

K-FLEX®

K-FONIK SYSTEM



K-FLEX® K-FONIK SYSTEM

- ▶ Acoustic insulation of waste and rainwater drainage pipes
- ▶ Acoustic insulation of industrial pipes, civil and industrial machinery
- ▶ Solutions for traditional brick dividing walls and dry construction systems (plasterboard)
- ▶ Underfloor solutions
- ▶ Applications in shipbuilding and rail

Site

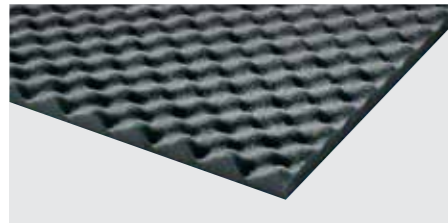


GENERAL INFORMATION

Whether at home, work or leisure, most of our time is spent inside buildings, so it is important that we feel comfortable. The optimum environment is created from a combination of the correct ambient temperature, humidity and lighting, access to necessary resources and suitable acoustic insulation. All these factors have to be taken into consideration when designing buildings, and will also have a direct bearing on the build cost and final project value.

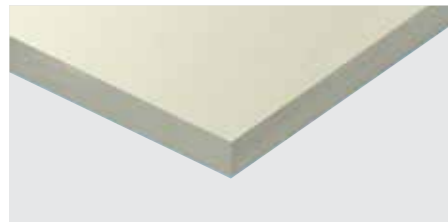
K-FLEX® offers good value high performance acoustic solutions to meet the demands of today's buildings (both new-build and renovation projects) with high quality, excellent durability and optimum design, complying with the required regulations.

K-FLEX® products are manufactured to the highest specifications using high quality durable materials and finishes with excellent performance qualities.



SOUND ABSORPTION MATERIALS

To absorb and dissipate sound energy reducing its reflection from the source.



SOUND INSULATION MATERIALS

To isolate airborne noise and prevent its migration.



DAMPING MATERIALS

To dampen noise produced by vibrations from sheets, panels and covers.

APPLICATION EXAMPLES BUILDING



PROJECTS

Poland

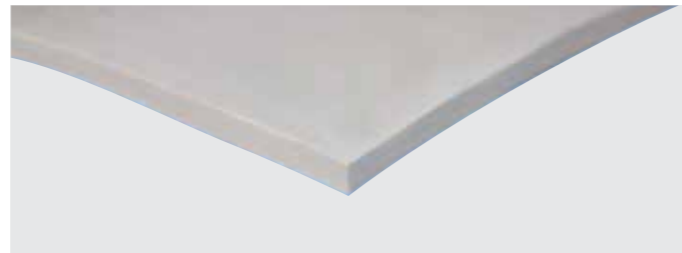


K-FLEX® K-FONIK GK / GV

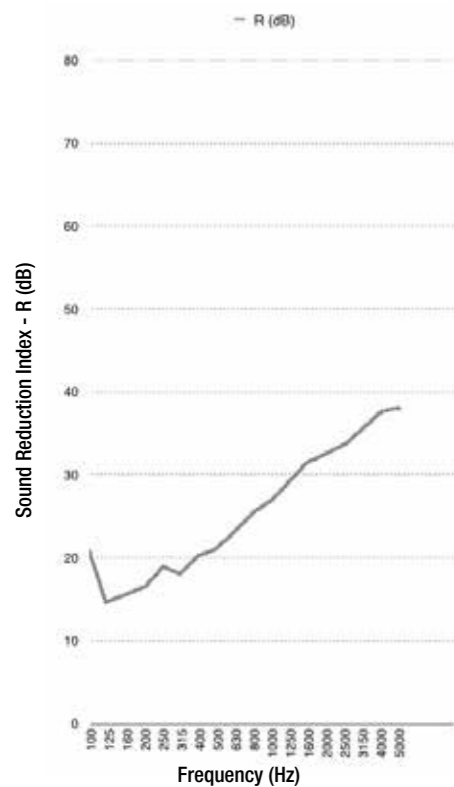
High-density elastomeric acoustic insulating panel for building, OEM and industrial applications. **The product is lead-free and therefore does not represent a health risk.**

K-FONIK GK is a high density elastomeric material based on partially reticulated polymers with viscoelastic properties designed for acoustic insulation applications. Installed as a mass barrier, its special sound insulation characteristics make it an excellent product for insulation of walls and ceilings in civil applications, pipe insulation in industrial applications and damping reduction in OEM applications.

K-FONIK GV is a high density elastomeric material based on partially reticulated polymers and fireproof mineral fillers. Its viscoelastic properties make it ideal for acoustic insulation in shipbuilding and railway applications.



ACOUSTIC PERFORMANCE



Freq. (Hz)	R (dB)
100	20,9
125	14,5
160	15,6
200	16,6
250	18,8
315	17,9
400	20,2
500	21,1
630	23,1
800	25,2
1000	27,1
1250	29,2
1600	31,5
2000	32,6
2500	33,6
3150	35,6
4000	37,4
5000	37,9

$$R_w (C; C_{tr}) = 27(-1; -4) \text{ dB}$$

APPLICATION

K-FONIK GK is ideal for sound insulation of walls, ceilings, acoustic cabins, drainage systems, OEM sound insulation applications, etc.

K-FONIK GV is ideal for the railway and shipbuilding industries.

RANGE

K-FONIK GK
from 4 to 8 Kg/m²



K-FONIK GV
from 4 to 8 Kg/m²



K-FLEX® K-FONIK GK ▶ TECHNICAL DATA		
Property	Value	Test method
Material	High density elastomeric material	
Fire rating	B - s3,d0 ¹ , IMO A653 (CE MARINE) ² , FMVSS 30 ² Class 0	EN 13501 BS 476 Part 6/7
Temperature	-40 °C +70 °C	
Dimensions	1000 x 2000 mm; 1200 x 2000 mm; 1500 x 2000 mm - Roll 25 or 50 m	
Surface	Smooth ³	
Weight	from 4 kg/m ² to 8 kg/m ²	
Base colour	Black (GK) White (GV)	
Density	2000 kg/m ³ (±10%)	

¹ Only for K-FONIK GK on request ² Only for K-FONIK GV
³ Different finishes available: ALU and non-woven fabric

K-FLEX® reserves the right to change data and technical requirements without notice.

K-FLEX® K-FONIK OPEN CELL

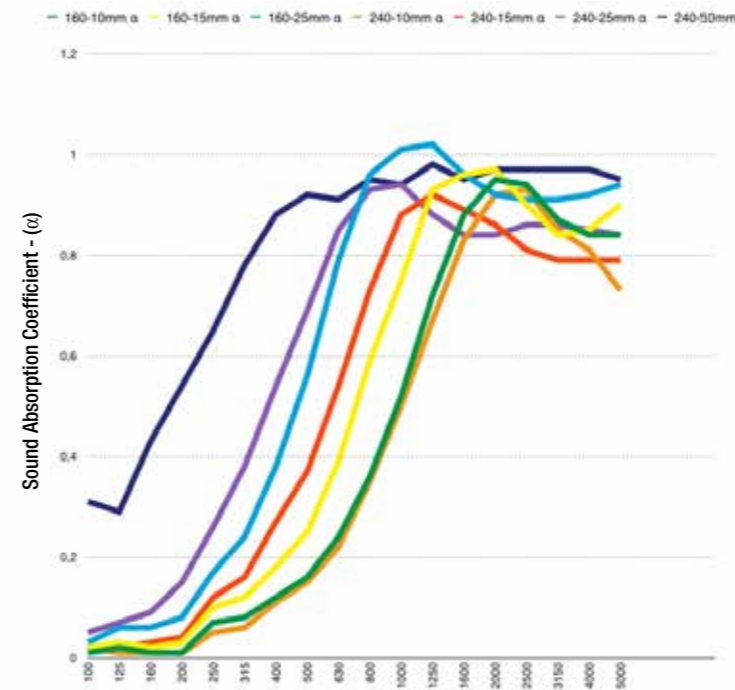
K-FONIK OPEN CELL is an open cell Flexible Elastomeric Foam designed for sound absorption.

Its viscoelastic properties, open cell structure and good air flow resistance make it excellent for acoustic insulation in building, HVAC/R, pipes and industrial applications. It combines excellent acoustic performances and insulation characteristics.

APPLICATION

K-FONIK OPEN CELL is ideal for sound absorption application; industrial pipes, building, OEM products and HVAC/R.

ACOUSTIC PERFORMANCE



Thickness	α _w
K-FONIK OPEN CELL 160, 10 mm	0,25
K-FONIK OPEN CELL 160, 15 mm	0,30
K-FONIK OPEN CELL 160, 25 mm	0,45
K-FONIK OPEN CELL 240, 10 mm	0,25
K-FONIK OPEN CELL 240, 15 mm	0,40
K-FONIK OPEN CELL 240, 25 mm	0,55
K-FONIK OPEN CELL 240, 50 mm	0,90



RANGE

K-FONIK OPEN CELL
160 - 240



from 10 to 350 mm
Please see the price list for the full range

K-FLEX® K-FONIK OPEN CELL ▶ TECHNICAL DATA		
Property	Value	Test method
Material	Flexible elastomeric foam open cell	
Density	OPEN CELL 160: ≥ 100 kg/m ³ OPEN CELL 240: 240 kg/m ³ (-20 / +120 kg/m ³)	
Thermal conductivity	OPEN CELL 240: 0,056 W/(m•K) OPEN CELL 160: 0,048 W/(m•K)	EN 12667
Fire rating	C-s3,d0 Class 1	EN 13501-1 BS 476 Part 6/7
Temperature	-40 °C +85 °C	
Thickness	from 10 to 500 mm	
Base colour	Black	
Modulus (MPa)	22 ± 3,7 (160) 57,7 ± 8,0 (240)	
Elongation to break (%)	114 ± 33 (160) 140 ± 47 (240)	
Insertion Loss	K-FONIK 160 10mm R _w =5 dB K-FONIK 160 15mm R _w =8 dB K-FONIK 160 25mm R _w =9 dB K-FONIK 240 10mm R _w =8 dB K-FONIK 240 15mm R _w =10 dB K-FONIK 240 25mm R _w =14 dB	

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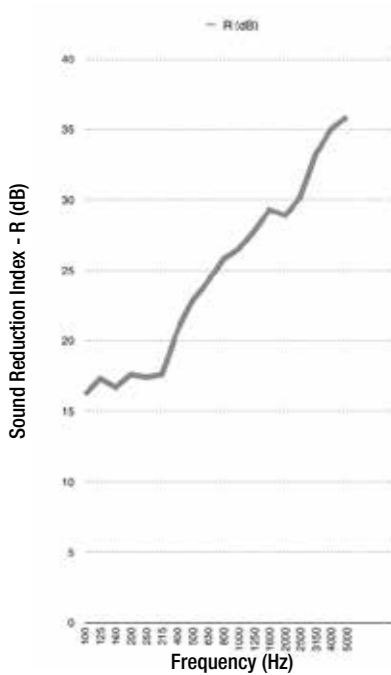
K-FLEX® K-FONIK ST GK

Smooth elastomeric sound insulation panel in various thicknesses, coupled with a high density elastomeric sheet. **The product is lead-free and therefore does not represent a health risk.** K-FONIK ST GK combines the features of K-FONIK GK with a layer of our elastomeric K-FLEX® ST.

APPLICATION

K-FONIK ST GK is ideal for sound insulation of walls, ceilings, acoustic cabins, drainage systems, OEM sound insulation applications, etc.

ACOUSTIC PERFORMANCE



$$R_w (C; C_{tr}) = 26 (0; -3) \text{ dB}$$



RANGE

<p>K-FONIK ST GK 074</p>	<p>K-FONIK ST GK 072</p>
<p>K-FONIK ST GK 070</p>	<p>K-FONIK ST GK ST 074</p>

Please see the price list for the full range

K-FLEX® K-FONIK ST GK ▶ TECHNICAL DATA		
Property	Value	Test method
Material	Flexible elastomeric foam with high-density elastomeric material	
Weight	4,4 kg/m ² (K-FONIK ST GK 072)	
Fire rating	B - s3,d0	EN 13501-1
Thermal conductivity	0.036 W/(m•K)	EN 12667
Temperature	-40 °C +70 °C	
Dimensions	2000 x 1000 mm	
Surface	Smooth	
Base colour	Black	

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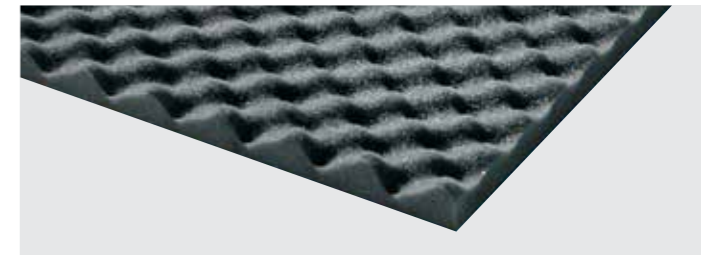
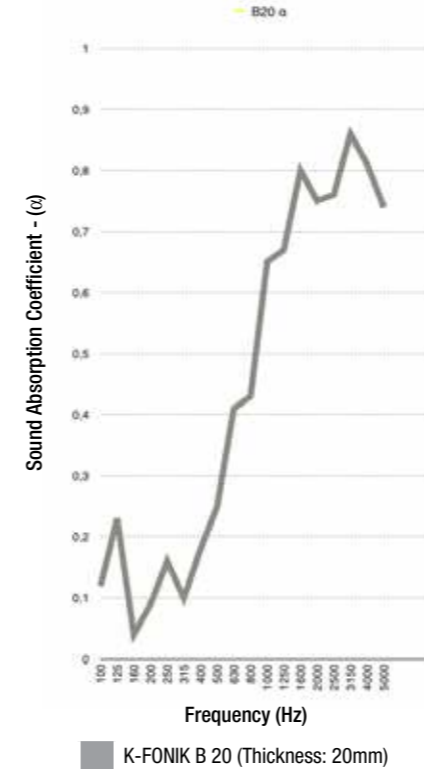
K-FLEX® K-FONIK B

Embossed surface polyurethane foam sheet ideal for acoustic absorption. K-FONIK B material is specifically designed for situations where sound absorption is a priority. It is made of open cell flexible polyurethane foam with a density of 25/30 kg/m³.

APPLICATION

K-FONIK B is widely used in gyms, conference rooms, rifle ranges, recording studios, radio/television studios, moveable acoustic panels, engine rooms, etc.

ACOUSTIC PERFORMANCE



RANGE

K-FONIK B 20

Please see the price list for the full range

K-FLEX® K-FONIK B ▶ TECHNICAL DATA		
Property	Value	Test method
Material	Polyurethane foam	
Density	25 ÷ 30 kg/m ³	
Temperature	-40 °C +70 °C	
Dimensions	1000 x 2000 mm	
Surface	Embossed	
Thickness	20 mm	
Base colour	Black	

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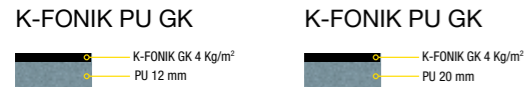
K-FLEX® K-FONIK PU GK

K-FONIK PU GK is a sound absorption material with high density elastomeric sheet specifically designed to provide a solution to particular soundproofing problems.

APPLICATION

K-FONIK PU GK is ideal for the sound insulation of fixed or false walls, ceilings and false ceilings, garages, acoustic cabins and drainage systems.

RANGE



Please see the price list for the full range

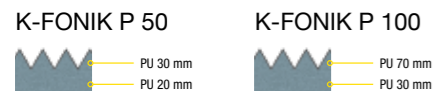
K-FLEX® K-FONIK P

K-FONIK P is a sound absorption material manufactured with a pyramid-shaped surface, it is the ideal acoustic insulation solution for rooms etc.

APPLICATION

K-FONIK P is widely used in gyms, conference rooms, rifle ranges, recording studios, radio/television studios, moveable acoustic panels, engine rooms, etc.

RANGE



Please see the price list for the full range

ACOUSTIC PERFORMANCE

P50 - $\alpha_w = 0,34$
P100 - $\alpha_w = 0,82$



Property	Value	Test method
Material	Polyurethane foam and high density mass	
Fire rating	Self-extinguishing	
Temperature	-40 °C +70 °C	
Dimensions	1000 x 2000 mm	
Surface	Surface Smooth or embossed	
Base colour	Black	

K-FLEX® reserves the right to change data and technical requirements without notice.



Example of possible application

Property	Value	Test method
Material	Polyurethane foam	
Density	25 ÷ 30 kg/m³	
Fire rating	Self-extinguishing	
Temperature	-40 °C +70 °C	
Dimensions	1000 x 1000	
Surface	Pyramid structure	
Thickness	50 - 100 mm	
Base colour	Dark grey	

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PROJECTS

Poland

