

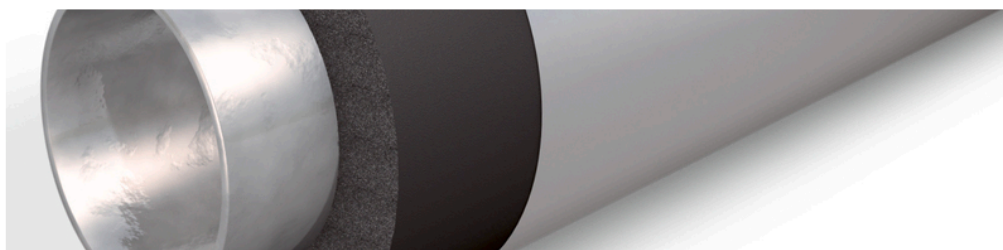


INSTALL IT. SAFEGUARD YOUR  
EQUIPMENT.

# 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



 **armacell**<sup>®</sup>  
ArmaClad<sup>™</sup>

INSTALL IT. SAFEGUARD YOUR EQUIPMENT.

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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 resistant 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.

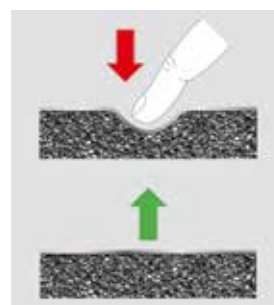
### // UV-Resistance

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 closed-cell 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: <a href="http://www.armacell.com/DoP">www.armacell.com/DoP</a> (Armaflex substrate)

Property	Value / Assessment	Standard / Test method
<b>Temperature range</b>		
Service temperature <sup>1,2</sup>	Min. °C	Max. °C
	-50	110
	Remarks	+85 °C if sheet or tape is glued to the object with its whole surface
<b>Thermal conductivity</b>		
Remarks	Depends on ArmaFlex substrate.	EN ISO 13787, EN 12667, EN ISO 8497
<b>Fire Performance and Approvals</b>		
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
<b>Resistance to water vapour</b>		
Water vapour diffusion resistance factor	sheets and tubes $\mu \geq 15.000$	EN 13469, EN 12086
<b>Physical attributes</b>		
Thickness	approx. 230 $\mu\text{m}$ (covering)	EN 22286
Dimensions and tolerances	In acc. with EN 14304, Table 1 (ArmaFlex substrate)	EN 822, EN 823, EN 13467
<b>Mechanical properties</b>		
Tear strength	MD 70 N CD 28 N	EN ISO 527-3
Resistance to mechanical impact	Good puncture and tear resistance.	
<b>Weather and UV resistance</b>		
UV resistance <sup>3</sup>	Excellent	EN ISO 4892-2
<b>Health and environment</b>		
Health aspects	Dust- and fibre-free.	

Property	Value / Assessment	Standard / Test method
<b>Other technical features</b>		
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 °C – 35 °C).	

<sup>1</sup>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.

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

<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.

Tube – precovered and self-seal. Silver (Covering)

AF-2 (insulation thickness: 11.5mm - 16.0mm)						AF-4 (insulation thickness: 17.0mm - 25.0mm)					
Pipe Ø [mm]	Item	Inner diameter (minimum) [mm]	Inner diameter (maximum) [mm]	Insulation thickness [mm]	Content [metric]	Pipe Ø [mm]	Item	Inner diameter (minimum) [mm]	Inner diameter (maximum) [mm]	Insulation thickness [mm]	Content [metric]
15	AFSI-2-015	16.00	17.50	11.5	65 m	15	AFSI-4-015	16.00	17.50	17	44 m
18	AFSI-2-018	19.00	20.50	11.5	60 m	18	AFSI-4-018	19.00	20.50	17.5	35 m
22	AFSI-2-022	23.00	24.50	12	50 m	22	AFSI-4-022	23.00	24.50	18	30 m
28	AFSI-2-028	29.00	30.50	12.5	42 m	28	AFSI-4-028	29.00	30.50	19	24 m
35	AFSI-2-035	36.00	38.00	13	31 m	35	AFSI-4-035	36.00	38.00	19.5	18 m
42	AFSI-2-042	43.50	45.50	13.5	24 m	42	AFSI-4-042	43.50	45.50	20.5	16 m
48	AFSI-2-048	49.50	51.50	13.5	22 m	48	AFSI-4-048	49.50	51.50	21	12 m
54	AFSI-2-054	55.00	57.00	13.5	18 m	54	AFSI-4-054	55.00	57.00	21	12 m
60	AFSI-2-060	61.50	63.50	14	16 m	60	AFSI-4-060	61.50	63.50	21.5	10 m
64	AFSI-2-064	65.00	67.50	14	15 m	64	AFSI-4-064	65.00	67.50	21.5	9 m
76	AFSI-2-076	77.00	79.50	14	14 m	76	AFSI-4-076	77.00	79.50	22	8 m
89	AFSI-2-089	90.50	93.50	14.5	11 m	89	AFSI-4-089	90.50	93.50	22.5	6 m
114	AFSI-2-114	116.00	120.00	15	8 m	114	AFSI-4-114	116.00	120.00	23.5	5 m
140	AFSI-2-140	142.00	146.00	15.5	4 m	140	AFSI-4-140	142.00	146.00	24.5	3 m
-	-	-	-	-	-	168	AFSI-4-168	170.00	176.00	25	2 m

Other information

Thickness tolerance  
 ≤8mm: ±10mm  
 9 - 18mm: ±1.5mm  
 19 - 31mm: ±2.5mm  
 >31mm: ±3.0mm

Length tolerance ±1.5%

Remarks Some items have a self-adhesive seam achieved with a radial cut surface. Contact Armacell for more details.

Tube – precovered and self-seal. Silver (Covering)

AF-5 (insulation thickness: 25.0mm - 33.0mm)

Pipe Ø [mm]	Item	Inner diameter (minimum) [mm]	Inner diameter (maximum) [mm]	Insulation thickness [mm]	Content [metric]
18	AFSI-5-018	19.00	20.50	25	21 m
22	AFSI-5-022	23.00	24.50	25	18 m
28	AFSI-5-028	29.00	30.50	25	18 m
35	AFSI-5-035	36.00	38.00	27	12 m
42	AFSI-5-042	43.50	45.50	27	11 m
48	AFSI-5-048	49.50	51.50	27.5	8 m
54	AFSI-5-054	55.00	57.00	28.5	8 m
60	AFSI-5-060	61.50	63.50	29	6 m
64	AFSI-5-064	65.00	67.50	29	6 m
76	AFSI-5-076	77.00	79.50	30	5 m
89	AFSI-5-089	90.50	93.50	30.5	4 m
114	AFSI-5-114	116.00	120.00	31.5	3 m
140	AFSI-5-140	142.00	146.00	32	3 m
168	AFSI-5-168	170.00	176.00	33	2 m

Other information

Tube – precovered and self-seal. Silver (Covering)

AF-5 (insulation thickness: 25.0mm - 33.0mm)

Pipe Ø [mm]	Item	Inner diameter (minimum) [mm]	Inner diameter (maximum) [mm]	Insulation thickness [mm]	Content [metric]
<b>Thickness tolerance</b>		≤8mm: ±10mm 9 - 18mm: ±1.5mm 19 - 31mm: ±2.5mm >31mm: ±3.0mm			
<b>Length tolerance</b>		±1.5%			
<b>Remarks</b>		Some items have a self-adhesive seam achieved with a radial cut surface. Contact Armacell for more details.			

Covering. Silver. Covering without insulation

Item	Width [mm]	Length [m]	Content [quantity]	Content [metric]
ACH-SI25	1,040	25	2 roll	26 m <sup>2</sup>
ACH-SI25/100	100	25	4 roll	10 m <sup>2</sup>

Roll – standard precovered. Silver (Covering)

Item	Insulation thickness [mm]	Width [mm]	Length [m]	Content [metric]
AFSI-13MM/E	13	1,000	8	8 m <sup>2</sup>
AFSI-19MM/E	19	1,000	6	6 m <sup>2</sup>
AFSI-25MM/E	25	1,000	4	4 m <sup>2</sup>
AFSI-32MM/E	32	1,000	3	3 m <sup>2</sup>

Other information

<b>Thickness tolerance</b>	≤ 6 mm: ±1,0 mm 7 -19 mm: ±1,5 mm > 19 mm: ±2,0 mm
<b>Length tolerance</b>	+/- 1,5%

Roll – standard precovered self-adhesive. Silver (Covering). AF/ArmaFlex

Item	Insulation thickness [mm]	Width [mm]	Length [m]	Content [metric]
AFSI-13MM/EA	13	1,000	8	8 m <sup>2</sup>
AFSI-19MM/EA	19	1,000	6	6 m <sup>2</sup>
AFSI-25MM/EA	25	1,000	4	4 m <sup>2</sup>
AFSI-32MM/EA	32	1,000	3	3 m <sup>2</sup>

Other information

<b>Thickness tolerance</b>	≤ 6 mm: ±1,0 mm 7 -19 mm: ±1,5 mm > 19 mm: ±2,0 mm
<b>Length tolerance</b>	+/- 1,5%

Prefabricated part – 90° elbow. Silver. Elbow fitting (covering without insulation)

Outer diameter [mm]	Item	Content [quantity]
40	ACHB-040	1 piece
50	ACHB-050	1 piece
60	ACHB-060	1 piece
70	ACHB-070	1 piece
80	ACHB-080	1 piece
90	ACHB-090	1 piece

Prefabricated part – 90° elbow. Silver. Elbow fitting (covering without insulation)

Outer diameter [mm]	Item	Content [quantity]
100	ACHB-100	1 piece
110	ACHB-110	1 piece
120	ACHB-120	1 piece
130	ACHB-130	1 piece
140	ACHB-140	1 piece
150	ACHB-150	1 piece
160	ACHB-160	1 piece
170	ACHB-170	1 piece
180	ACHB-180	1 piece
200	ACHB-200	1 piece
210	ACHB-210	1 piece
220	ACHB-220	1 piece
230	ACHB-230	1 piece
250	ACHB-250	1 piece
260	ACHB-260	1 piece
280	ACHB-280	1 piece

Other information

Thickness tolerance

AF-1, AF-2: ± 1.0 mm  
 AF-3, AF-4: ± 1.5 mm  
 AF-5: ± 2.5 mm  
 AF-6: ± 3.0 mm

Remarks

Other items can be made to order upon request.

Prefabricated part – t-piece. Silver. T-piece fitting (covering without insulation)

Outer diameter [mm]	Item	Content [quantity]
52	ACHT-052	1 piece
57	ACHT-057	1 piece
67	ACHT-067	1 piece
73	ACHT-073	1 piece
82	ACHT-082	1 piece
88	ACHT-088	1 piece
93	ACHT-093	1 piece
100	ACHT-100	1 piece
102	ACHT-102	1 piece
108	ACHT-108	1 piece
116	ACHT-116	1 piece
120	ACHT-120	1 piece
128	ACHT-128	1 piece
136	ACHT-136	1 piece
140	ACHT-140	1 piece
149	ACHT-149	1 piece
156	ACHT-156	1 piece
169	ACHT-169	1 piece
176	ACHT-176	1 piece



Prefabricated part – t-piece. Silver. T-piece fitting (covering without insulation)

Outer diameter [mm]	Item	Content [quantity]
189	ACHT-189	1 piece
194	ACHT-194	1 piece
214	ACHT-214	1 piece
245	ACHT-245	1 piece

Other information

Thickness tolerance	AF-1, AF-2: $\pm 1,0$ mm AF-3, AF-4: $\pm 1,5$ mm AF-5: $\pm 2,5$ mm AF-6: $\pm 3,0$ mm
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Remarks	Other items can be made to order upon request.
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Tape – self-adhesive. Silver. Composite aluminium tape

Item	Description	Thickness [mm]	Width [mm]	Length [m]	Content [quantity]
ACH-PSATAPES-30	AL tape in width: 30mm, length: 25m, thickness: 0.08	0.08	30	25	10 roll
ACH-PSATAPES-50	AL tape in width: 50mm, length: 50m, thickness: 0.08	0.08	50	50	6 roll

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## ABOUT ARMACELL

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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](http://www.armacell.com)