

New halogen-free acoustic insulation from Armacell

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[Armacell](#), a global leader in flexible foam for the equipment insulation market and a leading provider of engineered foams, is expanding its acoustic product portfolio with the launch of ArmaComfort NH-S Alu, a halogen-free multi-layer acoustic insulation material for air ducts, fan coil units and pipe lagging in residential and commercial buildings.

Combining excellent sound reduction properties with outstanding fire performance and environmental credentials, this product the new material sets a new benchmark for acoustic lagging in modern building services.

Tackling noise at the source

Noise has become one of the greatest environmental issues of recent times. Whether at work, in public buildings or at home, unwanted sound can disrupt concentration, disturb sleep, and impair quality of life. Mitigating noise from building services at the design stage is essential for maintaining acoustic comfort throughout a building's lifecycle. Early use of high-performance insulation materials can prevent costly retrofits and enhance occupant well-being.

High-performance multi-layer acoustic insulation

ArmaComfort NH-S Alu combines mass, damping, and decoupling into a single product – composed of an EVA/EPM high-mass acoustic barrier effectively blocking airborne noise, and an ArmaFlex® damping layer minimising noise by reducing vibration. This combination addresses a wide frequency spectrum – from low-frequency vibrations to high-pitched noise. Installed on vertical pipes, it can reduce noise by up to 16

dB(A) – and by as much as 24 dB(A) on horizontal pipe sections. When used as a duct wrapping solution, ArmaComfort NH-S Alu can achieve a reduction of 10 dB(A) – a level typically perceived as halving the loudness.

Minimising the risk of fire damage

Based on a highly innovative halogen-free foam technology, ArmaComfort NH-S Alu achieves Euroclass B-s1,d0, the highest fire classification attainable for organic materials. It emits up to 10 times less smoke than conventional elastomeric insulation, improving visibility and evacuation conditions. Being free from halogens, the material is especially suitable for sensitive environments such as hospitals, hotels, schools, and pharmaceutical facilities.

Health- and environment-friendly

ArmaComfort NH-S Alu is free from halogens, lead, bitumen, and fibres, making it ideal for applications with strict indoor air quality requirements. It supports green building certification schemes such as LEED®, BREEAM® and MINERGIE® Eco, with product-specific compliance documentation available. Thanks to its high water vapour diffusion resistance, it provides long-term condensation control.

Thin, highly flexible and easy to install

Despite its high acoustic performance, ArmaComfort NH-S Alu features a slim profile that is ideal for installation in tight spaces. It is available as standard and self-adhesive sheets, and its visually appealing aluminium surface ensures robust protection, eliminates the need for additional cladding, and provides a consistent, professional finish. Armacell supports contractors and specifiers with expert guidance and offers tailored training sessions and project-specific assistance upon request.

“Install it. Enjoy quietness. ArmaComfort NH-S Alu is the ideal pipe and duct lagging solution for specifiers and installers looking for a safe, flexible and high-performance acoustic insulation material that also meets the demands of modern sustainable construction,” says Pascal Raphoz, Director Global Acoustics at Armacell.