Your proven answer to soundproof ventilation in noise affected buildings.



90mm Passive Acoustic Wall Ventilator - Premium

Product Code: 14-51-01



Sound Reduction

By using a revolutionary patented technology that incorporates arrays of sound attenuating tubes, Silenceair can reduce the noise that enters the room through a ventilation opening by up to 85%. The compact size removes the need for bulky and costly acoustic ducting.

Airflow

The aerodynamic air-passage allows for a highly efficient flow of air at very low pressure. For example, a single unit will allow 20 cubic metres of air into a room at very low pressure of 2 Pascals. Airflow rates at these low pressures can be increased simply by increasing the number of units used. Balancing can be achieved by the same method.

Applications

Silenceair can be used to KEEP OUT THE NOISE in a variety of ventilation systems: for background ventilation; natural cross ventilations; in conjunction with environmentally friendly passive systems, providing make up air to A/C units; and as part of cost effective and code compliant mechanical ventilation systems.

It can be used to KEEP IN NOISE. ACTUAL applications include home theaters, night clubs and commercial dog kennels.

Visit our website for case studies, or contact the office for more advise on potential applications.

Wall suitability

The Silenceair 90mm Premium acoustic ventilator can be installed in any wall that is at least 90mm thick

It is ideal for use in brick veneer walls, where the slim design allows for small and discrete vents to the inside and outside. A standard brick vent can be used for the outside.

Advantages

Reduces noise transmission across the acoustic barrier.

Highly efficient. The unique design allows for higher airflow at minimum pressure, and superior noise reduction over the thickness of the wall than alternative technologies.

Cost effective. Silenceair is a highly effective solution for air penetrations through acoustic barriers. You can save on materials, installation time and operating costs.

Installation

Silenceair is designed to be compatible with most common construction systems and can be installed by a competent home handyman.

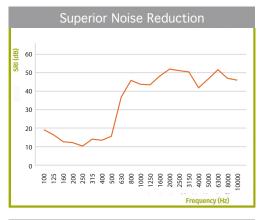
It can be installed in new work or retrofitted into existing buildings. You have choices of decorative interior and exterior face plate lourves, or you may choose from any number of commercially available designs.

Silenceair is fully recyclable is UV stabilised and contains spread of flame and smoke inhibitors.



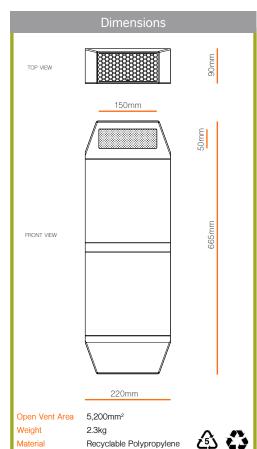
| Tabulate Airflow Performance | | | |
|------------------------------|-------|------|--|
| Pressure Drop (Pa) | m3/h | I/s | |
| 1 | 17.28 | 4.8 | |
| 2 | 21.24 | 5.9 | |
| 5 | 26.64 | 7.4 | |
| 10 | 36.72 | 10.2 | |
| 12 | 37.80 | 10.5 | |
| 15 | 40.32 | 11.2 | |
| 20 | 47.16 | 13.1 | |
| 50 | 70.20 | 19.5 | |

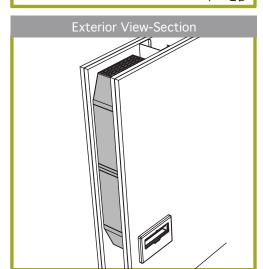
The airflow performance graph and table above shows how much air flows through the Silenceair acoustic attenuation device at different air pressures. For example, when the air pressure differential is 0.20 Pascals, air will flow through the device at 6 cubic metres an hour, or 1.6 litres per second.

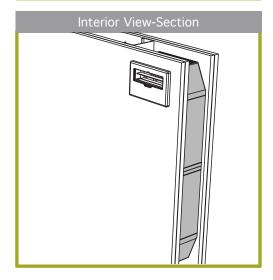


| Data Table SRI, dB re 20 μPa | | |
|------------------------------|-----------|-------------|
| Frequency (Hz) | Vent Open | Vent Closed |
| 100 | 19.15 | |
| 125 | 16.51 | |
| 160 | 12.69 | |
| 200 | 12.21 | |
| 250 | 10.10 | |
| 315 | 14.16 | |
| 400 | 13.52 | |
| 500 | 15.77 | |
| 630 | 36.77 | |
| 800 | 45.80 | |
| 1000 | 43.72 | |
| 1250 | 43.48 | |
| 1600 | 48.21 | |
| 2000 | 51.99 | |
| 2500 | 51.15 | |
| 3150 | 50.36 | |
| 4000 | 41.88 | |
| 5000 | 46.59 | |
| 6300 | 51.49 | |
| 8000 | 46.92 | |
| 10000 | 45.97 | |

The noise reduction graph and table above show the reduction in sound power levels through the Silenceair acoustic attenuation device. Over the spectrum from 100hz to 5000hz the Silenceair acoustic ventilator has a Rw39 when adjustable louvre is open.







Silenceair International Pty Lid reserves the right to reissue performance data without notice.