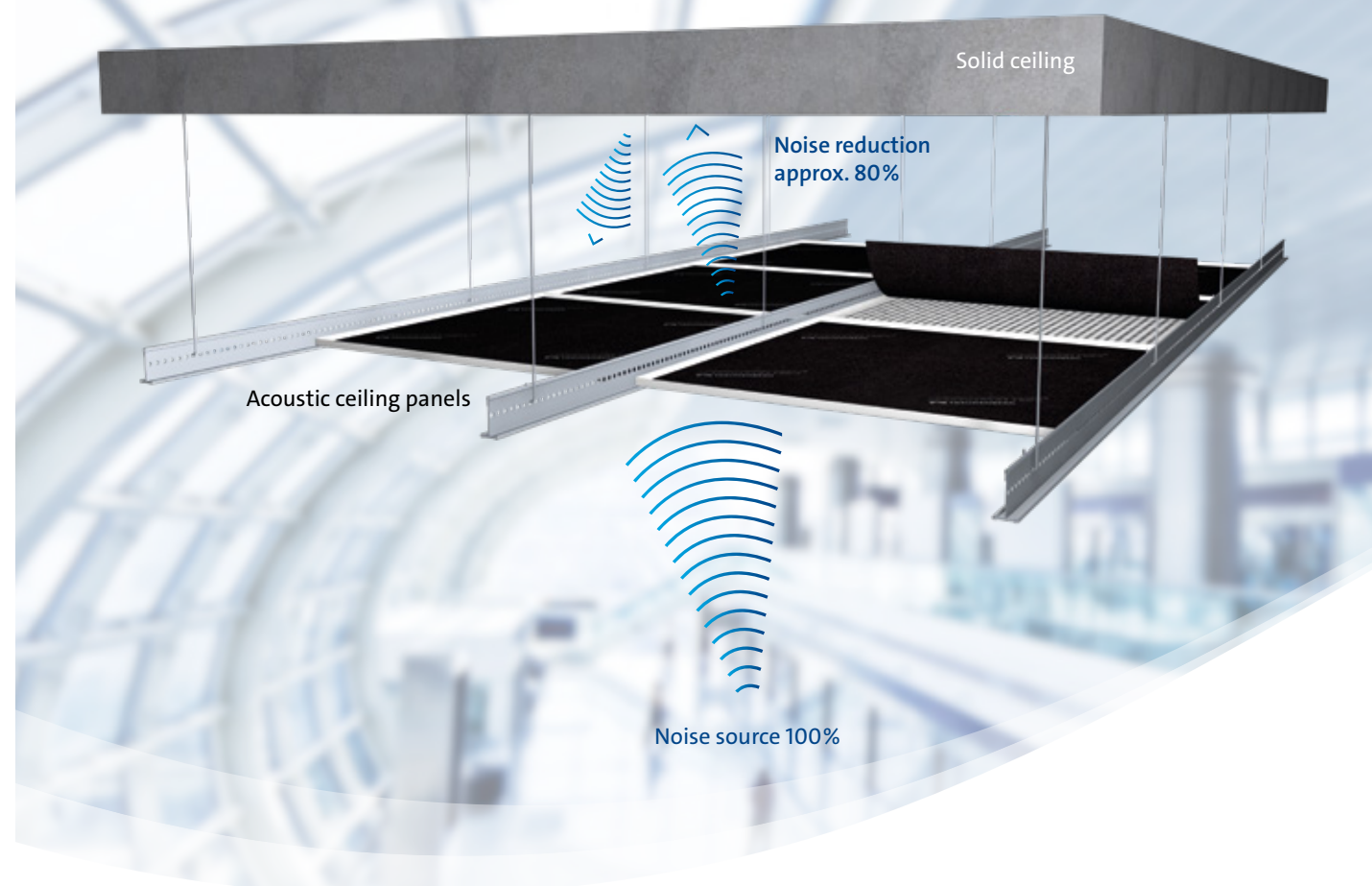


HOW SOUNDTEX WORKS



KEY BENEFITS

- Optimal sound absorption for all environments
- Thin material, thickness of approx. 0,27 mm — great savings on freight, storage and installation costs
- Customized rolls and sheets available worldwide
- Facilitates thermal transfer for acoustic panels containing integrated heating and/or cooling system
- Enhanced flexibility in building HVAC designs
- Easy to apply on perforated ceilings, walls or furniture
- Tested in accordance with all major international standards for acoustic performance and fire behavior. Further optional test reports upon request.

CONTACT

Freudenberg Performance Materials SE & Co. KG

Phone: +49 6201 80 50 96

Mail: soundtex.building@freudenberg-pm.com

www.freudenberg-pm.com



Watch SoundTex Movie

FREUDENBERG
PERFORMANCE MATERIALS

 **FREUDENBERG**
INNOVATING TOGETHER

SoundTex[®]

ACOUSTIC NONWOVENS

FREUDENBERG
PERFORMANCE MATERIALS

 **FREUDENBERG**
INNOVATING TOGETHER



SOUNDTEX INSIDE

When it comes to architectural solutions for perforated ceilings, walls and furniture, the things that matter most are appearance, performance and cost effectiveness. In order to offer a great product, you need all of them.

SoundTex is a thin acoustic nonwoven that is applied to the back of perforated structures to absorb sound. The material offers a number of economic and environmental advantages over competitive solutions.

Our acoustical nonwoven is applied behind perforated panels made of steel, aluminium, wood or plasterboard. SoundTex is available in black, white and custom colors.

Freudenberg Performance Materials developed a wide range of nonwovens to meet the acoustic requirements for each application in modern architectural design.

SoundTex is used extensively in applications where acoustical performance and building aesthetics are required. Typical examples include airports, office buildings, municipal halls, theatres, convention centers, subway stations, partitions and furniture in offices all over the world.

Works great – installs easily!

With a porous sound absorber like SoundTex, the sound energy is converted into thermal energy due to viscous friction. The ultra-thin structure of our acoustic nonwoven makes handling and installation easy. Using heat and pressure, SoundTex is easily laminated onto perforated elements directly at the factory, allowing for lower shipping cost, reduced workload and higher efficiency at the construction site.

SoundTex is economical and cost effective

With a thickness of only 0.27 mm, it provides architects and designers with maximum flexibility by reducing shipping and storage costs at the same time.

SoundTex increases manufacturing yield

SoundTex can be supplied in rolls or sheets, eliminating the need for manual cutting and fitting. This feature also allows for greater use of automated production processes.

SoundTex increases design options

Acoustic nonwovens are lightweight, air permeable, and do not interfere with certain ventilation processes. These features give architects and designers greater flexibility in panel shapes, contours and placement of air inlets and vents. Air exchange through the nonwoven improves efficiency of heat and cooling systems.

Freudenberg Performance Materials also offers acoustic nonwovens with various optical features for interior construction.

The product brand marked ® is a registered trademark of Carl Freudenberg KG in several countries.

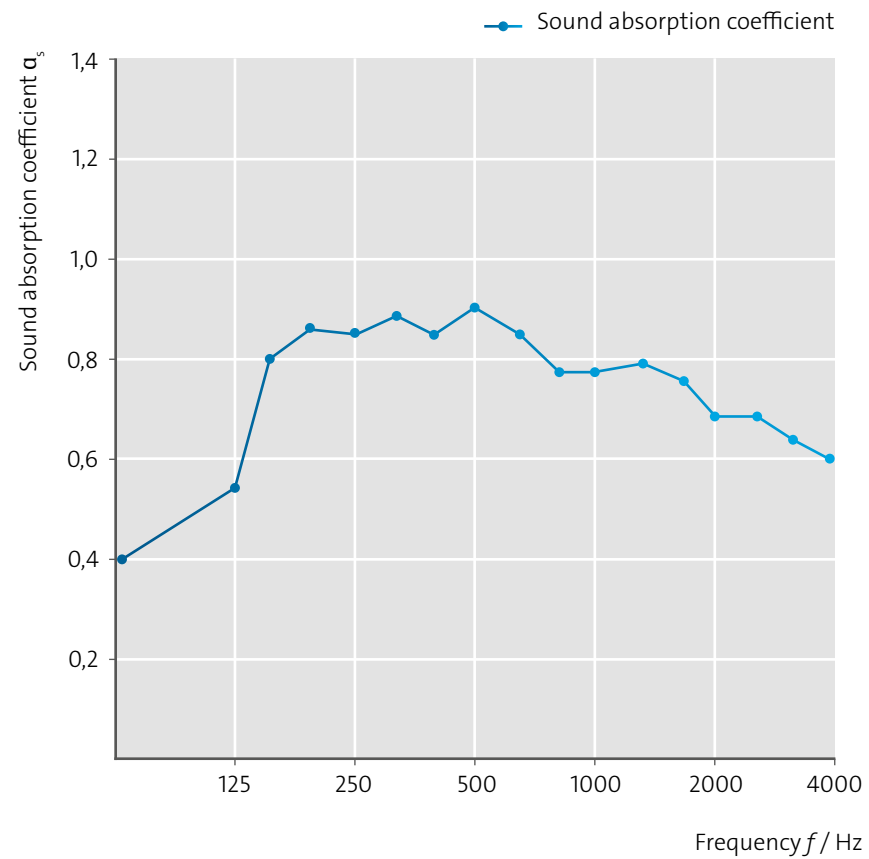
SOUND ABSORPTION COEFFICIENT ISO 354

Measurement of sound absorption in reverberation rooms

Rating according to ISO 11654:
Weighted sound absorption coefficient
 $\alpha_w = 0.75$ (L), Sound absorption class: C

Rating according to ASTM C423:
Noise Reduction Coefficient NRC = 0.80
Sound Absorption Average SAA = 0.81

Air cavity: 150 mm
Open perforated area: approx 10%
Hole diameter: w = 1,8mm



Frequency (Hz)	α_s 1/3 octave	α_p oktave
100	0.39	0,60
125	0.56	
160	0.79	
200	0.86	0.85
250	0.86	
315	0.88	
400	0.87	0.85
500	0.90	
630	0.85	
800	0.77	0.75
1000	0.77	
1250	0.78	
1600	0.74	0.70
2000	0.70	
2500	0.68	
3150	0.65	0.60
4000	0.61	
5000	0.58	

α_s Sound absorption coefficient according to ISO 354

α_p Practical sound absorption coefficient according to ISO 11654

VERSATILE APPLICATIONS



Plasterboard ceiling, library, Spain



Metal ceiling, airport, India



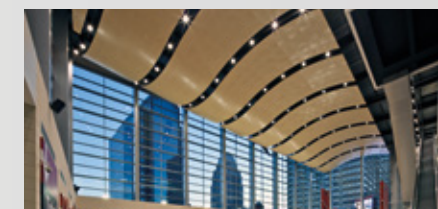
Wooden ceiling, hotel, Chile



Special shaped ceiling, airport, Emirates



Metal ceiling, office, Luxembourg



Wooden ceiling, basketball arena, USA

INTERNATIONAL AIRPORT REFERENCES

- Pudong Airport, China
- Beijing Capital Airport, China
- Hong Kong International Airport, China
- Shenyang Taoxian International Airport, China
- International Airport Guangzhou, China
- Tan Son Nhat Airport, Vietnam
- Incheon International Airport Seoul, Korea
- International Airport, Singapore
- Luxor International Airport, Egypt
- Beirut International Airport, Lebanon
- Abu Dhabi International Airport, UAE
- Dubai International Airport, UAE
- Doha International Airport, Qatar
- Muscat International Airport, Oman
- Lahore International Airport, Pakistan
- Mumbai Domestic Airport, India
- Dehli International Airport, India
- Bangalore International Airport, India
- International Airport Frankfurt Terminal 2, Germany
- Linate International Airport Milano, Italy
- International Airport Madrid, Spain
- Barcelona Airport, Spain
- Keflavik Airport, Iceland
- Arlanda International Airport Stockholm, Sweden
- International Airport Copenhagen, Denmark
- Sofia Airport, Bulgaria
- Riga Airport, Latvia
- Tulsa International Airport, USA
- Hartsfield-Jackson Atlanta International Airport Georgia, USA
- Los Angeles International Airport California, USA
- John F. Kennedy Airport New York, USA
- International Airport Philadelphia, USA
- Logan International Airport Boston, USA
- Calgary International Airport Alberta, CAN
- El Dorado Airport, Colombia
- Scheremetjewo Airport Moscow, Russia

SoundTex installation: Pudong Airport, China