Information Update





nail: projects@passivent.com Web: www.passivent.com Tel: +44 (0)1732 850770

SOUNDSCOOP SPECIFICATION DOCUMENT

Product Description:

Passivent SoundScoop forms part of the SoundScoop range of air ventilation units which combine exceptional acoustic attenuation with very low airflow resistance.

SoundScoop has been specifically designed to meet the conflicting requirements of low resistance air flow and high attenuation of sound.

SoundScoop is suitable for environments such as education facilities, offices and hotel bedrooms which are adjacent to noisy spaces such as busy circulation routes. The noise reduction is targeted at the mid frequency band 500 – 2000Hz which is typically the most disturbing. A specially designed cover grille is available to maintain the free area requirement and low flow resistance.



SoundScoop has been designed in association with Arup. The open design is based on selective sound absorption at key frequencies, and does not rely on baffles or diverters. The acoustic performance of the SoundScoop has been developed through an engineered approach where the exact nature of the source noise and receiver sensitivity has been considered. As such, each unit is targeted in terms of the sound it attenuates. This means it outperforms any other equivalent product on the market in terms of attenuation of speech and footfall.

Construction Details:

Sleeve: constructed from 100% recycled ABS Acoustic Foam: Mineral wool covered with a membrane

Performance data:

Can be demonstrated to comply with:

- Building Regulations Part F Means of Ventilation, Part L Conservation of fuel and power, and Part E Resistance to the passage of sound
- BB93 Acoustic design of schools a design guide
- BS8233: 1999 Sound insulation and noise reduction for buildings code of practice
- Priority Schools Output Specification for Acoustic Design
- Tested to BS EN 13141-1: 2004 Ventilation of Buildings for air transfer between rooms
- Appraised under BS EN ISO 9001

All the configurations have been independently tested for acoustic performance.

The sleeve is manufactured from fire resistant ABS. The acoustic foam complies with Euroclass A1. The highest class for non-combustible products that do not contribute to a fire.

Typical application where SoundScoop is used as a cross ventilation path between two spaces:



Information Update

PVCTI20 - Issue 1 - January 2019



. Tel: +44 (0)1732 850770

Available Sizes:

Widths of 320mm and 620mm (structural opening size). Height of 320mm (structural opening size). Lengths of 300mm, 600mm, 900mm and 1200mm. Supplied to site fully assembled, ready for installation into a bulkhead

Options:

SoundScoop Cover Grille: Frame and blades are extruded aluminum to standard RAL 9016 (White gloss), other standard RAL colours available upon request.

Technical Drawing:



Acoustic Performance:

| Cross section, mm (w x h) | Length (mm) | Average mid-frequency Dne (dB) 500Hz—2kHz | Acoustic performance, Dne,w (dB) | Unit Weight (kg) | |
|---------------------------------|-------------|--|-------------------------------------|------------------|--|
| 320 x 320 | 300 | 34 | 32 | 3.0 | |
| | 600 | 45 | 39 | 5.9 | |
| | 900 | 52 | 41 | 8.8 | |
| | 1200 | 56 | 44 | 11.7 | |
| 620 x 320 | 300 | 30 | 29 | 4.6 | |
| | 600 | 39 | 36 | 9.2 | |
| | 900 | 46 | 40 | 13.8 | |
| | 1200 | 52 | 42 | 18.3 | |

Flow Performance:* Cd value for the 900mm long unit

| Cross section, mm (w x h) | Free Area (m ²) | | Coefficient of Discharge, Cd | | |
|---------------------------|-----------------------------|--------------|------------------------------|------------------------|-------------------------|
| | SoundScoop | Cover Grille | SoundScoop | Cover grille (in flow) | Cover grille (out flow) |
| 320 x 320 | 0.04 | 0.05 | 1.04* | 0.78 | 0.75 |
| 620 x 320 | 0.10 | 0.10 | 1.04* | 0.78 | 0.75 |

Passivent maintains a policy of continuous development and reserves the right to amend product specifications without notice.