

# TECHNICAL DATA SHEET



# MUTE SYSTEM 33

## Soundproofing system

### Product description and Technical Specification:

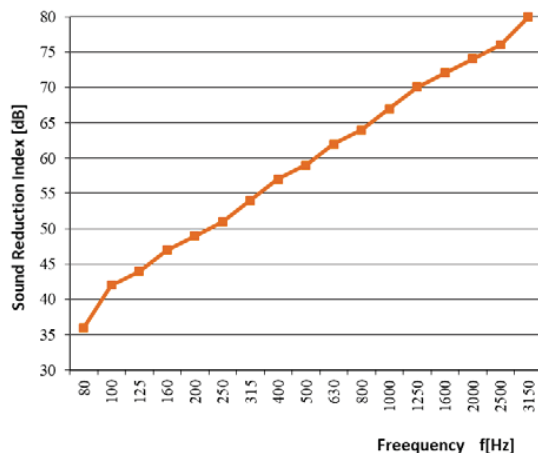
MUTE SYSTEM 33 is a thin point connected soundproofing system for walls developed and refined over the years by the R&D department of DECIBEL. The main acoustical principle used in the system is mass + spring + mass as in the electromechanical analogy. DECIBEL engineers have created an extra thin and 4 times more effective system, mounted via 5 specially designed anti-vibration DCIox 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. MUTE SYSTEM 33 is suitable for residential and public premises, industrial buildings.

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%. Sound reduction index  $STC = 58$  dB added to added to 3-5/8" Metal stud drywall structure with 5/8" Drywall on one side insulation in between the stud cavity and 5/8" drywall on the opposite side.



- Panel-wall contacting area: less than 1 %
- Installation: on walls and ceilings through fasten with DCIox
- Sound reduction index  $STC=58$  dB

PHYSICAL CHARACTERISTICS	Unit	Value	Tolerance
Thickness	in	1,3	±1%
Length	ft	3,94	±1%
Width	ft	3,28	±1%
Weight	lb	39,68	±1%



Sound reduction index $R_w$					
f [Hz]	dB	f [Hz]	dB	f [Hz]	dB
80	22	315	57	1250	65
100	29	400	58	1600	62
125	34	500	61	2000	61
160	45	630	62	2500	62
200	51	800	61	3150	66
250	55	1000	65		

TECNICAL CHARACTERISTICS	Unit	Value	Tolerance
Thermal conductivity ( $\lambda$ )	W/m°C	0,040	±0%
Shear strength	lb*in	0,0345	±0%
Hardness of acoustic foam	psi	0,4062	±0%

### PACKING AND STORING

On pallets 3,94 x 3,28 x 4,92 ft, 40 panels on pallet, weight 1587,33lb/pallet, stretched with folium