

Rytons Building Products Ltd

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Agrément Certificate
11/4866
Product Sheet 1

RYTONS VENTILATORS

RYTONS VENTILATORS FOR WALL CAVITIES, UNDERFLOOR VOIDS AND CUPBOARDS AND RYTONS DRAINAGE DUCTS

PRODUCT SCOPE AND SUMMARY OF CERTIFICATE

This Certificate replaces Certificate 89/2321 and relates to Rytons Ventilators for Wall Cavities, Underfloor Voids and Cupboards and Rytons Drainage Ducts for use as ventilation ducts for wall cavities, sub-floor voids and cupboards. Rytons Weep Hole Duct and Rytons Rytweep⁽¹⁾ are used for forming weep holes.

(1) Rytons Rytweep is a registered trademark of Rytons Building Products Ltd.

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 provide ventilation to wall cavities, sub-floor voids and cupboards (see section 5).

Durability — the products will remain effective as ventilating ducts during the life of the wall/door into which they are built (see section 8).



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

A handwritten signature in black ink, reading 'Sean Moriarty'.

Sean Moriarty
Head of Approvals — Physics

A handwritten signature in black ink, reading 'Greg Cooper'.

Greg Cooper
Chief Executive

Date of First issue: 19 September 2011

Originally certificated on 17 October 1989

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.

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Regulations



The Building Regulations 2010 (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.



The Building (Scotland) Regulations 2004 (as amended)

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.



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

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.

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 to address their obligations under these Regulations.

Non-regulatory Information

NHBC Standards 2011

NHBC accepts the use of the Rytons Ventilators for Wall Cavities, Underfloor Voids and Cupboards and Rytons Drainage Ducts when installed and used in accordance with this Certificate in relation to *NHBC Standards*, Chapters 5.2 *Suspended ground floors*, 6.1 *External masonry walls* and 6.2 *External timber framed walls*.

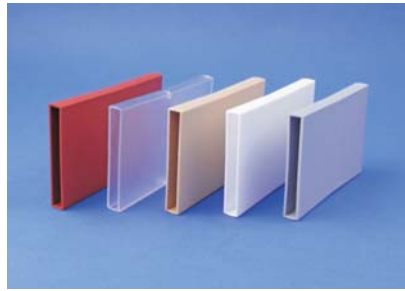
Technical Specification

1 Description

1.1 Rytons Ventilators for Wall Cavities, Underfloor Voids and Cupboards and Rytons Drainage Ducts are manufactured from suitable grades of thermoplastic to the nominal dimensions given in Table 1 (see also Figure 1).



SVMAJ



SVMIN and SVFMIN



WHD



RYTWEEP



RTV250CL



MFAB



PUFV



LV47, LV25F



LV103, LV74F



LV88, LV68F



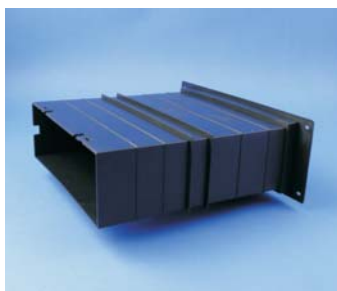
LV177, LV137F



LV265, LV205F



CV60FBG



TCL8000/TAL4000



TCL18000/TAL8000



TCL20000/TAL9900

Table 1 Product range and nominal dimensions (see Figure 1)

Item/Code	Length (mm)	Height (mm)	Width (mm)	Colour
Rytons Slim Vent ⁽¹⁾ Major (SVMMAJ)	304	66	10	clear
Rytons Slim Vent Minor (SVMIN)	102	66	10	grey, white, buff/sand, terracotta, clear
Rytons Flyscreened Slim Vent Minor (SVFMIN)	103	66	10	grey, white, buff/sand, terracotta, black, clear
Rytons Weep Hole Duct (WHD)	100 top 107 bottom	65	10	buff/sand, terracotta
Rytons Rytweep (RYTWEEP)	101	66	10	grey, buff/sand, terracotta, black, clear
Rytons Retro Weep Vent (RTV250CL)	80 ⁽²⁾	26 diameter	—	clear
Rytons Multifix ⁽¹⁾ Air Brick (MFAB)	215	66	58	grey, white, buff/sand, terracotta, black, dark brown, blue/black
Rytons Periscope ⁽¹⁾ Underfloor Ventilator (PUFV)	250 ⁽³⁾	up to 368	218	black
Rytons Louvre Ventilator 6 x 3 (LV47) with Flyscreen (LV25F)	11	94	155	white (white flyscreen)
Rytons Louvre Ventilator 6 x 6 (LV103) with Flyscreen (LV74F)	20	160	166	white, buff/sand, terracotta, black, brown (white flyscreen)
Rytons Louvre Ventilator 9 x 3 (LV88) with Flyscreen (LV68F)	12	95	271	white, terracotta, brown (white flyscreen)
Rytons Louvre Ventilator 9 x 6 (LV177) with Flyscreen (LV137F)	12	171	271	white, brown (white flyscreen)
Rytons Louvre Ventilator 9 x 9 (LV265) with Flyscreen (LV205F)	12	247	271	white, brown (white flyscreen)
Rytons RytAround Ventilator (CV60FBG)	13.5	156 (overall external diameter)	—	white (white flyscreen)
Rytons 9 x 3 Telescopic AirLiner ⁽¹⁾ (TCL8000)	230–348 ⁽⁴⁾	71 ⁽²⁾	220 ⁽²⁾	black
Rytons 9 x 6 Telescopic AirLiner (TCL18000)	230–384 ⁽⁴⁾	140 ⁽²⁾	220 ⁽²⁾	black
Rytons 9 x 9 Telescopic AirLiner (TCL20000)	230–384 ⁽⁴⁾	207 ⁽²⁾	220 ⁽²⁾	black
Rytons 9 x 3 Acoustic AirLiner (TAL4000)	230–384 ⁽⁴⁾	71 ⁽²⁾	220 ⁽²⁾	black
Rytons 9 x 6 Acoustic AirLiner (TAL8000)	230–384 ⁽⁴⁾	140 ⁽²⁾	220 ⁽²⁾	black
Rytons 9 x 9 Acoustic AirLiner (TAL9900)	230–384 ⁽⁴⁾	207 ⁽²⁾	220 ⁽²⁾	black

(1) Rytons Slim Vent, Multifix, Periscope and AirLiner are registered trademarks of Rytons Building Products Ltd.

(2) Excluding flange.

(3) Including MFAB fitted.

(4) Excluding MFAB.

1.2 Quality control is exercised over raw materials, during production and on the final products.

2 Delivery and site handling

2.1 The products are delivered in cardboard boxes bearing labels incorporating details of the contents.

2.2 The products should be stored in clean, dry surroundings out of direct sunlight until ready for use, and protected from mechanical damage.

Assessment and Technical Investigations

The following is a summary of the assessment and technical investigations carried out on Rytons Ventilators for Wall Cavities, Underfloor Voids and Cupboards and Rytons Drainage Ducts.

3 Use

3.1 Rytons Slim Vent Minor (SVMIN), Rytons Flyscreened Slim Vent Minor (SVFMIN), Rytons Multifix Air Brick (MFAB) and Rytons Retro Weep Vent (RTV250CL) are suitable for use as ventilating ducts in cavity walls, and, where appropriate, *NHBC Standards 2011*, Chapters 6.1 and 6.2.

3.2 Rytons Weep Hole Duct (WHD), Rytons Rytweep (RYTWEEP), Rytons Slim Vent Minor (SVMIN), Rytons Flyscreened Slim Vent Minor (SVFMIN), Rytons Slim Vent Major (SVMAJ) and Rytons Retro Weep Vent (RTV250CL) are suitable for forming weep holes.

3.3 Rytons Slim Vent Major (SVMAJ) and Multifix Air Brick (MFAB), in conjunction with Rytons Periscope Underfloor Ventilator (PUFV) or Telescopic AirLiner (TCL8000), are suitable for use as ventilating ducts for sub-floor voids and, where appropriate, *NHBC Standards 2011*, Chapter 5.2. Rytons Periscope Underfloor Ventilator (PUFV) can be vertically adjusted through two to five brick courses (can also be cut to suit one brick course).

3.4. Externally mounted Louvre Ventilators and Multifix Air Bricks are suitable for use in conjunction with Rytons AirLiners and internally mounted Louvre Ventilators. They can be installed in brick and blockwork during construction. For NHBC constructions a cavity tray will normally be required, unless otherwise protected, eg by overhanging eaves.

3.5 Louvre Ventilators are also suitable for use in internal walls or doors of small spaces, for example cupboards.

3.6 The ventilators with flyscreens must not be used for the provision of combustion and cooling air for combustion appliances.

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

5.1 The geometric free areas of the vents are given in Table 2.

Table 2 Characteristics

Item/Code	Geometric free area of inlet (mm ²)
Rytons Slim Vent Minor (SVMIN)	330 ⁽¹⁾
Rytons Flyscreened Slim Vent Minor (SVFMIN)	220 ⁽¹⁾
Rytons Slim Vent Major (SVMAJ)	330 ⁽¹⁾
Rytons Multifix Air Brick (MFAB)	7750 ⁽¹⁾
Rytons Retro Weep Vent (RTV250CL)	250 ⁽¹⁾
Rytons Louvre Ventilator 6 x 3 (LV47)	4750
Rytons Louvre Ventilator 6 x 3 with Flyscreen (LV25F)	2570
Rytons Louvre Ventilator 6 x 6 (LV103)	10360
Rytons Louvre Ventilator 6 x 6 with Flyscreen (LV74F)	6420
Rytons Louvre Ventilator 9 x 3 (LV88)	8800
Rytons Louvre Ventilator 9 x 3 with Flyscreen (LV68F)	6600
Rytons Louvre Ventilator 9 x 6 (LV177)	17760
Rytons Louvre Ventilator 9 x 6 with Flyscreen (LV137F)	13300
Rytons Louvre Ventilator 9 x 9 (LV265)	26500
Rytons Louvre Ventilator 9 x 9 with Flyscreen (LV205F)	20000
Rytons RytAround Ventilator (150 mm) (without flyscreen)	8900 ⁽²⁾
Rytons RytAround Ventilator (150 mm) (flyscreened)	6060 ⁽²⁾
Rytons RytAround Ventilator (125 mm) (without flyscreen)	7618 ⁽²⁾
Rytons RytAround Ventilator (125 mm) (flyscreened)	4640 ⁽²⁾
Rytons RytAround Ventilator (100 mm) (without flyscreen)	4870 ⁽²⁾
Rytons RytAround Ventilator (100 mm) (flyscreened)	2910 ⁽²⁾
Rytons 9 x 3 Telescopic AirLiner (TCL8000)	8000 ⁽³⁾
Rytons 9 x 6 Telescopic AirLiner (TCL18000)	13000 ⁽⁴⁾
Rytons 9 x 9 Telescopic AirLiner (TCL20000)	19800 ⁽⁵⁾
Rytons 9 x 3 Acoustic AirLiner (TAL4000)	4000 ⁽³⁾
Rytons 9 x 6 Acoustic AirLiner (TAL8000)	8100 ⁽⁴⁾
Rytons 9 x 9 Acoustic AirLiner (TAL9900)	6500 ⁽⁵⁾

(1) Of inlet.

(2) Maximum dependant on type/thickness of tube.

(3) Excludes baffle area, approx 4200 mm².

(4) Excludes baffle area, approx 1023 mm².

(5) Excludes baffle area, approx 1637 mm².

Application rate

5.2 For the ventilation of wall cavities, Rytons Slim Vent Minor (SVMIN), Rytons Flyscreened Slim Vent Minor (SVFMIN) and Rytons Retro Weep Vent (RTV250CL) 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 (dpc), unless cavity trays are used when they should be positioned above the tray.

5.3 Rytons Weep Hole Duct (WHD), Rytons Rytweep (RYTWEEP), Rytons Slim Vent Minor (SVMIN), Rytons Flyscreened Slim Vent Minor (SVFMIN), Rytons Slim Vent Major (SVMAJ) and Rytons Retro Weep Vent (RTV250CL) when spaced every fourth brick can be used for draining cavities above and below the dpc, and above lintels and cavity trays. At least two weep holes should be provided over an opening, ie lintel.

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

5.5 Where a cavity wall incorporates insulation, Rytons Slim Vent Major (SVMAJ) or Rytons Multifix Air Brick (MFAB) in conjunction with Rytons Telescopic AirLiner (TCL8000) 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.

5.6 For raised floor constructions, Rytons Slim Vent Major (SVMAJ) or Rytons Multifix Air Brick (MFAB) in conjunction with Rytons Telescopic AirLiner (TCL8000) 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:

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

5.7 The application rate equates to approximately 1500 mm² per metre run of external wall.

6 Weathertightness

6.1 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).

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

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

6.4 Rytons Retro Weep Vent (RTV250CL) and Louvre Ventilators incorporate a louvre screen to prevent water ingress.

7 Maintenance

7.1 The units have no moving parts and are, therefore, considered to be maintenance free.

7.2 Paint should not be applied.

8 Durability

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

Installation

9 General

9.1 Rytons Ventilators for Wall Cavities, Underfloor Voids and Cupboards and Rytons Drainage Ducts do not require any special fixings. They are incorporated in the brickwork or blockwork during the normal course of laying.

9.2 For installing the Rytons Retro Weep Vent (RTV250CL) a 25 mm diameter hole is drilled through the external leaf at a slightly upward angle. The front louvres are positioned horizontally using the top marker on the flange as a guide. The vent is firmly pushed into the pre-drilled hole, ensuring the front louvres are kept horizontal at all times, until the external flange sits tight and flush with the wall (may be tapped lightly into position using a rubber mallet).

9.3 For installing Louvre Ventilators in doors, a suitable opening must be made to accommodate the ventilator. The ventilator is secured with screws.

9.4 If necessary certain products can be cut easily with a fine-tooth saw.

9.5 The front face of the products should be aligned with the brickwork, wall or door surface.

Technical Investigations

10 Tests

Tests were carried out to determine:

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

11 Investigations

An assessment 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 fabrication process and assembly procedure, including the methods adopted for factory production control.

12 Conditions

12.1 This Certificate:

- relates only to the product/system that is named and described on the front page
- is issued only to the company, firm, organisation or person named on the front page — no other company, firm, organisation or person may hold or claim that this Certificate has been issued to them
- 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.

12.2 Publications, documents, specifications, legislation, regulations, standards and the like referenced in this Certificate are those that were current and/or deemed relevant by the BBA at the date of issue or reissue of this Certificate.

12.3 This Certificate will remain valid for an unlimited period provided that the product/system and its manufacture and/or fabrication, including all related and relevant parts and 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.

12.4 The BBA has used due skill, care and diligence in preparing this Certificate, but no warranty is provided.

12.5 In issuing this Certificate, the BBA is not responsible and is excluded from any liability to any company, firm, organisation or person, for any matters arising directly or indirectly from:

- 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 their nature, design, methods, performance, workmanship and maintenance
- any works and constructions in which the product/system is installed, including their nature, design, methods, performance, workmanship and maintenance
- any loss or damage, including personal injury, howsoever caused by the product/system, including its manufacture, supply, installation, use, maintenance and removal.

12.6 Any information relating to the manufacture, supply, installation, use, maintenance and removal 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, maintained and removed. It does not purport in any way to restate the requirements of the Health and Safety at Work etc. Act 1974, or of any other statutory, common law or other duty which may exist at the date of issue or reissue 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.