

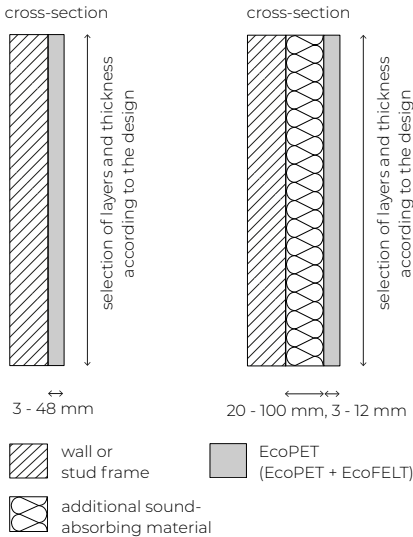


EcoPET



EcoPET are acoustic tiles, panels and other forms, made of non-dusting, non-toxic and 100% environmentally friendly material which is characterized by a high sound absorption coefficient. With EcoPET, you can cut any shapes, combine colours and thicknesses, and complement them with other sound-absorbing materials. Combination with the EcoFELT acoustic felt guarantees even more interesting visual forms.

Application examples



Size
1220 x 2440 mm
(maximum size of a board without formatting, after formatting size reduced to max. 1200 x 2420 mm)

Thickness
3, 9, 12 mm and thicknesses resulting from joining EcoPET boards, for example 15, 18, 21, 24 mm

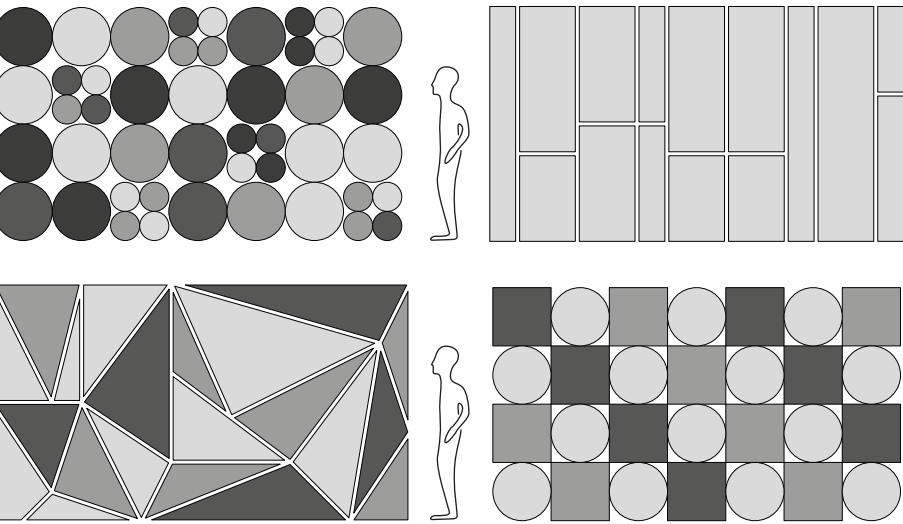
Area weight
1 000 – 4 600 gsm

Material
PET – compressed 50-80% recycled polyester fibers

The color chart is available at architected-sound.com and can be ordered in the form of a sample box.

Designer
Architected Sound Team

Exemplary arrangements



Country of origin
China, Germany

Category
absorption

Description
EcoPET is a sound-absorbing system made from pressed polyester fibers - odorless, non-toxic and non-dusting material. It can be glued directly to the wall or mounted to a stud frame, filling the space between the laths with sound absorptive material. You can cut out various shapes and combine colours to create interesting visual compositions.

Sound absorption coefficient
 $\alpha_{w, \max} = 1.00$

Exemplary arrangements
Please find them on our website

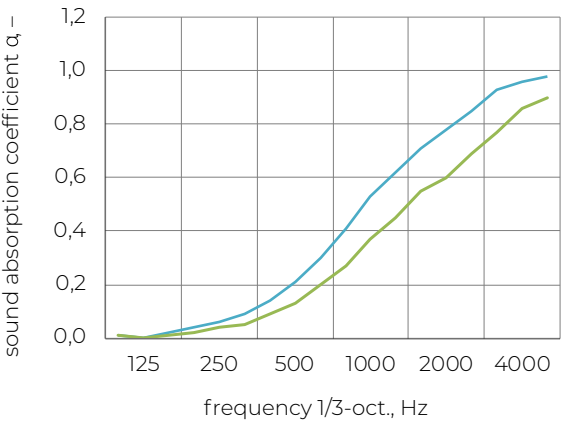
Application
Residential (living rooms, halls, kid's rooms etc.), recording studios, classrooms in music schools,, home listening rooms, waiting rooms, offices, conference rooms, concert and theatre halls, public and private spaces

Custom-made
Can be combined with the EcoFELT acoustic felt material.

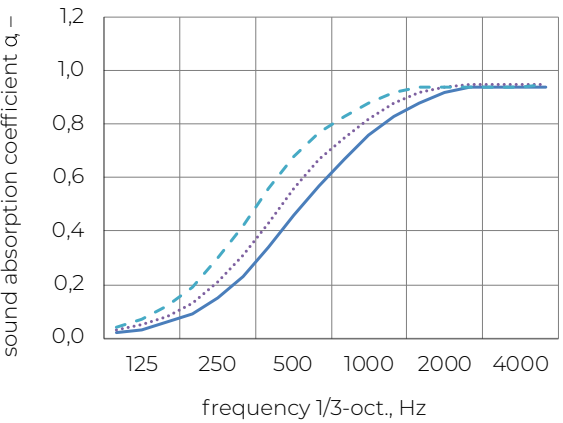
Various sizes and shapes available, depending on the design concept.

Fire safety
Depending on the thickness, it can be made of materials with flammability class B-s2, d0 or C-s2, d0.

Architected Sound EcoPET – sound absorption coefficients



EcoPET 9 mm, 2 000 gsm *
EcoPET 12 mm, 2 300 gsm *
* measurements conducted in accordance to PN-EN ISO 354:2005



EcoPET 18 mm, 4 000 gsm **
EcoPET 21 mm, 4 300 gsm **
EcoPET 24 mm, 4 600 gsm **
** results obtained by analytical calculations

Practical sound absorption coefficient α_p

frequency 1/1-okt.					
125 Hz	0.00	0.00	0.05	0.05	0.10
250 Hz	0.05	0.05	0.15	0.20	0.30
500 Hz	0.15	0.20	0.45	0.55	0.65
1000 Hz	0.35	0.50	0.75	0.80	0.90
2000 Hz	0.65	0.80	0.90	0.95	0.95
4000 Hz	0.85	0.95	0.95	0.95	0.95

Sound absorption coefficients

Weighted sound absorption coefficient α_w	0.25(H)	0.25(MH)	0.45(MH)	0.50(MH)	0.60(MH)
Sound absorption class (EN 11654)	E	E	D	D	C
NRC - Noise Reduction Coefficient (ASTM C423)	0.30	0.40	0.55	0.65	0.70
SAA - Sound Absorption Average (ASTM C423)	0.29	0.39	0.57	0.63	0.70