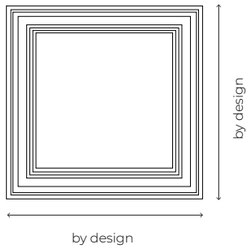
Reffuzor

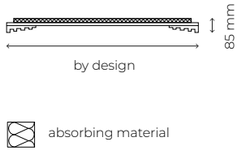
reflection · low tones · mid tones · high tones

Reffuzor ceiling panel with the basic function of directing sound has been designed in order to reflect the sound waves in the extended frequency range. The possibility of permanent suspension or setting the angle of inclination allows to adjust the acoustic parameters of the room, depending on the type of artistic event.

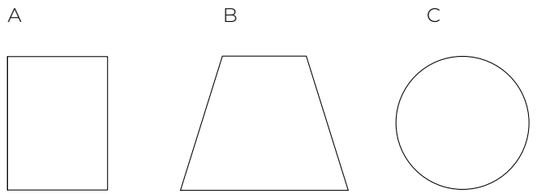
front view



cross section



possible shapes



Size
according to individual design of an interior and required acoustic properties

Weight
approximately 30 kg / sqm

Material
wood-based or gypsum-fiber materials, polyethylene foam

Available in any colour from the RAL K7 classic palette.

Designer
Architected Sound Team

Country of production
Poland

Category
reflection

Description
The novelty of Reffuzor panels technology is the result of in-depth material analyzes, computer simulations and tests carried out in specialized measuring chambers. The ability to adjust the angle of the panels, allows to direct reflections to specific places in the room. An additional sound absorbing layer located at the top of the panel prevents the occurrence of undesirable reflections between the panel and the ceiling surface. The use of Reffuzor panels in groups increases their effectiveness and allows to improve the quality of mutual hearing of artists on stage and to evenly cover audience surface with sound.

Application
Concert halls, theatres, operas and multi-purpose halls.

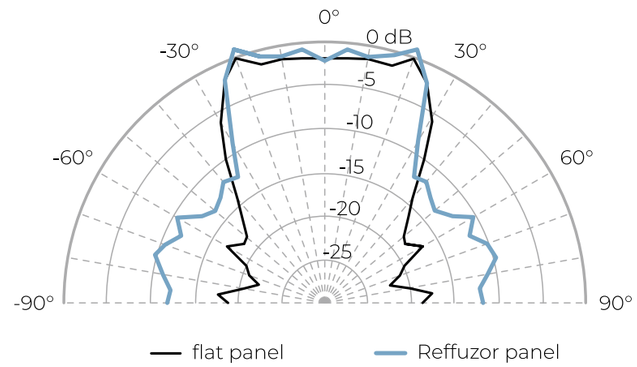
Custom-made
Possibility of designing panels with dimensions, shapes and colours adapted to a specific room. They can also be equipped with an automatic angle adjustment system in two planes. The regulation system can be integrated with the management systems of leading manufacturers.

Fire safety
Possibility of making the system out of materials with flammability class at least D-s1.

Additional information
Technical solution patented by AGH University of Science and Technology in Krakow.
Patent number: PL 227198 B1.

AGH

Directional reflection characteristics of the Reffuzor panel compared to a standard flat reflective panel for a sound frequency of 4000 Hz.



Amplitude-frequency characteristics of sound reflection from the Reffuzor panel and compared to a standard flat reflection panel for an angle of incidence of 75°.