

ALPHA^{acoustic}-TRAP

BASS TRAPS

MAIN CHARACTERISTICS

- Extended low frequency sound absorption
- Elegant professional appearance
- Resonating sound absorber device
- Special design, Conic shape
- Corner mounted bass - trap
- Easy installation

APPLICATIONS

The bass-trap **ALPHA^{acoustic}-TRAP** is useful where low frequency absorption is required. The places that mainly have the specific requirements are:

Auditoriums, Recording studios, control rooms, concert halls, CD mastering, home theatres, music practice rooms, vocal booths etc.

ALPHA^{acoustic}-TRAP can be installed at the corners of the room.

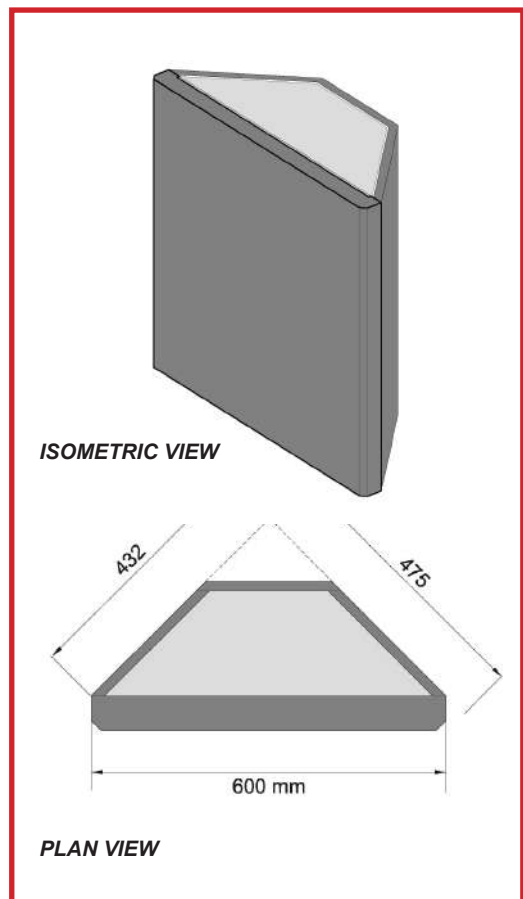
ALPHA^{acoustic}-TRAP



GENERAL DATA

Since low frequency resonances in a room have their points of maximum or minimum pressure in the corners of the room, bass traps mounted in these positions will be the most efficient solution. For this reason we have designed the **ALPHA^{acoustic}-TRAP** which is corner mounted to reduce the excessive bass in a room.

The operating principle of **ALPHA^{acoustic}-TRAP** is based on diaphragmatic element / dense -mass membrane, which is free to vibrate by the low frequency exited bass sound down to 80 Hz. Behind the resonating diaphragmatic absorber there is an air cavity created by the special design from MDF wooden enclosure/cavity. The conic shape form improves its performance in lower frequencies and increases the structural stiffness. The external back surface of the bass trap is made by MDF wooden board or by a black melamine. They can be covered with luxurious air-mess fabric in case that its upper or bottom side is visible. Inside the conic shape enclosure there is a special sound absorption acoustic coat made by an ecological sheep wool or other polyester fibers board. The front side of **ALPHA^{acoustic}-TRAP** comprise a wooden batten skeleton frame covered by a breathable fabric (type air mesh according to our sample color).



SPECIFICATIONS

Dimensions (H x W)	60 x 60 cm or 120 x 60 cm (please refer to the design)
Enclosure Material	Fiberboard without paint or melamin cheapboard All the external surface can be covered by an acoustic fabric
Diaphragmatic Material	Loaded EPDM membran
Facing side	Acoustical transparent fabric AirMesh (type ALPHAcoustic-CL)
Weight	Type 60 cm: 15 kg Type 120 cm: 28 kg

ACOUSTICAL PERFORMANCE

ALPHAcoustic TRAP plus is specifically designed to achieve maximum sound absorption at wide acoustic frequency range band. Upon request we can determine the sound absorption index according to ISO 354.2008 for most types of our acoustic panels. Indicative sound absorption indexes (α_s) can be found in the following table for the most frequently used basstrap type:

Frequency (Hz)	80	125	250	500	1000	2000	4000	5000
Sound absorption (α_s) (expressed per item)	0.85	0.73	0.50	0.55	0.30	0.20	0.25	0.12

Depending on the requirements of each application and in order to achieve wide range frequency absorption, a combination of different sound absorptive materials can be applied. Please refer to our technical department at tech@alphacoustic.com

INSTALLATION



ALPHAcoustic TRAP is delivered in adequate carton box loose. All the packages contain detailed assembly instructions which make the process user friendly. It is designed to fit into a corner of a room since all room modes have a pressure high or node in the corner. It is also effective to place the bass-trap where the two walls meet the ceiling or the floor. As for facilitation of the installation, the two large holes on the back of **ALPHAcoustic TRAP** offer the possibility to hang them from the wall with nails or self - expanding bolts.



Design and Production according to Quality Management System **ISO 9001.2008** & Environmental Management System **ISO 14001.2004**