

SORBERFOAM™ GC

combustion modified acoustic foam with glass cloth facing

Sorberfoam™ GC acoustic insulation is the next generation of combustion modified, flexible acoustic foams, laminated with a durable, fire-rated glass cloth surface covering – ‘GC’.

In conjunction with leading laboratories and test facilities, Pyrotek has formulated and developed Sorberfoam, by controlling the cell size, porosity, density and the flow resistivity throughout its cell structure. Traditional polyurethane foams often break down through hydrolysis (foam rot) under hot, humid and acidic conditions. Sorberfoam is engineered to resist degradation or foam rot.

The glass cloth facing - ‘GC’, is thermally bonded to the insulation base - ‘Sorberfoam’. The inherent fire and thermal properties of the ‘GC’ facing make the product suited to areas where high temperature and abrasion are experienced. The facing also provides additional protection to the foam from mechanical stress and dirt, oil and liquid ingress. ‘GC’ facing is offered in 2 colours – grey and black.

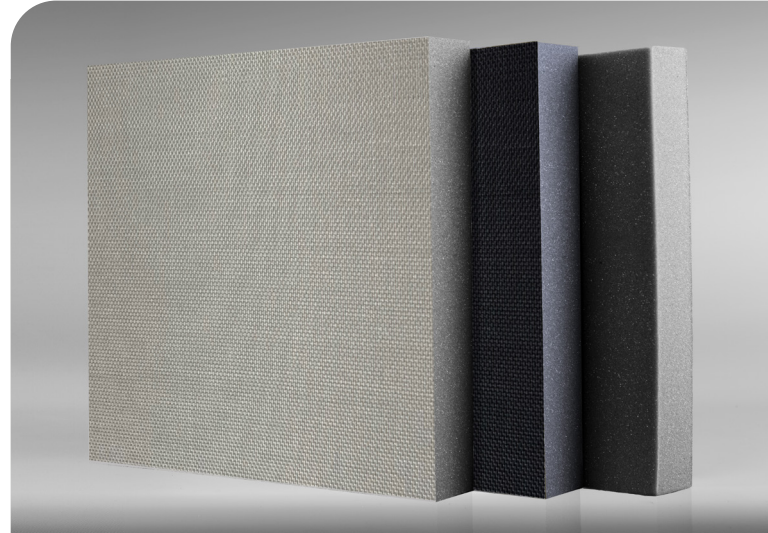
Sorberfoam GC offers an alternative to mineral fibre products that tend to shed fibres during application and lose thickness over a period of time, resulting in a gradual reduction in its noise absorption properties.

Sorberfoam GC is available with or without a self-adhesive backing and is easy to cut and install. Pyrotek also offers a pressure-sensitive adhesive backed ‘joining tape’ with a matching ‘GC’ face, besides a range of other mechanical fastening accessories.

SPECIFICATIONS

| | |
|-----------|---|
| Colours | Grey and black (additional colours available on request depending on MOQ) |
| Available | Available in 15, 30, 60 m rolls Other roll lengths and sheet sizes also available (*Available with pressure-sensitive adhesive backing) |
| | Minimum order quantities apply |
| | Thicknesses of 6, 12, 25, 50 mm |
| | 1.27 m usable width (untrimmed) |

*Recommend product to be supplied in sheets to reduce excessive creasing.



applications

- Engine rooms in boats under CE Marine Survey
- Power generation units
- Containerised generator sets
- Additional thermal insulation for air-conditioning
- Engine compartments and firewalls of cars, boats, trucks, buses and construction machinery
- Machinery and equipment enclosures
- Pool and spa motor enclosures
- Whitegoods industry

features

- Does not shed irritating fibres
- Hydrolysis (foam rot) resistant
- Tough, durable facing, resistant to liquids, dusts and sprays
- Low spread of flame surface
- Self-extinguishes upon flame removal
- Easy to cut, adhere or mechanically fasten
- No ozone-depleting substances generated during manufacture, free from formaldehyde and phenolic resins
- Product available in thicknesses from 6 to 100 mm
- Available with self-adhesive backing for ease of install
- Roll lengths - typically 15, 30 and 60 lineal metres. Other roll lengths and sheet sizes also available
- Matching joining tape - ‘Tape GC’ available
- Seal joints with reinforced tape to eliminate water and dust penetrations



PRODUCT SPECIFICATIONS

| Standard thickness (mm) | Density (kg/m ³) | Roll length (lineal m) | Width (mm) | Thermal conductivity (W/mK) | Operating temperature range (°C) |
|-------------------------|------------------------------|------------------------|------------|-----------------------------|---|
| 6 | 28 | 60 | 1270* | 0.033** | -40 to +90 Continuous -40 to +110 Intermittent |
| 12 | | 60 | | | |
| 25 | | 30 | | | |
| 50 | | 15 | | | |

Tolerances: Length: -0 to +50 mm; Width: -0 to +5 mm; Thickness: ±2 mm; Density: ±5%

*Supplied untrimmed - means some surface coverings such as foils, film or fabric may overhang the ordered useable width.

**Polyurethane handbook: Chemistry, Raw Materials, Processing, Application, Properties 2nd edition.

All above products are available with pressure-sensitive adhesive backing. Under extreme temperature and humidity conditions, air flow or where the substrate surfaces cannot be free from contaminants, mechanical fixing will be required. For all inverted installations including ceiling installations, mechanical fixing must be done in addition to pressure sensitive adhesive. Please consult your local Pyrotek representative for more information.

MATERIAL PROPERTIES

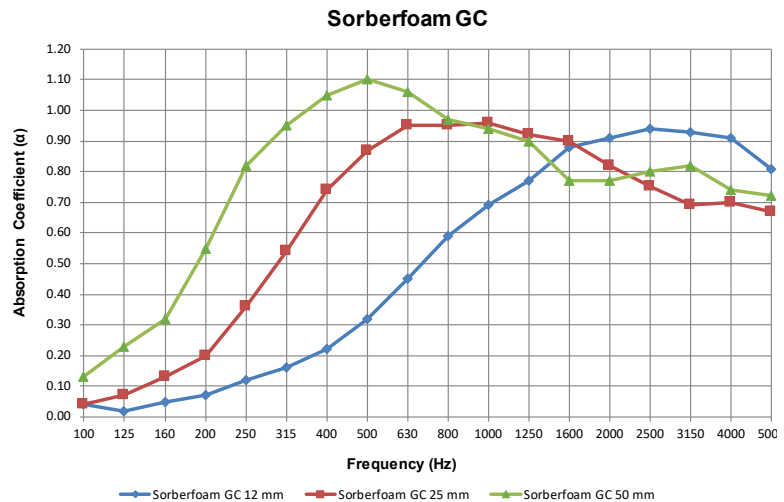
| Test method | Index | Report no. | Results | Description |
|-------------|------------------------------|---------------------|--------------------|--|
| UL94 | After flame time ≤ 2 seconds | Report No. 13513JY7 | HF-1** | Horizontal burn test for foam materials. Complies. |
| FMVSS-302 | Burn rate - mm/min (LOI) | Report No. 14713JY1 | Self extinguishing | Automotive burn rate test. Complies. |

For plain foam only

**Result applies to 12 mm thickness.

ACOUSTIC PERFORMANCE

| Frequency (Hz) | 12 mm | 25 mm | 50 mm |
|----------------|-----------|----------|-------|
| 100 | 0.04 | 0.04 | 0.13 |
| 125 | 0.02 | 0.07 | 0.23 |
| 160 | 0.05 | 0.13 | 0.32 |
| 200 | 0.07 | 0.20 | 0.55 |
| 250 | 0.12 | 0.36 | 0.82 |
| 315 | 0.16 | 0.54 | 0.95 |
| 400 | 0.22 | 0.74 | 1.05 |
| 500 | 0.32 | 0.87 | 1.10 |
| 630 | 0.45 | 0.95 | 1.06 |
| 800 | 0.59 | 0.95 | 0.97 |
| 1000 | 0.69 | 0.96 | 0.94 |
| 1250 | 0.77 | 0.92 | 0.90 |
| 1600 | 0.88 | 0.90 | 0.77 |
| 2000 | 0.91 | 0.82 | 0.77 |
| 2500 | 0.94 | 0.75 | 0.80 |
| 3150 | 0.93 | 0.69 | 0.82 |
| 4000 | 0.91 | 0.70 | 0.74 |
| 5000 | 0.81 | 0.67 | 0.72 |
| NRC | 0.50 | 0.75 | 0.90 |
| SAA | 0.51 | 0.75 | 0.89 |
| α_w | 0.35 (MH) | 0.65 (M) | 0.85 |



Tested to ISO 354:2003 at University of Canterbury, New Zealand
Report Number: 285, 286 & 287

For further information and contact details, please visit our website pyroteknc.com

Caveats: Specifications are subject to change without notice. The data in this document is typical of average values based on tests by independent laboratories or by the manufacturer and are indicative only. Materials must be tested under intended service conditions to determine their suitability for purpose. The conclusions drawn from acoustic test results are as interpreted by qualified independent testing authorities. Nothing here releases the purchaser/user from responsibility to determine the suitability of the product for their project needs. Always seek the opinion of your acoustic, mechanical or fire engineer on data presented by the manufacturer. Due to the wide variety of individual projects, Pyrotek NC is not responsible for differing outcomes from using their products. Pyrotek disclaims any liability for damages or consequential loss as a result of reliance solely on the information presented. No warranty is made that the use of this information or of the products, processes or equipment to which this Information Page refers will not infringe any third party's patents or rights. DISCLAIMER: This document is covered by Pyrotek standard Disclaimer, Warranty and © Copyright clauses. See www.pyroteknc.com/disclaimer.

