

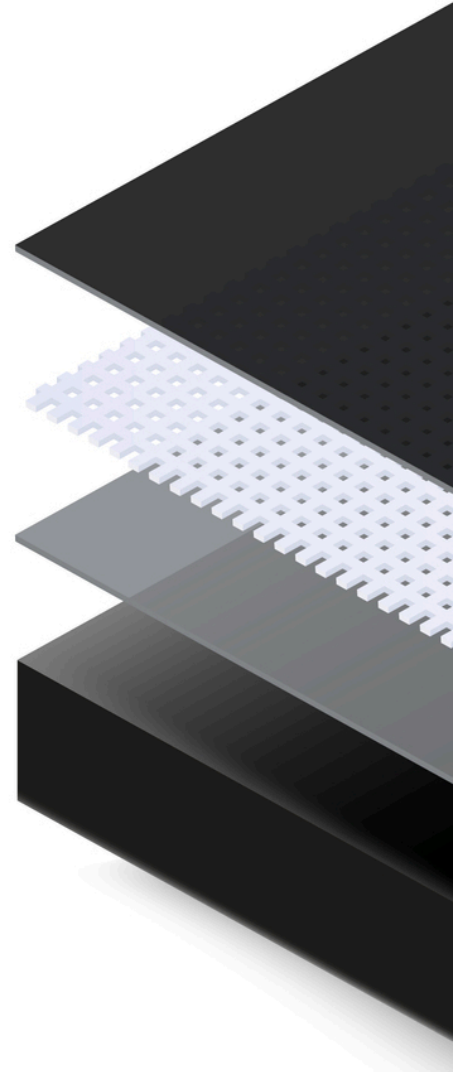


INSTALL IT. TRUST IT.

NH/ArmaFlex Smart C

Flexible 2-in-1 solution

- // Protected insulation
- // High mechanical resistance
- // Advanced fire behavior



 **armacell**[®]
ArmaFlex[®]

INSTALL IT. TRUST IT.

NH/ArmaFlex[®] Smart

We are taking our halogen-free insulation material to the next level. Our NH/ArmaFlex Smart is a highly flexible elastomeric foam, which is faster and easier to install. A unique new technology which will make a real difference for our customers and the industry.

NH/ArmaFlex Smart. Innovation reloaded.



// Resistant to uv-light and ageing

NH/ArmaFlex Smart has excellent UV and ageing resistance. The resistance to light ageing was confirmed in accelerated radiation tests. The halogen-free insulation material has outstanding light stability. Indoors it can be exposed to natural and artificial light without the need for additional cladding.

// Excellent fire behaviour

NH/ArmaFlex Smart releases 50 percent less smoke than conventional flexible elastomeric foam products. In the event of a fire, smoke hinders visibility, makes it difficult to locate escape and rescue routes. Today, therefore, experts attach greater importance to smoke development and smoke density than to heat release.

// Less consequential fire damage

In a fire, NH/ArmaFlex Smart does not release corrosive gases, which in combination with extinguishing water can form aggressive acids. In areas requiring special protection, such as data centres or clean room industries, the consequential fire damage can soon amount to many times the cost of the actual fire damage.

// Reliable thermal and condensation control

Thanks to its low thermal conductivity and high resistance to water vapour diffusion, the closed-cell NH/ArmaFlex Smart ensures reliable condensation control and high energy savings in the long-term. This also minimises the risk of corrosion under the insulation. of 25 mm.

Pascal Beuing

Insulator at Schmengler Dämmtechnik Havixbeck (Germany)

"Wow! That's how flexible a halogen-free insulation tube can be.

The new material feels completely different. The surface is much smoother and the product is altogether more stable. Armacell has reinvented NH/ArmaFlex."



50%
LESS
SMOKE

Halogen-free insulation without compromises.

// Prevents stress corrosion cracking

Stress corrosion cracking can occur on austenitic stainless steels when stresses, moisture and chlorine ions occur simultaneously. As a halogen-free product, NH/ArmaFlex Smart can minimise the risk of stress corrosion cracking.

Armacell has developed the new ArmaFlex 750 adhesive to be used with NH/ArmaFlex Smart.



// System solution for maximum reliability

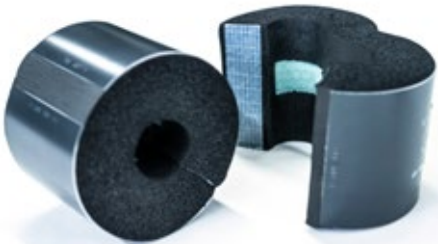
The ArmaFix NH Smart pipe support thermally isolates the pipe and its fixing from each other and, together with the adjoining NH/ArmaFlex Smart insulation, forms an insulation system for refrigeration equipment which is reliable in the long-term.

// High environmental sustainability

NH/ArmaFlex Smart is halogen-free, it contains neither PVC nor chlorinated polyethylene. It is produced without adding brominated flame retardants and is free of chlorinated paraffins. Short-chain chlorinated paraffins are considered hazardous to health and the environment and their production has been discontinued in Europe. NH/ArmaFlex Smart contains neither short-, medium- nor long-chain chlorinated paraffins. The product meets the German Sustainable Building Council's highest quality level for flame-retardant building products.

// NH/ArmaFlex Smart C. Flame-retardant sheets

With our new NH/ArmaFlex Smart C, we now offer halogen-free, flame-retardant and low-smoke insulation sheets. Especially engineered for the insulation of airducts and tanks, this pre-covered material provides a high level of protection against mechanical impact and is easy to clean. Unlike traditional insulation materials and jackets, the pre-covered sheets can be applied cost-efficiently in a single step. What's more, the black surface is highly absorptive and thinner insulation thicknesses can be installed to control condensation.



The load-bearing segments are based of environmentally friendly, recycled PET.

C-s2,d0



TECHNICAL DATA - NH/ARMAFLEX SMART C

Brief description	NH/ArmaFlex Smart C is the new generation halogen free, flexible closed-cell insulation material with an additional pre-covering for use in any building and construction types.
Material type	Highly flexible, closed-cell elastomeric foam material based on synthetic rubber. Factory-made flexible elastomeric foam (FEF), according to EN 14304. Covering: 25 µm Alufoil glossy (black), 204 g/m ² high performance glass fabric, 18 µm Alufoil glossy.
Additional material information	Self-adhesive coating: pressure-sensitive adhesive coating on modified acrylate basis with mesh structure, covered with polyethylene foil. Traces of silicon can be found on the protection paper/foil used to protect self-adhesive closures.
Product colour range	FEF: black / anthracite Covering: black
Special features	Without halogens (chloride, bromide) according to DIN/VDE 0472, part 815. Fulfils DIN 1988-200.
Applications	Insulation / protection for rectangular air ducts of air-conditioning / refrigeration and ventilation to prevent condensation and save energy.
Installation	Certified and compatible adhesive for a long-term performing system is ArmaFlex 750. During application with ArmaFlex 750 Adhesive and ArmaFlex Cleaner the surface black colour may blurred, but this have no impact on the product performance.

Property	Value / Assessment		Standard / Test method
Temperature range			
Service temperature	Min. °C ¹	Max. °C ²	EN 14706, EN 14707, EN 14304
	-50	110	
Thermal conductivity			
Declared thermal conductivity	θm	+/- 0 °C	EN ISO 13787, EN 12667, EN ISO 8497
	λd ≤ [W/(m·K)]	0.040	
Fire Performance and Approvals			
Reaction to fire	sheets, tape C-s2, d0		EN 13501-1, EN 13823, EN ISO 11925-2
Fire performance			
Practical fire behaviour	self-extinguishing, does not drip, does not spread flames		
Physical attributes			
Dimensions and tolerances	In accordance with EN 14304, table 1		EN 822, EN 823, EN 13467
Weather and UV resistance			
UV resistance ³	High. (see Technical Bulletin no. 142)		ISO 4982
Health and environment			
Green building assessment	Meets the sustainable construction requirements for DGNB QS4 Platin and BNB QN 2-5.		
Additional features	SCCP, MCCP, LCCP-free		
Other technical features			
Shelf life	Self-adhesive tapes, self-adhesive sheets: 1 year		
Storage	Can be stored in dry, clean rooms at normal relative humidity (50% to 70%) and ambient temperature (0 °C – 35 °C).		

¹For temperatures below -50 °C please contact our Customer Service Center to request for the corresponding technical information.

²+85 °C, for products with a self-adhesive layer.

³If ArmaFlex is used outdoors or in applications under UV radiation, it should be protected with ArmaFinish Paint, or a covering such as ArmaClad Arma-Chek within 3 days of installation.

Sheet – precovered

Item	Insulation thickness [mm]	Width [mm]	Length [m]	Content [metric]
NHSC-13-99	13	1,000	2	24 m ²
NHSC-19-99	19	1,000	2	16 m ²
NHSC-25-99	25	1,000	2	12 m ²
NHSC-32-99	32	1,000	2	10 m ²
Other information				
Thickness tolerance	9 -19 ± 1,5 mm 25 - 32 ± 2,0 mm			
Length tolerance	± 1,5 %			
Width tolerance	± 2,0 %			

Sheet – precovered and self-adhesive

Item	Insulation thickness [mm]	Width [mm]	Length [m]	Content [metric]
NHSC-13-99/A	13	1,000	2	24 m ²
NHSC-19-99/A	19	1,000	2	16 m ²
NHSC-25-99/A	25	1,000	2	12 m ²
NHSC-32-99/A	32	1,000	2	10 m ²
Other information				
Thickness tolerance	9 -19 ± 1,5 mm 25 - 32 ± 2,0 mm			
Length tolerance	± 1,5 %			
Width tolerance	± 2,0 %			

Tape – self-adhesive

Item	Thickness [mm]	Width [mm]	Length [m]	Content [quantity]
NHSC-TAPE-70	0.24	70	25	6 piece

Accessories

Item	Description	Content [quantity]
ADH750/0,5	ArmaFlex 750 Adhesive, 0.5 Litre	12 tin

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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:
www.armacell.com