

OPTIDI PANEL




architected sound

OPTIDI PANEL

In the modular direction



diffusion



absorption

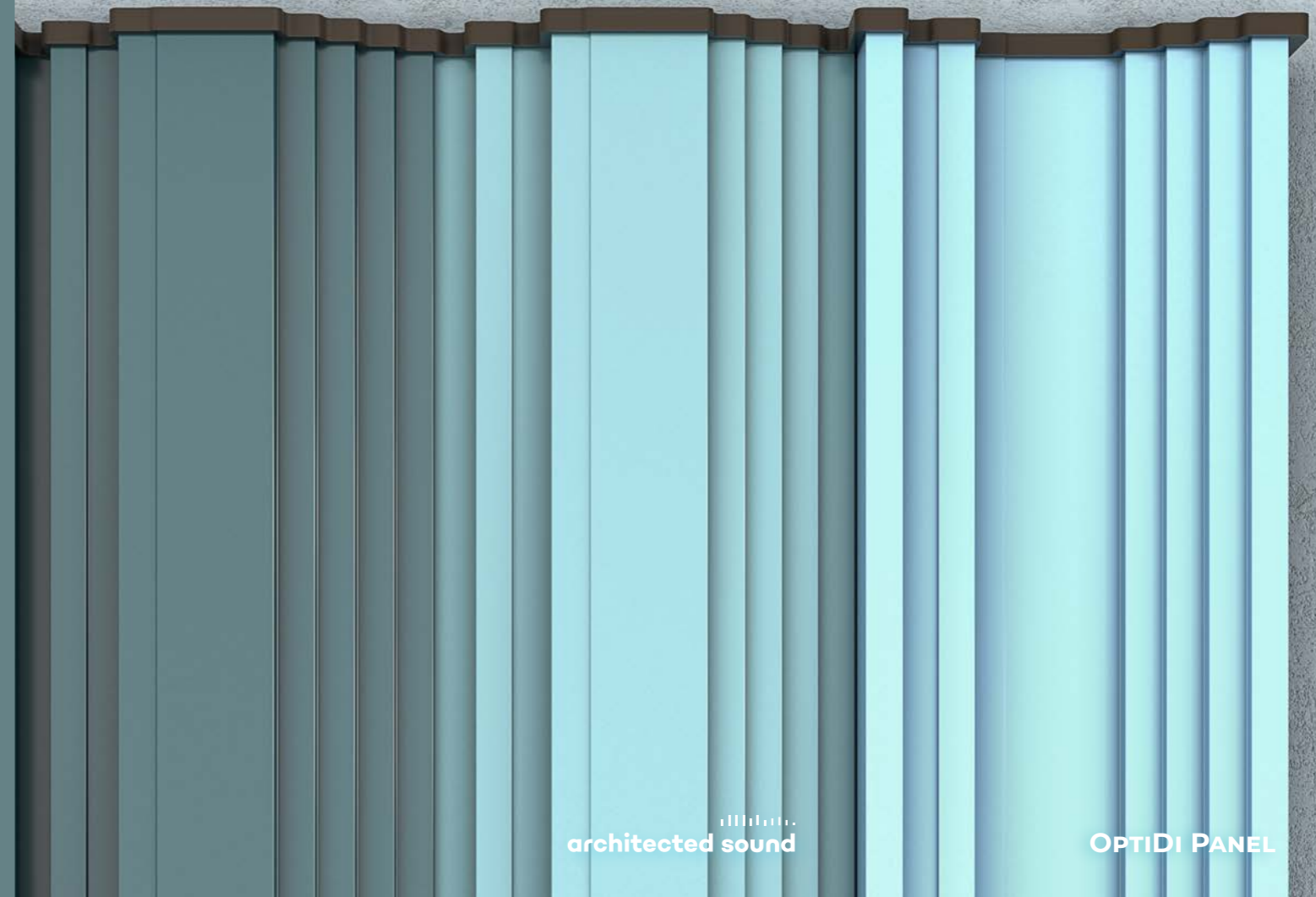


low tones

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The main purpose of OPTIDI PANEL is dispersing sound waves over a very wide frequency range. OPTIDI PANEL was formed as a specialized construction in order to create an innovative acoustic system in a form available to any customer. It is now easy to hang in any space.



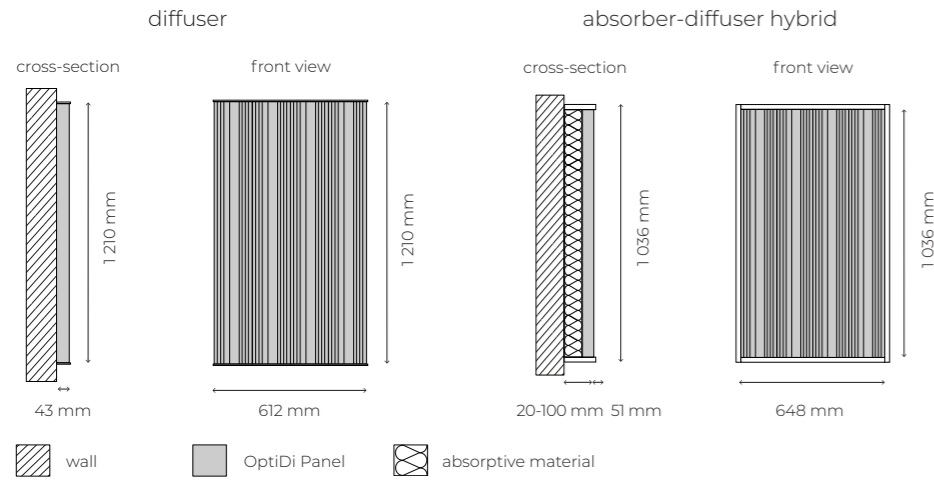
OPTIDI PANEL is a perfect match for interiors that require both high acoustic qualities and an interesting, innovative visual form.



OPTIDI PANEL



OptiDi is a compact acoustic system with a wide range of applications. Its unique shape and colour enlivens any room and gives it a unique character, combining the visual and sound side. It is precisely molded from aluminum in two forms and two thicknesses, providing sound dispersion over a wide frequency range and optional bass absorption.

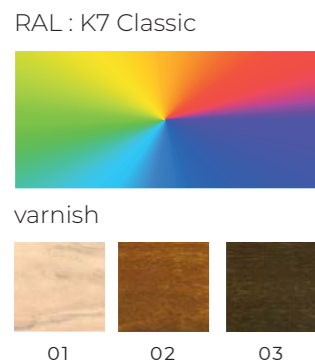


Standard sizes
 612 x 1 210 x 43 mm – diffuser
 648 x 1 036 x 71-151 mm – absorber-diffuser hybrid

Weight
 13 kg – diffuser
 25 kg – absorber-diffuser hybrid

Material
 aluminium, wood-based material, mineral wool

Possible finish in any colour from the RAL palette or wood-like varnish.



Designer
 Architected Sound Team

Country of production
 Poland

Category
 diffusion / absorption

Opis
 OptiDi Panel comes in two variants: as a diffuser and an absorber-diffuser hybrid.

Sound absorption coefficient
 $\alpha_{w, \max} = 0.20$

Application
 Concert and philharmonic halls, theatres, opera houses, rehearsal rooms, recording studios, control rooms, radio and TV emission rooms, conference rooms, lecture rooms and classrooms, waiting rooms, offices, dedicated/home listening rooms.

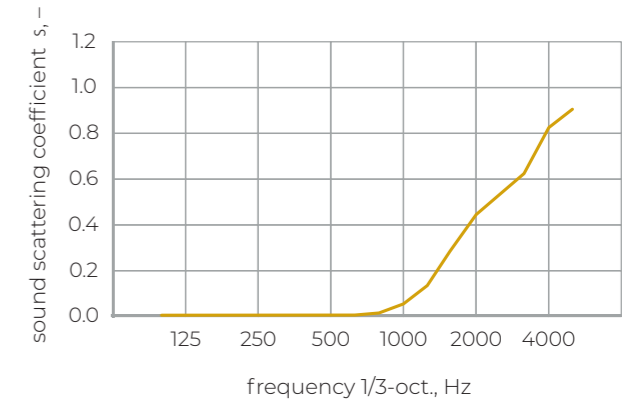
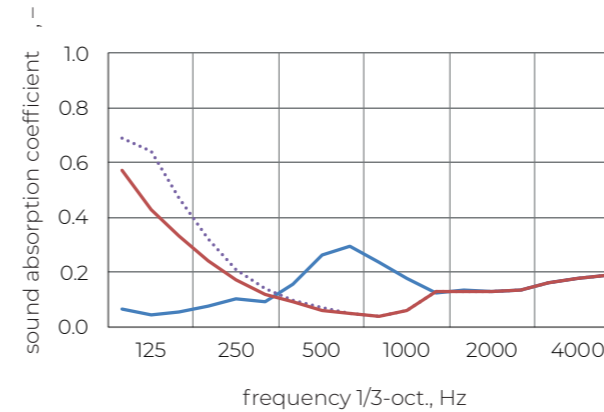
Custom-made
 An individually designed comprehensive acoustic system, taking into account the particular frequency bands. Possible mobile version. Different panel thicknesses are available in the hybrid variant due to the absorption needed.

Fire safety
 Diffuser variant made of materials with flammability class A1. Possibility of making hybrid variant out of materials with flammability class B-s1, d0.

Additional information
 Technical solution developed in cooperation with the AGH University of Science and Technology in Cracow. Community design number: 004417723-0001 and 004417723-0002.



Architected Sound OptiDi Panel – sound absorption and scattering coefficients



Practical sound absorption coefficient α_p

mounting type	A-40	C-50	C-100
frequency 1/1 oct.	—	—
125 Hz	0.05	0.60	0.45
250 Hz	0.10	0.20	0.20
500 Hz	0.25	0.05	0.05
1000 Hz	0.20	0.10	0.10
2000 Hz	0.15	0.15	0.15
4000 Hz	0.20	0.20	0.20

Sound scattering coefficient s

frequency 1/3-oct.	s
1000 Hz	0.05
1250 Hz	0.13
1600 Hz	0.28
2000 Hz	0.44
2500 Hz	0.53
3150 Hz	0.62
4000 Hz	0.82
5000 Hz	0.90

- A-40:** direct mounting, o.d.s. 40 mm *
- C-50:** slit 1 mm + mineral wool 50 mm (35 kg/cbm), o.d.s. 90 mm *
- C-100:** slit 1 mm + mineral wool 100 mm (35 kg/cbm), o.d.s. 140 mm *

* results obtained from analytical calculations
 ** measurements conducted in accordance to ISO 17497-1:2004



Combination of positive and negative modules increase the effectiveness of the system.



