

Trickle Ventilation

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Disclaimer

The information included in these documents were correct at the time of publication. The product group areas of the Glazpart.com website are updated on a regular basis and will be more accurate than these documents. We recommend that products of interest are checked with this data or contact us sales@glazpart.co.uk to ensure accuracy of this information.

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Introduction

Welcome to the latest version of the Glazpart Trickle Ventilation catalogue. Totally revised, this is the most comprehensive overview of our ever expanding product range dedicated to the Fenestration industry to comply with prevailing building regulations.

This edition also answers some of the key questions related to the need, use and specification of trickle ventilators. We also try to offer some guidance to the building regulations across the UK and Ireland. This must however be read in conjunction with the prevailing regulations in each country across the United Kingdom and Northern Ireland.

We have for the first time included colour referenced part number tables and highlight product combinations for new applications such as combustion air, sash window and patio or bi-fold doors.

Our trickle ventilator products are available for delivery as;

- packaged in sets (Canopy and Ventilator)
- point of sale (promotional packaging)
- bulk or standard packed (as sets or separate internal ventilators & external grilles)
- mix and match colours.

Let us know how you want the parts delivered and we can arrange it!

New in this edition are rendered CAD images to give a clear view of our products. These images are available from your customer services contact as .jpeg, 3D adobe PDF or .stp files to assist you and your design team in the design and development of your products.

New products this year;

- Colour options:
 - vacuum foiling, wood grain and solid colour
 - through moulded colour range extended, E.g. Anthracite Grey RAL7016
 - printed wood grain colours, E.g. Irish Oak, Mahogany, Rose Wood and Golden Oak
- Colour spraying service where if required parts can be paint sprayed to ANY RAL, BS or swatch matched colour for special applications.

All these supply benefits and new products from the manufacturer of the only range of BBA certificated Trickle vents in the UK (at the time of publication).

We hope you find this document useful and should you have any feedback please contact me.

Regards

Dean Bradley

Dean Bradley, Sales and Marketing Manager dbradley@glazpart.co.uk











Why are trickle ventilators needed?



This has long been a controversial and puzzling question in the fenestration market since its introduction. The typical question has been -

"Why having developed thermally efficient window systems do we then rout a hole in the top?"



Over the last few revisions of the regulations, the airtightness of buildings has become an increasing issue. On the one hand there has been a drive to improve the thermal efficiency of windows whilst reducing energy consumption, as we build greener buildings. The consequence has been that as dwellings are made more airtight and internally generated pollutants affect disproportionately indoor air quality. This may cause adverse health effects unless unobtrusive background ventilation is installed.

Background ventilation is therefore necessary to provide a healthy indoor environment for the occupants. The primary purpose of trickle ventilation is to remove polluted indoor air from a building and replace it with 'Fresh' outside air. Background Ventilation is a key product for a healthy living environment. These small trickle ventilators are designed to deliver controllable whole room ventilation.

Background ventilation using trickle ventilators provides;

Low Co2 footprint, as this system consumes no electrical power once installed.

Security, installation foot prints prevent intrusion into the property. Whilst allowing constant

ventilation even when the window is locked, as even locking handles can be a risk.

Controllable, ventilators are designed to deflect the airflow to minimize draughts.

Cost effective, the lowest cost route for provision of background ventilation without the need

for air bricks and no ongoing electricity costs.

Cleaner building designs: as background ventilation is delivered through the window reveal no additional

means of ventilation need be installed.

Noise reduction, a property in a noisier location, E.g. near a busy road or airport. Trickle ventilators

provide ventilation without the need to open the windows, reducing noise levels.

Condensation reduction, some properties may have an existing problem with condensation especially in

colder weather. Fitting windows with suitable trickle ventilation may improve the problem and potential risk of mould growth is reduced, which could minimise

damage to internal surfaces.

Clean, fresh may reduce health problems, E.g. Asthma sufferers. Whilst also helping to manage the levels of pollutants such as carbon monoxide and carbon dioxide. The building

regulations require the number of inhabitants in a property to be a consideration

when planning a ventilation requirement.

24 hours operation, even at night and whilst you are on holiday they can still operate.

Controlled heat loss, by using calculated background ventilation the need for purge and extraction of

warm air is managed. Background ventilation can assist with air temperature

movement between the habitable room and the atmosphere.

Thermal comfort, trickle vents are designed and located (typically 1.70 m above floor level) to control

air movement (draughts) in habitable rooms.

Other ventilation types include 'Purge' and 'Extraction' is mechanical and is used locally within a building typically for kitchens and bathrooms where pollutants and water vapour are removed to prevent spreading throughout the building.



X





Equivalent area (EQA) is used instead of free area for the sizing of trickle ventilators as it is a better measure of the ventilators air flow performance.



Free area is the geometric cross sectional area of the opening of the ventilator. This however may not accurately reflect the air flow performance achieved by the ventilator. The more complex and/or restricted route of the air flow through the ventilator, the less air can flow through it.



Therefore, two separate ventilators with equal free areas may have different ventilation performance.

In order to calculate the EQA, the F1 Approved document uses a method defined in European Standard, BS EN 131 41-1 :2004 (Clause 4), for measuring the *EQA* of background ventilators.

EQA cannot be assessed on site, so it will be difficult to demonstrate that trickle ventilators have the correct EQA, so it is preferable to use ventilators which have the EQA (mm² at 1 Pa pressure difference), marked on the ventilator in a visible location, in the room to be ventilated, when installed.

The *EQA* is determined in accordance with BS EN 13141:2006 Part 1 "Ventilation for Buildings - Performance testing of components/products for residential ventilation - Part 1: Externally and internally mounted air transfer devices".

Clause 4.1 defines the test; "Flow Rate/Pressure" of BS EN13141 - 1 at pressures between 1 and 100Pa. The equivalent free area test calculates a value in mm² at a pressure difference of 1Pa.

The *EQA* is calculated using characteristic K at six pressures to measure the airflow. At 1Pa pressure difference the K value equals the corrected volume air flow rate Qvcor in I/s. This is multiplied by the coefficient C to give the equivalent free area in mm².

This information is for guidance only and is based upon Approved Document F1 at the time of publication.

Demonstrating this difference below is the geometric and EQA values of our modular ventilator range.

Vent Type	E.Q.A. (Equivalent Area)	Geometric Area
Modular 2000 Mk 3	1480 mm²	2000 mm ²
Modular 4000 Mk 3	2590 mm ²	4000 mm ²
Modular 2000 + Grille	1380 mm ²	2000 mm ²
Modular 2000 + Hood	1390 mm ²	2000 mm ²
Modular 4000 + Hood	2580 mm ²	4000 mm ²
Modular 4000 + Grille	2700 mm ²	4000 mm ²
Modular 8000 + Hood	5170 mm ²	8000 mm ²
Modular 8000 + Grille	5940 mm ²	8000 mm ²









Independent Certification

Unique Trickle vent approval for Glazpart customers

Advantages of BBA Certification

At the time of writing Glazpart are the <u>ONLY</u> trickle vent manufacturer holding a current BBA certification (certificate Number 96/3217). This is issued following detailed assessments as to compliance with building regulations. Then there is ongoing monitoring to ensure products are manufactured to these exacting standards.

How can we help your sales?

Q: How do we tell our customers?

A: Request access to our customer secure web portal to download the certificate for your selected vent from the customer service team.

Q: Will this help my sales?

A: Yes, the BBA certificate / approval is often requested in specifications especially for major house builders, Local authorities and Housing associations.

Which products are covered?:

- Slim line (MK3) Clip fix
- Standard Vent Screw fix
- · Modular Vent Clip fix
- All in colour's white, Brown and Black.

"This approval allows our customers to supply our trickle vent products with complete confidence as BBA certification assures compliance to building regulations..."

- Dean Bradley Sales and Marketing Manager







Certificates











Independent Certification

Unique Trickle vent approval for Glazpart customers

Advantages of LABC Registered detail

Registered Details involves a one-off fast track certification process so your product solution can be instantly accepted by LABC building control surveyors in more than 300 local authorities across the country. So you can offer Glazpart trickle vents to your local authority building control department in the knowledge it will be approved, provided sufficient equivalent area is to be installed.

How can we help your sales?

Q: How do we tell our customers?

A: Request access to our customer secure web portal to download the certificate for your selected vent from the customer service team.

Q: Will this help my sales?

A: Yes, the registered detail provides approval across all English and Welsh building control departments, simply highlight the approvals.

Which products are covered?:

- Link-Vent 2500EQA and 500EQA (Cert No RD482C)
- Slim line (MK3) Clip fix (Cert No RD482A)
- Standard Vent Screw fix (Cert No RD482B)

"This approval allows our customers to supply our trickle vent products with even more confidence as LABC registered detail assures compliance to building regulations..."

- Dean Bradley Sales and Marketing Manager

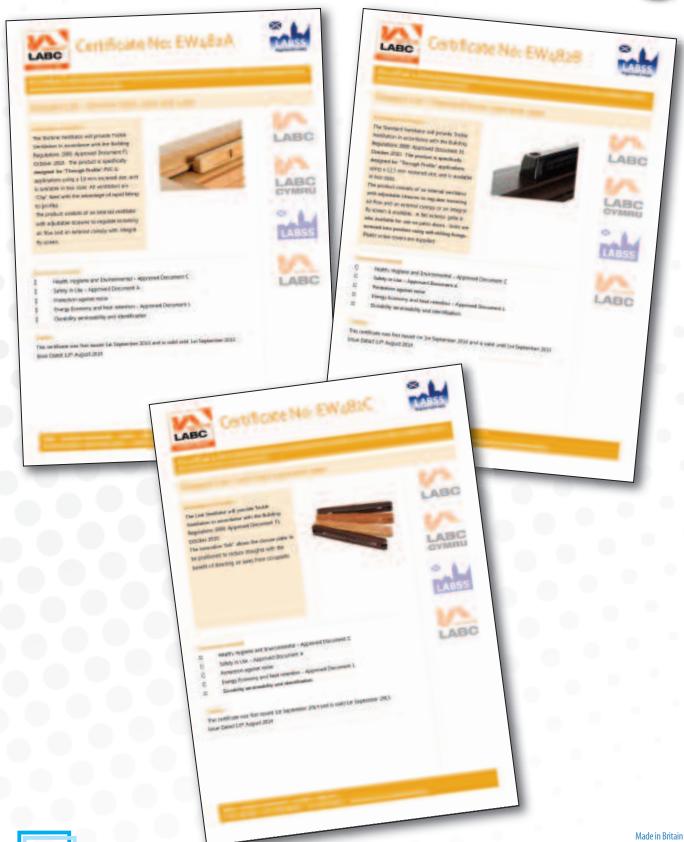






Certificates





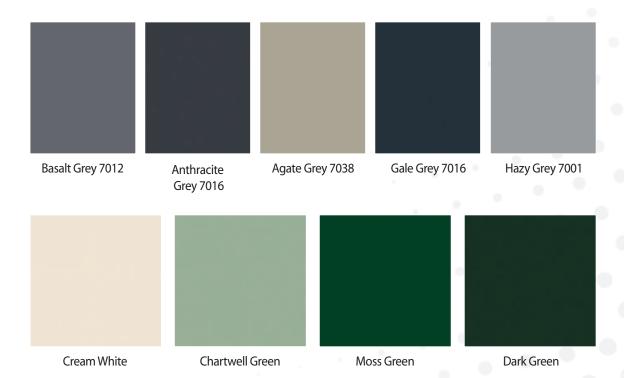
GGF







Through Moulded Vents



Hazy Grey 7015







Never spray another tricklevent again!















Colour Options Vacuum Foil —Woodgrain Effects



MXP0113.9.3241.002.119500



MXP0059.9.3202 001 - 116700 FX.9.3202.701.116701



MXP0031.9.2178.001.116700 PX.9.2178.301.116700 FXP0040.9.2178.701.116701



MXP0109.9.3211.005.114800



MXP0019.9.2097.013.116700



MXP0016.9.2065.021.116700 PX.9.2065.321.116700



Dark Oak FL-F1 MXP0012.9.2052.089.116700 PX.9.2052.389.116700 FX.9.2052.789.116701



Light Oak MXP0013.9.2052.090.116700



Macore MXP0051.9.3162.002.116700 PX.9.3162.302.116700 FX.9.3162.702.116701



Mountain Pine MXP0039.9.3069.041.116700



Natural Oak ST-F2 MXP0044.9.3118.076.116800



Oregon Pine 4 MXP0008.9.1192.001.116700



Piedmont A MX46095.9.0049186.101100 PX46822.9.0046822.101100



Regency A MX46096.9.0049177.101100



Rustic Cherry MXP0086.9.3214 007.119500



Rustic Oak 1 MXP0046.9.3149.008.16700 FX.9.3149 708 - 116701



Sherwood G MX46049.9.0049158.101100 PX46820.9.0046820.101100



Sherwood W MX46050.9.0049201.101100 PX46821.9.0046821.101100



Shogun AC MX46100.9.0049197.101100



Shogun AD MX46099.9.0049195.101100



Siena PN MX46102.9.0049237.114800 PX46828.9.0046828.114800



Siena PR MX46101.9.0049233.114800 PX46827.9.0046827.114800



Soft Cherry MXP0108.9.3214.009.119500



Stripe Douglas MXP0047.9.3152.009.116700



Swamp Oak ST-F MXP0053.9.3167.004.116700



Walnut V MXP0033.9.2178.007.116700 PX.9.2178 307 - 116700 FXP0041.9.2178.707.116701



Winchester XA MX46104.9.0049240.114800 PX46830.9.0046830.114800



Colours are reproduced as near as possible, and we recommend samples are approved to compare compatability. Foil numbers are for Renolit foils and should be quoted to clearly identify foil colour or pattern.









Colour Options Vacuum Foil — Solid Colour Effects





Agate Grey MXS0061 7038.05.116700 RAI - 7038



Anthracite Grey 083 MXS0053 7016.05.808300 PX.02.20.71 000001.808300



Anthracite Grey 167 MXS0054 7016.05.116700 PX.02.20.71. 000001.116700 FX.02.12.71. 000003.116701 RAL:7016



Basalt Grey MXS0050 7012.05.116700 RAI - 7012



Beck Brown MX462226 49116.101100 RAI -8022



Chartwell Green MX45894 49246.101100



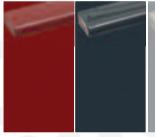
Cream White PX47848.02.20 11.000011.116700 FX.02.12.11. 000011.116701 RAL:9001



Ice Cream PX47835 46835.101100 RAL:9001



Dark Green MXS0045 6125.05.116700 PX.02.20.61. 000001.116700 FX.02.12.61. 000008.116701 RAL:6009



Dark Red MXS0026 3081.05.116700 RAL:3011



MX46312 49122.101100 PX46838.46838.116700

Finesse available MX46172 49122.801300 RAL:7016



Finesse MX46325

49124.101100 PX46839 46839 116700 Finesse available

MX46242 49124.801300



Moss Green MXS0042 FX 02 12 61

6005.05.116700 000001.116701 RAL:6005



Black Brown MXS0078 8518.05.116700

RAL:8022



46833.116700 Finesse available MX46391 49229 - 801300

RAL: 7015

PX46833



Steel Blue MXS0037 5150.05.116700 RAL:5011

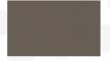


PX47849.02.20.91 000001.116801 FXS0128.02.12.91 .000014.116801 RAL:9010



Wine Red **Finesse** MXS0022 3005.05.116700

RAI - 3005



Quartz Grey MXS0062.7039.05.116700 RAL: 7039



Brilliant Blue MXS0031.5007.05.116700 RAL:5007



Chocolate Brown MXS0080.8875.05.116700 RAL:8022



Crystal White Crystal White 083 FX.02.12.91.000005.808302

Crystal White 167 FXS0112.02.12.91. 000005.116701



Grey MXS0064 7155.05.116700 FX.02.12.71.00004.116701 Emboss available



Light Grey MXS0067 7251.05.116700 RAL:7035



Signal Grey MXS0047 7004.05.808300 RAL:7004



Silver Platinum MXP0124 9.1293.003.119500

Note:

RAL numbers are for reference only and samples should be approved. Colours are reproduced as near as possible, and we recommend samples are approved to compare compatability. Foil numbers are for Renolit foils and should be quoted to clearly identify foil colour or pattern.















Colour Options Woodgrain Print Effect









Colour Options Spraying



Glazpart are proud to be a high quality colour paint sprayer using the latest paint technology and suppliers



The spray system is a special coating designed to paint uPVC and other hard plastic such as ABS, polycarbonate and acrylic where the system forms a molecular cross bond with the plastic surface.



To enable the production of coloured window frames, coloured doors and coloured conservatories thousands of colours are available. We can offer all standard RAL and BS colours and match to most other colour systems. In addition, we have a specialist colour matching service that allows us to match non-standard colours and supplied colour samples.

The system is extremely colour stable and resistant to UV, so will hold its colour without excessive fading.

Technical data sheets show that the system does not contain lead, cadmium, zinc, formaldehyde or isocyanates so is kinder to the environment and safer for operators.

- Very colour stable
- UV resistant (perfect for Conservatories and Patio Doors)
- Resistant to Abrasion ideal for doors and windows
- Available in almost any colour
- Available in gloss, satin or matt finish
- Available in metallic and pearlescent finishes



















Product Overview

The Link Vent will provide Trickle Ventilation in accordance with the Building Regulations 2000: Part F: Approved Document F1 October 2010 and Scottish Building Regulations October 2011 Standard 3.14.

The product is specifically designed for "Through Profile" PVC-U applications using a 13 mm routed slot, and is available in two sizes. All ventilators have the option to be "Screw" or "Clip" fixed with the advantage of rapid fitting to profiles.

The products key features are as follows:

- The innovative design eliminates screw cap covers
- Option to be "Screw" or "Clip" fixed
- Unique closure mechanism provides for a uniquely adjustable air flow
- LABC Certification
- Sash window application

Contents

- 1 Product Detail
- 2 Physical Data
- 3 Materials Of Construction
- 4 Performance Data
- 5 Acoustic Values
- 6 Installation Instructions
- 7 Slimline Vent Routing Detail
- 8 Part numbers



1. Product Detail

The product consists of an internal ventilator with adjustable closures to regulate incoming air flow and an external canopy with integral fly screen.

Internal ventilator

This is injection moulded in ASA, which is highly UV and temperature resistant. The optional acetal spring clips that enable the ventilators to be firmly snapped into the routed slot in the profile or conventionally screw fixed. The clip fixed option of this vent provides installation time cost savings when compared with 'screw fitting' alternatives.

The closure plate has a positive action and multiple units in the 4000 version provide control of airflow.







External canopy

This is complimentary to the interior unit and features the same materials and fixing methods. The canopy has an integral fly screen. A flat grille is available.

LABC LABC

2. Physical Data

	Internal		Exte	ernal
	Dimension	Weight	Dimension	Weight
Link-Vent 2500	18.5 mm x 236.5 mm Depth 15 mm	28g	18 mm x 236.5 mm Depth 37.5 mm	39g
Link-Vent 5000	18 mm x 454.5 mm Depth 15 mm	59g	18 mm x 454.5 mm Depth 37.5 mm	78g

For colour options please see page 8 - 13.

3. Materials of Construction

Internal and external units are primarily moulded in UV stabilised PVC-U. The spring fixing clips are in UV stabilised Acetal. Suppliers data sheets for these polymers are available on request.

4. Performance Data

	Ventilator			
	Attachment type Dimension E		E.Q.A (Equivalent area)	Cross sectional area
2500	Clip or Screw	13 mm x 204 mm	2500mm²	2574mm²
5000	Clip or Screw	13 mm x 422 mm Depth 14 mm	5000mm²	5158mm²

5. Acoustic Values

Position	Closed	Open	
2500 EQA	dB = 42 (-1;0)	dB = 36 (-1;1)	
5000 EQA	dB = 40 (-0;1)	dB = 36 (-1;1)	
D,n,e,,w as defined in BS EN 20140-10-1992			







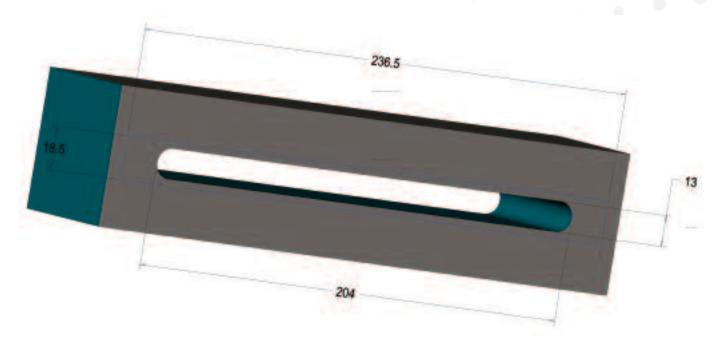




6. Installation Instructions

- 1. The ventilator is normally fitted in the head of the frame or sash in a section that does not contain a reinforcing member.
- 2. Rout a 10 mm slot as detailed in the below diagrams.
- 3. Units are fitted by locating the spring fixings into the routed slots and pressing firmly into place.

Link Vent 2500 Routing and Vent Footprint detail



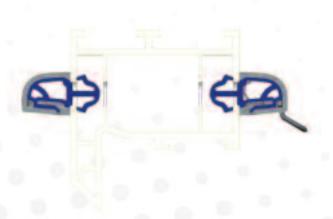
2500 LINK VENT ROUTING DETAIL



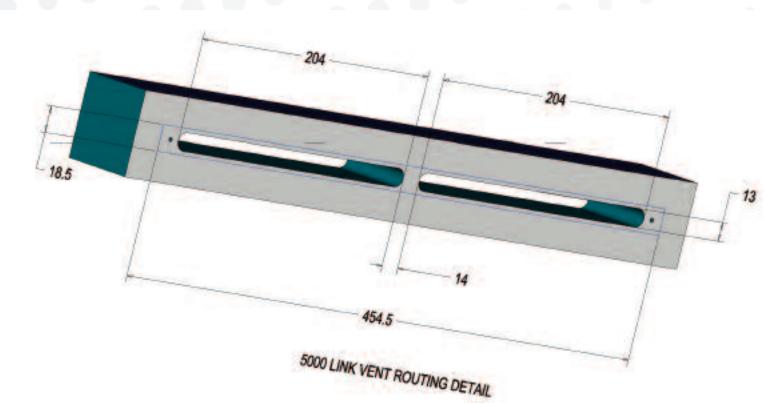








Link Vent 5000 Routing and Vent Footprint detail















7. Part numbers – Link Vent Clip Fix 2500

White	LINK VENT CLIP FIX 2500	Internal	External	Full Vent	Colour and White vent
Brown 2100-00001B 2200-00001B 2000-00001 2000-01001 Black 2100-00002B 2200-00002B 2000-00002 2000-01002 White (Gream Tint)	Traditional Colours				
Black 2100-00002B 2200-00002B 2000-00002 2000-01002	White	2100-0000B	2200-00000B	2000-00000	N/A
White (Cream Tint) White (Blue Tint) Oak Brown Tan 21 2100-00005B 2200-00006B 2000-00005 2000-01004 Oak Brown 2100-00006B 2200-00006B 2000-00006 Cream RAL 9001 2000-00108 Cream RAL 9001 2100-00014B 2200-00014B 2000-00014 2000-01014 Cream White 2100-00007B 2200-00007B 2000-01007 Woodgrain Patterns Wahogany (Aqua) 2100-00500B 2200-00500B 2000-00500 2000-01500 Rosewood (Aqua) 2100-00501B 2200-00501B 2000-00501 2000-01501 Light Oak (Aqua) 2100-00502B 2200-00502B 2000-00502 2000-01502 Irish Oak (Aqua) 2100-00503B 2200-00503B 2000-00503 2000-01503 Modern Colours Grey 7001 Grey 7015 2100-00009B 2200-0009B 2000-0009 2000-01009 Grey 7016 2100-00010B 2200-0001B 2000-0010 2000-01010 Quartz Grey 2100-00017B 2200-00017B Basalt Grey 2100-00016B 2200-00016B Steel Blue Chartwell Green 2100-00015B 2200-00015B 2000-00015 Dark Green Wine Red Dark Red	Brown	2100-00001B	2200-00001B	2000-00001	2000-01001
White (Blue Tint) Oak Brown Tan 21 2100-00005B 2200-00005B 2000-00006 Cream RAL 9001	Black	2100-00002B	2200-00002B	2000-00002	2000-01002
Oak Brown Tan 21 2100-00005B 2200-00005B 2000-00005 2000-01004 Oak Brown 2100-00006B 2200-00006B 2000-00006 2000-01008 Cream RAL 9001 2000-00014B 2000-00014 2000-01014 Cream RAL 1015 2100-0007B 2200-00007B 2000-01014 Cream White 2100-0007B 2200-00007B 2000-01007 Woodgrain Patterns Wahogany (Aqua) 2100-00500B 2200-00500B 2000-00500 2000-01500 Rosewood (Aqua) 2100-00501B 2200-00501B 2000-00501 2000-01501 Light Oak (Aqua) 2100-00502B 2200-00502B 2000-00502 2000-01502 Irish Oak (Aqua) 2100-00503B 2200-00503B 2000-00503 2000-01503 Modern Colours Grey 7001 Grey 7015 2100-00009B 2200-00009B 2000-00009 2000-01009 Grey 7016 2100-00010B 2200-00010B 2000-00010 2000-01010 Quartz Grey 2100-00017B 2200-00017B 2000-00015B 2000-00015 2000-01015	White (Cream Tint)				
Oak Brown 2100-0006B 2200-0006B 2000-0006 Cream RAL 9001 2000-01008 2000-01008 Cream RAL 1015 2100-0007B 2200-0007B 2000-01014 Cream White 2100-00007B 2200-00007B 2000-01007 Woodgrain Patterns Mahogany (Aqua) 2100-00500B 2200-00500B 2000-00500 2000-01500 Rosewood (Aqua) 2100-00501B 2200-00501B 2000-00501 2000-01501 Light Oak (Aqua) 2100-00502B 2200-00502B 2000-00502 2000-01502 Irish Oak (Aqua) 2100-00503B 2200-00503B 2000-00503 2000-01503 Modern Colours Grey 7011 2100-00009B 2200-00009B 2000-00009 2000-01009 Grey 7016 2100-00010B 2200-00010B 2000-00010 2000-01010 Quartz Grey 2100-00017B 2200-00017B 2000-00015 2000-01015 Basalt Grey 2100-00015B 2200-00015B 2000-00015 2000-01015 Moss G	White (Blue Tint)				
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Cream RAL 1015 2100-00014B 2200-00014B 2000-00014 2000-01014 Cream White 2100-00007B 2200-00007B 2000-01007 Woodgrain Patterns Mahogany (Aqua) 2100-00500B 2200-00500B 2000-00500 2000-01500 Rosewood (Aqua) 2100-00501B 2200-00501B 2000-00501 2000-01501 Light Oak (Aqua) 2100-00502B 2200-00502B 2000-00502 2000-01502 Irish Oak (Aqua) 2100-00503B 2200-00503B 2000-00503 2000-01503 Modern Colours Grey 7015 2100-0009B 2200-0009B 2000-00009 2000-01009 Grey 7016 2100-00010B 2200-00010B 2000-00010 2000-0100 Quartz Grey 2100-00017B 2200-00017B 2000-00016B Steel Blue Chartwell Green 2100-00015B 2200-00015B 2000-00015 2000-01015 Moss Green Dark Green Wine Red Dark Red Dark Red	Oak Brown	2100-00006B	2200-00006B	2000-00006	
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Woodgrain Patterns Mahogany (Aqua) 2100-00500B 2200-00500B 2000-00500 2000-01500 Rosewood (Aqua) 2100-00501B 2200-00501B 2000-00501 2000-01501 Light Oak (Aqua) 2100-00502B 2200-00502B 2000-00502 2000-01502 Irish Oak (Aqua) 2100-00503B 2200-00503B 2000-00503 2000-01503 Modern Colours Grey 7001 Grey 7015 2100-0009B 2200-0009B 2000-00009 2000-01009 Grey 7016 2100-00010B 2200-00010B 2000-00010 2000-01010 Quartz Grey Agate Grey 2100-00017B 2200-00017B 2000-0010 Basalt Grey 2100-00016B 2200-00016B 2000-00015 2000-01015 Chartwell Green 2100-00015B 2200-00015B 2000-00015 2000-01015 Moss Green Dark Green Wine Red	Cream RAL 1015	2100-00014B	2200-00014B	2000-00014	2000-01014
Mahogany (Aqua) 2100-00500B 2200-00500B 2000-00500 2000-01500 Rosewood (Aqua) 2100-00501B 2200-00501B 2000-00501 2000-01501 Light Oak (Aqua) 2100-00502B 2200-00502B 2000-00502 2000-01502 Irish Oak (Aqua) 2100-00503B 2200-00503B 2000-00503 2000-01503 Modern Colours Grey 7001 2100-0009B 2200-00009B 2000-00009 2000-01009 Grey 7016 2100-00010B 2200-00010B 2000-00010 2000-01010 Quartz Grey Agate Grey 2100-00017B 2200-00017B 2000-0011B Basalt Grey 2100-00016B 2200-00016B 2000-00015 2000-01015 Moss Green Dark Green 2100-00015B 2200-00015B 2000-00015 2000-01015 Wine Red Dark Red Dark Red Dark Red Dark Red Dark Red	Cream White	2100-00007B	2200-00007B		2000-01007
Rosewood (Aqua) 2100-00501B 2200-00501B 2000-00501 2000-01501 Light Oak (Aqua) 2100-00502B 2200-00502B 2000-00502 2000-01502 Irish Oak (Aqua) 2100-00503B 2200-00503B 2000-00503 2000-01503 Modern Colours Grey 7001 Crey 7015 2100-0009B 2200-00009B 2000-00009 2000-01009 Grey 7016 2100-00010B 2200-00010B 2000-00010 2000-01010 Quartz Grey Agate Grey 2100-00017B 2200-00017B 2000-00017B Basalt Grey 2100-00016B 2200-00016B 2000-00015 2000-01015 Chartwell Green 2100-00015B 2200-00015B 2000-00015 2000-01015 Moss Green Uine Red Dark Red Dark Red Dark Red	Woodgrain Patterns	5			
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Irish Oak (Aqua) 2100-00503B 2200-00503B 2000-00503 Modern Colours Grey 7001 2100-00009B 2200-00009B 2000-00009 2000-01009 Grey 7016 2100-00010B 2200-00010B 2000-00010 2000-01010 Quartz Grey Agate Grey 2100-00017B 2200-00017B Basalt Grey 2100-00016B 2200-00016B Steel Blue Chartwell Green 2100-00015B 2000-0015 2000-01015 Moss Green Wine Red Dark Red Dark Red	Rosewood (Aqua)	2100-00501B	2200-00501B	2000-00501	2000-01501
Modern Colours Grey 7001 2100-00009B 2200-00009B 2000-00009 2000-01009 Grey 7016 2100-00010B 2200-00010B 2000-00010 2000-01010 Quartz Grey Agate Grey 2100-00017B 2200-00017B Basalt Grey 2100-00016B 2200-00016B Steel Blue Chartwell Green 2100-00015B 2000-00015 2000-01015 Moss Green Dark Green Wine Red Dark Red Dark Red Dark Red	Light Oak (Aqua)	2100-00502B	2200-00502B	2000-00502	2000-01502
Grey 7001 2100-00009B 2200-00009B 2000-00009 2000-01009 Grey 7016 2100-00010B 2200-00010B 2000-00010 2000-01010 Quartz Grey 2100-00017B 2200-00017B 2200-00016B 2200-00016B Steel Blue 2100-00016B 2200-00015B 2000-00015 2000-01015 Chartwell Green 2100-00015B 2200-00015B 2000-00015 2000-01015 Moss Green Wine Red Dark Red Dark Red Dark Red	Irish Oak (Aqua)	2100-00503B	2200-00503B	2000-00503	2000-01503
Grey 7015 2100-00009B 2200-00009B 2000-00009 2000-01009 Grey 7016 2100-00010B 2200-00010B 2000-00010 2000-01010 Quartz Grey 2100-00017B 2200-00017B 2000-00016B 2000-00016B 2000-00016B 2000-00016B 2000-00015B 2000-00015B 2000-00015B 2000-00015 2000-01015 <td>Modern Colours</td> <td></td> <td></td> <td></td> <td></td>	Modern Colours				
Grey 7016 2100-00010B 2200-00010B 2000-00010 2000-01010 Quartz Grey Agate Grey 2100-00017B 2200-00017B 2200-00016B 2200-00016B 2200-00016B 2000-00015 2000-00015 2000-0101	Grey 7001				
Quartz Grey 2100-00017B 2200-00017B Basalt Grey 2100-00016B 2200-00016B Steel Blue Chartwell Green 2100-00015B 2200-00015B Moss Green Dark Green Wine Red Dark Red	Grey 7015	2100-00009B	2200-00009B	2000-00009	2000-01009
Agate Grey 2100-00017B 2200-00017B Basalt Grey 2100-00016B 2200-00016B Steel Blue Chartwell Green 2100-00015B 2200-00015B 2000-00015 Moss Green Dark Green Wine Red Dark Red	Grey 7016	2100-00010B	2200-00010B	2000-00010	2000-01010
Basalt Grey 2100-00016B 2200-00016B Steel Blue Chartwell Green 2100-00015B 2200-00015B 2000-00015 Moss Green Dark Green Wine Red Dark Red	Quartz Grey				
Steel Blue 2100-00015B 2200-00015B 2000-00015 2000-01015 Moss Green Dark Green Wine Red Dark Red Dark Red	Agate Grey	2100-00017B	2200-00017B		
Chartwell Green 2100-00015B 2200-00015B 2000-00015 2000-01015 Moss Green Dark Green Wine Red Dark Red Dark Red	Basalt Grey	2100-00016B	2200-00016B		
Moss Green Dark Green Wine Red Dark Red	Steel Blue				
Dark Green Wine Red Dark Red	Chartwell Green	2100-00015B	2200-00015B	2000-00015	2000-01015
Wine Red Dark Red	Moss Green				
Dark Red Dark Red	Dark Green				
	Wine Red				
Plain Irish Oak 2100-00011B 2200-00011B 2000-00011 2000-01011	Dark Red				
	Plain Irish Oak	2100-00011B	2200-00011B	2000-00011	2000-01011

Part numbers – Link Vent Clip Fix 5000

LINK VENT CLIP FIX 5000	Internal	External	Full Vent	Colour and White vent
Traditional Colour	S			
White	5100-0000B	5200-00000B	5000-00000	N/A
Brown	5100-00001B	5200-00001B	5000-00001	5000-01001
Black	5100-00002B	5200-00002B	5000-00002	5000-01002
White (Cream Tint)				
White (Blue Tint)				
Oak Brown Tan 21	5100-00005B	2200-00005B	5000-00005	5000-01004
Oak Brown	5100-00006B	5200-00006B	5000-00006	
Cream RAL 9001				5000-01008
Cream RAL 1015	5100-00014B	5200-00014B	5000-00014	5000-01014
Cream White	5100-00007B	5200-00007B		5000-01007
Woodgrain Patter	ns			
Mahogany (Aqua)	5100-00500B	5200-00500B	5000-00500	5000-01500
Rosewood (Aqua)	5100-00501B	5200-00501B	5000-00501	2000-01501
Light Oak (Aqua)	5100-00502B	5200-00502B	5000-00502	5000-01502
Irish Oak (Aqua)	5100-00503B	5200-00503B	5000-00503	5000-01503
Modern Colours				
Grey 7001				
Grey 7015	5100-00009B	5200-00009B	5000-00009	5000-01009
Grey 7016	5100-00010B	5200-00010B	5000-00010	5000-01010
Quartz Grey				
Agate Grey	5100-00017B	5200-00017B		
Basalt Grey	5100-00016B	5200-00016B		
Steel Blue				
Chartwell Green	5100-00015B	5200-00015B	5000-00015	5000-01015
Moss Green				
Dark Green				
Wine Red				
Dark Red				
Plain Irish Oak	5100-00011B	5200-00011B	5000-00011	5000-01011





Part numbers – Link Vent Screw Fix 2500

LINK VENT			= 1137	
SCREW FIX 2500	Internal	External	Full Vent	Colour and White vent
Traditional Colou	rs			
White	2101-00000B	2201-00000B	2001-00000	N/A
Brown	2101-00001B	2201-00001B	2001-00001	
Black	2101-00002B	2201-00002B	2001-00002	
White (Cream Tint)				
White (Blue Tint)				
Oak Brown Tan 21	2101-00005B	2201-00005B	2001-00005	
Oak Brown			2001-00006	
Cream RAL 9001	2101-00007B			
Cream RAL 1015		2201-00014B	2001-00014	
Cream White				
Woodgrain Patter	ns			
Mahogany (Aqua)	2101-00500B	2201-00500B		
Rosewood (Aqua)	2101-00501B	2201-00501B		
Light Oak (Aqua)	2101-00502B	2201-00502B		
Irish Oak (Aqua)	2101-00503B	2201-00503B		
Modern Colours				
Grey 7001	2101-00022B	2201-00022B		
Grey 7015	2101-00009B	2201-00009B	2001-00009	
Grey 7016	2101-00010B	2201-00010B	2001-00010	2001-01010
Quartz Grey				
Agate Grey	2101-00017B	2201-00017B		
Basalt Grey	2101-00016B	2201-00016B		
Steel Blue	2101-00019B	2201-00019B		
Chartwell Green	2101-00015B	2201-00015B	2001-00015	2001-01015
Moss Green	2101-00020B	2201-00020B		
Dark Green	2101-00021B	2201-00021B		
Wine Red	2101-00018B	2201-00018B		
Dark Red	2101-00023B	2201-00023B		
Plain Irish Oak	2101-00011B	2201-00011B		







Part numbers – Link Vent Screw Fix 5000

LINK VENT SCREW FIX 5000	Internal	External	Full Vent	Colour and White vent
Traditional Colours				
White	5101-00000B	5201-00000B	5001-00000	N/A
Brown	5101-00001B	5201-00001B	5001-00001	
Black	5101-00002B	5201-00002B	5001-00002	
White (Cream Tint)				
White (Blue Tint)				
Oak Brown Tan 21	5101-00005B	5201-00005B	5001-00005	
Oak Brown			5001-00006	
Cream RAL 9001				
Cream RAL 1015		5201-00014B		
Cream White				
Woodgrain Pattern	S			
Mahogany (Aqua)	5101-00500B	5201-00500B		
Rosewood (Aqua)	5101-00501B	5201-00501B		
Light Oak (Aqua)	5101-00502B	5201-00502B		
Irish Oak (Aqua)	5101-00503B	5201-00503B		
Modern Colours				
Grey 7001	5101-00022B	5201-00022B		
Grey 7015	5101-00009B	5201-00009B	5001-00009	
Grey 7016	5101-00010B	5201-00010B	5001-00010	
Quartz Grey				
Agate Grey				
Basalt Grey				
Steel Blue				
Chartwell Green	5101-00015B	5201-00015B		
Moss Green				
Dark Green				
Wine Red				
Dark Red				
Plain Irish Oak	5101-00011B	5201-00011B		







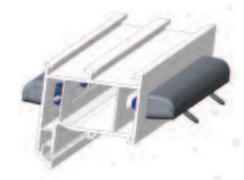


Slimline Trickle Ventilator ("Clip Fit")









Product Overview

The Slimline Ventilator will provide Trickle Ventilation in accordance with the Building Regulations 2000: Part F: Approved Document F1 October 2010 and Scottish Building Regulations October 2011 Standard 3.14.

The product is specifically designed for "Through Profile" PVC-U applications using a 10 mm routed slot, and is available in two sizes. All ventilators are "Clip" fixed with the advantage of rapid fitting to profiles.

The products key features are as follows:

- Spring Clip fitting (No Screws) (Saves over 1 minute per window to install)
- Unique closure mechanism provides for adjustable ventilation with a positive action
- "BBA" Certification
- Sash window application "Offset" clips are available

Contents

- 1 Product Detail
- 2 Physical Data
- 3 Materials Of Construction
- 4 Performance Data
- 5 Acoustic Values
- 6 Installation Instructions
- 7 Slimline Vent Routing Detail
- 8 LABC and BBA Certification
- 9 Part numbers



1. Product Detail

The product consists of an internal ventilator with adjustable closures to regulate incoming air flow and an external canopy with integral fly screen. A flat exterior grille is also available for use on patio doors or overframe applications.

Internal ventilator

This is injection moulded in PVC-U, with UV resistant Acetal spring clips that enable the ventilators to be firmly snapped into the routed slot in the profile. The installation of this vent provides time cost savings when compared with 'screw fitting' alternatives.

The closure plate has a positive action and multiple units in the 4000 version provide control of airflow.







A variety of custom fixing clips are available to offset the ventilator vertically relative to the 10mm slot for applications such as sash windows, where space is at a premium. These give offsets of \pm -2mm.

LABC

External canopy

This is complimentary to the interior unit and features the same materials and fixing methods. The canopy has an integral fly screen. A flat grille is available see page 37.



2. Physical Data

Dimensions & Weights

	Internal		External (Fly screen)	
	Dimension	Weight	Dimension	Weight
Slimline MK3 2000	18 mm x 242 mm Depth 20 mm	40g	18 mm x 242 mm Depth 20 mm	31g
Slimline MK3 4000	18 mm x 455 mm Depth 20 mm	74g	18 mm x 455 mm Depth 20 mm	55g

All dimensions are nominal

For colour options please see page 8 - 13.

3. Materials of Construction

Internal and external units are primarily moulded in UV stabilised PVC-U. The spring fixing clips are in UV stabilised Acetal. Suppliers data sheets for these polymers are available on request.

4. Performance Data

Vent Type	E.Q.A. (Equivalent Area)	Geometric Free Area
Slimline MK3 2000	1480 mm²	2000 mm ²
Slimline MK3 4000	2590 mm²	4000 mm²

5. Acoustic Values

Vent Type	Values D.n.e.w.
Slimline MK 3 4000 Open	33dB
Slimline MK 3 4000 Closed	35dB
Slimline MK 3 2000 Open	37dB
Slimline MK 3 2000 Closed	40dB









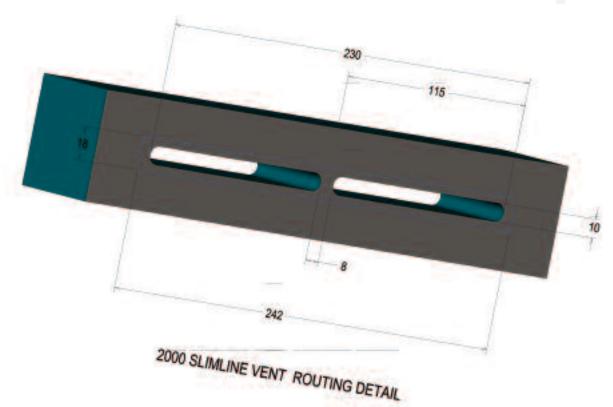




6. Installation Instructions

- 1. The ventilator is normally fitted in the head of the frame or sash in a section that does not contain a reinforcing member.
- 2. Rout a 10 mm slot as detailed in the below diagrams.
- 3. Units are fitted by locating the spring fixings into the routed slots and pressing firmly into place.

Slim Vent 2000 Routing and Vent Footprint detail





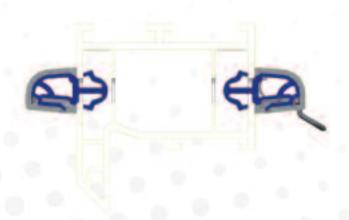




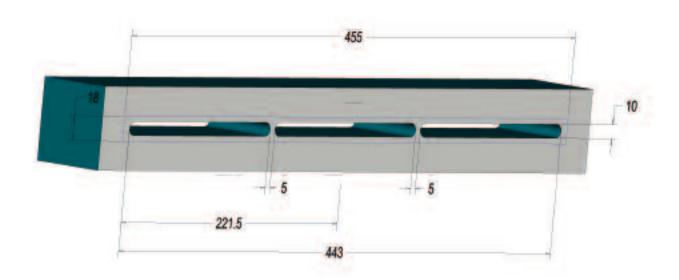








Slim Vent 4000 Routing and Vent Footprint detail



4000 SLIMLINE VENT ROUTING DETAIL











7. Part numbers – Slimline 2000

SLIMLINE 2000	Internal	External	Full Vent	Colour and White vent					
Traditional Colou	Traditional Colours								
White	2300720B	2300710B	2300700	N/A					
Brown	2300721B	2300711B	2300701	2300790					
Black	2300722B	2300712B	2300702	2300792					
White (Cream Tint)			2300703						
White (Blue Tint)			2300704						
Oak Brown Tan 21									
Oak Brown	2300726B	2300716B	2300706	2300974					
Cream RAL 9001			2300705	V235-00108					
Cream RAL 1015	2300729B	2300719B	2300709						
Cream White		V235-00142B							
Woodgrain Patte	rns								
Mahogany (Aqua)	V235-00041B	V235-00038B	V235-00051	V235-00102					
Rosewood (Aqua)	V235-00042B	V235-00058B	V235-00050	V235-00103					
Light Oak (Aqua)	V235-00043B	V235-00040B	V235-00052	V235-00104					
Irish Oak (Aqua)	V235-00075B	V235-00074B	V235-00073						
Modern Colours									
Grey 7001		V235-00211B							
Grey 7015	V235-00063B	V235-00061B	V235-00076	V235-00100					
Grey 7016	V235-00068B	V235-00065B	V235-00077	V235-00101					
Quartz Grey									
Agate Grey									
Basalt Grey									
Steel Blue									
Chartwell Green	V235-00131B	V235-00132B	V235-00094	V235-00106					
Moss Green									
Dark Green									
Wine Red									
Dark Red									
Plain Irish Oak			V235-00095	V235-00107					

Part numbers – Slimline 4000

SLIMLINE 4000	Internal	External	Full Vent	Colour and White vent				
Traditional Colours								
White	4300720B	4300710B	4300700	N/A				
Brown	4300721B	4300711B	4300701	4300790				
Black	4300722B	4300712B	4300702	4300792				
White (Cream Tint)			4300703					
White (Blue Tint)			4300704					
Oak Brown Tan 21								
Oak Brown	4300726B	4300716B	4300706	4300974				
Cream RAL 9001			4300705	V435-00108				
Cream RAL 1015	4300729B	4300719B	4300709	4300791				
Cream White		V435-00142B						
Woodgrain Patter	ns							
Mahogany (Aqua)	V435-00034B	V435-00036B	V435-00051	V435-00102				
Rosewood (Aqua)	V435-00043B	V435-00037B	V435-00050	V435-00103				
Light Oak (Aqua)	V435-00033B	V435-00058B	V435-00052	V435-00104				
Irish Oak (Aqua)	V435-00075B	V435-00074B	V435-00073					
Modern Colours								
Grey 7001		V435-00211B						
Grey 7015	V435-00063B	V435-00061B	V435-00076	V435-00100				
Grey 7016	V435-00068B	V435-00065B	V435-00077	V435-00101				
Quartz Grey								
Agate Grey								
Basalt Grey								
Steel Blue								
Chartwell Green	V435-00131B	V435-00132B	V435-00094	V435-00106				
Moss Green								
Dark Green								
Wine Red								
Dark Red								
Plain Irish Oak			V435-00095	V435-00107				

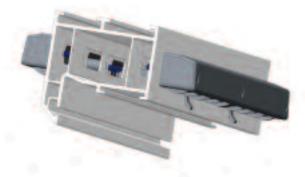




Standard Ventilator ("Screw Fit")











Product Overview

The Standard Ventilator will provide Trickle Ventilation in accordance with the Building Regulations 2000:Part F: Approved Document F1: October 2010 Scottish Building Regulations October 2011: Standard 3.14.

The product is specifically designed for "Through Profile" applications using a 12.5 mm routed slot, and is available in two sizes - for details of equivalent area see Section 4.

The products key features are as follows:

- All PVC-U construction.
- Extremely rugged design
- "BBA" Certification on most versions

Contents

- 1 Product Detail
- 2 Physical Data
- 3 Materials Of Construction
- 4 Performance Data
- 5 Acoustic Values
- 6 Installation Instructions
- 7 Standard Trickle Ventilator Routing
- 8 LABC and BBA Certification
- 9 Part numbers



1. Product Detail

The product consists of an internal ventilator with adjustable closures to regulate incoming air flow and an external canopy with an integral fly screen is available. A flat exterior grille is also available for use on patio doors or overframe applications. Units are screwed into position using self drilling fixings. Plastic screw covers are supplied.

Internal ventilator

Air flow regulation is afforded by the use of adjustable tumblers.

External canopy

This is complimentary to the interior unit and features the same materials and fixing methods. A flat grille available see page 37.















	Internal		External Canopy		External (Fly screen)	
	Dimension	Weight	Dimension	Weight	Dimension	Weight
2000	26 mm x 230 mm Depth 24 mm	58g	26 mm x 230 mm Depth 24 mm	50g	25 mm x 230 mm Depth 24 mm	9g
4000	26 mm x 444 mm Depth 24 mm	103g	26 mm x 444 mm Depth 24 mm	86g	25 mm x 444 mm Depth 24 mm	18g

F: Approved Document F1: October 2010 Scottish Building Regulations October 2011: Standard 3.14.

The product is specifically designed for "Through Profile" applications using a 12.5 mm routed slot, and is available in two sizes - for details of equivalent area see Section 4.

The products key features are as follows:

- All PVC-U construction.
- Extremely rugged design
- "BBA" Certification on most versions

Contents

Vent Type	E.Q.A. (Equivalent Area)	Geometric Free Area
Standard 2000 + Hood	1380 mm²	2000 mm²
Standard 2000 + Grille	1360 mm²	2000 mm²
Standard 4000 + Hood	2580 mm ²	4000 mm ²
Standard 4000 + Grille	2700 mm²	4000 mm ²

- 1 Product Detail
- 2 Physical Data
- 3 Materials Of Construction

Vent Type	Values D.n.e.w.
Standard 2000 Open	34dB
Standard 2000 Closed	39dB
Standard 4000 Open	31dB
Standard 4000 Closed	36dB









Product Overview

The Standard Ventilator will provide Trickle Ventilation in accordance with the Building Regulations 2000: Part Albert Frank (1997) and the Standard Ventilator will provide Trickle Ventilation in accordance with the Building Regulations 2000: Part (1997) and (1997) and (1997) are the Standard Ventilator will provide Trickle Ventilation in accordance with the Building Regulations 2000: Part (1997) and (1997) are the Standard Ventilator will provide Trickle Ventilation in accordance with the Building Regulations 2000: Part (1997) and (1997) are the Standard Ventilator will provide Trickle Ventilation in accordance with the Building Regulations 2000: Part (1997) and (1997) are the Standard Ventilator will provide Trickle Ventilator will be a supplication of the Standard Went (1997) and (1997) are the Standard Went (1997) and (1997) are the Standard Went (1997) are the StandardF: Approved Document F1: October 2010 Scottish Building Regulations October 2011: Standard 3.14.

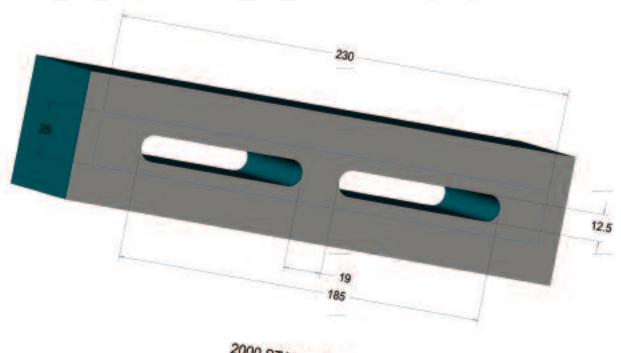


The product is specifically designed for "Through Profile" applications using a 12.5 mm routed slot, and is available in two sizes - for details of equivalent area see Section 4.



The products key features are as follows:

• All PVC-U construction.





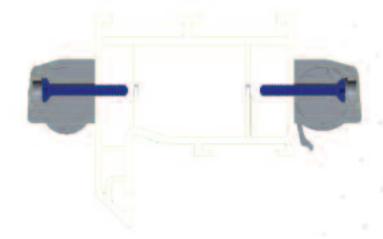




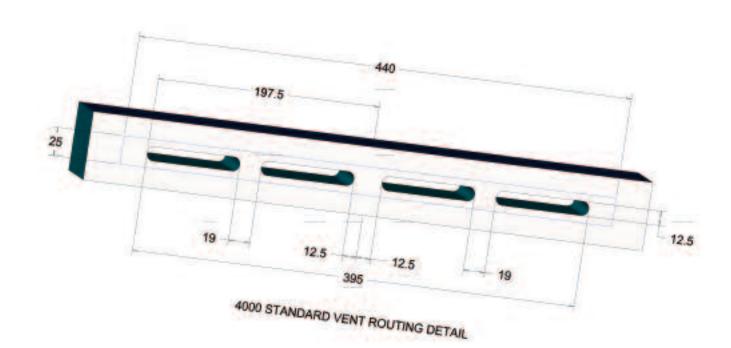








Standard 4000 Trickle Ventilator Routing and Footprint detail







7. Part numbers – Standard 2000

STANDARD 2000	Internal	External	Full Vent	Colour and White vent
Traditional Colours				
White	2000210B	V200-01100B	2000100	N/A
Brown	2000211B	V200-01101B	2000101	2000900
Black	2000212B	V200-01102B	2000102	2000902
White (Cream Tint)			2000103	
White (Blue Tint)			2000104	
Oak Brown Tan 21	2000215B	V200-01105B	2000105	2000906
Oak Brown				
Cream RAL 9001		V200-01107B	2000108	V200-00106
Cream RAL 1015			2000109	
Cream White				
Woodgrain Patterns				
Mahogany (Aqua)	V200-00011B	V200-00014B	V200-00002	V200-00102
Rosewood (Aqua)	V200-00012B	V200-00006B	V200-00003	V200-00103
Light Oak (Aqua)	V200-00010B	V200-00013B	V200-00001	V200-00104
Irish Oak (Aqua)	V200-00070B	V200-00071B	V200-00053	V200-00105
Modern Colours				
Grey 7001		V200-01122B		
Grey 7015	V200-00049B	V200-01109B	V200-00060	V200-00100
Grey 7016		V200-01110B	V200-00061	V200-00101
Quartz Grey				
Agate Grey				
Basalt Grey				
Steel Blue				
Chartwell Green		V200-00132B	V200-00130	V200-00107
Moss Green				
Dark Green				
Wine Red				
Dark Red				
Plain Irish Oak				



STANDARD 4000	Internal	External	Full Vent	Colour and White vent
Traditional Colours				
White	4000210B	V400-01100B	4000100	N/A
Brown	4000211B	V400-01101B	4000101	4000900
Black	4000212B	V400-01102B	4000102	4000902
White (Cream Tint)			4000103	
White (Blue Tint)			4000104	
Oak Brown Tan 21	4000215B	V400-01105B	4000105	4000906
Oak Brown				
Cream RAL 9001		V400-01107B	4000108	V400-00106
Cream RAL 1015			4000109	
Cream White				
Woodgrain Patterns				
Mahogany (Aqua)	V400-00011B	V400-01150B	V400-00002	V400-00102
Rosewood (Aqua)	V400-00012B	V400-01151B	V400-00003	V400-00103
Light Oak (Aqua)	V400-00010B	V400-01152B	V400-00001	V400-00104
Irish Oak (Aqua)	V400-00070B	V400-01153B	V400-00053	V400-00105
Modern Colours				
Grey 7001		V400-01122B		
Grey 7015		V400-01109B	V400-00060	V400-00100
Grey 7016		V400-01110B	V400-00061	V400-00101
Quartz Grey				
Agate Grey				
Basalt Grey				
Steel Blue				
Chartwell Green		V400-00132B	V400-00130	V400-00107
Moss Green				
Dark Green				
Wine Red				
Dark Red				
Plain Irish Oak			V400-00045	





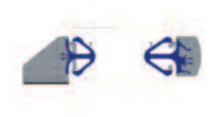






Modular Ventilator ("Clip Fit")







Product Overview

The Modular Ventilator will provide Trickle Ventilation in accordance with the Building Regulations 2000: Part F: Approved Document F1: October 2010 Scottish Building Regulations October 2011: Standard 3.14

This product is better suited for use with frame extension or header profiles and as such should be considered an 'over the top vent'.

The products key features are as follows:

- Modular design allows various equivalent area vents to be built from the standard base module. This reduces stockholdings. The Modular design is available assembled if required.
- BBA Certification
- Small footprint of only 138 mm x 26 mm for the base 2000 module. Spring clip fitting. (No screws)
- Unique closure mechanism provides for adjustable ventilation with a positive action.
- Optional modular grille or conventional canopy for exterior use.

Contents

- 1 Product Detail
- 2 Physical Data
- 3 Materials Of Construction
- 4 Performance Data
- 5 Acoustic Values
- 6 Modular Trickle Ventilator Routing Detail
- 7 BBA Certification



1. Product Detail

The product consists of an internal unit with adjustable closures to regulate incoming air flow and a choice of external protective screens.

Internal ventilator

The product is based on a modular concept. The base module carries a male and female dovetail on opposite ends. This allows them to be quickly joined to give the required equivalent area. Complimentary end caps are then fitted to complete the assembly. Product is of course available assembled to customers requirements.

The modules carry a moulded pair of spring clips that enable them to be firmly snapped into the routed slot in the profile. This has obvious cost savings when compared with "Screw Fitting" alternatives.







The unique patiented closure action, gives two intermediate opening positions as well as "Closed" and "Fully Open".



External canopy

The modular and snap fitting features, as well as footprint, are common between internal and external units.

An alternative exterior units are available including a low height fly screen. Designed primarily for installation in patio door or overframe applications.

2. Physical Data

Dimensions & Weights

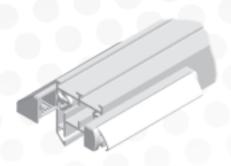
	Internal		External (Flat Grille)		External (Full Canopy)	
	Dimension	Weight	Dimension	Weight	Dimension	Weight
Modular 2000	26 mm x 145 mm Depth 16.5 mm	30g	26 mm x 145 mm Depth 16.5 mm	12g	26 mm x 145 mm Depth 16.5 mm	33g
Modular 4000	26 mm x 283 mm Depth 16.5 mm	57g	26 mm x 283 mm Depth 16.5 mm	23g	26 mm x 283 mm Depth 16.5 mm	64g
Modular 6000	26 mm x 421 mm Depth 16.5 mm	84g	26 mm x 421 mm Depth 16.5 mm	34g	26 mm x 421 mm Depth 16.5 mm	95g
Modular 8000	26 mm x 559 mm Depth 16.5 mm	111g	26 mm x 559 mm Depth 16.5 mm	45g	26 mm x 559 mm Depth 16.5 mm	126g

All dimensions are nominal

3. Materials of Construction

Both internal and external units are primarily moulded in UV stabilised PVC-U. The spring fixing clips are in UV stabilised Acetal.

Suppliers data sheets for these polymers are available on request.

















4. Performance Data

Vent Type	E.Q.A. (Equivalent Area)	Geometric Free Area
Modular 2000 + Hood	1293 mm²	2000 mm ²
Modular 2000 + Grille	1485 mm ²	2000 mm ²
Modular 4000 + Hood	2585 mm ²	4000 mm ²
Modular 4000 + Grille	2970 mm ²	4000 mm ²
Modular 6000 + Hood	3878 mm²	6000 mm ²
Modular 6000 + Grille	4455 mm ²	6000 mm ²
Modular 8000 + Hood	5170 mm ²	8000 mm ²
Modular 8000 + Grille	5940 mm ²	8000 mm ²

5. Acoustic Values

VentType	Values D.n.e.w.
Modular 2000 Open	34dB
Modular 2000 Closed	40dB
Modular 4000 Open	31dB
Modular 4000 Closed	37dB
Modular 6000 Open	29dB
Modular 6000 Closed	35dB
Modular 8000 Open	28dB
Modular 8000 Closed	34dB

6. Installation Instructions

Installation simply requires the routing of a 19 mm (3/4 inch) slot through the profile. In order to preserve the maximum structural integrity of the profile the use of separate slots for each 2000 Module is recommended. i.e. Leave 6.5 mm bridgings between modules.

Ensure that the ventilator is correctly positioned relative to the routed slots prior to snapping the ventilator into place; as the installation is permanent.





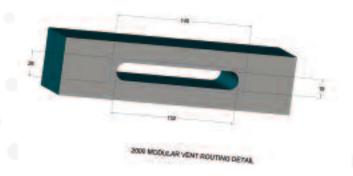


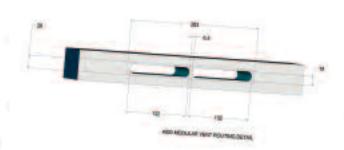
7. Modular Vent Routing Detail

2000 sq.mm



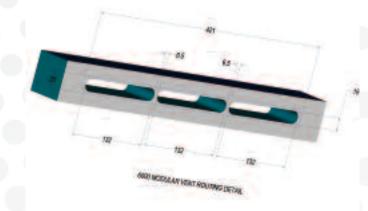


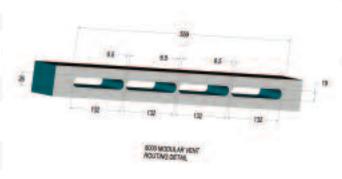




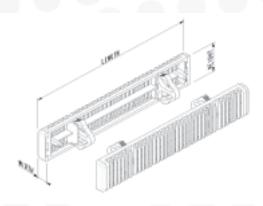
6000 sq.mm

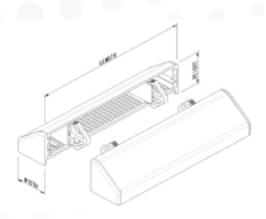
8000 sq.mm





Modular Vent Arrangements



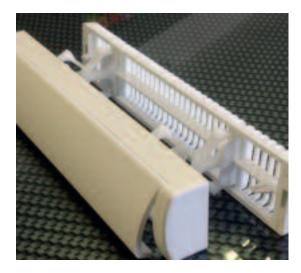


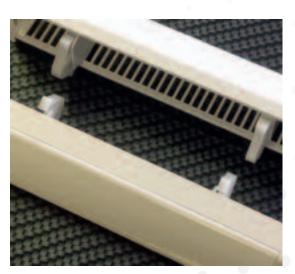












8. Part numbers

		Modular Vents		Combustio	n Air Vents
Colour	Packing	Vent with Grille	Vent with Canopy	Gas Vent with Canopy	Gas Vent with Grille
			2000 Mod	dular Vent	
White		5002000	5202000	5302000	5102000
Brown		5002001	5202001	5302001	5102001
Black		5002002	5202002	5302002	5102002
			4000 Mod	lular Vent	
White		5004000	5204000	5304000	5104000
Brown		5004001	5204001	5304001	5104001
Black	ng	5004002	5204002	5304002	5104002
Oak Brown	Standard packing		5204007		
	ndard	6000 Modu		dular Vent	
White	Stal	5006000	5206000	5306000	5106000
Brown		5006001	5206001	5306001	5106001
Black		5006002	5206002	5306002	5106002
			8000 Mod	dular Vent	
White		5008000	5208000	530800	5108000
Brown		5008001	5208001	5308001	5108001
Black		5008002	5208002	5308002	5108002
Oak Brown			5208007		
		Ви	ılk packed components		
		Modular Vent (Internal)	Modular Grille (External)	Modular Canopy (External)	
White	d sub	5002170B	5002180B	5002200B	
Brown	backe pone	5002171B	5002181B	5002201B	Size: 2000
Black	Bulk packed sub components	5002172B	5002182B	5002202B	
Oak Brown		5002176B	5002186B	5002206B	



Special Applications Combustion air vents



Combustion air vents provide a permanent supply of combustion air to rooms containing fuel-burning appliances which are not room-sealed. Maybe used to meet gas safety regulations and the requirements of Building Regulations Approved Document J1.

Requirements

All open-fluid fuel-burning appliances require an adequate supply of combustion air from the room so that:

- The appliance and its flue operate efficiently.
- Fuel is properly burnt, so harmful fumes are not produced.
- The appliance will not draw oxygen from the air in the room.
- Combustion products are properly vented through the flue to avoid any risk of build up inside the room.

The provision of an adequate air supply is a mandatory requirement of the Building Regulations J1. There is also a legal obligation when installing or servicing appliances to ensure that there is an adequate air supply.

This is particularly important when new windows or doors have been fitted, which are usually weather stripped, so cutting down the 'Infiltration' air supply.

To meet the requirement, a vent should be installed which must not be closeable, should prevent draughts, and must be large enough for the rating of the appliance.

Capacity

Based on Approved Document J1/2/3, one pair of Combustion Air Vents is suitable for:

- Gas appliances up to 18kW (61 000Btu/h) input.
- Solid fuel closed appliances up to 14kW (47 000Btu/h) output.
- Solid fuel open appliances up to 10,000 mm2 throat opening area.
- Oil burning appliances up to 14kW (47 000Btu/h) output.

Part numbers

These can be found on page 20 as they are based on the modular vent.







New Special Applications Overframe Installation



The use of tricklevents through the head of the window either through an additional head section / profile or a specially designed vent profile.

In this application an internal ventilator is fitted and you can chose from the whole of the Glazpart trickle vent range.

Externally a flat grille is used as a canopy may interfere with the operation of opening windows and the canopy would restrict airflow.

Glazpart have a range of flat grille options for each ventilator type, therefore all of the following products are available with a flat grille option.

- Link Vent
- Modular Vent
- Slimline Mk3
- Standard Vents

These vents can be available in any through moulded, sprayed or wood grain finish ventilator colour. The grilles cannot be vacuum foiled. The external grilles are fully tested and compliant to Building regulations as detailed at the end of this brochure.









Special Applications Bi-fold / Patio vent



Glazpart have led the market for special applications developing a flat fly screen (grille) to allow background ventilation to be supplied through operating bi-fold / patio door sets.







Bi-fold / Patio Door Vent 4000

External Grilles & Fly Screens - EQA rating mm ²										
External Grille		Fly screen	Free area		Standard vent model					
			mm ²	2000	4000					
	2000									
	White Brown Black White White Oak Brown Brown Cream 1015 Blue Grey 7016	2000140 2000141 2000142 2000143 2000144 2000145 2000149 2000189 NO PART NUMBER AVAILABLE NO PART NUMBER AVAILABLE	2000	1360 EQA						
vent standard moulded colours	4000									
	White Brown Black White White Oak Brown Blue Grey 7016 Brown Cream 1015	4000140 4000141 4000142 4000143 4000144 4000145 4000147 4000148 4000149 4000152	4000		2700 EQA					

All grilles can have a woodgrain effect finish (Page 10) or through moulded in any ventilator or canopy colour option offered. E.g. Anthracite grey (RAL 7016)

Sash Windows

Specifically designed for sash windows using the slimline trickle ventilator. Glazpart developed an offset clip to allow for lower plaster lines the ventilator is moved vertically relative to the 10mm slot for applications such as sash windows, where space is at a premium. These give offsets of +/- 2mm.









Colour Options Coverage





Ventilator type										
		,	Ventilator:	5	Combu	stion Air	EQA vents			
	Component	Slimline MK3	Standard	Modular	(Canopy type)	(Grille type)	(Clip in type)	(Screw fix type)		
	External Grille (outer face)	~	~	~	~	~	~	~		
Ħ	External Grille (fly screen stands)	~	~	~	~	~	~	~		
Wood grain print	Internal Ventilator (Chassis)	~	~	~	~	~	~	~		
ood gr	Internal Ventilator (Deflector)	~	X	X	X	X	~	~		
Š	Matching colour clips (available)	~	X	~	~	~	~	X		
	Matching colour screw covers	X	~	X	X	X	X	~		

Ventilator type										
		,	/entilator	S	Combu	stion Air	EQA	vents		
Component		Slimline MK3	Standard	Modular	(Canopy type)	(Grille type)	(Clip in type)	(Screw fix type)		
	External Grille (outer face)	~	~	~	~	X	~	~		
act	External Grille (fly screen stands)	X	X	X	X	X	X	X		
Vacuum Foil effect	Internal Ventilator (Chassis)	~	~	~	X	X	~	~		
unm:	Internal Ventilator (Deflector)	~	X	X	X	X	~	~		
Vac	Matching colour clips (available)	~	X	~	~	~	~	X		
	Matching colour screw covers	X	~	X	X	X	X	~		

Ventilator type										
		١	/entilator:	5	Combu	stion Air	EQA vents			
	Component	Slimline MK3	Standard	Modular	(Canopy type)	(Grille type)	(Clip in type)	(Screw fix type)		
	External Grille (outer face)	~	~	~	~	~	~	~		
	External Grille (fly screen stands)	~	~	~	~	~	~	~		
Sprayed (Paint)	Internal Ventilator (Chassis)	~	~	~	X	X	~	~		
prayec	Internal Ventilator (Deflector)	~	X	X	X	X	~	~		
S	Matching colour clips (available)	~	X	~	~	~	~	X		
	Matching colour screw covers	X	~	X	X	X	X	~		

Ventilator type										
		١	/entilator:	5	Combu	stion Air	EQA vents			
Component		Slimline MK3	Standard	Modular	(Canopy type)	(Grille type)	(Clip in type)	(Screw fix type)		
	External Grille (outer face)	~	~	~	~	~	~	~		
olours	External Grille (fly screen stands)	~	~	~	~	~	~	~		
Ilded	Internal Ventilator (Chassis)	~	~	~	~	~	~	~		
Jh mou	Internal Ventilator (Deflector)	~	~	~	~	~	~	~		
Through moulded colours	Matching colour clips (available)	~	X	~	~	~	~	X		
	Matching colour screw covers	X	~	X	X	X	X	~		







Trickle Ventilation Comparison



		Physical Data								P	erforn	nance	Data								
ح		Inte	rnal	rnal External				Assembly													
Part Description	,	Vent	ilato	r		Can	ору			Gr mber door,			эe			(Equiv	Q.A valent ea)		- Open	- Closed	
Part	Height	Length	Depth	Weight	Height	Length	Depth	Weight	Height	Length	Depth	Weight	Attachment type	Rout height	Rout length	Stand width	Canopy	Grille	Cross sectional area	Acoustic value - Open	Acoustic value - Closed
Slimline MK3 2000	18 mm	242 mm	20 mm	40 g	18 mm	242 mm	20 mm	31 g					Spring Clip	10 mm	230 mm	8 mm	1480 mm²		2000 mm ²	37 dB	40 dB
Slimline MK3 4000	18 mm	455 mm	20 mm	74 g	18 mm	455 mm	20 mm	55 g					Spring Clip Spring Clip	10 mm	445 mm	5 mm	2590 mm²		4000 mm ²	33 dB	35 dB
Standard 2000	26 mm	230 mm	24 mm	58 g	26 mm	230 mm	24 mm	50 g	25 mm	230 mm	2 mm	9 g	Screw in	12.5 mm	185 mm	19 mm	1380 mm²	1360 mm ²	2000 mm ²	34 dB	39 dB
Standard 4000	26 mm	440 mm	24 mm	103 g	26 mm	442 mm	24 mm	86 g	25 mm	444 mm	2 mm	18 g	Screw in	12.5 mm	395 mm	19 mm	2580 mm²	2700 mm ²	4000 mm ²	31 dB	36 dB
Modular 2000	26 mm	145 mm	16.5 mm	30 g	26 mm	145 mm	16.5 mm	33 g	26 mm	145 mm	8 mm	12 g	Spring Clip	19 mm	132 mm	na	1293 mm²	1485 mm²	2000 mm ²	34 dB	40 dB
Modular 4000	26 mm	283 mm	16.5 mm	57 g	26 mm	283 mm	16.5 mm	64 g	26 mm	283 mm	8 mm	23 g	Spring Clip	19 mm	270.5 mm	6.5 mm	2585 mm²	2970 mm²	4000 mm ²	31 dB	37 dB
Modular 6000	26 mm	421 mm	16.5 mm	84 g	26 mm	421 mm	16.5 mm	95 g	26 mm	421 mm	8 mm	34 g	Spring Clip	19 mm	409 mm	6.5 mm	3878 mm²	4455 mm²	6000 mm ²	29 dB	35 dB
Modular 8000	26 mm	559 mm	16.5 mm	111 g	26 mm	559 mm	16.5 mm	126 g	26 mm	559 mm	8 mm	45 g	Spring Clip	19 mm	547.5 mm	6.5 mm	5170 mm ²	5940 mm ²	8000 mm²	28 dB	34 dB
Link- Vent 2500	18.5mm	236.5mm	15 mm	28 g	18 mm	236.5mm	37.5 mm	39 g					Clip or Screw	13 mm	204mm		2500 mm²	2500 mm ²	2574 mm²	36 dB	42 dB
Link- Vent 5000	18.5mm	454.5mm	15 mm	59 g	18 mm	454.5mm	37.5 mm	78g					Clip or Screw	13 mm	422mm	14 mm	5000 mm ²	5000 mm ²	5158 mm²	36 dB	40 dB





All dimensions are nominal















Building Regulations 2000: Part F: Approved Document F1: October 2010

Meeting the F1 Building Regulations 2012 for Background Ventilation

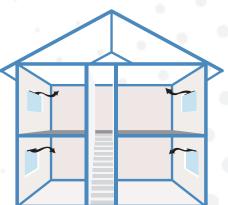
The Building Regulations in England and Wales require 'that there shall be adequate means for ventilation provided for people in the building. It however now differentiates between windows for residential installation in either a Replacement or New build application.

Replacement windows

If the window being removed has trickle vents fitted, then the replacement window should also have them – to the same level of performance.

The ventilators fitted to the replacement window should therefore offer at least the same capacity as the ventilators fitted to the removed window.

Typically these ventilators will be either 4000mm² or 2000mm² in their geometric free area.



Where it is not possible to ascertain the capacity of the outgoing vents;

- Habitable rooms should have a minimum of 5000 mm² EA*
- Wet rooms should have a minimum of 2500 mm² EA*

If the window being removed did not have trickle vents fitted, it is recommended to provide the background ventilation in the replacement window, due to the health benefits.





^{*}Equivalent Area EA, figures will vary for Scotland, Northern Ireland and Eire.





Additional Guidance for Replacement Windows within England and Wales

The Building Regulations Requirement F1 – Means of ventilation, states:

There shall be adequate means of ventilation provided for people in the building.

When assessing a property for replacement windows the following should be considered regarding the use of trickle ventilators and other forms of ventilation within replacement windows:

Trickle ventilators are not mandatory unless the existing windows have them, however it is always good practice to consider their use when replacing windows. Alternatively ventilators may be replaced by an air brick.

Replacement ventilators must be no smaller in geometric open area than the existing ventilators. If the geometric area is not known, habitable rooms should have trickle ventilator of 5000mm² equivalent area and wet rooms should have 2500mm² equivalent area.

Although not mandatory, increasing ventilation by the provision of new or additional ventilators to maintain good air quality should be considered between the supplier and the customer (ref: GGF publication "Advice to consumers regarding ventilation when replacing windows").

Two stage locking handles are an acceptable form of trickle ventilation, where security is not compromised and draughts will not create a problem. This would usually mean not on the ground floor.

The provision of permanent ventilators for combustion appliances is a different matter and compliance with Approved Document J is mandatory

New Houses

Ventilation levels within a house or dwelling are dependent upon a number of factors. Guidance tables can be found within Approved document F – or alternatively ventilator manufacturers maybe able to assist.



















England and Wales*



Basic requirement is 5,000 mm² EQA for a habitable room. Overall calculations are by floor area.

Total equivalent ventilator area (mm²) for a new dwelling with any design air permeability (EQA)

Total floor area (m²)	Number of bedrooms b							
	1	2	3	4	5			
< 50	35000	40000	50000	60000	65000			
51 - 60	35000	40000	50000	60000	65000			
61 - 70	45000	45000	50000	60000	65000			
71 - 80	50000	50000	50000	60000	65000			
81 - 90	55000	60000	60000	60000	65000			
91 - 100	65000	65000	65000	65000	65000			
> 100		Add 7000 mm ² f	or every additional	10 m ² floor area				

Total equivalent ventilator area (mm 2) for a new dwelling with a designed air permeability leakier than (>) 5 m 3 /(h.m1) at 50 Pa (EQA)

Total floor area (m²)	Number of bedrooms b							
	1	2	3	4	5			
< 50	25000	35000	45000	45000	55000			
51 - 60	25000	30000	40000	45000	55000			
61 - 70	30000	30000	30000	45000	55000			
71 - 80	35000	35000	35000	45000	55000			
81 - 90	40000	40000	40000	45000	55000			
91 - 100	45000	45000	45000	45000	55000			
> 100		Add 5000 mm ² f	or every additional	10 m ² floor area				

Notes

This is based on two occupants in the main bedroom and a single occupant in others. For a greater level of occupancy, assume a greater number of bedrooms. For more than five bedrooms, add 10000 mm² per bedroom.







General Guidance Table for Background Ventilation Requirements

Scotland*



These tables are basic and should be read with the regulations as there are additional requirements and allowances.



	Trickle vent (Free Area)
Apartment A ventilator with an opening area of at least 1/30th of the floor area it serves	12,000 mm ²
Kitchen either:	
a. mechanical extraction capable of at least 30 1/sec (intermittent) above a hob [3]; or	10,000 mm ²
b. mechanical extraction capable of at least 60 1/sec (intermittent) if elsewhere [3]; or	10,000 111111-
c. a passive stack ventilation system [4].	
Utility room either:	
a. mechanical extraction capable of at least 30 1/sec (intermittent) [3]; or	10,000 mm ²
c. a passive stack ventilation system [4].	
Bathroom or shower room either:	
a. mechanical extraction capable of at least 15 1/sec (intermittent); or	10,000 mm ²
b. a passive stack ventilation system [4].	
Toilet either:	
a. a ventilator with an opening area of at least 1/30th of the floor area it serves; or	10,000 mm ²
b. mechanical extraction capable of at least 3 air changes per hour.	

^{*}These tables are based on data available at the time of print.

Eire

Basic ventilation provision using background ventilators and extract and purge ventilation									
	General ventilation	Extract ventilation	Purge ventilation						
Room or Space	Minimum equivalent area of background ventilator (mm²)	Extract fan – Minimum extract rate (l/s)	Opening window or external door – Minimum provision h						
Habitable Room	5000	-	1/20th of room floor area						
Kitchen	2500	60 l/s	Window opening section						
Utility Room	2500	30 l/s	Window opening section						
Bathroom	2500	15 l/s	Window opening section						
Sanitary Accommodation (no bath or shower)	2500	6 l/s	Window opening section						















Northern Ireland

Ventilation of rooms direct to external air									
Room	Rapid ventilation opening(s) (minimum free area)	Background ventilation opening(s) (minimum free area)	Mechanical extract ventilation (nominal airflow rates)						
Habitable Room	1/20th of floor area	8000 mm ²	-						
Kitchen	1/20th of floor area	4000 mm ²	30 l/s adjacent to a hob or 60 l/s elsewhere						
Utility Room	1/20th of floor area	4000 mm ²	30 l/s						
Bathroom	1/20th of floor area	4000 mm ²	15 l/s						
Sanitary Accommodation (separate from bathroom)	1/20th of floor area	4000 mm ²	-						

Ventilation of rooms direct to external air									
Room	Rapid ventilation opening(s) (minimum free area)	Background ventilation opening(s) (minimum free area)	Mechanical extract ventilation (nominal airflow rates)						
Occupiable room	1/20th of floor area	for floor areas – –(i) up to 10 m ² - 4000 mm ² (ii) greater than 10 m ² - at the rate of 400 mm ² /m ² of floor area	-						
Kitchen	1/20th of floor area	4000 mm ²	30 l/s adjacent to a hob or 60 l/s elsewhere						
Bathroom (inc. shower room)	1/20th of floor area	4000 mm ²	30 l/s						
Sanitary Accommodation (separate from bathroom)	1/20th of floor area	4000 mm ²	15 l/s						

Useful links for building regulations

England & Wales

www.planningportal.gov.uk/buildingregulations/approveddocuments/partf/

Scotland (Scottish Government)

www.scotland.gov.uk/Topics/Built-Environment/Building/Building-standards/publications/pubtech

Eire

www.environ.ie/en/Publications/DevelopmentandHousing/BuildingStandards/

Northern Ireland

www.dfpni.gov.uk/index/buildings-energy-efficiency-buildings/building-regulations/br-technical-booklets/br-booklet-ventilation.htm





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