]

STYLES AND CILLS AVAILABLE

PRESTIGE FRENCH WINDOW / TECHNICAL INFO

- Matches standard casement sightlines
- Shown with optional head drip
- Ideal for fire egress applications†
- Min Size* 710mm(w) x 424mm(h)
- Max Size* 1472mm(w) x 1494mm(h)
*with Small Outer Frame
- Max Side Hung Sash Size* 710mm(w) x 1450mm(h)

OUTER FRAME†:	SMALL	INTERMEDIATE	LARGE
SIGHTLINES:	88mm	102mm	112mm

†page 64 for options

GLAZING	CONTEMPORARY	STEPPED
DOUBLE GLAZED	28mm	28mm
U VALUE	1.4	1.4
WER RATING	B	B
TRIPLE GLAZED	44mm	36mm
U VALUE	1.0	1.1
WER RATING	A+	A+

See building regulation sections from page 144 for details



SECURITY
PAS 24 & SBD Certified



WATER TIGHTNESS
Class E750



AIR PERMEABILITY
Class 4



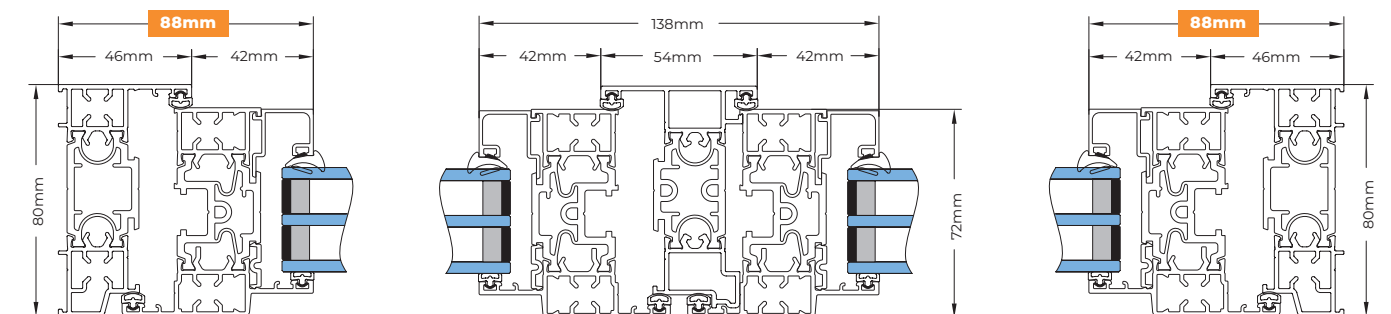
WIND RESISTANCE
Class CE2400

PART L Compliant



A

Cross section shown with Small Flush Outer Frame SP101, Stepped Sash SP300 and Meeting Stile SP250



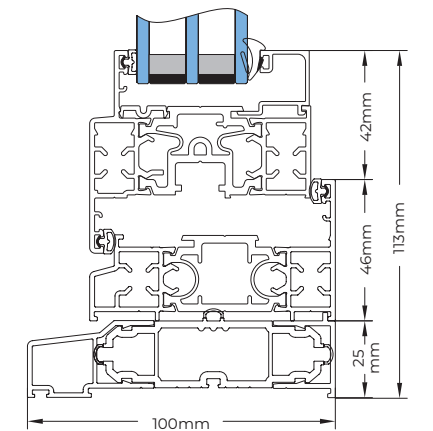
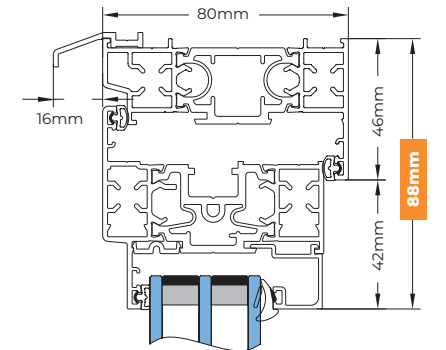
†Subject to minimum opening requirements

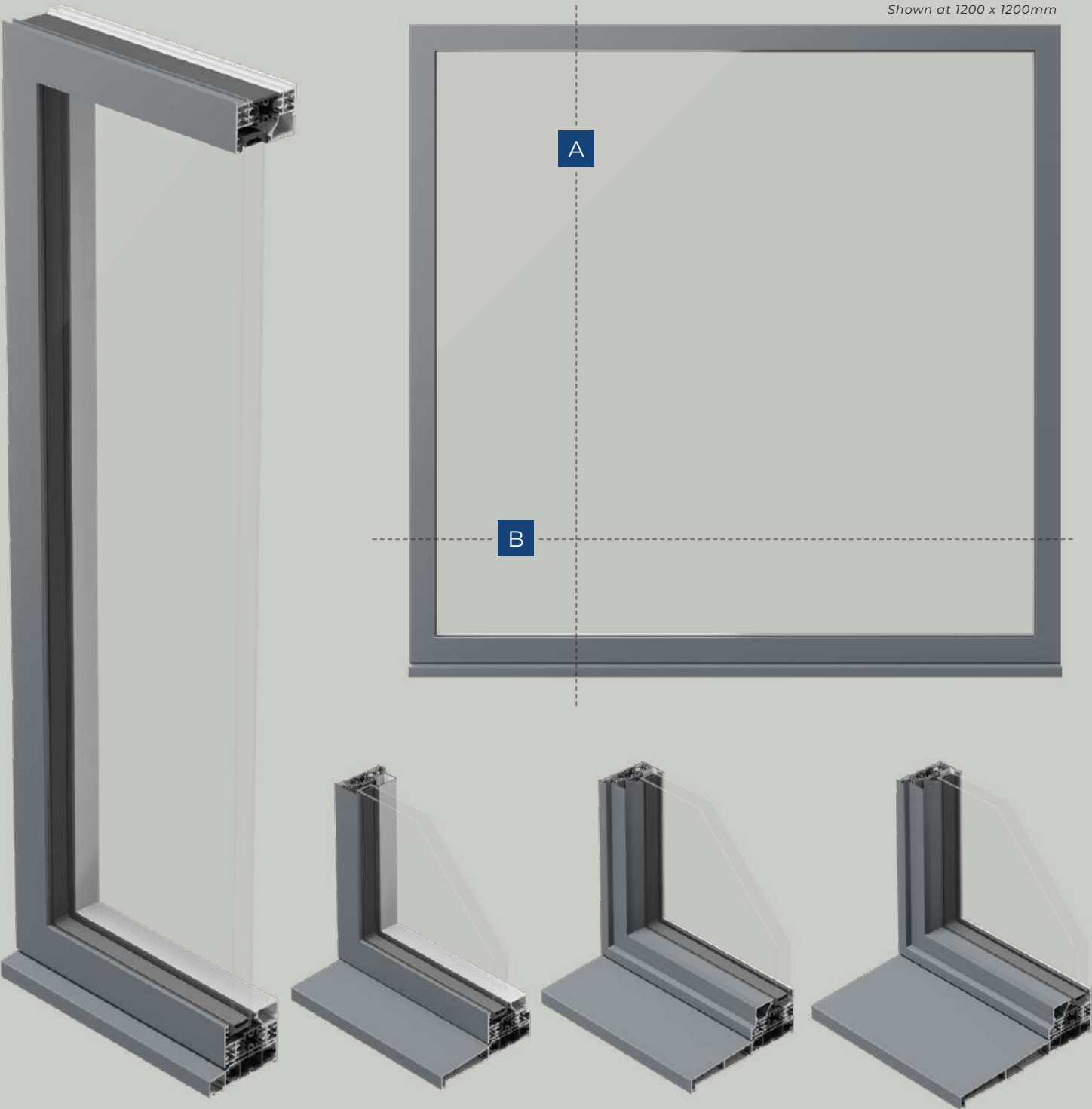
B

Cross section shown with
Small Flush Outer Frame
SP101

Stepped Sash
SP300

Stub Cill
SA010





Shown at 1200 x 1200mm

A

B

STANDARD
SP100
[Stub Cill SA010]

STANDARD
SP100
[Standard Cill SA011]

FLUSH FRAME
SP101 [Externally Glazed]
[Large Cill SA012]

FLUSH FRAME
SP101 [Externally Glazed]
[XL Cill SA032]

STYLES AND CILLS AVAILABLE

PRESTIGE FIXED / TECHNICAL INFO

- Min Size* 350mm(w) x 350mm(h)
- Max Size dependent on glazing, fixings and wind loadings

OUTER FRAME†:	SMALL	INTERMEDIATE	LARGE
SIGHTLINES:	46mm	60mm	70mm

†page 64 for options

GLAZING	FIXED FRAMES
DOUBLE GLAZED	28mm
U VALUE	1.4
WER RATING	B
TRIPLE GLAZED	44mm
U VALUE	1.0
WER RATING	A+

See building regulation sections from page 144 for details

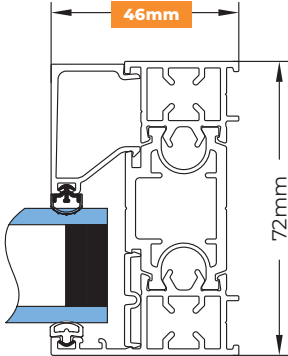
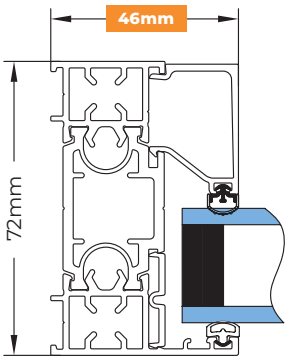
- SECURITY
PAS 24 & SBD Certified
- WATER TIGHTNESS
Class 7A
- AIR PERMEABILITY
Class 3
- WIND RESISTANCE
Class CE2400

PART L Compliant



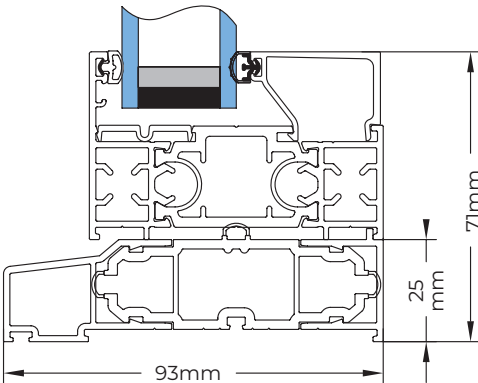
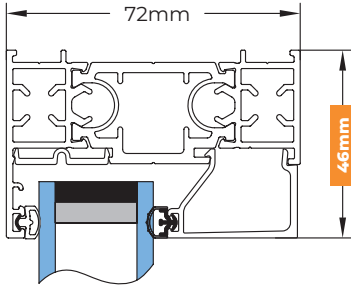
A

Cross section shown with
Small Flush Outer Frame
SP100

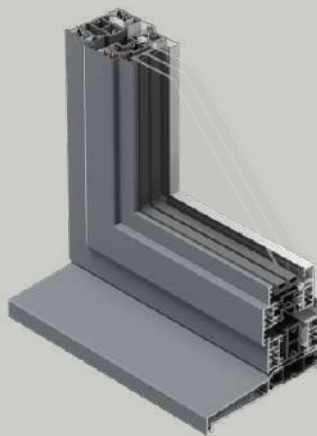
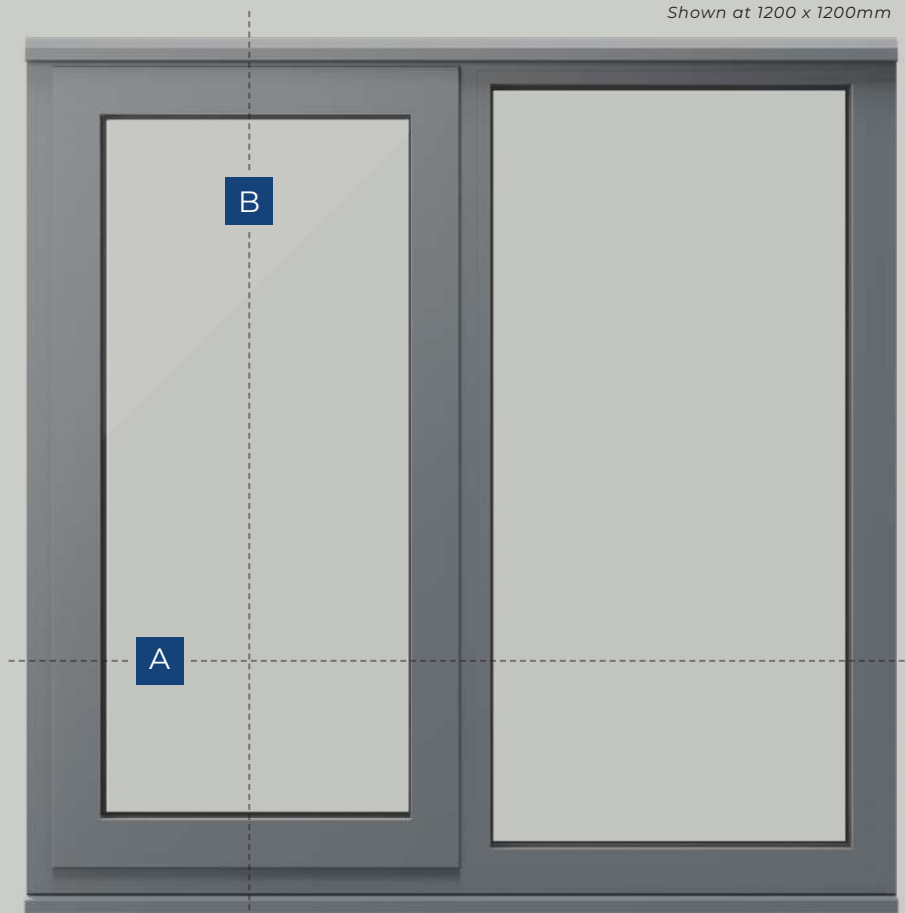
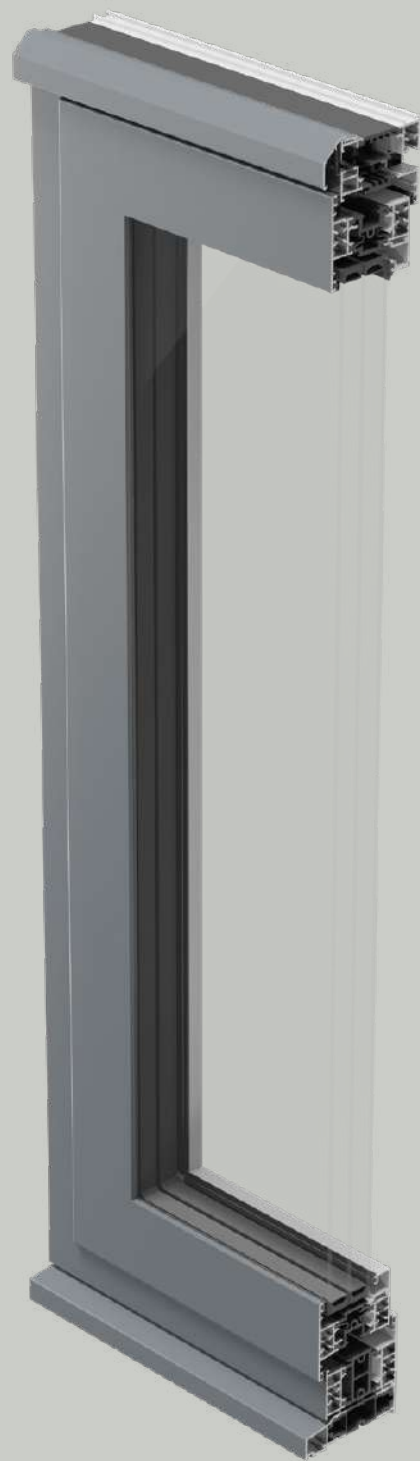


Cross section shown with
Small Outer Frame
SP100

Stub Cill
SA010



Prestige Casement



ENTIRELY
INTERNALLY
BEADED
COMBINATION
SHOWN ON
PAGE 72

CONTEMPORARY
SP102/SP301
[Stub Cill SA010]

STEPPED
SP102/SP300
[Standard Cill SA011]

STYLES AVAILABLE

PRESTIGE CASEMENT / TECHNICAL INFO

- Showing Grille Shroud for concealed ventilation
- Min Size* 330mm(w) x 380mm(h)
- Max Size* 6000mm(w) x 1500mm(h)
- Max Side Hung Sash* 710mm(w) x 1450mm(h)
*with Small Outer Frame

OUTER FRAME†:	SMALL	INTERMEDIATE	LARGE
SIGHTLINES:	88mm	102mm	112mm

†page 64 for options

GLAZING	CONTEMPORARY	STEPPED
DOUBLE GLAZED	28mm	28mm
U VALUE	1.4	1.4
WER RATING	B	B
TRIPLE GLAZED	44mm	36mm
U VALUE	1.0	1.1
WER RATING	A+	A+

See building regulation sections from page 144 for details



SECURITY
PAS 24 & SBD Certified



WATER TIGHTNESS
Class E750



AIR PERMEABILITY
Class 4



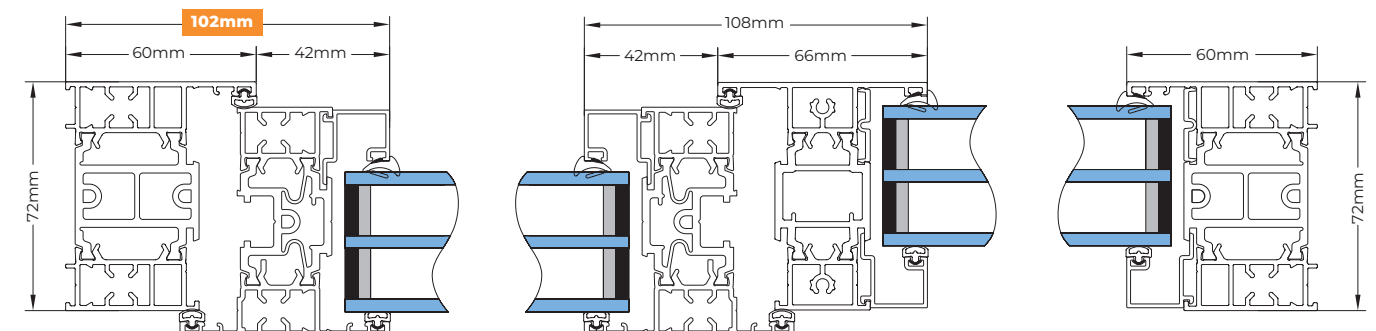
WIND RESISTANCE
Class CE2400

PART L Compliant



A

Cross section shown with Intermediate Outer Frame SP102, Contemporary Sash SP301 and Mullion SP200



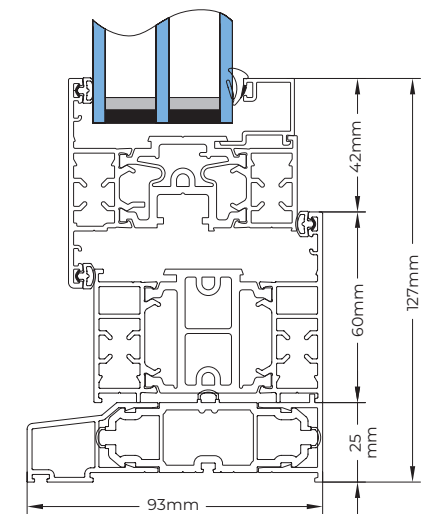
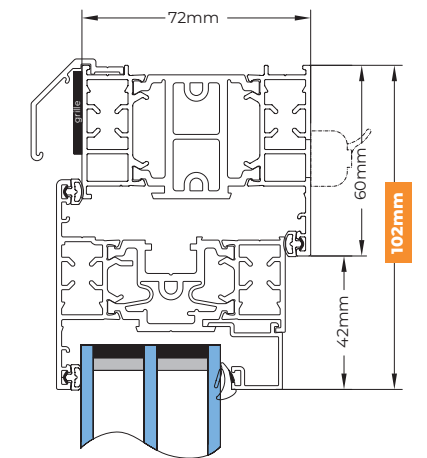
B

Cross section shown with
Intermediate Outer Frame
SP102

Grille Shroud
SA087

Contemporary Sash
SP301

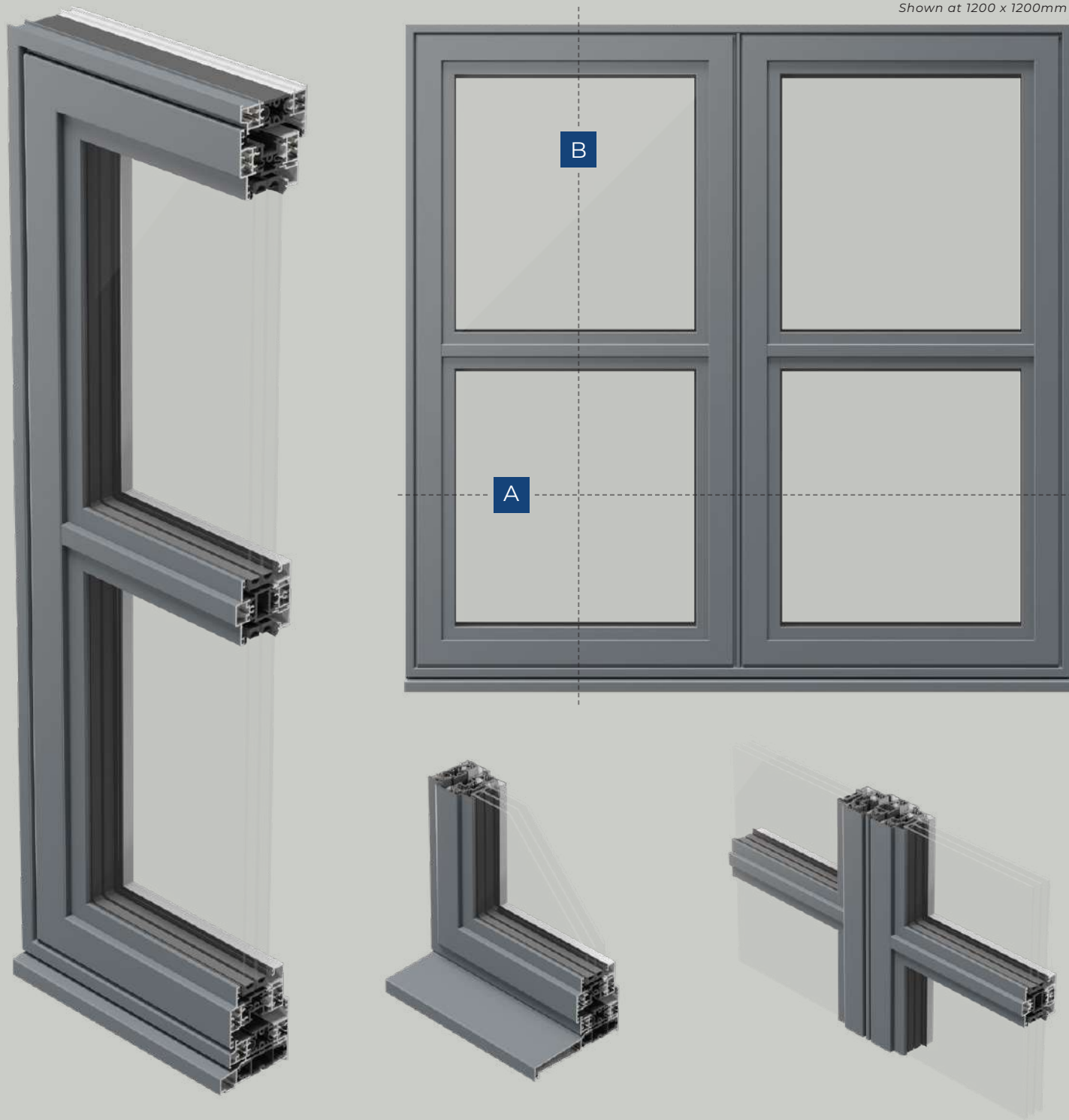
Stub Cill
SA010



Casement with Stepped Dummy Transom/Mullion



Shown at 1200 x 1200mm



STEPPED FLUSH
SP101/SP300
[Stub Cill SA010]

STEPPED
SP100/SP300
[Standard Cill SA011]

FLUSH TRANSOM / MULLION
SP210

STYLES AVAILABLE

PRESTIGE CASEMENT WITH STEPPED DUMMY TRANSOM/MULLION / TECHNICAL INFO

- Stepped Mullion/Transom matches the Flush Outer Frame
- Dummy Transom/Mullion ensures consistent aesthetics
- Min Size* 1482mm(w) x 1494mm(h)
- Max Size* 722mm(w) 424mm(h)
*with Small Outer Frame
- Max Side Hung Sash Size 710mm(w) 1450mm(h)

OUTER FRAME†:	SMALL	INTERMEDIATE	LARGE
SIGHTLINES:	88mm	102mm	112mm

†page 64 for options

GLAZING	CONTEMPORARY	STEPPED
DOUBLE GLAZED	28mm	28mm
U VALUE	1.4	1.4
WER RATING	B	B
TRIPLE GLAZED	44mm	36mm
U VALUE	1.0	1.1
WER RATING	A+	A+

See building regulation sections from page 144 for details



SECURITY
PAS 24 & SBD Certified



WATER TIGHTNESS
Class E750



AIR PERMEABILITY
Class 4



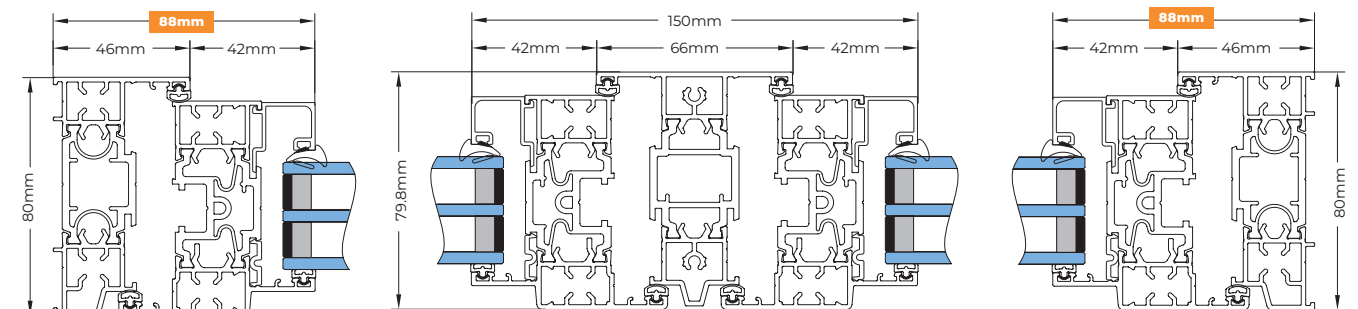
WIND RESISTANCE
Class CE2400

PART L Compliant



A

Cross section shown with Small Flush Outer Frame SP101, Stepped Sash SP300 and Flush Mullion SP210



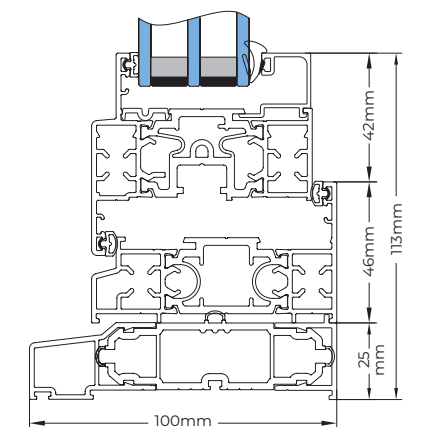
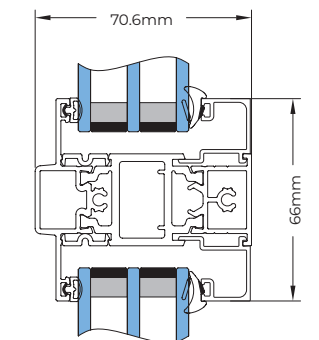
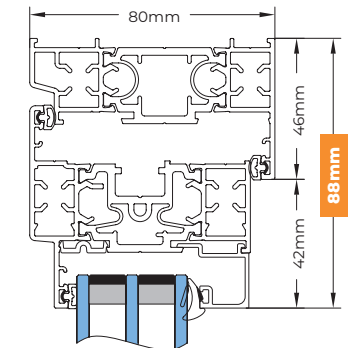
B

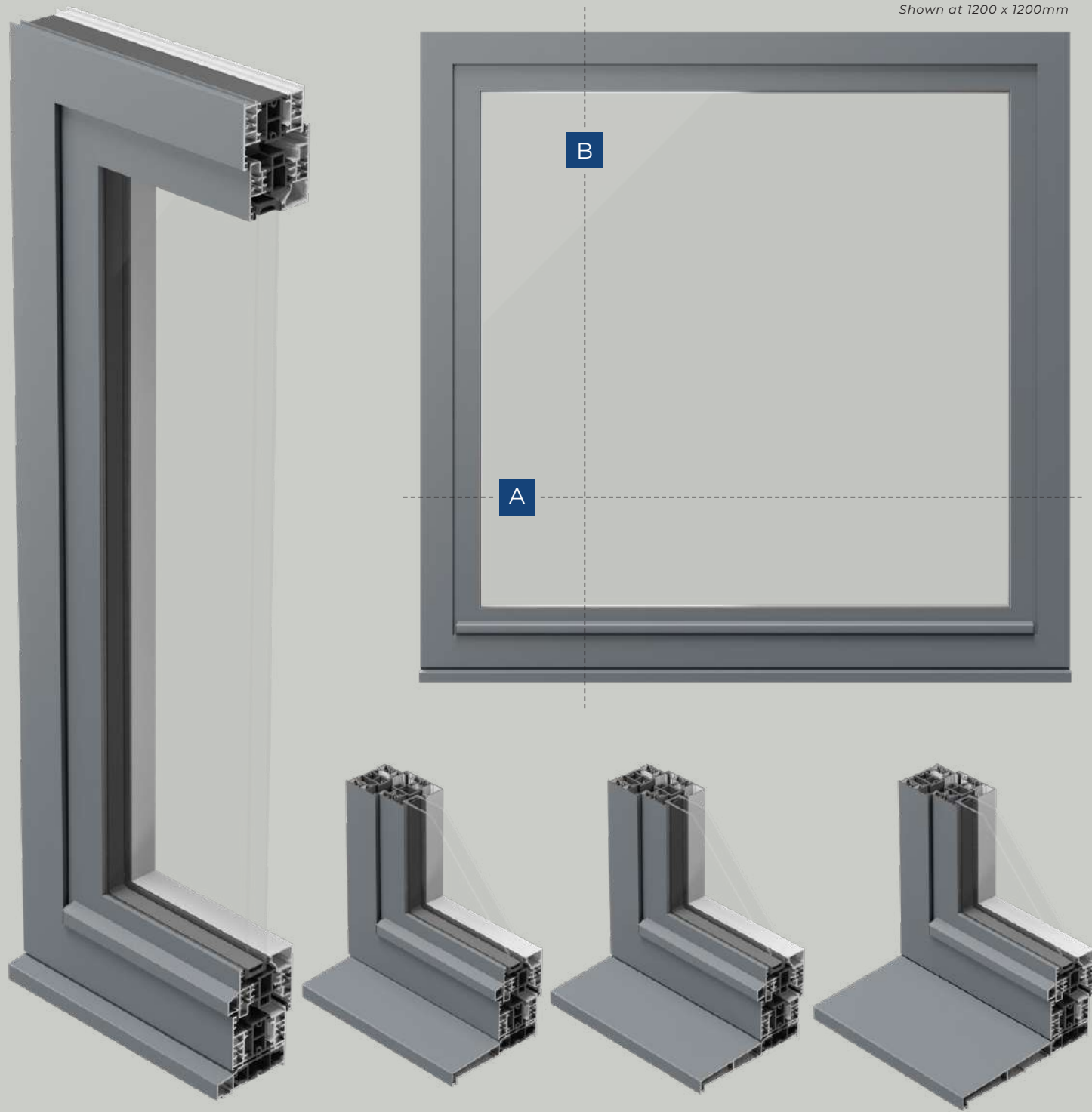
Cross section shown with
Small Flush Outer Frame
SP101

Stepped Sash
SP300

Stepped Dummy Mullion
SP230

Stub Cill
SA010





Shown at 1200 x 1200mm

CONTEMPORARY
SP102/SP305

[Stub Cill SA010]

[Standard Cill SA011]

[Large Cill SA012]

[XL Cill SA032]

CILLS AVAILABLE

PRESTIGE TILT & TURN / TECHNICAL INFO

- Min Size* 504mm(w) x 544mm(h)
- Max Size* 1472mm(w) x 1472mm(h)
*with Small Outer Frame
- Max Tilt & Turn Sash Size 1428mm(w) x 1428mm(h)

OUTER FRAME†:	SMALL	INTERMEDIATE	LARGE
SIGHTLINES:	94mm	108mm	118mm

†page 64 for options

GLAZING	CONTEMPORARY
DOUBLE GLAZED	28mm
U VALUE	1.4
WER RATING	B
TRIPLE GLAZED	44mm
U VALUE	1.0
WER RATING	A+

See building regulation sections from page 144 for details



SECURITY
PAS 24 & SBD Certified



WATER TIGHTNESS
Class 7a



AIR PERMEABILITY
Class 4



WIND RESISTANCE
Class CE2400

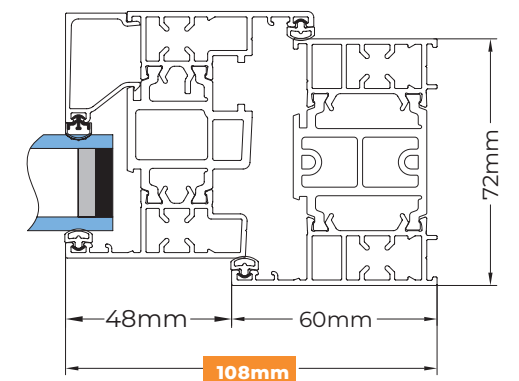
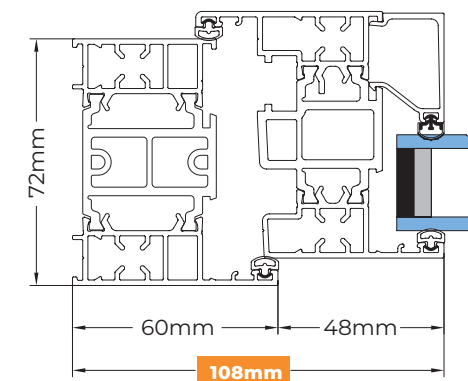
PART L Compliant



A

Cross section shown with
Intermediate Outer Frame
SP102

Tilt & Turn Sash
SP305

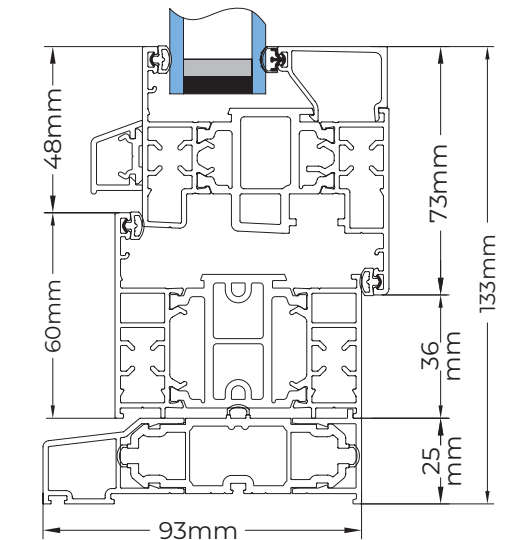
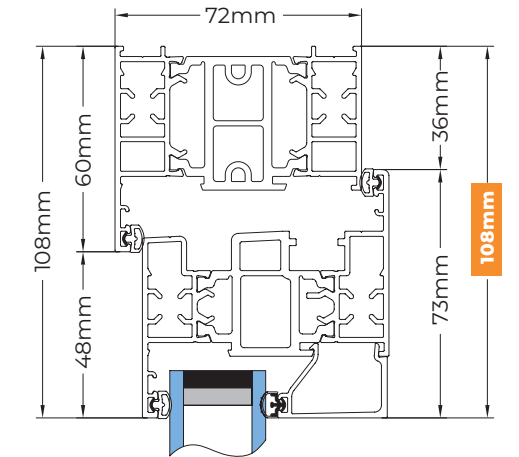


B

Cross section shown with
Intermediate Outer Frame
SP102

Tilt & Turn Sash
SP305

Stub Cill
SA010





DOOR SHOWN IN:

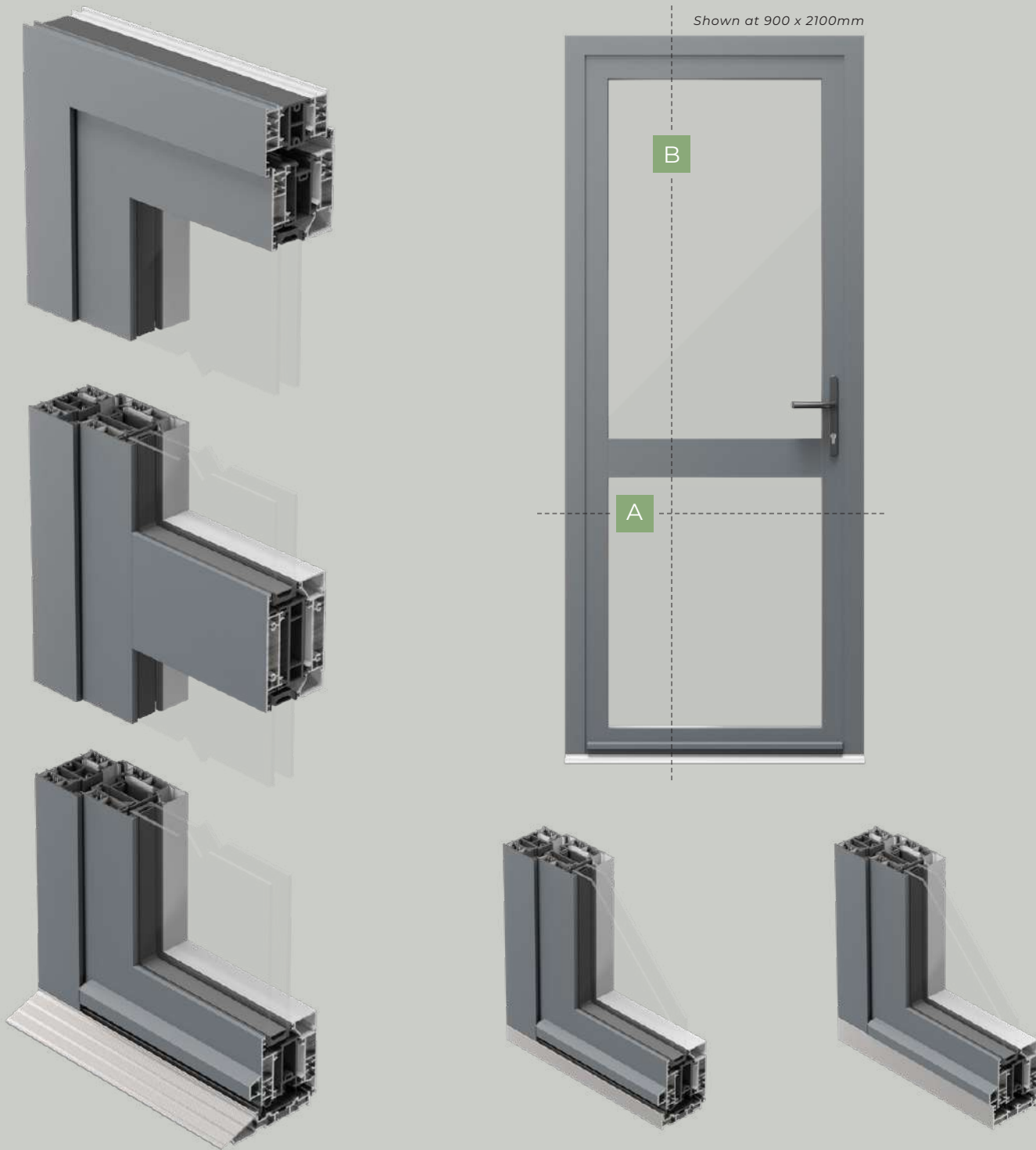


CREAM
9001 Matt

Prestige DOORS

Single and French entrance doors that are the perfect complement to our window ranges.
Available alongside a composite door outer frame – for the complete aluminium look.

Single Door with Midrail *inward opening*



CONTEMPORARY
SP102/SP351

LOW THRESHOLD with Ramp
SP700

LOW THRESHOLD
SP701

FRAME LOW THRESHOLD
SP702

LOW THRESHOLDS AVAILABLE

PRESTIGE SINGLE DOOR WITH MIDRAIL *INWARD OPENING* / TECHNICAL INFO

- Min Size* 672mm(w)
- Max Size* 1072mm(w) x 2572mm(h)
*with Intermediate Outer Frame
- Max Sash Size* 1000mm(w) x 2500mm(h)

OUTER FRAME†:	SMALL	INTERMEDIATE	LARGE
SIGHTLINES:	113mm	127mm	137mm

†page 64 for options

GLAZING	CONTEMPORARY	STEPPED
DOUBLE GLAZED	28mm	28mm
U VALUE	1.4	1.4
DSER RATING	B	B
TRIPLE GLAZED	44mm	36mm
U VALUE	1.0	1.1
DSER RATING	A+	A+

See building regulation sections from page 144 for details



SECURITY
PAS 24 & SBD Certified



WATER TIGHTNESS
Class 2A



AIR PERMEABILITY
Class 2



WIND RESISTANCE
Class C3

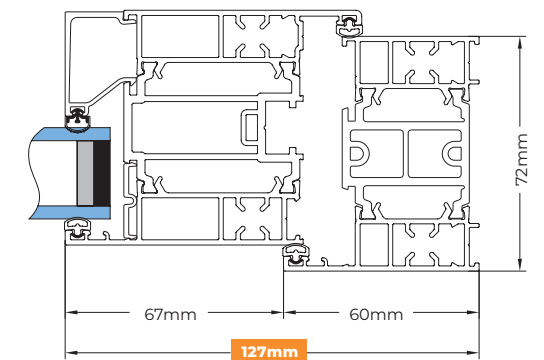
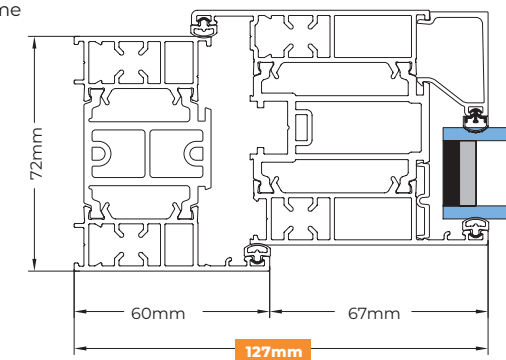
PART L Compliant



A

Cross section shown with
Intermediate Outer Frame
SP102

Door Sash 'Z'
SP351

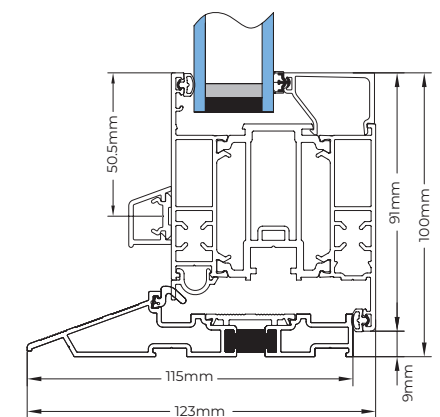
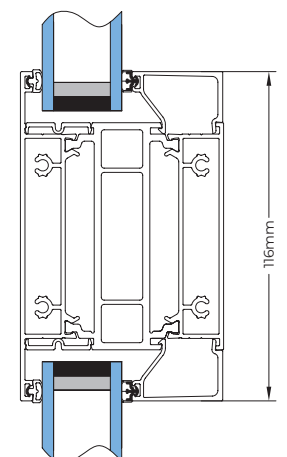
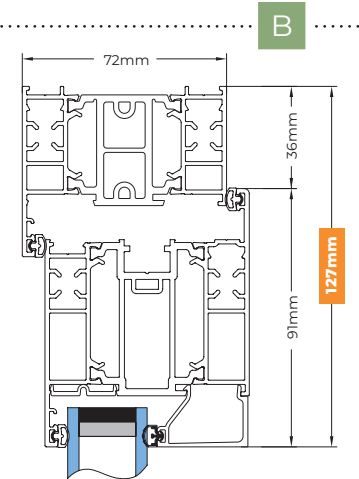


Cross section shown with
Intermediate Outer Frame
SP102

Door Sash 'Z'
SP351

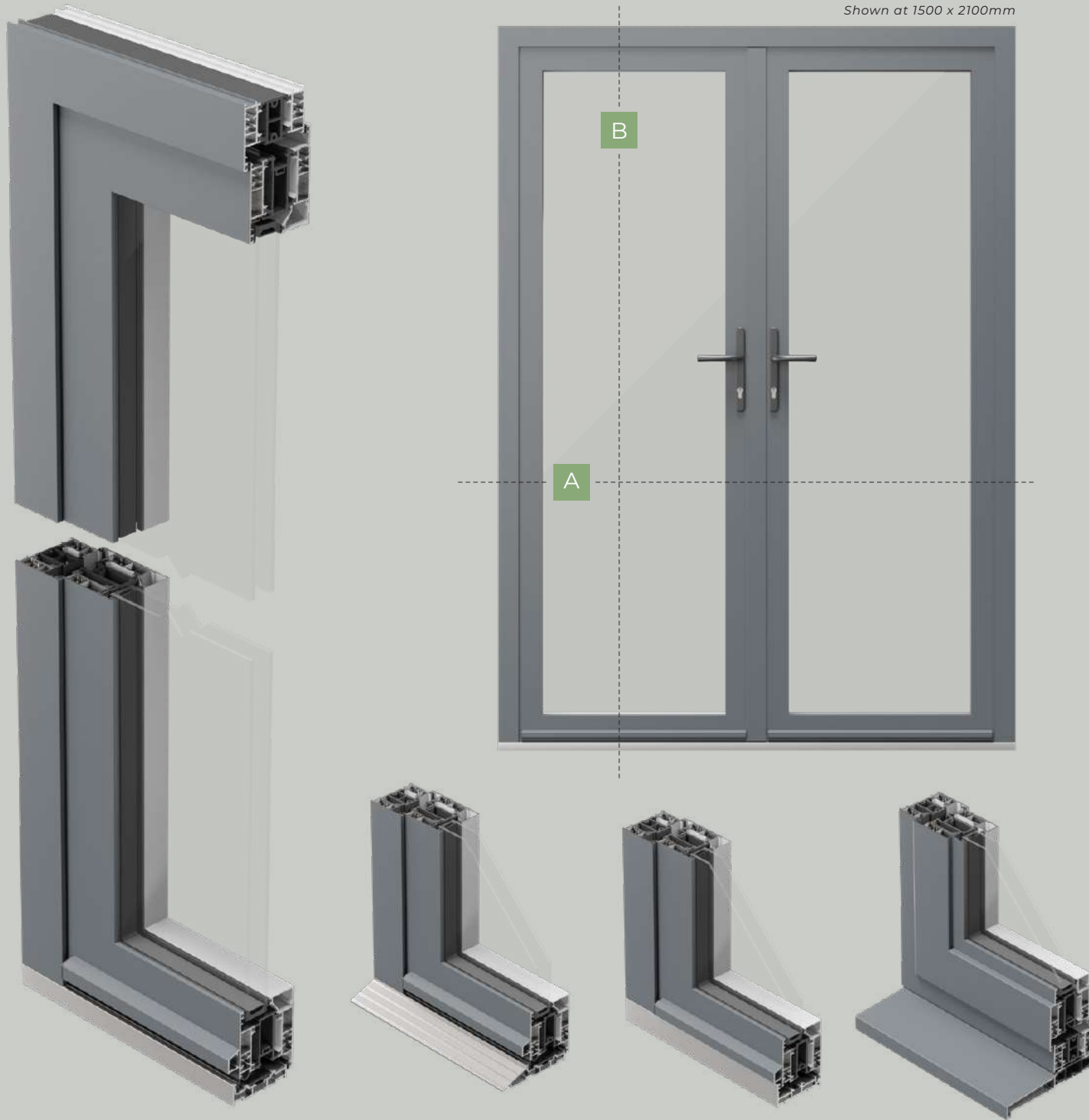
Door Sash 'T'
SP350

Low Threshold with Ramp
SP700





Shown at 1500 x 2100mm



CONTEMPORARY
SP102/SP351
LOW THRESHOLD
SP701

CONTEMPORARY
SP102/SP351
LOW THRESHOLD with Ramp
SP700

CONTEMPORARY
SP102/SP351
FRAME LOW THRESHOLD
SP702

STEPPED [Open Out Only]
SP102/SP352
INTERMEDIATE OUTER FRAME/
STANDARD CILL
SP102/SA011

THRESHOLDS AVAILABLE

PRESTIGE FRENCH DOOR INWARD OPENING / TECHNICAL INFO

- Min Size* 1290mm(w)
- Max Size* 2080mm(w) x 2572mm(h)
*with Small Outer Frame
- Max Sash Size* 1000mm(w) x 2500mm(h)

OUTER FRAME†:	SMALL	INTERMEDIATE	LARGE
SIGHTLINES:	113mm	127mm	137mm

†page 64 for options

GLAZING	CONTEMPORARY	STEPPED
DOUBLE GLAZED	28mm	28mm
U VALUE	1.4	1.4
DSER RATING	B	B
TRIPLE GLAZED	44mm	36mm
U VALUE	1.0	1.1
DSER RATING	A	A

See building regulation sections from page 144 for details



SECURITY
PAS 24 & SBD Certified



WATER TIGHTNESS
Class 2A



AIR PERMEABILITY
Class 4



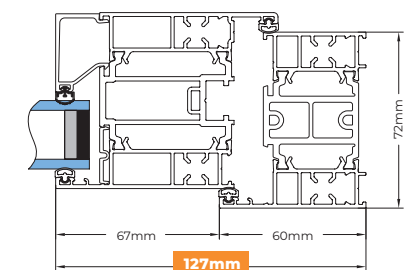
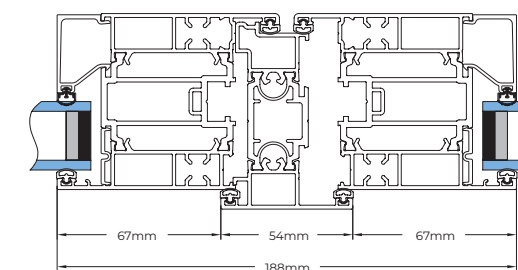
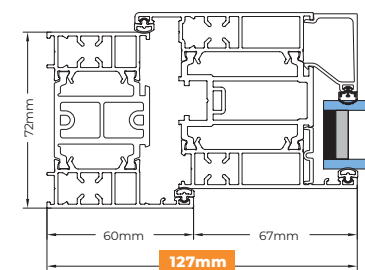
WIND RESISTANCE
Class C3

PART L Compliant



A

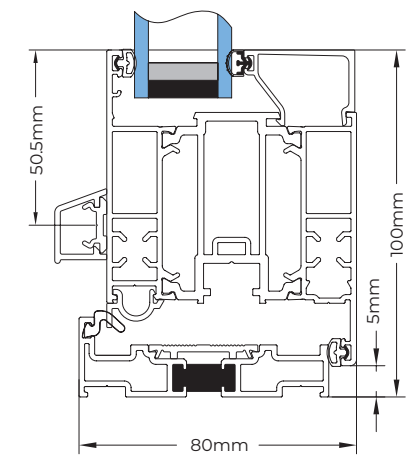
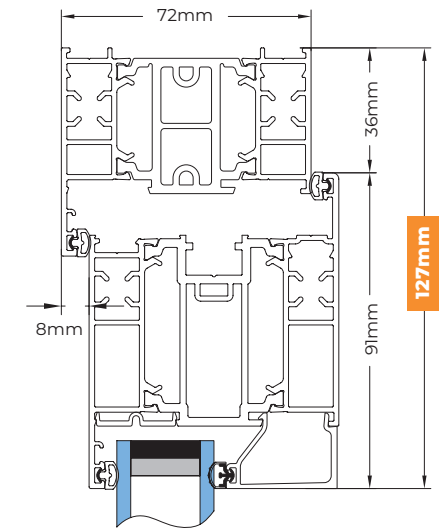
Cross section shown with Intermediate Outer Frame SP102, Door Sash 'Z' SP351 and Meeting Stile SP250



Cross section shown with
Intermediate Outer Frame
SP102

Door Sash 'Z'
SP351

Low Threshold
SP701



Prestige
COMPOSITE DOOR FRAME

COMBINING STRENGTH AND DURABILITY WITH EXCEPTIONAL THERMAL PERFORMANCE

ULTRA RIGID, PREMIUM ALUMINIUM FRAMES
FOR COMPOSITE DOORS.

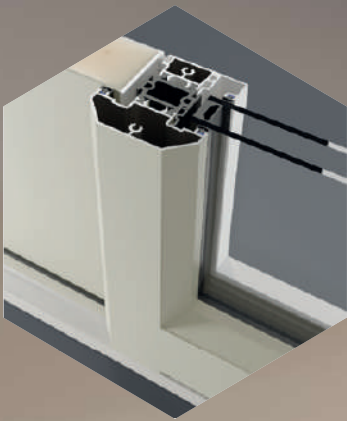
**SHEERLINE'S COMPOSITE
DOOR OUTER FRAME
ENABLES YOU TO SPECIFY
COMPLETE 'WHOLE HOUSE'
ALUMINIUM SOLUTIONS**

Available in two sizes to cover most popular
composite door blank sizes; 44mm and
48/49mm, Sheerline's composite door
outer frame enables you to offer complete
'whole house' aluminium solutions that are
perfectly matched.

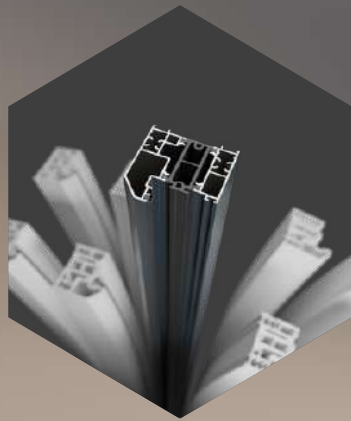
PRESTIGE COMPOSITE DOOR KEY BENEFITS



AVAILABLE FOR 44 AND 49MM
DOOR SLABS FOR THE COMPLETE
ALUMINIUM LOOK.



RUN-THROUGH THRESHOLD
Both thresholds can accommodate
a mechanically jointed 'T' mullion,
giving slimmer sightlines
when doors are configured with
optional sidelights.

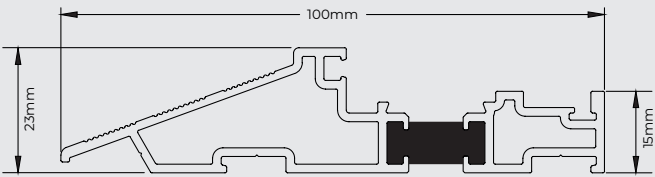


16X MORE RIGID
Our composite door outer frame
is 16x more rigid than reinforced
PVC-U, eliminating door 'bounce',
providing a premium feeling door
experience.

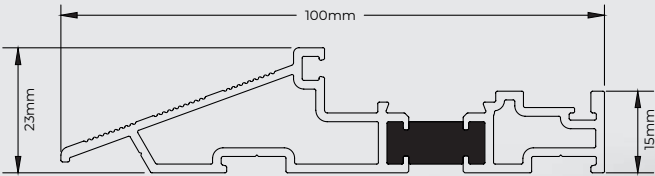
2 THRESHOLD OPTIONS

With low threshold options tested to Part M.

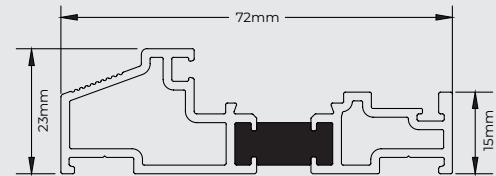
Thresholds can also be run continuously under sidelights if required for
improved aesthetics.



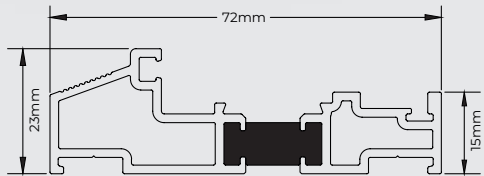
SP710
44mm COMPOSITE DOOR
LOW THRESHOLD WITH RAMP



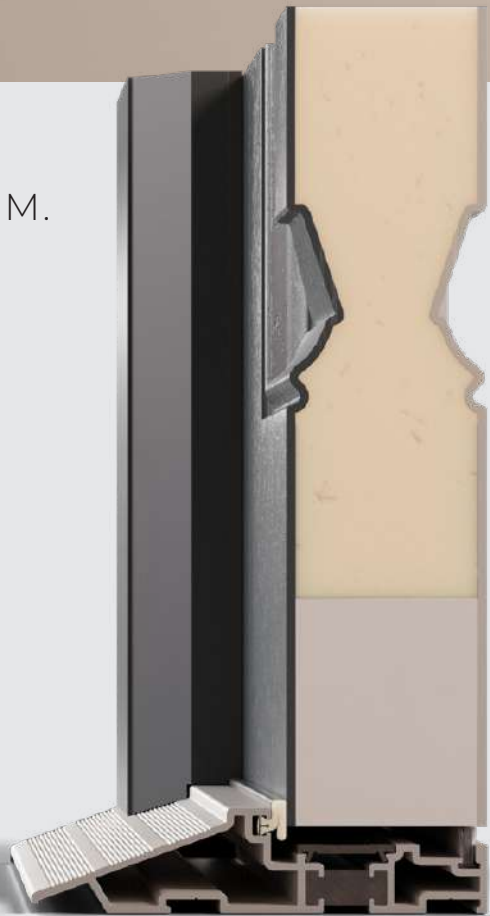
SP711
49mm COMPOSITE DOOR
LOW THRESHOLD WITH RAMP



SP712
44mm COMPOSITE DOOR
LOW THRESHOLD



SP713
49mm COMPOSITE DOOR
LOW THRESHOLD



DOOR SHOWN IN:



Prestige

COMPOSITE DOOR FRAME

Ultra-rigid, premium aluminium frames
for composite doors.

Outer Frame *only* inward opening



Shown at 900 x 2100mm

DOOR
SLABS ARE
PROVIDED BY
THIRD PARTY
SUPPLIERS

B

A

49MM SYSTEM
SP149
[Low Threshold SP713]

44MM SYSTEM
SP144
[Low Threshold SP712]

44MM SYSTEM
SP144
[Low Threshold with Ramp
SP710]

LOW THRESHOLDS AVAILABLE

PRESTIGE COMPOSITE DOOR OUTER FRAME *INWARD OPENING* / TECHNICAL INFO

- Available for 44 and 49mm door slabs
- Min & Max sizes are dictated by the third party door slab provider

	OUTER FRAME	MULLION/TRANSOM
SIGHTLINES:	70mm	70mm

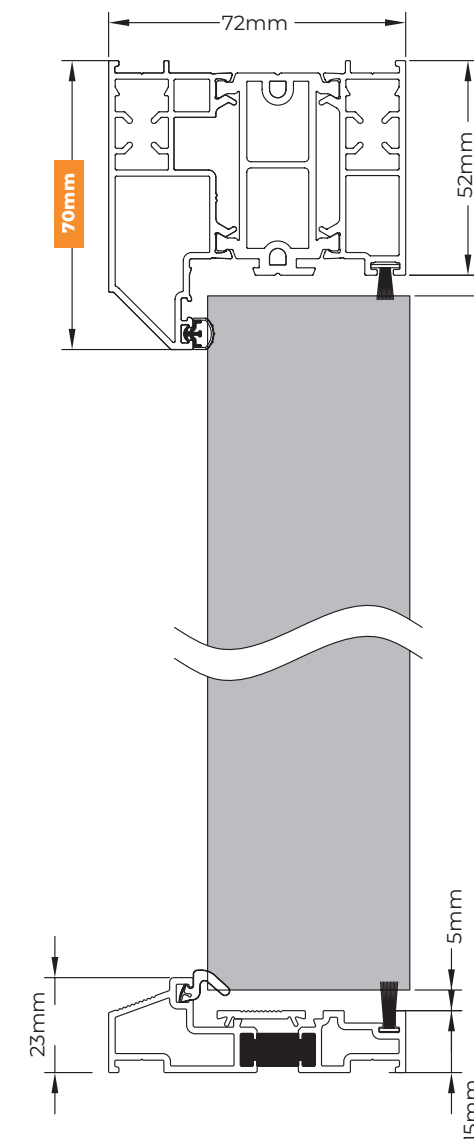
THERMAL PERFORMANCE

Thermal performance dictated by the third party slab provider

Cross section shown with
49mm Outer Frame
SP149

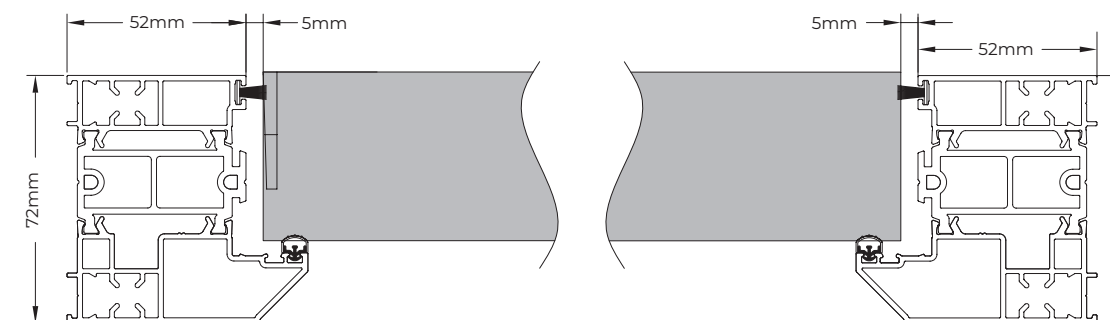
Door Slab
Supplied by third party

49mm Low Threshold
SP713

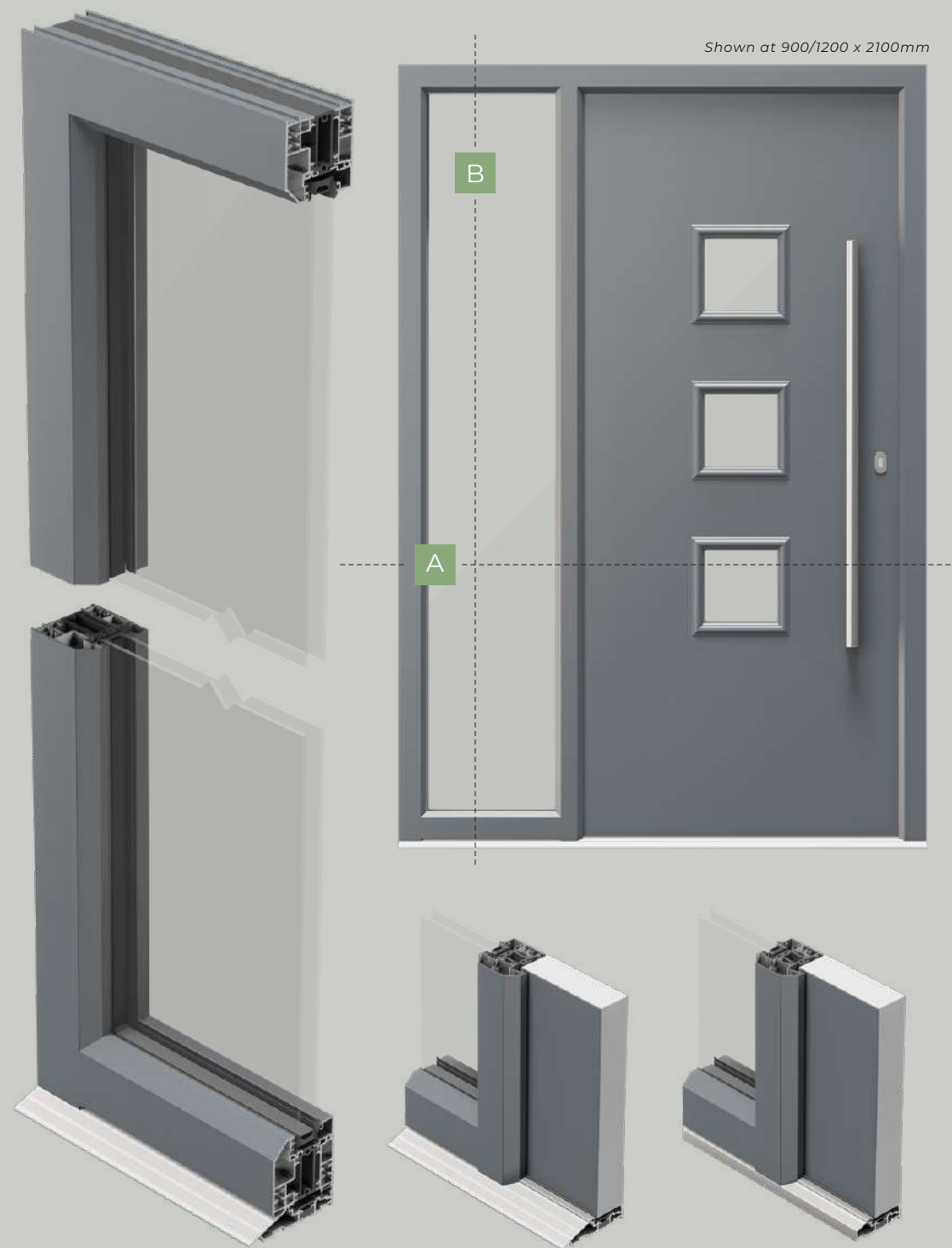


A

Cross section shown with
49mm Outer Frame
SP149



Outer Frame with Sidelight *inward opening*



Shown at 900/1200 x 2100mm

44MM SYSTEM
SP144

LOW THRESHOLD with Ramp
SP710

TRANSOM MULLION
LOW THRESHOLD with Ramp
SP710

LOW THRESHOLD
SP712

LOW THRESHOLDS AVAILABLE

PRESTIGE COMPOSITE DOOR OUTER FRAME WITH SIDELIGHT *INWARD OPENING* / TECHNICAL INFO

- Available for 44 and 49mm door slabs
- Run-through threshold for slimmer sightlines
- Min & Max sizes are dictated by the third party door slab provider

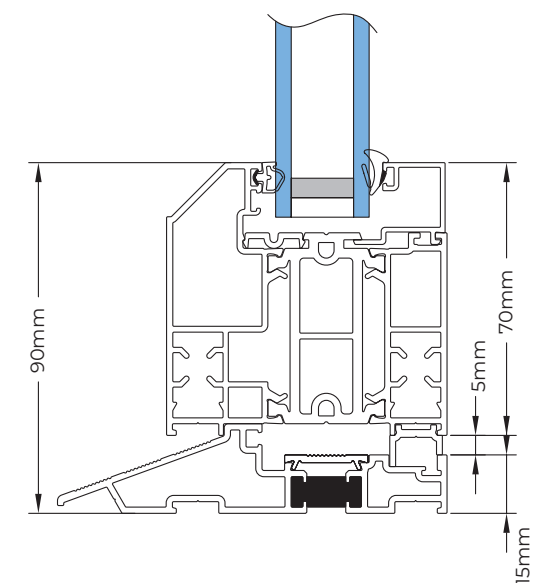
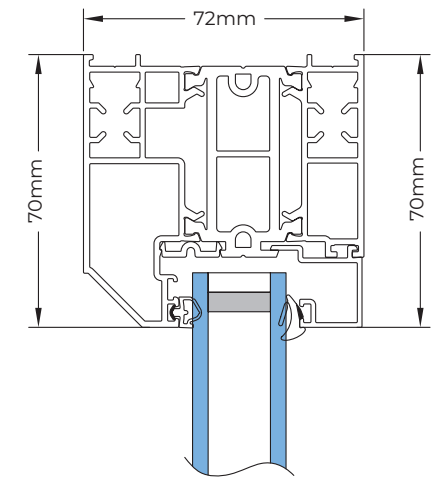
	OUTER FRAME	MULLION/TRANSOM
SIGHTLINES:	70mm	70mm

THERMAL PERFORMANCE

Thermal performance dictated by the third party slab provider

Cross section shown with
44mm Outer Frame
SP144

Low Threshold with Ramp
SP710



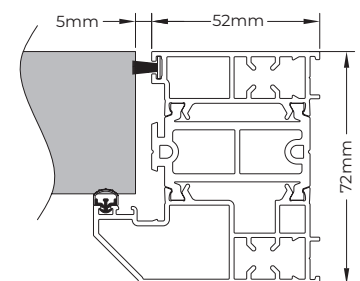
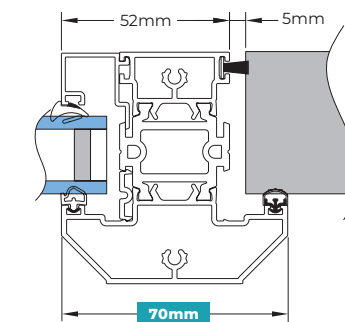
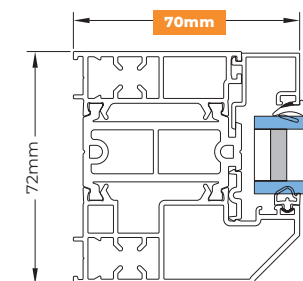
PART L Compliant ✓



A

Cross section shown with
44mm Outer Frame
SP144

Transom / Mullion
SP244





Prestige
BI-FOLDING DOOR

AVAILABLE IN
SINGLE, FRENCH
AND UP TO 7
PANE DOORS

SLIM, EQUAL 138MM SASH-TO-SASH SIGHTLINES ENSURE LIGHT BATHES INTERIORS,
EVEN WHEN DOORS ARE CLOSED.

PART L Compliant ✓

The entire Prestige Bi-fold range is Part L compliant, able to achieve a double-glazed U-value of 1.4 W/m²K which easily achieves compliance for new homes and non-dwelling commercial projects.

DOUBLE GLAZING > 1.4 U-value > 44MM TRIPLE GLAZING > 1.0 U-value

PRESTIGE BI-FOLDING DOOR
AT A GLANCE



**PRE-GASKETED CLIP-IN BEADS
- REMOVE THE NEED TO WEDGE
GASKET OR MILL BEADS**

Tolerance friendly 12mm spacing between frames and sashes are fabricator friendly. Using many standardised Prestige components - stockholding complexity and costs are also reduced.



DOOR RESTRICTOR

This easy-to-fit component helps stop traffic and French doors slamming open in gusts of wind, or overextending - preventing potential damage. They can also be retrofitted if required.



**STYLISH, CLEAN LINES FOR
A MODERN AESTHETIC**

Slimline internal handles help maintain the clean lines of the Prestige bi-fold. Flush styling perfectly matches flush Classic and Prestige windows, and there's no unsightly brush pile or unreliable corner gasket mouldings to spoil the aesthetics.



**WINK
HAUS**

**BESPOKE WINKHAUS
'THUNDERBOLT' LOCKING
WITH ONE PIECE KEEPS
AND INTEGRAL FINGER-PULL
PASSIVE DOOR LOCK**

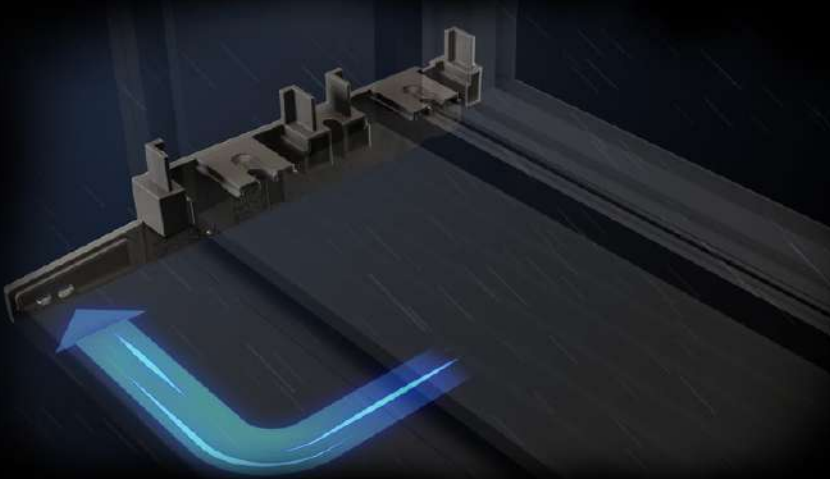
Featuring a full length high-security interlock on applicable styles as well as one piece keeps for reliable 5-point locking with double deadbolts. All designed to create exceptionally safe and secure doors.



VBH

**BESPOKE VBH
HARDWARE BASED ON
PROVEN DESIGNS WITH
PAS24 AS STANDARD**

A custom designed VBH single roller also eliminates the need for floating mullions. So whatever the style of door, a consistent 138mm sightline between sashes, creates the trademark Sheerline balanced aesthetic.



**CONCEALED
DRAINAGE**

Our Prestige bi-fold doors also feature clever integral concealed drainage, built into threshold end caps. This eliminates the need for unsightly drainage cover caps.



Prestige
BI-FOLDING DOOR

**AVAILABLE IN
SINGLE, FRENCH
AND UP TO 7
PANE DOORS**

SLIM, EQUAL 138MM SASH-TO-SASH SIGHTLINES ENSURE LIGHT BATHES INTERIORS, EVEN WHEN DOORS ARE CLOSED.

PART L Compliant ✓

The entire Prestige Bi-fold range is Part L compliant, able to achieve a double-glazed U-value of 1.4 W/m²K which easily achieves compliance for new homes and non-dwelling commercial projects.

DOUBLE GLAZING > **1.4 U-value** > 44MM TRIPLE GLAZING > **1.0 U-value**

**PRESTIGE BI-FOLDING DOOR
AT A GLANCE**



**PRE-GASKETED CLIP-IN BEADS
- REMOVE THE NEED TO WEDGE
GASKET OR MILL BEADS**

Tolerance friendly 12mm spacing between frames and sashes are fabricator friendly. Using many standardised Prestige components - stockholding complexity and costs are also reduced.



DOOR RESTRICTOR

This easy-to-fit component helps stop traffic and French doors slamming open in gusts of wind, or overextending - preventing potential damage. They can also be retrofitted if required.



**STYLISH, CLEAN LINES FOR
A MODERN AESTHETIC**

Slimline internal handles help maintain the clean lines of the Prestige bi-fold. Flush styling perfectly matches flush Classic and Prestige windows, and there's no unsightly brush pile or unreliable corner gasket mouldings to spoil the aesthetics.



**WINK
HAUS**

**BESPOKE WINKHAUS
'THUNDERBOLT' LOCKING
WITH ONE PIECE KEEPS
AND INTEGRAL FINGER-PULL
PASSIVE DOOR LOCK**

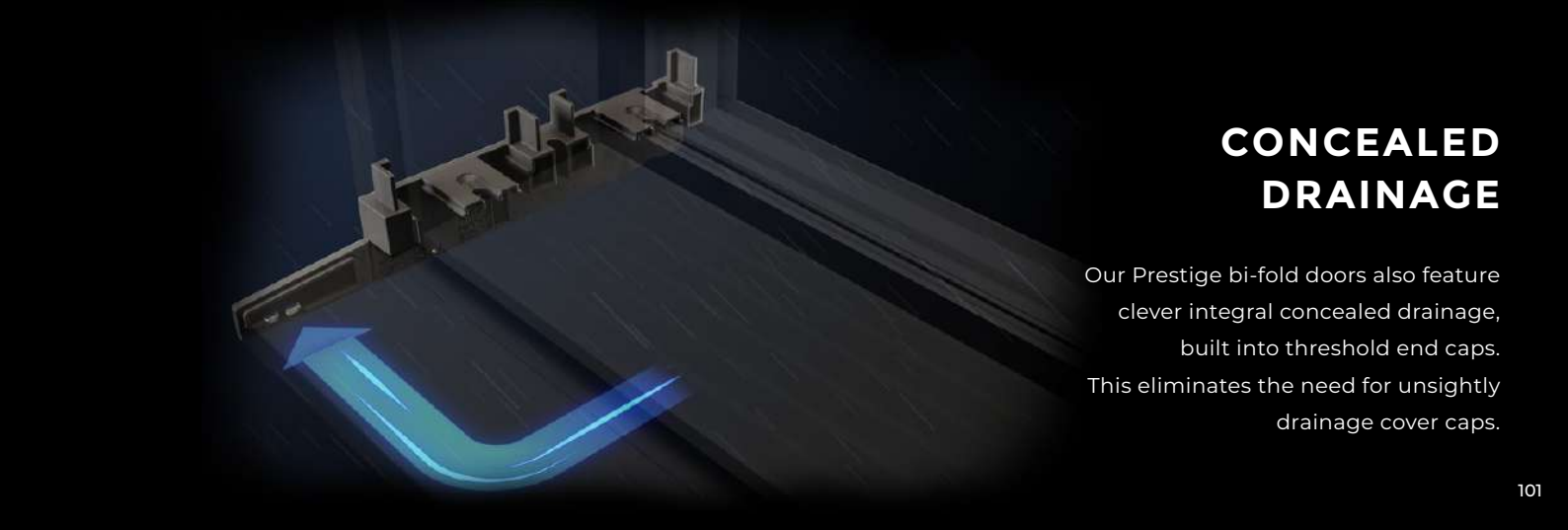
Featuring a full length high-security interlock on applicable styles as well as one piece keeps for reliable 5-point locking with double deadbolts. All designed to create exceptionally safe and secure doors.



VBH

**BESPOKE VBH
HARDWARE BASED ON
PROVEN DESIGNS WITH
PAS24 AS STANDARD**

A custom designed VBH single roller also eliminates the need for floating mullions. So whatever the style of door, a consistent 138mm sightline between sashes, creates the trademark Sheerline balanced aesthetic.



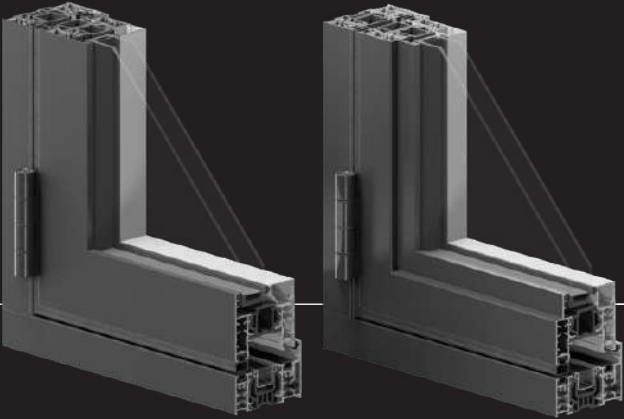
**CONCEALED
DRAINAGE**

Our Prestige bi-fold doors also feature clever integral concealed drainage, built into threshold end caps. This eliminates the need for unsightly drainage cover caps.

PRESTIGE BI-FOLD SASHES

CONTEMPORARY
SBF100/SBF301

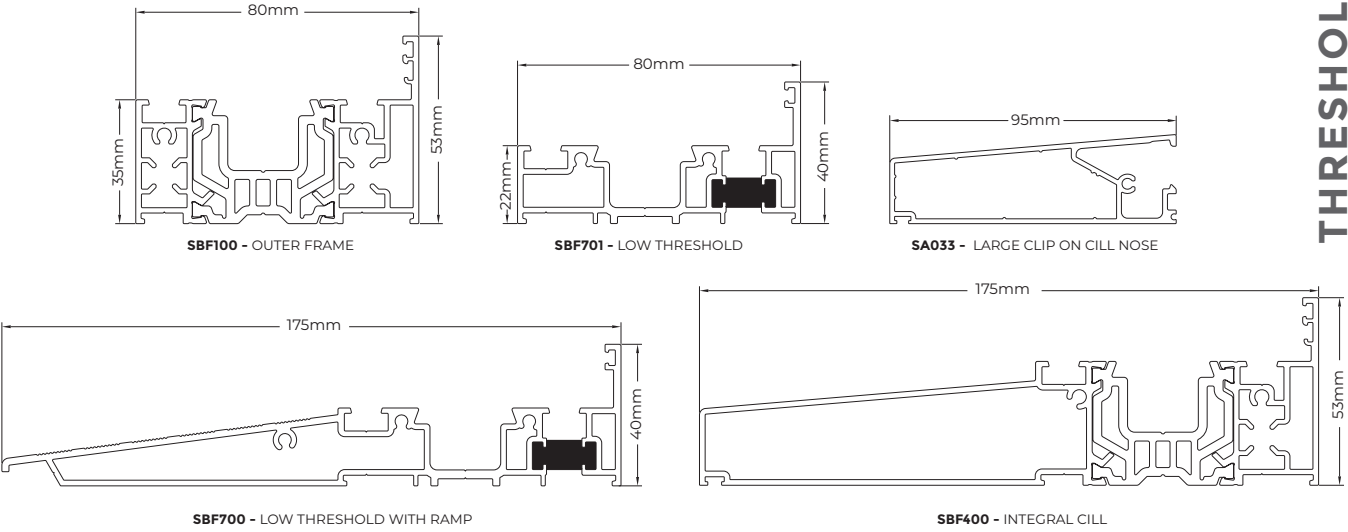
28mm 36mm 44mm



STEPPED
SBF100/SBF300

28mm 36mm

TESTED TO THE REQUIREMENTS OF PART M



THRESHOLDS

THRESHOLDS

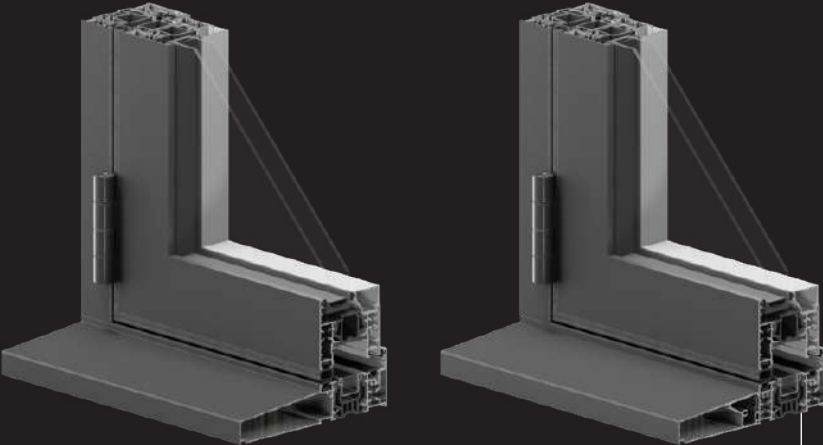


FRAME
SBF100

LOW THRESHOLD
SBF701

LOW THRESHOLD RAMP
SBF700

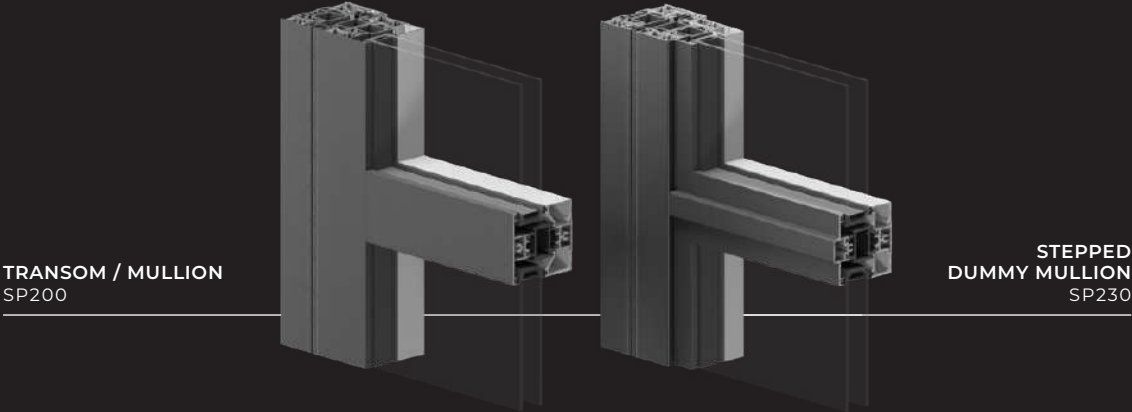
THRESHOLDS



INTEGRAL CILL
SBF400

CLIP-ON CILL
SA033

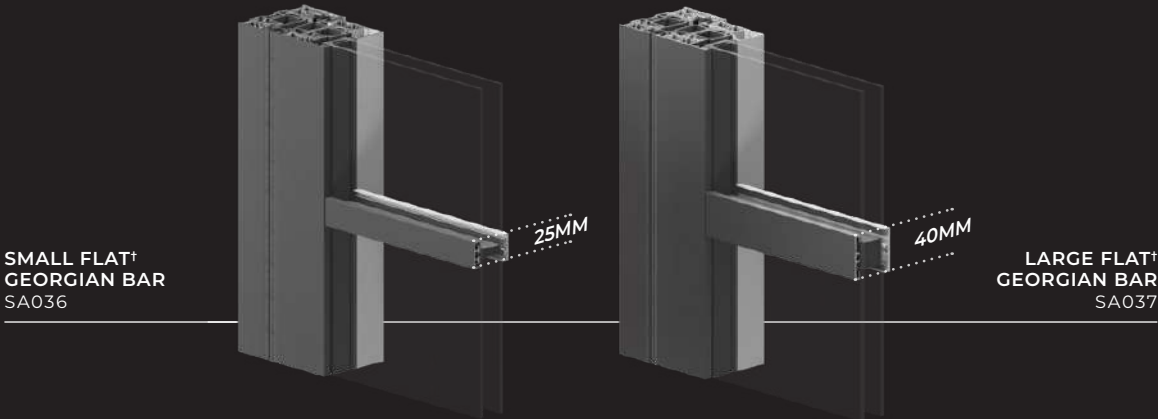
TRANSOMS



TRANSOM / MULLION
SP200

STEPPED
DUMMY MULLION
SP230

DECORATIVE BAR OPTIONS



SMALL FLAT†
GEORGIAN BAR
SA036

LARGE FLAT†
GEORGIAN BAR
SA037

†Suitable for both stepped and contemporary frames.

PRESTIGE BI-FOLD
SELECTION OF STYLES

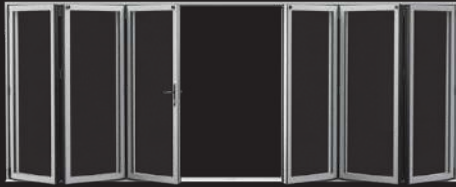
Bi-fold styles are expressed as three figures.
The total number of sashes first, followed by
the number of sashes folding left, then right
- when viewed from the outside.



6/5/1



6/4/2



6/3/3



7/7/0



7/6/1



7/5/2



7/4/3



1/1/0



2/2/0



2/1/1



3/3/0



3/2/1



4/4/0



4/3/1



4/2/2



5/5/0



5/4/1



5/3/2



6/6/0

BI-FOLD SHOWN IN:

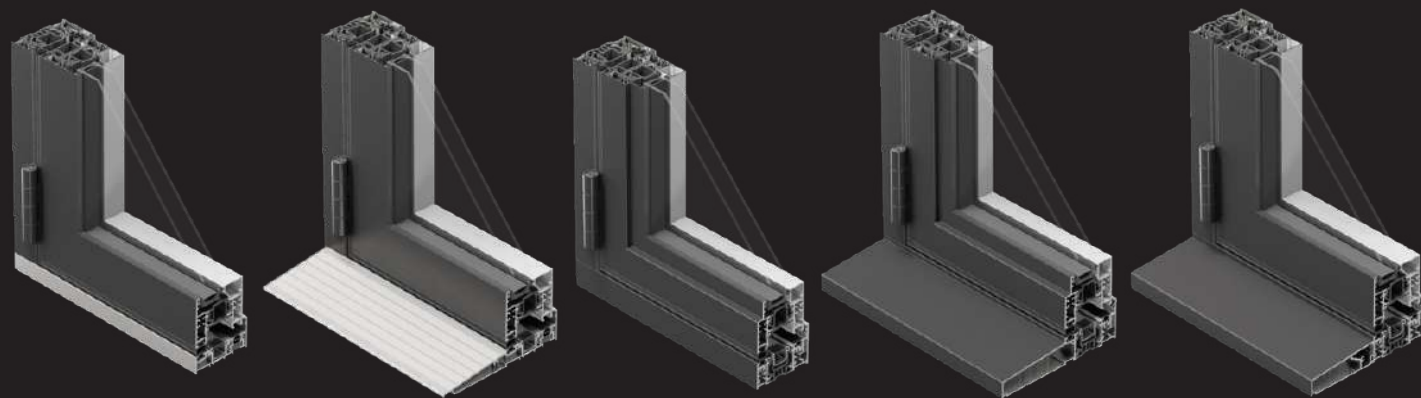


Prestige

BI-FOLDING DOOR

Beautifully balanced Prestige bi-folds provide slim, equal 138mm sash-to-sash sightlines to ensure light bathes interiors, even when doors are closed.





**CONTEMPORARY
SBF100/SBF301**
[Low Threshold
SBF701]

**CONTEMPORARY
SBF100/SBF301**
[Ramped Low Threshold
SBF700]

**STEPPED
SBF100/SBF300**
[Frame Threshold
SBF100]

**STEPPED
SBF100/SBF300**
[Integral Cill
SBF400]

**CONTEMPORARY
SBF100/SBF301**
[Clip-on Cill
SA033]

STYLES AND THRESHOLDS AVAILABLE

PRESTIGE BI-FOLDING DOOR SINGLE OUTWARD OPENING / TECHNICAL INFO

- Slimmer sightlines than a standard Prestige door
- Min Size 600mm(w) x 1860mm(h)
- Max Size 3200mm(w) x 2600mm(h)
- Max Sash Size 1200mm(w) x 2500mm(h)

	OUTER FRAME / SASH
SIGHTLINES:	110mm

GLAZING	CONTEMPORARY	STEPPED
DOUBLE GLAZED	28mm	28mm
U VALUE	1.4	1.4
DSER RATING	B	B
TRIPLE GLAZED	44mm	36mm
U VALUE	1.0	1.1
DSER RATING	A	A

See building regulation sections from page 144 for details

SECURITY
PAS 24 & SBD Certified

WATER TIGHTNESS
Class 7A

AIR PERMEABILITY
Class 4

WIND RESISTANCE
Class A3 (1200 Pa)

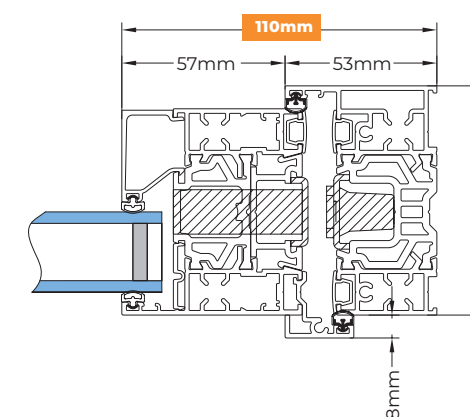
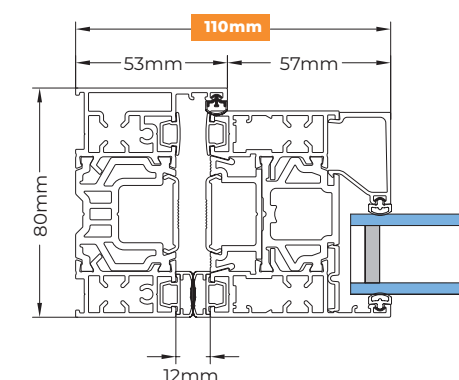
PART L Compliant



A

Cross section shown with
Outer Frame
SBF100

Contemporary Sash
SBF301

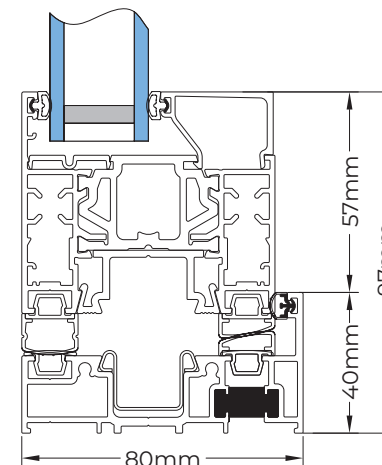
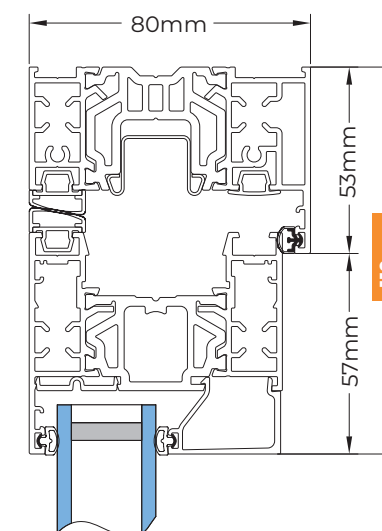


B

Cross section shown with
Outer Frame
SBF100

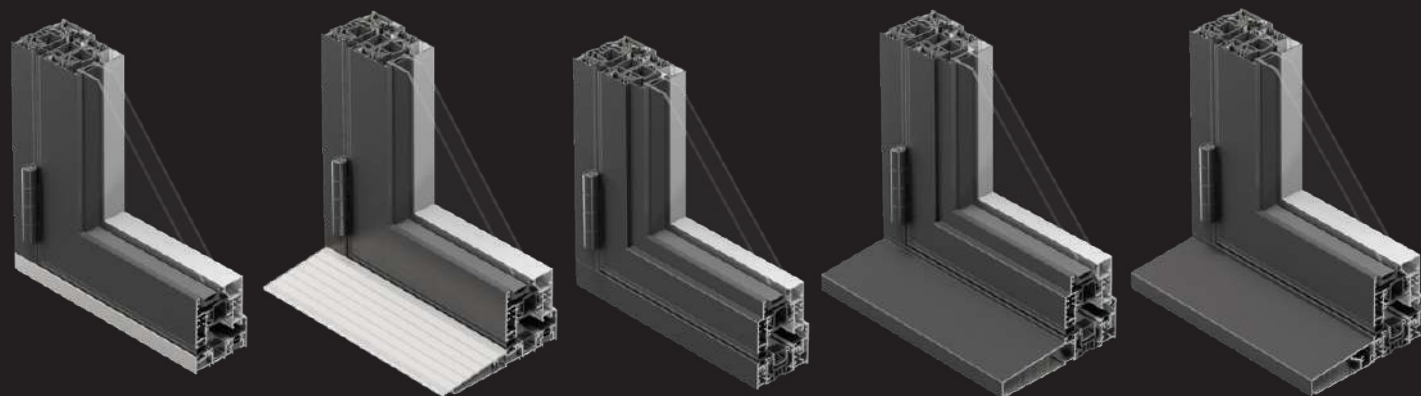
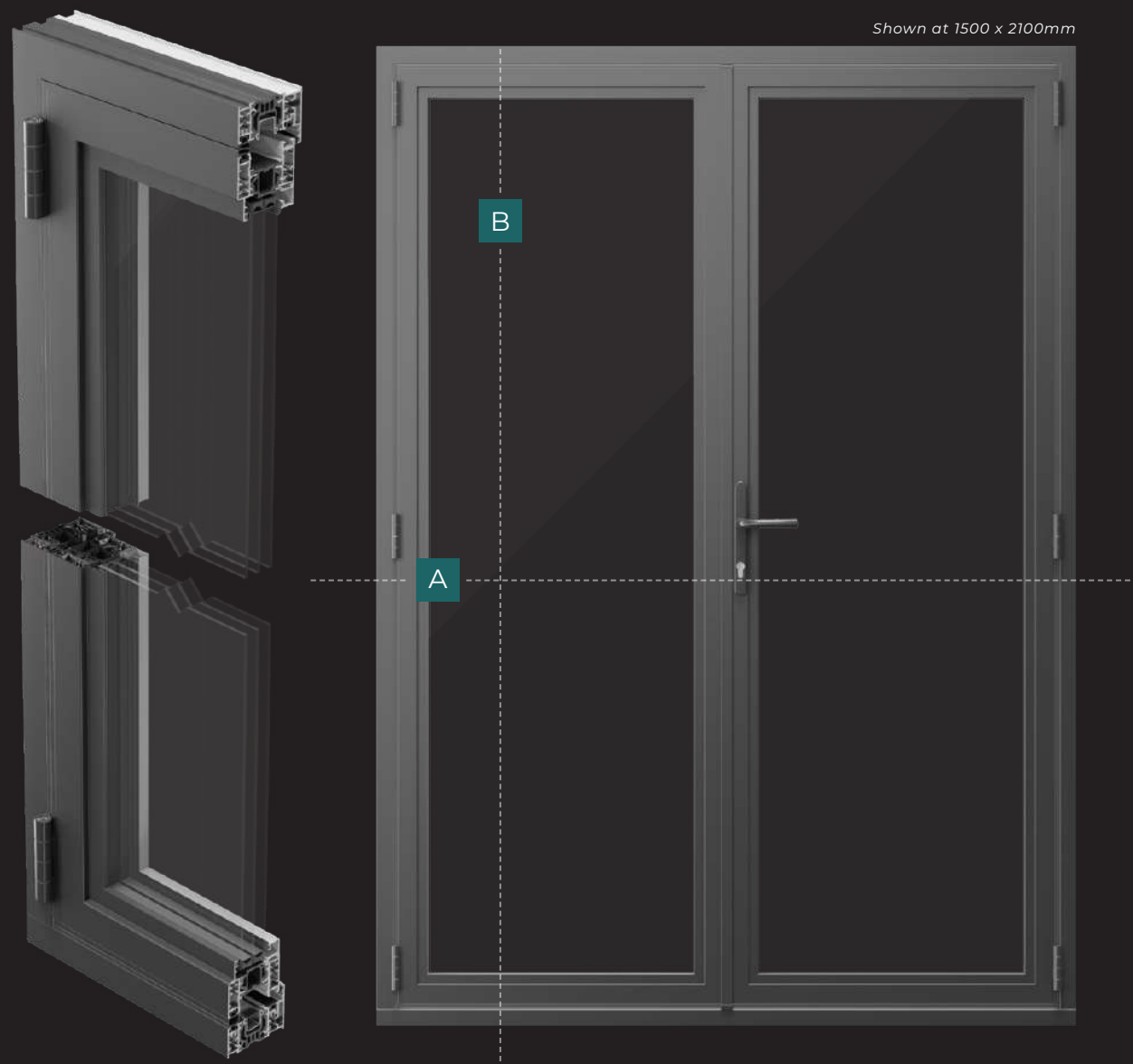
Contemporary Sash
SBF301

Low Threshold
SBF701





Shown at 1500 x 2100mm



CONTEMPORARY
SBF100/SBF301

[Low Threshold
SBF701]

CONTEMPORARY
SBF100/SBF301

[Ramped Low Threshold
SBF700]

STEPPED
SBF100/SBF300

[Frame Threshold
SBF100]

STEPPED
SBF100/SBF300

[Integral Cill
SBF400]

CONTEMPORARY
SBF100/SBF301

[Clip-on Cill
SA033]

STYLES AND THRESHOLDS AVAILABLE

PRESTIGE BI-FOLDING DOOR FRENCH OUTWARD OPENING / TECHNICAL INFO

- Slimmer sightlines than a standard Prestige door
- Concealed finger pull locking on passive doors eliminates the need for a second handle
- Min Size 1300mm(w) x 2000mm(h)
- Max Size 2500mm(w) x 2600mm(h)
- Max Sash Size 1200mm(w) x 2500mm(h)

	OUTER FRAME / SASH	SASH / SASH
SIGHTLINES:	110mm	138mm

GLAZING	CONTEMPORARY	STEPPED
DOUBLE GLAZED	28mm	28mm
U VALUE	1.4	1.4
DSER RATING	B	B
TRIPLE GLAZED	44mm	36mm
U VALUE	1.0	1.1
DSER RATING	A	A

See building regulation sections from page 144 for details



SECURITY
PAS 24 & SBD Certified



WATER TIGHTNESS
Class 7A



AIR PERMEABILITY
Class 4



WIND RESISTANCE
Class A3 (1200 Pa)

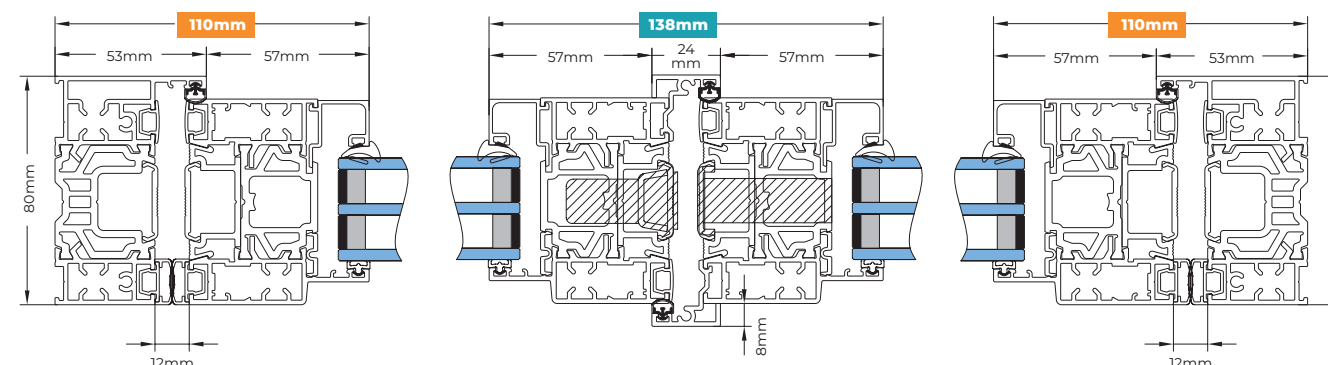
PART L

Compliant



A

Cross section shown with Outer Frame **SBF100** and Stepped Sash **SBF300**



Cross section shown with
Outer Frame
SBF100

Stepped Sash
SBF300

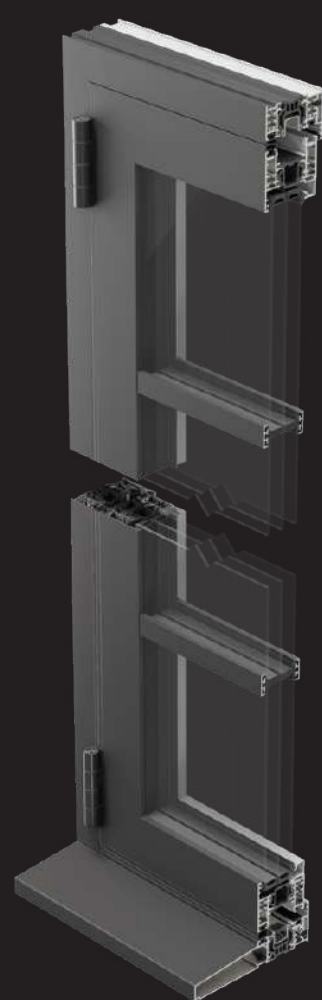
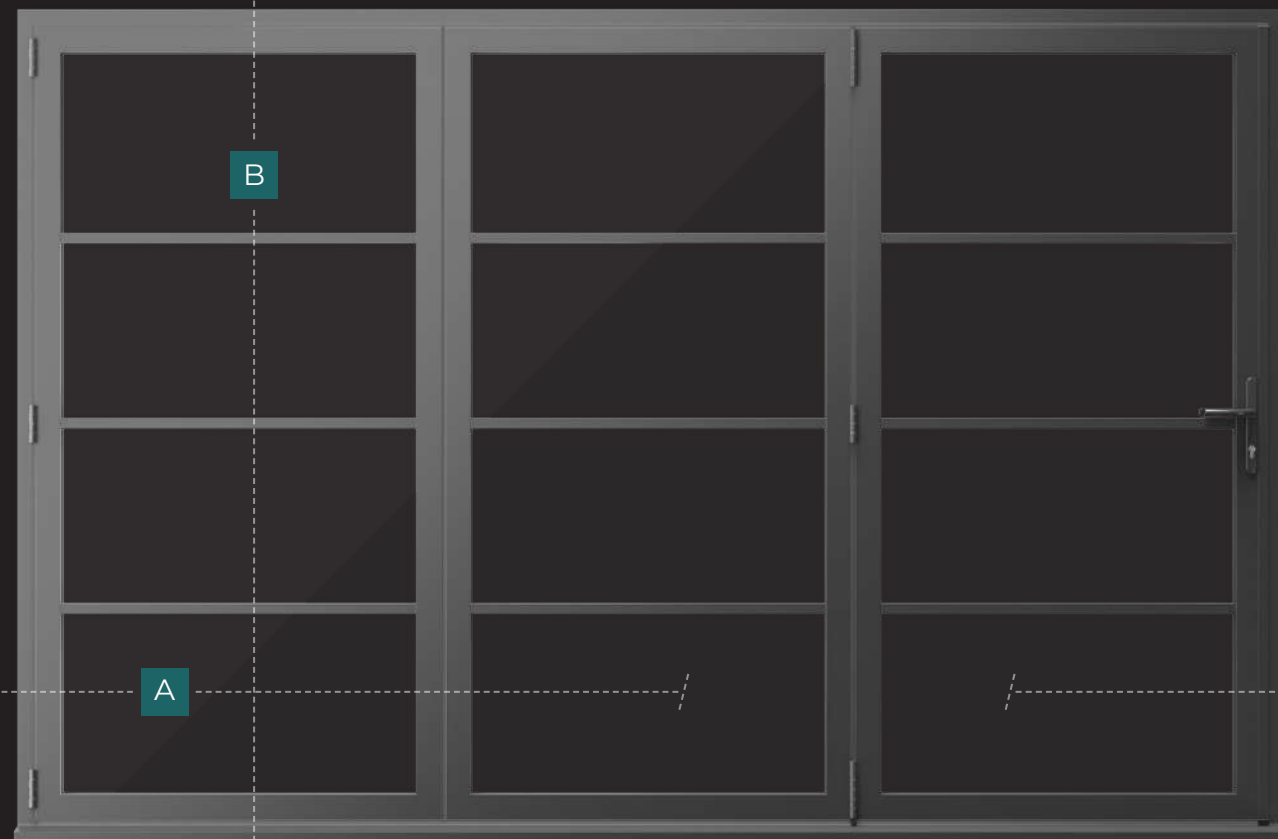
B

Prestige 3/3/0 outward opening

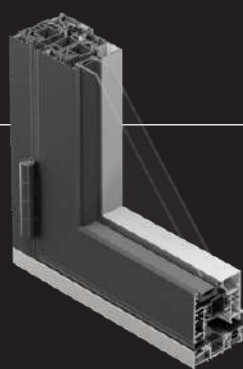
BI-FOLDING DOOR



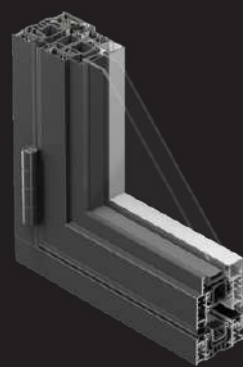
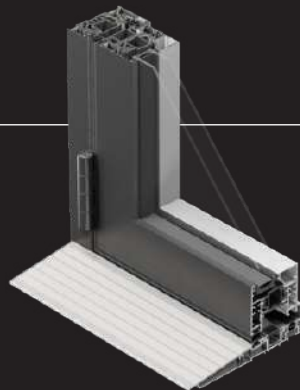
Shown at 3600 x 2100mm



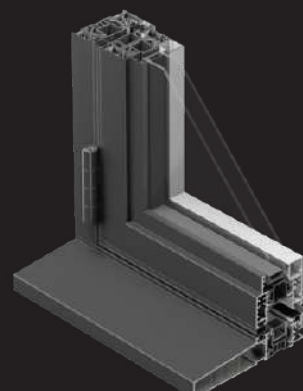
CONTEMPORARY SBF100/SBF301
[Low Threshold SBF701]



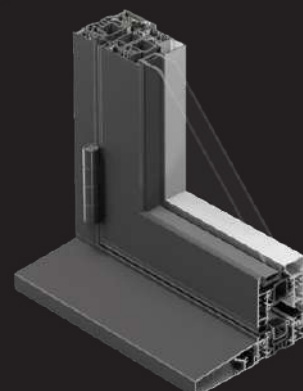
CONTEMPORARY SBF100/SBF301
[Ramped Low Threshold SBF700]



STEPPED SBF100/SBF300
[Frame Threshold SBF100]



STEPPED SBF100/SBF300
[Integral Cill SBF400]



CONTEMPORARY SBF100/SBF301
[Clip-on Cill SA033]

STYLES AND THRESHOLDS AVAILABLE

PRESTIGE BI-FOLDING DOOR 3/3/0 OUTWARD OPENING / TECHNICAL INFO

- Min Size 1900mm(w) x 2000mm(h)
- Max Size 3700mm(w) x 2600mm(h)
- Max Sash Size 1200mm(w) x 2500mm(h)

	OUTER FRAME / SASH	SASH / SASH
SIGHTLINES:	110mm	138mm

GLAZING	CONTEMPORARY	STEPPED
DOUBLE GLAZED	28mm	28mm
U VALUE	1.4	1.4
DSER RATING	B	B
TRIPLE GLAZED	44mm	36mm
U VALUE	1.0	1.1
DSER RATING	A	A

See building regulation sections from page 144 for details



SECURITY
PAS 24 & SBD Certified



WATER TIGHTNESS
Class 7A



AIR PERMEABILITY
Class 4



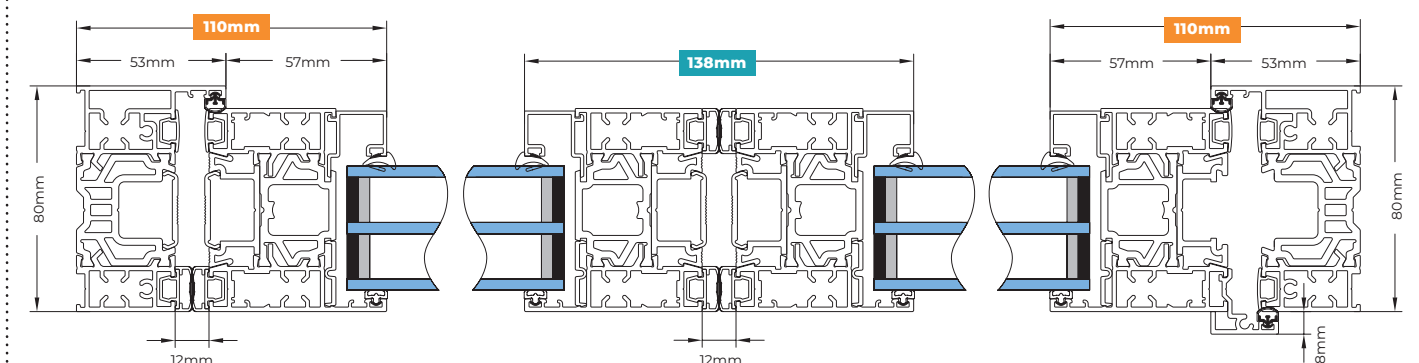
WIND RESISTANCE
Class A3 (1200 Pa)

PART L Compliant



A

Cross section shown with Outer Frame **SBF100** and Contemporary Sash **SBF301**



Cross section shown with
Outer Frame
SBF100

Contemporary Sash
SBF301

Integral Cill
SBF400

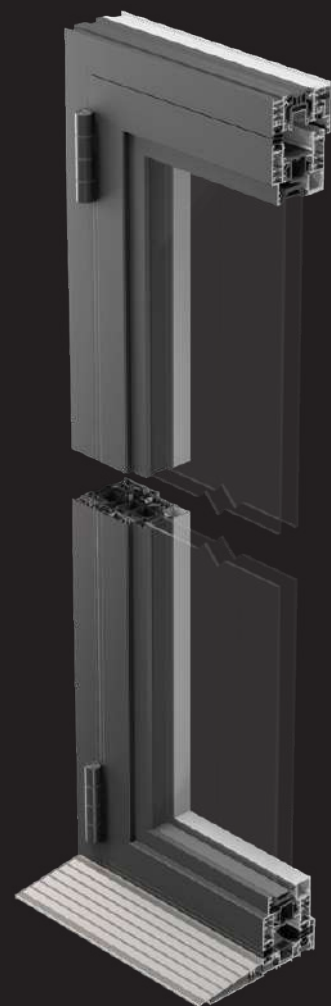
B

Prestige 5/4/1 outward opening

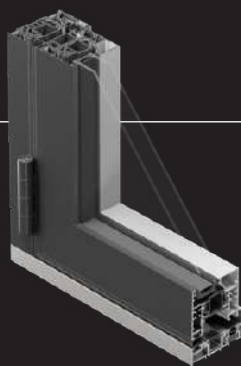
BI-FOLDING DOOR



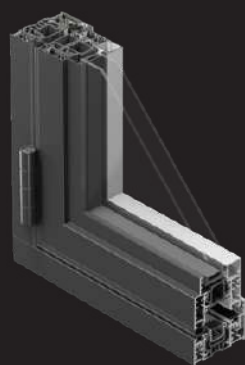
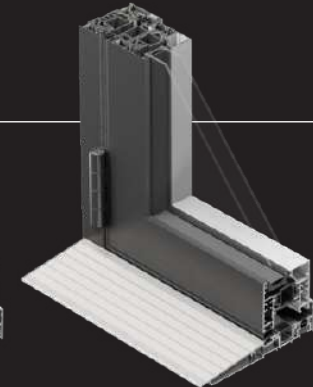
Shown at 4800 x 2100mm



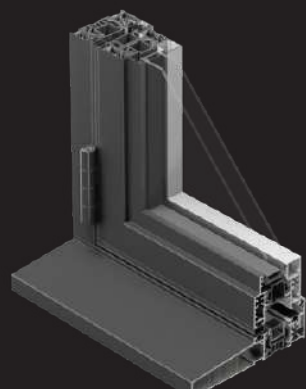
CONTEMPORARY
SBF100/SBF301
[Low Threshold
SBF701]



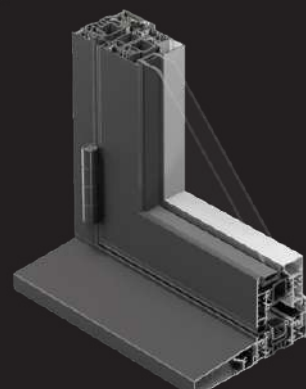
CONTEMPORARY
SBF100/SBF301
[Ramped Low
Threshold SBF700]



STEPPED
SBF100/SBF300
[Frame Threshold
SBF100]



STEPPED
SBF100/SBF300
[Integral Cill
SBF400]



CONTEMPORARY
SBF100/SBF301
[Clip-on Cill
SA033]

STYLES AND THRESHOLDS AVAILABLE

PRESTIGE BI-FOLDING DOOR 5/4/1 OUTWARD OPENING / TECHNICAL INFO

- Custom designed single roller eliminates the need for floating mullions - for consistent sightlines
- Min Size 3100mm(w) x 2000mm(h)
- Max Size 6100mm(w) x 2600mm(h)
- Max Sash Size 1200mm(w) x 2500mm(h)

	OUTER FRAME / SASH	SASH / SASH
SIGHTLINES:	110mm	138mm

GLAZING	CONTEMPORARY	STEPPED
DOUBLE GLAZED	28mm	28mm
U VALUE	1.4	1.4
DSER RATING	B	B
TRIPLE GLAZED	44mm	36mm
U VALUE	1.0	1.1
DSER RATING	A	A

See building regulation sections from page 144 for details



SECURITY
PAS 24 & SBD Certified



WATER TIGHTNESS
Class 7A



AIR PERMEABILITY
Class 4



WIND RESISTANCE
Class A3 (1200 Pa)

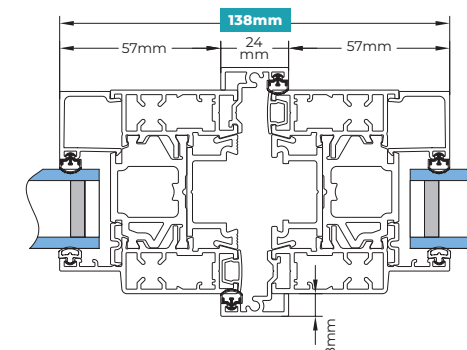
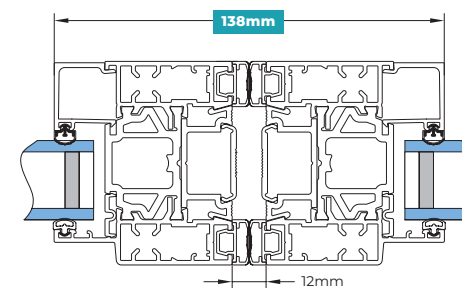
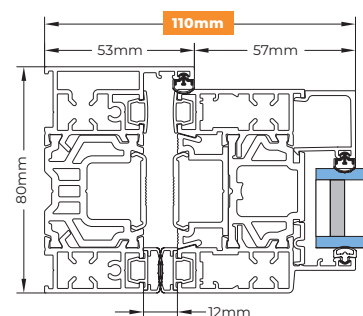
PART L

Compliant



A

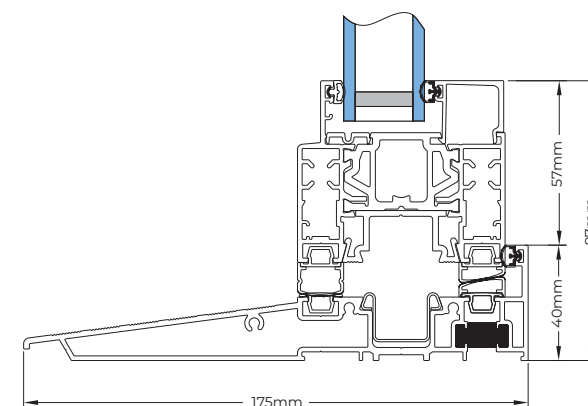
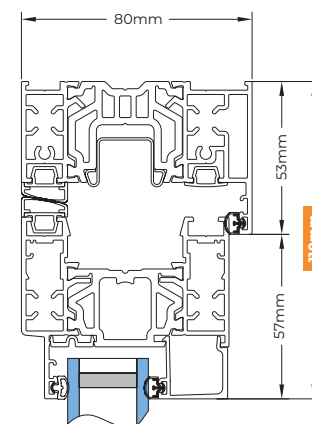
Cross section shown with Outer Frame **SBF100** and Stepped Sash **SBF300**



Cross section shown with
Outer Frame
SBF100

Stepped Sash
SBF300

Low Threshold with Ramp
SBF700



B

STREAMLINED BI-FOLDING DOOR RANGE



INTENDED FOR HIGH VOLUME RETAIL AND CONTRACT WORK
QUALITY COMBINED WITH EXCEPTIONAL VALUE.

PART L Compliant ✓

Index Bi-folds are Part L compliant, able to achieve a double-glazed U-value of 1.4 W/m²K which easily achieves compliance for new homes and non-dwelling commercial projects.

DOUBLE GLAZING > 1.4 U-value > 44MM TRIPLE GLAZING > 1.0 U-value

INDEX BI-FOLD AT A GLANCE

**BESPOKE INGENIOUS
LOCKING WITH ONE PIECE
KEEPS AND INTEGRAL
FINGER-PULL PASSIVE
DOOR LOCK**



**Ingenious
Locks &
Hardware**

Featuring a full length high-security interlock on applicable styles as well as one piece keeps for reliable 5-hook locking. All designed to create exceptionally safe and secure doors.

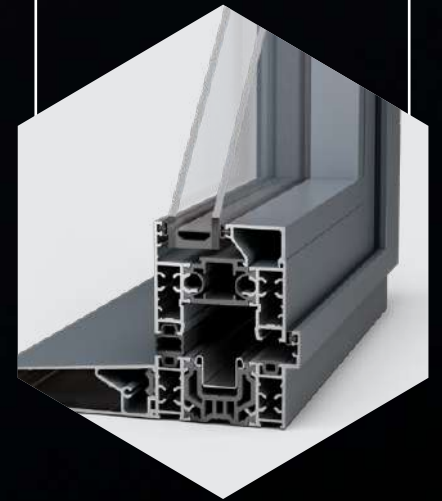
**BESPOKE VBH
HARDWARE BASED ON
PROVEN DESIGNS WITH
PAS24 AS STANDARD**



VBH

A custom designed VBH single roller also eliminates the need for floating mullions. So whatever the style of door, a consistent 134mm sightline between sashes, creates the trademark Sheerline balanced aesthetic.

**PRE-GASKETED CLIP-IN
BEADS - REMOVE THE
NEED TO WEDGE GASKET
OR MILL BEADS**



Tolerance friendly 12mm spacing between frames and sashes are fabricator friendly. Using many shared standard Prestige components - stockholding complexity and costs are also reduced.

INDEX IS AVAILABLE AS STANDARD IN OUR THREE MOST POPULAR COLOURS.

Other colours and foil lamination available to minimum order quantities.



HIPCA GLOSS WHITE
9910 Gloss



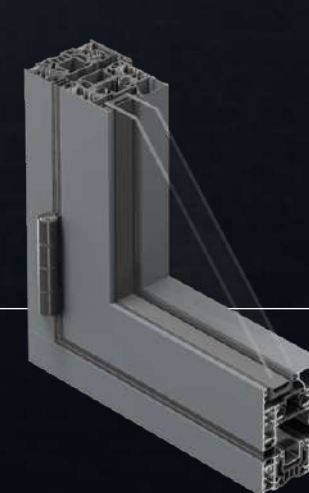
ANTHRACITE GREY
7016 Matt



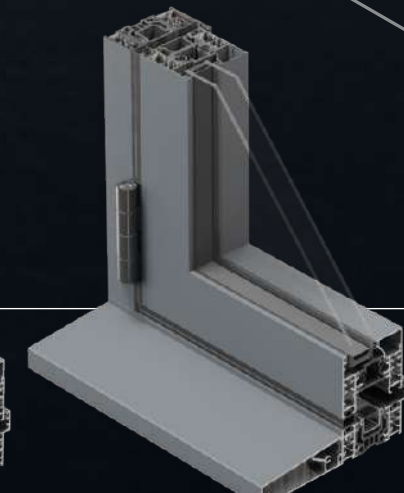
JET BLACK
9005 Matt

**INDEX IS COMPATIBLE
WITH THE MAJORITY
OF PRESTIGE BI-FOLD
ANCILLARIES SHOWN ON
PAGES 102**

**OUTER FRAME &
CONTEMPORARY SASH**
SBF170/SBF371

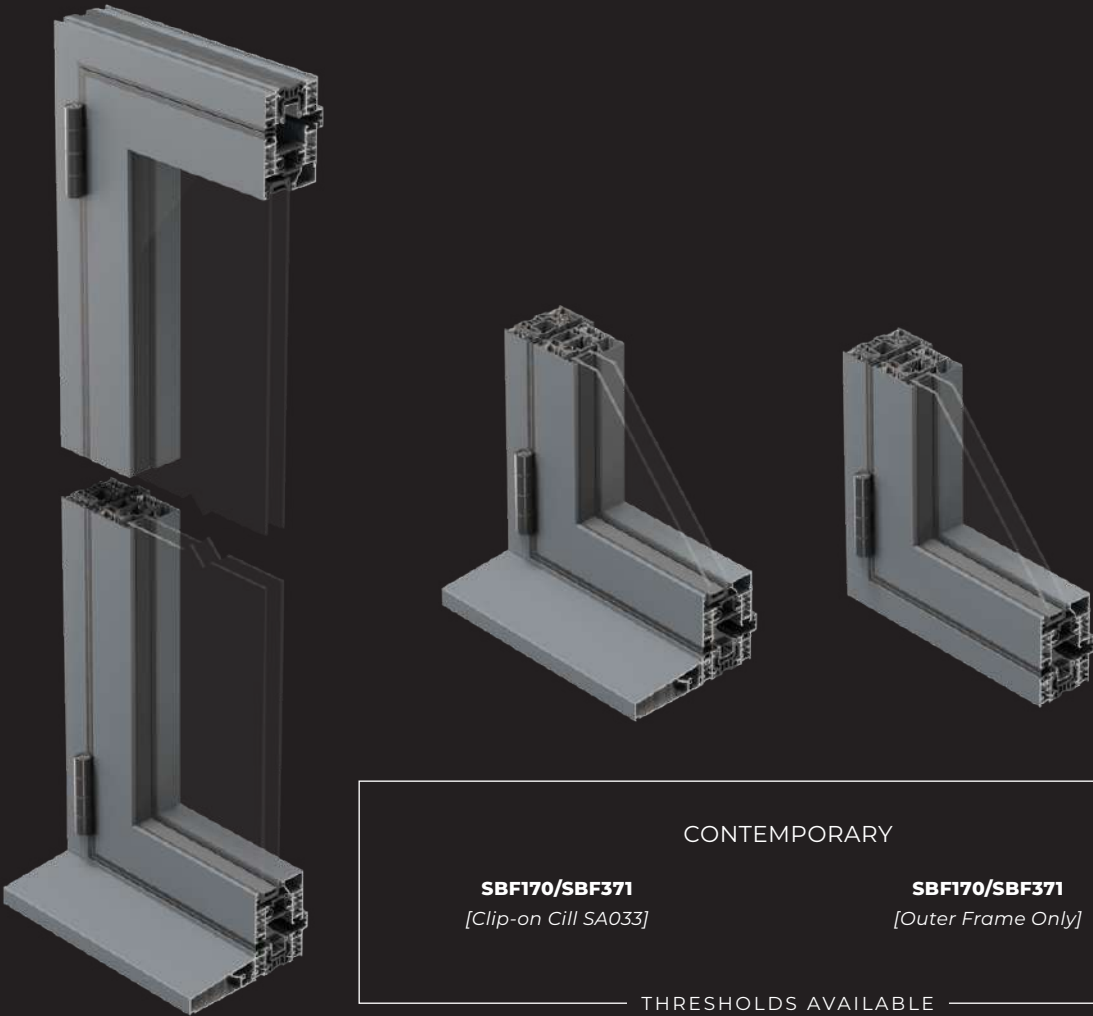


**OUTER FRAME &
CONTEMPORARY SASH
WITH CLIP-ON CILL**
SBF170/SBF371/SA033





Shown at 3500 x 2100mm



CONTEMPORARY

SBF170/SBF371
[Clip-on Cill SA033]

SBF170/SBF371
[Outer Frame Only]

THRESHOLDS AVAILABLE

INDEX BI-FOLD 4/3/1 / TECHNICAL INFO

- Ideal for contract and high volume retail work
- Min Size 700mm(w) x 2000mm(h)
- Max Size 6000mm(w) x 2300mm(h)
- Max Sash Size 1000mm(w) x 2200mm(h)

	OUTER FRAME / SASH	SASH / SASH
SIGHTLINES:	108mm	134mm

GLAZING	CONTEMPORARY
DOUBLE GLAZED	28mm
U VALUE	1.4
DSER RATING	B
TRIPLE GLAZED	44mm
U VALUE	1.0
DSER RATING	A

See building regulation sections from page 144 for details

SECURITY
PAS 24 & SBD Certified

WATER TIGHTNESS
Class 7A

AIR PERMEABILITY
Class 4

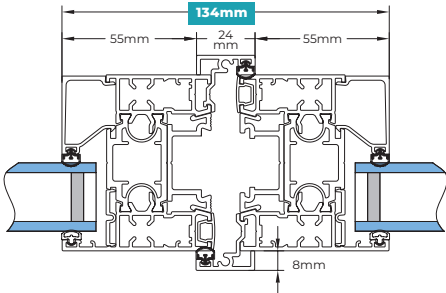
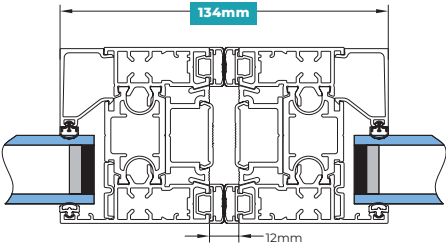
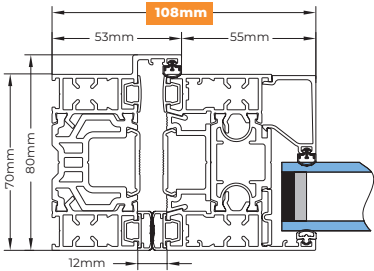
WIND RESISTANCE
Class A3 (1200 Pa)

PART L Compliant



A

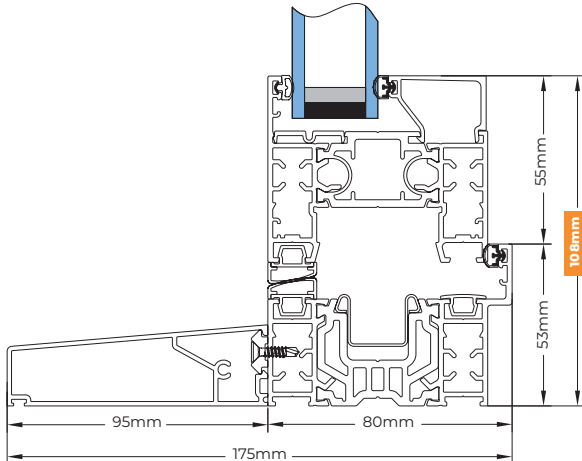
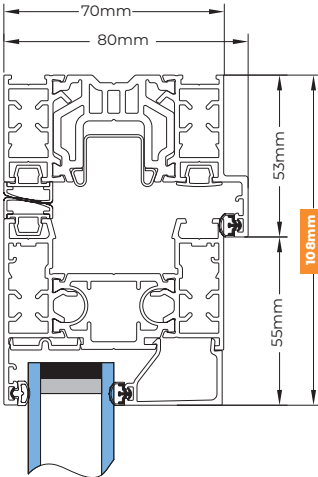
Cross section shown with Index Outer Frame SBF170 and Index Contemporary Sash SBF371



Cross section shown with
Index Outer Frame
SBF170

Index Contemporary Sash
SBF371

Clip-on Cill
SA033



Prestige
LIFT & SLIDE PATIO DOOR

SLIM SIGHTLINES WITH DUAL & TRIPLE TRACK OPTIONS



SLIM, STYLISH...

Slim minimalist looks which aesthetically match the rest of the Sheerline range maximise glass area to make the most of the expansive views clients value.

- Super slim sightlines of 106mm frame and sash
- **20-31% slimmer than market competitors**
- Interlocks:
 - 80mm as standard
 - 52mm ultra slim option



...AND SECURE

Like the rest of our products our lift & slide patio has been designed to offer high levels of security, with PAS24 accreditation as standard, plus an SBD upgrade option.

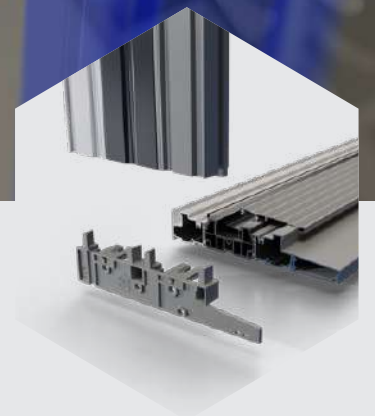
High security interlocks bind sashes together to stop unwanted intruders. Rated to 4.5KN.



**FLUSH JAMBS
PREVENT SNAGGING**
and help keep visual lines clean and aesthetically pleasing.



**PATENTED SEALING
ARRANGEMENT**
helps ensure Prestige L&S Patio Doors remain weather-tight.



FRAMES ARE SQUARE CUT
for easy assembly, and can be delivered flat packed if required.

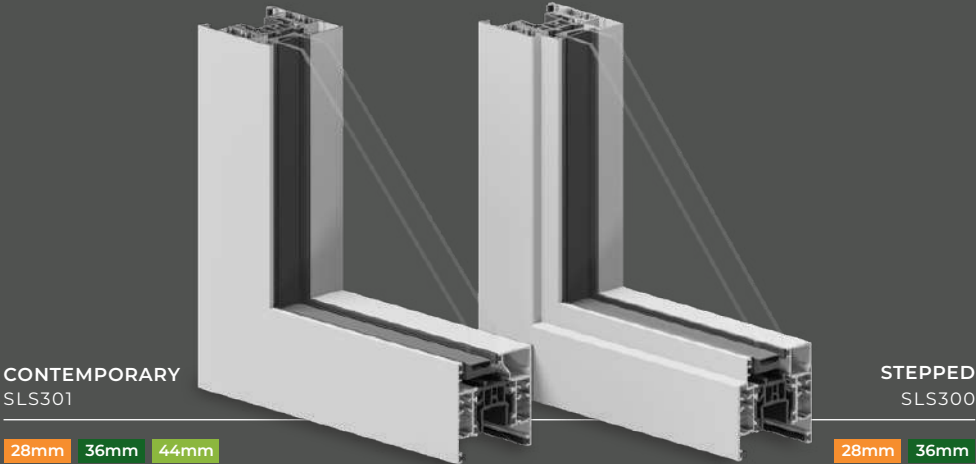
BESPOKE GEARING ENSURES SUPER SMOOTH AND RELIABLE OPERATION WITH FLAWLESS AESTHETICS AND EXCEPTIONAL THERMAL PERFORMANCE.

PART L Compliant ✓

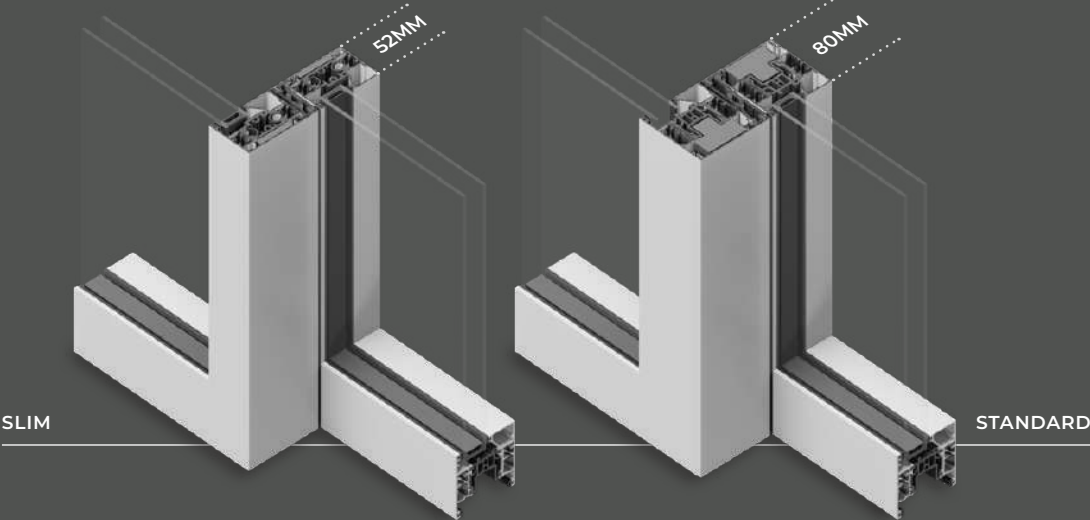
The Prestige Lift & Slide Patio is Part L compliant, able to achieve a double-glazed U-value of 1.4 W/m²K which easily achieves compliance for new homes and non-dwelling commercial projects.

DOUBLE GLAZING > 1.4 U-value > 44MM TRIPLE GLAZING > 1.0 U-value

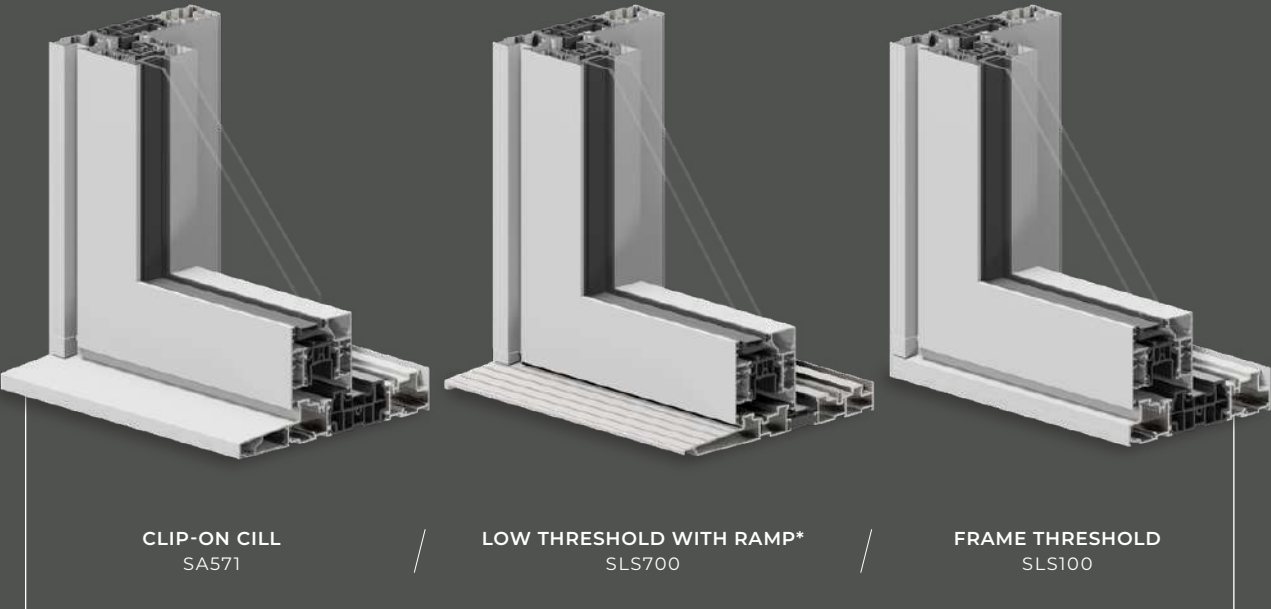
PRESTIGE LIFT & SLIDE PATIO
SASH OPTIONS



INTERLOCKS



THRESHOLDS



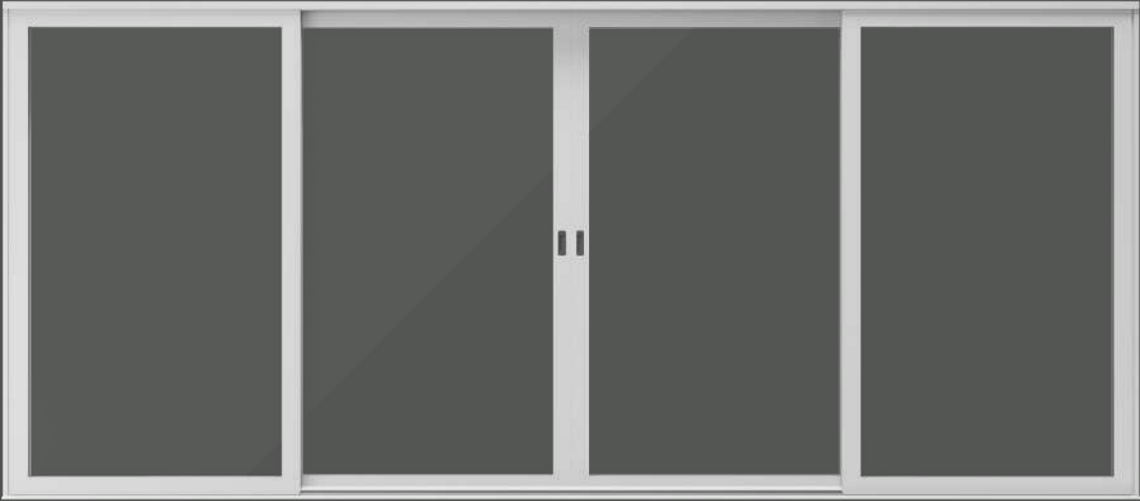
*Double track designs only.

PRESTIGE LIFT & SLIDE PATIO
SAMPLE STYLES



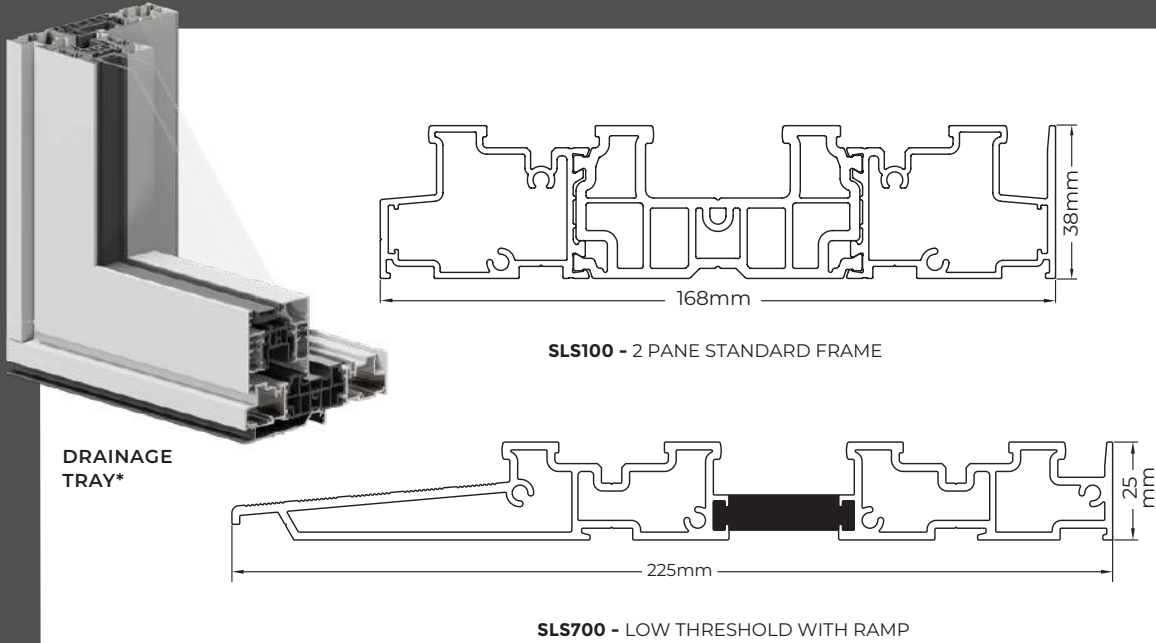
TRIPLE TRACK 3 PANE

DOUBLE TRACK DOUBLE PANE



DOUBLE TRACK 4 PANE

SLIDING SASHES
CAN BE LOCKED
INTERNALLY OR
EXTERNALLY



*Default for certain types

THRESHOLDS

PATIO SHOWN IN:



Prestige

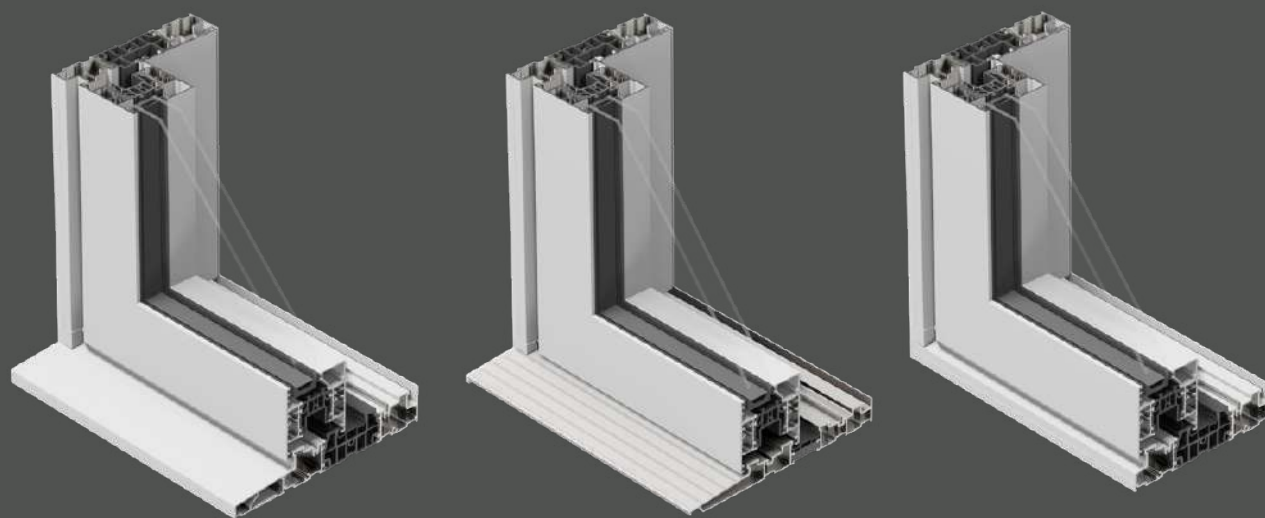
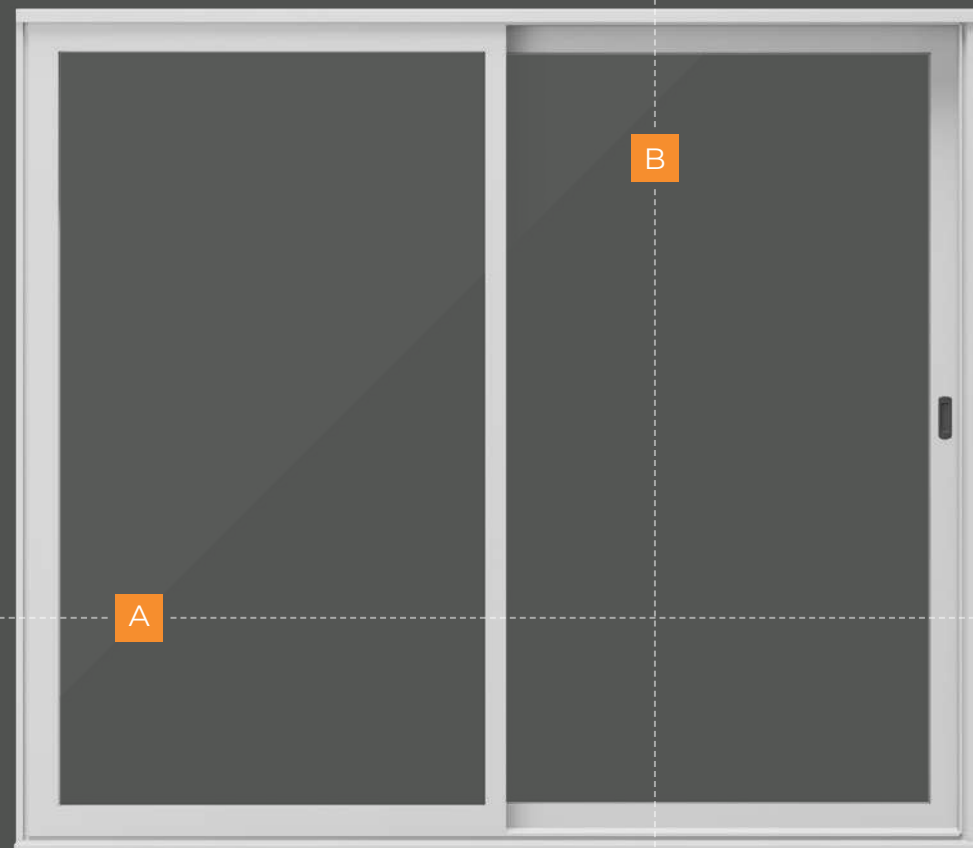
LIFT & SLIDE PATIO DOOR

Bespoke gearing based on a proven platform ensures super smooth and reliable operation with flawless aesthetics and exceptional thermal performance.

2 Pane (Type A) Slim Interlock



Shown at 2400 x 2100mm



CLIP-ON CILL
SA571/SL5100

CONTEMPORARY
SLS100/SLS301

LOW THRESHOLD
SLS700

FRAME
SLS100

THRESHOLDS AVAILABLE

PRESTIGE LIFT & SLIDE PATIO 2 PANE (TYPE A) SLIM INTERLOCK / TECHNICAL INFO

- With slim interlock option (as shown)
- Flush jambs do away with protruding lock pegs, preventing snagging and improving aesthetics
- Min Size 1203mm(w) x 1905mm(h)
- Max Size 3200mm(w) x 2500mm(h)

	OUTER FRAME / SASH	SLIM INTERLOCK
SIGHTLINES:	106mm	52mm

GLAZING	CONTEMPORARY	STEPPED
DOUBLE GLAZED	28mm	28mm
U VALUE	1.4	1.4
DSER RATING	B	B
TRIPLE GLAZED	44mm	36mm
U VALUE	1.0	1.2
DSER RATING	A+	A

See building regulation sections from page 144 for details



SECURITY
PAS 24 & SBD Certified



WATER TIGHTNESS
Class 4A



AIR PERMEABILITY
Class 3



WIND RESISTANCE
Class A3



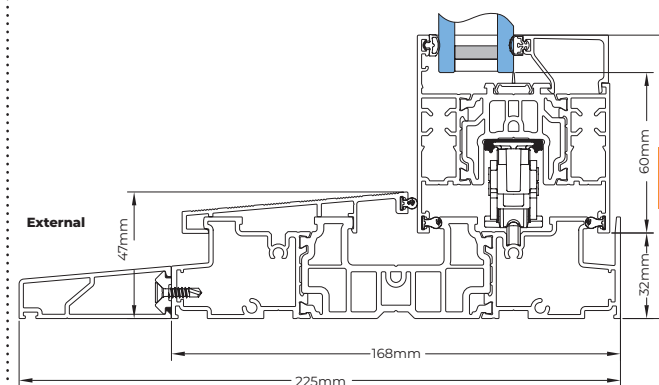
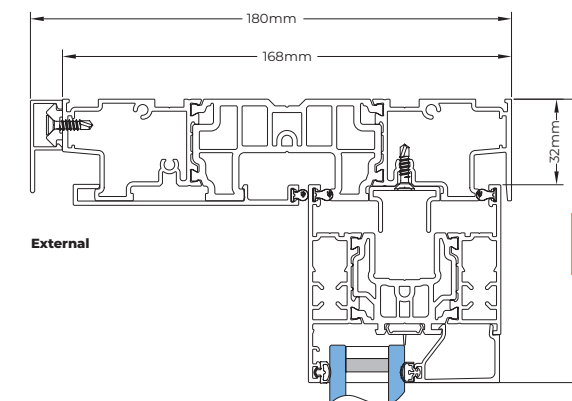
PART L Compliant

B

Cross section shown with
2 Pane Standard Frame
SLS100

Contemporary Sash
SLS301

Clip-on Cill
SA571

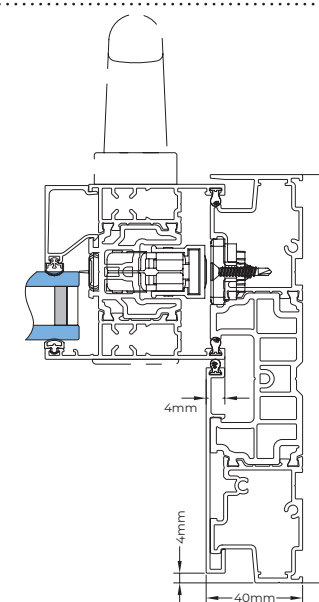
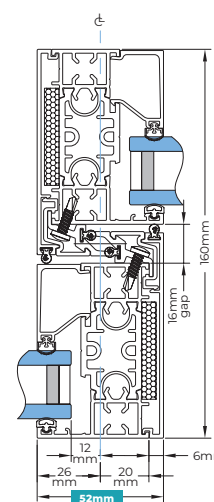
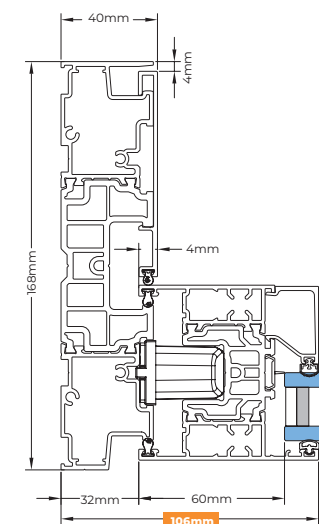


A

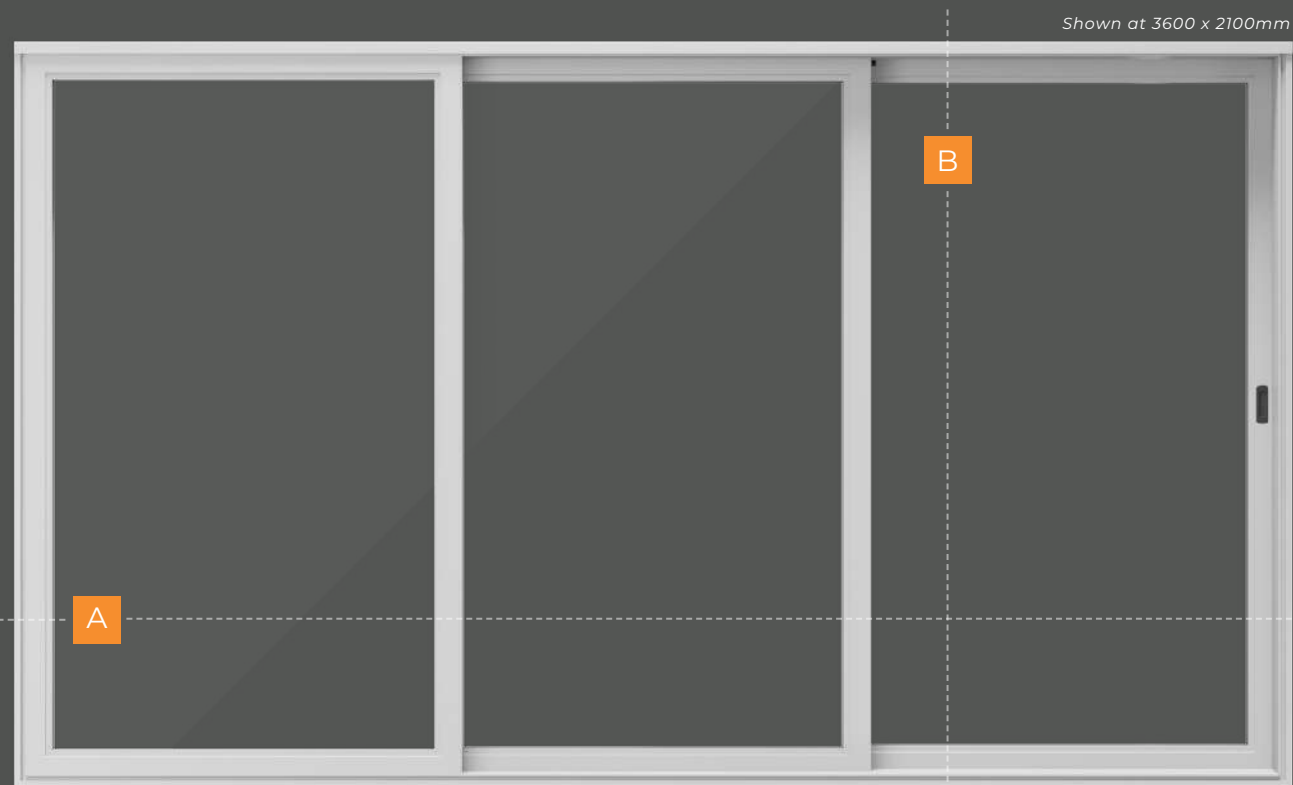
Cross section shown with
2 Pane Standard Frame
SLS100

Contemporary Sash
SLS301

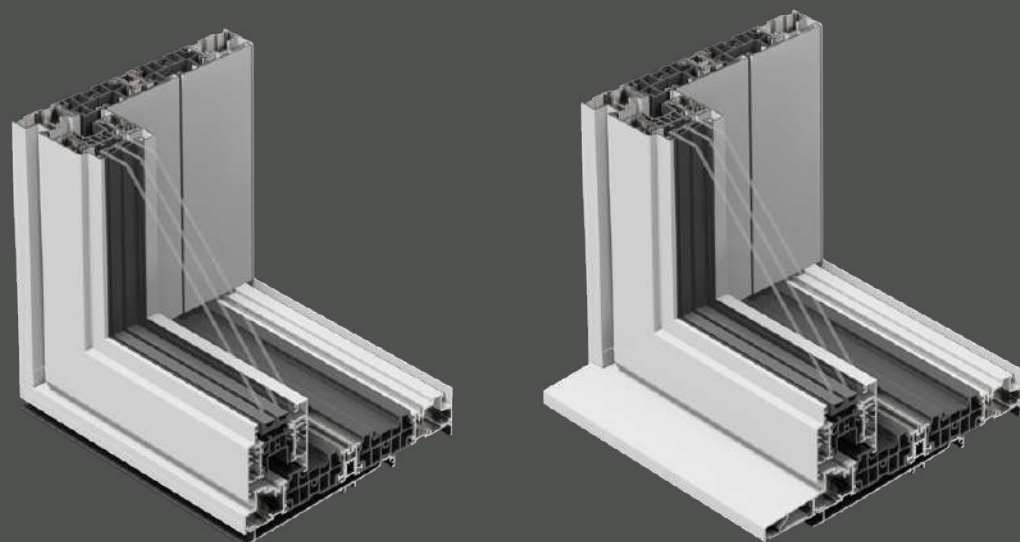
Slim Interlock
SP100/SL5050



3 pane Triple track (Type E)



Shown at 3600 x 2100mm



STEPPED
SLS101-SLS102/SLS300

FRAME with Drainage Tray
SLS101-SLS102/SLS014

CLIP-ON CILL with Drainage Tray
SA571/SLS101-SLS102/SLS014

THRESHOLDS AVAILABLE

PRESTIGE LIFT & SLIDE PATIO 3 PANE TRIPLE TRACK (TYPE E) / TECHNICAL INFO

- Flush jambs do away with protruding lock pegs, preventing snagging and improving aesthetics
- Min Size 1203mm(w) x 1905mm(h)
- Max Size 3200mm(w) x 2500mm(h)

	OUTER FRAME / SASH	STANDARD INTERLOCK
SIGHTLINES:	106mm	80mm

GLAZING	CONTEMPORARY	STEPPED
DOUBLE GLAZED	28mm	28mm
U VALUE	1.4	1.4
DSER RATING	B	B
TRIPLE GLAZED	44mm	36mm
U VALUE	1.0	1.2
DSER RATING	A+	A

See building regulation sections from page 144 for details



SECURITY
PAS 24 & SBD Certified



WATER TIGHTNESS
Class 4A



AIR PERMEABILITY
Class 3



WIND RESISTANCE
Class A3 (1200 Pa)



Official Police Security Initiative

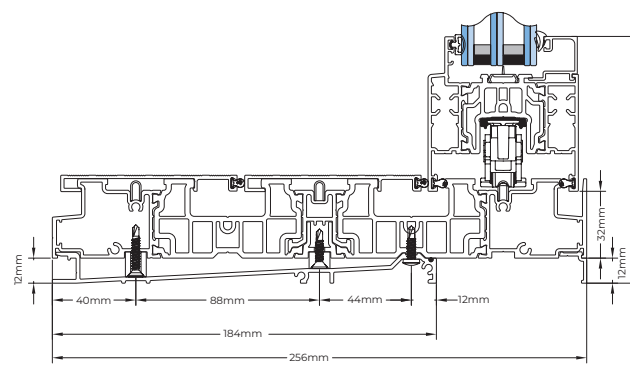
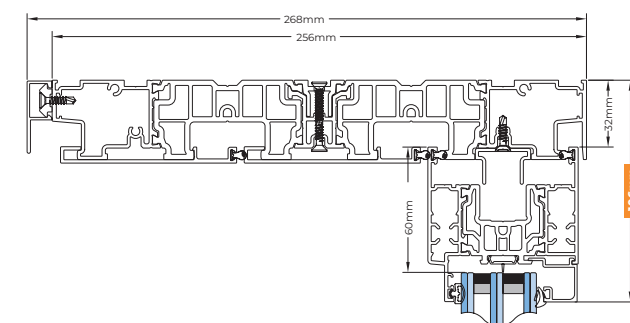
PART L Compliant

B

Cross section shown with
3 Pane Frame
SLS101-SLS102

Stepped Sash
SLS300

Drainage Tray
SLS014

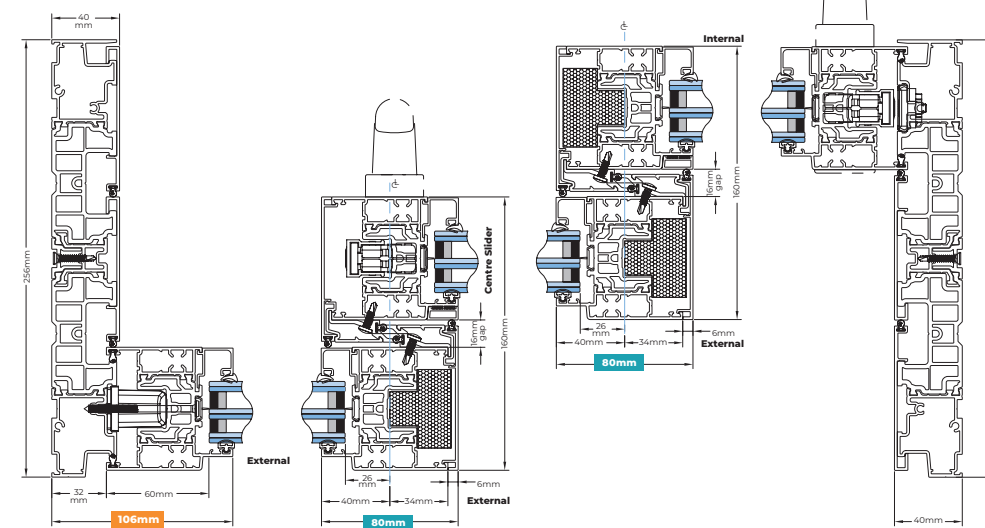


A

Cross section shown with
3 Pane Frame
SLS101-SLS102

Stepped Sash
SLS300

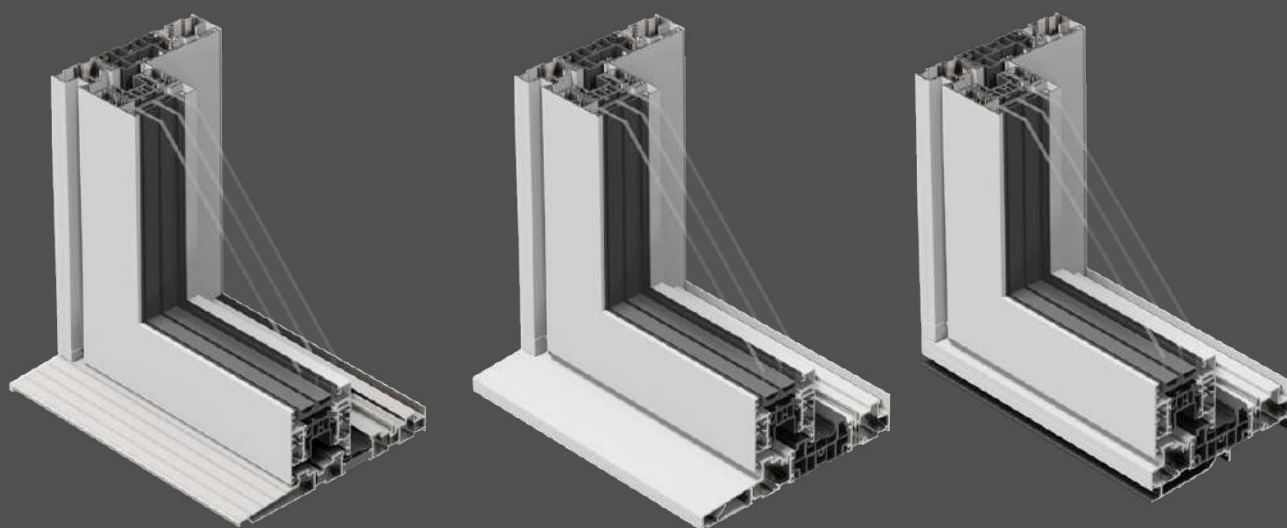
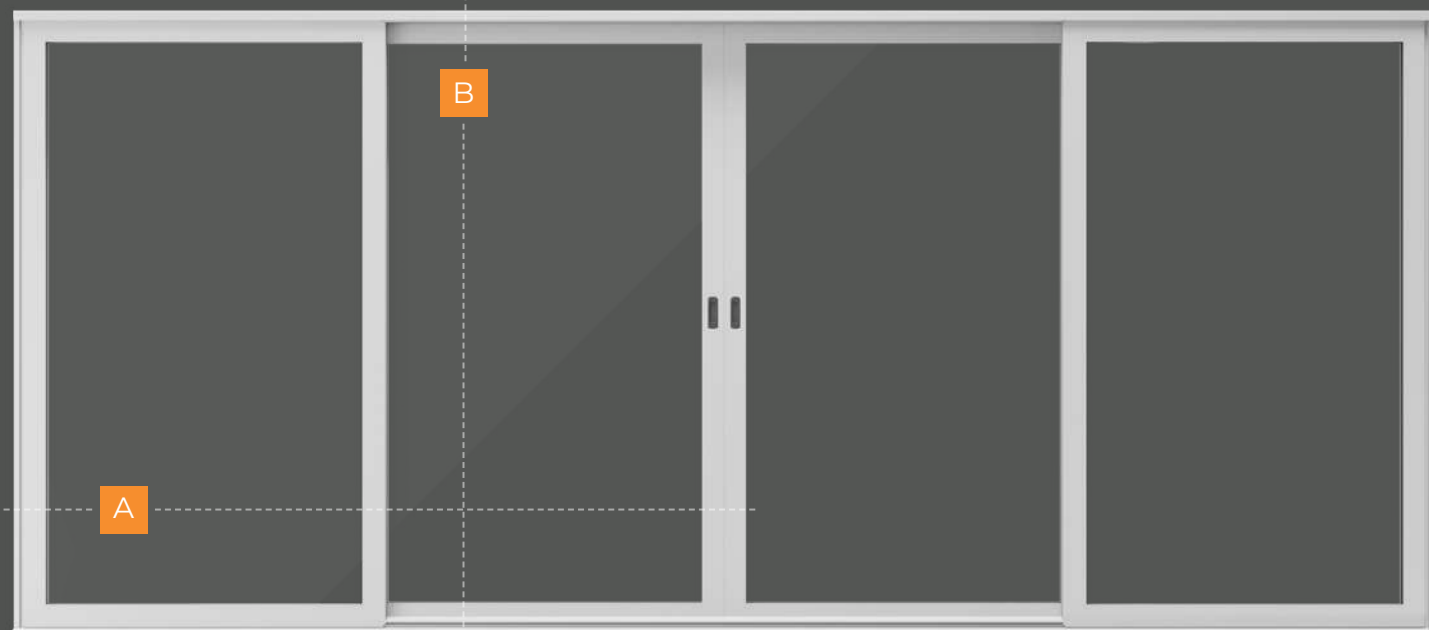
Standard Interlock
SLS300/SLS051



4 Pane (Type C) Slim Interlock



Shown at 4800 x 2100mm



CONTEMPORARY
SLS100/SLS301

CLIP-ON CILL
SA571/SLS100

FRAME with Drainage Tray
SLS100/SLS013

THRESHOLDS AVAILABLE

PRESTIGE LIFT & SLIDE PATIO 4 PANE (TYPE C) SLIM INTERLOCK / TECHNICAL INFO

- With slim interlock option (as shown)
- Flush jambs do away with protruding lock pegs, preventing snagging and improving aesthetics
- Min Size 1203mm(w) x 1905mm(h)
- Max Size 3200mm(w) x 2500mm(h)

	OUTER FRAME / SASH	STANDARD INTERLOCK	SASH / SASH
SIGHTLINES:	106mm	80mm	154mm

GLAZING	CONTEMPORARY	STEPPED
DOUBLE GLAZED	28mm	28mm
U VALUE	1.4	1.4
DSER RATING	B	B
TRIPLE GLAZED	44mm	36mm
U VALUE	1.0	1.2
DSER RATING	A+	A

See building regulation sections from page 144 for details



SECURITY
PAS 24 & SBD Certified



WATER TIGHTNESS
Class 4A



AIR PERMEABILITY
Class 3



WIND RESISTANCE
Class A3

Secured by Design



Official Police Security Initiative

OPTION

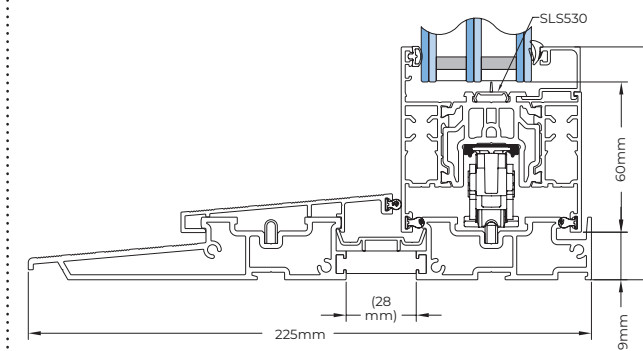
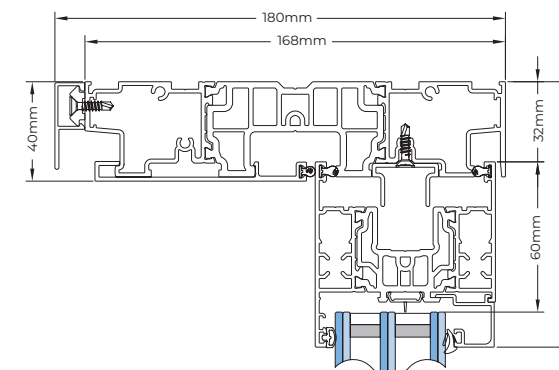
PART L Compliant

B

Cross section shown with
2 Pane Standard Frame
SLS100

Contemporary Sash
SLS301

Low Threshold with Ramp
SLS700

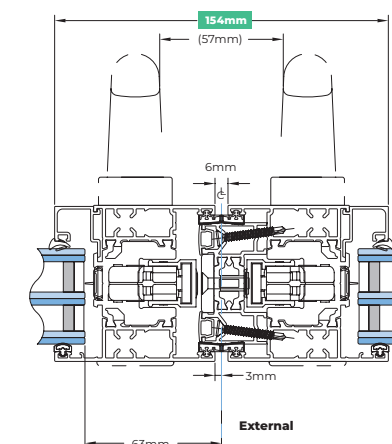
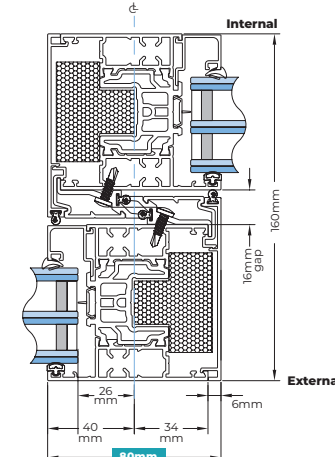
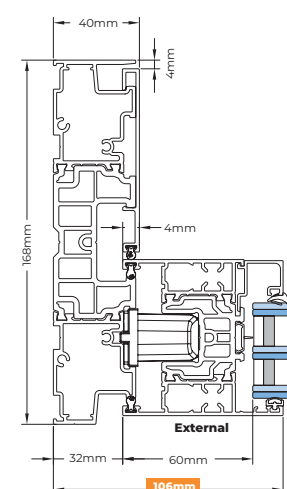


A

Cross section shown with
2 Pane Standard Frame
SLS100

Contemporary Sash
SLS301

Standard Interlock
SLS301/SLS051





THE UK'S MOST SECURE, SUSTAINABLE AND STYLISH ROOF LANTERN



COMBINING SECURITY, THERMAL PERFORMANCE AND REFINED LOOKS TO
CREATE THE ULTIMATE NEXT GENERATION ALUMINIUM ROOF LANTERN.



SNOW LOAD
1.2KN/m²

Covering the whole of the UK*



**UPGRADE
OPTION**
AVAILABLE



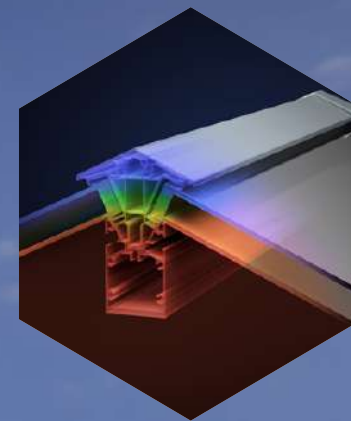
SECURE

Features such as anti-tamper security screws, a patent pending glass lock and the fact that all top caps are protected by overlapping castings, protecting them from attack, make S1 one of the most secure lanterns available.



STYLISH

Clean lines and discreet external aesthetics create an exceptional looking roof with corner and rafter end caps that run perfectly parallel with the perimeter of the roof. While deep internal rafter and ridge bars create a high end architectural aesthetic.



SUSTAINABLE

Thermlock® multi-chamber technology, far superior to traditional polyamide, helps make S1 the most thermally efficient lantern in its class. Inbuilt perimeter seals and a snow load rating of 1.2 KN/m² also ensures S1 is ready for the worst of British weather.



SHEERVENT® **FLUSH INTELLIGENT VENTILATION**

With a sleek minimalist design that sits perfectly flush with S1's rafter bars, and using powered actuators that can be intelligently automated, Sheerline has re-imagined roof vents, bringing them into the 21st century at last.

Dispensing with the need for muntin bars, SheerVent® offers reliable ventilation without the risk of leaks.



Fully thermally broken and using the same high-performance 28mm glazing as the rest of the S1 roof.

Insulated with
THERMLOCK[®]
technology

THERMAL PERFORMANCE

Thermlock[®] multi-chamber technology used in the eaves beam, ridge and all rafter and hip bars creates an exceptionally thermally insulated lantern. With a unique co-extruded perimeter seal ensuring draughts and rain are kept safely outside, while 28mm glazing allows acoustic dampening glass to be fitted if required.

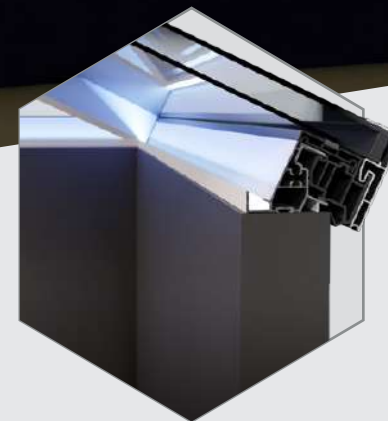
Our eaves beam design also ensures aluminium sections remain internal, preventing cold bridging and condensation issues.

INSTALLER FRIENDLY

Unique hook brackets support the hip rafters during construction, simplifying fitting on site and speeding up installation.

We've also designed out many common issues installers encounter and include internal rafter end caps to prevent bars marking the eaves beam during installation.

STYLE OPTIONS
AVAILABLE IN A
CHOICE OF 13 STYLES
FROM SQUARE
'PYRAMID' DESIGNS
TO GRANDER OPTIONS
SUITABLE FOR LARGER
'ORANGERY' STYLE
INSTALLATIONS



LED FEATURE

S1 lanterns feature integral LED light channels in the ridge and eaves – giving an easy way to add lighting to an installation if required.



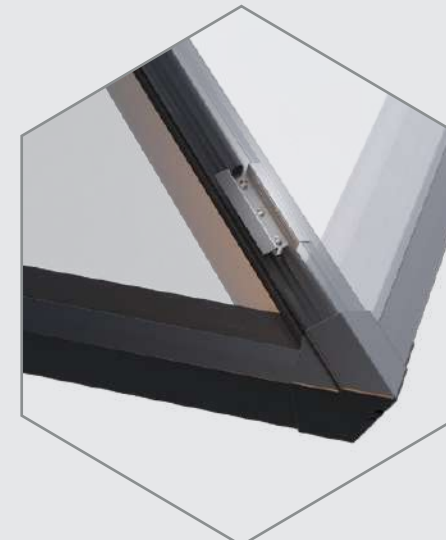
PRECISION ENGINEERED

S1 uses the patented Sheerline corner construction method to create a square and rigid eaves beam. While integral glass locks ensure a perfect, highly secure finished product.



REFINED AESTHETICS

Slim, consistent 50mm rafter, hip and ridge sightlines maximise the light flooding into interiors. Shallow top caps sit just 8mm above glass to complete the ultra-low profile external aesthetic.



SECURITY UPGRADE OPTION AVAILABLE

The SBD upgrade uses security clamping plates to lock laminated glass in place, preventing lifting and removal by would-be intruders[†] even if rafter top caps have been removed.

These stainless steel components are held firmly in place by security screws for added strength.

[†] Based on SBD's text criteria



The UK's most secure, sustainable
And stylish roof lantern, with great looks
from every angle – due to our unique
ultra-low line aesthetics.





STYLE EXAMPLES

STYLE 1
Min 600 x 600mm
Max 2400 x 2400mm

STYLE 2
Min 800 x 600mm
Max 3000 x 2400mm

STYLE 4*
Min 2400 x 600mm
Max 6000 x 2400mm
Showing Sheervent®

STYLE 10*
Min 3600 x 1800mm
Max 6000 x 3200mm

STYLE 13*
Min 3000 x 1400mm
Max 6000 x 3200mm

STYLES MARKED WITH * CAN INCORPORATE AN OPTIONAL SHEERVENT®

THERMALLY BROKEN EAVES BEAM SHOWING GLASS LOCK AND INTEGRATED LED CHANNEL

SNOW LOAD
1.2KN/m²

MIN SIZE
600 x 600mm

MAX SIZE
3200 x 6000mm

PITCH
25°

SIGHTLINES
50mm
Rafter, hip, jack rafters and ridge

STYLE 3
Min 1200 x 600mm
Max 4000 x 2400mm

STYLE 5*
Min 3000 x 600mm
Max 6000 x 2400mm

STYLE 6
Min 1800 x 1800mm
Max 3200 x 3200mm

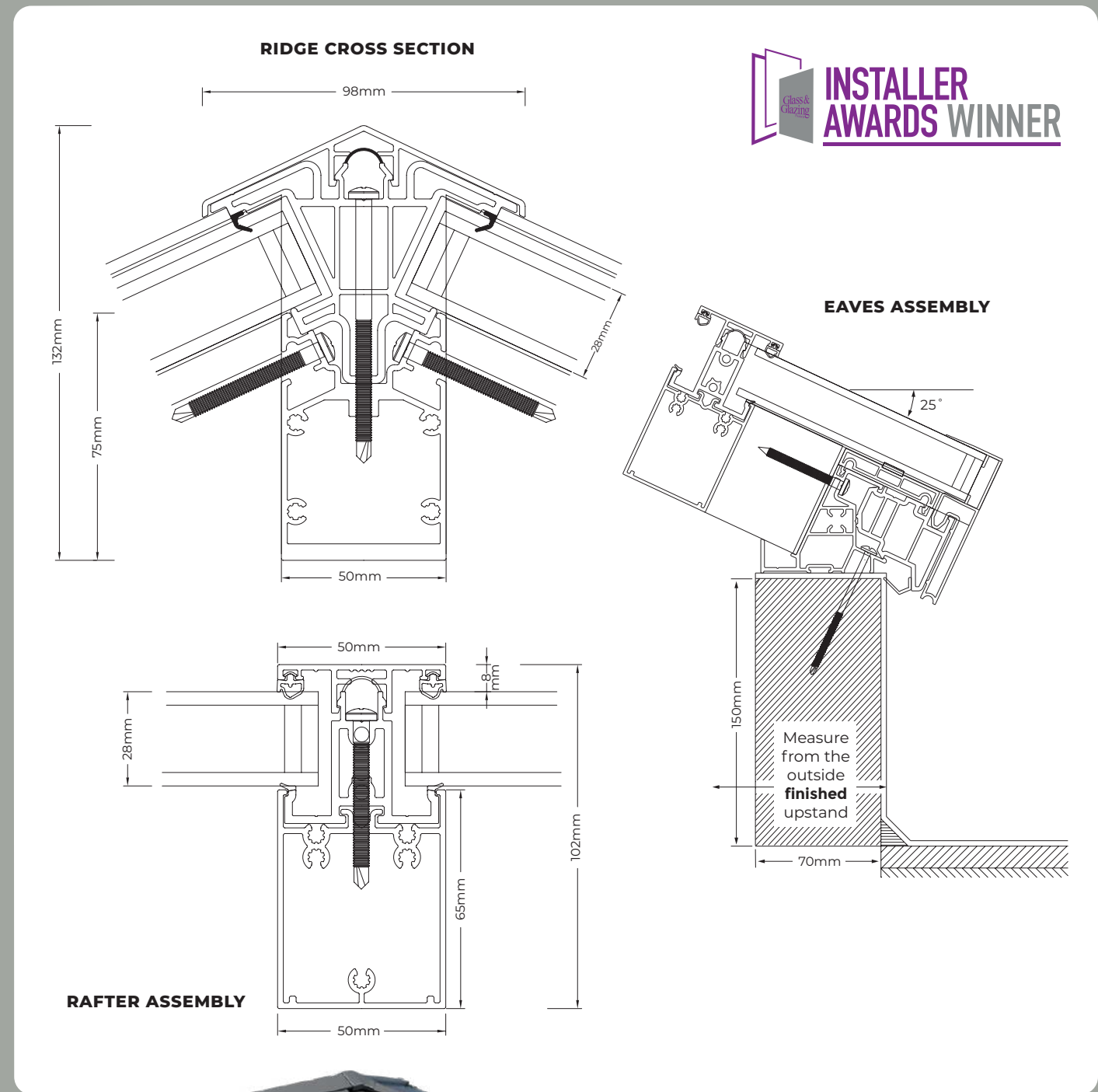
STYLE 7
Min 2000 x 1800mm
Max 3400 x 3200mm

STYLE 8
Min 2000 x 1800mm
Max 4000 x 3200mm

STYLE 9*
Min 3000 x 1800mm
Max 6000 x 3200mm

STYLE 11
Min 1600 x 1400mm
Max 4000 x 3200mm

STYLE 12*
Min 2400 x 1400mm
Max 6000 x 3200mm



SHEERVENT®
FLUSH INTELLIGENT VENTILATION

200MM

MIN SIZE
600mm w x 550mm h

MAX SIZE
1000mm w x 2000mm h

GLAZING
28mm

■ REMOTE CONTROL ■ WIRED ACTUATOR ■ WIND, RAIN & LIGHT SENSOR

ACCREDITATIONS & ASSOCIATIONS



Our manufacturing facility has achieved ISO9001: 2015 accreditation, meeting British standards for a robust, quality management system. This standard demonstrates the strength of the dedicated management processes and procedures we have in place across the whole company.



Made in Britain is an organisation that recognises excellence in manufacturing and promotes British-made products across all sectors. It brings together the best manufacturers in the UK and Sheerline is proud to be a member of this association. Giving businesses and consumers confidence and clarity that they are buying British.



Sheerline is a member of The Aluminium Federation, which represents businesses who process, trade and work with aluminium, promoting best practise within the sector.



Secured by Design (SBD) is the official police security initiative that works to improve the security of buildings. All Sheerline products have an SBD upgrade option available for ultimate protection.



PAS 24 is a standard of testing that measures the security performance of windows and doors in the UK. Developed by BSI (British Standards Institution) it's designed to make homes more secure by ensuring that windows and doors are robust enough to resist attack. The complete Sheerline range has been tested to and meets PAS 24 requirements.



To gain the coating applicator approved licence, Sheerline underwent QUALICOAT's thorough approval process, which involved a detailed application outlining every step of the company's powder coating process and submitting samples for testing. Ensuring beautiful, consistent colour from our in-house powder coating facility is guaranteed.



APPLICATOR STATUS

Syntha Pulvin full approved applicator status was obtained after going through Syntha Pulvin's rigorous testing process. This helps underline Sheerline's commitment to excellence as Syntha Pulvin is one of the leading architectural powder coatings brands in Europe.

SUSTAINABILITY:

THE BENEFITS OF ALUMINIUM

Aluminium remains the ultimate sustainable solution

for high performance windows, doors and roof lanterns due to the hard-wearing nature of the material and highly efficient recycling processes.

Manufactured in the UK, Sheerline is committed to keeping our products' environmental impact as low as possible.

THE FACTS:



Aluminium is made from

**THE MOST
RECYCLED AND
ABUNDANT METAL**

in the Earth's crust



Anything made of
aluminium can be

**RECYCLED
REPEATEDLY**



75%

of aluminium produced
IS STILL IN USE
thanks to its durability



RECYCLING 1 TONNE

of aluminium saves the Carbon Dioxide
Emissions of driving nearly

27,000 MILES*

*Source: thinkcans.net



DID YOU KNOW?

**OUR 170-TONNE ALUMINIUM
PRESS IS THE SAME WEIGHT AS
A FULLY GROWN BLUE WHALE!**

RESPONSIBLE MANUFACTURING

Made from the most recycled and abundant metal and produced in the most energy efficient aluminium window facility in the UK, all Sheerline products are manufactured in the most sustainable way possible.

Our state-of-the-art, energy efficient SMS HYBEX press, which uses the latest servomotor technology delivers

**ENERGY SAVINGS OF UP
TO 55% COMPARED TO
TRADITIONAL PRESSES.**

REDUCING WASTE

The innovative design of all our systems vastly reduces fabrication waste, minimising the unnecessary consumption of raw material which helps reduce our products' carbon footprint. This coupled to the high level of energy efficiency built into every window and door, helps build towards a greener future for all.

Since our formation we have invested over £19 million in our advanced production facility, implementing processes to reduce waste. This includes recently investing over £1.3 million in our own Qualicoat approved powder coating facility. Our GEMA automation system also has a built-in powder reclamation feature which increases efficiency of the paint process to further reduce waste.



RECYCLING

For Sheerline, sustainability has been built into the foundation of the company from the outset. Using UK-sourced aluminium enables us to keep our carbon footprint low and enables offcuts to be recycled and sent back to the same Welsh aluminium foundry we source the majority of our aluminium logs from. Supporting UK based closed loop recycling.

One of the key benefits of recycling aluminium is that the material does not degrade during the process, so an off-cut that was sent back could well be used during the next extrusion process.

INTRODUCTION TO BUILDING REGULATIONS

Windows and doors are critical components of any building, influencing not only the aesthetics but also the functionality, energy efficiency, and security of a structure. Building Regulations set out stringent requirements to guarantee that these elements meet specific standards for insulation, ventilation, fire safety, accessibility, and structural integrity.

This section is designed to provide you with a simplified overview of the key Approved Documents that relate to windows and doors. Helping you understand the route to compliance with Building Regulations in England and Wales*. Whether you are designing new buildings, conversions, renovations or extensions (domestic or commercial), understanding these regulations is essential to delivering projects that are not only compliant but also exceed the occupants expectations and deliver practical, high-quality glazing solutions.

**THE GOOD NEWS IS
THAT SHEERLINE'S
SYSTEMS HAVE ALL
BEEN DESIGNED TO
OFFER PRACTICAL AND
STRAIGHTFORWARD
ROUTES OF COMPLIANCE
WHERE POSSIBLE.**



FULL UP-TO-DATE COPIES OF THE BUILDING REGULATIONS

can be found here or via the QR code:

www.gov.uk/government/collections/approved-documents

**A different regulatory framework exists in Scotland and other countries and local advice and guidance should be sought.*

Please note this guide does not constitute professional or legal advice. Which should be sought if required.
Please refer to page 171 for our detailed disclaimer.

BUILDING REGULATIONS AND APPROVED DOCUMENTS (ENGLAND)

The **Building Regulations** may apply in and around buildings. These legal requirements are intended to protect people's safety, health and welfare. They also set standards for accessibility, water use, energy use and security.

The **Approved Documents** give further guidance for many common building situations. They contain statutory guidance on how to meet the requirements of the Building Regulations, although may not provide appropriate guidance if the building is unusual in terms of its design, setting, use, scale or technology.

When proceeding with one or more of the following, Building Regulations are likely to apply:

- a. Put up a new building
- b. Change or make bigger a building that is already built
- c. Change the use of a building that is already built
- d. Alter the building services if a 'controlled service' or a 'controlled fitting'.

Building Regulations approval may also be required if replacing certain windows and doors.



Key elements of the Approved Documents and how they relate to windows and doors are featured in the following sections. All key element information is provided for guidance only and should not be seen as comprehensive, if in any doubt please consult the full text of the document referred to, which is available to view and download at:

www.gov.uk/government/collections/approved-documents

LIST OF THE APPROVED DOCUMENTS AND WHAT THEY COVER, THAT RELATE TO WINDOWS & DOORS			
DWELLINGS		OTHER BUILDINGS	
New	Existing	New	Existing ¹
A: Structure			
B: Fire Safety, Volume 1: Dwellings		B: Fire Safety, Volume 2: Buildings other than dwellings	
F: Ventilation			
K: Protection from falling, collision and impact			
L: Conservation of fuel and power L1A New dwellings	L: Conservation of fuel and power L1A Existing dwellings	L: Conservation of fuel and power L2A New buildings other than dwellings	L: Conservation of fuel and power L2B Existing buildings other than dwellings
M: Access to and use of buildings. Volume 1: Dwellings		M: Access to and use of buildings. Volume 2: Buildings other than dwellings	
Q: Security - Dwellings	Q: No requirement	Q: No requirement	

APPROVED DOCUMENT A: STRUCTURE

Ensuring buildings are constructed so that the combined dead, imposed and wind loads are sustained and transmitted by it to the ground, safely and without impacting surrounding buildings.

Key elements of Document A relating to windows and doors:

RESISTANCE TO DEFLECTION: All window and door members must be capable of withstanding wind loads established using BS EN 1991-1-1:2007 (Eurocode 9: Design of aluminium structures), without exceeding a deflection ratio of L/175 (GGF recommendation).

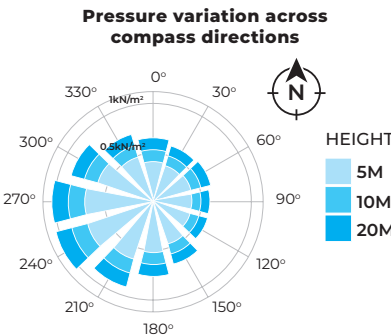
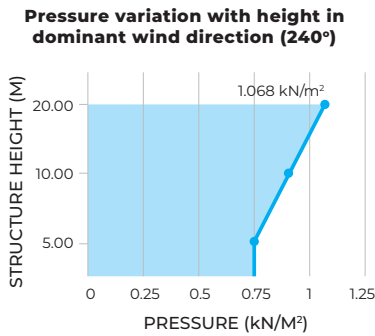
For example, the allowable deflection of a 2100mm high mullion: $2100/175 = 12\text{mm}$.

To calculate a 'Peak Velocity Pressure' (wind load) an installation address (most accurate) or postcode is needed, along with a height above ground level for each window or door.

Installations above 5m from ground level can be subject to significantly greater pressures, as can be seen in the pressure variation with height abstract below.

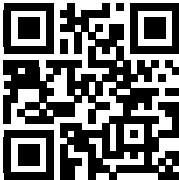
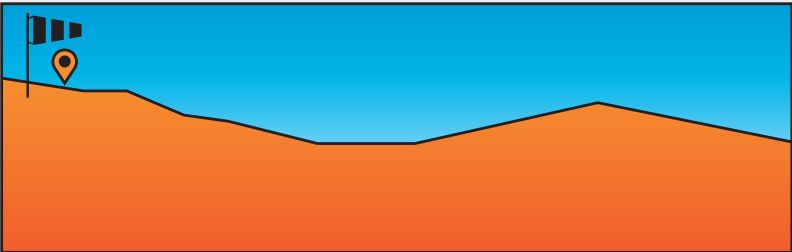
Orientation of the installation also has a significant impact on the pressure a window or door will be exposed to. In general, England's highest wind pressures come from the Southwest to West direction, as shown in the pressure variation compass below.

SHEERLINE HQ DE56 2JJ EXAMPLE:



Orography details in dominant wind direction (240°)

Ground at site level and sheltered by higher ground upwind. Orography not significant.



RESISTANCE TO BUCKLING: Applies to bay poles where axial loads are imposed by supporting the structure above, roof/brickwork etc.

APPROVED DOCUMENT B: FIRE SAFETY

VOLUME 1: DWELLINGS / VOLUME 2: BUILDINGS OTHER THAN DWELLINGS.

Ensuring buildings are designed and constructed to protect occupants in case of a fire. Addressing both the prevention of fire outbreak and the management of risk to life should a fire occur.

Key elements of Document B (Volume 1: Dwellings) relating to windows and doors:

MEANS OF ESCAPE

DWELLING HOUSES AND FLATS:

Where escape windows are specified (generally up to 4.5m above ground level), they should comply with all the following:

Windows should have an unobstructed openable area that complies with all the following:

- i. A minimum area of 0.33m².
- ii. A minimum height of 450mm and a minimum width of 450mm (the route through the window may be at an angle rather than straight through).

For example: 734 x 450mm OR 575 x 575mm OR 450 x 734mm.

- iii. The bottom of the openable area is a maximum of 1100mm above the floor.

Unfortunately, there is no straight forward way of translating the above criteria into a simple window width of X and height of Y, as there are many types and manufacturers of hinge, each with varying sizes and geometry.

The QR code below provides the required sash sizes to achieve the unobstructed openable area using Yale Defender Egress side hung and Yale Defender top hung hinges in a Sheerline window. Sizes should be regarded as theoretical absolute minimums and take no account of hinge or frame assembly tolerances.

Key elements of Document B (Volume 2: Buildings other than dwellings) relating to windows and doors:

MEANS OF ESCAPE

NO PROVISION FOR ESCAPE WINDOWS

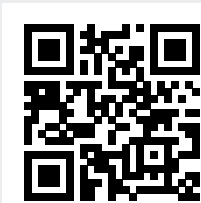
AOV (AUTOMATIC OPENING VENTILATOR)

An AOV is a type of window or opening that is designed to automatically open in the event of a fire, to allow smoke and heat to escape from a building.

Windows automated for smoke ventilation fall into the smoke and heat exhaust ventilator (SHEV) standard EN 12101-2

EN 12101-2 dictates that actuators and vent profiles must be tested together as a single system, at an accredited facility, to all test annexes of the prescriptive standard. There are also strict audited procedures to fabricate and install the components, to ensure they are manufactured as tested. Failure to follow this procedure means that the required Declaration of Performance (DoP) certificate cannot be issued, and the installation will not be compliant.

Details of Sheerlines' AOV compliant solution for Prestige Windows is available by scanning the QR code.



APPROVED DOCUMENT F: VENTILATION

VOLUME 1: DWELLINGS / VOLUME 2: BUILDINGS OTHER THAN DWELLINGS.

Ensuring buildings are designed and constructed with a level of ventilation sufficient to provide a healthy living environment for the occupants, whilst preventing the buildup of moisture and pollutants which can affect the durability of the building.

Types of ventilation:

1. Natural ventilation (through windows, doors, and other openings). Using background/trickle ventilation in the head of a frame or sash which should be fitted at least 1700mm above the finished floor level (FFL) but within reach.
2. Mechanical ventilation with heat recovery. Requiring no background/trickle ventilation.
3. Continuous mechanical extract ventilation, combined with background ventilation.

Note: Any night vent facility of an opening sash does not qualify as ventilation.

Key elements of Document F (Volume 1: Dwellings) relating to windows and doors

NEW DWELLINGS:

- Natural ventilation (type 1. above) using background/trickle ventilation. Specific 'equivalent area' (EA) requirements are provided for different types of buildings and rooms, these are listed in the extract below.

EXTRACT FROM F1(1) VOLUME 1: DWELLINGS

TABLE 1.7 MINIMUM EQUIVALENT AREA OF BACKGROUND VENTILATORS FOR NATURAL VENTILATION ¹		
ROOM	MINIMUM EQUIVALENT AREA OF BACKGROUND VENTILATORS FOR DWELLINGS WITH MULTIPLE FLOORS	MINIMUM EQUIVALENT AREA OF BACKGROUND VENTILATORS FOR SINGLE-STOREY DWELLINGS
Habitable rooms ^{2/3}	8000mm ²	10,000mm ²
Kitchen ^{2/3}	8000mm ²	10,000mm ²
Utility room	No minimum	No minimum
Bathroom ⁴	4000mm ²	4000mm ²
Sanitary accommodation	No minimum	No minimum

Notes:

1. The use of this table is not appropriate in any of the following situations and expert advice should be sought.
 - If the dwelling has only one exposed façade.
 - If the dwelling has at least 70% of its openings on the same façade.
 - If a kitchen has no windows or external façade through which a ventilator can be installed.
2. Where a kitchen and living room accommodation are not separate rooms (i.e. open plan), no fewer than three ventilators of the same equivalent area as for other habitable rooms should be provided within the open-plan space.
3. The total number of ventilators installed in a dwelling's habitable rooms and kitchens should be no fewer than five, except in one-bedroom properties, where there should be no fewer than four.
4. If a bathroom has no window or external façade through which a ventilator can be installed, the minimum equivalent area specified should be added to the ventilator sizes specified in other rooms.

- Continuous mechanical extract ventilation combined with background/trickle ventilation (type 3. above). Background/trickle ventilators should satisfy all the following conditions:
 - a. Not be in wet rooms.
 - b. Provide a minimum equivalent area of 4000mm² for each habitable room in the dwelling.
 - c. Provide a minimum total number of ventilators that is the same as the number of bedrooms plus two ventilators, for example: a one-bedroom dwelling should have three background ventilators

APPROVED DOCUMENT F: VENTILATION *continued*

Key elements of Document F (Volume 1: Dwellings) relating to windows and doors

REPLACEMENT OF WINDOWS WITH BACKGROUND (TRICKLE) VENTILATION:

- a. Not be smaller than the background ventilators in the original window.
- b. Be controllable either automatically or by the occupant.

REPLACEMENT OF WINDOWS WITHOUT BACKGROUND (TRICKLE) VENTILATION:

- a. If the dwelling ventilation is via natural means only, incorporate background ventilators in the replacement windows equivalent to the following.
 - i. Habitable rooms – minimum 8000mm² EA.
 - ii. Kitchen – minimum 8000mm² EA.
 - iii. Bathroom (with or without a toilet) – minimum 4000mm²EA.
- b. If the dwelling ventilation system includes a continuous mechanical extract method, install 4,000mm² EA background ventilators in each habitable room.

EXTENSIONS, WINDOWS AND DOORS BACKGROUND (TRICKLE) VENTILATION:

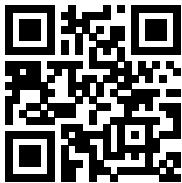
Within Approved Document F, there are too many variables to provide a brief guide to the required background ventilation for extensions.

Please refer to sections:

- 1. Addition of a habitable room (not including a conservatory) to an existing dwelling.
- 2. Addition of a conservatory to an existing building.
- 3. Addition of a wet room to an existing dwelling.
- 4. Refurbishing a kitchen or bathroom in an existing dwelling.

Key elements of Document F (Volume 2: Buildings other than dwellings) relating to windows and doors:

A ventilation specification for commercial buildings is generally supplied by a CIBSE Member or suitably qualified engineer.



This QR links to show methods of ventilation through various Sheerline Systems.

APPROVED DOCUMENT K: PROTECTION FROM FALLING, COLLISION AND IMPACT

Ensuring buildings are designed and constructed with specific safety provisions to help minimize the risk of serious cutting and piercing injuries from shards of glass. The protection from falling element (BS 6180) ensures the containment and provision of a suitable glazed barrier between different floor levels.

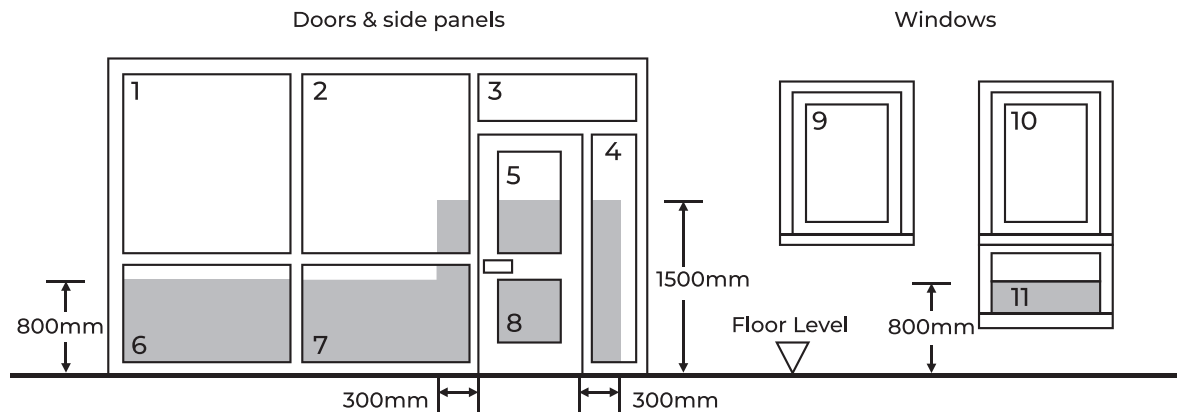
Key elements of Document K relating to windows and doors:

GLAZING IN CRITICAL LOCATIONS:

In installations where glazing falls wholly or partially within the shaded areas below, safety glass should be used to prevent injury if the glass breaks. Each unit should include a Kitemark with British Standard number 'BS 6206'.

- a. Toughened glass (also called tempered).
- b. Laminated glass.
- c. Wired glass - certain types of wired glass can satisfy the impact requirements for safety glass while giving a level of fire resistance.

EXTRACT FROM DOCUMENT K SECTION 5 - PROTECTION AGAINST IMPACT WITH GLAZING:



Safety glass is not required if there is a permanent protective screen installed: refer to 'Permanent Screen Protection' within Approved Document K. For large single glazed installations, shop fronts for example, a more robust thickness of annealed glass can be used, very often 10 or 12mm or even 15mm dependant on the area of glazing.

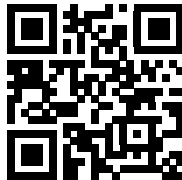
Referred to: BS 6180 Barriers in and about buildings - code of practice.

Glazed elements - where frame and glazing/infill perform the function of a barrier:

Where low level windows or doors (less than 800mm from FFL to cill) are installed in buildings with a potential for a person falling more than 600mm in a dwelling or 380mm in a non-dwelling there will be a need for a barrier to prevent the risks of falling.

Julliette balconies with French doors for example, generally have an external wall fixed barrier.

In situations where no additional protection from falling is to be installed, the window itself becomes the barrier. With installations such as these both glazing/infill and internal frame members (transoms or mullions) must be able to withstand the appropriate loads dependant on the type of occupancy of the building.



More information plus a guide to calculating transom or mullion deflection, along with product rigidity values can be found via the QR link.

APPROVED DOCUMENT L: CONSERVATION OF FUEL AND POWER

VOLUME 1: DWELLINGS / VOLUME 2: BUILDINGS OTHER THAN DWELLINGS.

As the UK moves towards 2025's Future Homes and Buildings Standard, the Government has introduced a range of changes to Building Regulations.

This includes a mandatory 30% cut in carbon for all new homes and a 27% cut for other buildings, including offices and shops. Part L sets the minimum thermal performance for various building elements, including windows and doors.

WHAT'S CHANGED?

The latest revision to Part L shows **thermal standards for windows and doors for both renovation and new-build projects tighten**, as the country looks to reduce its carbon footprint and improve the energy efficiency and thermal performance of everyone's homes.

This table lists the thermal requirements of Part L of the latest Building Regulation for Installation of windows and doors in new and existing Dwellings.

PRODUCT TYPE	EXISTING DWELLING	Inc Extensions	NEW BUILD LIMITING VALUE*
	===== MAXIMUM U-VALUE W/(M²K) =====		
WINDOWS	1.4	OR Window Energy Rating Band minimum B	1.6
DOORS WITH >60% OF INTERNAL FACE GLAZED	1.4	OR Doorset Energy Rating Band minimum C	1.6
OTHER DOORS	1.4	OR Doorset Energy Rating Band minimum B	1.6

*This is the absolute maximum permitted, with requirements changing based on the overall building specification – we advise checking what is required on a case-by-case basis.

PLEASE NOTE

Building Regulations also state that no window or door should perform more poorly than the element it is replacing.
For ease, throughout the document we've listed U-value's without the W/(m²K) suffix.

THE LATEST PART L REGULATIONS

These changes came into effect on **15th June 2022** and affects all housing that didn't have planning approval before that date, and on anything that didn't commence construction before 15th June 2023.

HM Government

The Building Regulations 2010

Conservation of
fuel and power

APPROVED DOCUMENT

Volume 2: Buildings other than dwellings


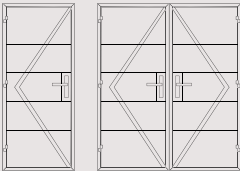
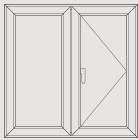
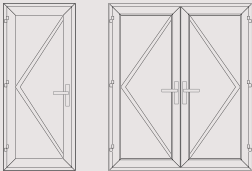
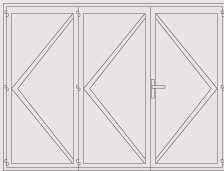
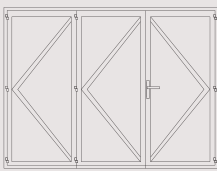
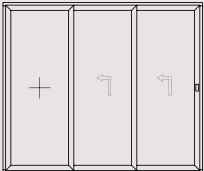

Requirement L1: Conservation of fuel and power
Requirement L2: On-site generation of electricity
Regulations: 6, 22, 23, 24, 25, 25A, 25B, 26, 26C, 27, 27C,
28, 40, 40A, 43, 44 and 44ZA

2021 edition – for use in England

PART L COMPLIANCE TABLE

PLEASE
NOTE

**We have shown the internal low-e pane laminated in our WER specification as this maximises the g-value (solar gain), giving the best possible WER result.*
**The low-e (Low-Emissivity) glass we've shown in our WER examples is Planitherm Total+, but similar results can be achieved with other 5% low-e glass options such as Guardian ClimaGuard A, or Pilkington K Glass S. The thermal control glass shown is Planitherm ONE, but is interchangeable with other 1% low-e glass options such as Guardian ClimaGuard 1.0, or Pilkington Optitherm 1.0.*

<div>DOUBLE GLAZED</div> <div>STYLES</div> <div>GLASS SPECIFICATION</div> <div>REPLACEMENT & EXTENSIONS</div> <div>NEW BUILD</div>							
	Classic WINDOWS	Classic HERITAGE DOOR	Prestige WINDOWS	Prestige DOORS	Prestige BI-FOLD SYSTEM	INDEX BI-FOLD	Prestige LIFT & SLIDE PATIO
	CASEMENT, FIXED & FRENCH STYLES	INCLUDING SIDE, TOPLIGHT & FRENCH COMBINATIONS	CASEMENT, FIXED, FRENCH & TILT & TURNS STYLES	INCLUDING SIDE, TOPLIGHT & FRENCH COMBINATIONS	SINGLE, FRENCH & BI-FOLDING DOORS UP TO 7 PANES	SINGLE, FRENCH & BI-FOLDING DOORS UP TO 7 PANES	DOUBLE & TRIPLE UP TO 4 PANES
	28mm (4/20/4) Clear / Argon / Planitherm* Total+ or 28mm (4/18/6.8) [†] Clear / Argon / Laminated Planitherm Total+	28mm (4/20/4) Clear / Argon / Planitherm* ONE or 28mm (4/18/6.8) [†] Clear / Argon / Laminated Planitherm* ONE	28mm (4/20/4) Clear / Argon / Planitherm* ONE or 28mm (4/18/6.8) [†] Clear / Argon / Laminated Planitherm* ONE	28mm (4/20/4) Clear / Argon / Planitherm* ONE or 28mm (4/18/6.8) [†] Clear / Argon / Laminated Planitherm* ONE	28mm (4/20/4) Clear / Argon / Planitherm* ONE or 28mm (4/18/6.8) [†] Clear / Argon / Laminated Planitherm* ONE	28mm (4/20/4) Clear / Argon / Planitherm* ONE or 28mm (4/18/6.8) [†] Clear / Argon / Laminated Planitherm* ONE	28mm (4/20/4) Clear / Argon / Planitherm* ONE or 28mm (4/18/6.8) [†] Clear / Argon / Laminated Planitherm* ONE
	A WER ✓	1.4 U-value ✓ A+ DSER ✓ Changed to Planitherm* Total+	1.4 U-value ✓	1.4 U-value ✓	1.4 U-value ✓	1.4 U-value ✓	1.4 U-value ✓
	1.5 U-value ✓ Upgraded to Planitherm* ONE or 1.6 U-value ✓	1.4 U-value ✓	1.4 U-value ✓ or 1.5 U-value ✓ Changed to Planitherm* Total+	1.4 U-value ✓ or 1.5 U-value ✓ Changed to Planitherm* Total+	1.4 U-value ✓ or 1.5 U-value ✓ Changed to Planitherm* Total+	1.4 U-value ✓ or 1.5 U-value ✓ Changed to Planitherm* Total+	1.4 U-value ✓ or 1.5 U-value ✓ Changed to Planitherm* Total+
<div>TRIPLE GLAZED</div> <div>36MM</div> <div></div> <div>44MM</div>	1.1 U-value ✓✓✓ 36mm (4/12/4/12/4) Clear / Argon x 2 / Planitherm* ONE x 2	—	1.1 U-value ✓✓✓ 36mm (4/12/4/12/4) Clear / Argon x 2 / Planitherm* ONE x 2	1.1 U-value ✓✓✓ 36mm (4/12/4/12/4) Clear / Argon x 2 / Planitherm* ONE x 2	1.1 U-value ✓✓✓ 36mm (4/12/4/12/4) Clear / Argon x 2 / Planitherm* ONE x 2	1.1 U-value ✓✓✓ 36mm (4/12/4/12/4) Clear / Argon x 2 / Planitherm* ONE x 2	1.1 U-value ✓✓✓ 36mm (4/12/4/12/4) Clear / Argon x 2 / Planitherm* ONE x 2
	A+ WER ✓ 36mm (4/12/4/12/4) Clear / Argon x 2 / Planitherm Total+ x 2	—	1.2 U-value ✓✓ 36mm (4/12/4/12/4) Clear / Argon x 2 / Planitherm* Total+ x 2 or as above with Laminated Clear (4/12/4/10/6.8)	1.2 U-value ✓✓ 36mm (4/12/4/12/4) Clear / Argon x 2 / Planitherm* Total+ x 2 or as above with Laminated Clear (4/12/4/10/6.8)	1.2 U-value ✓✓ 36mm (4/12/4/12/4) Clear / Argon x 2 / Planitherm* Total+ x 2 or as above with Laminated Clear (4/12/4/10/6.8)	1.2 U-value ✓✓ 36mm (4/12/4/12/4) Clear / Argon x 2 / Planitherm* Total+ x 2 or as above with Laminated Clear (4/12/4/10/6.8)	1.2 U-value ✓✓ 36mm (4/12/4/12/4) Clear / Argon x 2 / Planitherm* Total+ x 2 or as above with Laminated Clear (4/12/4/10/6.8)
	—	—	1.0 U-value ✓✓✓✓ 44mm (4/16/4/16/4) Clear / Argon x 2 / Planitherm* ONE x 2 or as above with Laminated Clear (4/16/4/14/6.8)	1.0 U-value ✓✓✓✓ 44mm (4/16/4/16/4) Clear / Argon x 2 / Planitherm* ONE x 2 or as above with Laminated Clear (4/16/4/14/6.8)	1.0 U-value ✓✓✓✓ 44mm (4/16/4/16/4) Clear / Argon x 2 / Planitherm* ONE x 2 or as above with Laminated Clear (4/16/4/14/6.8)	1.0 U-value ✓✓✓✓ 44mm (4/16/4/16/4) Clear / Argon x 2 / Planitherm* ONE x 2 or as above with Laminated Clear (4/16/4/14/6.8)	1.0 U-value ✓✓✓✓ 44mm (4/16/4/16/4) Clear / Argon x 2 / Planitherm* ONE x 2 or as above with Laminated Clear (4/16/4/14/6.8)
	—	—	1.1 U-value ✓✓✓ 44mm (4/16/4/16/4) Clear / Argon x 2 / Planitherm* Total+ x 2 or as above with Laminated Clear (4/16/4/14/6.8)	1.1 U-value ✓✓✓ 44mm (4/16/4/16/4) Clear / Argon x 2 / Planitherm* Total+ x 2 or as above with Laminated Clear (4/16/4/14/6.8)	1.1 U-value ✓✓✓ 44mm (4/16/4/16/4) Clear / Argon x 2 / Planitherm* Total+ x 2 or as above with Laminated Clear (4/16/4/14/6.8)	1.1 U-value ✓✓✓ 44mm (4/16/4/16/4) Clear / Argon x 2 / Planitherm* Total+ x 2 or as above with Laminated Clear (4/16/4/14/6.8)	1.1 U-value ✓✓✓ 44mm (4/16/4/16/4) Clear / Argon x 2 / Planitherm* Total+ x 2 or as above with Laminated Clear (4/16/4/14/6.8)

APPROVED DOCUMENT M: ACCESS TO AND USE OF BUILDINGS

VOLUME 1: DWELLINGS / VOLUME 2: BUILDINGS OTHER THAN DWELLINGS.

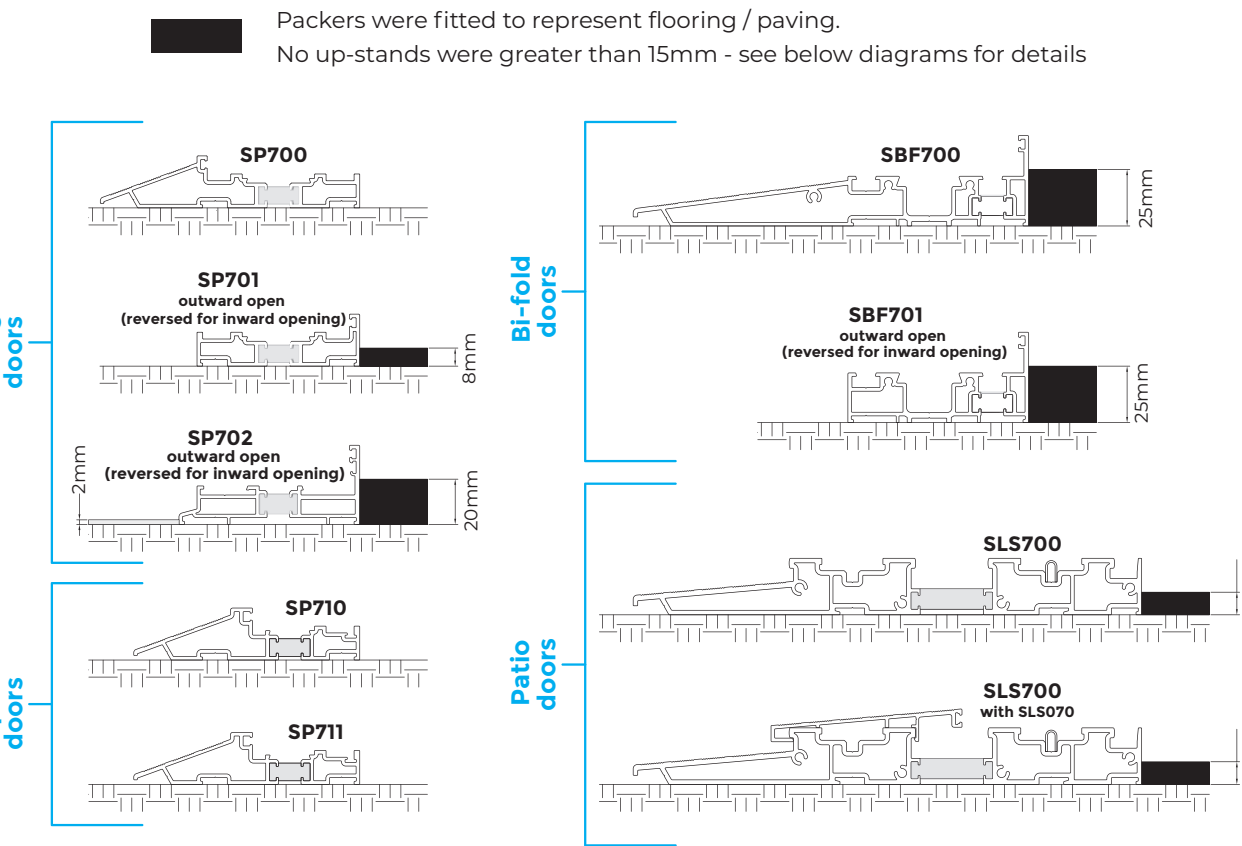
Ensuring that buildings are accessible and usable by everyone, including people with disabilities. This regulation covers different categories of access requirements depending on the intended use of a building or area of a building, ensuring an inclusive environment which is accessible for a wide range of people.

Key elements of Document M (Volume 1) relating to windows and doors:

- The accessible threshold, which is either flat or no more than 15mm high with no vertical face more than 5mm. This requirement is problematic and often results in poor weather performance. However, there is provision within the document to comply via ergonomic testing as specified in 'Accessible thresholds in new housing – Guidance for house builders and developers, The Stationary Office Ltd. ISBN 0 11 702333 3. 1999.
- The clear opening width of doors, not including door furniture such as handles.
 - a. **CATEGORY 1** – Visitable Dwellings. 775mm clear opening width.
 - b. **CATEGORY 2** – Accessible and adaptable dwellings. 850mm clear opening width.
 - c. **CATEGORY 3** – Wheelchair User Dwellings. 850mm clear opening width.

Accessible threshold:

'Part M' testing was carried out by Ciilock Engineering Ltd on behalf of Sheerline, with the assistance of wheelchair supply experts, Midshires of Rugby. These tests have been performed to show the effectiveness of wheelchair operation over thresholds designed to meet Part M requirements for Building Regulations in dwellings.



APPROVED DOCUMENT O: OVERHEATING

Introduced to address the growing concern of overheating in residential buildings. This part of the regulations is specifically focused on ensuring that new residential buildings, including dwellings, care homes, student accommodation, and children’s homes, are designed to mitigate the risks of excessive indoor temperatures.

Key elements of Document O relating to windows and doors:

LIMITING SOLAR GAINS: The regulations require measures to limit the amount of heat entering a building from sunlight, which can significantly contribute to overheating. This involves considerations around window design, shading, and orientation.

ADEQUATE VENTILATION: Part O emphasizes the importance of providing adequate and effective ventilation to help cool buildings. This includes both natural ventilation strategies and, where appropriate, mechanical ventilation solutions.

THERMAL COMFORT: The regulations aim to ensure thermal comfort for occupants without excessive reliance on active cooling systems like air conditioning, promoting more sustainable design practices.

ASSESSMENT OF OVERHEATING RISK: During the design stage, an assessment must be carried out to evaluate the risk of overheating based on factors such as location, building orientation, and local climate conditions. This assessment guides the design process to ensure appropriate measures are in place to prevent overheating.

ADAPTABILITY AND CONTROL: Features that allow occupants to control heat gains and losses, such as operable windows, shades, and the potential for retrofitting cooling systems, are encouraged under Part O.

The introduction of Part O reflects an evolving understanding of climate change impacts and the importance of designing buildings that remain comfortable and safe as temperatures rise. This part is crucial in promoting healthier living environments and reducing the energy demand associated with cooling buildings.

COMPLIANCE RELATING TO WINDOWS AND DOORS

Compliance to Part O is heavily focused on the Architect and the building design.

Is the location in Moderate or High Risk of Overheating?

Part O refers to CIBSE TM59 and TM49 Guidance on understanding the methodologies of categorising a building.

Typical factors –

- 1. Southern regions of the UK are more prone to overheating due to the warmer climate.
- 2. Urban areas are more prone to overheating due to the built-up topography, resulting in less wind, making ventilation less effective.
- 3. Building orientation having a mainly glazed façade towards the South or West will lead to more solar gain.
- 4. Buildings with highly insulated elements are more prone to overheating due to the high efficiency of said elements.

This risk level determines the number of mitigating strategies which must be implemented to satisfy Building Control.

Does the Dwelling have Cross Ventilation?

Part O defines cross-ventilation as openings on opposite façades which are within the control of the occupant. *For example, a detached house with windows on the front and back which is occupied by a singular party has cross-ventilation but a block of flats with multiple occupancy across different floors and façades does not. Each dwelling must be assessed independently.*

Limiting Solar Gain

To limit the amount of solar gain, Part O sets out guidance for the area of glazing vs. the floor area of the dwelling. This is applicable for both the dwelling as a whole and the individual rooms.

Buildings or parts of buildings with **cross-ventilation** should not exceed the maximum **glazing areas** in the below table.

LIMITING SOLAR GAINS FOR BUILDINGS OR PARTS OF BUILDINGS WITH CROSS-VENTILATION				
HIGH RISK LOCATION			MODERATE RISK LOCATION	
Largest glazed façade orientation	Maximum area of glazing (% floor area)	Maximum area of glazing in the most glazed room (% floor area of room)	Maximum area of glazing (% floor area)	Maximum area of glazing in the most glazed room (% floor area of room)
NORTH	15	37	18	37
EAST	18	37	18	37
SOUTH	15	22	15	30
WEST	18	37	11	22

NOTE: 1. Floor area and floor area of room areas defined as:

Floor area: Internal wall to wall of building at each floor.

Floor area of the room: Internal wall to wall of room. For multi-use rooms e.g. open-plan kitchen and living room, use the area with the largest glazing area and calculate based on a room depth no greater than 4.5m from the glazed façade.

Buildings or parts of buildings with **no cross-ventilation** should not exceed the maximum **glazing areas** in the below table.

LIMITING SOLAR GAINS FOR BUILDINGS OR PARTS OF BUILDINGS WITHOUT CROSS-VENTILATION ¹				
HIGH RISK LOCATION			MODERATE RISK LOCATION	
Largest glazed façade orientation	Maximum area of glazing (% floor area)	Maximum area of glazing in the most glazed room (% floor area of room)	Maximum area of glazing (% floor area)	Maximum area of glazing in the most glazed room (% floor area of room)
NORTH	15	26	18	26
EAST	11	18	18	26
SOUTH	11	11	15	15
WEST	11	18	11	11

From the tables above, the glazed area must be proportional to the floor area, dependant on the elevation and orientation at maximum. It is to be noted that the glazing area is only related to the area taken up by glass that can be seen through. *For example, glass area minus the overlap of the rebate depth.*

Dwellings that fall under the high-risk category must also have one of the following shading methods on the façades between North-East and North-West via the South;

- External Shutters with a means of ventilation.
- Glazing with a maximum g-value of 0.4 and minimum light transmittance of 0.7. This can be achieved using special coatings, such as the Saint-Gobain’s SKN range, or equivalent solar control glazing.
- Overhangs on the south facing façade which cover the glazing relative to a 50° sun angle.

APPROVED DOCUMENT O: OVERHEATING

continued

REMOVING EXCESS HEAT

Buildings with **cross-ventilation** should have a free area of ventilation as governed by the below tables, relating to **floor area**.

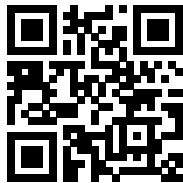
MINIMUM FREE AREAS FOR BUILDINGS OR PARTS OF BUILDINGS WITH CROSS-VENTILATION		
	HIGH RISK LOCATION	MODERATE RISK LOCATION
Total minimum free area ¹	The greater of the following: a. 6% of the floor area ² b. 70% of the glazing area ³	The greater of the following: a. 9% of the floor area ² b. 55% of the glazing area ³
Bedroom minimum free area	13% of the floor area of the room ⁴	4% of the floor area of the room ⁴

Buildings or parts of buildings with **no cross-ventilation** should equal or exceed the minimum **free areas** in the below table.

MINIMUM FREE AREAS FOR BUILDINGS OR PARTS OF BUILDINGS WITHOUT CROSS-VENTILATION		
	HIGH RISK LOCATION	MODERATE RISK LOCATION
Total minimum free area ¹	The greater of the following: a. 10% of the floor area ² b. 95% of the glazing area ³	The greater of the following: a. 12% of the floor area ² b. 80% of the glazing area ³
Bedroom minimum free area	13% of the floor area of the room ⁴	4% of the floor area of the room ⁴

NOTES:

1. The total minimum free area is the free area for the whole dwelling house, residential unit, shared communal room or common space, including any bedrooms.
2. Floor area: Internal wall to wall of building at each floor.
3. Glazing area: The area of transparent material, not including the window frame.
4. Floor area of the room: Internal wall to wall of room. For multi-use rooms e.g. open-plan kitchen and living room, use the area with the largest glazing area and calculate based on a room depth no greater than 4.5m from the glazed façade.



Free area of the opener can be calculated in multiple ways, the simplest and easiest to calculate is the tables for casement windows provided via the QR code.

APPROVED DOCUMENT Q: SECURITY IN DWELLINGS

(NEW BUILD ONLY, INCL. EXTENSIONS)

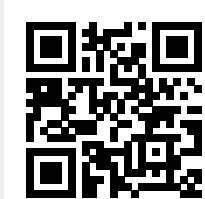
Ensures all easily accessed doors and windows installed in a new residential property must be secure and resistant to physical attack by an opportunistic burglar. This includes main entrance doors, ground floor windows, and any accessible upper-floor windows or doors.

Suppliers and installers of secure windows and doors need to be able to demonstrate the installed product has been manufactured to a design that has been shown by test to meet the security requirements of British Standards publication PAS24.

TS 007 was developed by the DHF (Door and Hardware Federation) and the Glass & Glazing Federation to provide a recognisable security standard for single, French, patio and bi-folding doors. It has the support of BSI and Secured by Design. The TS007 standard helps provide evidence-based guidance on the relative security offered by external handle and cylinder combinations.

The 3-star security standard can be achieved via specifying a 1-star handle and a 2-star cylinder for example. The level of security provided is shown by the appearance of one to three stars, with three stars signifying the highest level of security.

LINK TO THE SHEERLINE PART Q MANUAL:



SUPPLEMENTAL INFORMATION

CONDENSATION

IS WHEN WATER VAPOUR IN THE AIR TURNS INTO LIQUID WATER.

This often happens on windows. It occurs because air can hold varying amounts of water vapor, and warmer air can hold more than cooler air. When warm, moist air touches a cooler surface, like a window during colder months, it cools down quickly and can't hold as much moisture. The excess moisture turns into droplets of water on the cool surface, which we see as condensation.

The following can help reduce condensation on windows:

INCREASE VENTILATION: Open windows or use exhaust fans, especially in areas where a lot of moisture is produced like kitchens and bathrooms. This helps to get rid of moist air inside your home before it can condense.

USE A DEHUMIDIFIER: This device lowers the humidity level inside your home, which helps reduce the amount of moisture available to turn into condensation on your windows.

HEAT YOUR HOME EVENLY: Keeping your home at a consistent temperature helps to minimize the cold surfaces where condensation can form.

INSULATE YOUR WINDOWS: If windows are poorly insulated, they're more likely to be a lot colder than the air inside your home, which makes condensation more likely. Using double-glazing or thermal curtains can help keep the window surface warmer.

MOVE PLANTS: House plants release moisture into the air. If you have many plants near windows, moving them to another area can help reduce condensation.



SUPPLEMENTAL INFORMATION

G VALUES

In the context of windows in the UK, the "g-value" or solar factor refers to the ability of a window to transmit solar energy, which includes both the visible light and other forms of solar radiation such as ultraviolet and infrared rays. This factor is critical in determining how much heat from the sun can enter a building through the glass. The g-value is expressed as a number between 0 and 1.

Understanding G-Value

DEFINITION: The g-value (or solar gain coefficient) measures the percentage of the total solar radiation that is transmitted through the window. *For instance, a g-value of 0.6 means 60% of the solar radiation hitting the window is allowed to pass through it into the interior.*

IMPACT ON ENERGY EFFICIENCY: A higher g-value indicates that more solar heat is transmitted, which can be beneficial in colder climates as it helps to naturally heat up the space, reducing the need for artificial heating. Conversely, in warmer climates, a lower g-value can help keep a building cooler by blocking more solar heat, thus reducing the need for air conditioning.

Factors Influencing G-Value

TYPE OF GLASS: The type of glass used in the window affects its g-value. Options include clear glass, tinted glass, coated glass (like low-emissivity or low-e glass), and multiple glazing layers (double-glazed, triple-glazed), each offering different levels of solar gain.

COATINGS AND TREATMENTS: Special coatings and treatments can be applied to glass to modify its thermal and optical properties, thereby altering its g-value. Low-e coatings are particularly effective; they reflect infrared heat back outside while allowing visible light to pass through, thus optimizing both light and temperature control.

Importance in Building Design

In the UK, considering the g-values of windows is crucial for building design to comply with Part L of the Building Regulations, which focuses on the conservation of fuel and power. Proper selection of windows with appropriate g-values helps in creating energy-efficient buildings that maintain comfort without excessive reliance on heating and cooling systems.

When selecting windows for a building or renovation project, it's important to balance the g-value with other performance factors like thermal insulation (U-value) and visual light transmission to achieve the desired comfort levels, energy efficiency, and aesthetic outcomes.

SUPPLEMENTAL INFORMATION

G VALUES *continued*

CALCULATING SOLAR FACTOR FOR SHEERLINE PRODUCTS

1. Identify the Glazing Specification

*g*_{glass} is dependant on the make up of the glazed unit and the value is available from the glass suppliers main websites.

Saint Gobain - **Calumen** | Pilkington - **Spectrum** | Guardian - **Guardian Glass Analytics**.

Typical glazing combinations shown in the table below. The unit are in the configuration are 4-20-4, standard float glass.

SAINT-GOBAIN

COATING PRODUCT	G-VALUE	UG
COOL-LITE SKN 176	0.37	1.070
PLANITHERM TOTAL+	0.71	1.217
PLANITHERM ONE	0.52	1.070

PILKINGTON

COATING PRODUCT	G-VALUE	UG
SUNCOOL 70/35	0.38	1.070
K GLASS S	0.71	1.217
OPTITHERM S1 PLUS	0.48	1.070

GUARDIAN GLASS

COATING PRODUCT	G-VALUE	UG
SUNGUARD SN 70/35	0.35	1.070
CLIMAGUARD A+	0.71	1.217
CLIMAGUARD 1.0+	0.53	1.070

2. Identify which Frame and Sash combination is required, within the Sheerline product range.

G VALUES:
AREA OF GLASS ON
SHEERLINE PRODUCTS

	OUTER FRAME – SASH	<i>a</i> _{glass}
CLASSIC WINDOWS	SC100/SC101 – SC300/SC301	0.8071
	SC100/SC101 – SC310/SC311	0.8037
	SC102/SC103 – SC300/SC301	0.7739
	SC102/SC103 – SC310/SC311	0.7719
CLASSIC DOOR (French is only applicable)	SC100/SC101 – SC310/SC312	0.8378
	SC102/SC103 – SC310/SC312	0.8169
PRESTIGE WINDOWS	SP100/SP101 – SP300SP301	0.7325
	SP102/SP103 – SP300/SP301	0.6970
	SP104/SP105 – SP300/SP301	0.6722
	SP100/SP101 – SP305	0.7191
	SP102/SP103 – SP305	0.6839
	SP104/SP105 – SP305	0.6565
PRESTIGE DOORS (French is only applicable)	SP102/SP103 – SP350/SP351/SP352	0.6882
	SP104/SP105 – SP350/SP351/SP352	0.6767
PRESTIGE BIFOLD	SBF100 – SBF300/SBF301	0.7308
INDEX BIFOLD	SBF170 – SBF371	0.7359
LIFT AND SLIDE	SLS100 – SLS300/SLS301 – Standard Interlock	0.7710
	SLS100 – SLS300/SLS301 – Slim Interlock	0.7836

The figures above relating to each product combination are a factor of glass area relating to total product area, based on the CEN Sizing of the product group. This factor remains constant despite changing sizes in real-world applications.

3. Input the figures into the formula below.

SOLAR FACTOR = *g*_{glass} x 0.9 x *a*_{glass}



ACOUSTICS - BS EN 14351-1

(Not an approved document)

PART 1: WINDOWS & EXTERNAL PEDESTRIAN DOORSETS

Helping to achieve acoustic comfort for occupants by reducing sound nuisance, with consideration given to particular types of external sources.

Key elements of acoustics relating to windows and door:

The acoustic insulation of windows or doors is their ability to reduce the flow of sound and are measured in decibels (dB). Generally referred to in the format: Rw (C; Ctr).

Rw values of frame and glazing combined can be determined through acoustic testing at a laboratory, or using appropriate tables within BS EN 14351-1 Part 1, based on the acoustic values of most insulating glass units (IGU). However, the table-based method can only be used to qualify windows and doors up to $Rw \geq 39$ dB or $Rw + Ctr \geq 35$ dB, higher values shall be determined by laboratory testing.

Rw - The Weighted Sound Reduction represents the effectiveness of a window or door’s soundproofing over a broad range of frequencies, measured in decibels (dB).

The higher the Rw number, the better sound insulator a window or door is.

C and **Ctr** are correction values applied to Rw (always negative) to give a more accurate performance level of a window or door when accounting for specific frequencies of sound. These corrections are not always applicable, in which case, Rw may be shown in isolation. Rw = 33 dB for example.

Ctr - is subtracted from the Rw value to account for sounds of low and medium frequency e.g. urban road traffic, low speed railway traffic, aircraft at long distance. $Rw + Ctr$ will always be less than the Rw value.

C - is subtracted from the Rw value to account for sounds of medium and high frequency e.g. motorway traffic, high speed railway traffic, children playing, nearby aircraft.

For example, a window or door glazed with a 28mm double glazed 4-20-4 unit will achieve:

$Rw (C; Ctr) = 33 (-2;-5)$ dB OR $Rw = 33$ dB (no correction applied) OR $Rw + Ctr = 28$ dB
Whichever Rw value applies can be subtracted from the external sound level (dB) to calculate the internal sound level (dB).

External Sound level of 80dB - Glazed window/door of 31dB = Internal Sound level of 49dB
Glazing thickness and glass type has a significant impact on the acoustic performance of the unit.

There are numerous acoustic glazing products available such as Stadip Silence & Pilkington Optiphon. These feature a special acoustic interlayer in the laminate to further help their sound insulation performance and generally are identified with an 'A' suffix, 6.8A or 8.8A for example.

Acoustic information for most IGUs can be found using the manufacturer’s on-line tools:

- Pilkington - **Spectrum**
- Saint Gobain - **Calumen**
- Guardian - **Guardian Glass Analytics**.

It is a popular misconception that triple glazing is the best way to improve a window or door’s acoustic performance. The addition of a further pane of the same thickness will see very little improvement in sound insulation and merely add significant cost.

For example, a 4-20-4 double IGU will achieve an Rw of 31dB, a 4-16-4-16-4 triple IGU will achieve an Rw of 32 dB. But a 6.8A-18-4 double IGU achieves 36 dB and an 8.8A-16-4 an Rw of 39 dB.

Whilst a sound insulation increase of 5 decibels may not seem significant, it should be considered along with the it’s logarithmic scale of measurement, for every 10 decibel increase there is a perceived doubling of volume to the human ear.

For example, a window with an Rw of 40 dB would be twice as effective as a window with an Rw of 30 dB but four times more effective than one of 20 dB.

The above are IGU only Rw values and the method detailed in BS EN 14351-1 Part 1 - Annex B must be followed to calculate the Rw Value for the frame and glazing combined. This method is based on a fixed or openable window of 1.23m x 1.48m.

For Rw reference, $Rw + Ctr$ reference and extrapolation rules for different window sizes please see additional information available via the QR code below.



The following acoustic reports are available via the Sheerline website login.

REPORT NUMBER	GLAZING SPEC	RESULT (Rw)	RESULT (Rw + Ctr)
W20176-1	4-20-4	Rw = 33	Rw + Ctr = 28
W20176-2	6.8A – 12 - 4	Rw = 36	Rw + Ctr = 31
W20176-3	8.8A – 16 - 4	Rw = 37	Rw + Ctr = 33
W20176-4	6.8A – 12 - 6	Rw = 37	Rw + Ctr = 32
W20176-5	8.8A – 16 - 6	Rw = 38	Rw + Ctr = 33

Manufacturers IGU test data is not always available for the preferred air gap but small variations have no bearing on stated values.

OUR GUARANTEES

Sheerline product components are covered by a comprehensive guarantee, giving extra peace of mind when specifying our products.

01 SHEERLINE STANDARD RANGES OF POWDER COATED COLOURS 25 YEARS

Guaranteed against significant shift of gloss retention and colourfastness for installations not within 10km of the coast, tidal estuary or any potential industrial or external pollutant.

All mitres, cut edges and drilled holes must be sealed with a suitable low modulus neutral cure silicone to ensure no bare metal edges are open to the environment, the responsibility for this is the fabricator and installers. Any on site damage to the coated material resulting in a breakage to the film should be repaired within 24 hours. During installation the responsibility for this lies with the installer, after installation this is the homeowner's responsibility.

Our Powder Coating guarantee excludes 'Hazardous Environments' as defined by ISO 12944-2:2018, which include marine environments affected by salt laden atmospheres, areas of industrial pollution and areas enclosing, or in close proximity to a swimming or leisure pool. Where Sheerline products are to be installed within 10km of such a Hazardous Environment then the approved Sheerline fabricator must request a specific 'Marine Grade' powder coating – which may be covered by a different guarantee and cleaning regime, see point 2 below.

02 SHEERLINE BESPOKE GUARANTEES FOR MARINE, SPECIFIC LOCATIONS AND BESPOKE COLOURS AND FINISHES

Bespoke guarantees against significant shift of gloss retention and colourfastness can be provided by our suppliers based on specific locations, or colours that fall outside our standard cover as detailed in point 1. The final guarantee is defined by a free, pre-order enquiry service and is based on the installation address. Options for higher performance surface finishes can then be discussed if required to meet specific project requirements. Surcharges may apply.

For areas less than 50 metres from the high-water level of a marine environment, or less than 2m from the edge of a swimming/leisure pool, then no guarantee will be offered.

03 10-YEAR GUARANTEE ON LAMINATED PRODUCTS

Laminated Sheerline products are guaranteed against Discolouration and Delamination for 10 years from date of installation. This guarantee is issued in association with our laminated foil suppliers and applies to their standard UV stabilised products.

04 PROFILE INTEGRITY AND THERMAL PERFORMANCE 25 YEARS

Against warping, bending, cracking and the separation of aluminium from Thermlock® thermal breaks.

05 SUSTAINABILITY

All Sheerline products are easily recyclable using existing recycling facilities. Ensuring minimal environmental impact. Aluminium components are infinitely recyclable with 75% of all the aluminium ever produced still being in circulation. While the material used in our Thermlock® thermal breaks is expected to be able to be recycled at least 20 times through existing channels.

06 GASKET INTEGRITY 10 YEARS

Sheerline gaskets are guaranteed to maintain an effective weatherseal and are guaranteed against stretching when used in the prescribed fashion under normal installation conditions.

07 HARDWARE

Covered by the specific hardware manufacturers guarantees where applicable. Electrical hardware supplied by Sheerline is covered by a 12 month guarantee.

08 GLAZING

Covered by the specific IGU (Insulated Glazed Unit) manufacturer, or fabricators guarantees where applicable.

GENERAL EXCLUSIONS AND TERMS AND CONDITIONS

These Guarantees are applicable to standard residential installations in the United Kingdom and Eire only and are written in conjunction with our suppliers and their satisfaction with our manufacturing controls and processes. Please note Sheerline, as a system component supplier, does not guarantee any aspect of installation or fabrication, and this guarantee does not extend to third party components. In the event of a successful claim this guarantee is limited to the resupply of Sheerline components and does not cover any contingent losses. All guarantees are subject to installation and manufacture following Sheerline guidelines and the adherence to Sheerline's maintenance recommendations (available as a download on www.sheerline.com) and BS 8213 - 4:2016 the Code of Practice for the Survey and Installation of Windows and External doorsets, where applicable. All claims must show evidence of original purchase date and cleared invoice. Sheerline is a brand wholly owned by Garner Aluminium Extrusions Ltd, trading as Garnalex.

BESPOKE GUARANTEES

For installations requiring a BESPOKE GUARANTEE FOR MARINE, SPECIFIC LOCATIONS AND BESPOKE COLOURS AND FINISHES as outlined in the guarantee please contact customerservices@sheerline.com with the sites location and your requirements and we will be able to provide you with the guarantee we can offer for that specific project.



**POWDER
COATED FINISH**
25 YEARS



**PROFILE
INTEGRITY**
25 YEARS



THE THERMLOCK®
PERFORMANCE
25 YEARS



**GASKET
INTEGRITY**
10 YEARS



**LAMINATED
FOILING**
10 YEARS

OUR ACHIEVEMENTS



**BEST MODERN
ALUMINIUM EXTRUSION
COMPANY 2024**

SME UK Enterprise award



**9TH FASTEST
UK GROWTH**

Oresa Growth Index



**RISING STAR -
BEN HARTSHORN**

G23 Awards



**FOR FURTHER INFORMATION
OR HELP WITH YOUR NEXT PROJECT,**
call the Sheerline Team
on 01332 978000



**MANAGING DIRECTOR
OF THE YEAR -
ROGER HARTSHORN**

NFA 2023



**NEW PRODUCT
OF THE YEAR -
PRESTIGE PATIO DOOR**

NFA 2023



**BEST TECHNICAL
INNOVATION -
S1 LANTERN ROOF**
GGP Installer Awards 2022



**LIFETIME ACHIEVEMENT
AWARD -
ROGER HARTSHORN**

NFA 2022



**BEST TECHNICAL
INNOVATION -
SHEERLINE SYSTEM**

GGP Installer Awards 2020

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