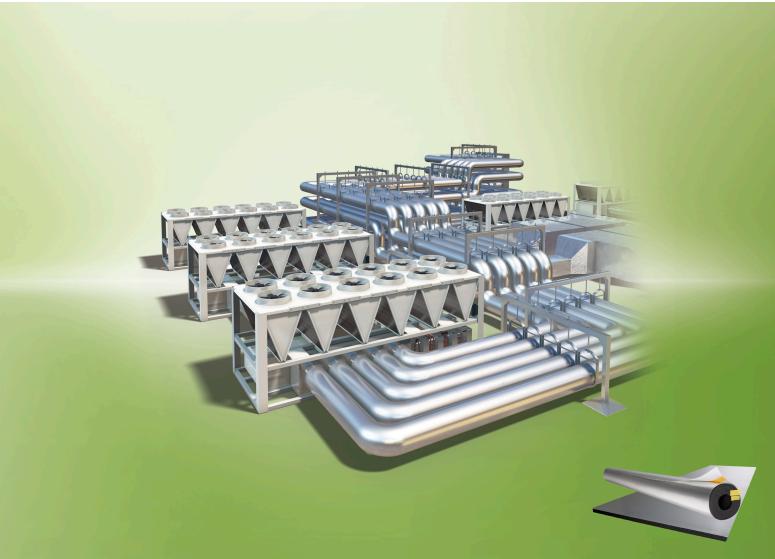


#### **FLEXIBLE MECHANICAL PROTECTION**



- Insulation and covering in one product
- Saves installation time
- Easy to clean
- $\cdot$  Full system with Tape, Elbows and T-Parts
- Good chemical resistance

#### 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 <a href="http://youtu.be/x0nHyDRcEzo">http://youtu.be/x0nHyDRcEzo</a> 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**

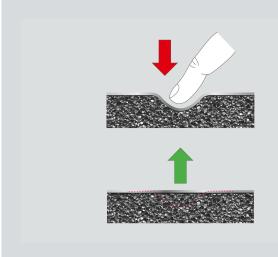
The UV-resistance of Arma-Chek Silver is constantly tested with Weather-O-Meter equipment according to ISO 4892. The samples are exposed to simulated weather for at least 15000 hours, which equals estimated 15 years of outdoor application in Central Europe.



#### 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.



#### Technical Data - Arma-Chek Silver

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. Brief description

Material type

Insulation: Highly flexible, closed-cell elastomeric foam material based on synthetic rubber. Covering: double layer laminate of aluminium, coated with a special UV protection and a PVC backing.

Colour silver (covering)

Product Range Arma-Chek Silver is available in a range of pre-insulated tubes & sheets, as well as single covering incl. pre-insulated bends & t-pieces.

Applications Insulation and protection of pipes, ducts, valves and vessels of refrigeration and air conditioning equipments, clean room environments, food

For outdoor use please note: Testing regarding UV resistance of these materials showed excellent results. When used on outdoor applications the materials showed very good durability even under UV exposition. However, due to the unpredictable nature of outdoor conditions in the whole variety of thinkable installations, there might be occasional weathering influences on the materials' consistence, which can not be tested in advance. Therefore, installations in extreme environments (regions of extreme weather conditions like high mountains etc.) can not be recommended. In Special Features

case of doubt please contact our Customer Service.

The Armaflex and Arma-Chek installation manuals should be consulted before assembly. We offer special installation courses for the application of Arma-Chek. Please consult our Customer Service. Assembly

Remarks Declaration of Performance is available in accordance with Article 7(3) of Regulation (EU) No 305/2011 on our homepage: www.armacell.com/

Property	Value/Assessment				Test*1	Special Remark
Temperature Range						
Temperature Range <sup>1</sup>	max. service temperature	+110 °C for subs sheet is glued to its whole surface	the object with	(+75 °C for the silver jacketing)	EU 5695	Tested acc. to EN 14706, EN 14707 and EN 14304
Thermal Conductivity	min. service temperature <sup>2</sup>	-25 °C				
,					ELL ECOE	Darland and to
Thermal Conductivity	depends on used Armaflex substra	ite			EU 5695 EU 6430	Declared acc. to EN ISO 13787 Tested acc. to EN 12667 EN ISO 8497
Water vapour diffusion	n resistance					
Water vapour diffusion resistance	sheets and tubes µ		≥	15.000	EU 5695	Tested according to EN ISO 12086, EN 13469
Fire performance						
Reaction to fire	Arma-Chek Silver (AF) tubes		$C_L$ -s3, d0		EU 5695	EN 13823
	Arma-Chek Silver (AF) sheets 13 -	25 mm	C-s3, d0			EN ISO 11925-2
	Arma-Chek Silver (AF) sheets 32 -	50 mm	D-s3, d0			
	Arma-Chek Silver (ACE) tubes and	d sheets	E			
Other technical featur	es					
Dimensions and tolerances	In acc. with EN 14304, Table 1 (An	maflex substrate)			EU 5695	Tested acc. to EN 822, EN 823, EN 13467
Weight	approx. 340 g/m² (covering)					Tested according to EN 22286
Material thickness	approx. 230 μm					Tested according to EN 22286
Resistence to mechanical impact	Good puncture and tear resistance	e.				
UV resistance <sup>3</sup>	Excellent				TB 142	Tested according to EN ISO 4892-2 (Xenon-Test)
Tear strength	MD 70 N CD 28 N					Tested acc. to EN ISO 527-3
Health aspects	Dust and fibre free.					
Storage & Shelf life	Tape, sheets, tubes, self-adhesive	: 1 year				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.

All data and technical information are based on results achieved under typical application conditions. Recipients of this information should, in their own interest and responsibility, clarify with us in due time whether or not the data and information apply to the intended application area. Installation instructions are available in our Arma-Chek installation manual. Please consult our Customer Service Center before insulating stainless steels. Armaflex 520 adhesive and Clipse must be used to guarantee proper installation.

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

<sup>\*1</sup> Further documents such as test certificates, approvals and the like can be requested using the registration number given.

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

#### LENZING, AUSTRIA

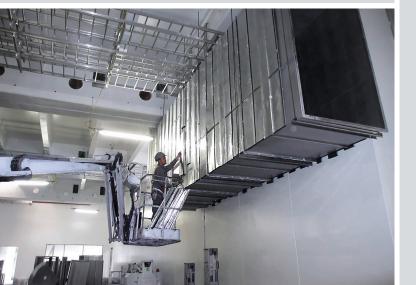
The Lenzing Group's newlyocell fibre plant is record-breaking: in just 24 months the most modern fibre production facilities in the world were constructed at the company headquarters.





#### **CHALLENGE**

Part of the new patented TENCEL® line is an innovative airhandling 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."

## Arma-Chek Silver (AF) tubes self-adhesive pre-covered



Length 1,0 m

Pipe max. Outside-Ø [mm]	Inner Ø min/ max mm	AF-2 insulation thickness 11,5 mm - 16,0 mm		Insulation	AF-4 thickness 17,0 mm	- 25,0 mm	
		Insulation thickness [mm]	Code	m/carton	Insulation thickness [mm]	Code	m/carton
15	16,0 - 17,5	11,5	AFSI-2-015 ○	65	17,0	AFSI-4-015	44
18	19,0 - 20,5	11,5	AFSI-2-018	60	17,5	AFSI-4-018	35
22	23,0 - 24,5	12,0	AFSI-2-022	50	18,0	AFSI-4-022	30
28	29,0 - 30,5	12,5	AFSI-2-028	42	19,0	AFSI-4-028	24
35	36,0 - 38,0	13,0	AFSI-2-035	31	19,5	AFSI-4-035	18
42	43,5 - 45,5	13,5	AFSI-2-042	24	20,5	AFSI-4-042	16
48	49,5 - 51,5	13,5	AFSI-2-048	22	21,0	AFSI-4-048	12
54	55,0 - 57,0	13,5	AFSI-2-054	18	21,0	AFSI-4-054	12
60	61,5 - 63,5	14,0	AFSI-2-060	16	21,5	AFSI-4-060	10
64	65,0 - 67,5	14,0	AFSI-2-064	15	21,5	AFSI-4-064	9
76	77,0 - 79,5	14,0	AFSI-2-076	14	22,0	AFSI-4-076	8
89	90,5 - 93,5	14,5	AFSI-2-089	11	22,5	AFSI-4-089	6
114	116,0 - 120,0	15,0	AFSI-2-114 ○ ●	8	23,5	AFSI-4-114 ○ ●	5
140	142,0 - 146,0	15,5	AFSI-2-140 ○●	4	24,5	AFSI-4-140 ○●	3
168	170,0 - 176,0	-	-	-	25,0	AFSI-4-168 ○●	2

Pipe max. Outside-Ø [mm]	Inner Ø min/ max mm	insulation	AF-5 insulation thickness 25,0 mm - 33,0 mm				
		Insulation thickness [mm]	Code	m/carton			
18	19,0 - 20,5	25,0	AFSI-5-018	21	-	-	-
22	23,0 - 24,5	25,0	AFSI-5-022	18	-	-	-
28	29,0 - 30,5	25,0	AFSI-5-028	18	-	-	-
35	36,0 - 38,0	27,0	AFSI-5-035	12	-	-	-
42	43,5 - 45,5	27,0	AFSI-5-042	11	-	-	-
48	49,5 - 51,5	27,5	AFSI-5-048	8	-	-	-
54	55,0 - 57,0	28,5	AFSI-5-054	8	-	-	-
60	61,5 - 63,5	29,0	AFSI-5-060	6	-	-	-
64	65,0 - 67,5	29,0	AFSI-5-064	6	-	-	-
76	77,0 - 79,5	30,0	AFSI-5-076	5	-	-	-
89	90,5 - 93,5	30,5	AFSI-5-089	4	-	-	-
114	116,0 - 120,0	31,5	AFSI-5-114 ○●	3	-	-	-
140	142,0 - 146,0	32,0	AFSI-5-140 ○●	3	-	-	-
168	170,0 - 176,0	33,0	AFSI-5-168 ○●	2	-	-	-

Length tolerance for tubes +/- 1,5%

Thickness tolerance ≤ 8 mm: ±1,0 mm 9 -18 mm +1.5 mm

9 -18 mm: ±1,5 mm 19 - 31 mm: ±2,5 mm > 31 mm: ±3,0 mm

o In the case of this item the seam is not self-adhesive and is achieved width a radial cut surface.

• Item not in stock. Delivery on request. [MTO]

## Arma-Chek Silver (AF) sheets endless pre-covered



Width 1,0 m

Code	Insulation thickness [mm]	Roll length [m]	m²/carton
AFSI-13MM/E	13,0	8	8
AFSI-19MM/E	19,0	6	6
AFSI-25MM/E	25,0	4	4
AFSI-32MM/E	32,0	3	3

Length tolerance for sheets +/- 1,5%

Thickness tolerance for sheets ≤ 6 mm: ±1,0 mm 7 - 19 mm: ±1,5 mm > 19 mm: ±2,0 mm

## Arma-Chek Silver (AF) sheets endless self-adhesive pre-covered



Width 1,0 m

Code	Insulation thickness [mm]	Roll length [m]	m²/carton
AFSI-13MM/EA ●	13,0	8	8
AFSI-19MM/EA ●	19,0	6	6
AFSI-25MM/EA ●	25,0	4	4
AFSI-32MM/EA ●	32,0	3	3

Length tolerance for sheets

+/- 1,5%

Thickness tolerance for sheets

≤ 6 mm: ±1,0 mm 7 -19 mm: ±1,5 mm > 19 mm: ±2,0 mm

±2,0 mm

• Item not in stock. Delivery on request. [MTO]

### **Arma-Chek Silver covering endless**



Color silver, Covering foil

Code	Width [mm]	Roll length [m]	Rolls/carton	m²/carton
ACH-SI25	1.040,0	25	2	52
ACH-SI25/100	100,0	25	4	10

#### **Arma-Chek Silver elbows pre-fabricated**



Color silver, Elbow fitting (covering without insulation)

Color silver, Eldow fitting (covering without insulation)								
Pipe max. Outside-Ø [mm]		AF-2		AF-4				
	insulation	on thickness 11,5 mm - 16,0 mm	insulatio	on thickness 15,5 mm - 25,0 mm				
	Code	Pieces/carton	Code	Pieces/carton				
15	ACHB-040	1	ACHB-050	1				
18	ACHB-040	1	ACHB-060	1				
22	ACHB-050	1	ACHB-060	1				
28	ACHB-050	1	ACHB-070	1				
35	ACHB-060	1	ACHB-080	1				
42	ACHB-070	1	ACHB-080	1				
48	ACHB-080	1	ACHB-090	1				
54	ACHB-080	1	ACHB-100	1				
60	ACHB-090	1	ACHB-110	1				
64	ACHB-100	1	ACHB-110	1				
76	ACHB-110	1	ACHB-120	1				
89	ACHB-130 ◆	1	ACHB-140	1				
114	ACHB-150 ◆	1	ACHB-160 ◆	1				
140	ACHB-180 ◆	1	ACHB-200 ◆	1				
168	ACHB-210 ●	1	ACHB-220 ●	1				

Pipe max. Outside-Ø [mm]	AF-5 insulation thickness 25,0 mm - 32,0 mm			
	Code	Pieces/carton		
18	ACHB-070	1	-	-
22	ACHB-080	1	-	-
28	ACHB-080	1	-	-
35	ACHB-090	1	-	-
42	ACHB-100	1	-	-
48	ACHB-100	1	-	-
54	ACHB-110	1	-	-
60	ACHB-120	1	-	-
64	ACHB-120	1	-	-
76	ACHB-130 ●	1	-	-
89	ACHB-160 ●	1	-	-
114	ACHB-180 ◆	1	-	-
140	ACHB-210 ◆	1	-	-
168	ACHB-230	1	-	-

• Item not in stock. Delivery on request. [MTO]

## **Arma-Chek Silver elbows pre-fabricated**



Color black, Elastomeric pre-fabricated elbows

Pipe max. Outside-Ø [mm]	e-Ø insulation thickness				AF-4 insulation thickness			
[iiiiii]	Code	Thickness [mm]	Article description	Pieces/carton	Code	Thickness [mm]	Article description	Pieces/carton
15	AF-2-015-C90 •	11,5	3 segment	3	AF-4-015-C90 ●	17	3 segment	3
18	AF-2-018-C90 •	11,5	3 segment	3	AF-4-018-C90 •	17,5	3 segment	3
22	AF-2-022-C90 •	12	3 segment	3	AF-4-022-C90 ●	18	3 segment	3
28	AF-2-028-C90 •	12,5	3 segment	3	AF-4-028-C90 ●	19	3 segment	3
35	AF-2-035-C90 •	13,0	3 segment	3	AF-4-035-C90 ●	19,5	3 segment	3
42	AF-2-042-C90 •	13,5	3 segment	3	AF-4-042-C90 •	20,5	4 segment	3
48	AF-2-048-C90 •	13,5	3 segment	3	AF-4-048-C90 ●	21	4 segment	3
54	AF-2-054-C90 •	13,5	3 segment	3	AF-4-054-C90 ●	21	4 segment	3
60	AF-2-060-C90 •	14	3 segment	3	AF-4-060-C90 ●	21,5	4 segment	3
64	AF-2-064-C90 •	14	4 segment	3	AF-4-064-C90 •	21,5	4 segment	3
76	AF-2-076-C90 •	14	4 segment	3	AF-4-076-C90 •	22	4 segment	3
89	AF-2-089-C90 •	14,5	4 segment	3	AF-4-089-C90 •	22,5	4 segment	3

Pipe max. Outside-Ø		AF-4 insulation the						
[mm]	Code	Thickness [mm]	Article description	Pieces/carton				
18	AF-5-018-C90 •	25	3 segment	3	-	-	-	-
22	AF-5-022-C90 •	25	3 segment	3	-	-	-	-
28	AF-5-028-C90 •	25	4 segment	3	-	-	-	-
35	AF-5-035-C90 •	27	4 segment	3	-	-	-	-
42	AF-5-042-C90 •	27	4 segment	3	-	-	-	-
48	AF-5-048-C90 •	27,5	4 segment	3	-	-	-	-
54	AF-5-054-C90 •	28,5	4 segment	3	-	-	-	-
60	AF-5-060-C90 •	29	4 segment	3	-	-	-	-
64	AF-5-064-C90 •	29	4 segment	3	-	-	-	-
76	AF-5-076-C90 •	30	4 segment	3	-	-	-	-
89	AF-5-089-C90 •	30,5	4 segment	3	-	-	-	-

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

Remark

Other items can be produced make to order.

• Item not in stock. Delivery on request. [MTO]

## Arma-Chek Silver t-pieces pre-fabricated



Color silver, T-piece fitting (covering without insulation)

Color silver, 1-piece fitting (covering without insulation)									
Pipe max. Outside-Ø [mm]	insula	AF-2 ation thickness 11,5 mm - 16,0 mm	Insula	AF-4 ation thickness 17,0 mm - 25,0 mm					
	Code	Pieces/carton	Code	Pieces/carton					
18	-	-	ACHT-052	1					
22	ACHT-052	1	ACHT-057	1					
28	ACHT-052	1	ACHT-067	1					
35	ACHT-057	1	ACHT-073	1					
42	ACHT-067	1	ACHT-082	1					
48	ACHT-073	1	ACHT-093	1					
54	ACHT-082	1	ACHT-100	1					
60	ACHT-088	1	ACHT-102	1					
64	ACHT-100	1	ACHT-108	1					
76	ACHT-102	1	ACHT-120	1					
89	ACHT-116	1	ACHT-136	1					
114	ACHT-149	1	ACHT-156	1					
140	ACHT-176	1	ACHT-189	1					
168	ACHT-214	1	ACHT-214	1					

## Arma-Chek Silver t-pieces pre-fabricated



Color silver, T-piece fitting (covering without insulation)

Pipe max. Outside-Ø [mm]	AF-5 insulation thickness 25,0 mm - 33,0 mm			
	Code	Pieces/carton		
18	ACHT-067	1	-	-
22	ACHT-073	1	-	-
28	ACHT-082	1	-	-
35	ACHT-093	1	-	-
42	ACHT-093	1	-	-
48	ACHT-100	1	-	-
54	ACHT-102	1	-	-
60	ACHT-116	1	-	-
64	ACHT-120	1	-	-
76	ACHT-128	1	-	-
89	ACHT-140	1	-	-
114	ACHT-169	1	-	-
140	ACHT-194	1	-	-
168	ACHT-245	1	-	-

## Arma-Chek Silver t-pieces pre-fabricated



Color black, Elastomeric pre-fabricated T-pieces

Pipe max. Outside-Ø	AF-2 insulation thickness				AF-4 insulation thickness			
[mm]	Code	Thickness [mm]	Article description	Pieces/carton	Code	Thickness [mm]	Article description	Pieces/carton
15	AF-2-015-T90 ◆	11,5	2 segment	3	AF-4-015-T90 ●	17	2 segment	3
18	AF-2-018-T90 •	11,5	2 segment	3	AF-4-018-T90 •	17,5	2 segment	3
22	AF-2-022-T90 •	12	2 segment	3	AF-4-022-T90 ●	18	2 segment	3
28	AF-2-028-T90 •	12,5	2 segment	3	AF-4-028-T90 •	19	2 segment	3
35	AF-2-035-T90 •	13	2 segment	3	AF-4-035-T90 ●	19,5	2 segment	3
42	AF-2-042-T90 •	13,5	2 segment	3	AF-4-042-T90 •	20	2 segment	3
48	AF-2-048-T90 ●	13,5	2 segment	3	AF-4-048-T90 ●	21	2 segment	3
54	AF-2-054-T90 •	13,5	2 segment	3	AF-4-054-T90 ●	21	2 segment	3
60	AF-2-060-T90 •	14	2 segment	3	AF-4-060-T90 ●	21,5	2 segment	3
64	AF-2-064-T90 ●	14	2 segment	3	AF-4-064-T90 ●	21,5	2 segment	3
76	AF-2-076-T90 ◆	14	2 segment	3	AF-4-076-T90 ●	22	2 segment	3
89	AF-2-089-T90 •	14,5	2 segment	3	AF-4-089-T90 •	22	2 segment	3

Pipe max. Outside-Ø	AF-5 insulation thickness							
[mm]	Code	Thickness [mm]	Article description	Pieces/carton				
18	AF-5-018-T90 •	25	2 segment	3	-	-	-	-
22	AF-5-022-T90 ◆	25	2 segment	3	-	-	-	-
28	AF-5-028-T90 •	25	2 segment	3	-	-	-	-
35	AF-5-035-T90 ●	27	2 segment	3	-	-	-	-
42	AF-5-042-T90 •	27	2 segment	3	-	-	-	-
48	AF-5-048-T90 •	27,5	2 segment	3	-	-	-	-
54	AF-5-054-T90 ◆	28,5	2 segment	3	-	-	-	-
60	AF-5-060-T90 ◆	29	2 segment	3	-	-	-	-
64	AF-5-064-T90 •	29	2 segment	3	-	-	-	-
76	AF-5-076-T90 ◆	30	2 segment	3	-	-	-	-
89	AF-5-089-T90 •	30,5	2 segment	3	-	-	-	-

**Thickness tolerance** AF-1, AF-2: ± 1,0 mr

AF-1, AF-2: ± 1,0 mm AF-3, AF-4: ± 1,5 mm AF-5: ± 2,5 mm AF-6: ± 3,0 mm

**Remark** Other items can be produced make to order.

• Item not in stock. Delivery on request. [MTO]

## Arma-Chek Silver tapes self-adhesive



Covering Color silver, Composite aluminium tape

Code	Width [mm]	Length [m]	Thickness [mm]	Rolls/carton	
ACH-PSATAPES-30	30,0	25	0.08	10	
ACH-PSATAPES-50	50,0	50	0.08	6	

notes