

# K-FLEX



## Acoustic Insulation



Solutions for Acoustic Comfort





# K-FLEX

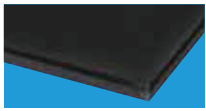
## K-FONIK PRODUCT RANGE

K-FLEX offers a wide range of acoustic insulation solutions for many different applications to provide a more comfortable environment.



WORK SECTOR	APPLICATIONS	SOUND INSULATION				SOUND ABSORPTION					SYSTEM	
		K-FLEX ST	K-FLEX K-FONIK ST GK	K-FLEX K-FONIK GK	K-FLEX K-FONIK GV	K-FLEX K-FONIK OPEN CELL 160	K-FLEX K-FONIK OPEN CELL 240	K-FLEX K-FONIK B	K-FLEX K-FONIK P	K-FLEX K-FONIK PE GK	K-FLEX K-FONIK PU GK	K-FLEX INDUSTRIAL*
BUILDING	Floors	●										
	Walls		●	●		●	●	●				
	Structure	●	●	●								
HVAC	Ventilation ducts and drainage pipes		●	●		●	●	●		●	●	
INDUSTRIAL and OIL & GAS	Piping, equipment and plants			●	●		●					●
OEM PRODUCTS	Machinery covers, engine compartments		●	●		●	●	●	●	●	●	
TRAIN & SHIPBUILDING	Engine and frames, partitions, technical installations				●							
AUTOMOTIVE	Engine noise insulation and frames, sound absorption for roof frames, driver cabins		●	●		●	●					

\* Refer to K-FLEX K-FONIK INDUSTRIAL brochure



## K-FLEX ▶ K-FONIK ST GK

# 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.**

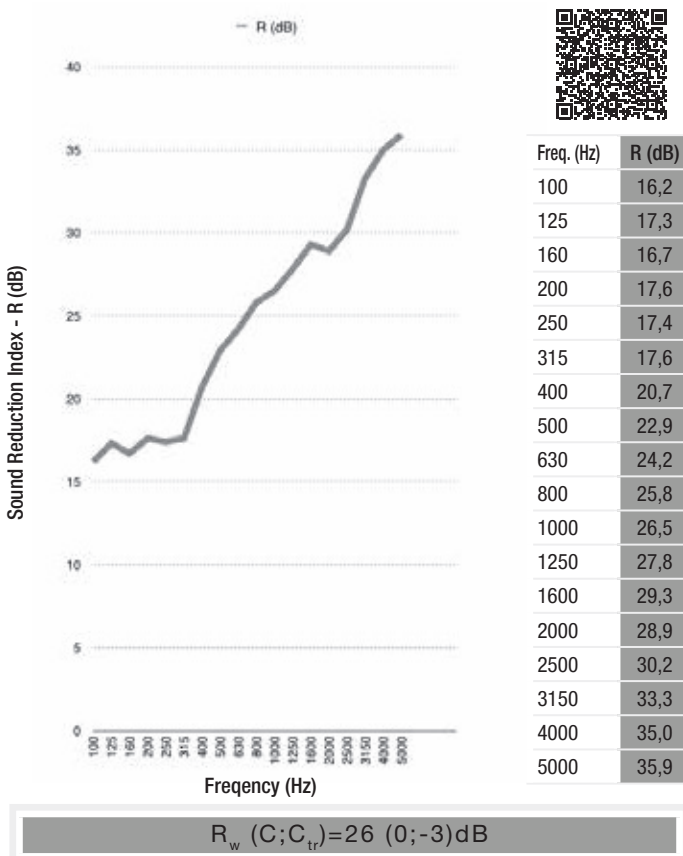
K-FONIK ST GK combines the features of K-FONIK GK with a layer of our elastomeric K-FLEX ST.

### APPLICATION ▶

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

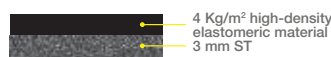


### ACOUSTIC PERFORMANCE ▶

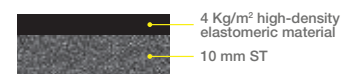


### RANGE ▶

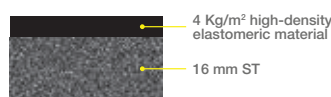
#### K-FONIK ST GK 074



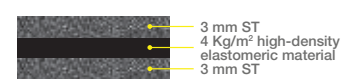
#### K-FONIK ST GK 072



#### K-FONIK ST GK 070



#### K-FONIK ST GK ST 074



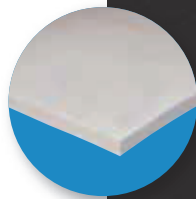
Please see the price list for the full range

#### K-FONIK ST GK ▶

<b>Material type:</b>	Flexible elastomeric foam with high-density elastomeric material	
<b>Weight:</b>	4,4 Kg/m <sup>2</sup> (K-FONIK ST GK 072)	
<b>Fire classification:</b>	B - s3,d0	EN 13501
<b>Thermal conductivity:</b>	0.036 W/(m•k)	EN 12667 DIN 52612
<b>Temperature range:</b>	-40 °C +70 °C	
<b>Dimensions:</b>	2000 x 1000 mm	
<b>Surface:</b>	Smooth	
<b>Base colour:</b>	Black	



# K-FLEX K-FONIK GK / GV

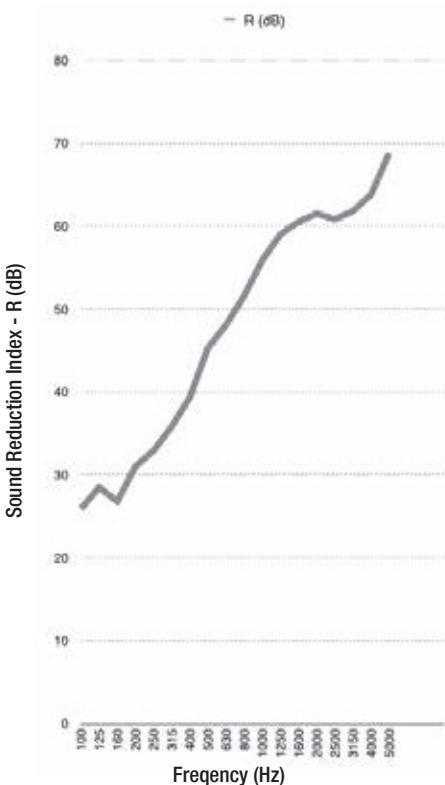


High-density elastomeric acoustic insulating panel for building, OEM and industrial applications. **The product is lead-free and therefore does not represent a health risk.**

**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 ▶

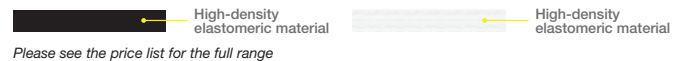
**K-FONIK GK** is ideal for sound insulation of walls, ceilings, acoustic cabins, drainage systems, OEM sound insulation applications, etc.

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

## RANGE ▶

**K-FONIK GK**  
from 4 to 8 Kg/m<sup>2</sup>

**K-FONIK GV**  
from 4 to 8 Kg/m<sup>2</sup>



Please see the price list for the full range

### K-FONIK GK ▶

<b>Material type:</b>	High density elastomeric material	
<b>Fire classification</b>	B - s3,d0 <sup>1</sup> , IMO A653 (CE MARINE) <sup>2</sup> , FMVSS 302	EN 13501
<b>Temperature</b>	-40 °C +70 °C	
<b>Dimensions:</b>	1000 x 2000 mm; 1200 x 2000 mm; 1500 x 2000 mm - Rolls 25 or 50 m	
<b>Surface</b>	smooth <sup>3</sup>	
<b>Weight</b>	from 4 Kg/m <sup>2</sup> to 8 Kg/m <sup>2</sup>	
<b>Base colour</b>	Black (GK) White (GV)	
<b>Density</b>	2000 Kg/m <sup>3</sup> (±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 ▶ K-FONIK OPEN CELLS

# K-FLEX K-FONIK OPEN CELL

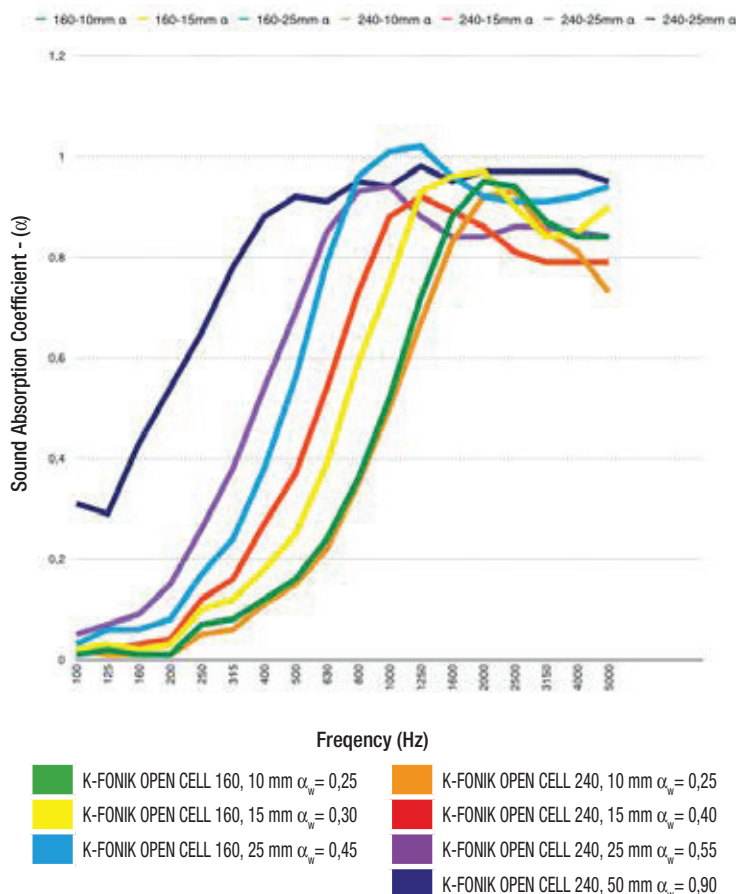
**K-FONIK OPEN CELL** is an open cell Flexible Elastomeric Foam designed for sound absorption.

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 ▶



### RANGE ▶

#### K-FONIK 160 - 240

from 10 to 350 mm

Please see the price list for the full range

#### K-FONIK OPEN CELL ▶

<b>Material type:</b>	Flexible elastomeric foam open cell	
<b>Density:</b>	160-240 Kg/m <sup>3</sup>	
<b>Thermal conductivity:</b>	K-FONIK OPEN CELL 240: 0,056 W/(m•k) K-FONIK OPEN CELL 160: 0,048 W/(m•k)	EN 12667 DIN 52612
<b>Fire classification:</b>	C - s3,d0	EN 13501
<b>Temperature:</b>	-40 °C +85 °C	
<b>Dimensions:</b>	see price list	
<b>Thickness:</b>	From 10 to 350 mm	
<b>Base colour:</b>	Black	
<b>Modulus (MPa):</b>	22 ± 3.7 (160) - 57.7 ± 8.0 (240)	
<b>Elongation to break (%):</b>	114 ± 33 (160) - 140 ± 47 (240)	
<b>Insertion Loss:</b>	K-FONIK 160 10mm Rw=5 dB K-FONIK 160 15mm Rw=8 dB K-FONIK 160 25mm Rw=9 dB K-FONIK 240 10mm Rw=8 dB K-FONIK 240 15mm Rw=10 dB K-FONIK 240 25mm Rw=14 dB	



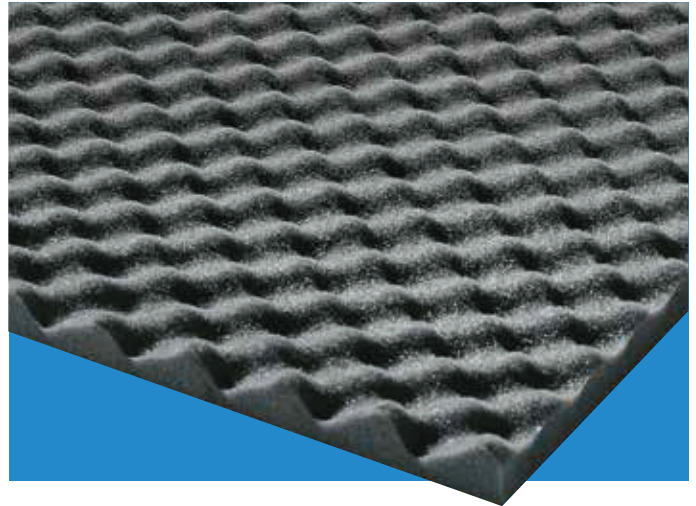
# K-FLEX K-FONIK B

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/m<sup>3</sup>.

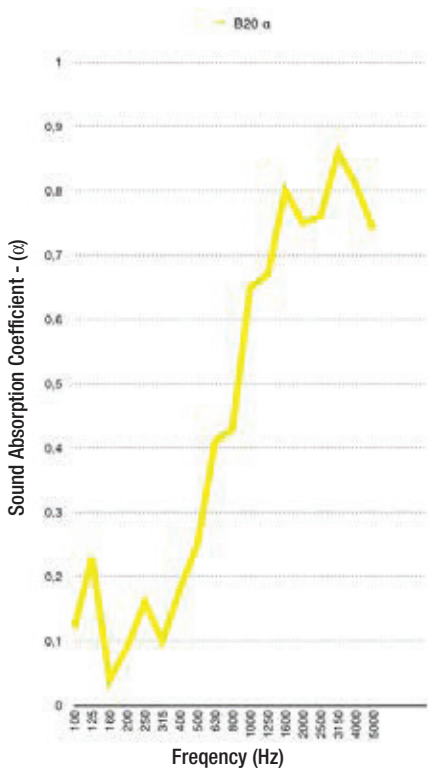
It is also available in the **K-FONIK ST B** version made with **ST** rubber foam.



## 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 ▶



K-FONIK B 20 (Thickness: 20mm)



B20	
Freq. (Hz)	α
100	0,12
125	0,23
160	0,04
200	0,09
250	0,16
315	0,10
400	0,18
500	0,25
630	0,41
800	0,43
1000	0,65
1250	0,67
1600	0,80
2000	0,75
2500	0,76
3150	0,86
4000	0,81
5000	0,74
α <sub>w</sub>	0,28

## RANGE ▶

### K-FONIK B 20



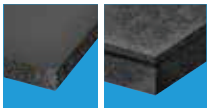
### K-FONIK ST B 20



Please see the price list for the full range

### K-FONIK B ▶

<b>Material type:</b>	Polyurethane foam / Flexible elastomeric foam	
<b>Density:</b>	25 ÷ 30 Kg/m <sup>3</sup>	
<b>Fire classification:</b>	B - s3,d0 (ONLY ST B version)	EN 13501
<b>Temperature:</b>	-40 °C +70 °C	
<b>Dimensions:</b>	1000 x 2000 mm - also available in rolls of different sizes	
<b>Surface:</b>	Embossed	
<b>Thickness:</b>	20 mm	
<b>Base colour:</b>	Black	



## K-FLEX ▶ K-FLEX ST / K-FONIK PE GK

# K-FLEX ST

### APPLICATION ▶

**K-FLEX ST** is ideal for the sound insulation of floating floors. Its mechanical properties reduce the transmission of sound from footsteps, increasing the  $\Delta L_w$  value.

### ACOUSTIC PERFORMANCE ▶

$\Delta L_w = 25$  dB  
 $s't = 54$  MN/m<sup>3</sup>

### RANGE ▶

#### K-FLEX ST



K-FLEX ST 6 mm

Please see the price list for the full range



#### K-FLEX ▶ ST

<b>Material:</b>	Flexible elastomeric foam	EN 14304
<b>Fire classification:</b>	B - s3,d0	EN 13501
<b>Temperature:</b>	-165 °C +85 °C	
<b>Dimensions:</b>	h 1000 mm - 30 m Rolls	
<b>Thickness:</b>	6 mm	
<b>Dynamic Stiffness</b>	54 MN/m <sup>3</sup>	UNI EN 29052
<b>Surface:</b>	Smooth	
<b>Weight:</b>	0,3 Kg/m <sup>2</sup> (±10%)	
<b>Base colour:</b>	Black	
<b>Density:</b>	50 kg/m <sup>3</sup> (±10%)	
<b>Compressibility:</b>	0,3±0,05 mm	UNI EN 12431

# K-FLEX K-FONIK PE GK

**K-FONIK PE GK** is a sound insulation material with high density elastomeric sheet specifically designed to provide a solution to particular soundproofing problems. **K-FONIK PE GK** is a complete range with specific features designed to handle different types of acoustic requirements.

### APPLICATION ▶

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

### RANGE ▶

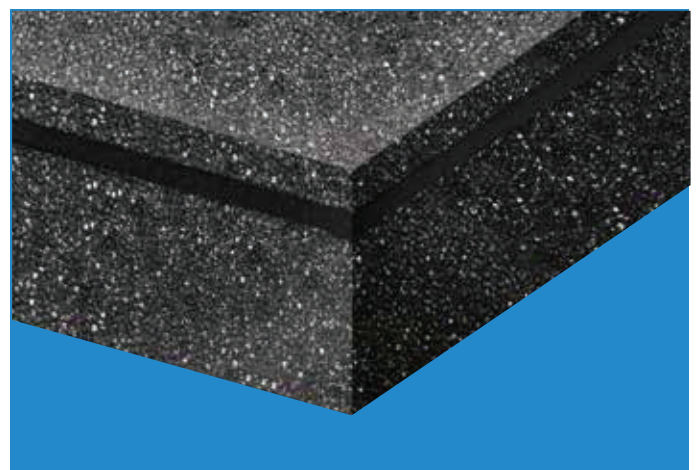
#### K-FONIK PE GK



#### K-FONIK PE GK



Please see the price list for the full range

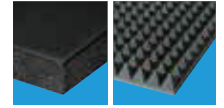


#### K-FONIK PE GK ▶

<b>Material type:</b>	Polyethylene foam and high density mass	
<b>Fire classification:</b>	Self-extinguishing	
<b>Temperature:</b>	-40 °C +70 °C	
<b>Dimensions:</b>	1000 x 2000 mm in rolls	
<b>Surface:</b>	Smooth	
<b>Base colour:</b>	Black	

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





# 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 ▶

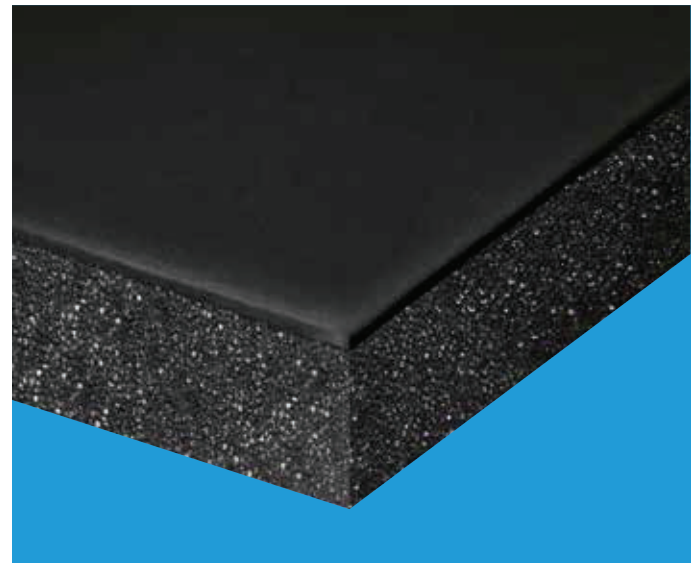
### K-FONIK PU GK



### K-FONIK PU GK



Please see the price list for the full range



### K-FONIK PU GK ▶

<b>Material type:</b>	Polyurethane foam and high density mass
<b>Fire classification:</b>	Self-extinguishing
<b>Temperature:</b>	-40 °C +70 °C
<b>Dimensions:</b>	1000 x 2000 mm
<b>Surface:</b>	Smooth or embossed
<b>Base colour:</b>	Black

# 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.

## ACOUSTIC PERFORMANCE ▶

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



## RANGE ▶

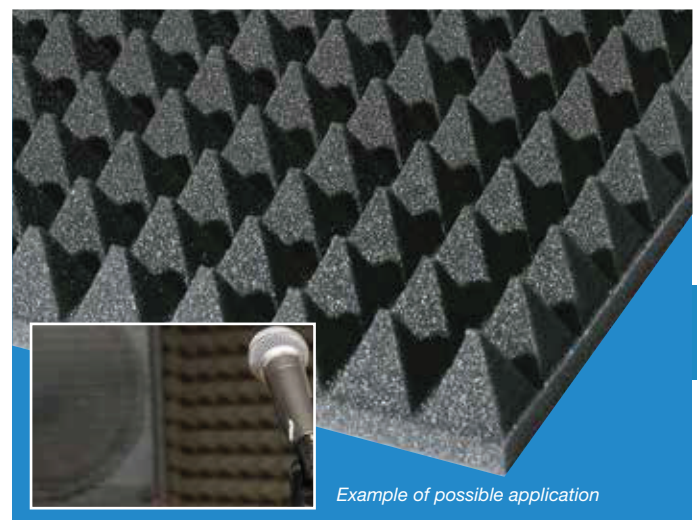
### K-FONIK P 50



### K-FONIK P 100



Please see the price list for the full range



Example of possible application

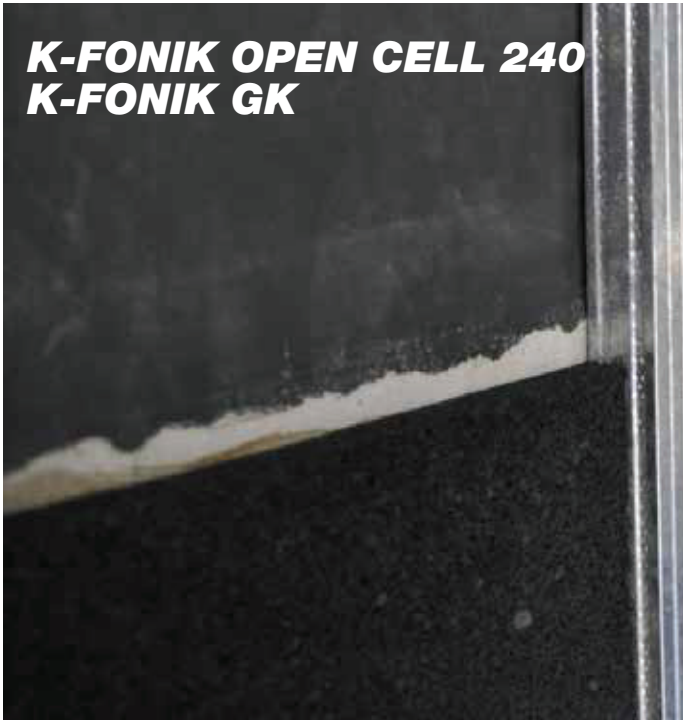
### K-FONIK P ▶

<b>Material type:</b>	Polyurethane foam
<b>Density:</b>	25 ÷ 30 Kg/m³
<b>Fire classification:</b>	Self-extinguishing
<b>Temperature:</b>	-40 °C +70 °C
<b>Dimensions:</b>	1000 x 1000 mm
<b>Surface:</b>	Pyramid structure
<b>Thickness:</b>	50 - 100 mm
<b>Base colour:</b>	Dark grey





Our Technical Department is made up of qualified acoustic technicians who specialise in carrying out preliminary analyses to establish the feasibility of specific soundproofing projects. We are able to simulate the final results of a detailed acoustic project as part of an architectural design project.



**K-FONIK OPEN CELL 240**  
**K-FONIK GK**



**K-FONIK GK**



**K-FONIK GK**



**K-FONIK ST GK 072**



# K-FLEX

## Worldwide Leader in the production of **Elastomeric Insulation** for **Energy Saving**

DOCUMENTATION ▶ PDF



**Brochure  
PDF format**



**Acoustic  
Website**

TECHNICAL DPT e-mail [kflex-technical@isolante.com](mailto:kflex-technical@isolante.com)

# Acoustic Insulation



SOUND ABSORPTION

SOUND INSULATION

DAMPING



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