

Armaflex®
TuffCoat

MADE TO WITHSTAND MECHANICAL
IMPACT



- Protection against mechanical impact
- Can be used on underground pipework, including mains cold water and ground source heat pump pipes
- Wash-down waterproof and easy to clean
- Built-in vapour barrier prevents condensation

- No additional painting required
- UV resistant
- Microban® Antimicrobial Protection

 **Microban®**
antibacterial protection



Technical Data - Armaflex Tuffcoat

Brief description	AF/Armaflex Class O with polymeric covering for protection against mechanical impact					
Material type	Foamed nitrile rubber with polymeric covering					
Colour	Black or white covering (other colours available on request)					
Product Range	Product Modification 2014: Armaflex Tuffcoat tubes are now supplied in 1m lengths with a section of the Tuffcoat film un-adhered to the Armaflex tube and covered with a self-adhesive backing for sealing the covering in place on-site. This is to improve the ease of slitting and re-sealing tubes onto existing pipework (without having to cut through the Tuffcoat covering) and to make it easier to stretch the tube over new pipework					
Applications	<p>Insulation for hot and cold water services, chilled water lines, heating systems, air conditioning and refrigerated pipework to provide condensation control, energy conservation and frost protection.</p> <p>Easy to wipe clean and wash down - suitable for food manufacturing, hospitals and schools.</p> <p>Suitable for outdoor use since covering provides additional protection against UV damage and bird attack.</p> <p>Can be used underground - including on mains cold water and ground source heat pump pipes.</p>					
Special Features	For Outside applications NO additional coating is necessary.					
Safety and Environment	<p>ODP zero</p> <p>GWP zero</p> <p>Fibre dust free</p>					
Property	Value/Assessment		Test¹	Super-vision²	Special Remarks	
Temperature Range						
Temperature Range ¹	Max. service temperature	+110 °C	EU 5412		According to EN 14706, EN 14707 + EN14304	
	Min. service temperature	-50 °C				
Thermal Conductivity						
Thermal Conductivity	ϑ_m +/-0	°C	$\lambda =$	EU 5412	Tested acc. to EN ISO 8497 + EN 12667	
	Tubes 6-19mm	$\lambda \leq 0.033$	W/(m · K)			$[33 + 0,1 \cdot \vartheta_m + 0,0008 \cdot \vartheta_m^2]/1000$
	Sheets 13 - 25mm	$\lambda \leq 0.033$	W/(m · K)			$[33 + 0,1 \cdot \vartheta_m + 0,0008 \cdot \vartheta_m^2]/1000$
	Tubes 25mm	$\lambda \leq 0.036$	W/(m · K)	$[33 + 0,1 \cdot \vartheta_m + 0,0008 \cdot \vartheta_m^2]/1000$		
Water vapour diffusion resistance						
Water vapour diffusion resistance	tubes & sheet	μ	\geq	15,000	EU 5412	Tested acc. to EN 12086 EN 13469
Fire performance						
Reaction to fire ²	Surface Spread of Flames	Class 1*		GB5151 / GB5153	o/●	Surface Spread of Flame acc. to BS 476 Part 7: 1997
	Fire Propagation	Total Index Performance (I) \leq 12				
		Sub Index (i ₁) \leq 6		GB5150 / GB5152		Fire Propagation acc. to BS 476 Part 6: 1989
	Fire Performance acc. to Building Regulation	Class 0*				
Euroclass	E				Classified acc. to EN 13501-1	
						Tested acc. to EN ISO 11925-2
Other technical features						
Dimensions and tolerances	In accordance with EN 14304, table 1					
Resistance to mechanical impact	Very Good					
Chemical behaviour	Consult Product Test List					
UV resistance	Excellent					
Antimicrobial behaviour	In-built Microban® antimicrobial protection : No fungal growth observed					

1. For temperatures above +110 °C, please consult our Customer Service Center for further information.

2. *Class O Armaflex insulation and Tuffcoat covering both Class O fire rated.

*1 Further documents such as test certificates and approvals can be requested using the registration number given.

*2 ●: Official supervision by independent institutes and /or test authorities
o: In-house quality monitoring

All statements and technical information are based on results obtained under typical conditions. It is the responsibility of the recipient to verify with us that the information is appropriate for the specific use intended. Please consult our Technical Department before insulating stainless steel. Armaflex 520 adhesive must be used to guarantee correct installation.

Armaflex Tuffcoat tubes



Product Modification 2014: Armaflex Tuffcoat tubes are now supplied in 1m lengths with a section of the Tuffcoat film un-adhered to the Armaflex tube and covered with a self-adhesive backing for sealing the covering in place on-site. This is to improve the ease of slitting and re-sealing tubes onto existing pipework (without having to cut through the Tuffcoat covering) and to make it easier to stretch the tube over new pipework

Pipe max. Outside-Ø [mm]	Inner Ø min/max mm (tube)	White 13,0 mm insulation thickness		Black 13,0 mm insulation thickness	
		Code	m/carton	Code	m/carton
10	11.0 - 13.0	CO-13X010/WH-1M ●	94	CO-13X010/BK-1M ●	94
12	13.0 - 15.0	CO-13X012/WH-1M ●	81	CO-13X012/BK-1M ●	81
15	16.0 - 18.0	CO-13X015/WH-1M ●	68	CO-13X015/BK-1M ●	68
20	21.0 - 23.0	CO-13X020/WH-1M ●	56	CO-13X020/BK-1M ●	56
22	23.0 - 25.0	CO-13X022/WH-1M ●	52	CO-13X022/BK-1M ●	52
28	29.0 - 31.5	CO-13X028/WH-1M ●	39	CO-13X028/BK-1M ●	39
35	36.0 - 38.5	CO-13X035/WH-1M ●	30	CO-13X035/BK-1M ●	30
42	43.0 - 46.0	CO-13X042/WH-1M ●	28	CO-13X042/BK-1M ●	28
48	49.0 - 51.5	CO-13X048/WH-1M ●	20	CO-13X048/BK-1M ●	20
54	55.0 - 58.0	CO-13X054/WH-1M ●	21	CO-13X054/BK-1M ●	21
60	61.0 - 64.0	CO-13X060/WH-1M ●	18	CO-13X060/BK-1M ●	18
67	68.0 - 71.0	CO-13X067/WH-1M ●	17	CO-13X067/BK-1M ●	17

Pipe max. Outside-Ø [mm]	Inner Ø min/max mm (tube)	White 19,0 mm insulation thickness		Black 19,0 mm insulation thickness	
		Code	m/carton	Code	m/carton
12	13.0 - 15.0	CO-19X012/WH-1M ●	46	CO-19X012/BK-1M ●	46
15	16.0 - 18.0	CO-19X015/WH-1M ●	39	CO-19X015/BK-1M ●	39
20	21.0 - 23.0	CO-19X020/WH-1M ●	35	CO-19X020/BK-1M ●	35
22	23.0 - 25.0	CO-19X022/WH-1M ●	32	CO-19X022/BK-1M ●	32
28	29.0 - 31.5	CO-19X028/WH-1M ●	25	CO-19X028/BK-1M ●	25
35	36.0 - 38.5	CO-19X035/WH-1M ●	20	CO-19X035/BK-1M ●	20
42	43.0 - 46.0	CO-19X042/WH-1M ●	16	CO-19X042/BK-1M ●	16
48	49.0 - 51.5	CO-19X048/WH-1M ●	15	CO-19X048/BK-1M ●	15
54	55.0 - 58.0	CO-19X054/WH-1M ●	12	CO-19X054/BK-1M ●	12
60	61.0 - 64.0	CO-19X060/WH-1M ●	12	CO-19X060/BK-1M ●	12
67	68.0 - 71.0	CO-19X067/WH-1M ●	10	CO-19X067/BK-1M ●	10
76	77.0 - 80.0	CO-19X076/WH-1M ●	9	CO-19X076/BK-1M ●	9
80	81.0 - 84.0	CO-19X080/WH-1M ●	8	CO-19X080/BK-1M ●	8
89	90.0 - 93.0	CO-19X089/WH-1M ●	8	CO-19X089/BK-1M ●	8
93	94.0 - 97.0	CO-19X093/WH-1M ●	8	CO-19X093/BK-1M ●	8
108	110.0 - 114.0	CO-19X108/WH-1M ●	6	CO-19X108/BK-1M ●	6
114	116.0 - 120.0	CO-19X114/WH-1M ●	6	CO-19X114/BK-1M ●	6

Pipe max. Outside-Ø [mm]	Inner Ø min/max mm (tube)	25,0 mm [white] insulation thickness		25,0 mm [black] insulation thickness	
		Code	m/carton	Code	m/carton
12	13.0 - 15.0	CO-25X012/WH-1M ●	25	CO-25X012/BK-1M ●	25
15	16.0 - 18.0	CO-25X015/WH-1M ●	24	CO-25X015/BK-1M ●	24
20	21.0 - 23.0	CO-25X020/WH-1M ●	20	CO-25X020/BK-1M ●	20
22	23.0 - 25.0	CO-25X022/WH-1M ●	20	CO-25X022/BK-1M ●	20
28	29.0 - 31.5	CO-25X028/WH-1M ●	16	CO-25X028/BK-1M ●	16
35	36.0 - 38.5	CO-25X035/WH-1M ●	12	CO-25X035/BK-1M ●	12
42	43.0 - 46.0	CO-25X042/WH-1M ●	12	CO-25X042/BK-1M ●	12
48	49.0 - 51.5	CO-25X048/WH-1M ●	11	CO-25X048/BK-1M ●	11
54	55.0 - 58.0	CO-25X054/WH-1M ●	9	CO-25X054/BK-1M ●	9
60	61.0 - 64.0	CO-25X060/WH-1M ●	9	CO-25X060/BK-1M ●	9
67	68.0 - 71.0	CO-25X067/WH-1M ●	8	CO-25X067/BK-1M ●	8
76	77.0 - 80.0	CO-25X076/WH-1M ●	7	CO-25X076/BK-1M ●	7
80	81.0 - 84.0	CO-25X080/WH-1M ●	6	CO-25X080/BK-1M ●	6
89	90.0 - 93.0	CO-25X089/WH-1M ●	6	CO-25X089/BK-1M ●	6
93	94.0 - 97.0	CO-25X093/WH-1M ●	6	CO-25X093/BK-1M ●	6
108	110.0 - 114.0	CO-25X108/WH-1M ●	4	CO-25X108/BK-1M ●	4
114	116.0 - 120.0	CO-25X114/WH-1M ●	4	CO-25X114/BK-1M ●	4

Remark Other colours available on request.

● Not a stock item. Delivery on request.

Armaflex Tuffcoat pre-covered sheet



Black					White				
Code	Thickness [mm]	Width [m]	Pieces/ carton	m ² /carton	Code	Thickness [mm]	Width [m]	Pieces/ carton	m ² /carton
CO-13MM/BK ●	13.0	0.5	9	9	CO-13MM/WH ●	13.0	0.5	9	9
CO-19MM/BK ●	19.0	0.5	7	7	CO-19MM/WH ●	19.0	0.5	7	7
CO-25MM/BK ●	25.0	0.5	5	5	CO-25MM/WH ●	25.0	0.5	5	5

Length tolerance for sheets ± 1,5 %

Thickness tolerance for sheets 13 - 19 mm ± 1,5 mm
>19 mm ± 2,0 mm

Remark Other colours available on request

● Not a stock item. Delivery on request.

Armaflex Tuffcoat pre-covered self-adhesive sheet



Black					White				
Code	Thickness [mm]	Width [m]	Pieces/ carton	m ² /carton	Code	Thickness [mm]	Width [m]	Pieces/ carton	m ² /carton
CO-13MM/A-BK ●	13.0	0.5	9	9	CO-13MM/A-WH ●	13.0	0.5	9	9
CO-19MM/A-BK ●	19.0	0.5	7	7	CO-19MM/A-WH ●	19.0	0.5	7	7
CO-25MM/A-BK ●	25.0	0.5	5	5	CO-25MM/A-WH ●	25.0	0.5	5	5

Length tolerance for sheets ± 1,5 %

Thickness tolerance for sheets 13 - 19 mm ± 1,5 mm
>19 mm ± 2,0 mm

● Not a stock item. Delivery on request.

Armaflex Tuffcoat pre-covered endless sheets (rolls)



Black				White			
Code	Thickness [mm]	Roll length [m]	m ² /carton	Code	Thickness [mm]	Roll length [m]	m ² /carton
CO-13MM/E-BK ●	13.0	8	8	CO-13MM/E-WH ●	13.0	8	8
CO-19MM/E-BK ●	19.0	6	6	CO-19MM/E-WH ●	19.0	6	6
CO-25MM/E-BK ●	25.0	4	4	CO-25MM/E-WH ●	25.0	4	4

Length tolerance for sheets ± 5 % - 1.5%

Thickness tolerance for sheets 13 - 19 mm ± 1,5 mm
>19 mm ± 2,0 mm

● Not a stock item. Delivery on request.

Armaflex Tuffcoat pre-covered endless sheets self-adh (rolls)



Black				White			
Code	Thickness [mm]	Roll length [m]	m ² /carton	Code	Thickness [mm]	Roll length [m]	m ² /carton
CO-13MM/EA-BK ●	13.0	8	8	CO-13MM/EA-WH ●	13.0	8	8
CO-19MM/EA-BK ●	19.0	6	6	CO-19MM/EA-WH ●	19.0	6	6
CO-25MM/EA-BK ●	25.0	4	4	CO-25MM/EA-WH ●	25.0	4	4

Length tolerance for sheets ± 5 % - 1.5%

Thickness tolerance for sheets 13 - 19 mm ± 1,5 mm
>19 mm ± 2,0 mm

● Not a stock item. Delivery on request.

Armaflex Tuffcoat covering rolls



Code	Thickness [mm]	Width [mm]	Length [m]	m ² /roll	
TC-BK-1M/100M •	1	1,000.0	100	100	
TC-WH-1M/100M •	1	1,000.0	100	100	

• Not a stock item. Delivery on request.

Armaflex Tuffcoat self-adhesive tapes



Code	Colour	Width [mm]	Length [m]	Thickness [mm]	Rolls/carton	
TUFF-TP-12,5/BK •	Black	12.5	50	3	16	
TUFF-TP-12,5/WH •	White	12.5	50	3	16	
TUFF-TP-25/BK •	Black	25.0	50	3	8	
TUFF-TP-25/WH •	White	25.0	50	3	8	
TUFF-TP-50/BK •	Black	50.0	50	3	4	
TUFF-TP-50/WH •	White	50.0	50	3	4	

• Not a stock item. Delivery on request.

Armaflex Tuffcoat accessories



Code	Description	Pieces/carton	
ACH-MASTICD •	Mastic black. Sealing compound for installing Arma-Chek, 290 ml	12	
TC-MASTIC •	White mastic. Sealing compound for installing Armaflex Tuffcoat. Food safe, 310 ml.	6	

• Not a stock item. Delivery on request.