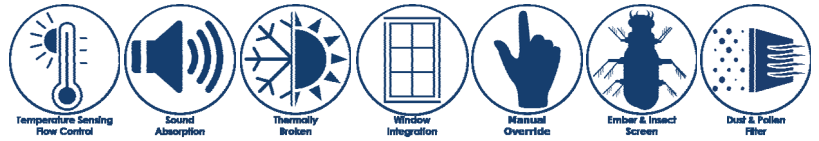


PROCTOR VENTIENT trickle ventilation system EcoSmart Breathe (ESB)

Glazed-in trickle vent with passive temperature sensing flow control



Product Description

The Ventient EcoSmart Breathe (ESB) is precision manufactured aluminium glazed-in trickle vent that can be accommodated into a wide range of window frames. The Ventient passive shape memory technology, without electric power, sensors or human intervention, automatically controls ventilation flow dependent on ambient temperatures, optimising the benefits of passive ventilation.

Applications

Improvements in construction create buildings that are more airtight than previously, with the result that infiltration or leakiness is no longer providing a pathway for make-up air for exhaust systems.

Although many building are complying with building code requirements by having sufficient openable windows, changing lifestyle patters, concerns about noise and security and generational differences mean that ventilation from open windows tends to be infrequent.

Unlike conventional systems such as operable windows or louvres, Proctor Ventient ESB can get on with the job of providing fresh air circulation regardless of occupancy.

As part of the total ventilation system Proctor Ventient can provide continuous ventilation to spaces even if they are unoccupied and is perfect for student accommodation, hotels, age care, healthcare and educational facilities.

Ventient is an ideal solution for residential buildings such as modern air tight homes and medium or high rise developments, as modern lifestyles mean that occupants are unable to mange purge ventilation and often return home to a stuffy environment.

Installation

The Ventient ESB is installed into the glazing pocket of the frame in accordance with the product installation guide.

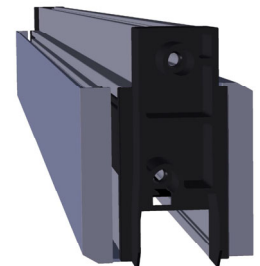
Exhaust Make-up in Lieu of Supply

Where it is not possible to meet the code requirements for natural ventilation, or where the design preference is for a specific air change rate and 24 hour provision of fresh outside air without leaving windows open, Ventient, in conjunction with low energy, mechanical extract ventilation can provide or contribute to supply ventilation as required when calculated in accordance with AS1668.2.

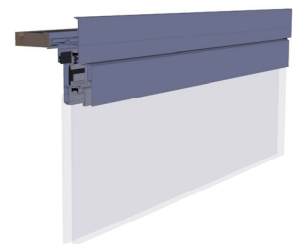
General Exhaust Make-Up Air

AS1668.2 draws to the attention of designers that increased air-tightness of modern buildings requires consideration of sources of make-up air. Make-up air drawn through gaps and service penetrations does not meet the requirements of Clause 2.3 within the standard and can lead to the loss of amenity in the enclosure.

Ventient ESB could be an acceptable permanent natural



View from interior with cover option



View from exterior with cover option

ventilation opening as required in Clause 2.3.

Sample Specification

Install Proctor Ventient ESB Trickle Vent with shape memory alloy passive temperature sensing flow control, in accordance with the user guide.

Device Length: _____mm (L2 from figure 1)

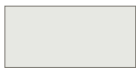
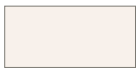



Optional features: (from table 2)

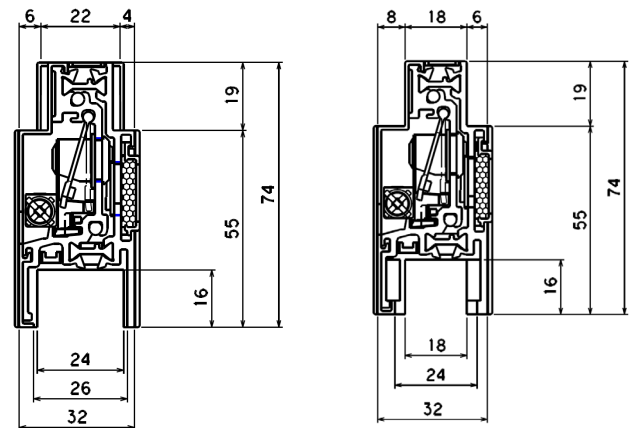
Product Code: VENTIENT ESB-24 / ESB-18

Ventilation volume at $\Delta P 12Pa$: (from PQ data)

Colour: (from table 1)

SMA Minimum Temperature: 12°C (other temperatures

Table 1 Performance		Table 2 Optional Features	
Open area (A)	17.2cm ² - 78.2cm ²	Shape Memory Alloy (SMA) Thermal Actuator - Fully Open - Minimum Open (typically 33%)	Fitted as standard >20°C <14°C Other set point are available
Effective open area (αA) with	6.5cm ² - 34.4 cm ² (no filter) 6.5cm ² - 29.7 cm ² (Type A filter)	Mesh to resist vermin, insects and windblown material.	Exterior cover includes a max. 2mm aperture screen
Thermal Resistance	4.07 W/m ² .K	Air filter (average arrestance)	68% (Type A)
Air Tightness (JIS A 1516) when closed	A-4 (<20m ³ /hr.m ² at 100Pa)	Manual Operation - Closable - Openable	Standard Standard (Auto mode)
Water tightness (JIS A 1517) when closed	W-5 (500Pa)	Intumescent fire barrier	Available option with exterior cover
Wind pressure (JIS A 1515) when closed	S-7 (3,600Pa)	Additional acoustic attenuation	Available option with interior and exterior covers
Acoustic rating without covers (D _{ntw})		Exterior cover	Available
Closed	54dB	Magnetic fix interior cover	Available
Open	49dB	Maintenance	Interior cover removable from interior to clean the device and filter.
Standard Sizes and colours			
Minimum Length (L1)	350 mm		
Maximum Length (L1)	1,500 mm		
Option to trim length	Available up to 100mm trim		
Suitable for glazing units	≤24mm Product Code: VENTIENTESB-24 ≤18mm Product Code: VENTIENTESB-18		
Dimensional Tolerance (L1)	± 1 mm		
Standard available colours for main unit in gloss or matt anodized finish.			
<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <p>Silver</p>  </div> <div style="text-align: center;"> <p>Ivory</p>  </div> <div style="text-align: center;"> <p>Grey</p>  </div> </div> <div style="display: flex; justify-content: space-around; align-items: flex-start; margin-top: 10px;"> <div style="text-align: center;"> <p>Bronze</p>  </div> <div style="text-align: center;"> <p>Black</p>  </div> </div>			
Selection of unfinished interior and exterior covers enables the window supplier to coat covers to match the frame.			



VENTIENT ESB-24

VENTIENT ESB-18

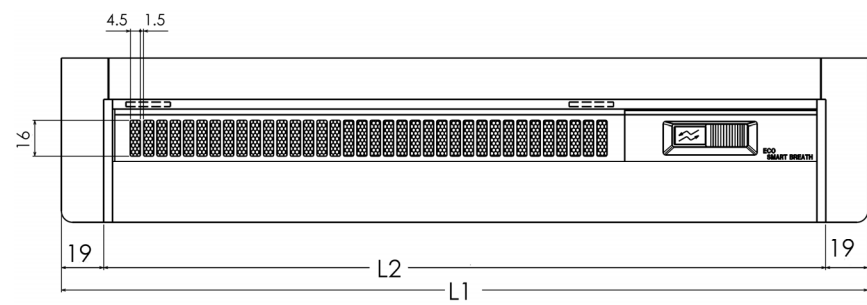


Figure 1: Ventient ESB dimensions