

## Specification

### Scope

This specification details materials, construction, finish and size limitations for the Dualframe 75mm Si Reversible window system. This range is designed to meet high performance requirements in a variety of applications. The suite of profiles can be constructed to form fixed lights and reversible windows.

### Materials

Aluminium profiles are extruded from aluminium alloy 6063 or 6060 T6 complying with the recommendations of BS EN 755-9:2001. Polyester powder coat finishes are available to BS EN 12206-1:2004 in a wide range of colours. Anodised finishes are to BS 3987 Grade AA25 etch silver as standard, with a range of special anodised finishes on application.

Weatherstripping is a TPE seal internally with a mixture of TPE (head/cill) and woolpile (jambs) externally, both set in undercut grooves in the sash and frame. The thermal barrier is achieved using two polyamide extrusions separating the internal and external faces.

### Construction

Outerframe members are mitre cut at 45° or square cut, with the ventframe being mitre cut only. The outerframe is either jointed using die cast zinc corner cleats, or butt jointed with self tap screws. Ventframe corners are reinforced with stainless steel corner ties and a combination of die cast zinc corner cleats and extruded aluminium corner cleats. All joints shall be fully sealed during fabrication against water entry.

The thermal barrier section is achieved using two separate aluminium extrusions and two polyamide extrusions mechanically jointed to form a single compound profile. The ventframe is internally glazed, fixed lights can be either glaze in or glaze out by appropriate use of the reverse rebate adaptor.

### Assembly and Installation

Detailed instructions are provided in this publication, which must be strictly conformed to.

### Thermal Performance

Dualframe 75mm Si can meet and surpass the area weighted average U values stipulated in Part L 2014 of the Building Regulations. Lower U-values can be achieved using triple glazed units with enhanced thermal insulation, such as 'soft coat' low emissivity glass, argon gas filling and thermally broken spacer bar.

### Hardware

Vents are hung on zinc plated mild steel variable geometry top overswing hinges, manufactured by Peder Nielsen, with integral restrictors which engage at initial opening stops and fully reversed position for safe cleaning. Espagnolette locks are zinc plated steel, with zinc plated die cast keeps. Handles can be colour matched and are zinc die castings. Hinge bolts provide enhanced security to BS7950.

### Glazing

Drainage in accordance with details listed in this manual meets the requirements of "Ventilated and Drained Glazing System", as specified in BS6262. Glass must conform to BS6262 for thickness and type. Insulating glass units of 24mm - 50mm can be accommodated.

Glass is set against co-extruded PVCu / Nitrile gaskets retained in undercut grooves within the aluminium profile. Final retention of the glass is achieved by the application of a co-extruded PVCu / Nitrile wedge gasket between the inner face of the glass and bead or frame.

Compliance with the requirements of all current Regulations and Standards is the responsibility of the manufacturer.

Sapa's policy is one of continual system development and we reserve the right to incorporate design improvements and changes. Every effort is made to ensure that all details are correct at time of publication. However, it is the responsibility of the customer to check the accuracy of the relevant facts and information before entering into any contract or other commitment. Up to date information is freely available from the Sapa Building Systems Webshop.

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### Performance (Weather)

When tested in accordance with BS6375-1:2009 all products listed in this manual, when manufactured installed and glazed strictly to the enclosed details, will exceed exposure category "2000". (See below)

#### Opening Lights

Water Tightness	Class 9A (600 Pascals)
Air Permeability	Class 4 (600 Pascals)
Wind Resistance	Class C5 (2000 Pascals)**

#### Fixed Lights

Water Tightness	Class 9A (600 Pascals)
Air Permeability	Class 4 (600 Pascals)
Wind Resistance	Class A5 (2000 Pascals)**

\*\* Exposure category varies with Width/Height of window and mullion / transom used, as these are the only unsupported members. An accurate figure can be obtained by the relevant Eurocode or BS6399:Part 2 calculations and inertia values given on page 2-26.

Maximum fixed light area = 5m<sup>2</sup>.

### Size Limitations

#### Fixed Light

Maximum area 5 sq.m

#### Reversible Window

Maximum Ventframe Height 1320mm  
Maximum Ventframe Width 1320mm

Minimum Ventframe Height 497mm  
Minimum Ventframe Width 497mm

Maximum Vent Weight 60 Kg

#### Notes :

All sizes given are in millimetres.

Maximum and minimum sizes shown relate to the ventframe.

Where windows are produced in non modular sizes, the bottom rail of the opening light will in some cases reverse above the frame head and may hit the soffit. To prevent the bottom rail hitting the outer frame head or soffit in the reverse mode, optional stop blocks (AW729) can be fitted in the aluminium slide track. Note modular sizes are the minimum size stated for that stay.