



PERMAP®

Metal Absorptive Noise Barriers



The reduction of traffic noise propagation can be effectively achieved by the use of a barrier. Noise reduction from the use of a barrier is attained by the screening effects of the barrier with the receiver protected in the acoustic shadow zone.

Significant degradation in noise reduction can be expected as a result of repetitive standing waves created between the noise barrier and vehicles (especially busses and trucks) or the parapet wall/barrier at the other side of the road divider, hence increasing the traffic noise level at source. An acoustically absorptive barrier is most effective in reducing the build-up of such standing waves.

SYSTEM DESCRIPTION

PERMAP Metal Absorber Panels is a sound barrier system that offer exceptional noise reduction in the critical traffic noise frequency range. It is a modular system of standard-sized lightweight panels which allows for quick and economical assembly at site. The flexibility embodied in the design of the panels enable easy integration with **PERGLAS** transparent noise barriers as and when desired.

PANEL CONSTRUCTION

The panels are fabricated in a standard module with nominal dimensions of 3000mm x 500mm. It is a composite construction, made up of a solid metal backing sheet, an absorptive infill, a layer of vapour barrier and finished with a slitted metal facing. The custom bending design ensures rigidity of the panel system as well as facilitates the slot-in installation method.

INSTALLATION METHOD

PERMAP Metal Absorber Panels adopts a slot-in installation between two structural I-sections spanning nominally 3m apart. This enables a quick and trouble-free installation on top of an existing parapet wall

TECHNICAL CHARACTERISTICS

The successful development of the barrier revolves around fulfilling the essential requirements of an effective traffic noise barrier system, as follows:

- Minimum sound insulation performance of STC 25
- Effective sound absorption at dominant frequencies of vehicular traffic noise (250Hz to 1000Hz)
- Light-weight/ Nominal loading on parapet wall
- Public Safety
- Weather Resistant
- Maintenance Free

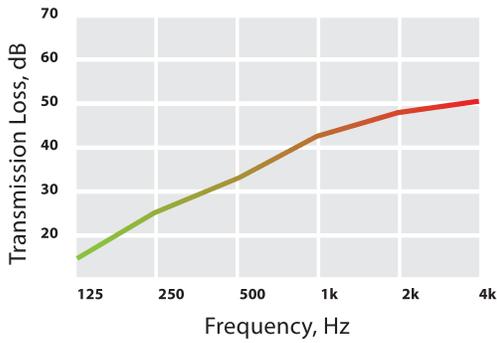


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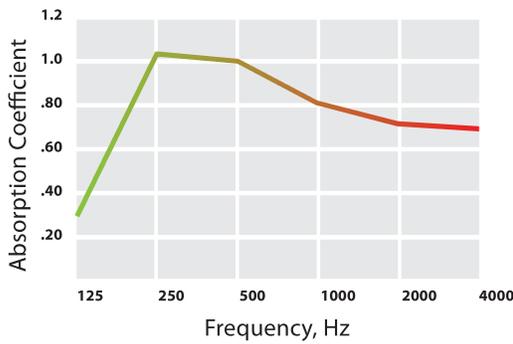


sound solutions



SOUND INSULATION PERFORMANCE, STC 35

Frequency - Hertz						
125	250	500	1000	2000	4000	STC
14	25	33	42	49	50	35



SOUND ABSORPTION PERFORMANCE, NRC 0.95

Frequency - Hertz						
125	250	500	1000	2000	4000	NRC
0.31	1.11	1.00	0.83	0.77	0.75	0.95



dB Acoustics Pte Ltd
delivering Best sustainable acoustic solutions

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