# POLYFON BT 

Bass Trap Acoustic Panel
LOW FREQUENCY ABSORPTION
\& DIFFUSION PROPERTIES

## POLYFON-BT : An innovative broadband acoustic

Bass Trap panel that combines Sound Absorption \&

## Diffusion characteristics.

## It consists of the POLYFON-BT Base and the Diffuser Membrane (DM).



## Description

POLYFON-BT Base, is polyurethane, flexible foam, corner type panel, with a sculpted design, that effectively absorbs the sound energy and reduces the reverberation time.
The addition of cavities (like Helmholtz resonators) offers maximum sound absorption efficiency. Foam triangular-shaped bass traps POLYFON-BT, are a cost effective solution for a reliable sound absorption. It can be installed into room corners and/or wall or ceiling junction, to provide significant low frequency sound absorption.
The acoustic energy is dissipated as heat in the foam cells.
Utilizing the depth of the corner, with foam material of some significant thickness, is more effective also in mid and low (bass) absorption frequencies, than the flat mounted acoustic foam which rarely has the thickness of POLYFON-BT.

The Diffuser Membrane (DM) is a flexible membrane, with a smooth radius, which creates a 2 D deflector that effectively spreads high frequency reflections. Additional the DM improves the low frequency absorption coefficient; it acts as a sound absorption membrane. The DM element can be either acrylic, plywood, HPL "formica" or others radius membranes. It can be easily removed from the two lateral channels, which keep the membrane in tension.


The Diffuser Membrane (DM) is a flexible membrane, with a smooth radius, which creates a 2D deflector that effectively spreads high frequency reflections. Additional the DM improves the low frequency absorption coefficient; it acts as a sound absorption membrane.
The DM element can be either acrylic, plywood, cork, HPL "formica" or others radius membranes.
It can be easily removed from the two lateral channels, which keep the membrane in tension.

Design Patent Pending.

| Type: <br> POLYFON-BT | Practical Sound Absorption Coefficient ( $\alpha \mathrm{p})$ |  |  |  |  | Weighted Sound <br> Absorption <br> Coefficient $(\alpha, w)$ | Sound Absorption <br> Class |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 125 | 250 | 500 | 1000 |  | 4000 |  |
|  | 0.8 | 0.9 | 0.85 | 0.95 | 0.9 |  | 0.95 | A |

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## POLYFON BT



POLYFON-BT with DM suspended from ceiling

## Typical applications:

Home Theatres, Recording \&
Post Production Studios,
Rehearsal Rooms, Conference Rooms, multipurpose hall etc.

## Applications

POLYFON-BT can be used in the corners of a room or it can be suspended from the ceiling. Its use improves the reverberation time, reduces flutter echo and standing waves, prevents the room modes and increases the voice clarity. It is especially useful to trap the bass audible frequencies which are more intense at the intersection of flat surfaces.

The DM element can be easily altered to suit any aesthetic needs. Any artwork or high resolution picture can be printed on its surface, in order to suit its aesthetic surroundings.

Installation on the wall can be easily done with adequate glue or using an appropriate tube adapted to the suitable configuration/ incisors at its back side.


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


[^0]:    Sound absorption coefficients $\alpha$ p, according to ISO 11654:1997.

