ALPHAfon - MB

METAL NOISE BARRIER

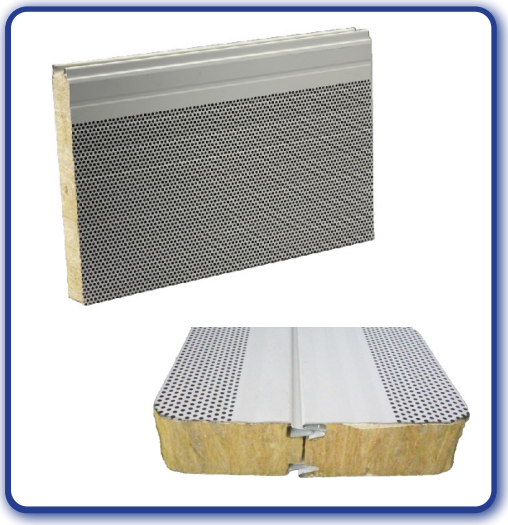
APPLICATIONS

Metal noise barrier **ALPHA*fon*-**MB is an efficient and economical solution for problems of sound absorption in relation with noise insulation and mechanical strength like:

- Swimming pools
- Disco / pubs
- Industrial plants
- Hospitals
- Gymnasiums
- Music schools
- Noise barriers for streets
- Houses

Also it can be used in noise control of different noise sources like:

- Air-conditioners
- Cooling towers
- Chillers
- AHU



DESCRIPTION

The metal noise barrier **ALPHA*fon*-**MB is made from a galvanized metal sheet at the external side and perforated metal sheet at the internal side.

The top and the bottom side of the metal barrier are properly formed (projection - cavity) in order to achieve perfect sound sealing but also to improve its bending strength.

Internally it is filled with sound-absorbing material, mineral wool, water repellent, with appropriate density, covered with thin glasswool cloth.

The metal noise barrier has great durability against time and ultraviolet radiation. It is water repellent, consists of incombustible materials and it can be easily replaced if needed.

The standard color in both sides is RAL 9002 but both sides can be painted in any RAL Color to match different project requirements.

INSTALLATION

The metal barrier **ALPHA*fon*-**MB can be installed by sliding it in a metal profile, from special formed double T, which is appropriately fixed to the base. The metal barriers can also be installed vertically with the appropriate support at the top and the bottom.

In the case of a road noise barrier, it is recommended to build an appropriate concrete wall at the bottom of the barrier.

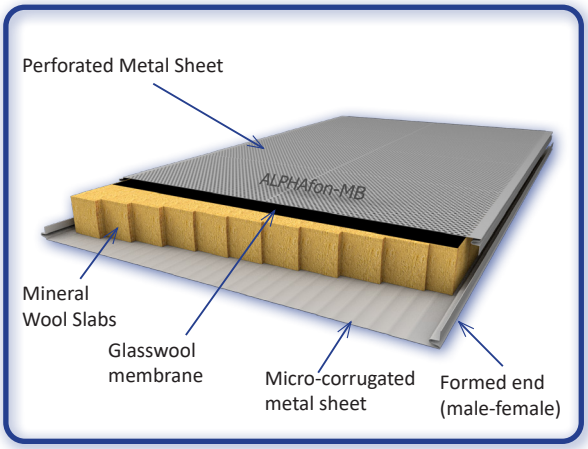
The height and the length of the metal barrier can be determined from our company using advanced calculation software, in order to estimate the noise reduction and decide on the best technical-economical solution.

The weighted sound reduction index acording to ISO 140.3 & ISO 717.1 is $\mathbf{R_w = 32dB}$ (for thickness 50mm), $\mathbf{R_w = 35\ dB}$ (for thickness 100mm) and the absorption coefficient is α_s = 0.82 at 250 Hz (for thickness 50mm) according to ISO 354.

TECHNICAL CHARACTERISTICS OF ALPHAfon-MB

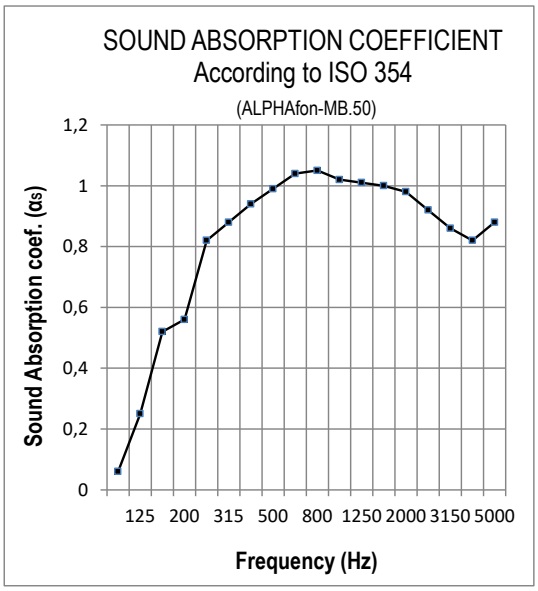
Dimensions:
Width: 100 cm
Length: 200 or 250 cm
Other lengths are available upon request
Thickness : **50 / 100 mm**

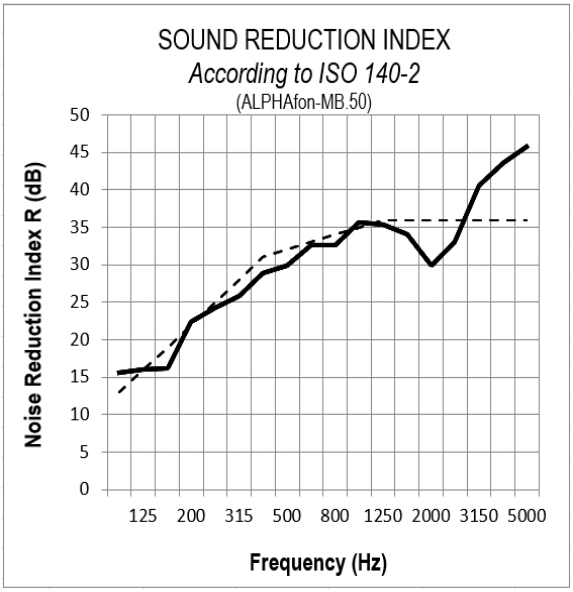
Other Characteristics
Thermal conductivity : λ = 0.038 W/mK
Coefficient of Heat Loss (for 50mm): U = 0.73 W/m²K
(for 100mm): U = 0.38 W/m²K



ALPHAfon- MB

Weighted sound absorption coefficient α_w **= 1**
Sound absorption Class: **A** *according to ISO 11654*
Weighted sound Reduction Index according to ISO 140.3 & ISO 717.1:
R_w = **32 dB** (for thickness 50mm)
R_w = **35 dB** (for thickness 100mm)





TYPICAL APPLICATIONS

*Our company applies the Quality Management System **ISO 9001.2015** & the Environmental Management System **ISO 14001.2015***

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