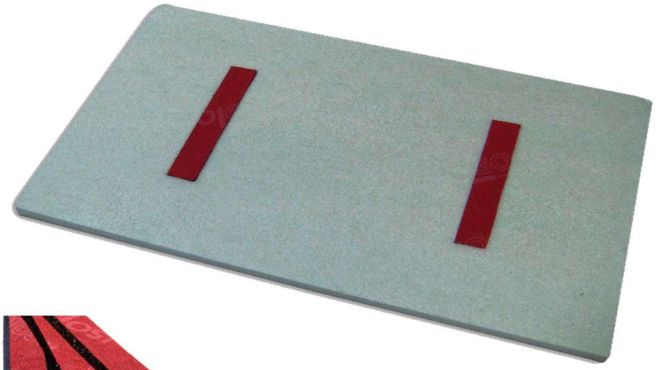
HIGHMAT 30
UNDER SCREED ACOUSTIC INSULATION

UNDER SCREED

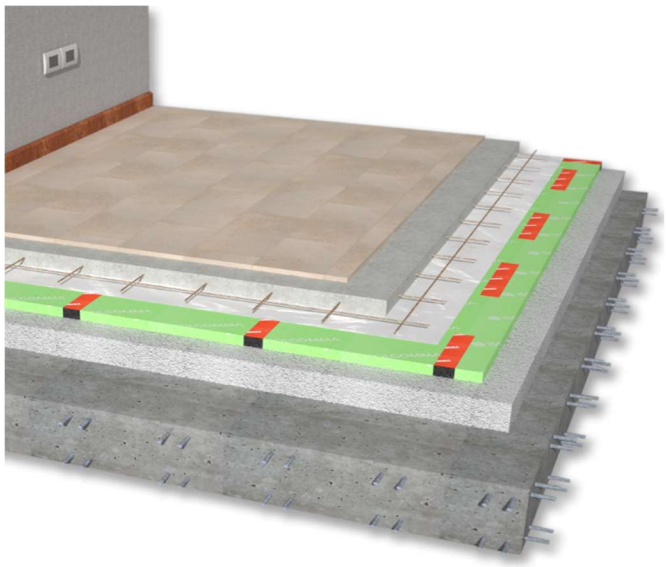
IMPACT NOISE ACOUSTIC INSULATION WITH HIGH THERMAL-ACOUSTIC PERFORMANCES, CONSISTING OF POLYESTER FIBRE PANELS AND PUNCTUAL SUPPORTS IN GRANULAR RUBBER SBR AND EPDM



HIGHMAT SIDE

TECHNICAL SPECIFICATION

Acoustic insulation panels made of two rubber bearings inserted in a polyesther fiber mat, with a total thickness of 30 mm. The bearings are made of SBR and EPDM rubber granules and fibers compacted using polyurethane glue in a hot process, protected with a non-woven, non-stretch, synthetic membrane on one side; the dimensions of the rubber bearings are 300 mm x 50 mm. The polyesther fiber mat has a density of 60 kg/m^3 and the total dimensions of the assembled panel are 1000 mm x 600 mm. Impact sound pressure level attenuation 36 dB.



CERTIFIED ACOUSTIC IMPROVEMENT

Highmat guarantees the maximum acoustic performances for the reduction of impact noise in the construction of new multi-purpose buildings

FLEXIBILITY

The excellent performances even at low frequency make it suitable on lightweight structures or for applications with very low system frequencies

LAYING COSTS REDUCTION

The realization in panels allows installation even in the absence of a specific design of the laying layout

TO BE USED WITH

Under screed solutions for floors acoustic insulation in multi-purpose buildings

TECHNICAL DATA

Thickness	30 mm
Length	1,00 m
Width	0,60 m
Mass per unit area	1,90 kg/m^2

Dynamic stiffness s'	4 MN/m^3
Compressibility c	3,8 mm
Impact sound pressure level attenuation ΔLw	36 dB
Reaction to fire	E
Thermal conductivity coefficient λ	0,040 W/m K

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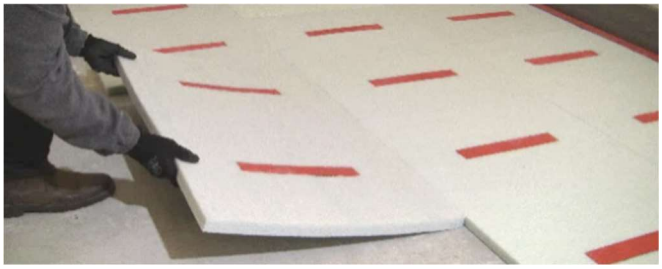
INSTALLATION INSTRUCTIONS FOR HIGHMAT

1 Install the adhesive strip Profyle Flat to the wall and the Side Highmat along the whole perimeter.

2 Install Highmat on the whole surface, staggered between two adjacent rows.



3 Seal any gaps higher than 2 mm between panels, using the Stik tape.

4 Apply a waterproof foil on the whole surface to protect the resilient layer.

5 Install the reinforcement mesh (Ø 5 mm, net 200 mm) and build the screed (th. > 60 mm).

6 Apply the finishing on top of the screed and cut the exceeding edging strip only at the end.

NOTES

At the end of the row, proceed with a cut of the Highmat panel when necessary. The waste can be used in the subsequent end-of-line or it can be reduced to half panel to start a new row

During the casting of the screed the Highmat product may undergo a partial deflection in correspondence with the part of the polyester fiber panel

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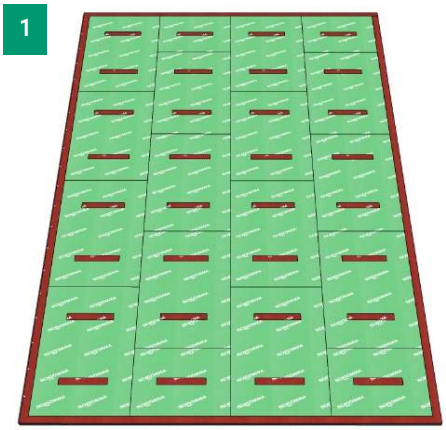
SPECIFIC LAYING INSTRUCTIONS FOR THE HIGHMAT PANEL AND ACCESSORIES

After preparing the laying surface, the Profyle Flat and the Highmat Side along the perimeter, start laying a full Highmat panel and proceed in the same direction so that the rubber supports are aligned between adjacent rows [1]. The orientation of the rows is at the discretion of the installer [2] [3]

1



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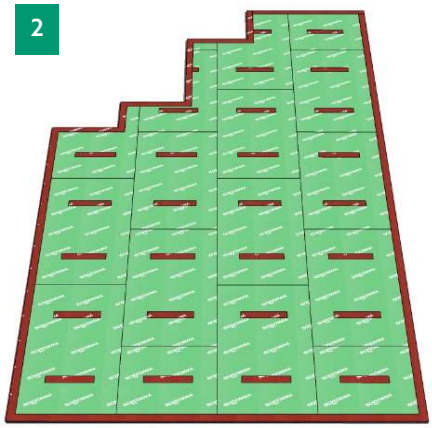
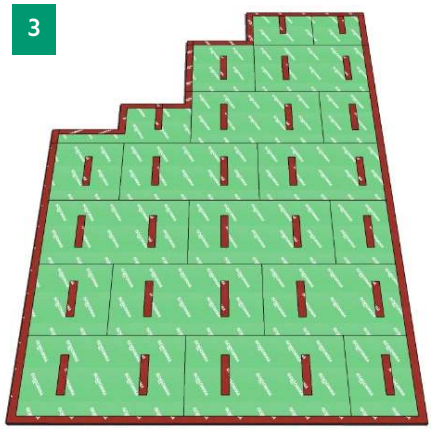
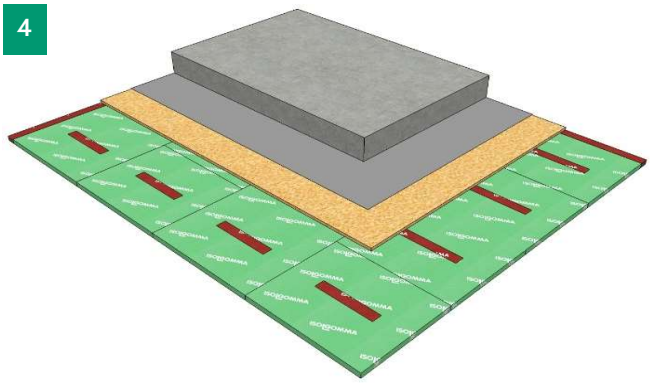


3



The sand and cement screed or leveling screed must have a thickness of more than 6 cm and a density of at least 2000 kg / m³ and must also be reinforced by a reinforcement mesh of 5 mm diameter and 200 mm mesh positioned at a height of about 20 mm from the top of the resilient mattress. For screed thicknesses greater than 100 mm, use a wooden panel as a disposable formwork (at least 15 mm thick) [4]. Before casting, protect the surface with a waterproof sheet.

4



ACOUSTIC CERTIFICATES
Product acoustic certificates are available and allow to comply with the limits imposed by law

INSTALLATION TEST
Acoustic performances of the intervention can be tested on site by a competent technician

ACOUSTIC REPORT
Our technical staff is able to give you the proper support in all the project phases, supporting you in the identification of materials

LAYING ASSISTANCE
Thanks to our extensive commercial technicians network, we are at your disposal for the coordination of the first laying phases on site

SEE THE REFERENCES > VISIT THE WEBSITE

CONTACT THE TECHNICAL DEPARTMENT FOR MORE INFORMATION

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PHYSICAL AND MECHANICAL CHARACTERISTICS OF THE PRODUCT

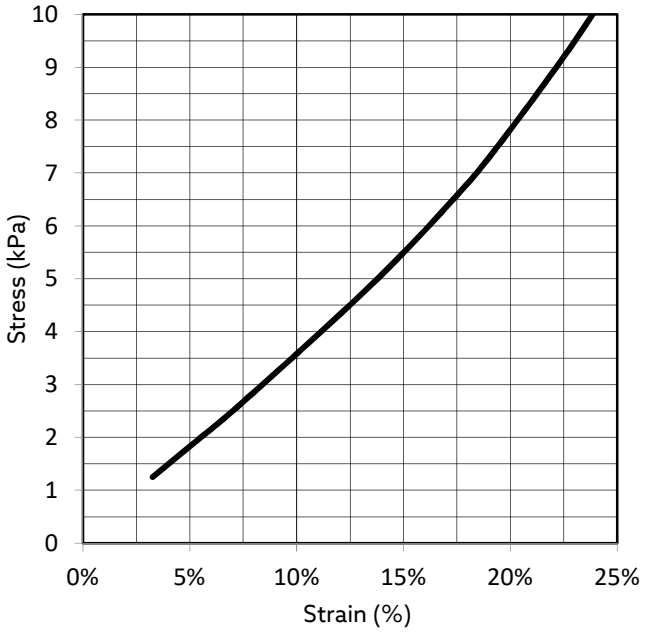
PHYSICAL CHARACTERISTICS

Thickness		mm	30	± 2
Length	EN 822	m	1,00	± 1%
Width	EN 822	m	0,60	± 1%
Rubber bearings				
Length	EN 822	mm	300	± 1%
Width	EN 822	mm	50	± 1%
Density	EN 1602	kg/m³	500	± 5%
Polyester fiber panel				
Density	EN 1602	kg/m³	40	± 10%

TECHNICAL CHARACTERISTICS

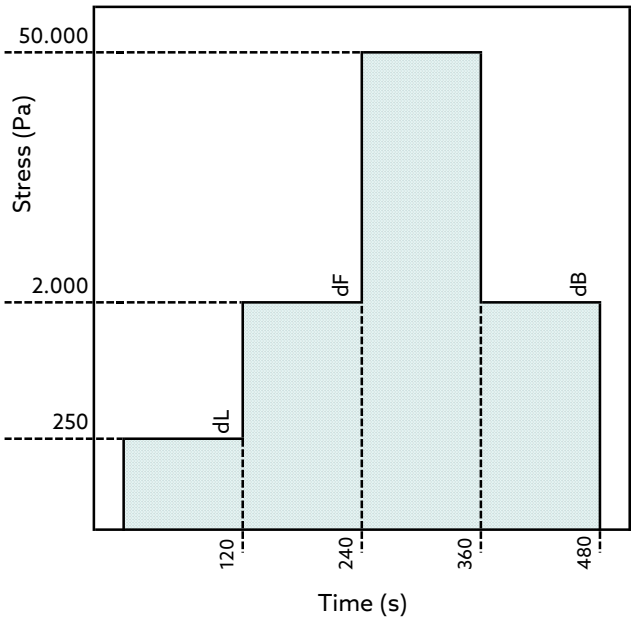
Compressibility c	EN 12431		3,8
Thermal conductivity coefficient λ	EN 12667	W/m K	0,040
Reaction to fire	EN 13501-1		E
Maximum traffic load		kg/m²	≤ 3.000

COMPRESSION BEHAVIOR



Stress at 10%		σ_{10}		
EN 826	kPa	3,7	± 10%	

THICKNESS AND COMPRESSIBILITY



Thickness		dL	dF	dB	
EN 12431	mm	29,47	27,68	25,75	± 10%

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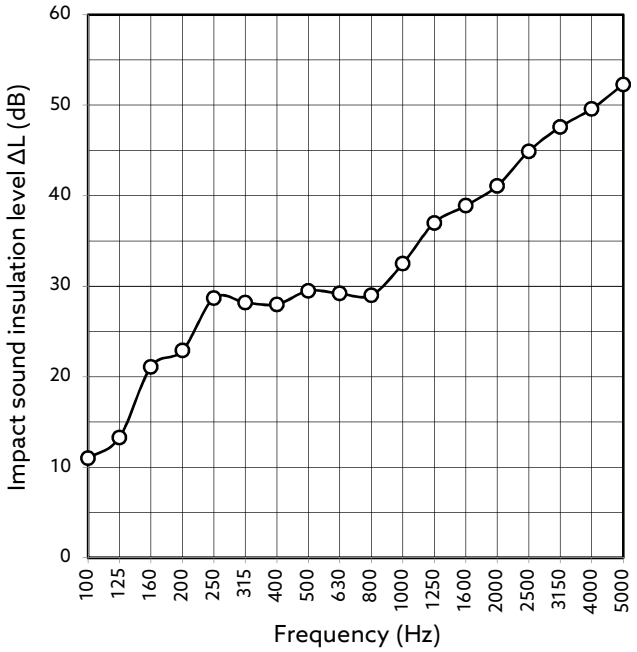
ACOUSTIC CHARACTERISTICS OF THE PRODUCT

DYNAMIC STIFFNESS

UNI EN 29052-1 **s' = 4 MN/m³**

Tested in the Isolgomma laboratory

IMPACT SOUND PRESSURE LEVEL ATTENUATION ON REFERENCE STANDARD FLOOR



Frequency Hz	ΔL dB
100	6,3
125	8,9
160	18,3
200	21,6
250	27,7
315	27,1
400	29,2
500	30,8
630	33,1
800	31,6
1000	32,9
1250	35,7
1600	38,6
2000	42,0
2500	45,9
3150	49,0
4000	52,3
5000	54,5

EN ISO 10140-3 Laboratory measurement of the acoustic insulation of building elements. Impact sound insulation measurement

Evaluation index of the reduction of standardized level of impact noise EN ISO 717-2:

ΔLw = 36 dB

Test description:
- 140 mm reinforced concrete floor
- Highmat 30
- 60 mm sand-cement screed

Test Report Ecam Ricert n.16-3642-001