

# INSTALL IT. SAFEGUARD YOUR EQUIPMENT.



## Arma-Chek Silver

The brilliant precovered ArmaFlex insulation designed for fast installation, durability and easy cleaning

// 2-in-1 precovered system, saves installation time

// Easy to clean aesthetic surface in metallic look

// Strong and resistant surface

// Good chemical resistance

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# Arma-Chek Silver

### INSULATION AND CLADDING IN ONE PRODUCT



Arma-Chek Silver is based on high performance AF/ArmaFlex insulation combined with a UV restant metal finishing for aesthetic indoor and outdoor installations.

The product saves installation time with the pre-covered System compared with traditional cladding. In addition, the self-adhesive tubes are with tangential cut for improved adhesion security.

Watch the video under http://youtu.be/x0nHyDRcEzo and see the difference!



### // Pre-formed Parts

Specially designed Arma-Chek Silver elbows and t-pieces offer you additional installation time savings. The pre-formed parts match the ArmaFlex tubes perfectly and complete the system.

Together with the prefabricated AF/ArmaFlex elbows and Tpieces thus fabrication and installation times can be reduced even further.



### // UV-Resistance

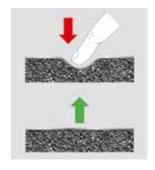
The UV-resistance of Arma-Chek Silver is constantly tested with Weather-O-Meter equipment according to ISO 4892. The samples are exposed to simulated weather for at least 15000 hours, which equals estimated 15 years of outdoor application in Central Europe.

### // Surface Pressure Resistance

Unlike traditional metal cladding, Arma-Chek Silver recovers itself to original shape after pressure is exerted on its surface.

This property prevents lasting dents and ensures a durable installation.





## Arma-Chek Silver in the world's largest lyocell plant

### **LENZING. AUSTRIA**

The Lenzing Group's new lyocell fibre plant is recordbreaking: in just 24 months the most modern fibre production facilities in the world were constructed at the company headquarters.





### // Challenge

Part of the new patented TENCEL® line is an innovative air-handling concept. The wet-spinning process results in very high temperatures and high humidity in the production areas. These conditions are very different to those outdoors where temperatures range from -16 °C in winter to +35 °C in summer. So it is essential that the air-handling equipment is insulated efficiently. The product installed also had to be UV-resistant and easy to clean. Furthermore, the schedule for insulating the extensive pipe- and ductwork was very tight.

### // Solution

In these ambient conditions a closedcell insulation material was the only option for the project management of Lenzing AG. Together with the insulation company Knierzinger the optimal solution for the complex requirements was found in Arma-Chek Silver. The product not only provides the pipes with reliable protection against condensation - the tough, covered insulation material is also UV-resistant and very easy to clean. Unlike traditional insulation materials and coverings, Arma-Chek Silver can be installed in one work step. The pre-covered elastomeric insulation material was specified for insulating the entire pipe- and ductwork of the air-handling system. All in all 10.455 m<sup>2</sup> of Arma-Chek Silver continuous sheets in insulation thicknesses of 19, 25 and 32 mm were installed.



### The insulation contractor:

"Especially in production areas where space is at a premium, Arma-Chek Silver is an ideal solution. When installed professionally, the pre-covered, closed-cell insulation material ensures reliable condensation control even where there is a high temperature difference and prevents energy losses. Using the 2-in-1 product also allowed us to save a great deal of time – a huge benefit when you're on such a tight schedule. And the result looks really good, too."

### **TECHNICAL DATA - ARMA-CHEK SILVER**

Brief description	Arma-Chek Silver is a covering system with a double layer laminate of aluminium, coated with a special UV protection and a PVC backing. Enclosing an Armaflex substrate, the Arma-Chek Silver jacketing is highly puncture and tear resistant as well as flame retardant. Arma-Chek Silver can be used for insulation and protection of HVAC and refrigeration systems inside or outside.			
Material type	Highly flexible, closed-cell elastomeric foam material based on synthetic rubber. Covering: double layer of aluminium laminate, coated with a special UV protection and a PVC backing.			
Product colour range	Silver (Covering)			
Special features	UV resistance testing regarding of these materials showed excellent results. When used on outdoor applications, the materials showed very good durability even under UV exposure. However, due to the unpredictable nature of outdoor conditions in the whole variety of thinkable installations, there might be occasional weathering influences on the consistence of the material, which cannot be tested in advance. Therefore, installations in extreme environments (regions of extreme weather conditions like high mountains etc.) cannot be recommended. In case of doubt, please contact our Customer Service.			
Product range	Arma-Chek Silver is available in a range of pre-insulated tubes & sheets, as well as single covering including pre-insulated bends and t-pieces.			
Applications	Insulation and protection of pipes, ducts, valves and vessels of refrigeration and air conditioning equipment, clean room environments, food industries etc.			
Installation	The ArmaFlex and ArmaClad Arma-Chek installation manuals should be consulted before assembly. We offer special installation courses for the application of ArmaClad Arma-Chek.			
Remarks	Declaration of Performance is available in accordance with Article 7(3) of Regulation (EU) No 305/2011 on our homepage: www.armacell.com/DoP (Armaflex substrate)			
Property	Value / Assessment		Standard / Test method	
Temperature range				
Service temperature <sup>1,2</sup>	Min. °C	Max. °C	EN 14304, EN 14706, EN 14707	
	-50	110		
	Remarks	+85 °C if sheet or tape is glued to the object with its whole surface		
Thermal conductivity				
Remarks	Depends on ArmaFlex substrate.		EN ISO 13787, EN 12667, EN ISO 8497	
Fire Performance and Approv	als			
Reaction to fire	Arma-Chek Silver (AF) tubes D(L)-s3,d0 Arma-Chek Silver (AF) sheets 13 - 25 mm D-s3,d0 Arma-Chek Silver (AF) sheets 32 - 50 mm D-s3,d0 Arma-Chek Silver (ACE) tubes and sheets E		EN 13823, EN ISO 11925-2	
Resistance to water vapour				
Water vapour diffusion resistance factor	sheets and tubes $\mu \ge 15.000$		EN 13469, EN 12086	
Physical attributes				
Thickness	approx. 230 μm (covering)		EN 22286	
Dimensions and tolerances	In acc. with EN 14304, Table 1 (ArmaFlex substrate)		EN 822, EN 823, EN 13467	
Mechanical properties				
Tear strength	MD 70 N CD 28 N	MD 70 N CD 28 N		
Resistance to mechanical impact	Good puncture and tear resistance.			
Weather and UV resistance				
UV resistance <sup>3</sup>	Excellent		EN ISO 4892-2	
Health and environment				
Health aspects	Dust- and fibre-free.			

Property	Value / Assessment	Standard / Test method
Other technical features		
Shelf life	Tape, sheets, tubes, self-adhesive: 1 year	
Storage	Can be stored in dry, clean rooms at normal relative humidity (50% to 70%) and ambient temperature (0 $^{\circ}$ C – 35 $^{\circ}$ C).	

When there are fluctuations in temperature, the surface may wrinkle slightly, as elastomeric products expand and contract in these circumstances. However, these superficial changes do not have any impact on the performance of the material. The wrinkles usually disappear as soon as the plant is heated to its original operating temperature.

2 For temperatures below -30 °C or above +100 °C, please consult our Customer Service Centre for further information.

<sup>&</sup>lt;sup>3</sup> In outdoor applications the colour may fade. This does not have any impact on the functionality of the covering or the insulation material.

All data and technical information are based on results achieved under the specific conditions defined according to the testing standards referenced. Despite taking every precaution to ensure that said data and technical information are up to date, Armacell does not make any representation or warranty, express or implied, as to the accuracy, content or completeness of said data and technical information. Armacell also does not assume any liability towards any person resulting from the use of said data or technical information. Armacell reserves the right to revoke, modify or amend this document at any moment. 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.

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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 27 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.

