

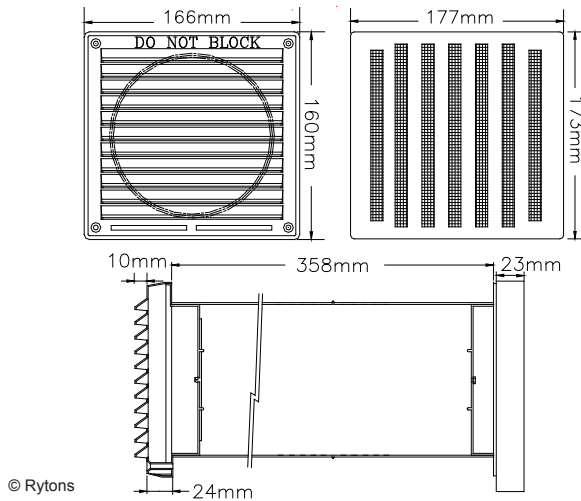
## Technical Data Sheet

### Rytons 125mm Acoustic AirCore® with Hit & Miss Ventilator (39 dB) (Sound Reducing)

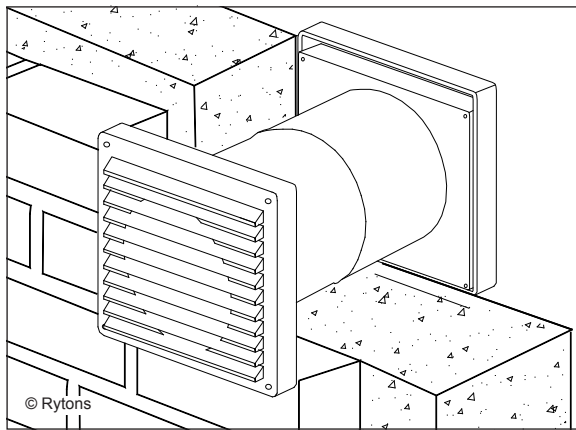
[www.vents.co.uk](http://www.vents.co.uk) (search code: AAC5HM)

April 2010

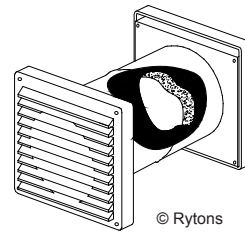
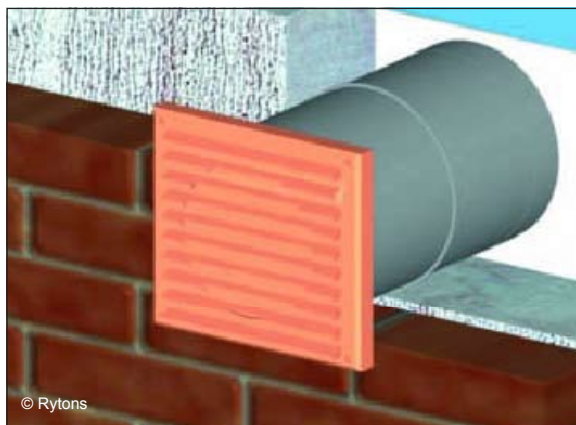
#### Dimensional Drawing



#### In-Situ Line Drawing



#### In-Situ Drawing



#### Approvals and Testing

**bre**  
Acoustic Testing

**bre**  
Equivalent Area Testing

#### Main Uses, Features and Benefits

- Acoustic background ventilator for a habitable room.
- Acoustic lining reduces sound to 39 dB  $D_{n,e,w}$
- $D_{n,e,w}$  figure calculated by the BRE in accordance with BS EN ISO 717-1:1997.
- Equivalent area calculated by the BRE at 1 Pa to BS EN 13141-1:2004.
- Manually controlled internal hit & miss ventilator with flyscreen.
- Fits into core drilled hole - suitable for retrofit installations.
- Grilles U.V. stabilised to protect against deterioration by sunlight.



F30 Accessories/Sundry Items for Brick/Block/Stone Walling  
Specification clauses 17, 171  
U90 General Ventilation - Domestic  
Specification clauses 34, 340

Product Specification Code	Equivalent Area	$D_{n,e,w}$
Rytons AAC5HM	3633mm <sup>2</sup> (36.33cm <sup>2</sup> )	39 dB (open) 40 dB (closed)

#### Size

External Louvre: 166mm (L) x 160mm (H).  
Tube: 127mm (5") (Dia.) x 358mm (L).  
Internal Hit & Miss: 177mm (L) x 173mm (H).  
AutoCAD drawing available by email.

#### Composition

External Louvre: U.V. stabilised high impact polystyrene.  
Tube: High impact polystyrene containing sound absorbent foam lining.  
Tube contains recycled plastic.  
Internal Hit & Miss: U.V. stabilised high impact polystyrene.

#### Colours

External Louvre: White, buff/sand, terracotta.  
Tube: Black.  
Internal Hit & Miss: White.



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#### Colour Key



#### Photo Library



#### Specification Paragraph

Manufacturer: Rytons Building Products Ltd  
T: 01536 511874, F: 01536 310455, E: admin@rytons.com  
Visit our website at [www.vents.co.uk](http://www.vents.co.uk)  
Product ref:

- Rytons 125mm Acoustic AirCore® with Hit & Miss Ventilator (39 dB) White (ref AAC5HMWH)
- Rytons 125mm Acoustic AirCore® with Hit & Miss Ventilator (39 dB) Buff/Sand (ref AAC5HMBS)
- Rytons 125mm Acoustic AirCore® with Hit & Miss Ventilator (39 dB) Terracotta (ref AAC5HMTC)

Type: Acoustic Core Ventilator with Internal and External Grilles  
Equivalent Area: 3633mm<sup>2</sup> (BRE tested)

#### Installation

Drill a hole using a 127mm core drill. Cut tube to length if necessary. Insert tube into hole. Push fit external louvre (screw to the brickwork for extra security). Screw fix internal hit & miss ensuring the vent is fitted so that it can be opened and closed with a 'side to side' movement. Consideration should be given to using Rytons AirCore® Cowl (ABC8) in exposed areas. To avoid discomfort from cold draughts the ventilator should be sited not less than 1.7m above floor level.

#### Extra Features and Benefits

Individually boxed sets for easy identification, handling and efficient installation.

Interlocking components aid correct positioning, alignment and easy installation.

Injection moulded one piece tube makes handling easier and installation quicker.

External water baffle prevents transfer of water across the cavity.

External louvre grille embossed with DO NOT BLOCK.

#### UK Regulations, Standards and Guidelines

Measurement of sound insulation made by BRE in accordance with BS EN 20140-10:1992 'Laboratory measurement of airborne sound insulation of small building elements'. Single number quantities were calculated in accordance with BS EN ISO 717-1:1997 'Rating of sound insulation in buildings and of building elements'.

The Building Regulations 2000, Approved Document F 2006 edition.

The Building (Scotland) Regulations 2007, Mandatory Standard 3.14.

The Building Regulations (Northern Ireland) 2000, Technical Booklet K.

British Standard BS 5250:2002.

#### The Building Regulations 2000, Approved Document F

**Noisy locations 0.31** In noisy areas it may be appropriate to use sound-attenuating background ventilators, depending on the noise level and any planning conditions.

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Rytons AAC5HM Converted Octave Band Values	
63 Hz	34.7 dB
125 Hz	43.2 dB
250 Hz	35.1 dB
500 Hz	32.6 dB
1000 Hz	46.3 dB
2000 Hz	59.6 dB
4000 Hz	65.9 dB

All figures are reproduced in good faith and to the best of our knowledge are true and accurate. Customers should satisfy themselves that the product is suitable for the intended purpose by using this information in conjunction with the BRE acoustic test report available online at [www.vents.co.uk](http://www.vents.co.uk) and from Rytons sales office.

#### A bit about the BRE

The Building Research Establishment Ltd is a respected independent testing authority. BRE Acoustics holds UKAS accreditation for the measurement of sound insulation in the field and the laboratory. The measurements were conducted using the procedures accredited by UKAS. Since 2006 Rytons has commissioned the BRE to calculate the equivalent free area of their heat producing appliance and background ventilators giving installers, suppliers and homeowners the confidence that the air space is **accurate** and **verifiable**.

#### Handling Information

Box quantity: 1 set.  
Box size: 44cm (W) x 19cm (H) x 22.5cm (D).  
Box weight: 0.75kg.

## Questions

#### Is a copy of the BRE test report available?

Yes, online at [www.vents.co.uk](http://www.vents.co.uk) or from Rytons sales office.

#### Is a cowl option available for exposed areas?

Yes, refer to technical data sheet AAC5HMCW.

#### Will installing more than one vent to achieve a greater free area have an effect on the acoustic performance?

Yes, by installing two vents anywhere in a room the combined performance of both vents would be reduced by 3dB. Installing four vents would give a reduction of 6dB.

#### Will the vent reduce sound from inside to outside as well as from outside to inside?

The BRE has advised us that it's reasonable to assume that 'reciprocity' applies to the vents. That is, the third octave values for sound reduction index are the same in both directions (out to in and in to out).



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