# **TECHNICAL DATA SHEET**

## **MUTE SYSTEM 63**

## Soundproofing system

#### **Product description and Technical Specification:**

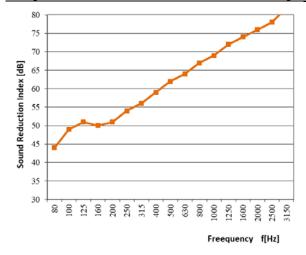
MUTE SYSTEM 63 is a thin point connected soundproofing system for walls developed and refined over the years by the R&D department of DECIBEL. The main acoustical principle used in the system is mass + spring + mass as in the electromechanical analogy. DECIBEL engineers have created an extra thin and 4 times more effective system, mounted via 5 specially designed anti-vibration DClox fastening elements. What allows DECIBEL to ensures 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 63 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 Rw=65 dB (-1 dB; -5 dB) / added to Phoroterm 250mm/



- $\bullet$  Panel-wall contacting area: less than 1 %
- Installation: on walls and ceilings through fasten with DClox
- Sound reduction index Rw=65 dB

PHYSICAL CHARACTERISTICS	Unit	Value	Tolerance
Thickness	mm	63	±0%
Length	mm	1200	±0%
Width	mm	1000	±0%
Weight	kg	19,2	±0%



Sound reduction index Rw							
f [Hz]	dB	f [Hz]	dB	f [Hz]	dB		
80	44	315	56	1250	72		
100	49	400	59	1600	74		
125	51	500	62	2000	76		
160	50	630	64	2500	78		
200	51	800	67	3150	82		
250	54	1000	69				

\* 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 63", Visco-elastic membrane DCvisco, one layer of GKB 12,5mm plasterboard, filed 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, 20 panels on pallet, weight 384kg/pallet, stretched with folium