Technical Information

Noiseflex® Corpo MH

Noiseflex® Corpo MH are absorber bodies such as baffles, balls and cylinders made of Noiseflex® MH. They can effect an improvement in room acoustics, mainly in the medium and high frequency ranges. Noiseflex® MH is a flexible, open-celled melamine resin foam plastic. Its typical distinguishing mark is the filigree, spatial net texture formed from slim, and hence easily deformable, cell connectors. Noiseflex® MH features a broad spectrum of attractive properties. The excellent attributes are high level of sound absorption capability and low weight. Based on the benefits of Noiseflex® MH is the broad application area of our Noiseflex® Corpo MH in the acoustic field, especially in recording studios, the HiFi sector, open-plan offices, production and factory workshops, as well as event venues. In halls for example, Noiseflex® Corpo MH is able to considerably reduce reverberation time and sound level when used appropriately.
The fire behaviour of Noiseflex® Corpo MH with textile cover is tested following the standard DIN EN 1021, parts 1 und 2 (cigarette and gas flame test). The fire resistance of Noiseflex® Corpo MH with textile cover therefore complies verifiable with the legal demands, which are made on objects of interior room setup.

Physical properties:
Noiseflex® Corpo MH is chemically resistant to a number of substances. It is free of halogenated hydrocarbons.

Technical data:

Absorber	Noiseflex® MH melamine resin foam	
Reaction to fire	B1 – flame-retardant	DIN 4102 – 1
Bulk density	7 – 10.5 kg / m³, depending on colour	EN ISO 845
Compression strength (average value)	> 5 kPa	EN ISO 3386 – 1
Tensile strength (average value)	> 100 kPa	ISO 1798
Elongation at fracture (average value)	> 18 %	ISO 1798
Thermal conductivity	λ ≤ 0.04 W / (m·K)	DIN EN 12667

Colours:
Noiseflex® Corpo MH absorbers are available in the following colours as standard (other colours available on request, e.g. fabric covers, paint coating):


White


Grey

Colours as well as pore structure and size may vary depending on product. Tolerances in length and width are possible (up to 1.5%).

Variant examples:

Boards as baffles	Cylinders	Balls
1000 x 500 x 50	L=1200mm, Ø=150mm	Ø to max. 480mm possible
1000 x 500 x 70	L=1200mm, Ø=230mm	
1000 x 500 x 100		

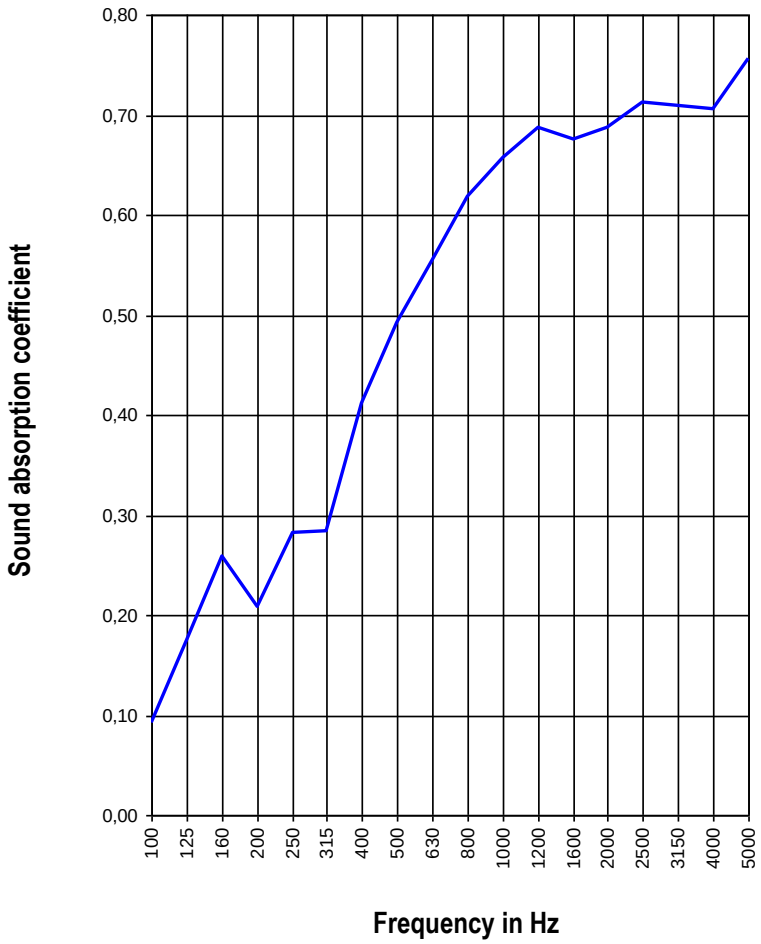
Processing notes:
The dust resulting from machining, such as when sawing and milling, must be extracted immediately at the point of generation. Wearing a dust mask during this work is recommended.
Because of the sorption characteristics of the melamine resin in conjunction with the open-cell nature of the foam plastic, the moisture content changes depending on the ambient conditions. This entails dimensional changes (as is the

case for wood, concrete and clay bricks). This behaviour must be taken into consideration during work. The foam plastic parts packed on delivery must be unpacked and put into temporary storage **at least 3 to 5 days** before being used and in the climatic conditions matching those for subsequent use. This is extremely important to avoid later any undesired dimensional changes to the material in length, width and thickness.
We recommend our insulating material dowels with hook for suspending our Noiseflex® Corpo MH from the ceiling. For fabric covers, the absorber bodies are clipped into an attachment hook with the integrated lugs. Our Noiseflex® cable set (see technical data sheet) can be used for longer suspensions from the ceiling.

Sound absorption of the Noiseflex® Corpo MH boards (1000x500x50mm) as a baffle system in the reverberation room as per DIN EN ISO 354.
16 elements with border type J, hung horizontally, 4 rows, dimension between row centre lines 600mm.

Room volume:	391.6 m³	Test sound:	Broad band noise
Room surface area:	322.2 m²	Receive filter:	Third octave band filter
Date of measurement:	13.12.2011	Measuring body:	TÜV Rheinland LGA Products GmbH (test report no. 21181673-001)

Sound absorption coefficient α		
Frequency [Hz]	Thirds	Octaves
	α	α
100	**0.09**	0.18
125	**0.18**	
160	**0.26**	
200	**0.21**	0.26
250	**0.28**	
315	**0.28**	
400	**0.41**	0.49
500	**0.49**	
630	**0.55**	
800	**0.62**	0.65
1000	**0.66**	
1200	**0.69**	
1600	**0.68**	0.69
2000	**0.69**	
2500	**0.71**	
3150	**0.71**	0.72
4000	**0.71**	
5000	**0.76**	



Individual value α_w to DIN EN ISO 11654	Noise absorption class to Annex B of DIN EN ISO 11654	Noise reduction coefficient NRC to ASTM C 423
0.50 (H)	D	0.50

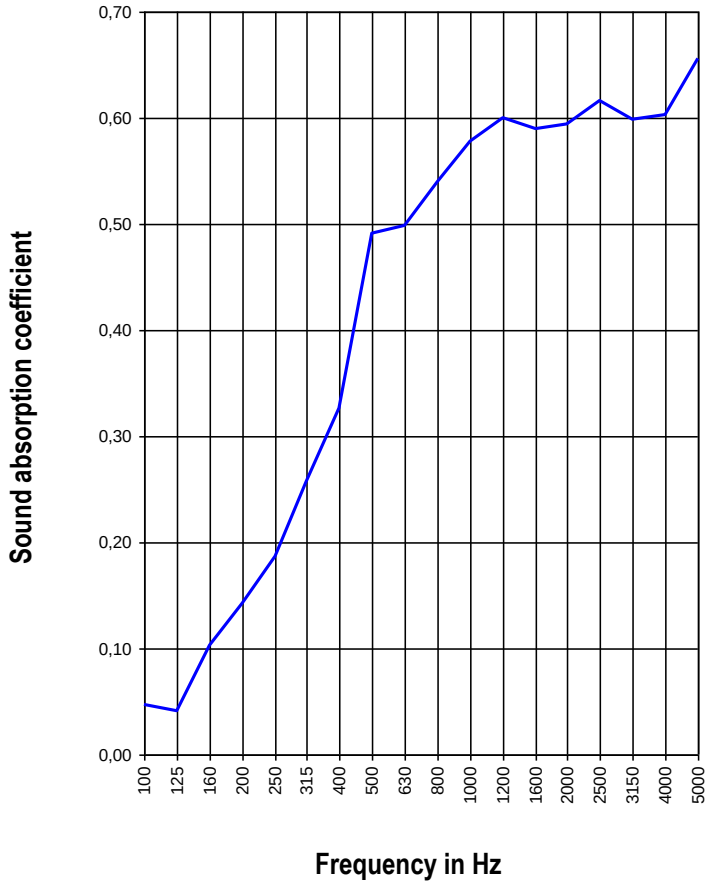
Technical Information

Noiseflex® Corpo MH

Sound absorption of the Noiseflex® Corpo MH cylinders (L=1200, Ø=150) as a baffle system in the reverberation room as per DIN EN ISO 354.
16 elements with border type J, hung horizontally, 4 rows, dimension between row centre lines 600mm.

Room volume:	391.6 m³	Test sound:	Broad band noise
Room surface area:	322.2 m²	Receive filter:	Third octave band filter
Date of measurement:	13.12.2011	Measuring body:	TÜV Rheinland LGA Products GmbH (test report no. 21181673-001)

Sound absorption coefficient α		
Frequency [Hz]	Thirds	Octaves
	α	α
100	**0.05**	0.06
125	**0.04**	
160	**0.10**	
200	**0.14**	0.20
250	**0.19**	
315	**0.26**	
400	**0.33**	0.44
500	**0.49**	
630	**0.50**	
800	**0.54**	0.57
1000	**0.58**	
1200	**0.60**	
1600	**0.59**	0.60
2000	**0.59**	
2500	**0.62**	
3150	**0.60**	0.62
4000	**0.60**	
5000	**0.66**	



Individual value α_w to DIN EN ISO 11654	Noise absorption class to Annex B of DIN EN ISO 11654	Noise reduction coefficient NRC to ASTM C 423
0.45 (H)	D	0.45

Attention! Important Note:
Above information are based on best present knowledge of current technology, but do not guarantee faultless processing of our products. The information is based on practical results of our tests, but is not binding and does not constitute warranties of characteristics in terms of Federal Supreme Court jurisdiction. Our information does not constitute a legally binding assurance of certain properties or suitability for a specific purpose. Supplementary information by our specialists are merely recommendations, for which no liability is accepted.
Due to the many possible applications of our products, we recommend subjecting the project to a thorough suitability test on original materials before release for further application.
Since our information are non-binding we do not warranty their correctness. For this reason we accept no liability for possible improper processing based on information submitted by our employees.
This technical data sheet replaces all previous versions and is valid until a new version is issued, or until Dec. 31, 2024. Please request the latest version after Jan. 01, 2025.

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