



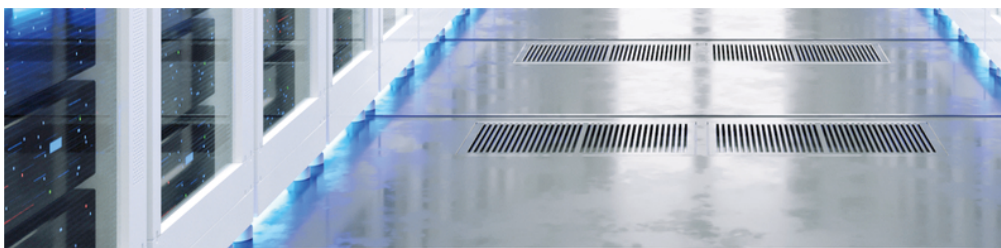
CLEANER INDOOR AIR QUALITY  
FOR OPERATIONAL RELIABILITY

# ArmaFlex Pro

The preferred dust- and fibre-free insulation for cleaner indoor air quality and reliable condensation control.

- // Fibre-free insulation for cleaner indoor air quality - an important criteria in mission-critical environments where dust cannot be tolerated.
- // Reliable condensation control performance in facilities that operate continuously, such as data centres, server rooms and hospitals.
- // Meets criteria of Singapore Civil Defence Force for construction material containing plastic for wall and ceiling material / finishes.
- // Active antimicrobial protection for reliable resistance against mould and bacteria.

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 **armacell**<sup>®</sup>  
ArmaFlex<sup>®</sup>

## TECHNICAL DATA - ARMAFLEX PRO

|                      |  |
|----------------------|--|
| Brief description    | Highly-flexible, closed-cell insulation material with high water vapour diffusion resistance and low thermal conductivity. ArmaFlex Pro also meets the Singapore Fire Code requirement for wall and ceiling material/finishes.   |
| Material type        | Flexible elastomeric foam based on synthetic rubber (NBR) with reinforced aluminum foil facing.  |
| Product colour range | Black foam with silver facing  |
| Product range        | Sheets with 13mm, 19mm and 25mm insulation thickness.  |
| Applications         | Installed in data centres and rooms that operate 24 hours daily to prevent condensation and enable energy efficiency through insulation.   |
| Installation         | Both the concrete surface and the insulation material should be clean and dry for optimal adhesion. If required wipe both surfaces with a solvent to ensure an oil-free surface. Care should be taken that the cement surface does not soak up too much adhesive as the surface could dry too quickly and lose its adhesiveness. Application of a bitumen-free prime coat is advised. Install ArmaFlex insulation material according to the recommendations detailed in the latest ArmaFlex application manual. This installation advice also applies to application of ArmaFlex on masonry. |
| Remarks              | Due to the nature of the elastomeric foam product, shrinkage can happen due to differences in temperature and result in some wrinkling on the surface. This is normal and has no impact on product performance.  |

| Property                                 | Value / Assessment  |   |       |       | Standard / Test method |
|--|---|---|-------|-------|------------------------|
| <b>Temperature range</b>                 |   |   |       |       |                        |
| Service temperature                      | Min. °C   | Max. °C   |       |       |                        |
|  | -50   | 85  |       |       |                        |
|  | Remarks   | Contact Armacell for applications beyond recommended service temperature range. |       |       |                        |
| <b>Thermal conductivity</b>              |   |   |       |       |                        |
| Declared thermal conductivity            | Øm  | 0 °C  | 25 °C | 40 °C | ASTM C518, GB/T 10295  |
|  | $\lambda d \leq [W/(m \cdot K)]$  | 0.034   | 0.036 | 0.039 |                        |
|  | Remarks   | Same as ArmaFlex Class 0  |       |       |                        |
| <b>Fire Performance and Approvals</b>    |   |   |       |       |                        |
| Surface spread of flame                  | Class 1   |   |       |       | BS 476 Part 7          |
| Fire propagation for products            | Fire propagation index, $I \leq 12$ , Sub-index, $i_1 \leq 6$ .<br>Class 0 rating for achieving the above and Class 1 per BS 476 Part 7 |   |       |       | BS 476 Part 6          |
| Smoke generation and toxicity test       | CIT < 0.75<br>VOF <sub>4</sub> < 300 min  |   |       |       | EN ISO 5659-2          |
| <b>Fire performance</b>                  |   |   |       |       |                        |
| Others                                   | Product conforms to the requirements for building products under the Fire Safety and Shelter Department, Singapore.                     |   |       |       |                        |
| <b>Resistance to water vapour</b>        |   |   |       |       |                        |
| Water vapour diffusion resistance factor | $\mu \geq 10,000$   |   |       |       | GB/T 17146, EN 12086   |



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## ABOUT ARMACELL

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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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