



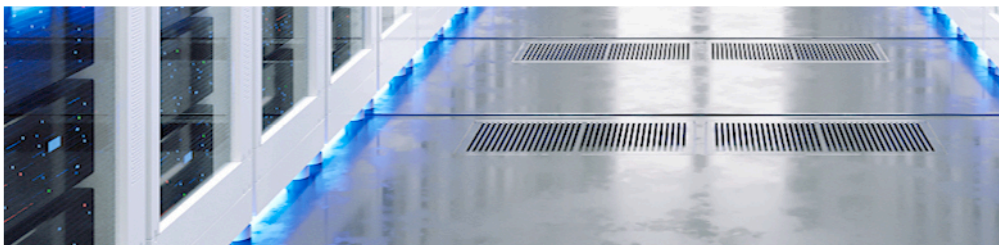
CLEANER INDOOR AIR QUALITY
FOR OPERATIONAL RELIABILITY

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**[®]
ArmaFlex[®]

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
Temperature range					
Service temperature	Min. °C	Max. °C			
	-50	85			
	Remarks	Contact Armacell for applications beyond recommended service temperature range.			
Thermal conductivity					
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			
Fire Performance and Approvals					
Surface spread of flame	Class 1				BS 476 Part 7
Fire propagation for products	Fire propagation index, $I \leq 12$, Sub-index, $i_1 \leq 6$. 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 VOF ₄ < 300 min				EN ISO 5659-2
Fire performance					
Others	Product conforms to the requirements for building products under the Fire Safety and Shelter Department, Singapore.				
Resistance to water vapour					
Water vapour diffusion resistance factor	$\mu \geq 10,000$				GB/T 17146, EN 12086

Item	Insulation thickness [mm]	Width (m)	Length [m]	Content [metric]
ARO-13120/AL	13	1.2	2	52.8 m ²
ARO-19120/AL	19	1.2	2	38.4 m ²
ARO-25120/AL	25	1.2	2	28.8 m ²

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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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