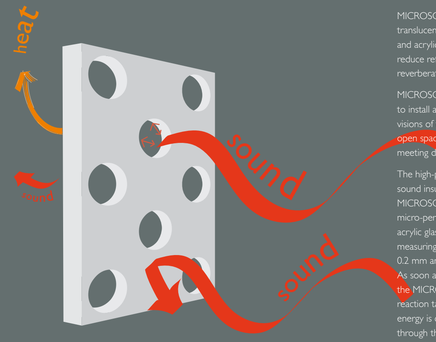


Welcome to the world of MICROSORBER® – the innovative sound absorbing system from KAEFER Isoliertechnik in Bremen.

MICROSORBER® – transparent, translucent and printed foils and acrylic glass panels which reduce reflected sound and reverberation time in buildings.

MICROSORBER® foil is easy to install and versatile. It allows visions of transparency and open space to come true while meeting demands of acoustics.

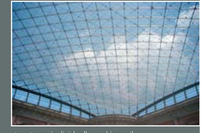
The high-performance sound insulation effected by MICROSORBER® results from its micro-perforation. The foil and acrylic glass elements have holes measuring anywhere between 0.2 mm and 0.8 mm in diameter. As soon as sound waves strike the MICROSORBER®, a physical reaction takes place; the sound energy is converted into heat through the friction arising at the hole edges. Reverberation times and sound levels are reduced significantly.

Whether in open-plan offices, canteens, swimming pools, production sites or entrance halls – the MICROSORBER® principle of transparent sound absorption allows for creativity in the design of buildings where room acoustics play a crucial role.

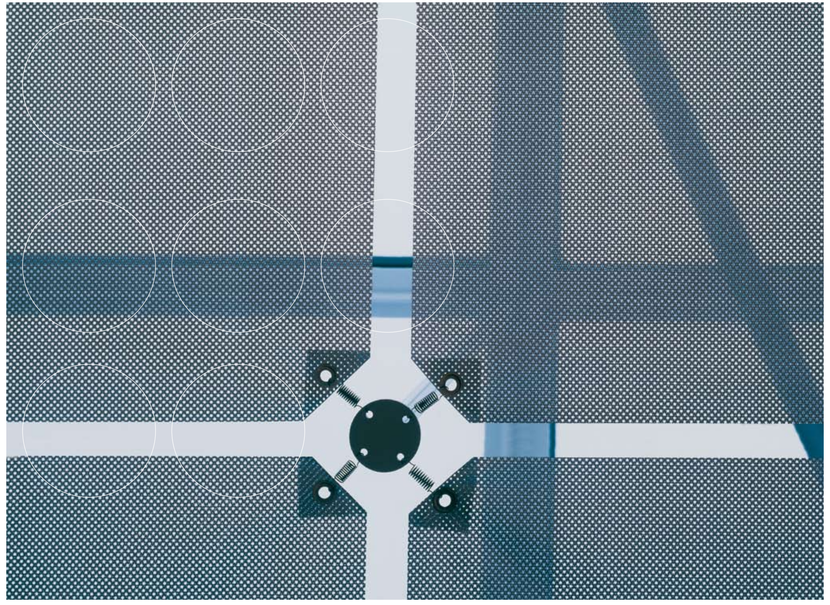
It is also ideal as a means of optimizing the room acoustics of already existing buildings.

MICROSORBER® can be installed in front of walls and glass façades and below ceilings. Various systems for fastening the foil make it possible to attach and detach individual elements with ease.

MICROSORBER® can be adapted to rooms and architectural



structures individually and is available in the form of foil absorber, acrylic glass paneling and finished products such as free-standing partitions, roller blinds and lamella curtains.



Micro-perforated aryphan foil

Thickness: 0.1 mm
Perforation: diameter of hole approx. 0.2 mm
Distance between holes 2 mm

Design:
- transparent
- translucent
- printed (silver design)

Properties:
- not easily ignitable, B1 in accordance with DIN 4102
- UV-stabilised,
- electrostatically neutral if relative humidity exceeds 40 %

max. width: 1.25 m

Micro-perforated ETFE-Foil (Teflon)

Thickness: 0.1 mm
Perforation: diameter of hole approx. 0.2 mm
Distance between holes 2 mm

Design:
- transparent
- printed

Properties:
- not ignitable, B1 in accordance with DIN 4102
- absolutely UV-stable

max. width: 1.5 m

PVC-Foil

Thickness: 0.17 mm
Perforation: diameter of hole approx. 0.15 mm
Distance between holes 2 mm

Design:
- white
- coloured
- translucent

Properties:
- not easily ignitable, B1 in accordance with DIN 4102
- UV-stabilised

max. width: 1.5 m

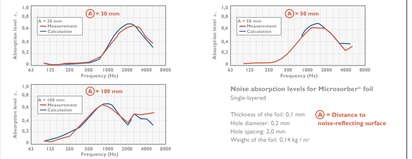
Micro-perforated acrylic glass

Thickness: 3 to 5 mm
Perforation: diameter of holes 0.8 mm
Distance between holes 5.33 mm and others

Design:
- transparent
- translucent
- coloured

Properties:
- normal flammability, B2 in accordance with DIN 4102
- not easily ignitable, B1 in accordance with DIN 4102
- UV-stabilised
- radial configuration possible

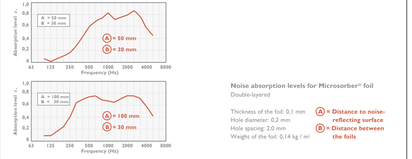
Dimensions: up to 2.05 × 3.05 m



Noise absorption levels for Microsorber® foil
Single-layered

Thickness of the foil: 0.1 mm
Hole diameter: 0.2 mm
Hole spacing: 2.0 mm
Weight of the foil: 0.14 kg / m²

A = Distance to noise-reflecting surface



Noise absorption levels for Microsorber® foil
Double-layered

Thickness of the foil: 0.1 mm
Hole diameter: 0.2 mm
Hole spacing: 2.0 mm
Weight of the foil: 0.14 kg / m²

A = Distance to noise-reflecting surface
B = Distance between the foils

You will find further technical information on our internet site
www.microsorber.com

Or talk to us directly.

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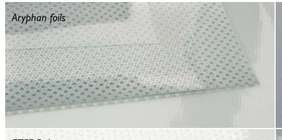
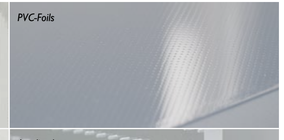
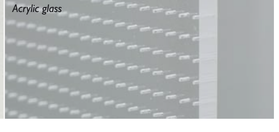


Aryphan foils



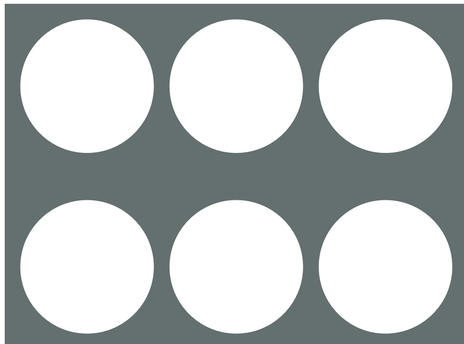
PVC-Foils

ETFE-Foils



Acrylic glass

MICROSORBER® systems can be combined with various façade and roof constructions and thus can be easily integrated into rooms. The foil is either pulled taut or fixed at the corners with a pin-and-spring system.



In addition to variable surface absorbers, the MICROSORBER® program includes various ready-to-use retrofit products for improving room acoustics which can be installed and removed again as required.

Free-standing partitions:
MICROSORBER® partitions are ideal for noise protection of work places, for example in call centers. If printed foil is used it also acts as a screen which blocks vision and it has an anti-glare effect on computer monitors.

Roller blinds:
MICROSORBER® roller blinds with electric drive or manual operation provide acoustic optimization as required. As the foil is transparent, it does not block vision.

Lamella curtains:
Like roller blinds, lamella curtains also provide noise insulation in front of windows. Printed foil acts as a screen for added privacy.

Baffle systems:
Noise-absorbing protective covers, so-called baffles, are installed under ceilings. Preferred fields of application are cooling ceilings and noisy production areas where special demands on lighting are made.

Illustrations:

adidas employees' restaurant, Herzogenaurach
Architects: Kauffmann Theilig & Partners, Ostfildern
Photo: Roland Halbe Photography, Stuttgart

Rofing- in of the Schlüterhof courtyard in the Zeughaus, Berlin
German Historical Museum
Architect: I.M. Pei, New York
Supporting construction planning: Schlaich Bergermann und Partner, Stuttgart
Photo: ADA Acoustic Design Ahnert

Open air swimming pool, Kempten
Plan: RPM Architects, Munich
R. Reichert, H. Pranschke, H. Maluche
Photo: Anita Back Photography, Berlin

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KAEFER

MICROSORBER® - optimizing transparency acoustically