



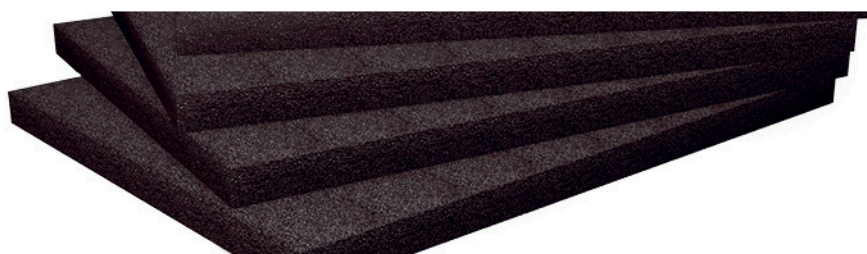
HIGH-PERFORMANCE
ACOUSTIC ABSORBER FOR A
QUIETER ENVIRONMENT

ArmaComfort S

Effective air-borne sound absorption
across a broad frequency range

- // Fibre-free, open-cell material with complex pore geometry
- // Flexible and light weight
- // Additional barrier performance, vibration damping and de-coupling (isolation) properties

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MAKING A DIFFERENCE AROUND THE WORLD

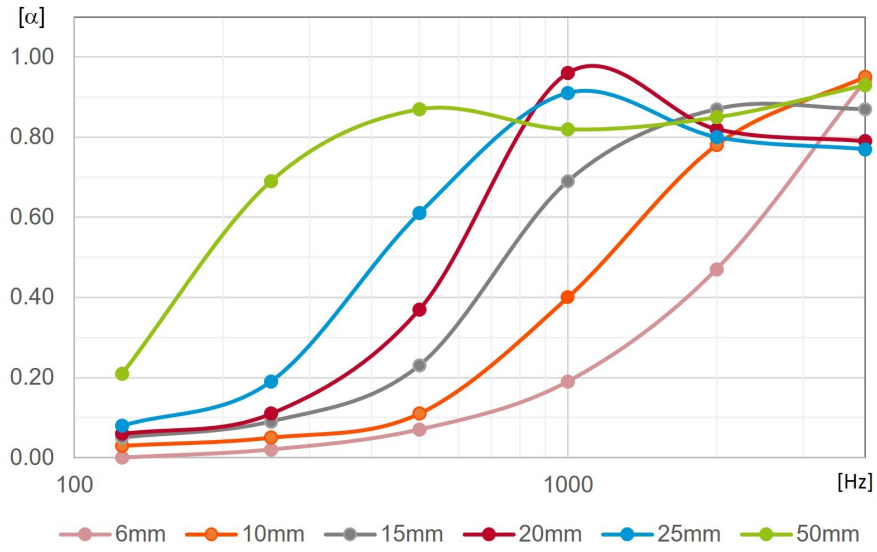
TECHNICAL DATA - ARMACOMFORT S

| | |
|----------------------|---|
| Brief description | ArmaComfort is a unique open-cell sound absorber that offers additional barrier (transmission loss) performance and both vibration damping and de-coupling (isolation) properties. |
| Material type | Open-cell elastomeric foam based on synthetic rubber |
| Product colour range | Black |
| Special features | Excellent sound absorption performance. |
| Applications | Delivering optimal performance at lower thickness than conventional materials, ArmaComfort is the trusted acoustic absorption material for HVAC applications (such as the fan-coil units, duct and cabinet linings and chiller systems), heavy industrial and automotive purposes (such as engine component lining and under-bonnet insulation), enclosures as well as in oil and gas facilities. |

| Property | Value / Assessment | | | | | | | Standard / Test method |
|--|----------------------------------|------|------|------|------|------|---------|------------------------|
| Temperature range | | | | | | | | |
| Service temperature ¹ | Min. °C | | | | | | Max. °C | |
| | -20 | | | | | | 85 | |
| Thermal conductivity | | | | | | | | |
| Declared thermal conductivity ² | Øm | | | | | | 23 °C | GB/T 10294, ISO 8302 |
| | $\lambda d \leq [W/(m \cdot K)]$ | | | | | | 0.047 | |
| Fire Performance and Approvals | | | | | | | | |
| Burning behaviour of building materials and products | Class 1 | | | | | | | BS 476 Part 7 |
| Flammability | | | | | | | | |
| Flammability of plastic materials | V-0 rating | | | | | | | UL 94 |
| Physical attributes | | | | | | | | |
| Density | $\geq 140 \text{ kg/m}^3$ | | | | | | | ISO 845 |
| Acoustic performance | | | | | | | | |
| Noise reduction coefficient | Thickness (mm) | 6 | 10 | 15 | 20 | 25 | 50 | ASTM C423, ISO 354 |
| | NRC | 0.20 | 0.35 | 0.45 | 0.55 | 0.65 | 0.80 | |
| Octave band sound absorption coefficient, α | Thickness | 6mm | 10mm | 15mm | 20mm | 25mm | 50mm | ISO 354 |
| | 125 Hz | 0.00 | 0.03 | 0.05 | 0.06 | 0.08 | 0.21 | |
| | 250 Hz | 0.02 | 0.05 | 0.09 | 0.11 | 0.19 | 0.69 | |
| | 500 Hz | 0.07 | 0.11 | 0.23 | 0.37 | 0.61 | 0.87 | |
| | 1000 Hz | 0.19 | 0.40 | 0.69 | 0.96 | 0.91 | 0.82 | |
| | 2000 Hz | 0.47 | 0.78 | 0.87 | 0.82 | 0.80 | 0.85 | |
| 4000 Hz | 0.94 | 0.95 | 0.87 | 0.79 | 0.77 | 0.93 | | |

| Property | Value / Assessment | Standard / Test method |
|----------|--------------------|------------------------|
|----------|--------------------|------------------------|

Absorption coefficient graph



Weather and UV resistance

Outdoor use For outdoor application, the outer layer of the material must be protected within 3 days with an adequate covering like ArmaClad Arma-Chek Silver 350 or metal jacketing. For further information, please contact Technical Services.

Health and environment

Health aspects Free of fibre and formaldehyde.

Environmental Product Declaration (EPD) Type III EPD: Declaration number 4789125188.101.1, UL Environment. ISO 14025

Other technical features

Adhesion and sealing ArmaFlex Adhesive 520 shall be used for reliable adhesion of joints and seams.

Storage Material shall be stored indoors, in clean and dry conditions, away from direct sunlight.

¹For temperatures beyond the identified temperature range, please contact Armacell's Sales team for more information.
²For reference only.

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ABOUT ARMACELL

As the inventor of flexible foam for equipment insulation and a leading provider of engineered foams, Armacell develops innovative and safe thermal and mechanical solutions that create sustainable value for its customers. Armacell's products significantly contribute to global energy efficiency making a difference around the world every day. With more than 3,300 employees and 25 production plants in 19 countries, the company operates two main businesses, Advanced Insulation and Engineered Foams. Armacell focuses on insulation materials for technical equipment, high-performance foams for acoustic and lightweight applications, recycled PET products, next-generation aerogel technology and passive fire protection systems.

For more information, please visit:
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