Acoustic Ventilation



### DN Vent

Acoustic window ventilator

### Physical specification

All measurements in millimetres



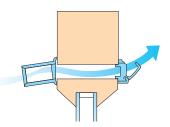
### Features and benefits

Acoustic window vent providing attenuation up to Dn,e,w 37(dB).

1400mm<sup>2</sup> equivalent area.

Internal unit (D Vent) provides upward deflection.

Suitable for installation up to 2 floors only.



Dn,e,w (dB) Open

37

### **Models and control options**

code area (mm²) (mm) height Length I x h x d (mm)	Control	Colour
External 278 x 22 x 11		
1600DN 1600DN 1400 15.5 165	F	W

Scottish Building Regulations: Free Area Performance (see page 11 for full details). 1600DN = 1600mm². Control: Front flap only (F). Colour: White (W).

### **Performance**

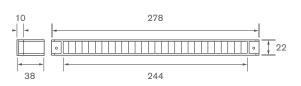
Window vent

2000D + 1600DN

BS EN ISO 717-1: 1997 Airborne Sound Insulation (dB)

45														Key
40														DN Vent
35										)				Acoustic performance
30														<b>Dn,e,w</b> = 37dB(A) <b>Dn,e,w</b> (C) = 36dB
25														Dn,e,w (Ctr) = 34dB Dn,e,w: Average weighted performance across frequency range
20														C: Pink noise Ctr: Road noise
	45 40 35 30 25	40 35 30	40 35 30 25											

Frequency Hz



### 1600DN (external)



2000D (internal)

### **Ordering information**

160

To Order: 1600DNFW

00



### even the best ideas can be improved





Ultra-low\* U-value **0.71 W/m<sup>2</sup>K**  Generic Green Guide Rating A



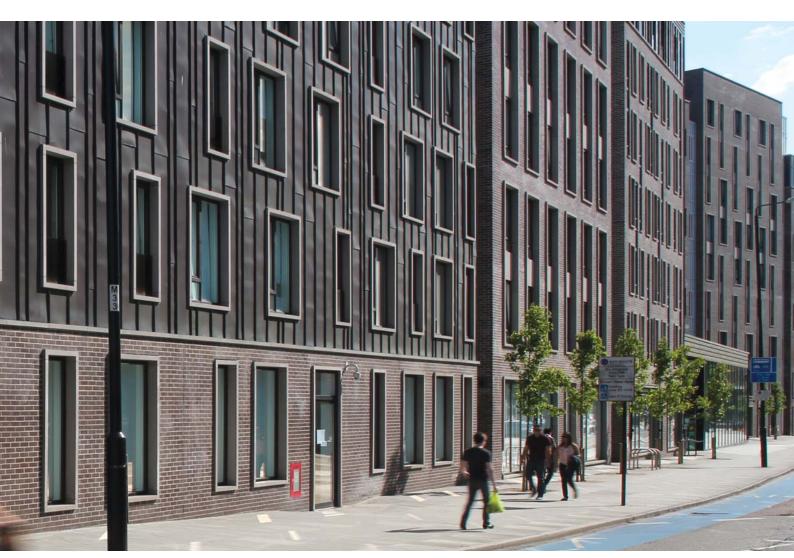
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### even the best ideas can be improved

The PURe window range\* has been developed by Senior Architectural Systems, one of the largest and most respected fenestration companies in the UK today. The system is the next generation of evolved products, to exceed current and meet future legislation.

Senior is constantly looking for new and innovative products, processes and service enhancements that will enable your next project to stand out from the crowd and make our world a better place.



# embracing simplicity

The PURe range\* is an aluminium window system that incorporates high insulation polyurethane foam (PUR) as an innovative thermal barrier.

Already used for many years in the construction industry to provide insulation, PUR is fully recyclable, safe to handle and gives ultra-high thermal performance.

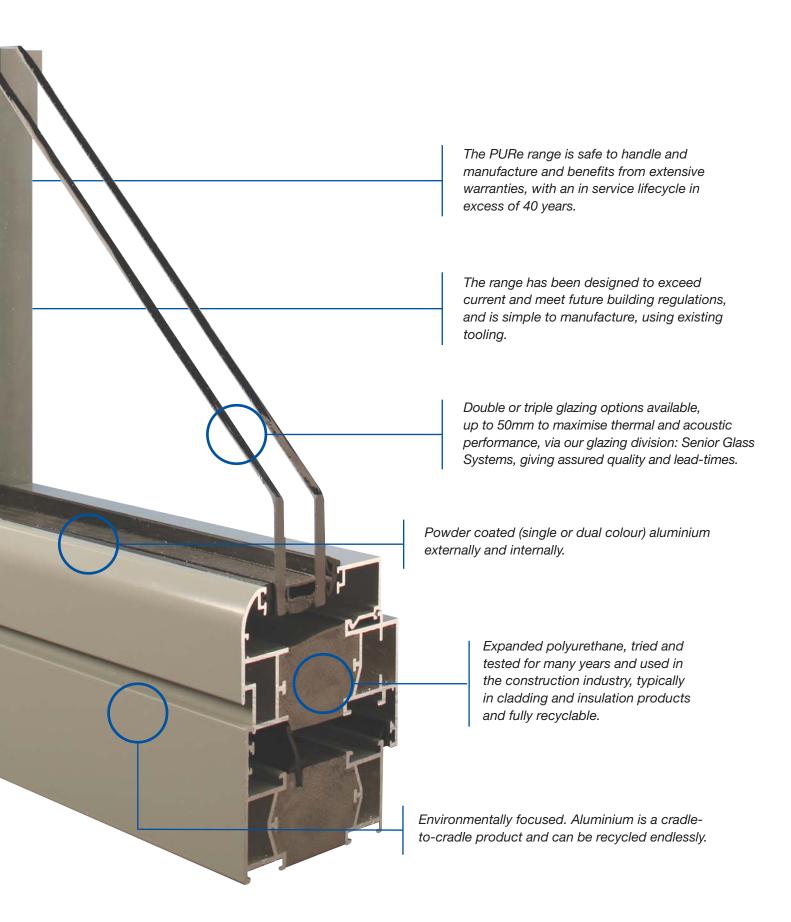
Its ground-breaking use as a thermal barrier in windows is set to revolutionise the market, giving U-values as low as 0.71 W/m<sup>2</sup>K when calculated as a commercial CEN standard window.

Easy to manufacture using existing tooling, the PURe window range is the new, simple way to exceed current and meet future building regulations.











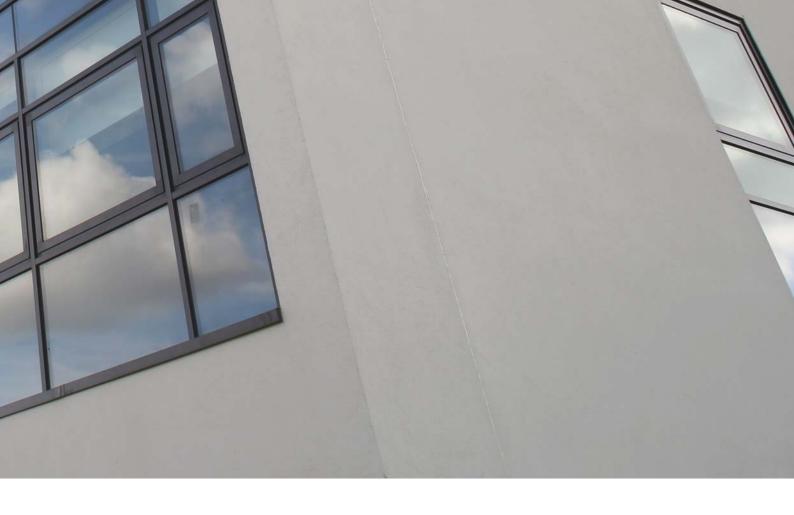
# developed to perform



From concept to design through to manufacturing, the PURe window range has been developed with simplicity and performance in mind.

The innovative use of expanded polyurethane foam as a thermal barrier gives the range its impressive thermal performance, ensuring it exceeds current and meets future legislation.

With the capacity to evolve further, the PURe window range is a next generation product that will benefit your projects both now and in the future.



Weather Rating BS 6375 Part 1: 2009 Tilt & Turn

Ultra low u-value\*

0.71 W/m²K Designed to meet

Passiv Haus Standard

Generic Green Guide

Commercial

In Service Lifecycle

40 Years +

Glazing

Double Triple Recyclable

Cradle - to -Cradle

Air Permeability	600 Pa
Water Tightness	600 Pa
Wind Resistance	2400 Pa

### **Top Hung Casement**

Air Permeability	600 Pa
Water Tightness	600 Pa
Wind Resistance	2400 Pa

### Side Hung Casement

Air Permeability	600 Pa
Water Tightness	600 Pa
Wind Resistance	2400 Pa

Performance BS 6375 Part 2: 2009

Top Hung Casement	Pass
Side Hung Casement	Pass
Tilt / Turn	Pass

Security

All types security tested to PAS 24: 2012 and BS6375



### thermal values

Our experience in developing innovative, thermally efficient windows goes back to 1991, when Senior Architectural Systems was founded.

The company was started with the aim of revolutionising the UK fenestration industry.

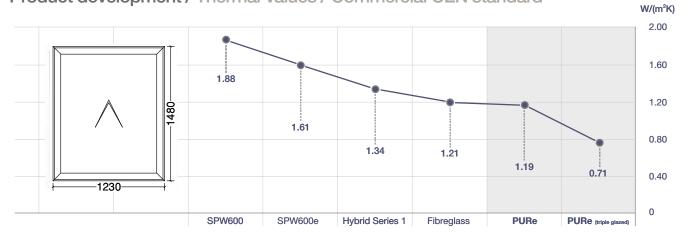
And that's just what we've done.

From the first of our window systems, the SW400 suite, through to the latest, our PURe range, we are constantly looking for new and innovative products, processes and service enhancements that will enable us to stand out from the crowd and make your world a better place.

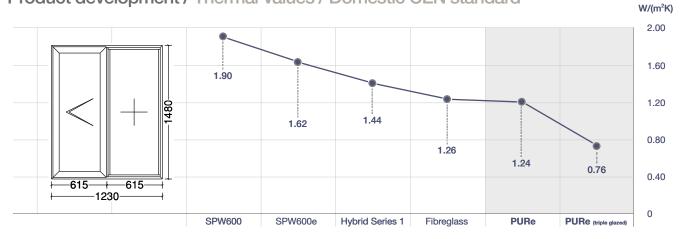
The charts on the right showcase the advancements in thermal performance that each product development has achieved.







### Product development / Thermal Values / Domestic CEN standard



## the Senior difference

Senior prides itself on providing a responsive and personal customer service with local availability, and on forming long term, mutually profitable relationships with specifiers and fabricators.

### Quick Facts

British based company: all our systems and products are fabricated and supplied from within the United Kingdom.

Fully accredited systems which enhance any building façade.

All products are manufactured/fabricated to exacting standards and quality is assured through constantly monitored systems and processes.

All material processing is carried out 'in-house' leading to a highly efficient and time sensitive turnaround service.

Full range of products utilising differing materials.

Expert technical and specification support available.

Consideration is always given to materials used in terms of recyclability and sustainability.

Dedicated ISO 14001, ISO 18001 and ISO 9001 quality accredited service centres in England, Wales and Scotland.





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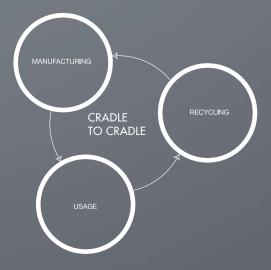


# taking the environment seriously

We are aware of the impact that buildings have on the environment, and we take a lifecycle responsibility for the products that we manufacture and deliver.

We minimise the risk of any chemical releases during manufacturing, and our systems in aluminium and wood are perfect for producing low maintenance, energy efficient windows and façades that have a long life.

Our metal of choice is aluminium. It recycles perfectly without losing any of its properties. And best of all for our planet, we make sure that our suppliers of wood always plant more trees than we use.





### helping you achieve BREEAM® credits

### What is BREEAM?

BREEAM (Building Research Establishment's Environmental Assessment Method) is the world's foremost environmental assessment method and rating system for buildings, with 250,000 buildings with certified BREEAM assessment ratings and over a million registered for assessment since it was first launched in 1990. The system sets the standard for best practice in sustainable building design, construction and operation.

### Ten categories for a sustainable building

A BREEAM assessment uses recognised measures of performance, set against established benchmarks, to evaluate a building's specification, design, construction and use.

Credits are awarded across ten categories based on the outcomes of the building assessed. The credits are then combined to provide a single score, achieving either a Pass, Good, Very Good, Excellent or Outstanding overall BREEAM rating.

### Senior and BREEAM

Senior Architectural Systems product range has been developed with BREEAM at its centre. Our systems are proven to help you achieve a credible BREEAM rating. With many BREEAM rated projects already successfully utilising Senior products, we have a wealth of experience to assist the architect/designer in meeting their sustainability goals.



Categories	Credits Available	Senior Architectural products impact
Management	11	No
Health & Well-Being	14	Yes
Energy	24	Yes
Transport	9	No
Water	9	No
Materials	13	Yes
Waste	7	Yes
Land Use & Ecology	10	No
Pollution	12	No
Innovation	10	Yes
Total	119	

### **HEAD OFFICE**

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Senior Glass Systems Ltd, Lakeside House, Hopper Hill Road, Eastfield, Scarborough, YO11 3YS. Tel: 01723 580 010. Fax: 01723 580 018. E-mail: ordering@seniorglass.co.uk

Visit our showroom at the Building Centre; Ground level, L4, Store Street, London, WC1E 7BT.

### www.seniorarchitectural.co.uk





















Senior Architectural Systems is a major UK supplier of fenestration solutions, specialising in providing aluminium, timber, glass and fibreglass glazing systems to the highest standards. This brochure is intended to show what makes Senior's unique and how our products and services can make a difference to customers, clients, their projects and the environment.

VENT AXIA\_The Multivent continuous mechanical extract ventilation range is designed for the simultaneous ventilation of separate areas in the home or as a multi-point extractor system for a wide range of commercial applications.

In the home the system is usually located in the loft or airing cupboard with ducts taken to the bathroom, kitchen and utility room to remove water vapour at source and from WC's to remove odours. Designed to provide 0.7 of an air change based on the volume of the building, the Multivent system provides adequate ventilation, even in a 'tight' dwelling.

Pollutant concentrations and humidity can be controlled.

The Multivent H versions are now available with 2 control options. An integral humidity sensor that will detect any rise in humidity within the system and will boost between any 2 of the 3 speeds. A new Wire-less Controller is available for use with the Multivent H with 3 speed options offering total control of the systems.

Extended motor guarantee to 5 years offered on the MVDC LoWatt Energy Saving model.

### Installation

Multivent is ideal for a range of commercial multipoint extract applications such as WC's, fitting rooms, and kiosk's. The units can be installed at any angle and where the ambient air has a high humidity content condensate drains are provided.

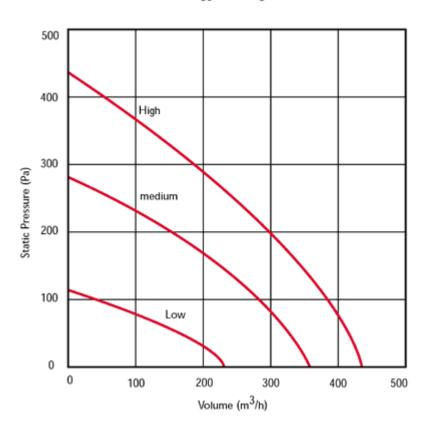


Typical Specifications

Supply and install a Multivent Wholehouse Central Extract unit for wholehouse condensation control as manufactured by:

### Graphs:

### **MVDCH LoWatt Energy Saving Model**



### **Dimensions**

Weight: 5.50kg

**Technical Data** 

	Settings							
	Low Medium High							
(	Current	Current	Power					
	Amps	Watts	Amps	Watts	Amps	Watts		
MVDC	0.1	13	0.23	35	0.39	44		
MVDCH	0.1	13	0.23	35	0.39	44		

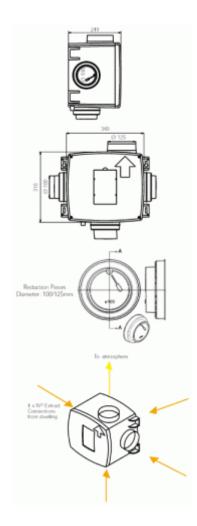
Sound Levels

|----- dB(A) @ 3m

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	Performance m³/h	Casing Breakout	Duct Inlet 100mm Ø	Duct Inlet 125mm Ø
MVDC				
low	232	33.3	36.3	36.5
medium	365	33.7	47.9	47.0
high	434	38.8	51.7	51.5
MVDCH				
low	232	33.3	36.3	36.5
medium	365	33.7	47.9	47.0
high	434	38.8	51.7	51.5

Published dB(A) figures are free field sound levels at 3m with spherical propagation at a reference level of 2 x 10-5 Pa. The free field sound power level spectra figures are dB with reference of 10-12 Watts.



[^Top of page]

### **MVDC**



The Multivent continuous mechanical extract ventilation range is designed for the simultaneous ventilation of separate areas in the home or as a multi-point extractor system for a wide range of commercial applications.

### **MVDCH**



The Multivent continuous mechanical extract ventilation range is designed for the simultaneous ventilation of separate areas in the home or as a multi-point extractor system for a wide range of commercial applications.

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