

Window system

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Enhanced thermal insulation performance

The Dualframe 75 Si Window System has been specifically designed to comply with the ever increasing complexity of Building Regulations, British Standards and other regulatory demands.

Superior thermal performance is achieved with a unique polyamide thermal barrier enabling Dualframe 75 Si to comfortably exceed the requirements of Part L 2013 of the Building Regulations for thermal insulation.

The Dualframe Si suite consists of a high performance casement, tilt before turn, pivot, reversible and window wall - a cost effective alternative to curtain wall allowing the installation of modular units that are constructed off-site. The full Si range can also be integrated with other Sapa systems including the Elegance 52 curtain walling and the Stormframe STII thermally enhanced door system

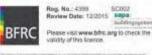
Dualframe 75 Si windows have been awarded BSI Kitemarks to BS4873 'Specification for aluminium alloy windows' and PAS24 'Specification for enhanced security performance.

As with all products in the Sapa range, the suite can be dual coloured, that is having differing finishes internally and externally.









# THE ENERGY EFFICIENT WINDOW SYSTEM

With an increased focus on the energy efficiency of buildings, it is invaluable to use windows and doors that help towards the overall reduction of energy consumption. The Dualframe 75 Si suite uses a unique polyamide thermal barrier for superior thermal performance without the need to resort to complex and costly sealed unit specifications.

The Dualframe 75mm Si window suite can achieve an "A+" Window Energy Rating and where specified 'U' Values down to 0.9 W/m2K, With the correct frame choice the Si Windows can also reach a generic BREEAM 'A+' rating against the Green Guide for Commercial Windows.

As well as achieving exceptional thermal performance, the Dualframe 75 Si suite attains the highest class weather performance for water tightness, air permeability and wind resistance.

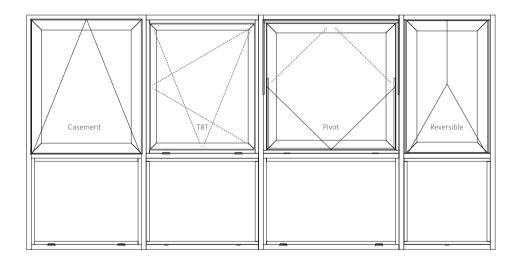
## A TRULY FLEXIBLE WINDOW SYSTEM

The Dualframe 75mm Si window suite is designed to work in harmony with the Sapa Building Systems range to maximise your design options.

The specialised profile range adds great flexibility when constructing windows where inward and outward facing rebates have to be combined, without the need for coupling sections or dummy frame to fixed lights.

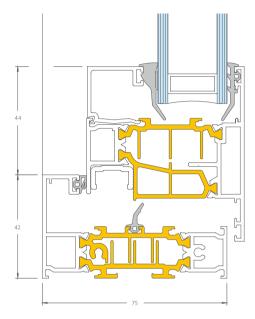
Universal frames can be used to create the most complex of screens easily combining casement, tilt before turn, pivot and reversible opening lights, as well as inside and outside glazing.

Combined with the option of having different finishes inside and out, Dualframe 75 Si suite will give you endless choices.





Casement









#### Top Hung

- Vent Size Max. 1720mm (H) x 1720mm (W)
- Vent Size Min. 250mm (H) x 424mm (W)

#### Side Hung

- Vent Size Max. 1828mm (H) x 884mm (W)
- Vent Size Min. 424mm (H) x 250mm (W)
- Fixed lights 5m<sup>2</sup>
- Glazing Thickness to 50mm
- · Vent weight to 100kg
- PAS024 and Secured by Design compliant
- A+ Rated WER
- U Value of 1.3 W/m2K with standard DGU

#### **Weather Performance**

Opening Lights:

Air Permeability Class 4 600Pa
Water Tightness Class 9A 600Pa
Wind Resistance Class A5 2000Pa\*\*

Fixed Lights:

Air Permeability Class 4 600Pa
Water Tightness Class 9A 600Pa
Wind Resistance Class A5 2000Pa\*\*

\*\* Exposure category varies with Width/Height of window and mullion / transom used, as these are the only unsupported members.





- Vent Size Max. 2440mm (H) x 1440mm (W)
- Vent Size Min. 561mm (H) x 451mm (W)
- Fixed lights 5m2
- Glazing Thickness to 50mm
- · Vent weight to 100kg
- PAS024 and Secured by Design compliant
- A+ Rated WER
- U Value of 1.3 W/m2K with standard DGU

#### **Weather Performance**

Opening Lights:

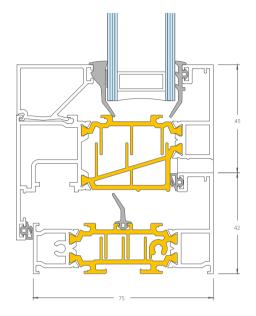
Air Permeability Class 4 600Pa Water Tightness Class 9A 600Pa Wind Resistance Class E 2400Pa

Fixed Lights:

Air Permeability Class 4 600Pa Water Tightness Class 9A 600Pa Wind Resistance Class E 2400Pa

## DUALFRAME 75 Si

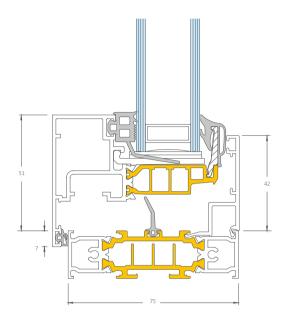
Tilt before turn





## DUALFRAME 75 Si

Concealed Vent





- Vent Size Max. 1900mm (H) x 1000mm (W)
- Vent Size Min. 561mm (H) x 451mm (W)
- Glazing Thickness to 32mm
- · Vent weight to 80kg
- U Value of 1.3 W/m2k with standard DGU

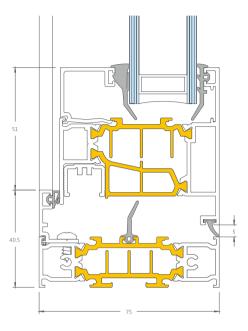
#### **Weather Performance**

Air Permeability Class 4 600pa
Water Tightness Class 9A 600pa
Wind Resistance Class C5 2000pa





Reversible







- Vent Size Max. 1320mm (H) x 1320mm (W)
- Vent Size Min. 497mm (H) x 497mm (W)
- Fixed lights 5m<sup>2</sup>
- Glazing Thickness to 50mm
- Vent weight to 60kg
- PAS024 and Secured by Design compliant
- A+ Rated WER
- U Value of 1.4 W/m2K with standard DGU

#### **Weather Performance**

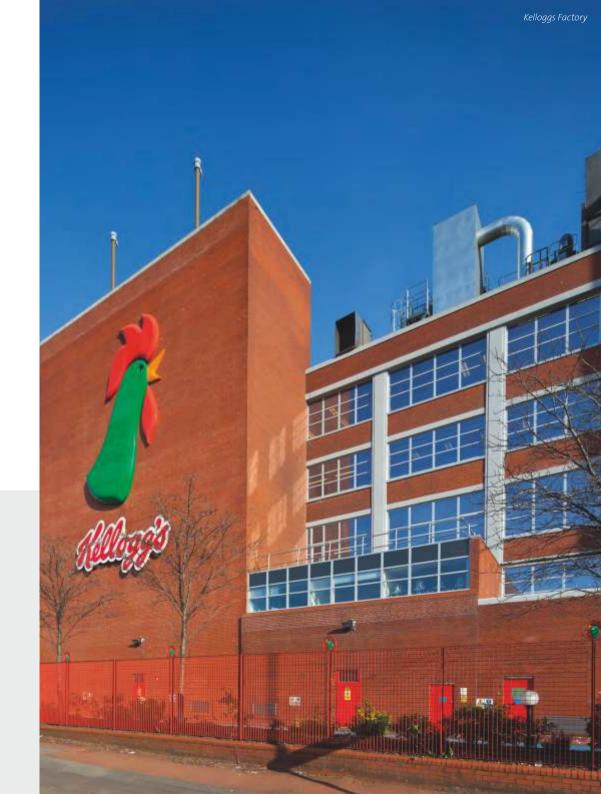
 Opening Lights:
 Fixed Lights:

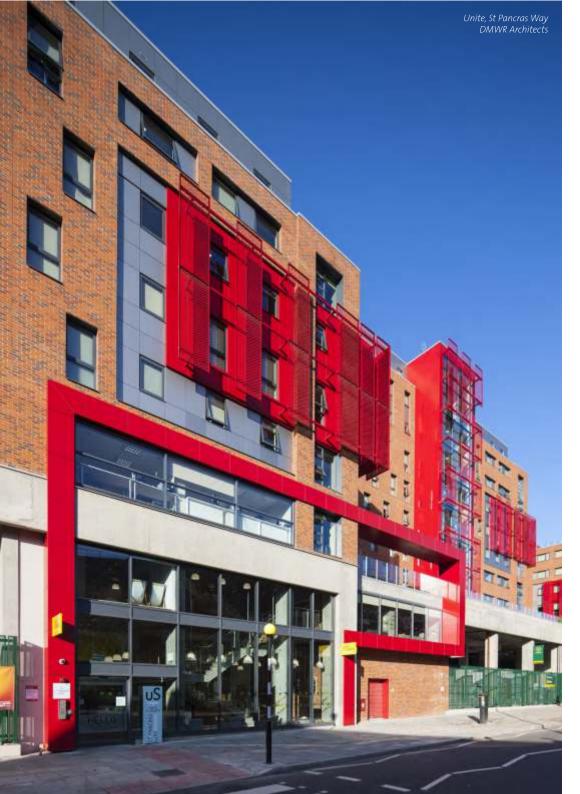
 Air Permeability
 Class 4 600Pa

 Water Tightness
 Class 9A 600Pa

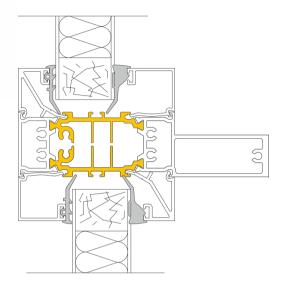
 Wind Resistance
 Class A5 2000Pa

 Wind Resistance
 Class C5 2000Pa





Window Wall



Dualframe Window Wall is a suite of profiles which when used in conjunction with the other elements of the Dualframe Si range, can be used to construct high performance single and double storey window walling.

Window wall is a fast and economic way to construct façades and is an alternative to standard curtain walling. The system is fabricated off site, it allows for a more controlled construction process than on site fabrication.

The system can be constructed to form fixed and opening lights either as combination frames or as separate coupled lights. It can also be integrated with other products from the Dualframe Si range for a variety of opening light options.

Window wall is suitable to be used in either refurbishment or new build projects.

- Fixed lights 5m2
- Glazing Thickness to 50mm
- PAS024 and Secured by Design compliant

#### **Weather Performance**

Fixed Lights:

Air Permeability Class 4 600Pa
Water Tightness Class 9A 600Pa
Wind Resistance Class A5 2000Pa

Opening Lights:

See relevant Dualframe Si variant for more information





- Vent Size Max. 1640mm (H) x 1640mm (W)
- Vent Size Min. 780mm (H) x 780mm (W)
- Fixed lights 5m2
- Glazing Thickness to 50mm
- · Vent weight to 90kg HP and 60kg VP
- PAS024 and Secured by Design compliant
- A+ Rated WER
- U Value of 1.3 W/m2K with standard DGU

#### **Weather Performance**

Horizontal Pivot:

Air Permeability Class 4 600Pa Water Tightness Class 9A 600Pa Wind Resistance Class C5 2000Pa

Vertical Pivot:

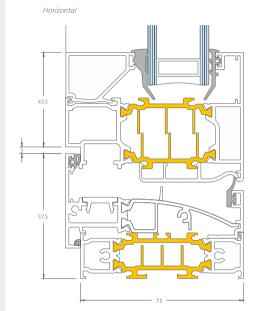
Air Permeability Class 4 600Pa Water Tightness Class 8A 450Pa Wind Resistance Class C5 2000Pa

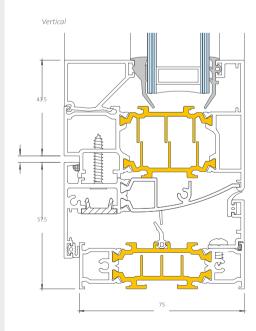
Fixed Lights:

Air Permeability Class 4 600Pa Water Tightness Class 9A 600Pa Wind Resistance Class A5 2000Pa

# DUALFRAME 75 Si

Pivot







## DUALFRAME 75 Si

Alternative Options

#### **Parallel Opener**

Parallel Opener windows offer enhanced ventilation and it fully suites with the rest of the range, providing a flexible and cost efficient solution with consistent sightlines. The design helps to create an even flow of air in and out of a building while also offering class leading thermal performance.

An increasingly popular solution, the parallel opener is ideal for use across a whole variety of building types, both new build and refurbishment.

The parallel opener offers greater flexibility, helping to create a different aesthetic finish with improved air flow, its most important feature. It works by drawing in fresh air at the bottom of the window while warm, stale air is expelled via the top of the window creating full circulation of air within the room.

The window can also be linked with Building Management Systems to help control ventilation and security. This type of window can also accommodate large glass sizes and weights with motorised mechanisms included to assist with opening at certain sizes.

#### Side Hung / Open In

This option allows for numerous design variations such as louvres or perforated mesh to be fitted externally to let the window open fully into the room to give the maximum amount of purge ventilation with the added security that nothing can fall through the open window.







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