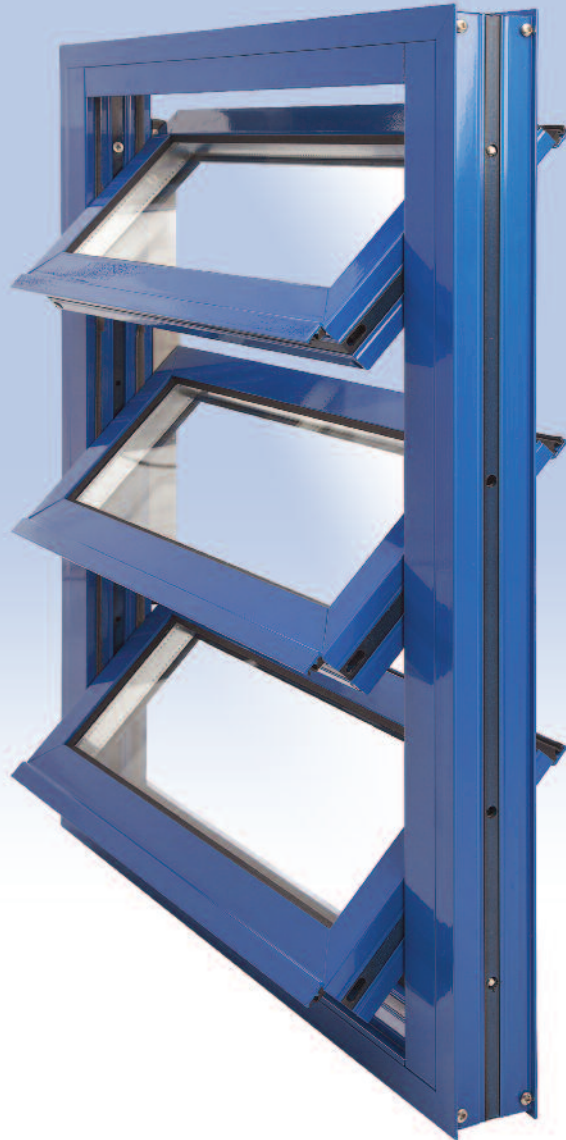


Vengen²⁸

Double Glazed
Thermal Break
Louvre Window

- Manual Control
- Motor Control
- 'Anti-Finger' Trap
- Fail Safe Open / Close
- Control Panels



naco



There's a much bigger picture to be found at Ruskin Air Management.



Fit for purpose

Vengen²⁸ is a high quality, double glazed thermal break aluminium louvre window system offering unique solutions for all your natural and smoke ventilation needs.

It incorporates all the benefits of our previous Weatherbeta 32 – but with improved looks, enhanced features and ‘best-in-class’ performance. Available in bespoke sizes, and in an extensive range of colours and finishes, it’s both fit for purpose – and fits to your exact building requirements.

In today’s environmentally conscious economy, Vengen²⁸ provides a natural, cost effective and low carbon solution to ventilation in modern buildings. It represents the culmination of years of design excellence from Naco, one of the world’s leading suppliers of creative air solutions. Providing a one-stop solution embracing both design and bespoke installation, Naco has unrivalled manufacturing experience and practical expertise in the louvre market. We’re a pioneer and an innovator who is able to meet individual needs, yet has the backing and resources of an established international group.



Why Naco?

Experience

.....
We are the UK’s longest established glass louvre specialist, with over 50 years manufacturing know-how and unrivalled knowledge of this market. This is channelled into the design and manufacture of industry leading products.

Totally bespoke

.....
We’ll listen, and work with you to deliver exactly what you want. Our extensive range of options and ancillary products means we’re able to help you create the definitive tailor made package.

Delivery

.....
We are the only glass louvre specialist with UK manufacturing capability. This, coupled with a commitment to working with you to meet - or exceed - your project timescales, gives you a reliable source of supply, especially for when dates and plans come under pressure.

Design and installation

.....
Our experienced team of consultants will ensure you have access to industry leading expertise. Unlike most UK louvre companies, we offer the whole service – from pre-design consultancy through to drawing, supply and installation.

Standards

.....
We are a ISO 9001 and ISO 14001 registered company.



An evolution in louvre design

Incorporating several new features and state-of-the-art design, the Vengen²⁸ offers natural and passive smoke ventilation, either manual or motor operation and a wide choice of attractive finishes. It's also designed for easy installation, and even easier glass replacement. Taken together, it gives you the total ventilation – and architectural – solution.

Benefits

Bespoke design

Vengen 28 can be made to fit to all sizes from (240mm W x 319mm H min) to (1500mm W x 3350mm H max), and offers a wide choice of glass, insulated panels, control options and finishes. We can also make multiple panel units and units can be coupled on site.

Class-leading performance

In independent tests, Vengen²⁸ is rated highly in terms of air and water tightness and heat retention.

Quality

As well as using high quality materials, Vengen²⁸ has been subject to a range of independent tests, including:

- Air and Water tightness
- Aerodynamics and weathering
- Heat and Smoke to EN12101-2*

We also carry out rigorous in-house life cycle tests on all moving components so you can be confident of long-life reliability.

* TBC Subject to independent testing.

Ease of installation/replacement

Vengen 28 is delivered fully assembled, with the glass supplied separately. This allows for ease of handling and installation. Glazing gasket is used to fit the glass and makes for easier 'mastic free' replacement should breakages occur.

Exceptionally high aerodynamic free area

The technical benefits of Vengen²⁸ mean that considerably smaller openings are required than for bottom hung windows, giving design and architectural flexibility.



Superior operation

Vengen²⁸ is available with a choice of either manual or motor operation.

Total control over the internal environment

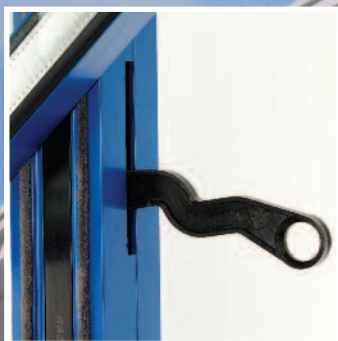
All motors can be easily integrated within Building Management Systems, and are fully compatible with heat, wind and rain sensors and control panels.

Improved looks

Slimmer sections and attractive mitre joints add visual appeal without compromising performance.

Comfort

By deflecting incoming air, the louvre blades minimise 'gusting' for maximum occupant comfort.



Product options

A high quality product, Vengen²⁸ comes with an extensive range of options to help meet all your design requirements, whatever the building needs.

Frame and glazing bars

To give a high quality finish, the Vengen²⁸ frame and louvre blade sections are made from extruded aluminium grade 6063T6 alloy, to BS EN 755 standard. Thermal break material is made from extruded polyamide 6.6 reinforced glass fibre. To give added air and water tightness, a rubber 'flipper' seal is fitted to the glazing bars, with brush seals for the jamb sections. Similarly, an extensive choice of frame border options means Vengen²⁸ can be adapted to most applications, such as curtain walling and brick-block structural openings.

Glass

The double glazed thickness of 28mm gives excellent thermal performance. To complement your building design, it is available in a range of colours, tints and specifications – including toughened, laminated and argon filled glass. We can also provide a choice of insulation panels where glass isn't needed or suitable.

Operation

Vengen²⁸ can be operated manually or mechanically.

- Manual. A choice of either lever operation (by hand or pole), c/w locking facility. Remote gear levers can be provided to suit Teleflex operation (by others).
- Motorised controls. A range of 230V a.c. and 24V d.c. electric motors give a full choice of mechanical operation, from simple open/close through to a modulating function. The sleek and attractive designs are available with anti finger trap facility for added safety. Fail safe open / close motors are also available.

Finishes

To give you choice and longer life, Vengen²⁸ is available in a wide range of polyester powder coated paint colours, and also with a choice of anodised finishes, including black and bronze.

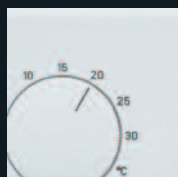
Controls and Ancillaries

Ventilation Control Panel

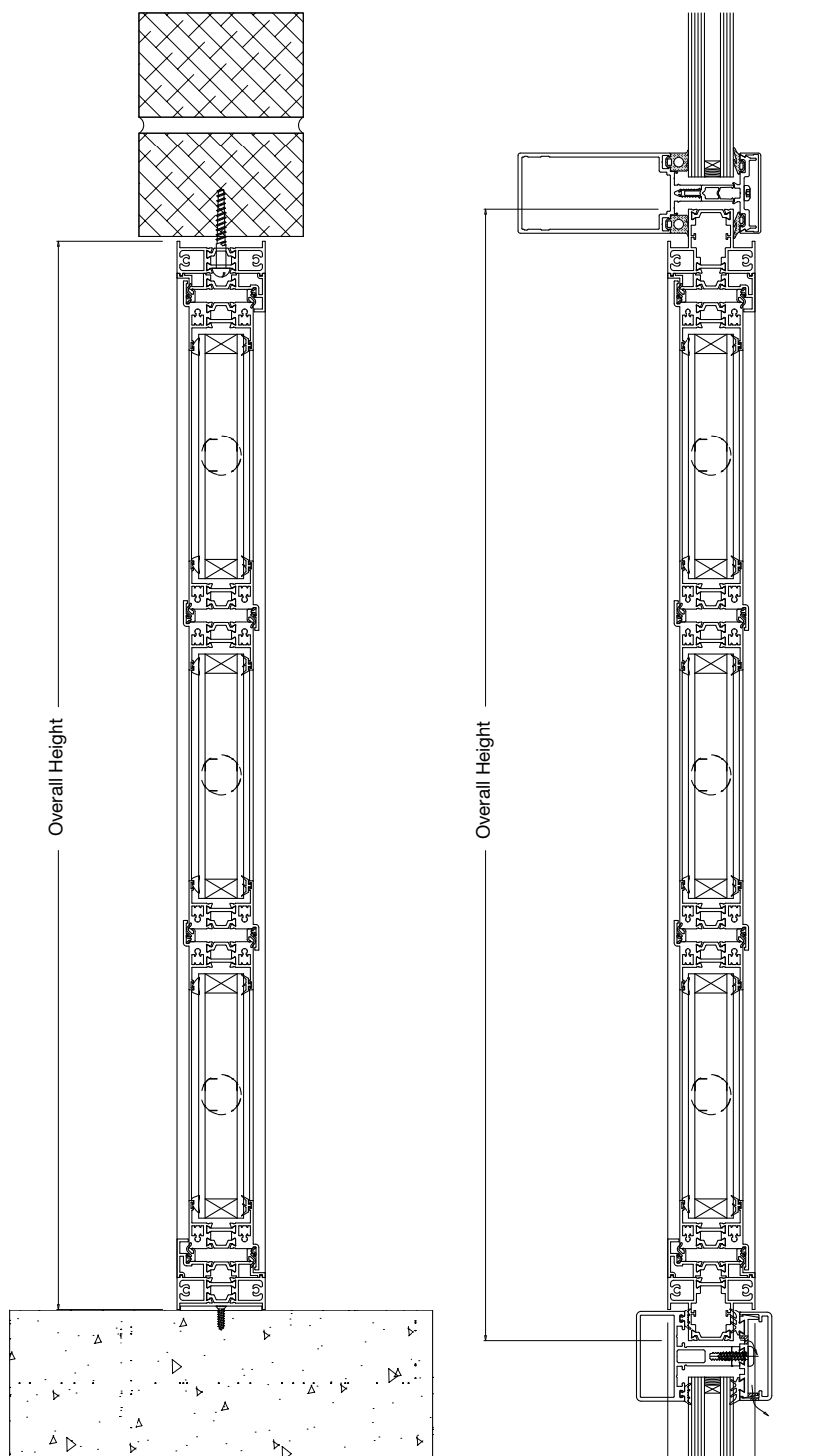
- Expandable ventilation control
- For control of 24V d.c. motors
- Single unit to multi-zone control
- 1A - 8A actuating current
- BMS compatible
- Expandable with 'plug-in' accessories



Ancillaries



- Open / Close Switch
- Room Thermostat
- Wind and Rain Sensors
- Indoor Air Quality Sensor
- Smoke Vent Panel



Typical details into glazing structure

Typical details into glazing system

Technical summary

Frame construction	Thermally broken frame and louvre blades
Glazing	28 mm o/a float, toughened, laminated or optional 28mm o/a double skinned insulated panel
Operation	Standard handle for use by hand, pole, or drop rod Remote gear lever* Motorised via 24V d.c. or 230V a.c., anti-finger trap option
Finish	Polyester powder coating (RAL range) Anodised
Width	240 mm – 1500 mm Single panel sizes
Height	319 mm – 3350 mm Single panel sizes
Frame depth	55 mm
Aerodynamic efficiency Cd	0.55
Free area %**	65% - 75%
Air leakage At 50 Pa	Area of louvre 0.6 m ³ /h/m ² Class 4 Length of joint 0.1 m ³ /h/m Class 4
Water leakage	Zero leakage up to 150 Pa
Thermal value U ***	2.1 W/m ² /K
Louvre pitch	Variable
Maximum Acoustic rating	38 dB (Rw)
Impact test	Class 5 to BS EN 13049: 2003 (c/w toughened laminated glass)
Barrier test	Horizontal UDL - Pass Point load - Pass to BS 6180: 2011 and BS 6399 - 1: 1996

* For connection to other systems such as Teleflex
 ** Depending on motor selection and number of louvre blades
 *** Calculation based on a 1500mm x 1500mm louvre with a centre pane value of 1.1 W/m²/K

For further technical information, please visit [www.naco.co.uk /drawingsVengen28.html](http://www.naco.co.uk/drawingsVengen28.html)

The Naco range

You'll find our products in buildings around the world, from Hong Kong airport and the University of Cincinnati in San Francisco, to the Channel Tunnel and Wimbledon Number 1 court closer to home.

With over 50 years' experience, we're the first choice for architects and specifiers everywhere. Part of Ruskin Air Management Limited, our products and services include:

Metal Louvres

Our comprehensive range of standard and high performance louvres covers everything from simple screen work to specialist applications, including acoustic, drainable and sandtrap louvres.

Natural Air Ventilators

A natural and practical alternative to openable windows and roof mounted air systems, our range of natural air ventilators (NAVs) ensure consistent air flow while preventing carbon dioxide build up.

Solar Shading

Sunscreens continue to be popular for many applications in commercial buildings, meeting the needs for control of solar gain and energy conservation while offering designers a palette of possible effects with the external cladding.

Weatherbeta Single Glazed

Our Weatherbeta single glazed louvre is an exceptionally efficient glazed ventilator particularly effective when thermal properties are not an issue, used widely in many countries around the world.

Controls

- Ventilation control panels
- Open / close room switches
- Indoor air quality sensors
- Wind, rain and temperature sensors
- Room thermostat

Installation

All products are offered on a supply or supply and fix basis. We offer a full site survey, design and fixing service where required.



Ruskin

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Distributor for Scotland

HASL

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