

TECHNICAL DATA SHEET

MUTE SYSTEM 33

Soundproofing system

Product description and Technical Specification:

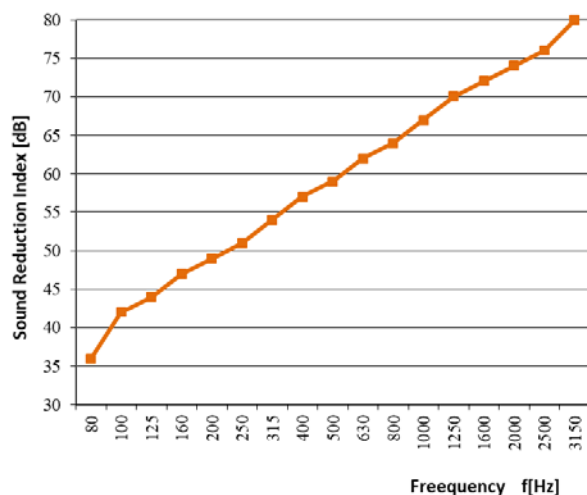
MUTE SYSTEM 33 is a thin point connected soundproofing system for walls developed and refined over the years by the R&D department of DECIBEL. The main acoustical principle used in the system is mass + spring + mass as in the electromechanical analogy. DECIBEL engineers have created an extra thin and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

DClox 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 $R_w=62$ dB (-1 dB; -6 dB) / added to Phorotherm 250mm/



- Panel-wall contacting area: less than 1 %
- Installation: on walls and ceilings through fasten with DClox
- Sound reduction index $R_w=62$ dB

PHYSICAL CHARACTERISTICS	Unit	Value	Tolerance
Thickness	mm	33	±0%
Length	mm	1200	±0%
Width	mm	1000	±0%
Weight	kg	18,0	±0%



Sound reduction index R_w					
f [Hz]	dB	f [Hz]	dB	f [Hz]	dB
80	36	315	54	1250	70
100	42	400	57	1600	72
125	44	500	59	2000	74
160	47	630	62	2500	76
200	49	800	64	3150	80
250	51	1000	67		

* Description of the tested sample: Partition ceramic brick wall with cavities Wienerberger Porotherm N + F with dimensions 375/250/238mm, double-sided with 15mm gypsum mortar; one-sided cladding with soundproofing system for wall "Decibel Mute 33", Visco-elastic membrane DCvisco, one layer of GKB 12,5mm plasterboard, filled gaps and joints with acoustic mastic DClant and embossing the perimeter of the wall with DCstrip.

TECNICAL CHARACTERISTICS	Unit	Value	Tolerance
Thermal conductivity (λ)	W/m°C	0,040	±0%
Shear strength	N/mm	3,9	±0%
Hardness of acoustic foam	kPa	2,8	±0%

PACKING AND STORING

On pallets 120 x 100 x 150cm, 40 panels on pallet, weight 720kg/pallet, stretched with folium