

# **TECHNICAL SHEET**

Silentmax® acoustic panels are characterized by very high acoustic absorption. They are light, ecological, mechanically and chemically resistant, antistatic against dust and practically maintenance-free.

**Acoustic comfort** brings peace and relaxation to workspace. It is proven that an echo-free environment fundamently increases the intelligibility of the spoken word and increases concentration and productivity at work. Investing in acoustics brings lasting benefits and contributes to a comfortable environment.

# Ecology



We took our inspiration from the cycle of raw materials in nature. Where one ends, another begins. Material used to produce recycled PET bottles is already awaiting its next life cycle. After sorting, the PET is crushed and heated. Fibers thinner than human hair are drawn from the heated mass. By pressing these fibers under the prescribed conditions, the Silentmax® material is created, which is again fully recyclable.

## Use and installation

Silentmax® effectively reduces echo and reverberation inside space. It also reduces unwanted noise and improves overall acoustic parameters.

How to install:

- hanging on the wall
- using corner bars
- hanging under the ceiling
- by gluing
- using Velcro
- laying down (partition, screen)
- using spacer screws



#### Medical harmlesness

It complies with these test substances according to Directive 2011/65 / EU. It does not contain heavy metals: lead, mercury, cadmium, hexavalent chromium, bromine. Does not contain phthalates: PBB, PBDE, DEHP, BBP, DBP, DIBP.

Tested by the accredited laboratory ITC Zlín.

#### Non-flammability

The reaction to fire classification according to ČSN EN 13501-1: 2019 is C-s1-d0. ČSN EN ISO 11925-2 (exposure 30 s) B to D, D2 to group B S2, d0. ČSN EN 13823 FIGRA-C; LFS-B, C; THR-B; SMOGRA-S1; TSP-S1; flaming drops-no (d0).

Tested by the Institute of Civil Engineering CSI in Prague.

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## Sound absorption parameters

They are characterized by excellent acoustic absorption in a very wide range of frequencies. Absorption coefficient NRC = 0.9 in the frequency band of the spoken word 500 Hz to 5 kHz. The NRC coefficient depends on the location of the panels in the space and their configuration.

Tested by the accredited laboratory ITC Zlín.



Hz	&s
100	0,05
125	0,08
160	0,11
200	0,15
250	0,26
315	0,37
400	0,50
500	0,63
630	0,74
800	0,86
1000	0,97
1250	0,98
1600	0,98
2000	0,96
2500	0,94
3150	0,92
4000	0,99
5000	0,97
NRC 500Hz-5kHz	0,90

#### **Technical parameters**

Dimensions: **2440 mm x 1220 mm**, thickness **12 mm** Mass: **6,9 kg** / panel (2,3 kg / m²)

# **Cleaning and maintenance**

Vacuum cleaner, damp cloth.

#### Detail

Recycled fibers with a thickness of 18 to 22  $\mu$ m are pressed at a strictly determined temperature and pressure so that the fibers melt and bond at the point of their mutual contact. The internal structure and precisely defined density (ratio of fibers, their gaps, free space between them) predetermine the property of extreme acoustic absorption.

# Full color printing

Using special technology, we can print Silentmax acoustic panels without any loss to their acoustic properties. Due to the very high viscosity of the paint and the surface tension, paint droplets spill on the surface of the individual fibers. This printing technology preserves the acoustic properties of the material.

#### ATTENTION!

Coating the panels with classic paint seals the resonant pores in the Silentmax material and thus degrades its acoustic properties.

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