

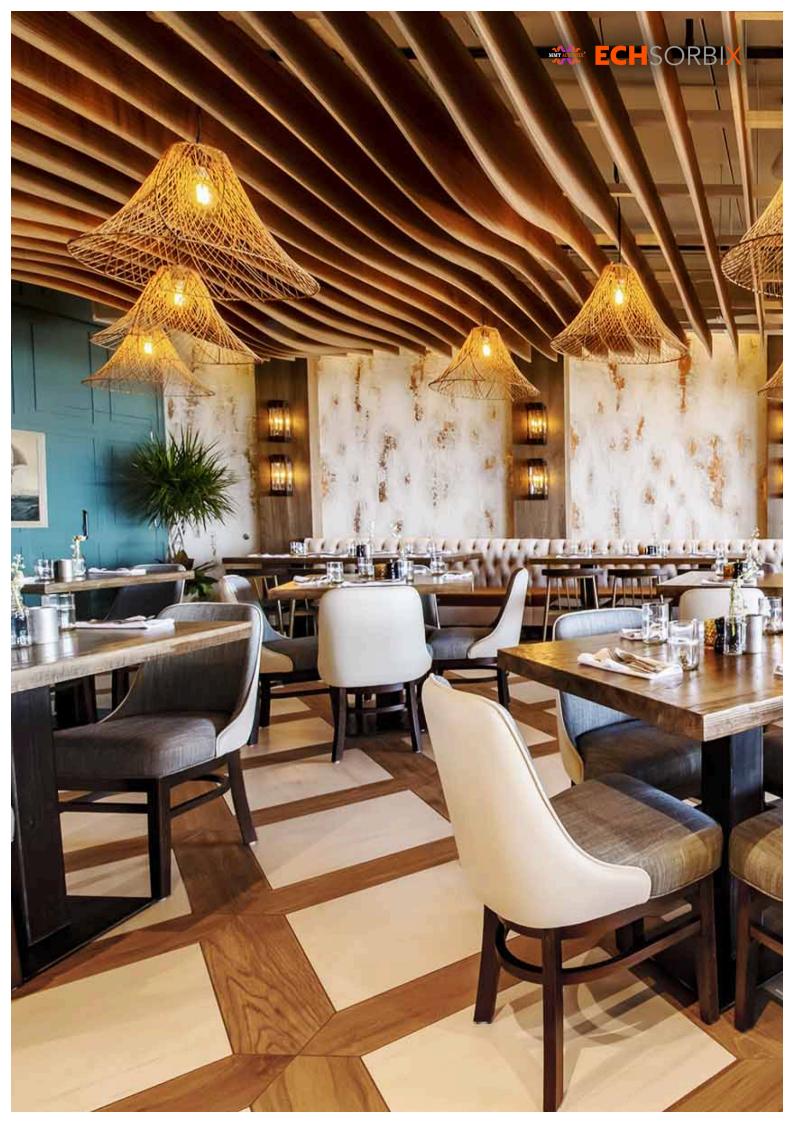
ECHSORBIX

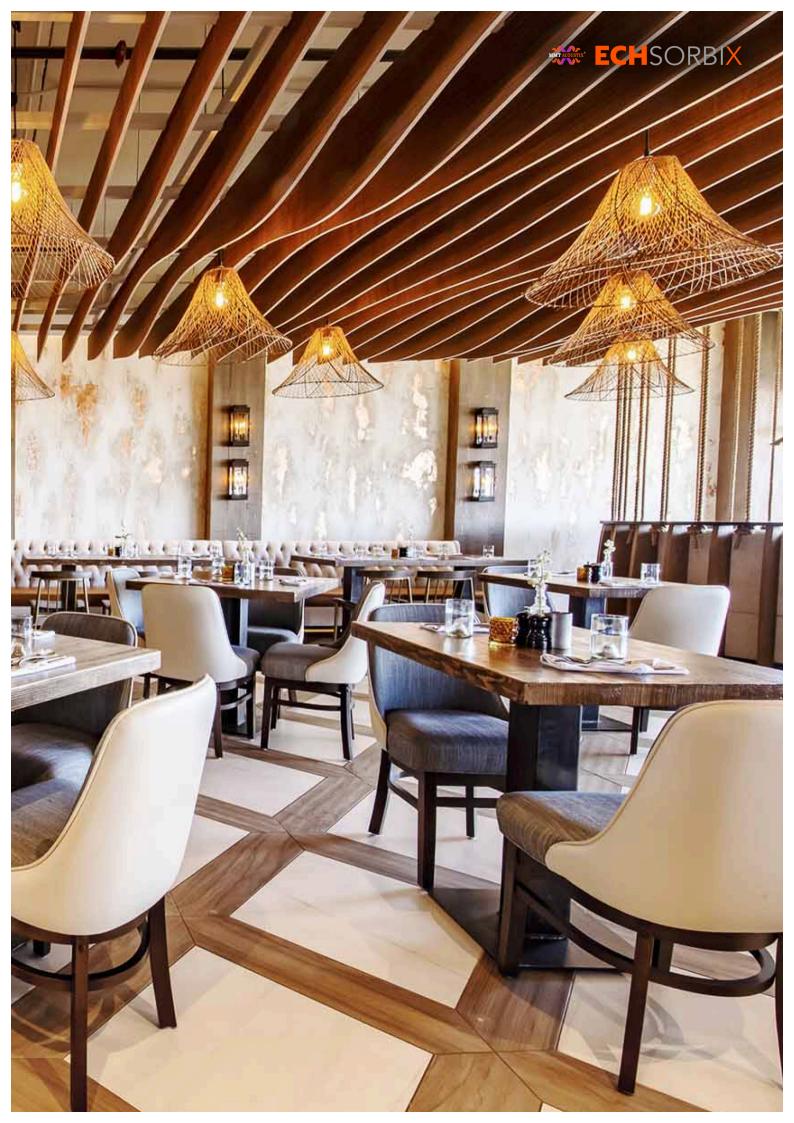
IS DEVELOPED ON THE BELIEF THAT BUILDING MATERIALS SHOULD BE SUSTAINABLE SURPRISINGLY FUNCTIONAL AND REMARKABLY BEAUTIFUL.

LET'S CREATE!



A SMARTER WAY OF SOUNDPROOFING





Specifications

Material:

Echsorbix are manufactured using industrial-grade non-woven Polyester Fibre made by recycling PET (polyethylene terephthalate), a waste material from plastic bottles. Hence, our products are made from 100% recycled material.

Standard Size:

2440 x 1220 mm - can be customized as per design

Standard Thickness:

10mm/20mm/30mm- can be customized as per design

Sound Absorption:

Products tested by ARAI NRC value: Up to 0.9 NRC

Flammability:

Tested as per EN-13501 by SGS

Sustainability:

- · 100% Bio-Based
- · 100% Biodegradable
- · 100% Recyclable
- · 0% Waste and pollution in manufacturing
- · Resourceful material sourcing

Functionality:

- ·Strong
- · Lightweight
- · Fire Retardant
- · Water Repellent
- · Sound Absorbent







Performance testing indicates that Echsorbix has excellent absorptive qualities, making it well suited for spaces that can benefit from a more restful and focused acoustical environment. A triad of sound absorption mechanisms are used: diffusion, absorption, and chambers. The irregular 3D shaped surface breaks up reflections and spreads them in different directions. The cellulosic material fibers transform sound waves into micro movement and heat. And the honey comb chambers trap sound waves entering through the perforated surface which bounce around and "die out."

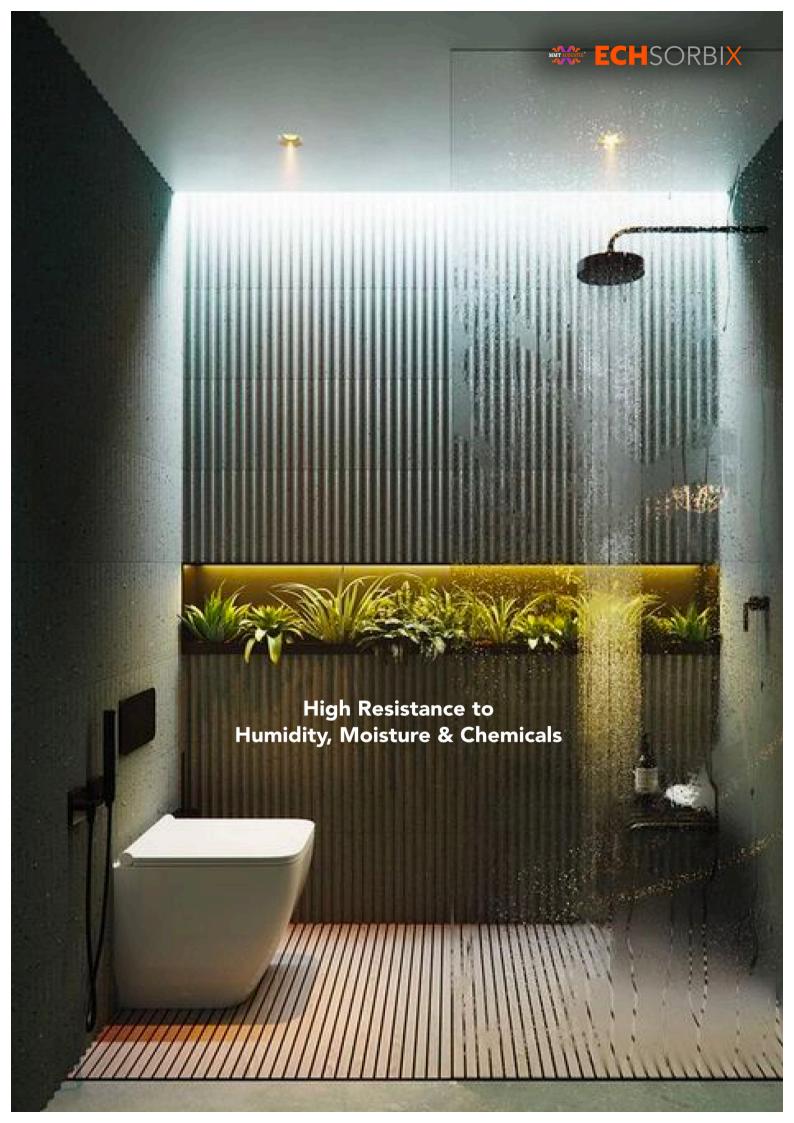




CERTIFIED









Features & Benefits

High Performance - NRC (0.85-0.9)

Echsorbix acoustic panels offer an efficient acoustic environment with NRC between 0.85-0.90



Easy Installation & Maintenance

Due to their lighter weight, installation of Echsorbix panel is effortless. Also, since the material is inorganic, it does not allow fungus or any other bacteria to breed on it.



Does not aid to the spread of fire

Due to its composition, non-woven polyester fibre panels do not act as a catalyst in spreading the fire. It requires four times more oxygen than a typical material to catch fire. When it burns, it does not leave any carbon residue. Hence, it does not have an impact on the environment.



High Resistance to Humidity, Moisture & Chemicals

Polyester fibres have an inorganic composition that helps in protection from humidity, moisture or chemicals. Echsorbix acoustic panels are therefore more durable and retain their original form.



Safety all along - Causes no irritation nor any allergies

Unlike glass wool, rock wool or mineral wool, non-woven polyester fibre does or cause any type of allergy or irritation.



Made from 100 % Recycled material

Echsorbix Acoustic panels are manufactured using industrial-grade non-woven polyester fibre made by recycling PET (polyethylene terephthalate) a waste material from plastic bottles. Hence, all products are made from 100% recycled material.



Light weight, Flexible & Easily Customisable

The material used in Echsorbix acoustic panel is very lightweight, which does not put additional load on the ceiling or walls. Also, being flexible, it can be highly customised. Our in-house UV printing, grooving, or laser printing machine can convert your ideas into beautiful acoustic panels.



In House design Team

Our in-house design experts can help you transform your creative ideas into the most functional and aesthetically unique acoustic spaces.



Made to Order Acquetic Panels

Our in-house manufacturing, UV printing, grooving and laser cutting facility can transform your creativity into acoustic panels that enhance the overall experience of the room. You will never have to limit your imagination when it comes to getting acoustic solutions from Techno Acoustic.





BUILDING MATERIALS SHOULD BE **BOTH SURPRISINGLY FUNCTIONAL AND** REMARKABLY BEAUTIFUL WITHOUT COMPROMISING THE SAFETY AND ENVIRONMENTAL STANDARDS OF TOMORROW.





The manufacturing process of PET is a remarkable clean process. There is no impact to the environment. Its a no chemicals and a low energy process. PET in all unused waste products and scrap are 100% recyclable. This waste is put back in to the manufacturing process to make the polyester fibre without any further waste

PET is an energy efficient packaging material although it's raw materials are derived from crude oil and natural gas. Its sustainability is favourably compared to that of glass, aluminium and other materials.

More than 9 Million pounds of plastic is trashed globally every year. At MMT Acoustix we proudly take part in recycling of plastic and covert them into beautiful yet an effective sound absorbing material.



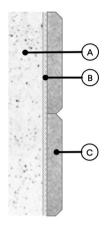
Installation Methods

Walls / Ceiling

1. Glue directly to the walls / ceiling

- All Echsorbix panels can be installed with this method.
- This is the fastest and most commonly used method to install Echsorbix panels

Illustration



A : Wall/Ceiling B: Glue (SR, Spray) C: Echsorbix Panel

Instructions

- 1. Position and mark the bottom left (or right) corner of the Echsorbix panel on the wall/ceiling and use this as a starting point for your installation
- 2. Either mount a horizontal beam below the bottom row of Echsorbix panel as a foundation during installation (use laser or spirit level) or mark the bottom line with laser or tape
- 3. Put glue on the first piece and push it firmly towards the surface. You will be allowed to move the piece slightly on the surface to secure an exact positioning. Larger panels may be fixed with small nails to avoid gliding before the glue hardens
- **4.** Install the first two bottom rows, piece-by-piece along the bottom beam/line. Make sure to position the pieces very linear and accurate against each other. This is especially critical for triangular and parallelogram shapes, a smaller error in the bottom section will grow successively further up on the pattern
- 5. Continue to install the pieces, one-by-one and row-by-row upwards
- 6. When you are finished you may remove the beam/tape

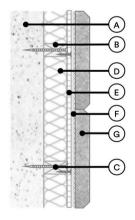
NOTE

- i. Only use glue recommended by MMT Acoustix or a certified installation company
- ii. The responsibility for recognising and compensating for field conditions is with the installer

2. Glue directly to the wall with MMT Acoustix Sound Insulation Pad & SoundBlanket MLV

- All Echsorbix panels can be installed with this method.
- With a layer of sound insulation pad or MLV behind Echsorbix Panel, the acoustic performance will be improved, especially for low frequency noise. The acoustic improvement for human voice frequencies compared to direct installation is more moderate

Illustration



A: Wall/Ceiling
B: Wooden Beams
C: Screws
D: Sound Insulation Pad / MLV
E: Gypsum Board
F: Glue (SR, Spray)
G: Echsorbix Panel

Instructions

- Install vertical or horizontal wooden beams with distance according to the sound insulation pad / MLV. Select a
 type of screw according to each specific field condition, i.e. depending on the surface material of the wall.
 Echsorbix Panels weigh 1.7 kg/m2 = 156 gms per ft2
- 2. Screw perforated plasterboards into the beams. Plasterboard perforation grade need to be higher than 17% in order to retain full acoustic effect from the stone wool behind
- 3. Glue Echsorbix Panels to the plasterboard according to installation method above

NOTE

- i. Only use glue recommended by MMT Acoustix or a certified installation company
- ii. The responsibility for recognising and compensating for field conditions is with the installer

Table 1 and Figure 2: Values and plot for Sound Transmission Loss of MMT Acoustix® Sound Blanket Mass Loaded Vinyl of 1640 kg/m³ and 8 mm thickness at one third octave frequencies

One Third Octave Frequency, Hz	Sound Transmission Loss, dB	STDV	70
100	16.6	0.2	60
125	19.4	0.6	
160	20.7	0.5	
200	23.6	0.6	⊕ 50
250	27.0	0.4	Pose
315	28.4	0.4) c 40
400	29.7	0.3	But (C: Cit) - 300-9 dB
500	32.9	0.3	
630	34.4	0.1	E 30
800	35.3	0.3	STC = 36 dB
1000	37.3	0.5	Rw (C; Ctr) = 36(0;-6) dB
1250	39.6	0.1	20
1600	41.3	0.2	
2000	43.1	0.4	
2500	45.6	0.6	10
3150	47.7	0.5	MMT Acoustive Sound Blanket Mass Loaded Vinyl of 1640 kg/m³ and 8 mm thickness 100 125 160 200 250 315 400 500 530 800 1000 1250 1600 2000 2500 3150 4000 500 1000 1250 1600 2000 2500 3150 4000 500 1000 1250 1600 2000 2500 3150 4000 500 1000 1250 1600 2000 2500 3150 4000 500 1000 1250 1600 2000 2500 3150 4000 500 1000 1250 1600 2000 2500 3150 4000 500 1000 1250 1600 2000 2500 3150 4000 500 1000 1250 1600 2000 2500 3150 4000 500 1000 1250 1600 2000 2500 3150 4000 500 1000 1250 1600 2000 2500 3150 4000 500 1000 1250 1600 2000 2500 3150 4000 500 1000 1250 1600 2000 2500 3150 4000 500 1500 1600 2000 2500 3150 4000 500 1500 1600 2000 2500 3150 4000 500 1500 1600 2000 2500 3150 4000 500 1500 1600 2000 2500 3150 4000 500 1500 1600 2000 2500 3150 4000 500 1500 1600 2000 2500 3150 4000 500 1500 1600 2000 2500 3150 4000 500 1500 1600 2000 2500 3150 4000 500 1500 2500 2500 2500 2500 2500 25
4000	50.0	0.1	
5000	53.0	0.2	
STC	36		
R _w (C; Ctr)	36 (0;-6)		One mild octave riequency, nz





Installation Methods

Suspended Ceiling

1. Suspending clouds from ceiling

- All Echsorbix panels can be installed with this method.
- This is the fastest and most commonly used method to install Echsorbix panels

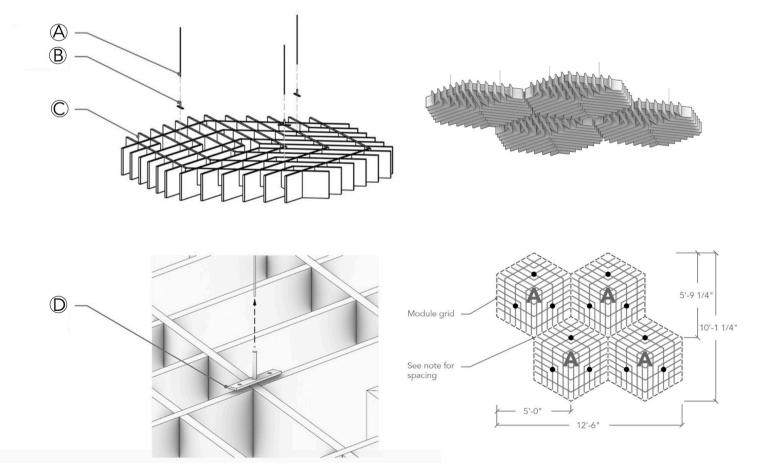
Instructions

- 1. Position and fix the echsorbix panels together to form the acoustic suspended design.
- 2. Attach quick connect fasteners on the top side of acoustic cloud which allows connection of hanging bracket and hanging wires.
- 3. Similarly install the hanging wires from the ceiling to allow synchronised connection between the wires and acoustic cloud.
- **4.** Connect the hanging brackets with the easterners as final attachment.

NOTE

- i. Only use glue recommended by MMT Acoustix or a certified installation company
- ii. The responsibility for recognising and compensating for field conditions is with the installer
- A : Stainless Cable
- **B: Hanging Bracket**
- C: Echsorbix Panel
- D: Adjustable Quick Connect Fastener

Illustration





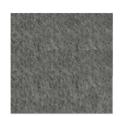
Colour Options



ECH 1 : WHITE



ECH 2: MARBLE GREY



ECH 3 : GREY



ECH 4 : LIGHT BEIGE



ECH 5 : DARK BEIGE



ECH 6 : NATURAL



ECH 7 : PACIFIC BLUE



ECH 8 : SKY BLUE



ECH 9 : BLUE



ECH 10 : BANANA GREEN



ECH 11 : GREEN



ECH 12 : DARK GREEN



ECH 13 : RED



ECH 14 : MAROON



ECH 15 : DARK MAROON



ECH 16 : CHARCOAL GREY



ECH 17 : BLACK



ECH 18 : YELLOW



ECH 19 : BROWN



ECH 20 : PINK



ECH 21 : PURPLE



ECH 22 : DARK BLUE



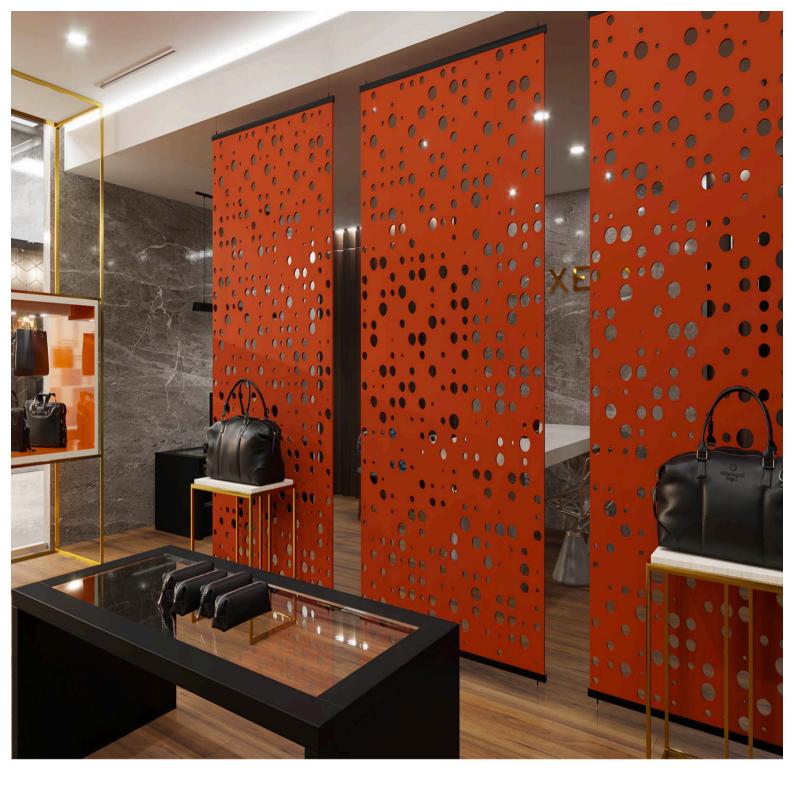
ECH 23 : ORANGE



Acoustic Wall Panels

Echsorbix acoustic wall panels are the perfect building blocks to easily and affordably enhance aesthetics and acoustic performance across interior space. Made from MMT Acoustix Echsorbix Acoustical material, Echsorbix acoustic wall panels can be simply adhered to wall surfaces to absorb sound while creating limitless design opportunities. Mix and match it's dozens of colour options to create the best design for your project. Tiles can also be field trimmed to effortlessly adapt to surrounding building conditions and create endless possibilities.

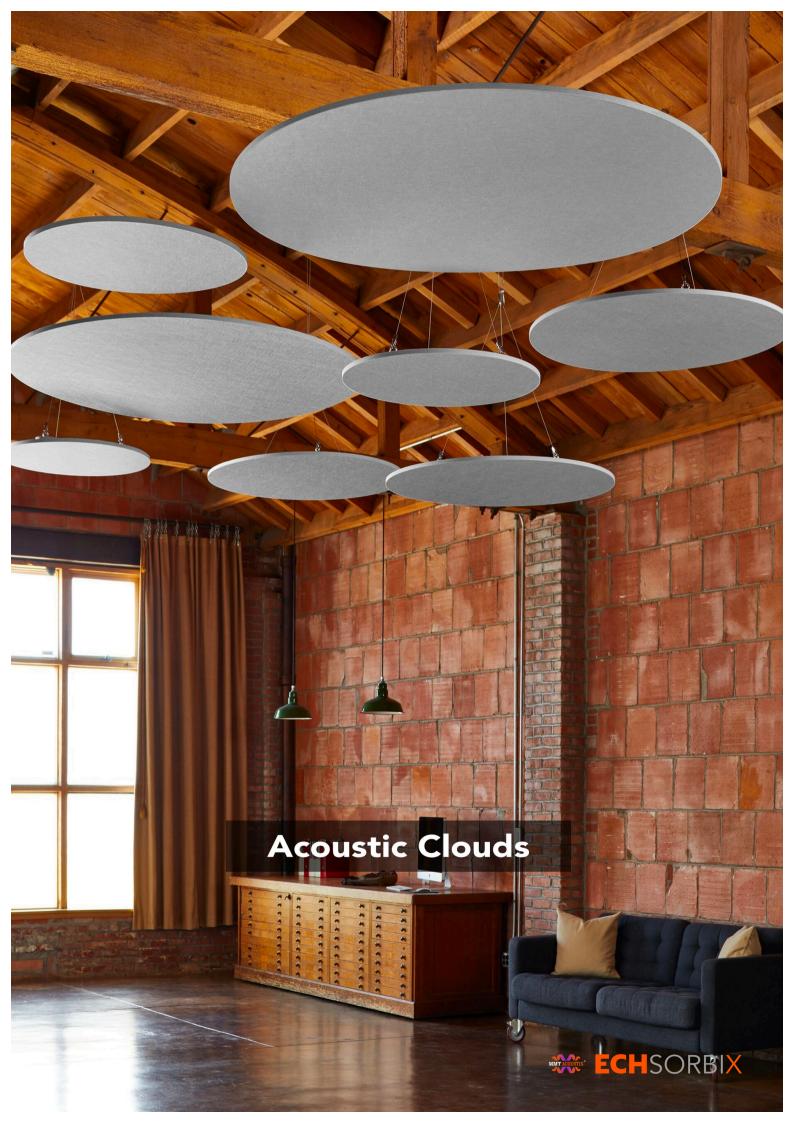


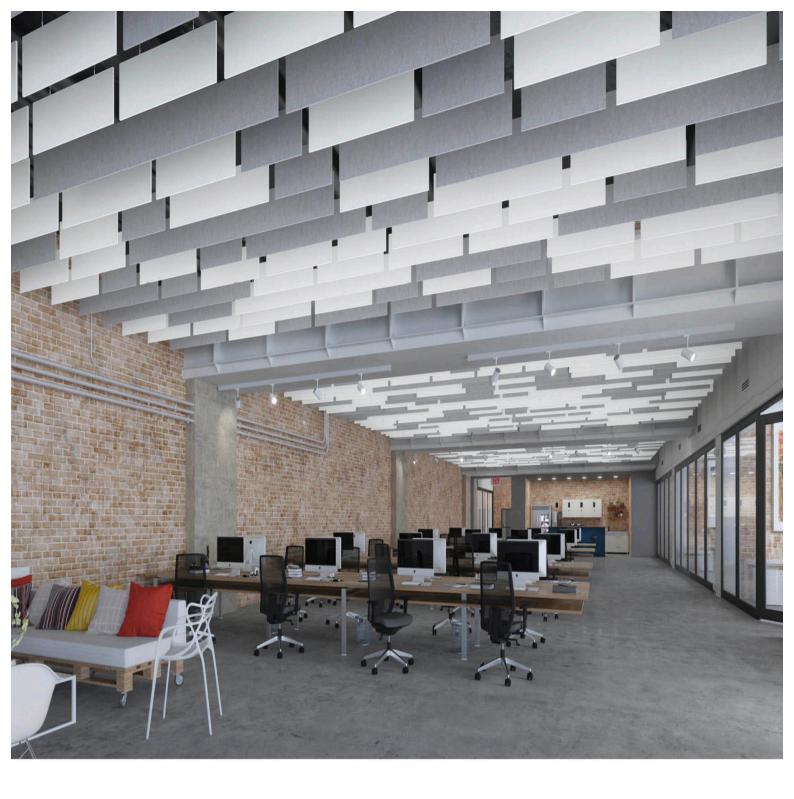


Acoustic Screens

Acoustic Screens from Echsorbix make it easy to dramatically define spaces and aesthetics while reducing the impact of noise, at any scale. Panels are available in a variety of patterns and colours, all able to be mixed and matched as desired. Acoustic Screen is a modular system that is adaptable to your needs. Whether it's two or twenty screens, panels can be directly wall mounted, suspended through simple cable grippers, or installed as operable dividers with our track and trolley system. Whatever your needs, Acoustic Screen elegantly enhances spaces and establishes privacy with ease.







Acoustic Baffles

Echsorbix acoustic baffle ceiling system offers flexible building blocks to easily achieve enhanced acoustical performance and design effects. Its modular single fin design, available in a multitude of lengths and depths, is easy to install, and can be mixed and matched in numerous configurations. Echsorbix acoustic baffle is constructed from our Echsorbix acoustical material (100% PET plastic with up to 60% recycled content) to drastically reduce sound reverberation. Elements can ship flat-packed, and are available in a variety of colours and finishes.





Applications

Hotels

Enhance the sound quality is lobbies, restaurants, gyms and premium suits

Auditoriums

Easily cover large spaces for excellent sound quality for every sitting ear

Offices

Control noise in conference rooms, open work spaces and receptions

Home & Villa

Add aesthetics and acoustics in living area and basements

Schools & Institutes

Quiet classes and no noise environment for excellent training & studies

Multiplexes

For premium sound quality and best cinema experience

Recording Studio

High quality sound recording and work station aesthetics

Hospital

Medica; centres with good acoustics, cure people faster



GET IN TOUCH

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