• Pre-covered insulation with excellent aesthetics
• Low thermal conductivity, $\lambda_{eq} \leq 0.035 \text{ W/(mK)}$
• Excellent water vapour diffusion resistance, $\mu \geq 60,000$
• Easy to clean and maintain
• Class 0 fire classification to BS 476 part 6 & 7
• Durable and high resistance to mechanical impact
### Technical Data - Armaflex® Alu E

**Brief description**: Armaflex® Alu E is a flexible, fibre-free insulation material laminated with an embossed silver-colour foil for enhanced aesthetic and mechanical protection. The closed-cell insulation material with superior performance in fire safety and maintenance is used for protection of HVAC ducts, especially in clean room conditions such as the pharmaceutical industries.

**Material Type**: Elastomeric foam based on Nitrile Butadiene Rubber (NBR), with tough Aluminium Foil facing

**Colour**: Base material is black, covering is metallic (pale silver)

**Product Range**: Available in sheets in 9 mm, 13 mm, 16 mm, 19 mm, 25 mm & 32 mm thickness. 1000 mm wide rolls.

**Applications**: Insulation to prevent condensation, reduce energy losses and protection against mechanical damage on HVAC ducts.

**Special Features**: Provides aesthetic metal finish and smooth surface; attracts less dust and easy to clean surfaces with high resistance to mechanical abuse

**Assembly**: Easy & faster installation due to flexible pre-covered foam material

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<tr>
<th>Property</th>
<th>Value/Assessment</th>
<th>Special Remark</th>
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<tbody>
<tr>
<td><strong>Temperature Range</strong></td>
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<tr>
<td>Temperature Range</td>
<td>Max. service temperature +85 °C</td>
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<td>Min. service temperature 0 °C</td>
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<tr>
<td><strong>Thermal Conductivity</strong></td>
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<tr>
<td>Thermal Conductivity</td>
<td>$\rho_m$</td>
<td>$\lambda$</td>
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<tr>
<td>Water vapour diffusion resistance</td>
<td>$\mu$</td>
<td>Tested acc. to EN 12086</td>
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<td>$\geq$ 60,000</td>
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**Fire Performance**

- **Reaction to Fire**
  - Fire performance acc. to building regulation: Class 0
  - Surface Spread of Flame: Class 1
  - Fire propagation: Total index performance ($i$) $\leq$ 12
  - Sub index ($i_d$) $\leq$ 6
  - Surface Spread of Flame tested acc to BS 476 Part 7:1997
  - Fire Propagation: tested acc to BS 476 Part 6:1989

**Practical Fire Behavior**: Self-extinguishing, does not drip and does not spread flames

**Chemical Behaviour**: Excellent resistance to ozone, oil and chemicals (consult product test list)

**Resistance to Mechanical Impact**: Good

**UV Resistance**: Not recommended for outdoors

**Safety and Environment**: Dust & fibre free, Zero ODP & GWP

**Storage & Shelf life**: Shall be stored in dry & clean area, away from direct sunlight

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All data and technical information are based on results achieved under typical application conditions. Recipients of this information should, in their own interest and responsibility, clarify with us in due time whether or not the data and information apply to the intended application area. Installation instructions are available in our Armaflex installation manual.