

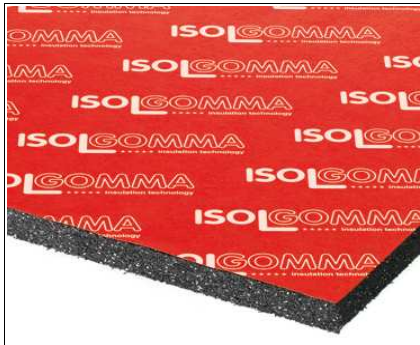
# TECHNICAL DATA

## Megamat ME50/500



**ISOLOGOMMA**  
\*\*\*\*\* Insulation technology

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### Product description and Technical Specification

Anti-vibration material supplied in panels, thickness 50 mm, produced using fibres and granules of SBR rubber (Stirene Butadiene Rubber) and granules of EPDM rubber (Ethylene Propylene Diene Monomer), selected and compacted using a polyurethane glue in a hot process. A non-woven, non-stretch synthetic membrane is applied on one side of panel, for added protection; density 500 kg/m<sup>3</sup>. Panels dimensions are m 1 length, m 1 width.

### Application

Vibration insulation for floating floors or direct basement of machinery operating in cyclic or impulsive way

PHYSICAL CHARACTERISTICS	Unit	Value	Tolerance
Nominal thickness	mm	<b>50</b>	± 5%
Length	m	<b>1.0</b>	± 1%
Width	m	<b>1.0</b>	± 1%
Density (without backing)	kg/m <sup>3</sup>	<b>500</b>	± 5%
Backing superficial mass	g/m <sup>2</sup>	<b>50</b>	
Overall Superficial mass	kg/m <sup>2</sup>	<b>25.0</b>	± 5%
Colour		<b>black/red</b>	

TECHNICAL CHARACTERISTICS	Norm	Unit	Value	Tolerance
Stress at strain 10%	EN 826	N/mm <sup>2</sup>	<b>0.035</b>	± 10%
Static Modulus of Elasticity (Es) - strain 10%	EN 826	N/mm <sup>2</sup>	<b>0.350</b>	± 10%
Dynamic Modulus of Elasticity (Ed) - strain 10%		N/mm <sup>2</sup>	<b>1.2 ÷ 1.4</b>	± 10%
Static Shear Modulus (Gs)	ISO 1827	N/mm <sup>2</sup>	<b>0.16</b>	± 10%
Natural frequency (fn) - strain 10%		Hz	<b>13</b>	± 2

PHYSICAL AND CHEMICAL PROPERTIES			
Temperature range of use		<b>-20°C ÷ +110°C</b>	
Inflammability	DIN 4102	<b>B2</b>	

PACKING AND STORING			
Product surface per pallet	m <sup>2</sup>	<b>35</b>	
Pallet dimension	m x m	<b>1,05 x 1,05</b>	
Number of panels per pallet	n°	<b>35</b>	
Each pallet is wrapped and protected with a polythene film.			

INSTALLATION INSTRUCTIONS	
The panels have to be installed butt jointed to each other and fixed using polyurethane adhesive. We suggest all joints are sealed with our "Stik", self-adhesive tape.	

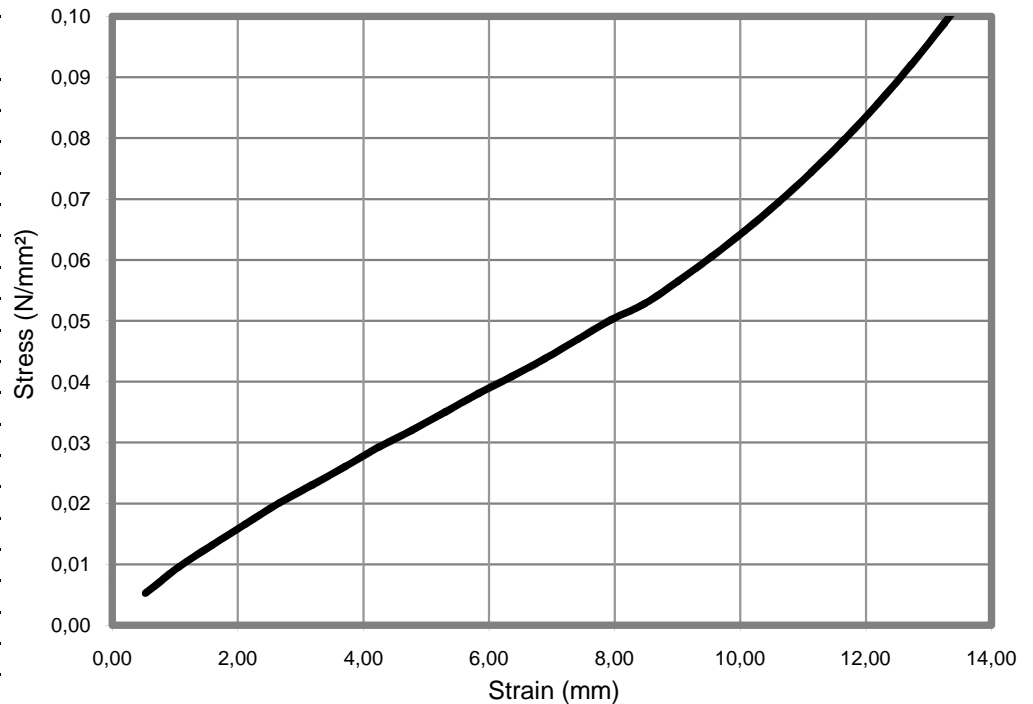
HEALTH & SAFETY	
This is not a dangerous material, therefore it is not subject to the European directive 67/648/CEE .	

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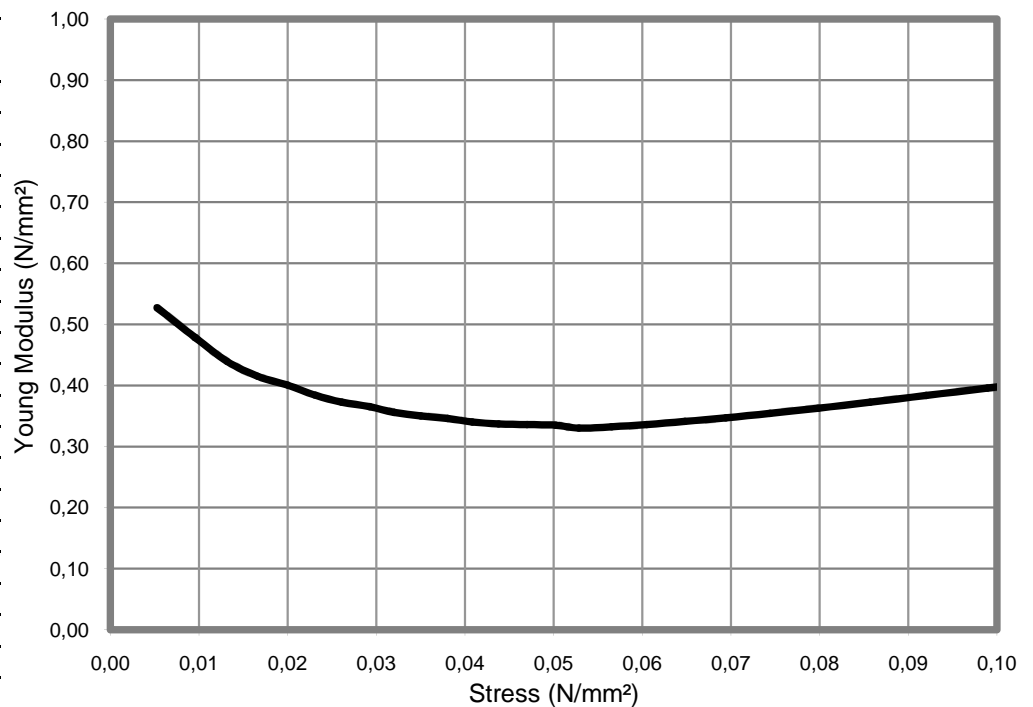
### Compression - EN 826

Strain (mm)	Stress (N/mm <sup>2</sup> )
0.53	0.005
1.06	0.010
1.59	0.013
2.12	0.017
2.65	0.020
3.18	0.023
3.71	0.026
4.24	0.029
4.77	0.032
5.30	0.035
5.83	0.038
6.36	0.041
6.89	0.044
7.42	0.047
7.95	0.050
8.48	0.053
9.01	0.057
9.54	0.061
10.07	0.065
10.60	0.069



### Static Modulus of Elasticity

Stress (N/mm <sup>2</sup> )	Young Modulus (N/mm <sup>2</sup> )
0.005	0.527
0.010	0.478
0.013	0.439
0.017	0.415
0.020	0.400
0.023	0.384
0.026	0.373
0.029	0.365
0.032	0.356
0.035	0.350
0.038	0.346
0.041	0.340
0.044	0.337
0.047	0.336
0.050	0.335
0.053	0.330
0.057	0.333
0.061	0.336
0.065	0.341
0.069	0.347

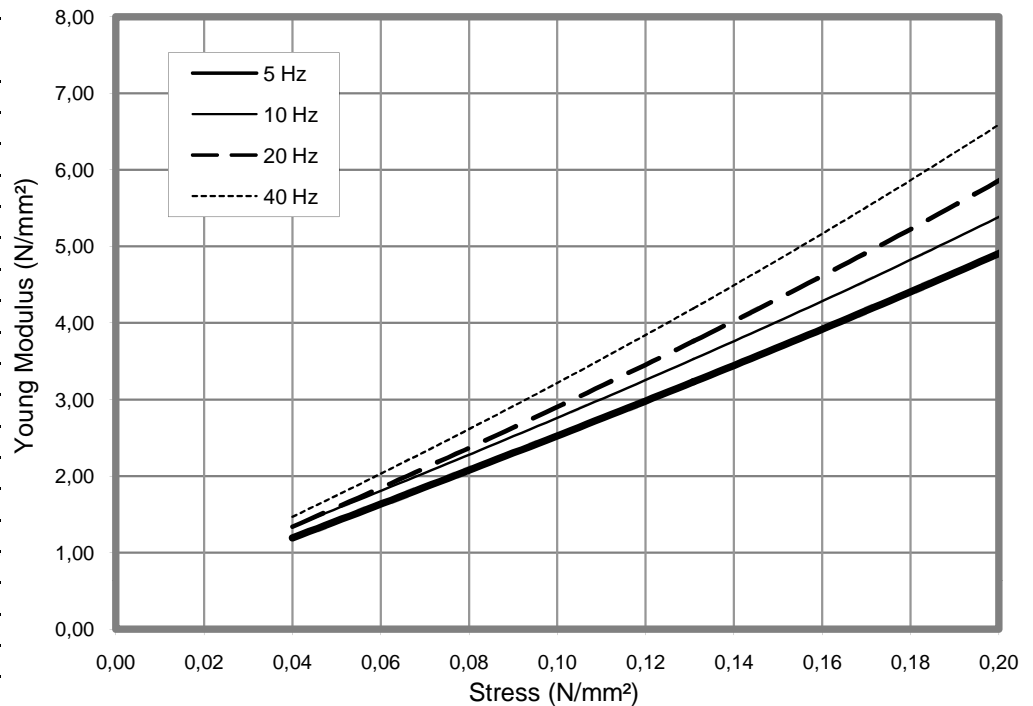


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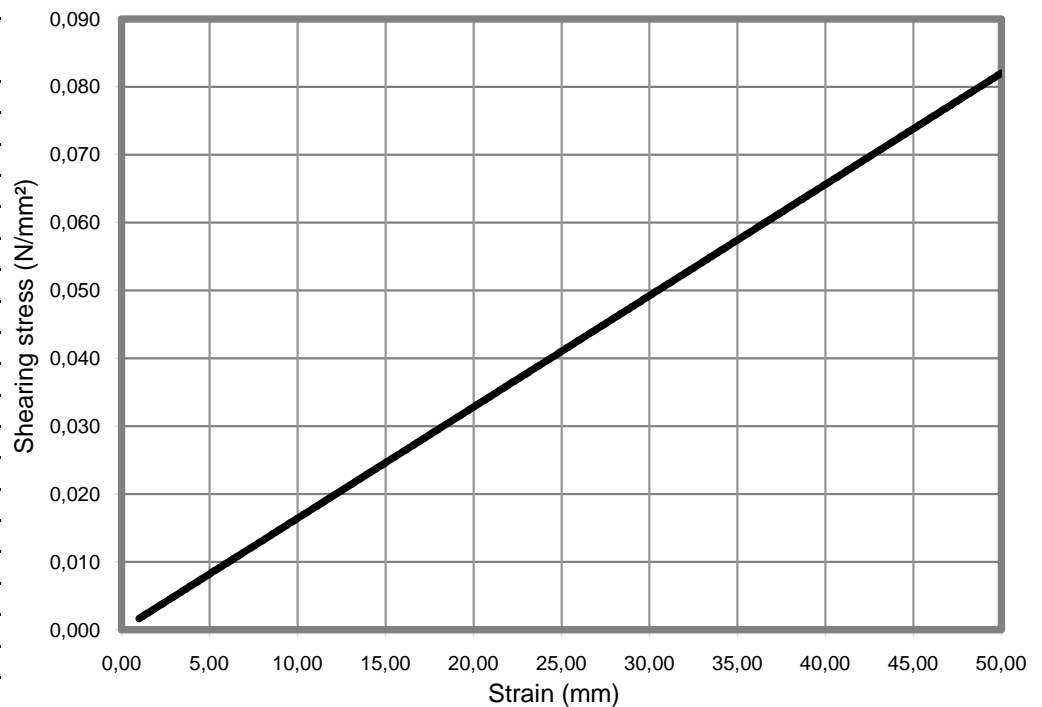
### Dynamic Modulus of Elasticity

Stress (N/mm <sup>2</sup> )	Young Modulus (N/mm <sup>2</sup> )
<b>5 Hz</b>	
0.04	1.24
0.08	2.03
0.12	2.93
0.20	4.99
<b>10 Hz</b>	
0.04	1.37
0.08	2.24
0.12	3.24
0.20	5.42
<b>20 Hz</b>	
0.04	1.37
0.08	2.33
0.12	3.43
0.20	5.90
<b>40 Hz</b>	
0.04	1.46
0.08	2.63
0.12	3.84
0.20	6.59



### Horizontal scroll

Strain (mm)	Shearing stress (N/mm <sup>2</sup> )
1.00	0.00164
2.00	0.00328
3.00	0.00492
4.00	0.00656
5.00	0.00820
6.00	0.00984
7.00	0.01148
8.00	0.01312
9.00	0.01476
10.00	0.01640
11.00	0.01804
12.00	0.01968
13.00	0.02132
14.00	0.02296
15.00	0.02460
16.00	0.02624
17.00	0.02788
18.00	0.02952
19.00	0.03116
20.00	0.03280

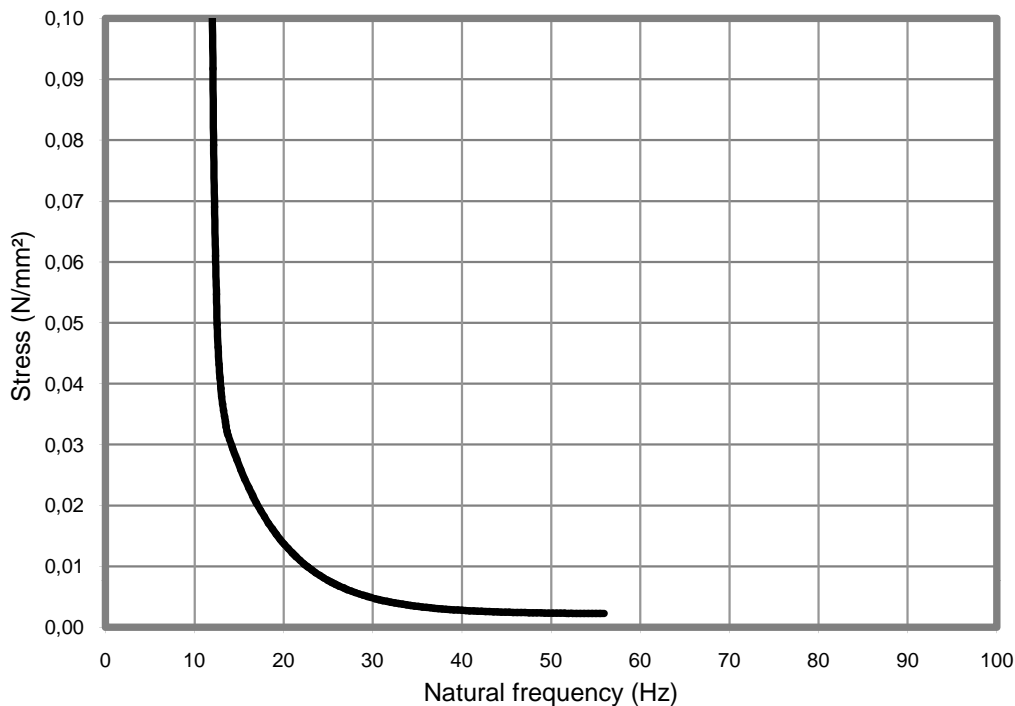


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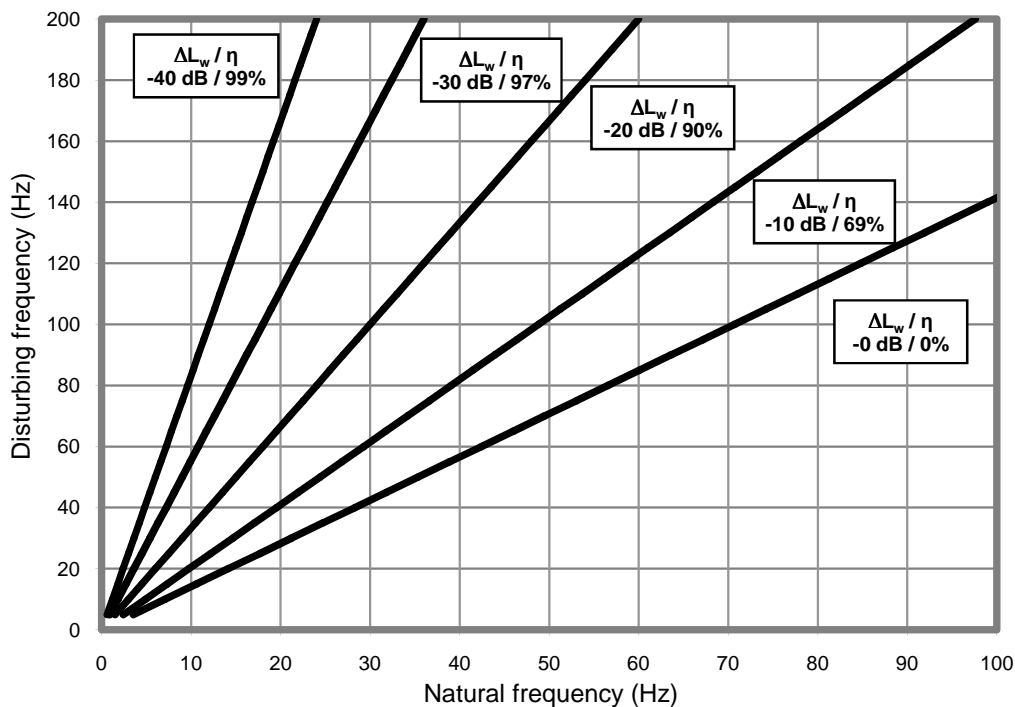
### Natural frequency

Natural (Hz)	Stress (N/mm <sup>2</sup> )
12	0.1072
14	0.0316
16	0.0243
18	0.0181
20	0.0144
22	0.0110
24	0.0090
26	0.0071
28	0.0059
30	0.0049
32	0.0043
34	0.0037
36	0.0033
38	0.0030
40	0.0028
42	0.0027
44	0.0025
46	0.0025
48	0.0024
50	0.0023



### Vibration Isolation

$\Delta L_w$
Transmission reduction on dB
$\eta$
degree of isolation on %



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