

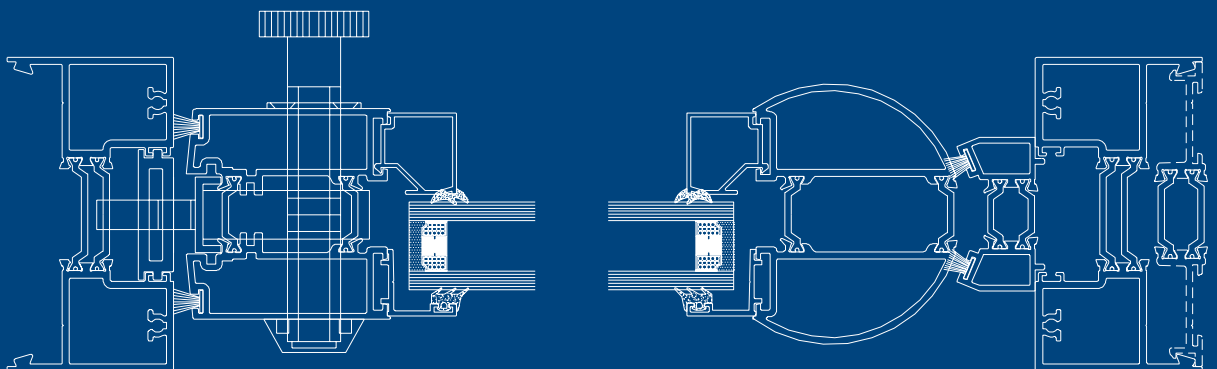


smart
architectural aluminium

Smart Wall

Smart Wall is a thermal shop front screen and door system suitable for all types of ground floor treatment where enhanced thermal performance is required. The system is ideal for use in schools, colleges and other educational buildings.

- U Value 1.8 W/m²K for Smart Wall Doors
- U Value 1.4W/m²K for Smart Wall Screens
- LPS 1175 Level 2 Enhanced Security Performance
- BS EN 1627 Level 3 Enhanced Security Performance
- BS 6375 Part :12009 Weather rated, anti-finger trap doors
- PAS 24:2012 Security rated doors





Project

ss Great Britain Visitor Centre
Great Western Dockyard, Gas Ferry Road, Bristol

Architect

Stride Treglown
Promenade House, Clifton Down, Bristol BS8 3NE

Main Contractor

Linden Homes
86 Kingskerswell Road, Newton Abbot, Devon

Summary

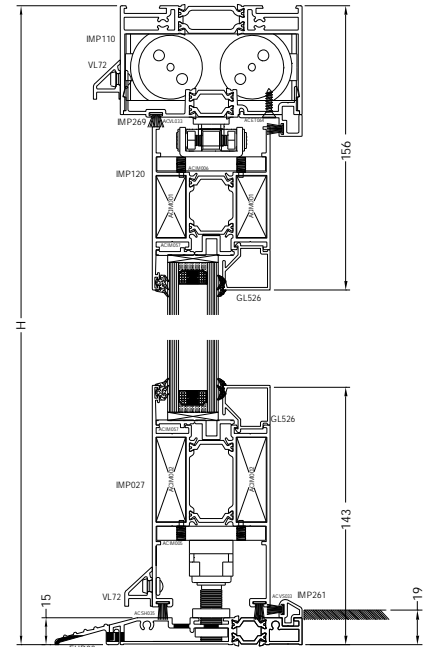
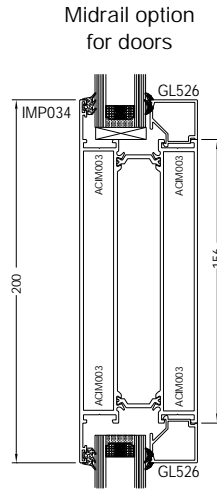
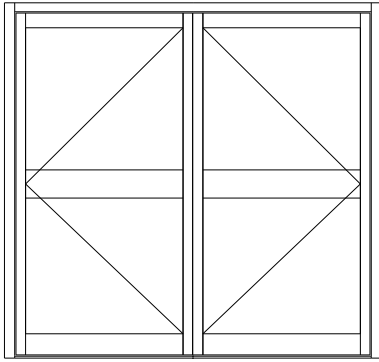
This high profile project, which was completed in 2010, was part new-build and part refurbishment, with the scheme ultimately delivering a new visitor centre and museum on the site as well as 145 apartments. The new building was designed to reflect Brunel's original Steam Engine Factory that was built in the 1830s, with the brickwork and window and door detailing echoing its original features.

A combination of some 600 Smart Visoline tilt & turn and casement windows and Visoline doors, was installed in the building, with the window combination design producing the look of 'dummy doors' on the building's balconies. The front elevation also appears to feature arch-headed windows, although these are actually square-headed on the inside, with feature panels on the external face forming the arch. Internally, the building's walkways feature narrow window 'strips' in the kitchens of the apartments, allowing light and air into rooms, without compromising privacy.

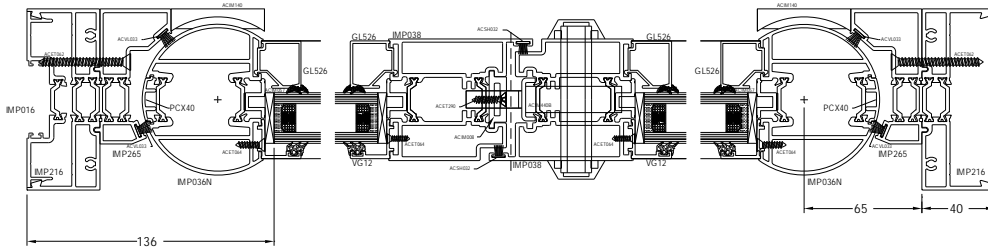


Examples of Typical Sections

Smart Wall –Double Rebated Door with Anti-Finger Trap



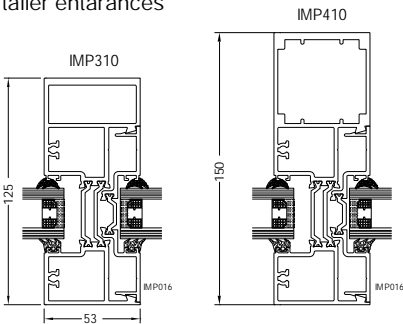
Vertical section



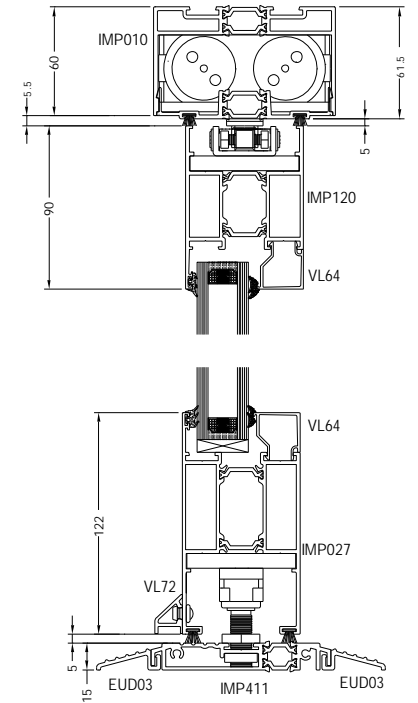
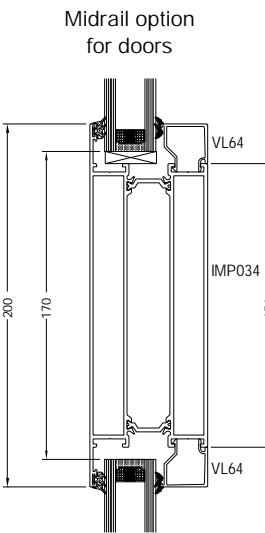
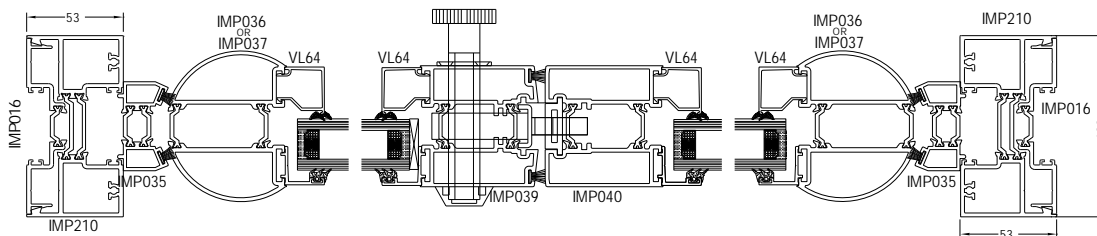
Horizontal section

Smart Wall –Double Door with Anti-Finger Trap Shown in heritage style window

Bolstered mullions for taller entrances



Horizontal section



Vertical section

Smart Wall

Smart Wall has recently been successfully tested to LPS 1175 level 2 and BS EN 1627 Level 3 for enhanced security performance making the door one of the best performing fully thermally broken screen and entrance doors available in the UK. Screen work is either beaded or pocket glazed. Smart Wall doors are weather rated to BS 6375 and are available with anti-finger trap door sections and drainable low thresholds. All profiles feature polyamide barriers to maximise thermal performance and can be internally or externally glazed. Unlike non-thermal alternatives, Smart Wall is available in dual colour from an extensive range of standard and non-standard finishes. Smart Wall complies with the latest requirements of Document L for thermal transmittance.



Features

- Fully rebated swing door with anti-finger trap
- Thermally broken, heavy duty doors & screens
- 30kg Dynamic impact test
- 6kN Static load test
- Security grade 6 locking mechanism
- Locking bolt withstands 10kN side load
- Polyamide thermal break
- Achieves U value 1.8W/m²K
- Internally beaded sash
- Anti-finger trap
- Thermally broken low threshold

Application

- Swing, hinged & automatic commercial entrance doors and ground floor treatment

Finish

Polyester powder coat to marine quality as standard

Technical Performance

U Value	1.8 W/m ² K for Smart Wall Doors U Value 1.4W/m ² K for Smart Wall Screens	
	Rebated Door	Screen Work
Air	Class 2, 300Pa Class 4, 600Pa	
Water	Class 7a, 150Pa	Class 9a, 600Pa
Wind	Class A5, 2000Pa	Class A4, 1600Pa

Document L Compliant

Dimensions

Frame Width	53mm
Frame Depth	100mm
Max Sash Height	2500mm
Max Sash Width	1150mm
Max Sash Weight	80kg

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Glass

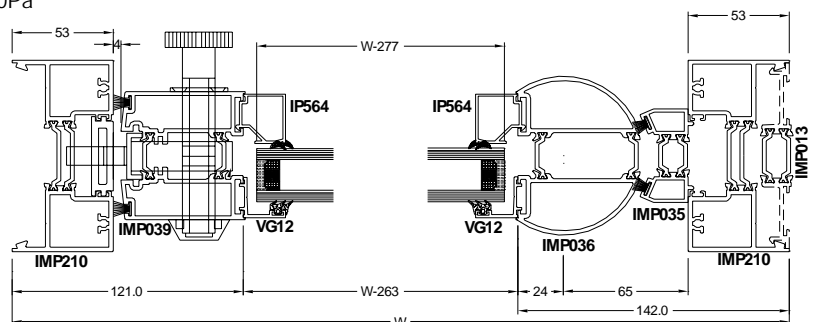
24-32mm double or triple glazed sealed units

Test Certification

LPS 1175 Level 2	Enhanced Security Performance
BS EN 1627 Level 3	Enhanced Security Performance
PAS 24: 2012	Security Performance
BS 6375 Part 1: 2009	Weather Performance



U Value 1.8W/m ² K	Document L ✓	Air 300Pa	Water 150Pa	Wind 2000Pa
Rebated Door				
U Value 1.4W/m ² K	Document L ✓	Air 600Pa	Water 600Pa	Wind 1600Pa
Screen Work				



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