Technical Information

Noiseflex® Pyramis MH

That sound absorption in rooms can be very important, is fact among acousticians. Noiseflex® Pyramis MH are pyramid shaped broadband absorbers made of Noiseflex® MH. They can produce an improvement of room acoustics mainly at medium and high frequencies. Noiseflex® MH is a flexible, open-cell foam material made from melamine resin. Its typical feature is the filigree, spatial network structure, which is formed by slim and thus easily ductile fillets. Noiseflex® MH offers a wide spectrum of attractive characteristics, e. g. it is highly sound absorbing and light weight. These acoustic advantages of Noiseflex® MH are behind the many applications of Noiseflex® Pyramis MH in the field, especially in sound studios, HiFi range, open plan offices, production and multipurpose halls as well as event venues. Noiseflex® Pyramis MH, if properly applied, is capable of drastically reducing sound level and reverberation time in halls, for instance.

Physical characteristics:
Noiseflex® Pyramis MH are chemically resistant to many substances. They do not contain halogenated hydrocarbons and comply with the RoHS directive.

Technical Data:

Absorber	Noiseflex® MH Melamine resin foam	
Fire resistant properties	B1 – flame-retardant	DIN 4102-1
Raw density	5.5 – 10.5 kg / m³, depending on colour	EN ISO 845
Tensile strength	> 100 kPa	ISO 1798
Elongation at break	> 18 %	ISO 1798
Compressive strength	> 5 kPa	EN ISO 3386 – 1
Thermal conductivity	λ ≤ 0.04 W / (m·K), depending on temperature	DIN EN 12667

Colours:
Noiseflex® Pyramis MH absorbers are available in the following colours as standard:

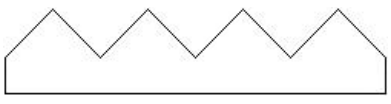
grey anthracite

Due to product properties, variations in colour and pore size and structure may occur. Tolerances in width and length of up to 1.5 % are possible.

Design and dimensions:

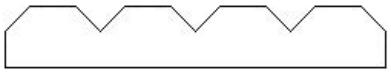
Noiseflex® Pyramis MH

1000 x 500 x 30 mm	base height 15 mm	pyramid height 15 mm
1000 x 500 x 50 mm	base height 15 mm	pyramid height 35 mm
1000 x 500 x 70 mm	base height 35 mm	pyramid height 35 mm



Noiseflex® Pyramis Plana MH

1000 x 500 x 30 mm	base height 15 mm	pyramid frustum 7 mm
1000 x 500 x 50 mm	base height 15 mm	pyramid frustum 17 mm
1000 x 500 x 70 mm	base height 35 mm	pyramid frustum 17 mm



Furthermore, the following types of both variants are available:
Noiseflex® Pyramis and Noiseflex® Pyramis Plana with self adhesive coating
Noiseflex® Panino MH with heavy foils Noiseflex® Vibra heavy (5 and 8 kg / m²) and with self adhesive coating

BOSIG GmbH D – 73333 Gingen, Brunnenstraße 75 - 77 Telephone +49(0)7162-40 99-0 Fax +49(0)7162-40 99-200 www.bosig.de info@bosig.de

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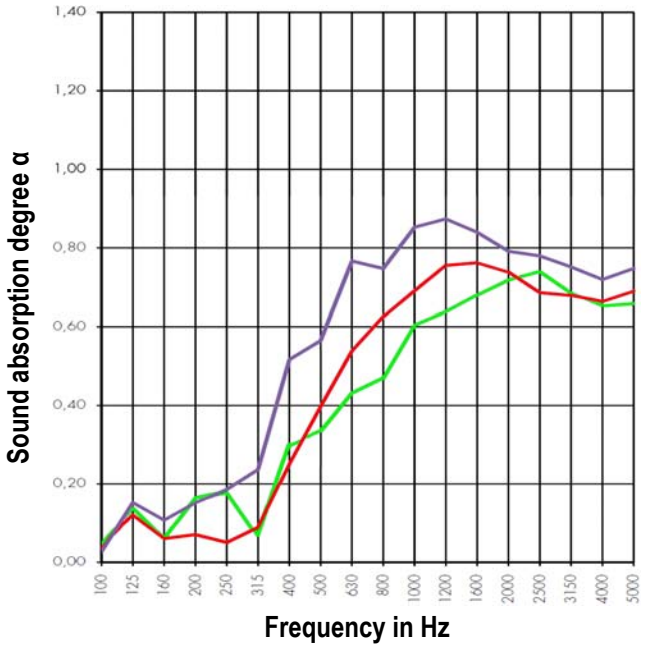
Processing instructions:
The dust arising when processing, e.g. when sawing and milling, it should be drawn off immediately at the cutting site. It is recommended to wear a dust mask during these operations.
The material's moisture content is altered depending on the environmental conditions.
Dimension modifications are associated with this similarly as is the case with wood, concrete or clay brick. This behavior has to be considered when converting. The foam sections packed in the manufacturing state have to be unpacked **at least 3 – 5 days** prior to converting them and intermediately stored under climatic conditions that match those of the later intended use.
For full surface gluing of Noiseflex® Pyramis MH onto walls or ceilings we recommend our BOSIG Acoustic Adhesive. Please observe the technical instruction sheet specifications and the processing notes of BOSIG Acoustic Adhesive. Particularly sheets, pyramids or other cuts made of Noiseflex® MH shall be installed with continuous joints. Displacements are to be avoided. Or with a shadow gap of 10 to 20 mm, for achieving an optimal appearance.

Sound absorption degree of Noiseflex® Pyramis MH according to DIN EN ISO 354

Noiseflex® Pyramis MH, dimension 1000 x 500 mm

Volume of the room:	75 m²
Absorber surface:	4.5 m²
Date of measurement:	Sept. 10, 2009
Acoustic noise for test:	pink noise
Receive filter:	third filter
Number of absorbers:	9 pyramids

Measurement and analysis
Bauphysik! Ingenieurbüro, Bolzweg 26, 73035 Göppingen



Frequency [Hz]	125	250	500	1000	2000	4000
Thickness 30 mm, base height 15 mm						
Absorption degree α_S	0.14	0.18	0.33	0.60	0.72	0.65
Reduction of sound pressure level in the reverberation room [dB]	1.66	1.60	2.23	2.79	2.56	1.86
Thickness 50 mm, base height 15 mm						
Absorption degree α_S	0.12	0.05	0.40	0.69	0.74	0.66
Reduction of sound pressure level in the reverberation room [dB]	1.46	0.51	2.55	3.08	2.62	1.88
Thickness 70 mm, base height 35 mm						
Absorption degree α_S	0.15	0.19	0.56	0.85	0.80	0.72
Reduction of sound pressure level in the reverberation room [dB]	1.79	1.62	3.29	3.57	2.76	2.01

Dr. Hermann, Anwendungstechnik / Application Technology, Gingen / Fils