

TECHNICAL DATA SHEET

MUTE SYSTEM 23

Soundproofing system

Product description and Technical Specification:

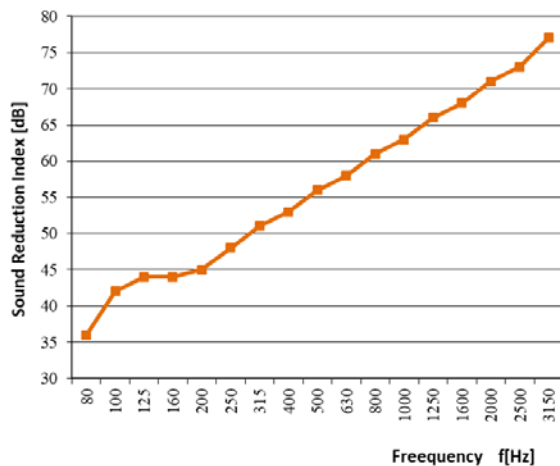
MUTE SYSTEM 23 is a thin point connected soundproofing system for walls developed and refined over the years by the R&D department of DECIBEL. The main acoustical principle used in the system is mass + spring + mass as in the electromechanical analogy. DECIBEL engineers have created an extra thin and 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 23 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 $R_w=59$ dB (-1 dB; -5 dB) / added to PhoroTerm 250mm/



- Panel-wall contacting area: less than 1 %
- Installation: on walls and ceilings through fasten with DCIox
- Sound reduction index $R_w=59$ dB

PHYSICAL CHARACTERISTICS	Unit	Value	Tolerance
Thickness	mm	23	±0%
Length	mm	1200	±0%
Width	mm	1000	±0%
Weight	kg	17,4	±0%



Sound reduction index R_w					
f [Hz]	dB	f [Hz]	dB	f [Hz]	dB
80	36	315	51	1250	66
100	42	400	53	1600	68
125	44	500	56	2000	71
160	44	630	58	2500	73
200	45	800	61	3150	77
250	48	1000	63		

* 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 23", Visco-elastic membrane DCvisco, one layer of GKB 12,5mm plasterboard, filled gaps and joints with acoustic mastic DCIant and embossing the perimeter of the wall with DCstrip.

TECHNICAL 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, 50 panels on pallet, weight 870kg/pallet, stretched with folium