

SilentPET®

acoustic solutions

Acoustic panels from
recycled PET bottles



Our aim is to be the market leader in our industry and to offer our customers the highest quality services.

We perceive a change in the working environment and modern trends in architecture and design. That's why we came up with **acoustics solutions for rooms using recycled PET bottles**.

By using **SilentPET® panels**, you can simply create a comfortable meeting and working environment.

ACOUSTICS FROM PET BOTTLES

Enjoy peace of mind and time for reflection at work, while thinking about your health. Being in a noisy environment adversely affects **your health** and **therefore worker output**.

Finding a good solution for room acoustics is one of the standards of quality offices and living spaces in the world.

Therefore, we have found a solution that solves **acoustic imperfections in spaces** – SilentPET® panels.

HOW THEY ARE MADE



INNOVATION

We think ecologically and we care about sustainability. That's why we came up with the idea of how **to produce acoustic panels from PET bottles**.



WASTE

A large number of recycled waste PET bottles **are needed**.



PROCESS

PET bottles are processed into fibres in the **manufacturing process** to form a final blend of material.



PRODUCT

Final rolling produces **SilentPET® sound insulation boards** with excellent acoustic properties.

WHERE SILENTPET WORKS



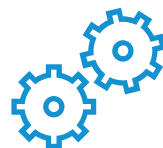
OFFICES

We specialize in office space and we know how to make yours a nice place **for meeting and getting work done**.



SCHOOLS

Cloakrooms, hallways, auditoriums and especially **classrooms and lecture halls**. We create peace and quiet in any space.



MANUFACTURING PLANTS AND WORKSHOPS

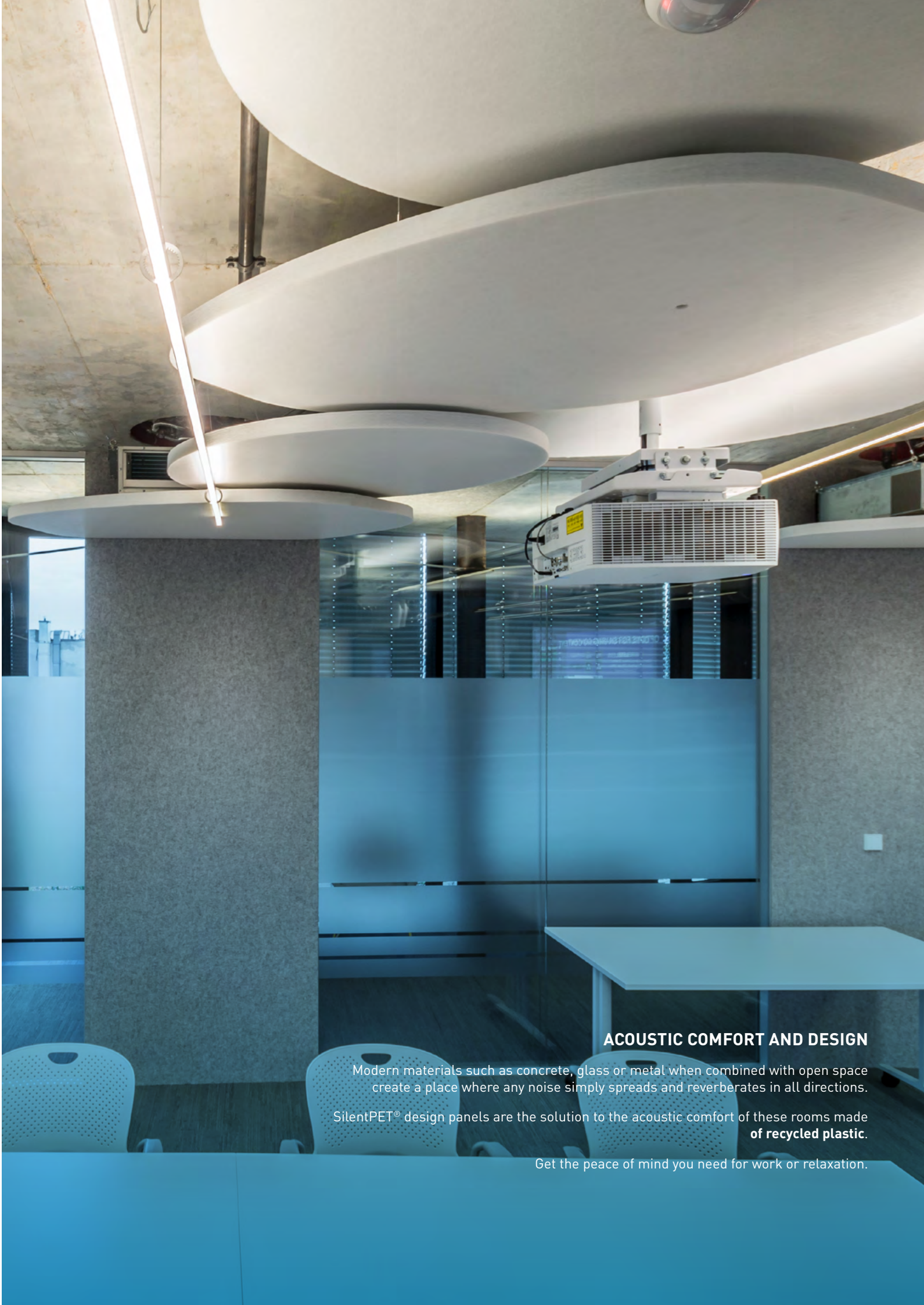
Even **in extremely noisy** conditions, we can make things run smoothly so that your skilled workers can get things done.



YOUR HOME

You don't have to shout each other down at home. Open galleries, large glass covered areas and interconnected rooms all are working against you.

Create well-being at home!



ACOUSTIC COMFORT AND DESIGN

Modern materials such as concrete, glass or metal when combined with open space create a place where any noise simply spreads and reverberates in all directions.

SilentPET® design panels are the solution to the acoustic comfort of these rooms made **of recycled plastic**.

Get the peace of mind you need for work or relaxation.



FINE-TUNING THE ROOM

Each space is different. Large **glass surfaces, hard floors, open spaces** or high light clearance. The composition of the construction, carpet or furnishings usually improves the acoustic conditions in the room, but only by **using acoustic panels** can you achieve the correct acoustic conditions. Choosing the correct shapes and location plays a role in the final effect,

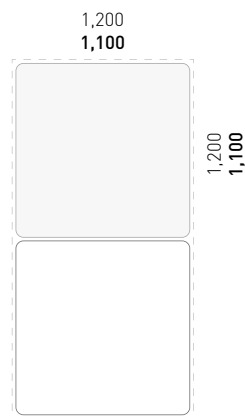
fine-tuning both the room and its users acoustically.

MEETING ROOM | JIHLAVA | CZ

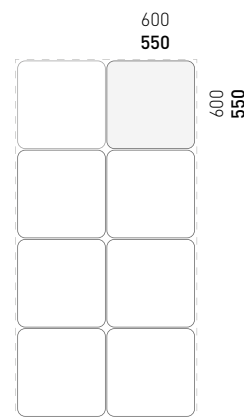
PRINT | CUSTOM CUTTING | AMBIENT LIGHT

CHOOSE THE SHAPE, COLOUR AND POSITION

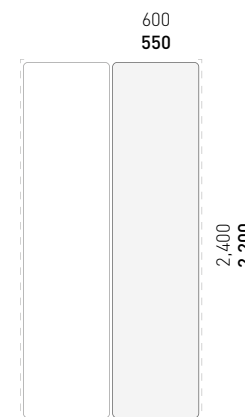
Straight corners | mm
Rounded corners | mm



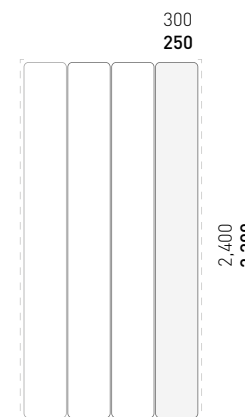
QUADRO L



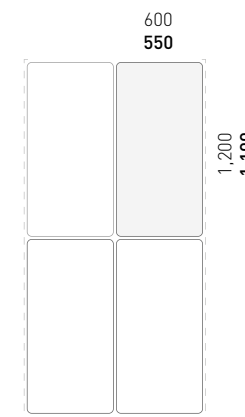
QUADRO M



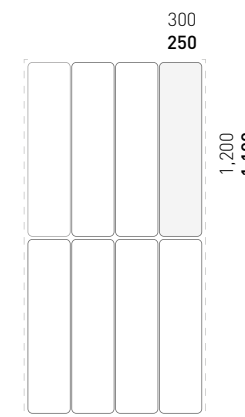
STRIPE M long



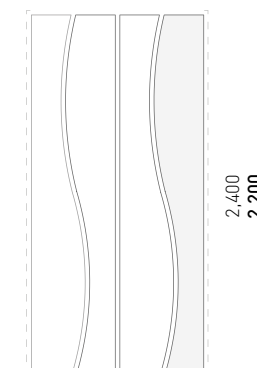
STRIPE L long



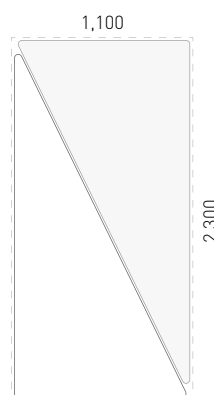
STRIPE M short



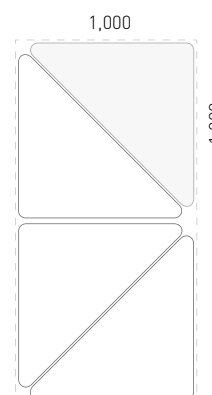
STRIPE M long



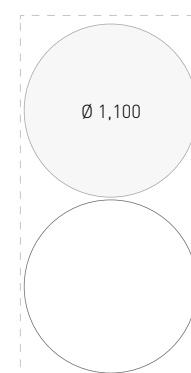
WAVES



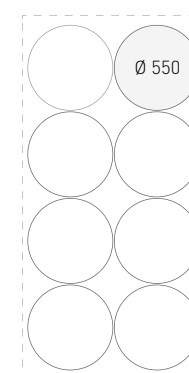
TRIANGULO L



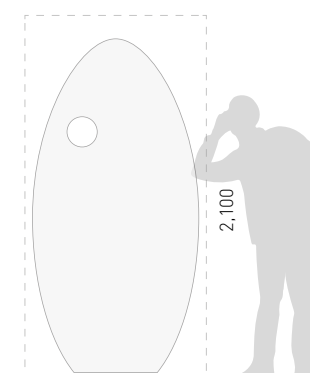
TRIANGULO M



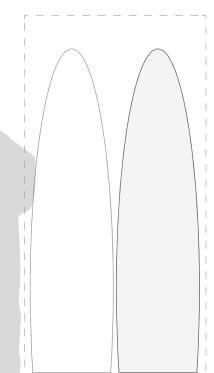
CIRCULO M



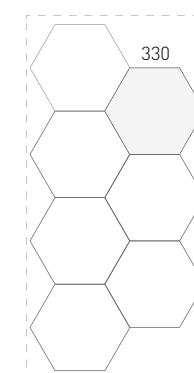
CIRCULO L



EGGO



SURFO



HEXUS

01

THE RIGHT SHAPE

Functionality is important, but we also have to like things.
Choose from our **library of features** or choose your own design!

The basic dimension of 2,400 x 1,200 mm offers a wide range of shapes.

02

STAND OUT OR FIT IN?

Choose **the thickness, colour variation** or special surface treatments such as printing graphics and RAL staining.

03

A LITTLE HIGHER!

SilentPET® acoustic panels installed in the right places will achieve the ideal diffusion and **reverberation absorption in rooms**.

15 MM
50 MM

THICKNESS OF THE MATERIAL

WHITE
GREY
BLACK

BASIC COLOURS

PRINT GRAPHICS
RAL STAINING

SURFACE FINISH



HANGING ON THE CEILING

In most cases it is **the most effective solution**, whether you place it horizontally or vertically.



FASTENED TO THE WALL

Create a **functional image**, complement your existing design or convey your thoughts directly on the wall.



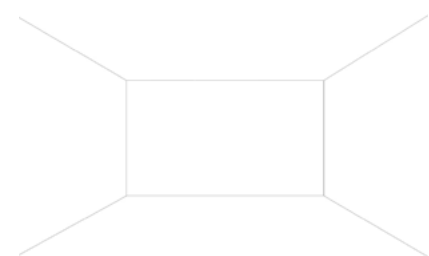
FREE STANDING

A divider is an ideal solution for **quickly moving it to** where you need it at the moment.

MODERATING REVERBERATION

The reverberation and echo time of a room can be influenced not only by the number of absorbing surfaces, **but also by their placement.**

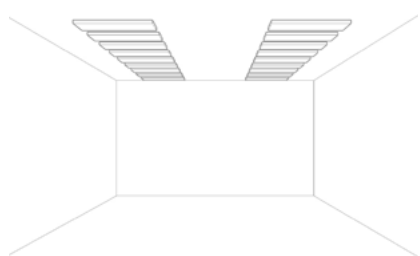
Take a look at **the basic fastening options** and how the chosen solution **affects room acoustics.**



EMPTY ROOM

Room size 6 x 8 x 2.7 m. Glass surfaces 30%. Walls are exposed concrete. Smooth cast floor.

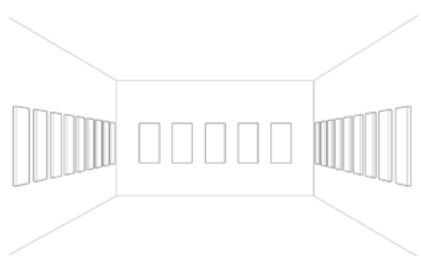
Absorption area (m²)	0
Reverberation time (seconds)	3.08
Improvement up to (%)	-



HORIZONTALLY ON THE CEILING

✓ Suitable for low light clearance

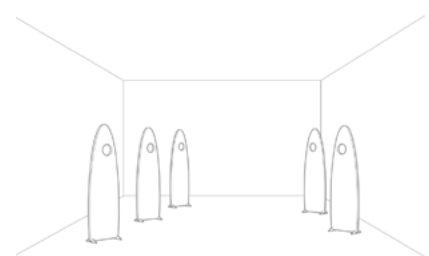
Absorption area (m²)	11.5
Reverberation time (seconds)	1.81
Improvement up to (%)	41



PLACEMENT ON THE WALL

✓ When the ceiling cannot be used
✓ Aesthetic effect (custom design)

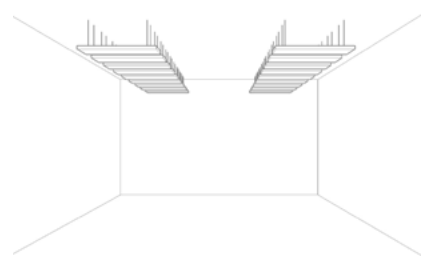
Absorption area (m²)	11.5
Reverberation time (seconds)	1.75
Improvement up to (%)	43



SOLITARY DIVIDERS

✓ No interference with structures
✓ Portable as needed

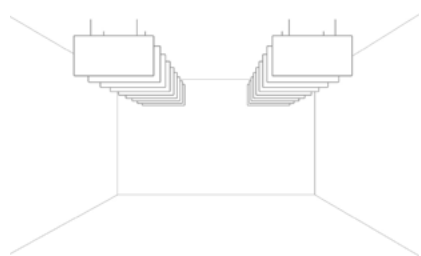
Absorption area (m²)	11.5
Reverberation time (seconds)	1.35
Improvement up to (%)	56



HORIZONTALLY SUSPENDED

✓ Interior design element
✓ Height adjustment possible

Absorption area (m²)	11.5
Reverberation time (seconds)	1.3
Improvement up to (%)	58



VERTICALLY SUSPENDED

✓ Possibility of placing a large amount of material in a small area

Absorption area (m²)	11.5
Reverberation time (seconds)	1.17
Improvement up to (%)	62



WHAT IS THE REVERBERATION TIME?

The **reverberation time** in the room is important for working comfortably or relaxation. The shorter, the better the concentration and conversation in the space.

We have a **special chamber** where we measure and moderate the reverberation time, where we test not only our acoustic panels, but also our interior systems.

CONFERENCE ROOM
NADACE PARTNERSTVÍ | BRNO | CZ

PRINT | CUTTING | MOUNTING WITHOUT DRILLING

FUNCTION AND DESIGN

SilentPET® does not have to come in only in the basic colours of white, grey and black. Thanks to printing you can **hang the panels as pictures** or use them for communication.

Combining different locations, whether they be **ceilings, walls or dividers**, improves the acoustic properties and brightens the room from an aesthetic point of view.



DISSEMINATING SOUND

Sound, whether it comes from our mouth or another source, **spreads like waves**. Spatial acoustics deals with its dissemination, absorption, reflection and scattering.

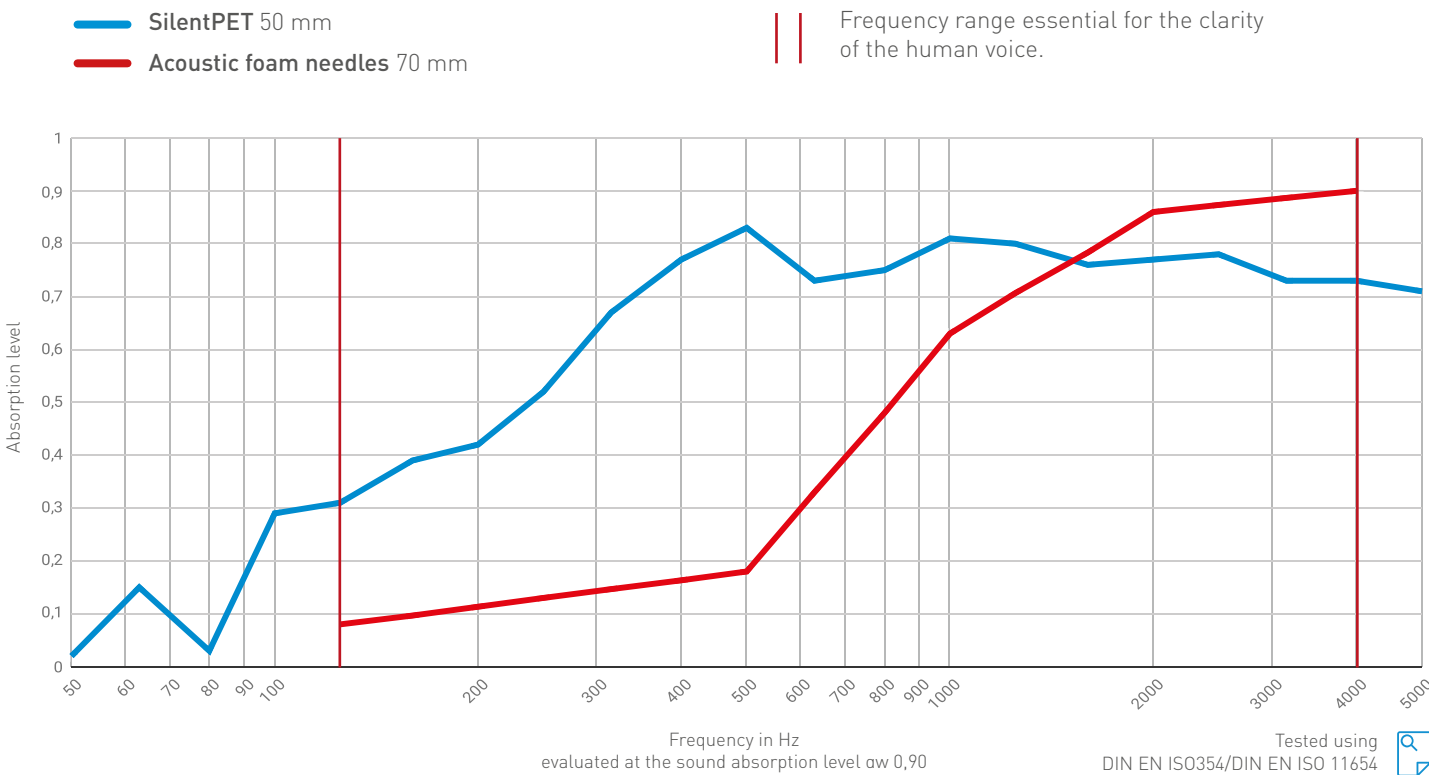
With the right choice of shape and placement of SilentPET® acoustic panels, we can make sound and moderate its dissemination **to improve the working environment**.

TECHNICAL SPECIFICATIONS

Excellent acoustic properties and high product standards guarantee **health-friendly** properties and **easy maintenance**.

In addition, we use environmentally friendly processes **with the lowest possible CO₂ emissions** in our production, which is why the production waste is returned to the production process.

SOUND ABSORPTION



TECHNICAL SPECIFICATIONS

COMPOSITION	60% recycled PET bottles 40% bico fibers (fibrous adhesives)
STANDARD SIZE	standard 2,400 x 1,200 mm [other sizes upon request]
PANEL THICKNESS	15 mm 50 mm
COLOURING	white grey black print
WEIGHT	2,600 g/m ²
MOISTURE RESISTANCE	yes
EMISSION	odour-free, does not release gases
FIRE RESISTANCE	B-S1, d0 (EN13501)
TEMPERATURE RANGE	-30 °C to + 80 °C

NOT HARMFUL TO HEALTH

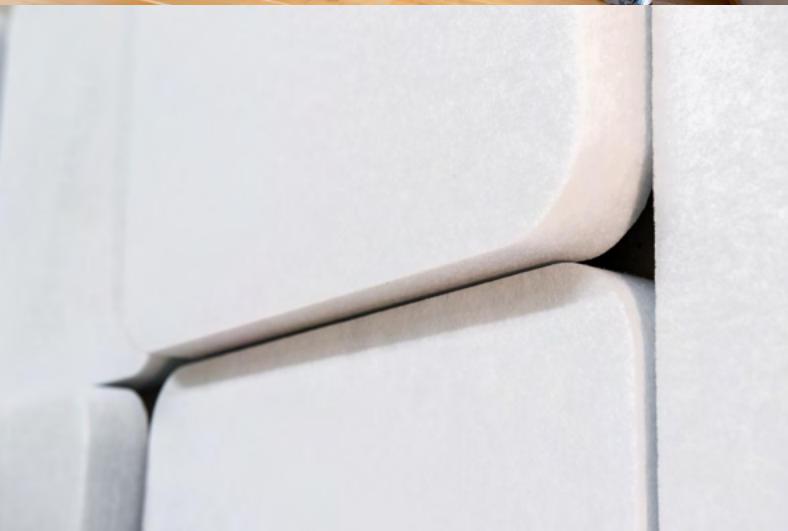
SilentPET® complies with “Öko-Tex® Standard 100 Product Class I” for products suitable for young children, even used as a padding for cot mattresses. The material is **skin friendly** and **does not cause allergies, irritations or respiratory problems**.

SilentPET® is odourless and emits no emissions. In addition, **it is moisture resistant** and does not tend to get mouldy or become infested by parasites.

EXPERT ANALYSIS

If you want to make your environment a more pleasant place to work or relax, all you have to do **is contact us** and we will provide you with professional analysis, calculations of reverberation time and other quantities.

Not everything can be calculated, so we apply our rich experience and development from our own acoustic chamber.



Headquarters:

LIKO-S, a.s.
U Splavu 1419
684 01 Slavkov u Brna
The Czech Republic

+420 5 44 22 11 11 | info@liko-s.com

www.liko-acoustic.com

Become one of our fans and be part of the story...



FACEBOOK



YOUTUBE



LINKEDIN