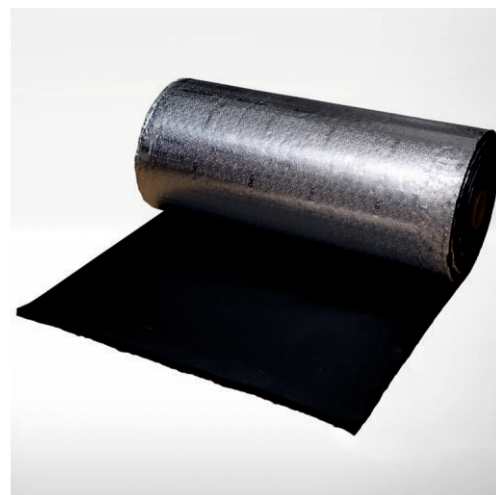




SUPERIOR FIRE PERFORMANCE WITH SUPERIOR  
AESTHETICS

# ArmaFlex® Alu E

- // Pre-covered insulation with excellent aesthetics
- // Low thermal conductivity,  $\lambda$   $0^{\circ}\text{C} \leq 0.035 \text{ W}/(\text{m}\cdot\text{K})$
- // Excellent water vapour diffusion resistance,  $\mu \geq 60,000$
- // Easy to clean and maintain
- // Class 0 fire classification to BS 476 part 6 and 7
- // Durable and high resistance to mechanical impact



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ArmaFlex<sup>®</sup>

## SUPERIOR FIRE PERFORMANCE WITH SUPERIOR AESTHETICS

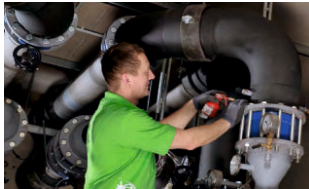
# ArmaFlex Alu E

Aluminium cladding highly flexible, fibre-free nitrile rubber insulation laminated with an embossed silver-colour foil for enhanced aesthetics and mechanical protection. The closed-cell insulation material with superior performance in fire safety and maintenance is used for the protection of HVAC ducts with very high water vapour diffusion resistance,  $\mu \geq 60,000$ .

Aesthetically Appealing



Easy to Install



Easy to Clean



$\mu \geq 60,000$



### Benefits

#### // Excellent fire performance

Low thermal conductivity,  $\lambda 0^\circ\text{C} \leq 0.035 \text{ W/(m}\cdot\text{K)}$  certifies to conform to safety, reliability and performance standards of various local fire safety bodies.

#### // Closed-cell structure

Minimizes moisture penetration to ensure long-term protection against corrosion under insulation (CUI).

#### // Condensation control

Excellent water vapour diffusion resistance with  $\mu \geq 60,000$  ensures that the surface temperature remains above dew point, removing the need for an additional water vapour barrier.

#### // Aesthetically appealing

Durable and high resistance to mechanical abuse and aesthetically appealing silver finish.

#### // Easy to install

Highly flexible elastomeric foam that can be installed quickly on irregular shapes and installations in tight spaces.

#### // Energy efficient

Low thermal conductivity minimizes energy losses to give long term energy savings.



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.					
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 plain and self-adhesive rolls [sheets] in 9 mm, 13 mm, 16 mm, 19 mm, 25 mm & 32 mm thickness of 1000 mm wide rolls.					
Applications	Insulation to prevent condensation, reduce energy losses and protection against mechanical damage on HVAC ducts and also used in clean room application such as the pharmaceutical industries.					
Assembly	ArmaFlex can be used together with a variety of ArmaFlex adhesives such as, ArmaFlex Pipe Seal / ArmaFlex Duct Seal / ArmaFlex 520 adhesive and ArmaFix for a complete insulation system. Please refer to the ArmaFlex installation manual for advice.					
Property	Value/Assessment					Standard/Test method
Temperature range						
Service temperature	Maximum service temperature		+85 °C		+85 °C if sheet or tape is glued to the object with its entire surface	Tested according to EN 14706 EN 14304
	Minimum service temperature		0 °C		[0 °C in case of self adhesive sheets]	
Thermal conductivity						
	0m	0	+20	+40	[°C]	Tested according to EN 12667
	λ ≤	0.035	0.037	0.039	W/(m·K)	
Water vapour diffusion resistance						
Water vapour diffusion resistance factor	μ ≥ 60,000					Tested according to EN 12086
Water absorption						
Water absorption (by volume)	0.2%					Tested according to ASTM C 1763, ASTM C 209
Fire performance and approvals						
Fire performance according to building regulations Fire propagation	Class 0 Total index performance (I) ≤ 12 Sub index (i <sub>1</sub> ), ≤6					Tested according to BS 476 Part 6:1989
Surface spread of flame	Class 1					Tested according to BS 476 Part 7:1997
Flammability	HB					Tested according to UL 94
Practical fire behaviour	Self-extinguishing, does not drip and does not spread flames.					
Other technical features						
Resistance to mechanical impact	Good					
UV resistance	Not recommended for outdoors.					
Environmental aspect*	Zero ozone depletion potential, zero global warming potential, dust and fibre free.					
Storage & shelf life	Shall be stored in dry and clean area, away from direct sunlight.					

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.

\*All data and technical information are provided above are based on results achieved under tests certified by the respective testing authorities for base foam only and not the complete system.

Contact information or visiting card

All data and technical information are based on results achieved under the specific conditions defined according to the testing standards referenced. It is the customer's responsibility to verify if the product is suitable for the intended application. The responsibility for professional and correct installation and compliance with relevant building regulations lies with the customer. Armacell takes every precaution to ensure the accuracy of the data provided in this document and all statements, technical information and recommendations contained within are believed to be correct at the time of publication. By ordering/receiving product you accept the **Armacell General Terms and Conditions of Sale** applicable in the region. Please request a copy if you have not received these.

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## ABOUT ARMACELL

As the inventors of flexible foam for equipment insulation and a leading provider of engineered foams, Armacell develops innovative and safe thermal, acoustic 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 3,135 employees and 24 production plants in 16 countries, the company operates two main businesses, Advanced Insulation and Engineered Foams. Armacell focuses on insulation materials for technical equipment, high-performance foams for high-tech and lightweight applications and next generation aerogel blanket technology.



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For more information, please visit:  
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