

Glazpart Limited

Wildmere Industrial Estate
Banbury
Oxfordshire OX16 3JU

Tel: 01295 264533 Fax: 01295 266699
e-mail: admin@glazpart.co.uk
website: www.glazpart.com

Agrément Certificate
96/3217
Product Sheet 2

GLAZPART TRICKLE VENTILATORS

GLAZPART OVERGLAZ GLAZED-IN VENTILATORS

PRODUCT SCOPE AND SUMMARY OF CERTIFICATE

This Certificate replaces Certificate 93/2976 and relates to Glazpart Overglaz Glazed-In Ventilators. The products are for use in new and existing windows for the provision of trickle ventilation in both domestic and commercial buildings.

AGRÉMENT CERTIFICATION INCLUDES:

- factors relating to compliance with Building Regulations where applicable
- factors relating to additional non-regulatory information where applicable
- independently verified technical specification
- assessment criteria and technical investigations
- design considerations
- installation guidance
- regular surveillance of production
- formal three-yearly review.



KEY FACTORS ASSESSED

Ventilation — the products can contribute to satisfying the natural background ventilation requirements of the national Building Regulations. The equivalent area of the new vents was also determined (see section 5).

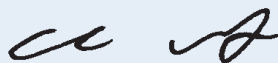
Weathertightness — use of the products will not affect the ability of a wall to comply with national Building Standards (see section 6).

Condensation — the products can contribute to limiting the risk of surface and interstitial condensation (see section 7).

Durability — the products will have a life equivalent to that of the windows into which they are fitted (see section 10).

The BBA has awarded this Agrément Certificate to the company named above for the products described herein. These products have been assessed by the BBA as being fit for their intended use provided they are installed, used and maintained as set out in this Certificate.

On behalf of the British Board of Agrément



Chris Hunt
Head of Approvals — Physics



Greg Cooper
Chief Executive

Date of First issue: 28 January 2010

Originally certificated on 9 February 1996

The BBA is a UKAS accredited certification body — Number 113. The schedule of the current scope of accreditation for product certification is available in pdf format via the UKAS link on the BBA website at www.bbacerts.co.uk

Readers are advised to check the validity and latest issue number of this Agrément Certificate by either referring to the BBA website or contacting the BBA direct.

British Board of Agrément
Bucknalls Lane
Garston, Watford
Herts WD25 9BA

©2010

tel: 01923 665300
fax: 01923 665301
e-mail: mail@bba.star.co.uk
website: www.bbacerts.co.uk

Regulations

In the opinion of the BBA, Glazpart Overglaz Glazed-In Ventilators, if used in accordance with the provisions of this Certificate, will meet or contribute to meeting the relevant requirements of the following Building Regulations:



The Building Regulations 2000 (as amended) (England and Wales)

Requirement: C2(b)(c)	Resistance to moisture
Comment:	Externally mounted components will not affect the ability of a wall to meet this Requirement. See sections 6.5 and 7 of this Certificate.
Requirement: F1	Means of ventilation
Comment:	The products can contribute to meeting this Requirement. See section 5 of this Certificate.
Requirement: Regulation 7	Materials and workmanship
Comment:	The components are acceptable. See section 10 and the <i>Installation</i> part of this Certificate.



The Building (Scotland) Regulations 2004 (as amended)

Regulation: 8(1)	Fitness and durability of materials and workmanship
Comment:	The products can contribute to a construction meeting this Standard. See section 10 and the <i>Installation</i> part of this Certificate.
Regulation: 9	Building standards – construction
Standard: 3.10	Precipitation
Comment:	Externally-mounted components will not affect the ability of a wall to satisfy this Standard, with reference to clauses 3.10.1 ⁽¹⁾⁽²⁾ . See section 6.5 of this Certificate.
Standard: 3.14	Ventilation
Comment:	The products can contribute to satisfying this Standard, with reference to clauses 3.14.1 ⁽¹⁾⁽²⁾ , 3.14.2 ⁽¹⁾⁽²⁾ , 3.14.3 ⁽²⁾ , 3.14.4 ⁽¹⁾⁽²⁾ , 3.14.5 ⁽¹⁾ , 3.14.7 ⁽¹⁾ , 3.14.9 ⁽²⁾ and 3.14.11 ⁽¹⁾ . See section 5 of this Certificate.
Standard: 3.15	Condensation
Comment:	The products will contribute to minimising the risk of surface Condensation, with reference to clause 3.15.1 ⁽¹⁾ . See section 7 of this Certificate.
	(1) Technical Handbook (Domestic).
	(2) Technical Handbook (Non-Domestic).



The Building Regulations (Northern Ireland) 2000 (as amended)

Regulation: B2	Fitness of materials and workmanship
Comment:	The products are acceptable. See section 10 and the <i>Installation</i> part of this Certificate.
Regulation: C4(b)	Resistance to ground moisture and weather
Comment:	Externally mounted components will not affect the ability of a wall to satisfy this Regulation. See section 6.5 of this Certificate.
Regulation: K2	Means of ventilation
Comment:	The products can contribute to satisfying this Regulation. See section 5 of this Certificate.

Construction (Design and Management) Regulations 2007

Construction (Design and Management) Regulations (Northern Ireland) 2007

In the opinion of the BBA, there is no information in this Certificate which relates to the obligations of the client, CDM co-ordinator, designer and contractors under these Regulations.

Non-regulatory Information

NHBC Standards 2008

NHBC accepts the use of Glazpart Overglaz Glazed-In Ventilators, when installed and used in accordance with this Certificate, in relation to *NHBC Standards, Chapter 6.7 Doors, windows and glazing*.

Technical Specification

1 Description

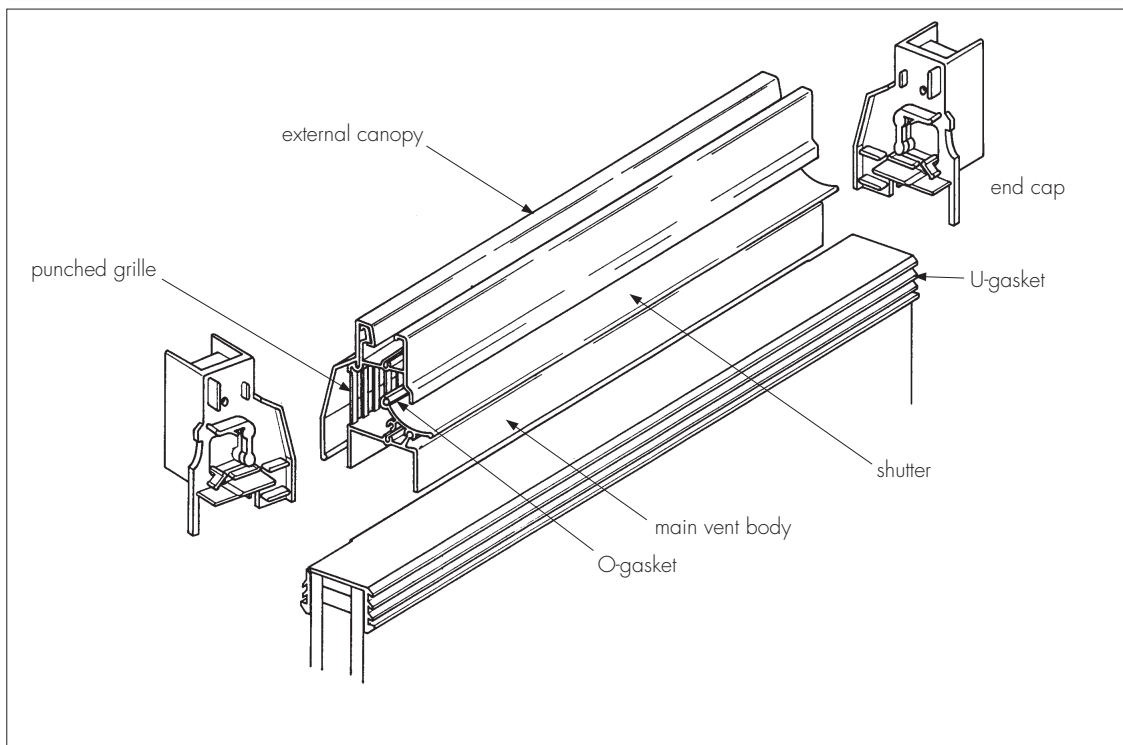
1.1 The range of Glazpart Overglaz Glazed-In Ventilators is suitable for use on 20 mm, 24 mm and 28 mm thick, sealed glazing units (see Table 1). The products are fitted above the glazing unit.

Table 1 Product range

Model vent	Glazing thickness (mm)
OGVB-20	20
OGVB-24	24
OGVB-28	28

1.2 The products are assembled from three separate aluminium sections, each with a polyester paint finish in white, brown or black. Plastic end caps are supplied in the same colours, and with screws for fixing to the main vent body. A U-gasket is also supplied (see Figure 1).

Figure 1 Overglaz ventilator



1.3 All components are subject to regular inspection during production, checks include dimensions and fit. All finished products are subject to regular inspection for function.

2 Delivery and site handling

2.1 The products are delivered to site, sealed in polythene tubes in cardboard packs.

2.2 The products should be kept in clean, dry surroundings and protected from mechanical damage.

Assessment and Technical Investigations

The following is a summary of the assessment and technical investigations carried out on Glazpart Overglaz Glazed-In Ventilators.

Design Considerations

3 Use

3.1 The products, when used in aluminium or PVC-U windows, will provide the required trickle ventilation while maintaining weathertightness.

3.2 The opening area for each ventilator in the range is given in Table 2.

Model	Opening area (mm ² per metre length)
OGVB-20	8000
OGVB-24	10000
OGVB-28	10000

3.3 When tested in accordance with BS EN 20140-10 : 1992, and mounted in an aperture within a brick dividing wall, the ventilators showed $D_{n,e,w}$ (C_{tr}) values with a difference in a range from 2 dB to 5 dB between opened and closed positions respectively. The total sound insulation achieved in practice will be dependent upon the structure within which the ventilator is located and the position of the ventilator in the structure.

4 Practicability of installation

The products are designed to be installed by a competent general builder, or a contractor, experienced with these types of products.

5 Ventilation



The use of appropriate ventilators, chosen in accordance with the equivalent areas, EQA (based on measurement to BS EN 13141-1 : 2004) detailed in Table 3 will contribute to satisfying the background ventilation requirements of the national Building Regulations:

England and Wales — Approved Document F

Scotland — Mandatory Standard 3.14, clauses 3.14.1⁽¹⁾⁽²⁾, 3.14.2⁽¹⁾⁽²⁾, 3.14.3⁽²⁾, 3.14.4⁽¹⁾⁽²⁾, 3.14.5⁽¹⁾, 3.14.7⁽¹⁾, 3.14.9⁽²⁾ and 3.14.11⁽¹⁾

(1) Technical Handbook (Domestic).

(2) Technical Handbook (Non-Domestic).

Northern Ireland — Technical Booklet K.

Table 3 Equivalent area (based on measurement⁽¹⁾ to BS EN 13141-1 : 2004)

Model	Equivalent area (mm ² ·m ⁻¹) at 1 Pa pressure difference
OGVB-24	5150
OGVB-28	6220

(1) The EQA test was performed on a 500 mm long OGVB vent sample, with end caps fitted. The effective length without the end caps is 450 mm. Therefore, the result was then multiplied by a factor of 2.22 to achieve an EQA per metre length of the OGVB vent.

6 Weathertightness

6.1 The inclusion of a trickle ventilator in a window will affect its air permeability and may affect the watertightness, two of the factors that determine the exposure category (as defined in BS 6375-1 : 2004) assigned to the window.

6.2 The products were tested for air permeability under the test conditions set out in BS 5368-1 : 1976, the results are given in Table 4.

Table 4 Air permeability test results

Pressure (Pa)	Air leakage (m ³ ·h ⁻¹) ⁽¹⁾
50	0.3
100	0.5
150	0.6
200	0.7
250	0.3
300	0.3
400	0.3
500	0.2
600	<0.5

(1) Ventilator length 0.87 m.

6.3 When considering the air permeability of a window in which the product is installed, the figures given in Table 4 should be added to the results obtained for the window alone, when tested for air permeability in accordance with BS 5368-1 : 1976 or MOAT No 1 : 1974.

6.4 The products were tested for watertightness in accordance with the test conditions set out in BS 5368-2 : 1980. The gradings determined in accordance with BS 6375-1 : 1989 and MOAT No 1 : 1974, are given in Table 5.

Table 5 Watertightness gradings

Ventilator	Pressure at which leakage occurred (Pa)	BS 6375-1 Test pressure class	MOAT No 1 : 1974 Watertightness class
Vent — main grille	No leakage at 600	300	E ₄ ⁽¹⁾

(1) E₄ indicates no water leakage occurring at a differential pressure of 500 Pa.



6.5 Use of the products will not affect the ability of a wall or roof to comply with national Building standards:

England and Wales — Approved Document C

Scotland — Mandatory Standard 3.10, clauses 3.10.1⁽¹⁾(2)

(1) Technical Handbook (Domestic).

(2) Technical Handbook (Non-Domestic).

Northern Ireland — Technical Booklet C.

7 Condensation



The use of the products can reduce the risk of surface condensation and contribute to satisfying the requirements of the national Building Standards:

England and Wales — Approved Document C

Scotland — Mandatory Standard 3.15, clause 3.15.1⁽¹⁾.

(1) Technical Handbook (Domestic).

8 Security

Provided the products are appropriately located (ie away from such features as handles, catches) they will not affect the security of the windows in which they are installed.

9 Maintenance

As the products are confined within the window and it has suitable durability (see section 10), maintenance is not required.

10 Durability



The products will have a life equivalent to that of the windows into which they are fitted.

Installation

11 General

Installation of Glazpart Overglaz Glazed-In Ventilators does not present difficulties, provided the installation instructions are followed.

12 Procedure

12.1 To accommodate the height of the ventilator, the glazing unit over which it is to be fitted must be reduced by 50 mm. The extrusions which make up the ventilator housing unit sub-assembly are cut, in one operation, to an overall length which is 46 mm less than the width of the glazing unit onto which it will be fitted.

12.2 End caps are attached to each end of the ventilator body with the screws provided and with the shutter in the open position to allow the end springs to engage.

12.3 The U-gasket is cut and fitted over the glazing unit and the ventilator placed over. The U-gasket must be correctly located between the glass and the ventilator, particularly at the end caps. The use of silicone sealant is recommended. The finished assembly is then glazed into the window frame as for a normal full-size glazing unit.

Technical Investigations

13 Tests

Tests were carried out on Glazpart Overglaz Glazed-In Ventilators to determine:

- air permeability
- watertightness
- scratch resistance
- cross-cut adhesion
- resistance to accelerated ageing
- resistance to sulfur dioxide
- coating film thickness.

14 Investigations

14.1 A re-examination was made of existing data on which the original Certificate was based.

14.2 Regular factory inspections have been carried out to ensure that quality is being maintained.

14.3 The effect of the installation of the ventilators on security against intrusion was assessed.

14.4 The durability of the ventilators, especially those components externally exposed, was assessed on the basis of the testing detailed in this product sheet.

14.5 Independent data relating to air permeability and water penetration were examined.

14.6 An examination was carried out on the equivalent areas of the vents to BS EN 13141-1 : 2004.

Bibliography

BS 5368-1 : 1976 *Methods of testing windows — Air permeability test*

BS 5368-2 : 1980 *Methods of testing windows — Watertightness test under static pressure*

BS 6375-1 : 1989 *Performance of windows — Classification for weathertightness (including guidance on selection and specification)*

BS 6375-1 : 2004 *Performance of windows and doors — Classification of weathertightness and guidance on selection and specification*

BS EN 13141-1 : 2004 *Ventilation for buildings — Performance testing of components/products for residential ventilation — Externally and internally mounted air transfer devices*

BS EN 20140-10 : 1992 *Acoustics — Measurement of sound insulation in buildings and of building elements — Laboratory measurement of room to room airborne sound insulation of small building elements*

MOAT No 1 : 1974 *Directive for the Assessment of Window*

15 Conditions

15.1 This Certificate:

- relates only to the product/system that is named and described on the front page
- is granted only to the company, firm or person named on the front page — no other company, firm or person may hold or claim any entitlement to this Certificate
- is valid only within the UK
- has to be read, considered and used as a whole document — it may be misleading and will be incomplete to be selective
- is copyright of the BBA
- is subject to English law.

15.2 Publications and documents referred to in this Certificate are those that the BBA deems to be relevant at the date of issue or re-issue of this Certificate and include any: Act of Parliament; Statutory Instrument; Directive; Regulation; British, European or International Standard; Code of Practice; manufacturers' instructions; or any other publication or document similar or related to the aforementioned.

15.3 This Certificate will remain valid for an unlimited period provided that the product/system and the manufacture and/or fabrication including all related and relevant processes thereof:

- are maintained at or above the levels which have been assessed and found to be satisfactory by the BBA
- continue to be checked as and when deemed appropriate by the BBA under arrangements that it will determine
- are reviewed by the BBA as and when it considers appropriate.

15.4 In granting this Certificate, the BBA is not responsible for:

- the presence or absence of any patent, intellectual property or similar rights subsisting in the product/system or any other product/system
- the right of the Certificate holder to manufacture, supply, install, maintain or market the product/system
- individual installations of the product/system, including the nature, design, methods and workmanship of or related to the installation
- the actual works in which the product/system is installed, used and maintained, including the nature, design, methods and workmanship of such works.

15.5 Any information relating to the manufacture, supply, installation, use and maintenance of this product/system which is contained or referred to in this Certificate is the minimum required to be met when the product/system is manufactured, supplied, installed, used and maintained. It does not purport in any way to restate the requirements of the Health & Safety at Work etc Act 1974, or of any other statutory, common law or other duty which may exist at the date of this Certificate; nor is conformity with such information to be taken as satisfying the requirements of the 1974 Act or of any statutory, common law or other duty of care. In granting this Certificate, the BBA does not accept responsibility to any person or body for any loss or damage, including personal injury, arising as a direct or indirect result of the manufacture, supply, installation, use and maintenance of this product/system.