

# Class 0 Armaflex®

Flexible insulation to prevent condensation and energy losses



- Reliable condensation control
- Effective reduction of thermal losses
- Built-in Microban® antimicrobial protection reduces mould and bacteria growth
- Class 0 Fire Performance
- Thermal conductivity  $\lambda_{0\text{ }^{\circ}\text{C}} \leq 0.034 \text{ W}/(\text{m} \cdot \text{K})$
- Water vapour resistance  $\mu \geq 7,000$



## Technical Data - Class 0 Armaflex

Brief description	Flexible, closed-cell insulation material with built-in Microban® antimicrobial protection						
Material type	Elastomeric foam based on synthetic rubber						
Colour	Black						
Material Special Information	Self-adhesive coating: pressure-sensitive adhesive coating on modified acrylate basis with mesh structure. Covered with polyethylene film. Traces of silicon can be found on the protective film used on self-adhesive closures.						
Applications	Insulation / protection to control condensation, reduce energy losses and protect against frost on pipes, air ducts, vessels (incl. elbows, fittings, flanges etc). Suitable for hot and cold water services, chilled water lines, heating systems, air conditioning ductwork and refrigerated pipework.						
Safety and Environment	Dust & fibre free						
Assembly	Light weight and flexible. Closed cell structure means no additional vapour barrier is required.						
<b>Property</b>	<b>Value/Assessment</b>	<b>Test<sup>*1</sup></b>	<b>Super- vision<sup>*2</sup></b>	<b>Special Remarks</b>			
<b>Temperature Range</b>							
Temperature Range	Max. service temperature	+ 110 °C (+ 85 °C when sheet or tape is glued to flat surfaces.)	GB 5165 / GB 5164		Tested acc.to EN 14706, EN 14707 and EN 14304		
	Min. service temperature <sup>1</sup>	-50 °C					
<b>Thermal Conductivity</b>							
Thermal Conductivity	$\vartheta_m$	0 [°C]	$\lambda =$	D 4804 GB 5148	Tested acc. to DIN EN 12667 EN ISO 8497		
	$\lambda$	$\leq 0.034$	W/(m · K)	$[34 + 0.1 \cdot \vartheta_m + 0.0008 \cdot \vartheta_m^2]/1,000$			
<b>Water vapour diffusion resistance</b>							
Water vapour diffusion resistance <sup>2</sup>	Sheets	$\mu$	$\geq$	7,000	EU 4950	○	Tested acc. to BS EN ISO 9346:1996 EN 12086 EN 13469
	Tubes	$\mu$	$\geq$	6,000*			
<b>Fire performance</b>							
Reaction to fire <sup>3</sup>	Surface Spread of Flames		Class 1	GB 5151 & GB 5153	○/●	Surface Spread of Flame: tested according to BS 476 Part 7:1997	
	Fire Propagation		Total Index Performance (I) $\leq 12$ Sub Index (i <sub>1</sub> ) $\leq 6$	GB 5150 & GB 5152		Fire Propagation: tested according to BS 476 Part 6:1989	
	Fire Performance acc. to Building Regulations		Class 0				
	Euroclass - sheets		B-s3, d0			Classified acc. to EN 13501-1	
	Euroclass - tubes		B <sub>L</sub> -s3,d0			Tested acc. to EN 13823 EN ISO 11925-2	
Other fire class	FM-approved			D3217 GB4706	●	Tested according to UBC26-3, Class No.4924	
Practical fire behaviour	Self-extinguishing, does not drip, does not spread flames						
Dimensions and tolerances	In accordance with EN 14304, table 1			GB 5164 / GB 5165		Tested acc. to EN 822, EN 823, EN 13467	
Chemical behaviour	Excellent resistance to ozone, oil and chemicals (consult product test list).						
UV resistance	For UV protection Armafinish 99 paint required						
Health aspects	Dust & fibre free			GB 5143			
Antimicrobial behaviour	In-built Microban® antimicrobial protection : No fungal growth observed						
Water Absorption	0.2% by volume					Test acc to ASTM C 209	
Environmental Aspects	ODP zero GWP zero			GB 5143			

1. For temperatures below -50 °C please contact our Technical Department to request the corresponding technical information.

2. \*Tubes (6 - 19mm)

3. The building materials classification is valid on metal or solid, mineral surfaces.

\*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

○: 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. With some refrigerants the discharge temperature may exceed +110 °C, please consult our Technical Department for further information. Armaflex 520 or Armaflex HT 625 Adhesive must be used to guarantee proper installation For outside use, Armaflex should be protected with a suitable outer covering within 3 days of installation

## Class 0 Armaflex tubes



Length 2.0 m, Colour Black

Pipe max. Outside-Ø [mm]	Inner Ø min/ max mm (tube)	6,0 mm		9,0 mm	
		Code	m/carton	Code	m/carton
6	7.0 - 9.0	-	-	CO-09X006	352
10	11.0 - 13.0	CO-06X010	400	CO-09X010	280
12	13.0 - 15.0	CO-06X012	336	CO-09X012	240
15	16.0 - 18.0	CO-06X015	266	CO-09X015	192
20	21.0 - 23.0	-	-	CO-09X020	156
22	23.0 - 25.0	-	-	CO-09X022	140
28	29.0 - 31.5	-	-	CO-09X028	98
35	36.0 - 38.5	-	-	CO-09X035	84
42	43.0 - 46.0	-	-	CO-09X042	60
48	49.0 - 51.5	-	-	CO-09X048	56
54	55.0 - 58.0	-	-	CO-09X054	54
60	61.0 - 64.0	-	-	CO-09X060	42

Pipe max. Outside-Ø [mm]	Inner Ø min/ max mm (tube)	13,0 mm		19,0 mm	
		Code	m/carton	Code	m/carton
6	7.0 - 9.0	CO-13X006	226	-	-
10	11.0 - 13.0	CO-13X010	188	CO-19X010	104
12	13.0 - 15.0	CO-13X012	162	CO-19X012	92
15	16.0 - 18.0	CO-13X015	136	CO-19X015	78
20	21.0 - 23.0	CO-13X020	112	CO-19X020	70
22	23.0 - 25.0	CO-13X022	104	CO-19X022	64
28	29.0 - 31.5	CO-13X028	78	CO-19X028	50
35	36.0 - 38.5	CO-13X035	60	CO-19X035	40
42	43.0 - 46.0	CO-13X042	56	CO-19X042	32
48	49.0 - 51.5	CO-13X048	40	CO-19X048	30
54	55.0 - 58.0	CO-13X054	42	CO-19X054	24
60	61.0 - 64.0	CO-13X060	36	CO-19X060	24
67	68.0 - 71.0	CO-13X067	34	CO-19X067	20
76	77.0 - 80.0	CO-13X076	28	CO-19X076	18
80	81.0 - 84.0	CO-13X080	28	CO-19X080	16
89	90.0 - 93.0	CO-13X089	22	CO-19X089	16
93	94.0 - 97.0	CO-13X093	20	CO-19X093 ●	16
108	110.0 - 114.0	CO-13X108	18	CO-19X108	12
114	116.0 - 120.0	CO-13X114	18	CO-19X114	12

Pipe max. Outside-Ø [mm]	Inner Ø min/ max mm (tube)	25,0 mm		32,0 mm	
		Code	m/carton	Code	m/carton
12	13.0 - 15.0	CO-25X012	50	-	-
15	16.0 - 18.0	CO-25X015	48	CO-32X015 ●	32
20	21.0 - 23.0	CO-25X020	40	-	-
22	23.0 - 25.0	CO-25X022	40	CO-32X022	32
28	29.0 - 31.5	CO-25X028	32	CO-32X028	24
35	36.0 - 38.5	CO-25X035	24	CO-32X035	22
42	43.0 - 46.0	CO-25X042	24	CO-32X042	16
48	49.0 - 51.5	CO-25X048	22	CO-32X048	12
54	55.0 - 58.0	CO-25X054	18	CO-32X054	12
60	61.0 - 64.0	CO-25X060	18	CO-32X060	12
67	68.0 - 71.0	CO-25X067	16	CO-32X067	12
76	77.0 - 80.0	CO-25X076	14	CO-32X076	10
80	81.0 - 84.0	CO-25X080	12	-	-
89	90.0 - 93.0	CO-25X089	12	CO-32X089	8
93	94.0 - 97.0	CO-25X093	12	-	-
108	110.0 - 114.0	CO-25X108	8	-	-
114	116.0 - 120.0	CO-25X114	8	CO-32X114	6

### Remark

All Class 0 Armaflex tubes are available pre-slit. Add 0.05 per metre net after discount has been applied. For ordering add -SLT to above codes (e.g. CO-19X010-SLT).

- Not a stock item. Delivery on request.

## Class 0 Armaflex tubes DHCG



Thicknesses required for adherence to Part L Domestic Heating Compliance Guide regarding the maximum permissible heat losses from central heating pipework

Pipe max. Outside-Ø [mm]	Domestic Heating Compliance Guide Range			
	Max. Permissible Heat loss [W/m]	Thickness [mm]	Code	m/carton
8	7.06	13.0	CO-13X010	188
10	7.06	13.0	CO-13X010	188
12	7.35	19.0	CO-19X012	92
15	7.89	19.0	CO-19X015	78
22	9.12	25.0	CO-25X022	40
28	10.07	25.0	CO-25X028	32
35	11.08	25.0	CO-25X035	24
42	12.19	25.0	CO-25X042	24
54	14.12	32.0	CO-32X054	12

## Class 0 Armaflex self-adhesive tubes (Self Seal)



Supplied pre-slit with two strips of self-adhesive on each seam to speed up installation times.

Pipe max. Outside-Ø [mm]	Inner Ø min/ max mm (tube)	9,0 mm		13,0 mm	
		Code	m/carton	Code	m/carton
15	16.0 - 18.0	CO-09X015-A	192	CO-13X015-A	136
20	21.0 - 23.0	CO-09X020-A •	156	CO-13X020-A	112
22	23.0 - 25.0	CO-09X022-A	140	CO-13X022-A	104
28	29.0 - 31.5	CO-09X028-A	98	CO-13X028-A	78
35	36.0 - 38.5	CO-09X035-A	84	CO-13X035-A	60
42	43.0 - 46.0	CO-09X042-A	60	CO-13X042-A	56
48	49.0 - 51.5	CO-09X048-A •	56	CO-13X048-A	40
54	55.0 - 58.0	CO-09X054-A •	54	CO-13X054-A	42
60	61.0 - 64.0	CO-09X060-A •	42	CO-13X060-A	36
76	77.0 - 80.0	-	-	CO-13X076-A	28
89	90.0 - 93.0	-	-	CO-13X089-A	22

Pipe max. Outside-Ø [mm]	Inner Ø min/ max mm (tube)	19,0 mm		25,0 mm	
		Code	m/carton	Code	m/carton
15	16.0 - 18.0	CO-19X015-A	78	CO-25X015-A •	48
20	21.0 - 23.0	CO-19X020-A	70	CO-25X020-A •	40
22	23.0 - 25.0	CO-19X022-A	64	CO-25X022-A •	40
28	29.0 - 31.5	CO-19X028-A	50	CO-25X028-A •	32
35	36.0 - 38.5	CO-19X035-A	40	CO-25X035-A •	24
42	43.0 - 46.0	CO-19X042-A	32	CO-25X042-A •	24
48	49.0 - 51.5	CO-19X048-A	30	CO-25X048-A •	22
54	55.0 - 58.0	CO-19X054-A	24	CO-25X054-A •	18
60	61.0 - 64.0	CO-19X060-A	24	CO-25X060-A •	18
76	77.0 - 80.0	CO-19X076-A	18	CO-25X076-A •	14
89	90.0 - 93.0	CO-19X089-A	16	CO-25X089-A •	12

• Not a stock item. Delivery on request.

## Class 0 Armaflex tubes endless (coils)



Colour Black, AC Coils supplied contained in a specially designed carton for easy dispense.

Pipe max. Outside-Ø [mm]	6,0 mm AC Coils		9,0 mm AC Coils	
	Code	m/carton	Code	m/carton
6	-	-	AC-09x006/E	70
10	AC-06x010/E	75	AC-09x010/E	50
12	AC-06x012/E	65	AC-09x012/E	45
15	AC-06x015/E	55	AC-09x015/E	40
20	-	-	AC-09x020/E	34
22	-	-	AC-09x022/E	30
28	-	-	AC-09x028/E	26

## Class 0 Armaflex tubes endless (coils)



Colour Black, AC Coils supplied contained in a specially designed carton for easy dispense.

Pipe max. Outside-Ø [mm]	13,0 mm AC Coils			
	Code	m/carton		
6	AC-13x006/E	45	-	-
10	AC-13x010/E	35	-	-
12	AC-13x012/E	32	-	-
15	AC-13x015/E	32	-	-
20	AC-13x020/E	28	-	-
22	AC-13x022/E	26	-	-
28	AC-13x028/E	20	-	-

## Class 0 Armaflex tubes endless (coils)



Colour Black, Coil length 15m, supplied in clear polyethylene bag.

Pipe max. Outside-Ø [mm]	6,0 mm 15 m Coils		9,0 mm 15 m Coils	
	Code	m/carton	Code	m/carton
6	-	-	CO-09X006/E-15	180
10	CO-06X010/E-15	210	CO-09X010/E-15	150
12	CO-06X012/E-15	180	CO-09X012/E-15	135
15	CO-06X015/E-15	135	CO-09X015/E-15	135
20	-	-	CO-09X020/E-15	105
22	-	-	CO-09X022/E-15	90
28	-	-	CO-09X028/E-15	75

Pipe max. Outside-Ø [mm]	13,0 mm 15 m Coils			
	Code	m/carton		
6	CO-13X006/E-15	135	-	-
10	CO-13X010/E-15	105	-	-
12	CO-13X012/E-15	90	-	-
15	CO-13X015/E-15	90	-	-
20	CO-13X020/E-15	90	-	-
22	CO-13X022/E-15	75	-	-
28	CO-13X028/E-15	60	-	-

## Class 0 Armaflex sheets



Length 2.0 m, Width 0.5 m, Colour Black

Code	Thickness [mm]	m <sup>2</sup> /carton
CO-09MM	9.0	13
CO-13MM	13.0	9
CO-19MM	19.0	7
CO-25MM	25.0	5
CO-32MM	32.0	4

## Class 0 Armaflex self-adhesive sheets



Length 2.0 m, Width 0.5 m, Colour Black

Code	Thickness [mm]	m <sup>2</sup> /carton
CO-09MM/A •	9.0	13
CO-13MM/A •	13.0	9
CO-19MM/A •	19.0	7
CO-25MM/A •	25.0	5
CO-32MM/A •	32.0	4

• Not a stock item. Delivery on request.

## Class 0 Armaflex continuous sheets (rolls)



Width 1.0 m, Colour Black

0,50 m width			
Code	Thickness [mm]	Roll length [m]	m <sup>2</sup> /carton
CO-06MM/E-500	6.0	15 x 2	15
CO-09MM/E-500	9.0	10 x 2	10
CO-13MM/E-500	13.0	8 x 2	8
CO-19MM/E-500	19.0	6 x 2	6
CO-25MM/E-500	25.0	4 x 2	4
CO-32MM/E-500	32.0	3 x 2	3

Length tolerance for sheets

± 1,5 %

## Class 0 Armaflex continuous sheets self-adhesive (rolls)



0,50 m width			
Code	Thickness [mm]	Roll length [m]	m <sup>2</sup> /carton
CO-06MM/E-500A •	6.0	15 x 2	15
CO-09MM/E-500A •	9.0	10 x 2	10
CO-13MM/E-500A •	13.0	8 x 2	8
CO-19MM/E-500A •	19.0	6 x 2	6
CO-25MM/E-500A •	25.0	4 x 2	4
CO-32MM/E-500A •	32.0	3 x 2	3

• Not a stock item. Delivery on request.

## Class 0 Armaflex self-adhesive tapes



Code	Width [mm]	Length [m]	Thickness [mm]	Rolls/carton
CO-TAPE	50.0	15	3	12