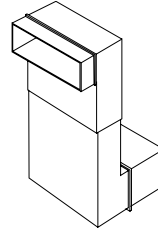
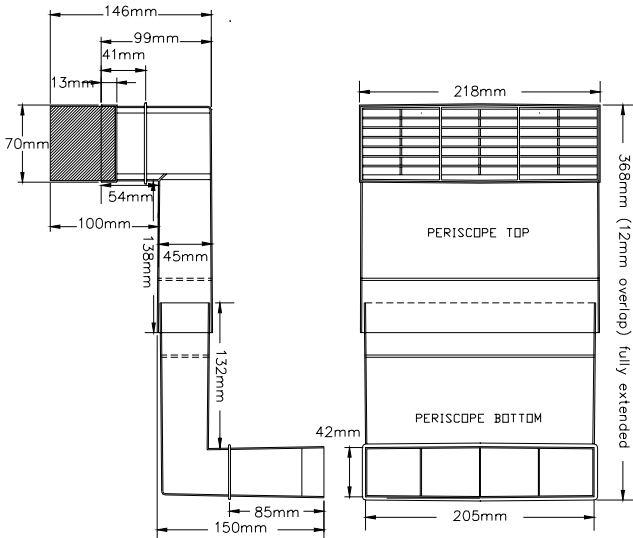


Technical Data Sheet

Rytons Periscope® Underfloor Ventilator

Dimensional Drawing



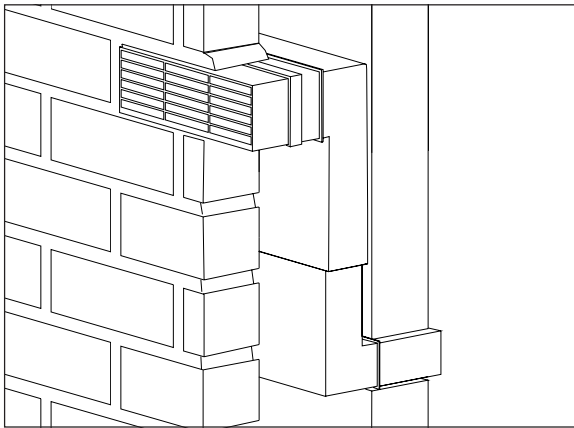
Main Uses, Features and Benefits

- For block and beam and timber floors.
- Alleviates build-up of dangerous gases.
- Expands up to 5 brick courses.
- Prevents damage by condensation.
- Use with Rytons Multifix® Air Brick (MFAB).

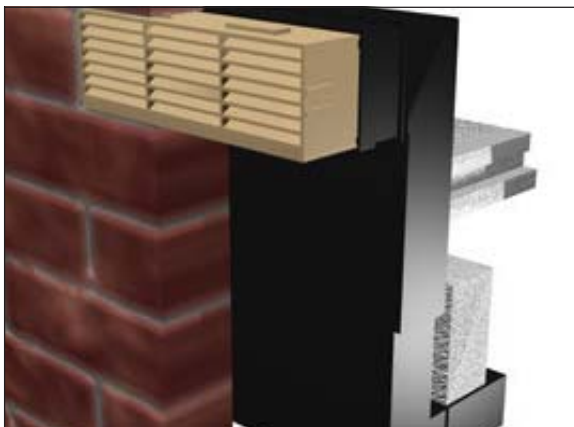


F30 Accessories/Sundry Items for Brick/Block/Stone Walling
Specification Clauses 17, 171

In-Situ Line Drawing



In-Situ Drawing



Product Specification Code

Rytons PUFV.

Size

218mm (W) x 250mm (D) x 368mm (H).
(Fully extended and with Rytons Multifix® Air Brick fitted).
R14 AutoCAD drawing available by e-mail.

Free Area

7750mm² per unit with Rytons Multifix® Air Brick fitted.

Composition

Polypropylene.

Colours

Black.

Specification Paragraph

Manufacturer:

Rytons Building Products Ltd Tel: 01536 511874 Fax: 01536 310455
Email: admin@rytons.com Web: www.vents.co.uk (updated regularly)
Product ref:

Rytons Periscope® Underfloor Ventilator (ref PUFV to BBA 89/2321)

Accessories:

- Rytons Multifix® Air Brick Buff/Sand (ref MFABBS to BBA 89/2321)
- Rytons Multifix® Air Brick Terracotta (ref MFABTC to BBA 89/2321)
- Rytons Multifix® Air Brick Grey (ref MFABGR to BBA 89/2321)
- Rytons Multifix® Air Brick Black (ref MFABBL to BBA 89/2321)
- Rytons Multifix® Air Brick White (ref MFABWH to BBA 89/2321)
- Rytons Multifix® Air Brick Brown (ref MFABDB to BBA 89/2321)
- Rytons Multifix® Air Brick Blue/Black (ref MFABBB to BBA 89/2321)
- Rytons Periscope® Vertical Extension (ref PUFVEXT)
- Rytons Horizontal Adaptor (ref HADAP100)

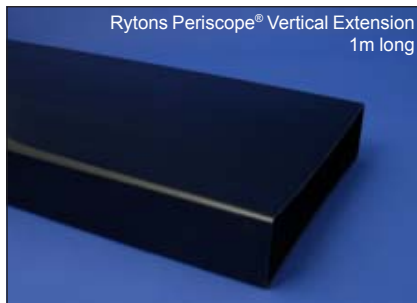
Installation

No special fixing required. Installation is easily carried out as work proceeds. Adjust the height of the Periscope® to suit courses and height of floor (cutting if necessary).

Technical Data Sheet

Rytons Periscope® Underfloor Ventilator

Photo Library



UK Regulations, Standards and Guidelines

SUSPENDED TIMBER FLOORS

The Building Regulations 2000, Approved Document C 2004 edition

4.14 b) Ventilated air space measuring at least 75mm from the ground covering to the underside of any wall plates and at least 150mm to the underside of the suspended timber floor (or insulation if provided). Two opposing external walls should have ventilation openings placed so that the ventilating air will have a free path between opposite sides and to all parts. The openings should be not less than either 1500mm²/m run of external wall or 500mm²/m² of floor area, whichever gives the greater opening area. Any pipes needed to carry ventilating air should have a diameter of at least 100mm. Ventilation openings should incorporate suitable grilles which prevent the entry of vermin to the subfloor but do not resist the air flow unduly. If floor levels need to be nearer to the ground to provide level access sub-floor ventilation can be provided through offset (periscope) ventilators.

The Building (Scotland) Regulations

3.4.4 (2006) Permanent ventilation of the underfloor space direct to the outside air by ventilators in two external walls on opposite sides of the building to provide an open area in each wall of either 1500mm² for at least every metre run of wall, or 500mm² for at least every square metre of floor area, this open area also being provided in internal sleeper walls or similar obstructions to maintain the underfloor ventilation; the ventilated space to be 75mm in height from the site covering to the underside of any wall-plates and 150mm to the underside of the floor joists.

NHBC Standards 2006

5.2 (c) A minimum ventilation void of 150mm should be provided below the floor joists or 75mm below any wall plate. Voids should be ventilated by openings providing not less than 1500mm² per metre run of external wall or 500mm² per m² of floor area, whichever gives the greater opening area. Ventilators should be spaced at not more than 2m centres and within 450mm of each end of any wall. Air bricks should be ducted through cavities and be unobstructed. Every part of the void under a timber suspended ground floor should be thoroughly ventilated through openings on at least two opposite sides. Where this is not possible, effective cross ventilation from opposite sides should be provided by a combination of openings and ducts. Provision should be made for ventilation through partitions and sleeper walls. If necessary, pipe ducts should be incorporated in adjoining solid floors, separating walls or other obstructions. Ventilation should not be obtained through a garage. Also refer to Rytons BBA certificate 89/2321.

British Standard BS 5250:2002

8.5.3.1 Timber 8.5.3.2 Precast concrete (beam and block)

Subfloor cross ventilation should be provided by openings not less than either 1500mm²/m run of external wall or 500mm²/m² of floor area whichever gives the greater opening area.

Zurich Building Guarantee Solid Foundation Manual

Avoid timber decay Air bricks are located at least one course above ground level.

Avoid build-up of gases and moisture in the floor void Provide perimeter ventilation in two opposite external walls at 1500mm² per metre run of wall or 500mm² per square metre of floor area (whichever is the greater) and maintain continuity of this ventilation through internal walls by honeycomb walling or air bricks. Any pipes carrying ventilating air should have a diameter of at least 100mm.

Technical Data Sheet

Rytons Periscope® Underfloor Ventilator

UK Regulations, Standards and Guidelines continued Code of Best Practice for the Use of Aircrete Products November 2002

A void of at least 75mm should be provided between the underside of the floor and the ground surface. Where the soil is heavy clay, the depth should be increased to at least 150mm to accommodate possible heave. The void should be ventilated by perimeter ventilators providing 600mm² of open area per metre run of external wall.

BBA Approval

Rytons has 73 British Board of Agrément approved products, the largest range on the market. BBA certification is third party evaluation and accreditation, and approved products are accepted by building control officers, architects, engineers and surveyors nationwide. The NHBC also accept products approved by the BBA when used as stated in the relevant BBA certificate. Rytons also has an Irish Building Regulation Statement for each of their three BBA certificates.

Handling Information

Box quantity: 20 number.
Box size: 81cm (W) x 45cm (H) x 31cm (D).
Box weight: 8.4kg.

Questions

Should the Periscope® be fitted above or below the DPC?

Generally air bricks and underfloor ventilators are installed directly above the DPC. Refer to paragraph 4.14, diagram 5, of The Building Regulations Approved Document C.

How many sections is it possible to cut from a Rytons Periscope® Vertical Extension?

Based on standard brick and mortar sizes:

- 1 extra brick course - 5 sections from a 1m length max.
 - 2 extra brick courses - 3 sections from a 1m length max.
 - 3 extra brick courses - 2 sections from a 1m length max.
 - 4 extra brick courses - 2 sections from a 1m length max.
 - 5 extra brick courses - 2 sections from a 1m length max.
- Please double check all calculations to your particular specification using the dimensional drawing on the front page to help.



Please recycle printouts where facilities exist.

UK Regulations, Standards and Guidelines SUSPENDED CONCRETE FLOORS

The Building Regulations 2000, Approved Document C 2004 edition

4.19 b) A ventilated air space should measure at least 150mm clear from the ground to the underside of the floor (or insulation if provided). "Two opposing external walls should have ventilation openings placed so that the ventilating air will have a free path between opposite sides and to all parts of the floor void. The openings should be not less than either 1500mm²/m run of external wall or 500mm²/m² of floor area, whichever gives the greater opening area. Any pipes needed to carry ventilating air should have a diameter of at least 100mm. Ventilation openings should incorporate suitable grilles which prevent the entry of vermin to the subfloor but do not resist the air flow unduly.

The Building (Scotland) Regulations

3.4.3 (2005) Permanent ventilation of the underfloor space direct to the outside air by ventilators in two external walls on opposite sides of the building to provide an open area in each wall of either 1500mm² for at least every metre run of wall, or 500mm² for at least every square metre of floor area, this open area also being provided in internal sleeper walls or similar obstructions to maintain the underfloor ventilation; the ventilated space to be 150mm to the underside of the floor slab or beams.

NHBC Standards 2006

5.2 (b) A minimum void of not less than 75mm should be provided below the underside of floor slabs and beams. Voids should be ventilated by openings providing not less than 1500mm² per metre run of external wall or 500mm² per m² of floor area, whichever gives the greater opening area. Ventilation openings should be provided on at least two opposite sides. Where this is not possible, effective cross ventilation from opposite sides should be provided by a combination of openings and ducts. Also refer to Rytons BBA certificate number 89/2321.

British Standards

British Standard BS 5250:2002.

PRECAST BEAM AND BLOCK FLOOR

Zurich Building Guarantee Solid Foundation Manual

Avoid ingress of ground moisture. There are two methods for preventing ground moisture in precast beam and block floors:

- 1. No damp-proof membrane required** Locate the beams and blocks above dpc level and provide 600mm²/m run of ventilation to the void under the floor. A minimum gap of 75mm should be maintained between the underside of the floor and sodium area. Increase void to 150mm when venting to remove gas, in Scotland or a risk of clay heave exists. Where a gas supply passes through this void or an occurrence of natural gas is possible (landfill, radon etc) the ventilation provided should be increased to 1500mm²/m run. Provide perimeter ventilation in two opposite external walls. Maintain continuity of ventilation through internal walls by honeycomb walling or airbricks.
- 2. Damp-proof membrane required** The void should be ventilated where a gas supply passes through this void or the presence of naturally occurring gases are expected (i.e. Methane or Radon).