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## ACOUSTIC PANELS FOR THE REDUCTION OF NOISE IN BUILDINGS

**SONOPROOF** are easy to install flexible panels that will sensibly reduce airborne noise levels transmitted through internal and external walls, floor and roof slabs and light weight partitions.

### NOISE REDUCTION

When tested in accordance to BS EN ISO 140-3, 1995, **SONOPROOF** panels have shown a sound reduction up to 41.6 dB at 5000 Hz frequency.

On average they will reduce the sound level transmitted through concrete blocks, wood panels, plasterboards by 25 dB - 35 dB making them extremely efficient and worthwhile.

### USES

**SONOPROOF** panels are ideal for areas where noise reduction is a must like : theatres, conference rooms, prayer areas, libraries, operation theatres, gymnasiums, internal sports arenas, hospitals.

They are also efficient for ordinary buildings in down town areas, next to highways or in proximity to airports and to those situated in areas subject to deafening high winds.

They are in particular recommended for offices and residences with prefabricated internal partitions to be placed in conjunction with gypsum, plaster or wood boards.

They can also be used as side noise dampening panels on highways and elevated sections.

### COMPOSITION

**SONOPROOF** are flexible panels of 1mx2m (standard length, other lengths available on request) made of reinforced visco-elastic polymers and noise reducing particles.

**SONOPROOF** are available in standard thickness of 3.5 mm and 6.5mm but any other thickness up to 7.5 mm can be produced on demand.

### APPLICATION

**SONOPROOF** panels are easy and simple to apply. Lightweight and flexible they can be adhered to a variety of substrates with the use of building adhesives, plastic cement ( **DERMAPLAST** ), or just lightly heating the surface.

### TECHNICAL DATA

Specific Gravity	: 1.28 Kg/M <sup>2</sup>
Thickness	: from 3 mm - 7.5mm
Physiological Action	: None
Colour	: Black
Application Temperature	: 5°C to 50°C
Service Temperature	: 5°C to +120°C
Thermal Conductivity	: 0.5 W/Mk
Water Absorption	: Less than 0.50%
Water Permeability	: Impermeable
Puncture Resistance	: > 1300 N/ 32 mm

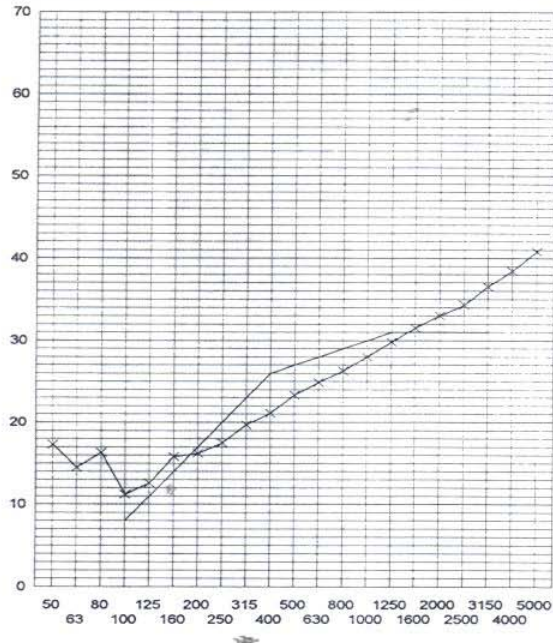
## TECHNICAL DATA

DERMABIT PRODUCTS ARE TESTED AT RANDOM INTERVALS BY INDEPENDENT LABORATORIES TO INTERNATIONAL STANDARDS AND THE RESULTS OF THESE TESTS ARE AVAILABLE ON REQUEST. IN ADDITION, EACH BATCH MANUFACTURED IS SUBJECT TO STRICT QUALITY CONTROL PROCEDURES TO ENSURE IT MEETS APPROPRIATE AND APPLICABLE STANDARDS AND/OR NORMS.

### Laboratory Measurement of Sound Reduction Index

Test No. L/2700/1 : 3.5 mm Sonoproof

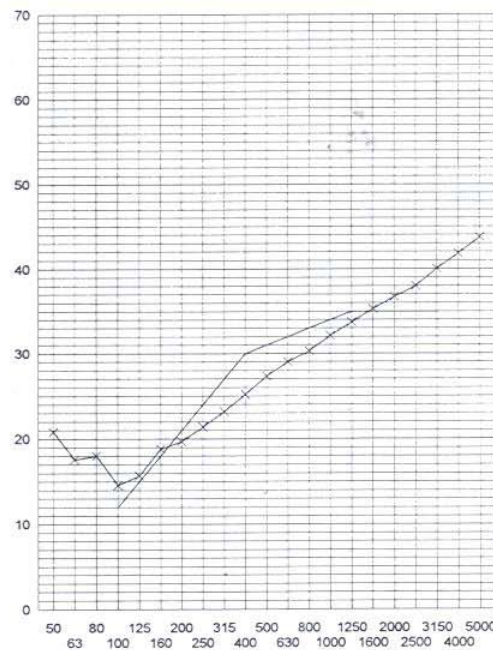
Frequency Hz	Sound Reduction Index, R (dB)	
	one-third octave	octave
50	17.3	
63	14.5	15.9
80	16.3	
100	11.2	
125	12.6	12.8
160	15.8	
200	16.2	
250	17.5	17.6
315	19.7	
400	21.1	
500	23.3	22.8
630	24.9	
800	26.3	
1000	28.0	27.8
1250	29.8	
1600	31.5	
2000	33.0	32.8
2500	34.3	
3150	36.5	
4000	38.4	38.2
5000	40.8	



X—X Measured value of Sound Reduction Index, R (dB)  
 — Weighted Sound Reduction Index,  $R_w = 27$  dB (BS EN ISO 717-1 : 1997)

Report No. L/2700/2 : 6.5 Sonoproof

Frequency Hz	Sound Reduction Index, R (dB)	
	one-third octave	octave
50	20.8	
63	17.6	18.6
80	18.0	
100	14.6	
125	15.7	16.0
160	18.8	
200	19.7	
250	21.4	21.2
315	23.2	
400	25.2	
500	27.3	26.9
630	29.0	
800	30.3	
1000	32.1	31.8
1250	33.7	
1600	35.3	
2000	36.7	36.5
2500	38.0	
3150	40.0	
4000	41.8	41.6
5000	43.7	



X—X Measured value of Sound Reduction Index, R (dB)  
 — Weighted Sound Reduction Index,  $R_w = 27$  dB (BS EN ISO 717-1 : 1997)

The above data are average figures obtained from the tests of various samples and are subject to the tolerances defined in the specified test methods.

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Submitted by :

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