

INSTALL IT. TRUST IT.

NH/ArmaFlex[®] Smart

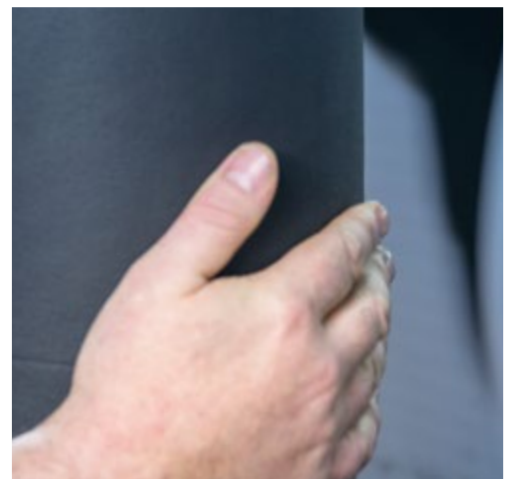
We are taking our halogen-free insulation material to the next level. Our NH/ArmaFlex Smart is a highly flexible elastomeric foam, which is faster and easier to install. A unique new technology which will make a real difference for our customers and the industry.

NH/ArmaFlex Smart. Innovation reloaded.

www.armacell.com



Low smoke,
highly flexible
and ageing
resistant



 **armacell**[®]
ArmaFlex[®]

HIGHLY INNOVATIVE FOAM TECHNOLOGY

NH/ARMAFLEX SMART. INNOVATION RELOADED.

We continuously develop our product solutions to create real added value for our customers. With NH/ArmaFlex Smart, we now offer you a halogen-free insulation material based on highly innovative foam technology. Our new recipe is much more flexible than conventional halogen-free elastomeric materials and significantly quicker and easier to install.

The UV and ageing resistance are outstanding too – for reliable condensation control and high energy efficiency in the long-term. Plus, NH/ArmaFlex Smart looks and feels different to its predecessors: it is black, has a very smooth surface and feels much more compact.



Halogen-free insulation without compromises.

Whether in airports, hospitals, schools, administrative buildings, data centres or in the pharmaceutical industry, halogen-free insulation materials are required in many buildings today. NH/ArmaFlex Smart has very good fire behaviour, reduces the costs of consequential fire damage and promotes the implementation of green building schemes.

When we launched NH/ArmaFlex in 1996, we were the first manufacturer to offer halogen-free elastomeric equipment insulation. Initially a niche product, this innovation soon established itself as an environment-friendly standard in technical insulation.

PROTECT
YOUR PEOPLE
AND ASSETS

EXPERIENCE THE NEW NH/ARMAFLEX SMART. FEEL THE DIFFERENCE.



OUR
VERDICT:
GREAT!



The surface is much smoother and the material is easy to cut.

“Very good insulation material. We were particularly impressed by the bonding properties. We needed less adhesive, which helped reduce the tack-drying time. This means that NH/ArmaFlex Smart can be installed much faster than conventional halogen-free products.”

Mattias Frick
CEO FM Isolering
Eskilstuna (Sweden)

“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.”

Pascal Beuing
Insulator at Schmengler Dämmtechnik
Havixbeck (Germany)

Compared to standard elastomeric insulation materials, conventional halogen-free products are less firm, because the stabilising effect of the halogenated ingredients is missing. Their surface can easily be damaged by mechanical impact. When exposed to UV radiation (even from artificial light sources) they tend to become brittle faster than standard FEFs. If they are installed under strain or tension, there is a risk of microcracks forming in the insulation material.

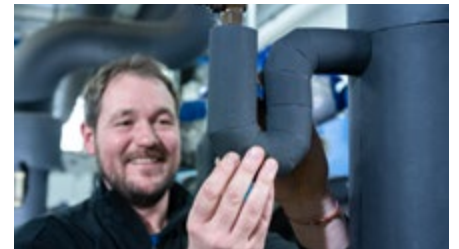


NH/ARMAFLEX SMART. INNOVATION RELOADED.

HALOGEN-FREE INSULATION WITHOUT COMPROMISES.

With NH/ArmaFlex Smart we are now taking our halogen-free insulation materials to a new level. Based on an innovative foam technology, the new material combines the tried-and-trusted fire properties and high environmental sustainability with greatly improved flexibility and excellent UV and ageing resistance. NH/ArmaFlex Smart was developed to simplify and speed up our customers' work.

NH/ArmaFlex Smart. No halogens. No compromises.



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.

50%
LESS
SMOKE



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

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.

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.

HIGH ENVIRONMENTAL SUSTAINABILITY

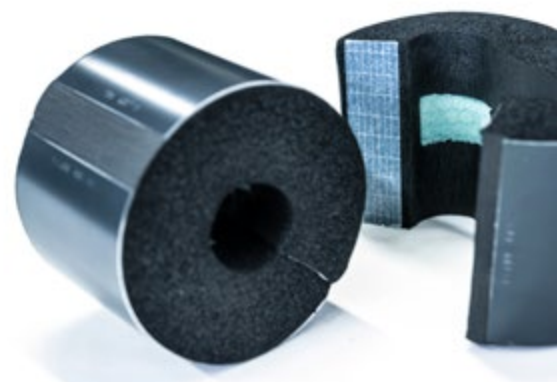
NH/ArmaFlex Smart is halogen-free, it contains neither PVC nor chlorinated polyethylene. It is produced without adding brominated flame retardants and is free of chlorinated paraffins. Short-chain chlorinated paraffins are considered hazardous to health and the environment and their production has been 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.

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.

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 insulation, forms an insulation system for refrigeration equipment which is reliable in the long-term.



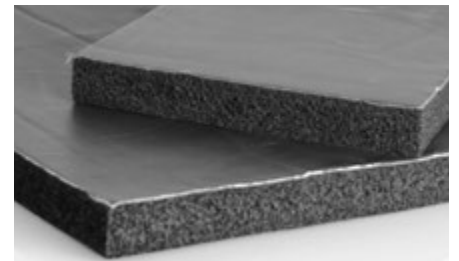
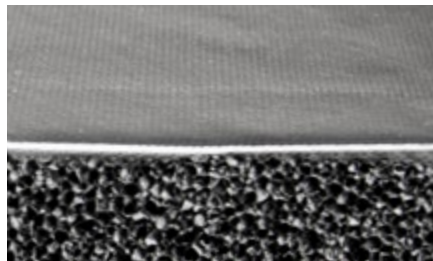
The load-bearing segments are based on environmentally friendly, recycled PET.

NH/ARMAFLEX SMART C. ANOTHER STEP BEYOND.

PRE-COVERED HALOGEN-FREE INSULATION SHEETS WITH ENHANCED FIRE BEHAVIOR.

With our new NH/ArmaFlex Smart C, we are now for the first-time offering halogen-free, flame-retardant and low-smoke insulation sheets. The pre-covered sheets offer high mechanical protection and are easy to clean.

C-s2,d0

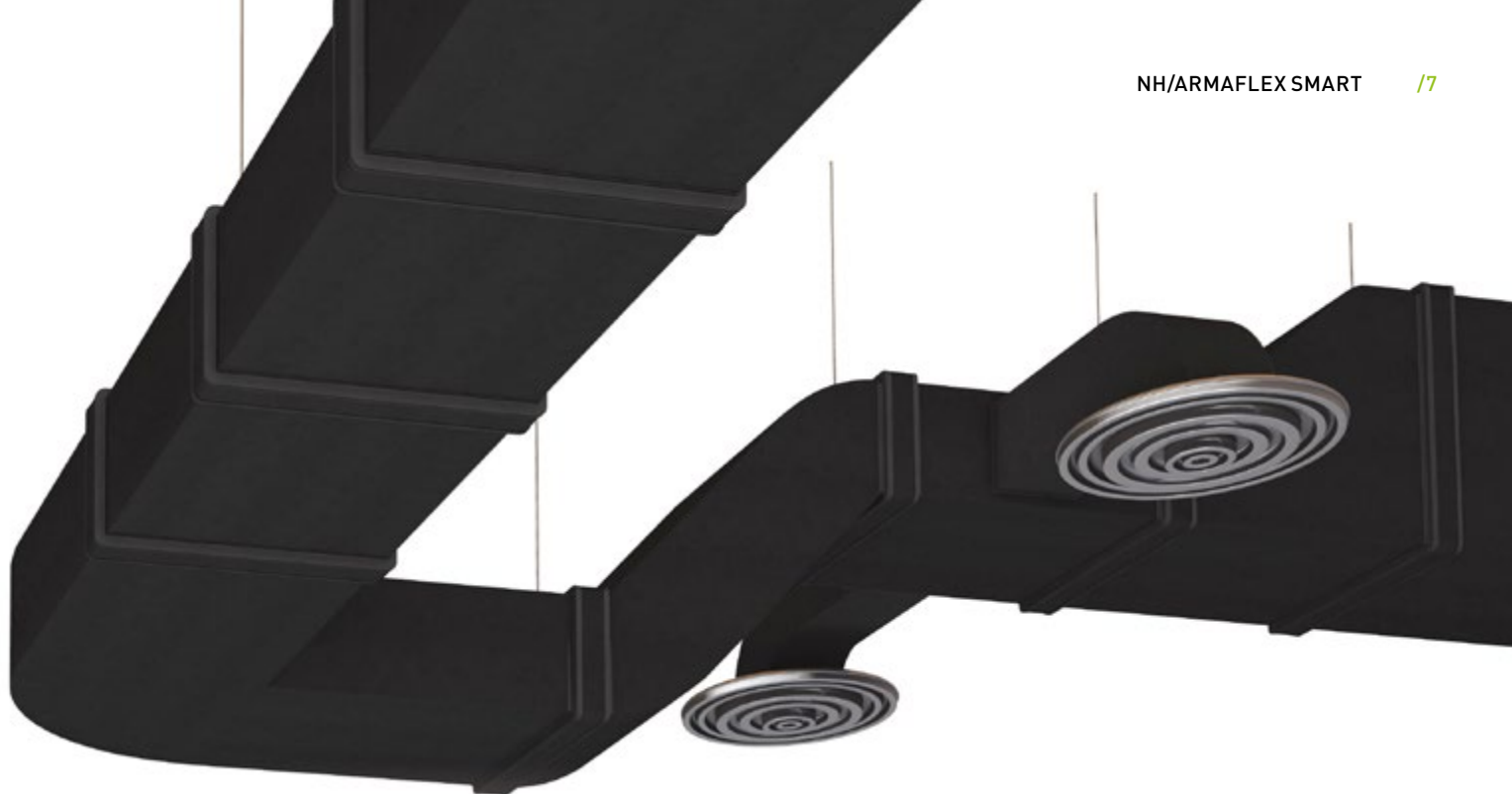


FLEXIBLE 2-IN-1 SOLUTION

NH/ArmaFlex Smart C is our latest addition to our halogen-free product portfolio. Especially engineered for the insulation of airducts and tanks, the pre-covered material offers 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. The flexible covering consists of a fibreglass fabric that is laminated with black aluminium.

SPACE-SAVING INSULATION THICKNESSES

Compared to an insulation material with a traditional aluminium cover, the black NH/ArmaFlex Smart C lamination allows space-saving installation: as the black surface is highly absorptive, thinner insulation thicknesses can be specified. A black material absorbs much more heat energy than a silver-coloured one. This has an extremely positive impact on the insulation thickness: the higher the absorptiveness, the smaller the insulation thickness needed to prevent condensation.



While unlaminated halogen-free insulation boards only achieve an E classification, we now offer with NH/ArmaFlex Smart C a flame-retardant material for the insulation of air ducts, tanks and larger pipe diameters, thus expanding the application range of our halogen-free products.

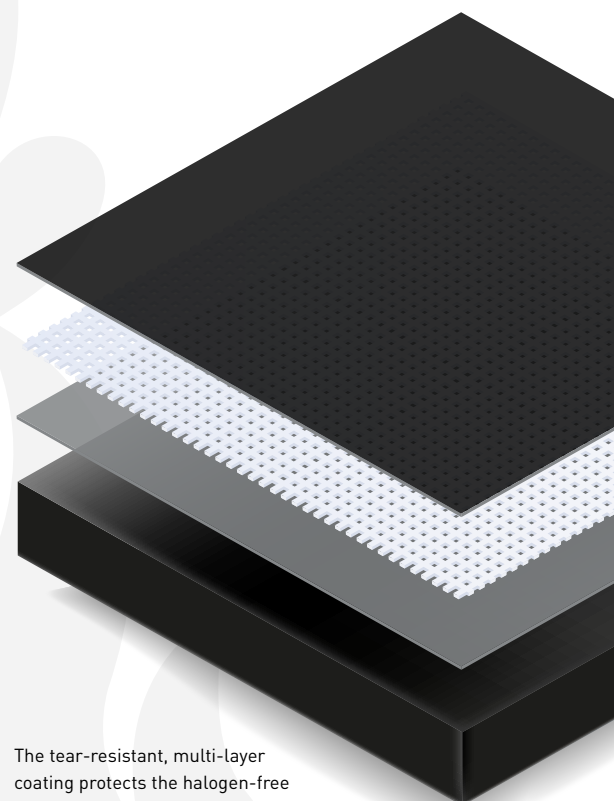
NH/ArmaFlex Smart C is available as a standard and self-adhesive sheet in insulation thicknesses of 13, 19, 25 and 32 mm. The product portfolio also includes a self-adhesive tape for additional securing of the adhesive seams, e.g. in the penetration area of fittings.

BLACK ALUMINIUM

GLASS FIBRE

ALUMINIUM LAYER

NH/ARMAFLEX SMART



The tear-resistant, multi-layer coating protects the halogen-free elastomeric insulation material from mechanical damage.

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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 3,000 employees and 23 production plants in 15 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. For more information, please visit: www.armacell.com.

For product information, please visit:
www.armacell.eu



ArmaFlex®