

MUTE SYSTEM

www.decibelinternational.com

MUTE SYSTEM is thin point connected soundproofing system for walls and ceilings.

The system is easy to mount via specially designed anti-vibration **DClox** element, patented in the EU. **DClox** point connection ensures less than 1% contact area between the soundproofing panels and the existing partition thus minimal sound transmission.

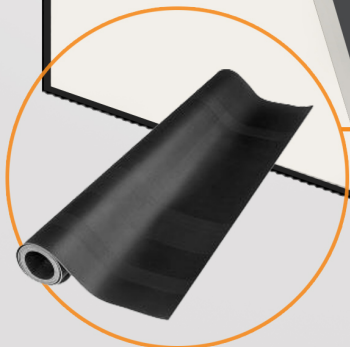
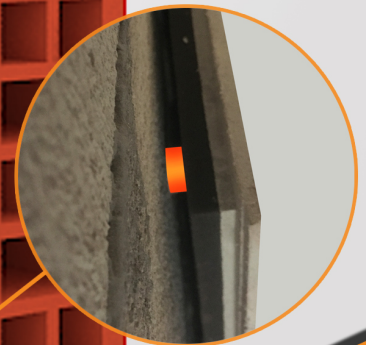
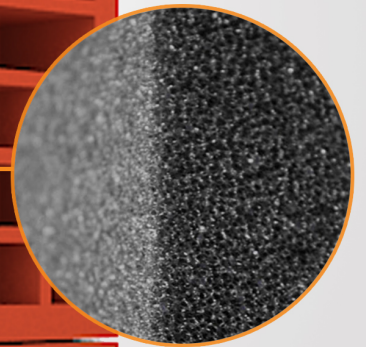
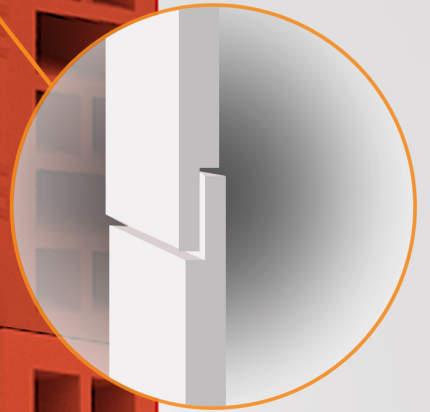
In comparison to the first generation of **MUTE SYSTEM**, where the contacting area was around 98%, the new **MUTE SYSTEM DClox** is a breakthrough innovation with contacting area below 1%.

INNOVATION



DCIox

DCIox is a patented fastener specially designed for the installation of MUTE SYSTEM soundproofing panels. The innovative fasteners are made from special elastomers, making them an effective vibro insulation point connection between the existing partition wall and the panel. Their geometry reduces the rate of sound transmission and minimizes the contacting area between the soundproofing panels and the existing wall to below 1%.



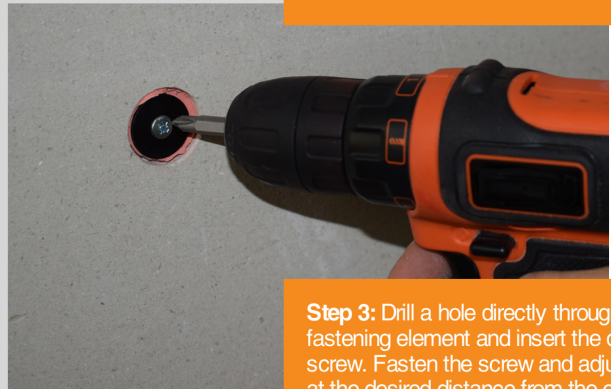
MUTE SYSTEM



Step 1: Apply DCstrip on the perimeter of the floor, walls and ceiling, on which the panels and the gypsum board will later be installed.



Step 2: Start the installation of the panels on the DCstrip from left bottom of the wall to the right.



Step 3: Drill a hole directly through the DCfastener element and insert the dowel and the screw. Fasten the screw and adjust the panel at the desired distance from the existing wall.



Step 4: Apply the next panel following the tongue and groove sequence, fix all DCfastener elements on the panel and then fix the DCscrew over the tongue and groove of the panel.



Step 5: Fill in the DCfastener element and the joints between the panels with DCfoam.



Step 6: For additional sound insulation apply DCvisco soundproofing membrane.

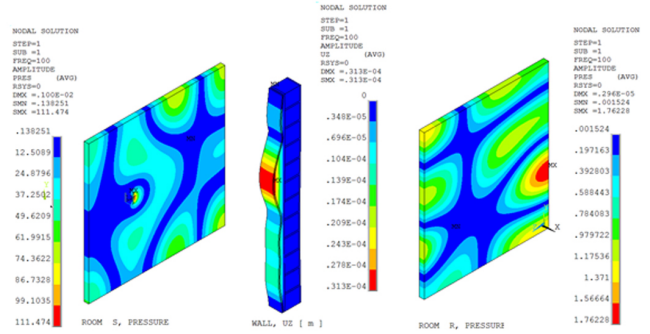


Step 7: To finish the system apply gypsum board layer directly over the membrane, fixing it with screws.

MUTE SYSTEM is a product developed and refined over the years by the R&D department of DECIBEL.

The main acoustical principle used in the system is mass + spring + mass as in the electromechanical analogy. DECIBEL engineers have created an extra thin and 4 times more effective system, mounted via specially designed anti-vibration **DClox** fastening elements.

What allows DECIBEL to ensure the quality and efficiency of the system is that its soundproofing parameters are simulated using FEM and after that verified with laboratory tests.



Recommended accessories for increasing the soundproofing performance



+3 dB

+2 dB

+3 dB

MUTE SYSTEM Types

Type	Thickness	Additional insulation
MUTE 23	2.25 cm	+ 9 to 11 dB
MUTE 33	3.25 cm	+ 12 to 14 dB
MUTE 63	6.25 cm	+ 15 to 18 dB

Air borne sound reduction index

Type of existing wall	Rw with Mute 23	Rw with Mute 33	Rw with Mute 63
Hollow Brick Wall 12 cm (Dwall - 850 kg/m ³)	51 dB	54 dB	58 dB
Hollow Brick Wall 25 cm (Dwall - 750 kg/m ³)	59 dB	62 dB	65 dB
Aerated concrete blocks 15 cm (Dwall - 390 kg/m ³)	52 dB	54 dB	56 dB
Aerated concrete blocks 25 cm (Dwall - 390 kg/m ³)	57 dB	59 dB	60 dB

DECIBEL Ltd is an international startup company established in 2012 by PhD engineers, focused entirely on the development and creation of innovative products for sound insulation and acoustics. The company has its own manufacturing plant and laboratory allowing the team of specialists to improve the quality of the products everyday.

DECIBEL's deep knowledge and expertise are in the field of building acoustics, noise and vibration control, audio and visual systems.

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