

MicroTone

High-Performance
Sound Insulation

When noise is controlled,
balance of happiness is limitless.

MicroFiber®



high performance sound insulation for
a quiet and peaceful living experience

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MicroTone

Microfiber glass wool insulation's porous structure helps block and absorb sound and reduce reverberation in the room

MicroTone NOIZESTOP

Acoustic insulation sheet designed for placement within wall systems to soundproof rooms. Suitable for bedroom, office space, and meeting room.

MicroTone NOIZELEZZ

Sound absorbing insulation sheet encapsulated with glass cloth designed for placement on wall to reduce echoes. Suitable for theatre, gymnasium, and auditorium.

MicroTone NOIZEBARRIER

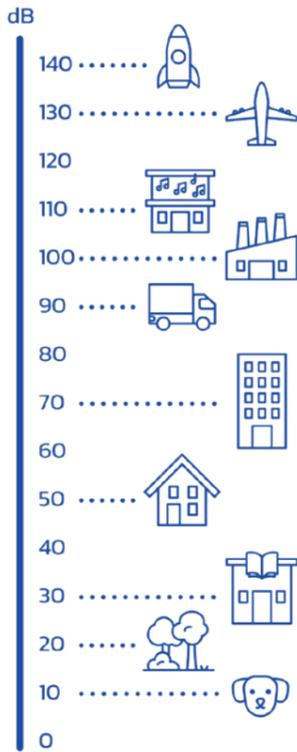
Reinforced acoustic insulation sheet with water repellent and fire retardant coating. Suitable for road, tunnel, and expressway barrier.

Sound Basics

Sound and Noise generation

When an object vibrates, sound waves are compressed and expanded then travel through air, creating the sound that we hear. Sounds that are unpleasant to our ears are what we called "noises" which comes in varying amplitude (dB) and frequency (Hz).

Figure shows a comparison of sound levels from different sources and environments.



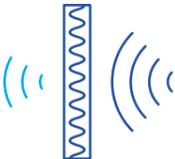
Unpleasant sound

Exposure to loud and unpleasant sound can lead to stress and insomnia, leading to a lack of sleep and reduces quality of life.

Sound Insulation

The sound which passes from one room to another can be reduced by using glass wool insulation material containing numerous pores and cavitation bubbles. Placed between walls, fiberglass insulation is a simplistic solution designed for sound blocking purposes.

Sound Transmission Class (STC)



STC measures the ability of wall system in blocking sound from one room to another. Measured in decibels (dB), higher STC, indicates better performance in sound blocking properties.

MicroTone for Sound Insulation

MicroTone is an acoustic glass wool insulation that can be used for both sound blocking and absorption purposes. When placed within wall system, it acts as a sound damper and blocks sound from passing through. While when encapsulated with glass cloth and placed on the wall, it can absorb sound and reduce echoes and reverberation.

Sound proofing acoustic material



MicroTone Noizestop Acoustic glass wool sheet designed for placement within wall systems to soundproof rooms. It's porous and highly dense structure makes it the perfect material to prevent sound passing through from one room to another.

Suitable for bedroom, office space, meeting room, recording studio, music practice room, home theatre, and karaoke room.

Properties and usage



Durable and long-lasting

MicroTone Noizestop is completely covered with high-quality material that can withstand tensile strength and cannot be torn easily.



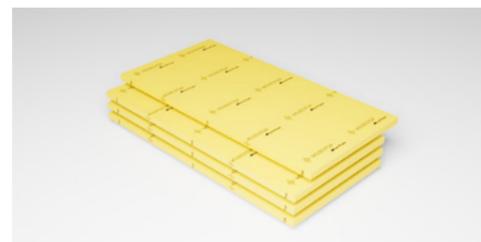
Nonflammable and fire resistant

MicroTone Noizestop is covered with water repellent and fire retardant coating, making it resistant to moisture and is fire resistant. The material is credited the EN 13501-1 Class A1 standard.

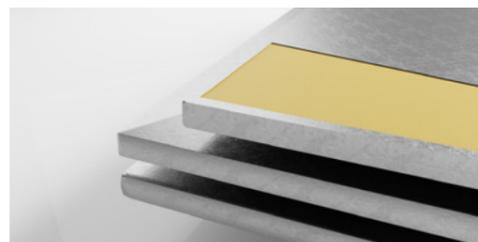


Easy to install for every type of walls

MicroTone Noizestop is designed and manufactured to work with all types of walls including gypsum wall, cement wall, smartboard wall, brick wall, cellular concrete wall, and wooden wall.



MicroTone Noizestop comes with high quality of encapsulation material. It can withstand tensile strength and has fire retardant and water repellent coating.



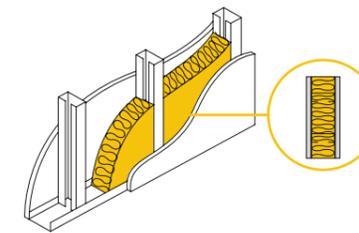
SM is encapsulated with high-quality water repellent coating.
SS is encapsulated with high-quality fire retardant and water repellent coating.
 *For other facing material, please send inquiries to MicroFiber Industries.

Product	Thickness	Size	Installation
Noizestop 050	50 mm	0.40 x 1.20 m 0.60 x 1.20 m	Installed with metal frames size C65
Noizestop 060	60 mm		Installed with metal frames size C75
Noizestop 100	100 mm		Installed with wooden frames

*For special product sizes, please send inquiries to Microfiber Industries.

MicroTone Noizestop with Gypsum wall

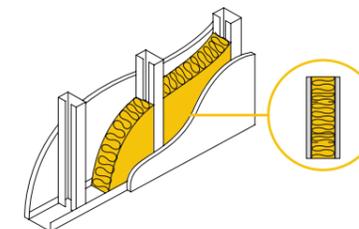
STC 42



Install a 12-mm gypsum sheet on two sides of the wall with the metal frame size C65. Fill the gap between the two sheets with **MicroTone Noizestop 050**.

MicroTone Noizestop with fiber cement wall

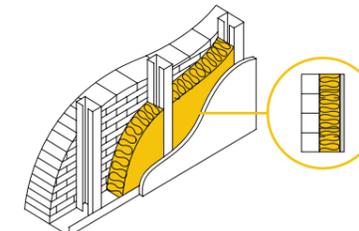
STC 51



Install a 12-mm fiber cement sheet on both sides of the wall with the metal frame size C65. Fill the gap between the two walls with **MicroTone Noizestop 050**.

MicroTone Noizestop and the brick wall

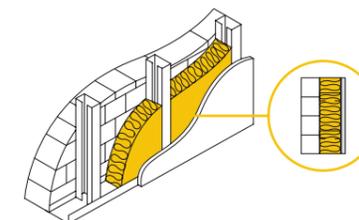
STC 65



Install a 10-cm brick wall along with the metal frame size C65. Plaster the brick wall with cement on both sides. Then cover with 8-mm fiber cement sheet and fill the gap in between with **MicroTone Noizestop 050**.

MicroTone Noizestop with lightweight concrete

STC 65



Install a 10-cm thick cellular concrete wall along with the metal frame size C65. Plaster the brick wall with cement on both sides. Then cover with 8-mm fiber cement sheet and fill the gap in between with **MicroTone Noizestop 050**.



Sound Absorption

Porous material with tiny cavitation like glass wool acoustic sheets can absorb sound energy, reduce echoes and reverberation.

Noise Reduction Coefficient (NRC)



NRC is the ability of acoustic material to absorb sound. Acoustic material with higher NRC is able to absorb more sound and reduce echoes and reverberation better.

MicroTone for Sound Absorption

Microtone acoustic material for sound absorption is made of porous glass wool which helps with sound absorption. With glass wool placed on wall, indoor noise echoes and reverberation will be reduced to provide a quiet and peaceful living space.



Sound absorbing acoustic material

MicroTone  **NOIZELEZZ**

MicroTone Noizelezz Acoustic glass wool sheet encapsulated with glass cloth. It's porous and highly dense structure with makes it the perfect material for echoes and reverberation reduction purposes.

MicroTone Noizelezz is designed and manufactured to work with all types of walls including gypsum wall, cement wall, smartboard wall, brick wall, cellular concrete wall, and wooden wall.



Properties and usage



High noise reduction coefficient

MicroTone Noizelezz acoustic glass wool sheet offers high Noise Reduction Coefficient (NRC) of 1.05.



Nonflammable and fire resistant

MicroTone Noizelezz is covered with water repellent and fire retardant coating, making it resistant to moisture and is fire resistant. The material is credited the EN 13501-1 Class A1 standard.



Easy to install and can be used with any wall

MicroTone Noizelezz is light weight and can be installed on any type of wall including concrete wall, smartboard wall, plastered brick wall, and gypsum wall.

Product	Thickness	Type	Size	Color	Installation
Noizelezz W350GC	50 mm	Standard Hight	0.60 x 0.60 m 0.60 x 1.20 m	White Black	Plain (Without foil facing) Foil (With foil facing)
Noizestop W425GC	25 mm				
Noizestop W450GC	50 mm				

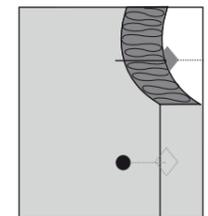
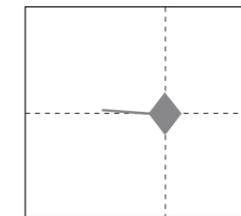
*For special product sizes, please send inquiries to Microfiber Industries.

Noise Reduction Coefficient

Product	Thickness	Sound Absorption Coefficients, ASTM C423 Octave Band Center Frequencies (Hz)						
		125	250	500	1000	2000	4000	NRC
Noizelezz W350GC	50 mm	0.16	0.73	0.88	0.94	0.79	0.56	0.89
Noizestop W425GC	25 mm	0.06	0.33	0.66	1.08	0.94	0.85	0.75
Noizestop W450GC	50 mm	0.24	0.90	1.11	1.11	1.03	1.01	1.05

Installation procedure

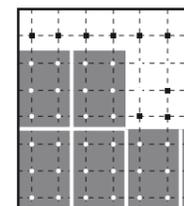
Install **MicroTone Noizelezz** with spindle pins.



1. Mark the spot for each spindle pin with 30 – 45 cm apart from each other (If installing on a painted concrete wall, remove the paint from the position where the spindle pin will be attached).

2. Attach the spindle pins using a special adhesive that suites to the wall surface. Apply the adhesive at the base of the spindle pin and let the adhesive dry once attached. (Choose the right spindle pin for the thickness of the insulation).

3. Pierce the end of the spindle pin through the front of the insulation and place the washer on the exposed end. There are several types of washers to choose from depending on the designer's preference and usage.



Recommendation

To cut the acoustic material to a desired size, remove the fabric cover and use a paper cutter to cut the insulation. Then, cover the insulation back with the fabric as before.

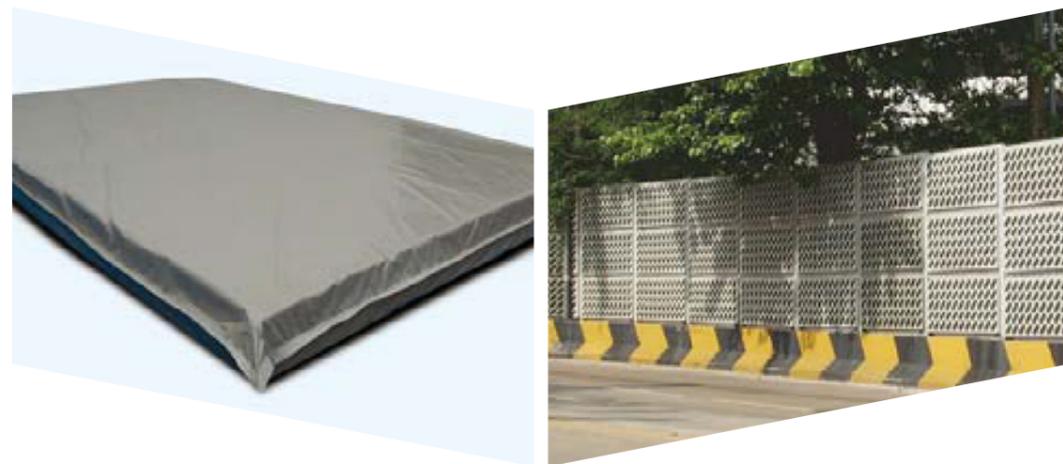
Acoustic material for sound absorption

MicroTone  **NOIZEBARRIER**

MicroTone Noise Barrier is a reinforced acoustic insulation sheet with water repellent and fire retardant coating. Suitable for road, tunnel, and expressway barrier. Each unit is 0.6 m x 12 m in size.

MicroTone Noise Barrier is widely accepted by international and Japanese standard. It is suitable for expressway wall, engine room wall, and cooling tower wall.

For special size and cover material, please contact Microfiber Industries.



MicroTone Certification and Safety



Green Label :
Thailand



LEED :
Leadship in Energy and
Environment Design



Energy Saving Label



Carbon Reduction
Label



ISO 9001 :
2008 Certificate
No. FM 72805



OHSAS 18001 :
2007 Certificate
No. OHS 505531



ISO 14000 :
2004 Certificate
No. EMS 561064



Thai Industrial Standards
Institute TIS 486-2527,
TIS 487-2526



American Society for
Testing and Material



Underwriters
Laboratories



National Fire Protection
Association



British Standard
Institute



Australian Standards

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MicroTone

 NOIZESTOP

 NOIZELEZZ

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