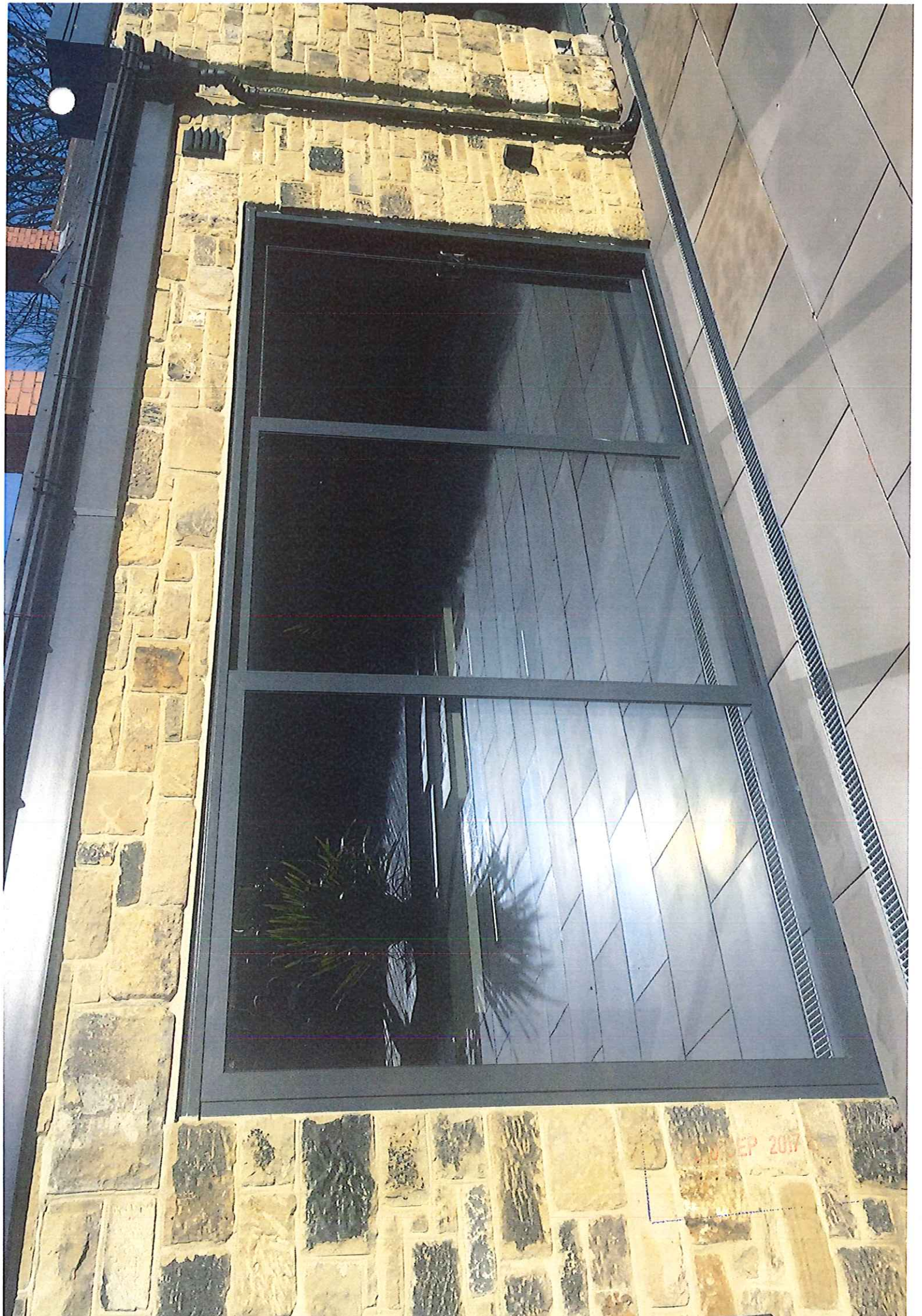


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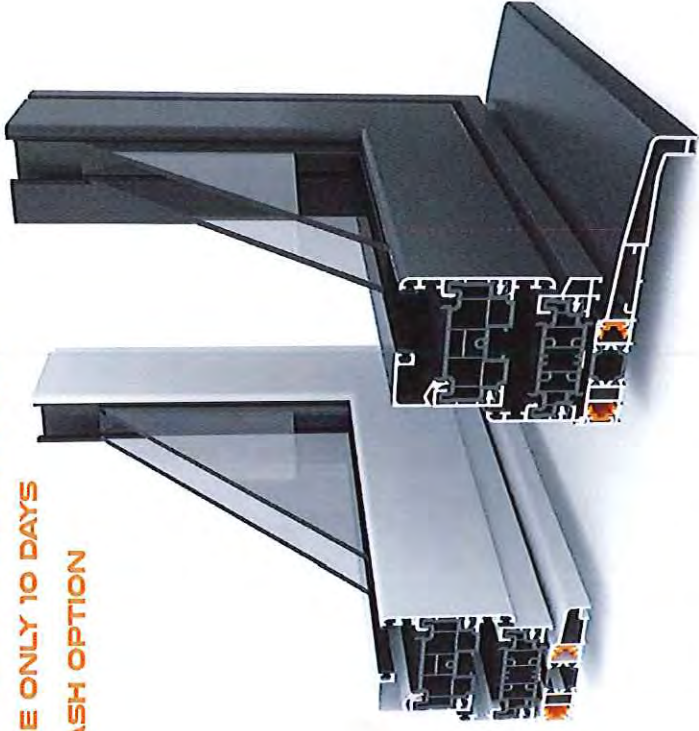
technical specification - aluminium windows

**warmcore**<sup>®</sup>  
ALUMINIUM WINDOWS



## WARMCORE BENEFITS

- 1.3 U-VALUE WITH DOUBLE GLAZED UNITS
- 0.8 U-VALUE WITH TRIPLE GLAZED UNITS
- DUAL COLOUR AT NO EXTRA COST
- LEAD TIME ONLY 10 DAYS
- FLUSH SASH OPTION



Built around a belief that beauty doesn't have to compromise performance, WarmCore aluminium windows were created out of a desire to combine the desirability and durability of aluminium with unparalleled insulation. The unique, full width thermal core is key to why WarmCore windows are 25% more thermally efficient than traditional aluminium systems.

## ALUMINIUM, BUT WITH A REVOLUTIONARY THERMAL CORE AT ITS HEART

Strong and secure, WarmCore windows come with multi-point locking, internal beading and are backed by a 10 year product guarantee. Available as casement or tilt and turn windows, and with a flush sash option that brings the outer frame perfectly level with the opening part of the window - WarmCore windows are the perfect warm, stylish and secure fenestration solution.

# CASEMENT AND FLUSH

Performance and Accreditation	
U-value (double glazing) *	1.3 W/m <sup>2</sup> K
U-value (triple glazing) **	0.8 W/m <sup>2</sup> K
Energy Rating (WER / DSER) **	A+
Green Guide Rating ‡	A
Acoustic Performance (dB) ^	Rw (C;Ctr) 37 (-2;-4) dB
Air Tightness (Pa)	Class 4
Water Tightness (Pa)	Class 6A
Wind Loading (Pa)	Class C3
Security	PAS 24
Secured By Design (SBD)	✓
Configurations	
Top Hung Outward	✓
Side Hung Outward	✓
Side Hung Inward	✓
Bottom Hung Inward	✓
Fixed Light	✓
Multilight	✓
Tilt & Turn	✗
Sash Weight and Size Limits (w x h) †	
Top Hung Outward	35kg
Side Hung Outward	35kg
Fixed Light	-
System Features	
System Depth	70mm/79mm (flush frame)
Dual Colour Option	Yes
Multi-Point Locking	Yes
Glazing Options	Internal
Glazing Thickness	28mm / 44mm

\* (4/20/4) Low-e 0.01 / Argon with TruPias warm edge spacer / Clear \*\* (4/16/4/16/4) 2x Low-e 0.01 / Argon with SuperSpacer Premium warm edge spacer / Clear ‡ based on informative tables on BRE website - aluminium profile weight <1.08 kg/m ^ based on physical testing using glass unit (6.8lam/18/4) † Size limits subject to window configuration. Please ask for more details if required.

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# TILT & TURN

Performance and Accreditation	
U-value (double glazing) *	1.3 W/m <sup>2</sup> K
U-value (triple glazing) **	0.8 W/m <sup>2</sup> K
Energy Rating (WER / DSER) **	A+
Green Guide Rating ‡	A
Acoustic Performance (dB) ^	Rw (C;Ctr) 37 (-2;-5) dB
Air Tightness (Pa)	Class 4
Water Tightness (Pa)	Class 9A
Wind Loading (Pa)	Class C3
Security	PAS 24
Secured By Design (SBD)	✓
Configurations	
Top Hung Outward	✗
Side Hung Outward	✗
Side Hung Inward	✗
Bottom Hung Inward	✗
Fixed Light	✓
Multilight	✓
Tilt & Turn	✓
Sash Weight and Size Limits (w x h) †	
Tilt & Turn	100kg
1000 x 2100mm	
System Features	
System Depth	70mm
Dual Colour Option	Yes
Multi-Point Locking	Yes
Glazing Options	Internal
Glazing Thickness	28mm / 44mm

**FOR MORE INFORMATION,  
PLEASE CONTACT US ON:**



**warmcore**  
ALUMINIUM WINDOWS

**REDEFINING THERMAL  
PERFORMANCE FOR  
ALUMINIUM WINDOWS**



UK designed and  
manufactured

**10 YEAR GUARANTEE  
A5 STANDARD**



**Synseal Group**  
Common Road | Huthwaite | Nottinghamshire | NG16AD



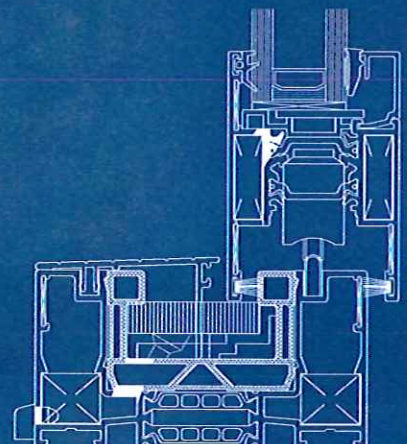
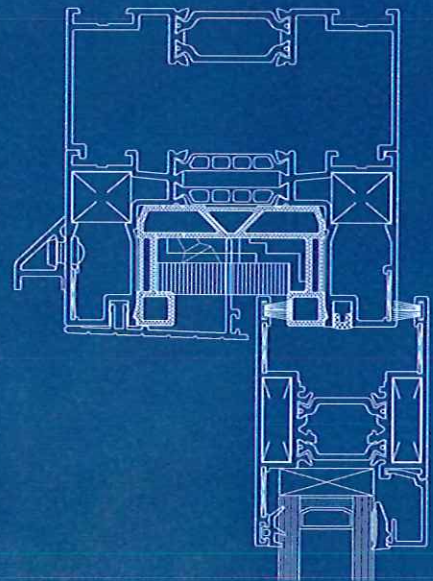


**smart**  
architectural aluminium

## Visoglide Plus

Visoglide Plus offers the same contemporary styling and robust performance associated with the system whilst delivering superior thermal performance.

- U Value 1.6 W/m<sup>2</sup>K
- Air Class 3, 600Pa
- Water Class 7a, 300Pa
- Wind Class AE, 2400Pa
- Inline sliding or lift & slide options
- Colour matched accessories now available  
speak with your supplier for details





## Project

### Saïd Business School

Egrove Park, Kennington Road, Oxford OX1 5NY

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## Architect

### Dixon Jones

2-3 Noel Road, Hanover Yard, London N1 8YA

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## Main Contractor

### Chalegrove Properties Ltd

243 Knightsbridge, London, SW7 1DN

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## Summary

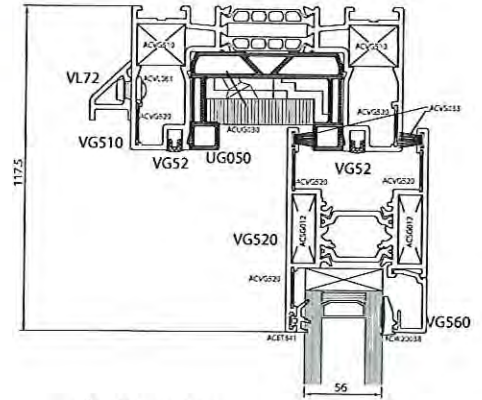
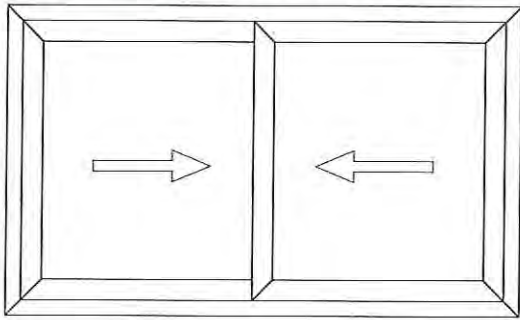
The second phase of Oxford University's Saïd Business School was completed in July 2012 and officially opened in February 2013. A striking feature of the building's external façade is an 8.2 metre run of Smart Visoglide sliding doors, installed in an unusual 'zigzag' formation which makes the internal space extremely flexible, allowing easy movement to a large paved terrace.

Elsewhere, Visoglide doors have also been used to add a feeling of light and space to the meeting and dining rooms, some with access to external and others to internal balcony areas. Continuing the design theme, the Visoline casement and tilt & turn windows and single and Smart Wall double doors were installed where possible without mullions or transoms to accentuate the systems' slim lines. Finally an imposing Smart Wall double door leads students, staff and visitors from the building's reception area to a central staircase and the impressive facilities beyond.

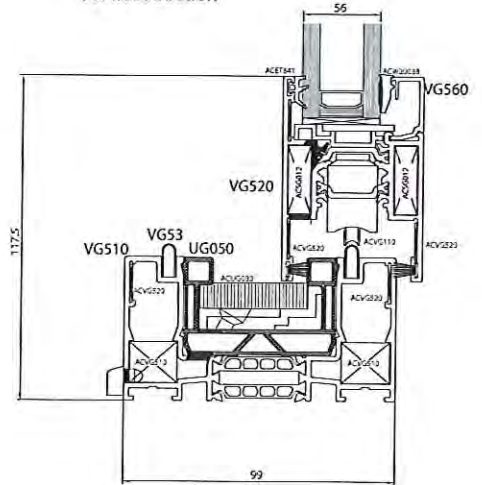


# Examples of Typical Sections

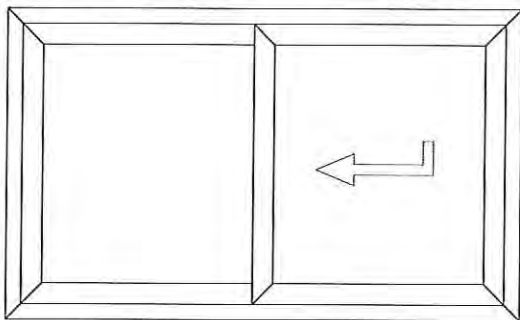
## Visoglide Plus Inline Sliding Door



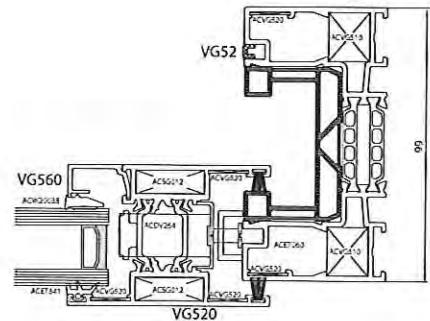
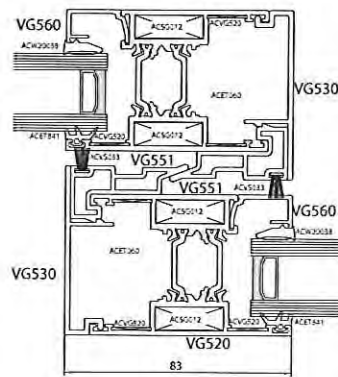
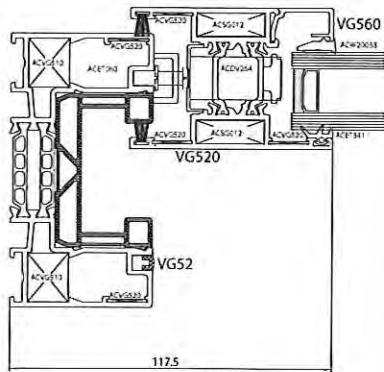
Vertical section



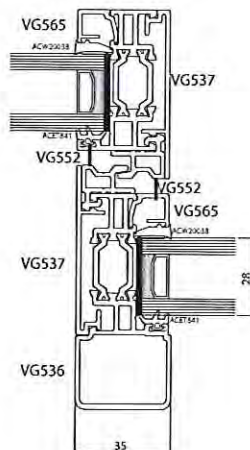
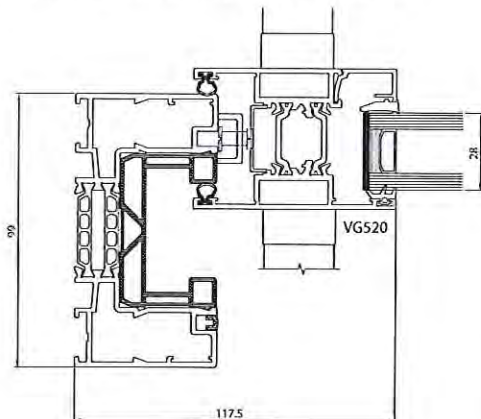
## Visoglide Plus Lift and Slide Door



Horizontal section through inline sliding door



Horizontal section through lift and slide door



Slimline mullion option for inline and lift and slide door

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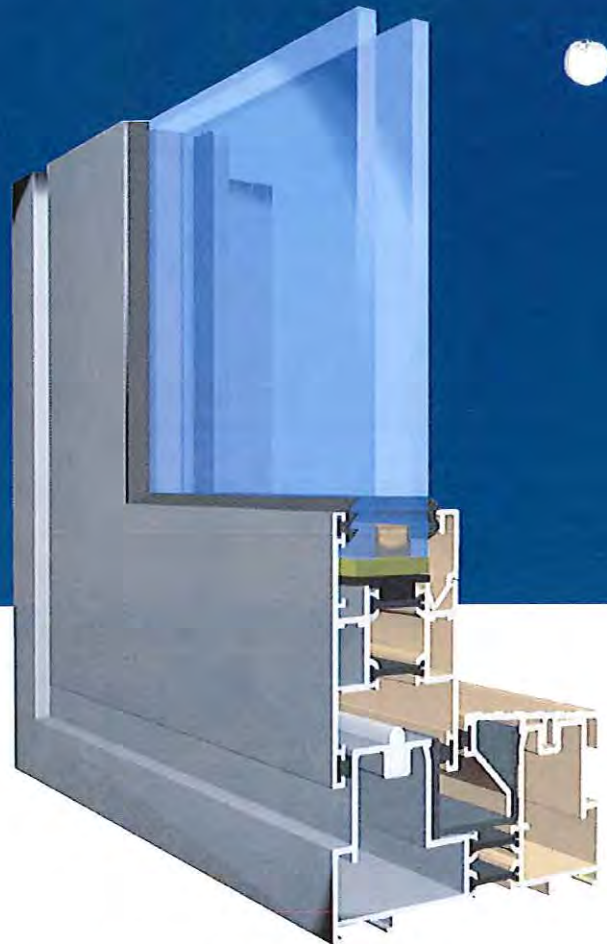
# Visoglide Plus

This adaptable system is suitable for use as either sliding commercial entrances where large opening apertures are required, or as dynamic residential sliding doors that maximise light and give stunning unimpeded views.

Visoglide Plus profiles have been designed to improve both strength and weather resistance. All main sections feature an extended polyamide thermal break that allows Visoglide Plus to achieve a U Value of 1.6 W/m<sup>2</sup>K when installed with a suitable sealed unit.

Visoglide Plus doors are available in both single and dual colour in wide choice of standard and non-standard finishes including Smart's unique Sensations range of textured colours.

The system is also suitable for use with auto slide opening mechanisms\*.



## Technical Performance

U Value	1.6 W/m <sup>2</sup> K (When using a 1.0 W/m <sup>2</sup> K centre panel)
Air	Class 3, 600Pa
Water	Class 7a, 300Pa
Wind	Class AE, 2400Pa
Glass	up to 38mm
Dual Colour	Yes
Security	Multipoint locking

## Dimensions

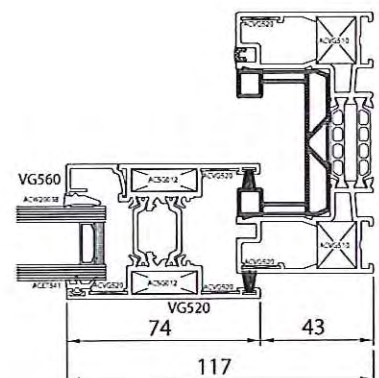
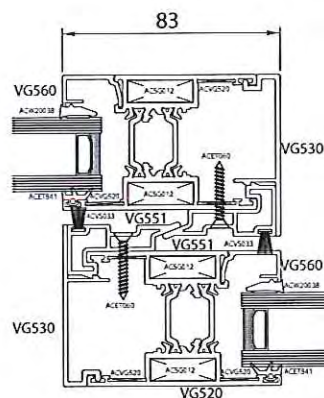
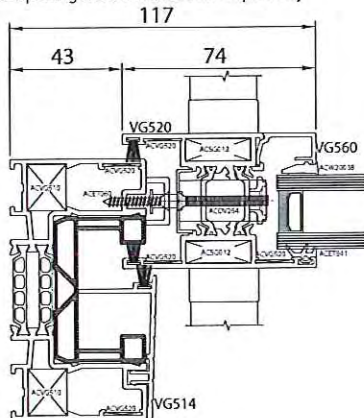
Frame Width	53mm
Frame Depth	100mm
Max Sash Weight	80kg
Glass	38mm double or triple glazed sealed units

<b>U Value</b> 1.6W/m <sup>2</sup> K	<b>Air</b> 600Pa	<b>Water</b> 300Pa	<b>Wind</b> 2400Pa
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## Design Limitations

Max Sash Weight	200kg
Max Sash Height	2500mm
Max Sash Width	Within above limitations

\*Auto slide opening mechanisms sold separately



## Smart Systems Limited

Arnolds Way | Yatton | Bristol | North Somerset | BS49 4QN | UK

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