

Sound absorbing open cell foam, Kaisound exhibits exceptional noise absorption combined with an excellent fire performance that makes flexible and fibre free Kaisound suitable for use in a wide range of different acoustic applications.

Kaisound has a visually attractive finish and is Class 0 fire rated — enabling use as an lining for enclosure walls or inside ductwork without the need to apply labour intensive coverings. In conjunction with high density barriers and flexible decoupling materials Kaisound forms part of a full Kaipro sound control system for pipework.

Available in sheets at a range of thickness's, all with or without a self-adhesive backing, Kaisound is easily cut to size and is particularly easy to install around pipes & ducts as well as inside equipment cabinets & acoustic enclosures.

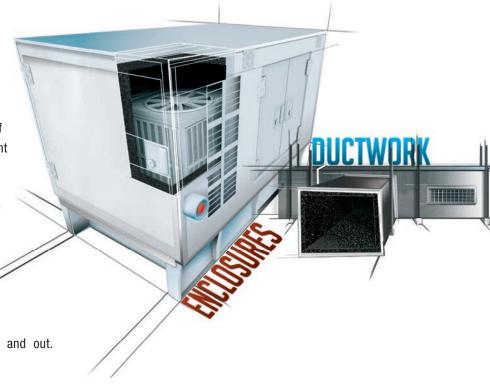
- Open cell noise absorbing foam
- Class 0 fire classification
- Fibre free structure
- Good load bearing capabilites
- Light weight and flexible





Ducts can provide natural conduits for the spread of noise, transforming a localised nuisance into one that affects everyone in a building. Kaisound is engineered with the right combination of material properties to make it an excellent duct lining for acoustic noise reduction.

Around particularly loud equipment, noise enclosures are an effective way of preventing noise breakout but can increase noise levels within the enclosure itself. Using Kaisound inside the enclosure absorbs unwanted noise, making the enclosure quieter both inside and out.



Benefits Kaisound



Excellent sound absorption: Absorption of sound waves through friction in an open cell structure re-

duces the loudness of noise. Kaisound features an open cell structure designed to maximise absorption across a broad frequency spectrum.



Flexible and fibre free: Supplied in flexible sheets that can be easily cut to fit around any size of pipe,

Kaisound is easy to apply and will not create problems associated with fibre migration when cut to size on site.



Low density: Acoustic absorption is closely related to density but careful engineering of the open cell

structure can provide superior absorption at lower densities.



Class 0 fire performance: Sensitive locations require materials that exhibit excellent fire

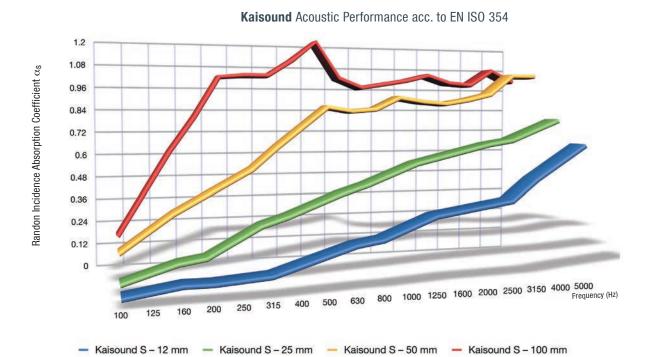
performance. Kaisound is rated as Class 0 when tested against British standards. As part of this classification Kaisound meets the highly influential BS 476 Part 7 required for most industrial applications.



Load bearing capabil- ity: Compressing sound absorbing foam can reduce its effectiveness.

Kaisound is capable of bearing heavy loads without experiencing excessive rates of compression.





Kaisound Acoustic Performance calculated acc. to EN ISO 11654

| Product | Kaiso | und S | Kaisound Splus | | |
|---|-------|-------|----------------|--------|-------|
| | 12 mm | 25 mm | 50 mm | 100 mm | 25 mm |
| Weighted Sound Absorption Coefficient α_{W} | 0.3 | 0.45 | 0.75 | 1 | 0.5 |
| Sound Absorption Class | D | D | С | Α | D |

Kaisound Technical Specification

| Product Kaisound S Kaisound Splus | | | | | | | |
|-----------------------------------|-----|--|-------------------------------|-------------------------------------|--|--|--|
| Product | | Kaisuulu 5 | Kaisound Splus | | | | |
| Polymer | | Impregnated Polyurethane foam | Impregnated Polyurethane foam | | | | |
| Cell Structure | | Open Cell | Open Cell | | | | |
| Colour | | Black | Black | | | | |
| Upper Temperature Limit | | +110°C | +110°C | | | | |
| Lower Temperature Limit | | -40°C | -40°C | | | | |
| Thermal Conductivity | 0°C | 0.048 W/(m·K) | 0.058 W/(m·K) | | | | |
| Fire Performance | | Class 0 | Class 0 | Test acc. to BS 476 Part 6 & 7 1997 | | | |
| Density | | 94 kg/m³ (± 10kg/m³) | 140 kg/m³ (± 10kg/m³) | | | | |
| Tensile Strength | | ≥ 70 Kpa | ≥ 70 Kpa | | | | |
| Elongation at Break | | ≥ 90% | ≥ 150% | | | | |
| Compression-Set at 75% | | < 15% | < 15% | | | | |
| Health Aspects | | Fibre free | Fibre free | | | | |
| Outdoor applications | | Needs protection against UV radiation & weatherasation | | | | | |

Remark (1) For temperatures below -40°C and above +110°C please contact our Technical Support Team for advice.

Remark (2) Test results for surface spread of flame and fire propagation meets Class O fire performance as defined in UK building regulations

Remark (3) When used outdoors Kaisound needs protection against UV-radiation. Kaimann recommends Kaiflex Protect R since this is a high density covering which can increase insertion loss. If using other covering materials please contact our Technical Support Team for advice."



Kaisound S flat sheet (2m x 0.5m) - Density 94 kg/m³

| Open Cell Acoustic Insulation; Colour: black; Density: 94 kg/m³; Length: 2m; Width: 0.5m | | | | | | | | |
|--|-------|-----------|-------------------------|----|-----------|---|----|--|
| Insulation Thickness Width mm mm | Width | Length | Flat sheet 2m x 0.5m | | | Flat sheet 2m x 0.5m with self-adhesive backing | | |
| | m | Reference | m ² / carton | | Reference | m ² / carton | | |
| 6 | 500 | 2 | SOUND-S-06-0.5 | 24 | | SOUND-S-06-0.5-A | 24 | |
| 10 | 500 | 2 | SOUND-S-10-0.5 | 16 | | SOUND-S-10-0.5-A | 16 | |
| 15 | 500 | 2 | SOUND-S-15-0.5 | 10 | | SOUND-S-15-0.5-A | 10 | |
| 20 | 500 | 2 | SOUND-S-20-0.5 | 8 | | SOUND-S-20-0.5-A | 8 | |
| 25 | 500 | 2 | SOUND-S-25-0.5 | 6 | | SOUND-S-25-0.5-A | 6 | |

Kaisound Splus flat sheet (2m x 0.5m) - Density 140 kg/m³

| Open Cell Acoustic Insulation; Colour: black; Density: 140 kg/m³; Length: 2m; Width: 0.5m | | | | | | | | |
|---|--------|----------------------|--------------------|-------------------------|---|----------------------|-------------------------|--|
| Insulation Thickness Width mm mm | Length | Flat sheet 2m x 0.5m | | | Flat sheet 2m x 0.5m with self-adhesive backing | | | |
| | | | Reference | m ² / carton | | Reference | m ² / carton | |
| 25 | 500 | 2 | SOUND-SPLUS-25-0.5 | tba | | SOUND-SPLUS-25-0.5-A | tba | |

[·] Kaisound products: Delivery 10 working days



KAIMANN Kaimann GmbH · School House Business Centre · Brideoak Street, Waterhead · Oldham · Greater Manchester · OL4 2HB · Phone +44 (0) 161 627 3289 foam technology of tomorrow Fax +44 (0) 161 880 2551 • Email info.uk@kaimann.com • www.kaimann.co.uk • © 2012 Kaimann GmbH • All rights reserved.

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