CLIVNARS
Windows & Doors



Dualframe 75mm Casement Windows

Technical Data Sheet

DUALFRAME

The Dualframe range

- **Contemporary Design:** The new Sapa Dualframe range signifies a new era in aluminium fenestration, with products that have been specifical designed to comply with the ever increasing complexity Building Regulations, British Standards and other regulatory demands.
- **Superior thermal performance:** Dualframe comfortably exceeds the requirements of Part L 2006 of the Building Regulations (2006) for both thermal insulation and air permeability, and has been designed to be compliant with future anticipated changes. Where required, Dualframe 75 casement can achieve an 'A' Window Energy Rating.
- **Dual colour capability:** All Dualframe products can have differing finishes internally and externally.
- **Integrated design:** The Dualframe suite consists of casement, pivot, tilt/turn, sliding and reversible windows, single and double leaf doors and glazed roofing, all of which can be combined to form composite units.
- **Unique polyamide thermal barrier:** With integral bead retention leg to minimise projection of opening lights (patent applied for).
- **Accreditation:** Dualframe casement and tilt/turn windows have been awarded BSI Kitemarks to BS4873 'Specification for aluminium alloy windows' and BS7950 'Specification for enhanced security performance of casement and tilt/turn windows for domestic applications'.

  Dualframe doors have been awarded BSI PAS023-1 : 1999, 'General performance requirements for door assemblies; Part 1 - single leaf door assemblies to dwellings' and PAS024-1 : 1999 'enhanced security performance requirements for door assemblies; Part 1 - single leaf external door assemblies to dwellings'.

  Dualframe casement, tilt/turn windows and Dualframe doors meet the Secured by Design specification.

  Dualframe 75 casement can achieve an 'A' Window Energy Rating (WER) where required.
- **Choice of appearance:** Chamfered and Softline profiles are available to many products within the Dualframe suite, options of internal or external beading (including BS7950 compliant security) are also available.
- **Ease of maintenance:** The integration of a 'Eurogroove' features enables use of industry standard hardware, available from a variety of sources so that the product is competitive and easily maintained.

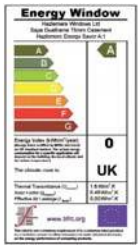
Secured by Design
Official Police Security Initiative

FM01154

BS 4873
Licence No. KM74159

BS 7950
Licence No. KM74141

PAS 23-1 and
PAS 24-1
Licence No. KM90215



- **Product**
  Dualframe 75mm outward opening side and top hung casement windows

- **Design Variants**
  Can be constructed to form fixed and opening lights either as combination frames or as separate coupled lights.

- **Compatibility**
  Can also be integrated with other products from the Dualframe range and with Sapa Elegance 52 curtain walling.

- **Application**
  Suitable for installation in new build or replacement projects in residential, commercial or public buildings.

- **Finishes**
  A wide range of polyester powder coat finishes is available to BS EN 12206:1 2004. Anodised finishes are to BS 3987 Grade AA25 etch silver with a range of special anodised finishes on application.

For more details, or to talk to a Project Consultant, contact the Marketing Department on 01684 853500.

Composition and Manufacture

Aluminium profiles are extruded from aluminium alloy 6063 or 6060 T6 complying with the recommendations of BS EN 755-9:2001.

Weatherstripping is polypropylene backed woven pile and polyurethane foam enclosed in a polythene sheath, set in undercut grooves in the sash.

The thermal barrier section is achieved using two separate aluminium extrusions and two polyamide extrusions mechanically jointed to form a single compound profile. (Except on some coupling mullions where a 'pour and cut' polyurethane resin thermal break is used).

Frame members are mitre cut at 45 degrees. Corners are reinforced with stainless steel corner ties and extruded aluminium corner cleats. All joints are sealed against water entry during fabrication.

Weather Performance

When tested in accordance with BS 6375: Part 1, all products listed in this data sheet, when manufactured, installed and glazed strictly to the details outlined in the Product Manual, will exceed exposure category '2400 Special'.

Water Tightness	600 Pascals(static test)
Air Permeability	600 Pascals
Wind Resistance	2400 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 using BS 6399: Part 2 calculations and the inertia values given in the Product Manual.

Authority

BS 4873: Aluminium alloy windows

BS 6375-1: Performance of windows: Classification for weathertightness and guidance on selection and specification.

BS 6375-2: Performance of windows. Specification for operation and strength characteristics.

BS 7950: Specification for enhanced security performance of casement and tilt/turn windows for domestic applications.

BS 6262: Code of practice for glazing for buildings.

BS EN 755-9: Aluminium and aluminium alloys. Extruded rod/bar, tube and profiles. Profiles, tolerances on dimension and form.
BS 3987: Specification for anodic oxide coatings on wrought aluminium for external architectural applications.

BS EN 12206:1 2004: Specification for powder organic coatings for application and stoving to aluminium alloy extrusions, sheet and perforated sections for external architectural purposes.

BS EN 10077-2: Thermal performance of windows, doors and shutters – Calculation of thermal transmittance – Part 2: Numerical method for frames.outerframe.

Size Limitations

Standard Casement - Side Hung

Stay Size	8"	12"	16"	Butt Hinge
Max Width	400	600	700	700
Max Height	1200	1300	1300	1300
Max Weight	18kg	22kg	24kg	*
Min Width	302	358	601	*
Min Height	424**	424**	424**	424**

Standard Casement - Top Hung

Stay Size	6"	8"	10"	12"	16"	20"	24"	Butt Hinge
Max Width	1200	1200	1200	1200	1200	1200	1200	1200
Max Height	300	350	400	550	750	1000	1200	1200
Max Weight	10kg	12kg	16kg	20kg	21kg	24kg	35kg	*
Min Width	424**	424**	424**	424**	424**	424**	424**	424**
Min Height	250	301	351	401	551	751	1001	*

Heavy Duty Casement - Side Hung

Stay Size	10"	16"	Butt Hinge
Max Width	660	838	838
Max Height	1524	1829	1829
Max Weight	37kg	45kg	*
Min Width	302	661	*
Min Height	424**	424**	424**

Heavy Duty Casement - Top Hung

Stay Size	10"	12"	16"	22"	Butt Hinge
Max Width	1600	1600	1600	1600	1600*
Max Height	635	787	1090	1500	1500
Max Weight	38kg	47kg	55kg	75kg	*
Min Width	424**	424**	424**	424**	424**
Min Height	302	636	788	1091	*

All sizes given are in millimetres, all maximum sizes relate to the overall size of the vent frame and not the outerframe.

*See Page 5 Hardware and Security

** MInimum sizes can be reduced to 302mm when using Cockspur handles.

Hardware and Security

The Dualframe casement window is available as standard with a multi-point locking system, comprising rods moving in opposing directions, with opposing centre cam and end shootbolts operated by “autolock” handles with key deadlocking.

Hinges as standard are stainless steel, projecting friction stays with optional restricted and egress variants.

Extruded aluminium butt hinges with stainless steel pins are available as an option.

Optional Vector Excluder hinge protectors must be used when enhanced security to BS7950 is required.

The Dualframe casement window system (in both externally and internally beaded formats), has been tested to BS7950 and BS 4873 in certain configurations, details upon request.

*Butt Hinges - Each hinge will carry a maximum of 20Kg in both side hung and top hung applications. Where a top hung vent is hung from a transom, this figure should be reduced to 15Kg per hinge and the maximum width of the vent restricted to 1500mm.

These butt hinges are primarily designed for use with folding openers, remote operating gear or electronic actuators. Where they are fitted in conjunction with espag gear or cockspur handles, suitable friction restrictors must also be used.

Note that a weatherbar must always be fitted over butt hinge opening lights, unless there is a soffit or similar to give protection. Therefore DF300 outerframe cannot be used where a soffit does not exist because the weatherbar cannot be fitted.

Other hardware specifications are available (eg for remote operation, trickle ventilators), consult Sapa Building Systems Ltd for details.

Glazing

Drainage in accordance with details listed in the Product Manual meets the requirements of ‘Ventilated and Drained Glazing System’, as specified in BS6262 for thickness and type. Insulating glass units of 24mm up to 32mm can be accommodated as standard, other depths can be accommodated on request.

Fixed/Opening Lights: Glass set against extruded synthetic rubber gaskets retained in undercut grooves within an aluminium bead profile. Final retention of the glass is achieved by the application of a co-extruded PVCu/ synthetic rubber wedge gasket between the inner face of the glass and the frame.

Thermal Performance

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

An ‘A’ Window Energy Rating (WER) can be achieved where required.

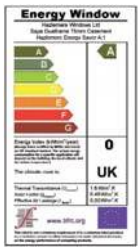
Site Work

Fabrication, installation and glazing service is available through a nationwide network of fabricators & installers. For details of suitable fabricators & installers, please contact our Marketing Department on 01684 853500.

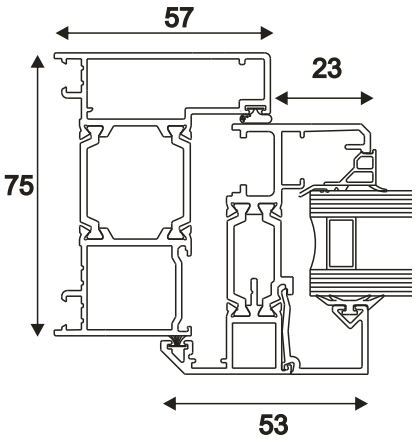
Secured by Design
Official Police Security Initiative

BS 4873
Licence No. KM74159

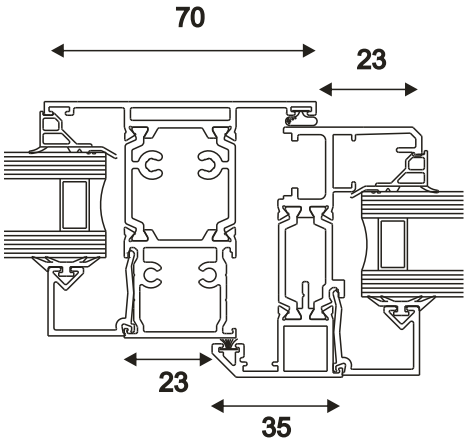
BS 7950
Licence No. KM74141



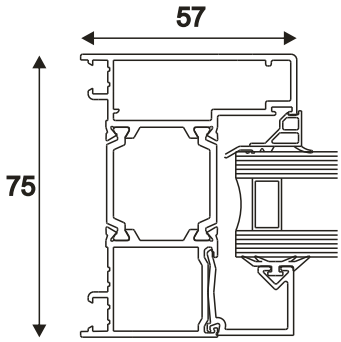
Jamb/Vent



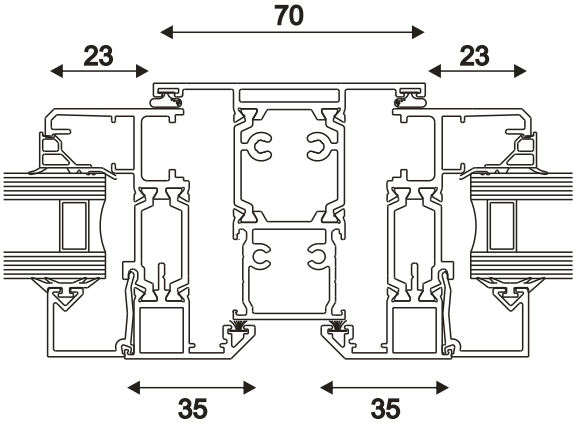
Mullion/Vent



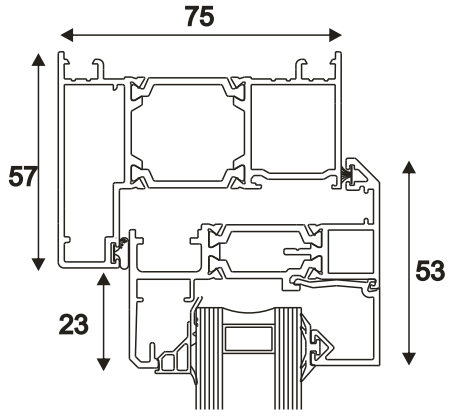
Fixed Light Jamb



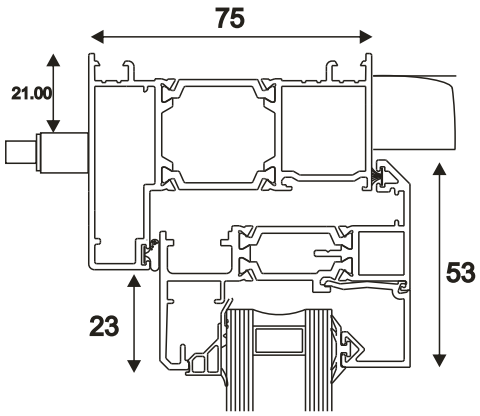
Mullion Vent / Vent



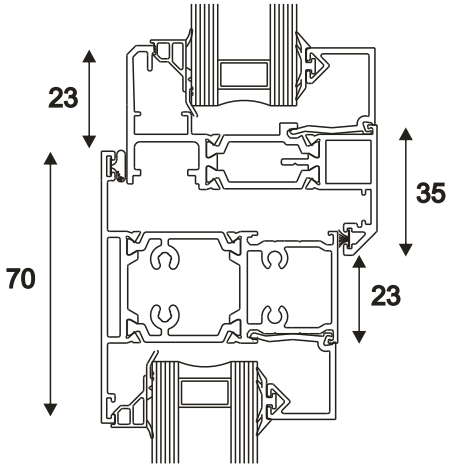
Head / Vent



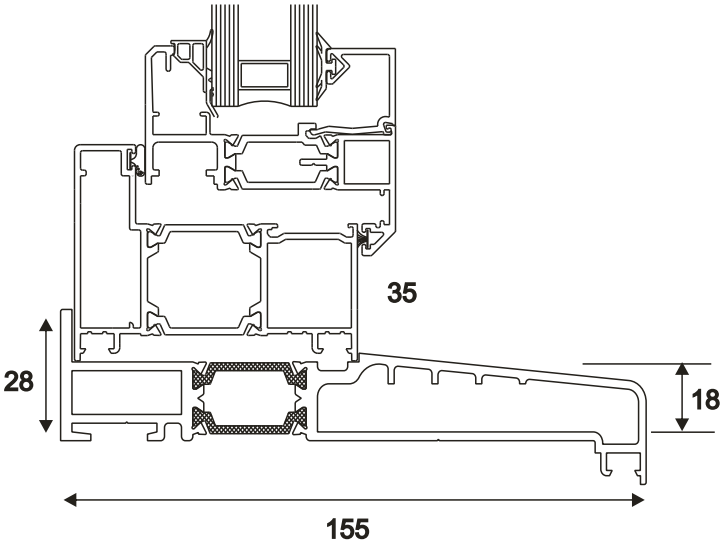
Outerframe / Trickle Vent



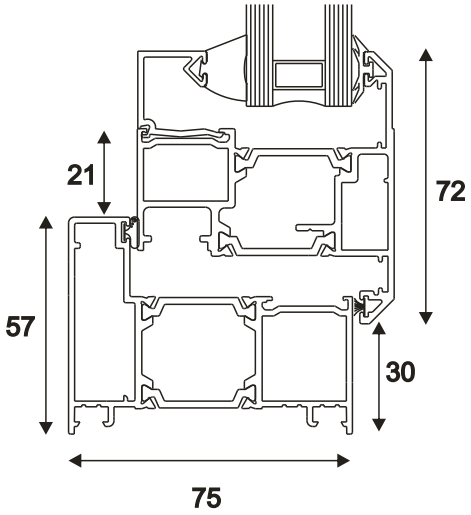
Transom / Vent



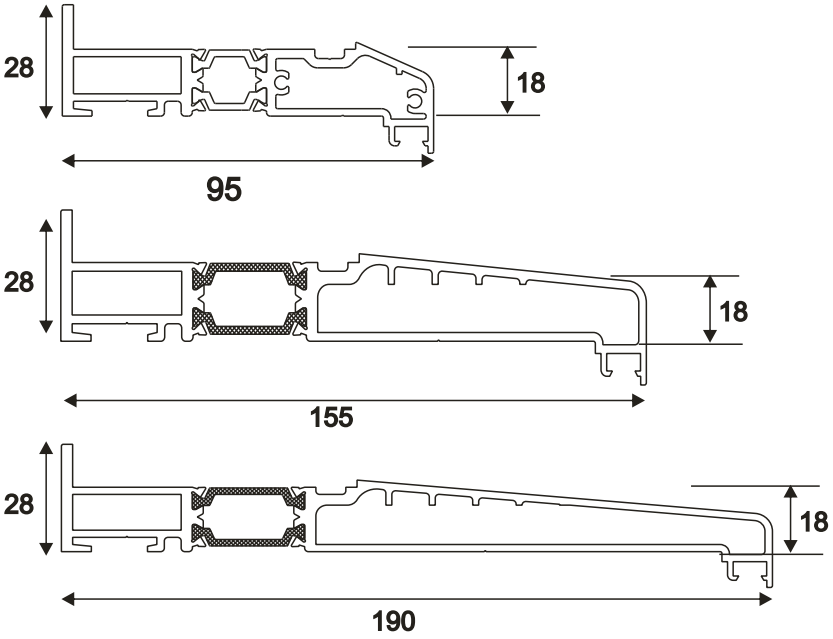
Subcill / Vent



Standard Duty Internally Glazed Vent



Cill Options



Clivnars Limited
Pindar Road, Hoddesdon, Hertfordshire, EN11 0EA
Telephone: 01992 467710
Email: sales@clivnars.co.uk Website: www.clivnars.co.uk

CLIVNARS
Windows & Doors