



## Rytons Building Products Ltd

Design House  
Kettering Business Park  
Kettering  
Northants NN15 6NL  
Tel: 01536 511874 Fax: 01536 310455  
e-mail: vents@rytons.com  
website: www.vents.co.uk

CI/SfB

(21.9) Xn6

**Agrément  
Certificate  
No 89/2321**  
*Fifth issue\**

Designated by Government  
to issue  
European Technical  
Approvals

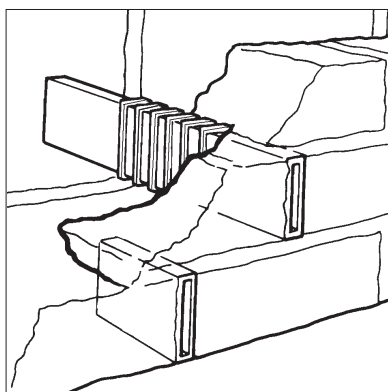
## RYTONS CAVITY, THROUGH-WALL AND UNDERFLOOR VENTILATORS AND DRAINAGE DUCTS

Gaine d'aération  
Ventilations-öffnungen

### Product


• *THIS CERTIFICATE REPLACES CERTIFICATE No 85/1432 AND RELATES TO RYTONS CAVITY, THROUGH-WALL AND UNDERFLOOR VENTILATORS AND DRAINAGE DUCTS.*

- *The ventilators are for use as ventilation ducts for wall cavities and sub-floor voids.*
- *Rytons Weep Hole Duct and Rytweep are used for forming weep holes.*
- *Rytons Wall Weep is used for draining a retaining wall.*




### Regulations


#### 1 The Building Regulations 2000 (England and Wales)

 In the opinion of the British Board of Agrément, there are no requirements in the Regulations relating to the use of these products. However, the ventilators may be used to provide ventilation to a ventilated space as referred to in these Regulations.

#### 2 The Building Standards (Scotland) Regulations 1990 (as amended)

 In the opinion of the BBA, there are no requirements in the Regulations relating to the use of these products. However, the ventilators may be used to provide ventilation to a ventilated space as referred to in Part G of these Regulations.

#### 3 The Building Regulations (Northern Ireland) 2000

 In the opinion of the BBA, there are no requirements in the Regulations relating to the use of these products. However, the ventilators may be used to provide ventilation to a ventilated space as referred to in these Regulations.

#### 4 Construction (Design and Management) Regulations 1994 (as amended) Construction (Design and Management) Regulations (Northern Ireland) 1995 (as amended)

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

### Technical Specification

#### 5 General

5.1 Rytons Cavity, Through-wall and Underfloor Ventilators and Drainage Ducts are manufactured from suitable grades of thermoplastic to the nominal dimensions given in Table 1 (see also Figure 1).

5.2 Rytons Multifix Air Brick (MFAB) may also be used in conjunction with an expandable periscope sleeve in the Rytons Periscope Underfloor

Ventilator (PUFV), to vertically adjust through two to five brick courses (can also be cut to suit one brick course) and Rytons Telescopic Airliners (TCL8000 and TCL16000).

#### 6 Delivery and site handling

6.1 Products are delivered to site in boxes bearing labels incorporating details of the contents.

6.2 Products should be stored in a clean, dry place out of direct sunlight until ready for use.

Table 1 Nominal dimensions (mm)

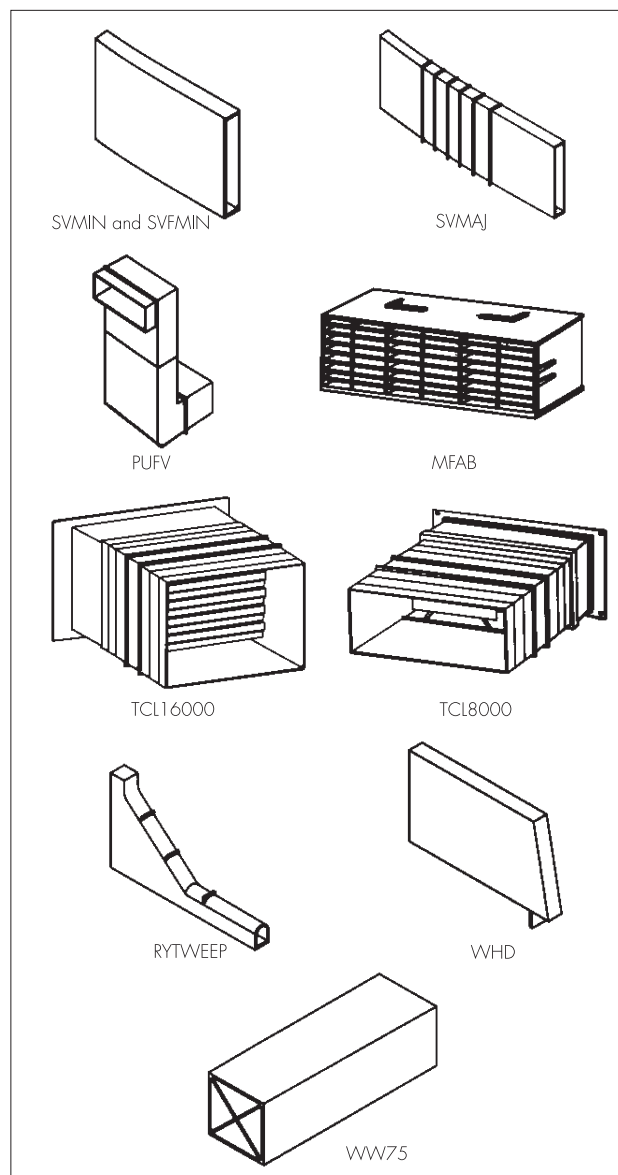
Item	Length	Height	Width	Colour <sup>(1)</sup>
Rytons Slim Vent Major (SVMAJ)	304	66	10	CL
Rytons Slim Vent Minor (SVMIN)	102	66	10	G, W, BS, T, B, DB
Rytons Flyscreened Slim Vent Minor (SVFMIN)	103	66	10	G, W, BS, T, B, DB
Rytons Wall Weep (WW75)	500	75	75	BS, T
Rytons Weep Hole Duct (WHD)	100 top 107 bottom	65	10	W, BS, T, B, DB, G
Rytons Rytweep (RYTWEEP)	101	66	10	BS, T, CL
Rytons Multifix Air Brick (MFAB)	215	66	58	G, B, W, BS, T, DB, BL
Rytons Periscope Underfloor Ventilator (PUFV)	250 <sup>(2)</sup>	up to 368	218	B
Rytons 9 by 3 Telescopic AirLiner (TCL8000)	220 <sup>(3)</sup>	71 <sup>(3)</sup>	250 to 350 <sup>(3)</sup>	B
Rytons 9 by 6 Telescopic AirLiner (TCL16000)	220 <sup>(3)</sup>	139 <sup>(3)</sup>	250 to 350 <sup>(3)</sup>	B

- (1) B = Black  
 BL = Blue/Black  
 BS = Buff/Sand  
 CL = Clear  
 DB = Dark Brown  
 G = Grey  
 T = Terracotta  
 W = White.

(2) Including MFAB fitted.

(3) Excluding flange.

Figure 1 Product details



## Design Data

### 7 General

7.1 Rytons Slim Vent Minor (SVMIN), Rytons Flyscreened Slim Vent Minor (SVFMIN) and Rytons Multifix Air Brick (MFAB) are suitable for use as ventilating ducts in cavity walls, and, where appropriate, NHBC Standards, Chapters 6.1 and 6.2 and Zurich Building Guarantees Technical Standards, Volume 2.

7.2 Rytons Wall Weep (WW75) is suitable for use in draining a retaining wall.

7.3 Rytons Weep Hole Duct (WHD), Rytons Rytweep (RYTWEEP), Rytons Slim Vent Minor (SVMIN), Rytons Flyscreened Slim Vent Minor (SVFMIN) and Rytons Slim Vent Major (SVMAJ) are suitable for forming weep holes.

7.4 Rytons Slim Vent Major (SVMAJ) and Multifix Air Brick (MFAB), in conjunction with Rytons

Periscope Underfloor Ventilator (PUFV) or Telescopic Airliners (TCL8000 or TCL16000), are suitable for use as ventilating ducts for sub-floor voids and, where appropriate, NHBC Standards, Chapter 5.2 and Zurich Building Guarantees Technical Standards, Volume 1.

### 8 Weathertightness

8.1 The top and bottom internal surfaces of both Rytons Slim Vent Major (SVMAJ) and Slim Vent Minor (SVMIN and SVFMIN) are tapered to the outside and incorporate internal water baffles to prevent the ingress of water. The Slim Vent Major incorporates external water baffles to prevent water transfer across the wall cavity space (see Figure 1).

8.2 Rytons Multifix Air Brick (MFAB) incorporates a louvre screen and internal water baffles to prevent water ingress.

8.3 Rytons Weep Hole Duct (WHD) incorporates an external hood to prevent water ingress.

## 9 Effective ventilation efficiency

Effective free area, or geometric free air characteristics of the vents calculated on an airflow/pressure drop basis are given in Table 2.

Table 2 Characteristics

Area (mm <sup>2</sup> )	Item type			
	SVMIN	SVFMIN	SVMAJ	MFAB
outer face	650	650	650	14539
geometric area of inlet	330	220	330	7750
equivalent effective free	330	220	330	7750

## 10 Application rate

10.1 For the ventilation of wall cavities, Rytons Slim Vent Minor (SVMIN), and Rytons Flyscreened Slim Vent Minor (SVFMIN) when evenly spaced, approximately every third or second brick respectively, at the top and the bottom of the cavity will assist in drying out of the walls. The lower ventilators should be placed below the damp-proof course, unless cavity trays are used when they should be positioned above the tray.

10.2 Rytons Weep Hole Duct (WHD), Rytons Rytweep (RYTWEEP), Rytons Slim Vent Minor (SVMIN), Rytons Flyscreened Slim Vent Minor (SVFMIN) and Rytons Slim Vent Major (SVMAJ) when spaced every fourth brick can be used for draining cavities above and below the damp-proof course, and above lintels and cavity trays. At least two weep holes should be provided over an opening, ie lintel.

10.3 When siting vents above and below horizontal fire stops, ensure that the vents are vertically staggered.

10.4 Where a cavity wall incorporates insulation, Rytons Slim Vent Major (SVMAJ) or Multifix Air Brick (MFAB) in conjunction with Rytons Telescopic Airliners (TCL8000 or TCL16000) or Rytons Periscope Underfloor Ventilator (PUFV) can be used to span the cavity and provide an airflow across the cavity, without breaking the cavity seal.

10.5 For raised floor constructions, Rytons Slim Vent Major (SVMAJ) or Multifix Air Brick (MFAB) in conjunction with Rytons Telescopic Airliners (TCL8000 or TCL16000) can be used to span the cavity and provide ventilation to the void beneath the floor. For other constructions, Rytons Periscope Underfloor Ventilator (PUFV) may be used in conjunction with Rytons Multifix Air Brick (MFAB). In either case the application rate should be:

(a) For England and Wales, the Slim Vent Major should be placed at a rate of not less than nine units per two metre run of external wall, and the Multifix Air Brick at a rate of not less than one unit per two-and-a-half metre run of external wall.

(b) For Scotland, the Slim Vent Major should be placed at a rate of not less than nine units per two

metre run of external wall, and the Multifix Air Brick at a rate of not less than one unit per two-and-a-half metre run of external wall.

(c) For Northern Ireland, the Slim Vent Major should be placed at a rate of not less than nine units per two metre run of external wall, and the Multifix Air Brick at a rate of not less than one unit per five metre run of external wall.

10.6 The application rate equates to approximately 1500 mm<sup>2</sup> per metre run of external wall.

## 11 Durability

On the basis of knowledge of the material used, the vents will remain effective as ventilating ducts during the life of the wall into which they are built.

## Installation

## 12 General

12.1 Rytons Cavity, Through-wall and Underfloor Ventilators and Drainage Ducts do not require any special fixings. They are incorporated in the brickwork or blockwork during the normal course of laying.

12.2 If necessary the products can be cut easily with a fine-tooth saw.

12.3 The front face of the products should be aligned with the brickwork face.

12.4 Rytons Wall Weep should be installed in accordance with BRE *Good Building Guide* No 27.

## Technical Investigations

The following is a summary of the technical investigations carried out on Rytons Cavity, Through-wall and Underfloor Ventilators and Drainage Ducts.

## 13 Tests

Samples of the products were obtained from the manufacturer for the purpose of testing. Tests were carried out to include:

- ash content
- density
- stress relief
- Vicat softening point
- impact
- effect of UV and heat ageing
- risk of blockage
- minimum geometric area.

## 14 Other investigations

As part of the assessment leading to the first issue of this Certificate, the following investigations were conducted:

- An examination was made of the data on which the previous Certificate was based. This included an assessment of the practicability of installation and reports of visits to sites to assess performance in use. The conclusions drawn remain valid.
- The manufacturing process was examined, including the methods adopted for quality control.
- A survey of users of the product was carried out to assess performance in use.

## Conditions of Certification

### 15 Conditions

15.1 This Certificate:

- (a) relates only to the product that is described, installed, used and maintained as set out in this Certificate;
- (b) is granted only to the company, firm or person identified on the front cover — no other company, firm or person may hold or claim any entitlement to this Certificate;
- (c) has to be read, considered and used as a whole document — it may be misleading and will be incomplete to be selective;
- (d) is copyright of the BBA.

15.2 References in this Certificate to any Act of Parliament, Regulation made thereunder, Directive or Regulation of the European Union, Statutory Instrument, Code of Practice, British Standard, manufacturers' instructions or similar publication, shall be construed as references to such publication in the form in which it was current at the date of this Certificate.

15.3 This Certificate will remain valid for an unlimited period provided that the product and the manufacture and/or fabricating process(es) thereof:

- (a) are maintained at or above the levels which have been assessed and found to be satisfactory by the BBA;
- (b) continue to be checked by the BBA or its agents; and
- (c) are reviewed by the BBA as and when it considers appropriate.

15.4 In granting this Certificate, the BBA makes no representation as to:

- (a) the presence or absence of any patent or similar rights subsisting in the product or any other product;
- (b) the right of the Certificate holder to market, supply, install or maintain the product; and
- (c) the nature of individual installations of the product, including methods and workmanship.

15.5 Any recommendations relating to the use or installation of this product which are contained or referred to in this Certificate are the minimum standards required to be met when the product is used. They do 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 or in the future; nor is conformity with such recommendations to be taken as satisfying the requirements of the 1974 Act or of any present or future 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 installation and use of this product.



In the opinion of the British Board of Agrément, Rytons Cavity, Through-wall and Underfloor Ventilators and Drainage Ducts are fit for their intended use provided they are installed, used and maintained as set out in this Certificate. Certificate No 89/2321 is accordingly awarded to Rytons Building Products Ltd.

On behalf of the British Board of Agrément

Date of Fifth issue: 27th February 2002

Chief Executive

*\*Original Certificate issued 17th October 1989. This revised version includes reference to the revised Building Regulations, an additional product and new Conditions of Certification.*