

Armaflex® MC

THE FLEXIBLE INSULATION WITH A
BUILT-IN VAPOR BARRIER



- Excellent, built-in condensation control due to closed-cell structure
- Low thermal conductivity $\lambda_{0-10} \leq 0.034 \text{ W/(m} \cdot \text{K)}$
- High water vapor resistance $\mu \geq 7,000$
- GREENGUARD® certified for low chemical emissions
- Flexible and fibre-free for easy installation



Technical Data - Armaflex® MC

Brief description	Flexible closed-cell material with microcell technology offers reliable condensation control and excellent thermal conductivity.									
Material type	Elastomeric foam based on nitrile rubber									
Colour	Black									
Applications	Insulation / protection for pipes and ducts of air-conditioning, refrigeration and chilled water systems to prevent condensation and save energy.									
Assembly	The Armaflex® installation manual should be consulted before installation. We offer special installation training for the application of Armaflex®, For outdoor application, Arma-Chek® cladding should be used. Please contact our Technical Department.									
Property	Value/Assessment							Test ^{*1}	Special Remark	
Temperature Range										
Temperature Range	max. service temperature		+ 105 °C		(+ 85 °C if sheet or tape is glued to the object with its whole surface)				For applications between - 50 °C and - 200 °C, please contact our Technical Department.	
	min. service temperature		- 50 °C							
Thermal Conductivity										
Thermal Conductivity	ϑ _m		-20 [-4]	+/-0 [32]	24 [75]	32 [90]	40 [104]	°C [°F]	ASTM C 177	
	λ		≤ 0.032	0.034	0.036	0.037	0.039	W/(m · K)		
			≤ 0.230	0.240	0.250	0.260	0.270	Btu·in/(h·ft²·°F)		
Water vapour diffusion resistance										
Water vapour diffusion resistance	< 2.8 x 10 ⁻¹¹ g/(m·s·Pa)							DIN EN 13469		
	Water Vapor Permeability		μ		≥		7,000	DIN EN 12086		
Fire performance										
Reaction to fire	Flammability							V-0	UL94	
Other Fire Class										
Practical Fire Behaviour	Self-extinguishing, no fire dripping									
Acoustic Performance										
Reduction of structure-borne sound transmission	Sound Absorption Co-efficient: Up to 0.55 at 1,000 Hz							ISO 354:2003	Also suitable for use in the prevention of sound passage	
Other technical features										
UV resistance	For UV protection, Armafinish Paint 99 or Arma-Chek® Silver 350 is required.									
Health aspects	Dust- and fibre-free Free of formaldehyde Low VOC, Low Total Aldehyde							UL2818-2013	GREENGUARD® Gold for even lower VOC and total chemical emissions	
Water Absorption	≤ 0.05% by volume							ASTM C 209		
Corrosion on Copper or Steel Pipe	No corrosion							DIN 1988 Part 7		
Environmental Aspect	Zero ODP and zero GWP									

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

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. For outside use, Armaflex should be protected with Armafinish Paint or Arma-Chek covering within 3 days of installation.

Armaflex® MC tubes



Length 2.0 m, Color black

Pipe max. Outside-Ø [mm]	Inner Ø min/ max mm	6.0 mm (1/4 inch) insulation thickness				9.0 mm (3/8 inch) insulation thickness			
		Cu Pipe OD [inch]	Code	Tubes/carton	m/carton	Cu Pipe OD [inch]	Code	Tubes/carton	m/carton
6	6.5 - 8.5	-	-	-	-	1/4"	MC-F-006	176	352
10	9.5 - 11.5	-	-	-	-	3/8"	MC-F-010	132	264
12	13.0 - 15.0	-	-	-	-	1/2"	MC-F-012	120	240
15	16.0 - 18.0	5/8"	MC-D-015	143	286	5/8"	MC-F-015	100	200
20	19.5 - 21.5	3/4"	MC-D-020	110	220	3/4"	MC-F-020	72	144
22	22.5 - 24.5	7/8"	MC-D-022	100	200	7/8"	MC-F-022	68	136
25	27.0 - 29.0	1"	MC-D-025	81	162	1"	MC-F-025	63	126
28	29.0 - 31.0	1-1/8"	MC-D-028	68	136	1-1/8"	MC-F-028	49	98
32	31.5 - 34.0	-	-	-	-	1-1/4"	MC-F-032	42	84
35	35.0 - 37.5	1-3/8"	MC-D-035	53	106	1-3/8"	MC-F-035	42	84
42	42.5 - 45.0	-	-	-	-	1-5/8"	MC-F-042	35	70
48	48.5 - 51.0	-	-	-	-	1-7/8"	MC-F-048	28	56
54	54.5 - 57.0	-	-	-	-	2-1/8"	MC-F-054	24	48
60	60.5 - 63.0	-	-	-	-	2-3/8"	MC-F-060	24	48

Pipe max. Outside-Ø [mm]	Inner Ø min/ max mm	13.0 mm (1/2 inch) insulation thickness				19.0 mm (3/4 inch) insulation thickness			
		Cu Pipe OD [inch]	Code	Tubes/carton	m/carton	Cu Pipe OD [inch]	Code	Tubes/carton	m/carton
6	6.5 - 8.5	1/4"	MC-H-006	90	180	1/4"	MC-M-006	56	112
10	9.5 - 11.5	3/8"	MC-H-010	90	180	3/8"	MC-M-010	46	92
12	13.0 - 15.0	1/2"	MC-H-012	72	144	1/2"	MC-M-012	39	78
15	16.0 - 18.0	5/8"	MC-H-015	64	128	5/8"	MC-M-015	39	78
20	19.5 - 21.5	3/4"	MC-H-020	56	112	3/4"	MC-M-020	30	60
22	22.5 - 24.5	7/8"	MC-H-022	53	106	7/8"	MC-M-022	30	60
25	27.0 - 29.0	1"	MC-H-025	42	84	1"	MC-M-025	25	50
28	29.0 - 31.0	1-1/8"	MC-H-028	36	72	1-1/8"	MC-M-028	20	40
32	31.5 - 34.0	1-1/4"	MC-H-032	30	60	1-1/4"	MC-M-032	20	40
35	35.0 - 37.5	1-3/8"	MC-H-035	25	50	1-3/8"	MC-M-035	18	36
38	0.0 - 0.0	-	-	-	-	1-1/2"	MC-M-038	16	32
42	42.5 - 45.0	1-5/8"	MC-H-042	25	50	1-5/8"	MC-M-042	16	32
48	48.5 - 51.0	1-7/8"	MC-H-048	20	40	1-7/8"	MC-M-048	16	32
54	54.5 - 57.0	2-1/8"	MC-H-054	20	40	2-1/8"	MC-M-054	16	32
60	60.5 - 63.0	2-3/8"	MC-H-060	15	30	2-3/8"	MC-M-060	12	24
67	67.5 - 70.5	2-5/8"	MC-H-067	12	24	2-5/8"	MC-M-067	10	20
73	74.0 - 77.0	2-7/8"	MC-H-073	12	24	2-7/8"	MC-M-073	9	18
76	77.0 - 80.0	3"	MC-H-076	12	24	3"	MC-M-076	9	18
80	81.0 - 84.5	3-1/8"	MC-H-080	11	22	3-1/8"	MC-M-080	8	16
89	89.5 - 93.0	3-1/2"	MC-H-089	11	22	3-1/2"	MC-M-089	8	16
105	106.0 - 110.0	4-1/8"	MC-H-105	8	16	4-1/8"	MC-M-105	5	10
114	115.0 - 119.0	4-1/2"	MC-H-114	8	16	4-1/2"	MC-M-114	5	10
140	141.5 - 145.5	-	-	-	-	5-1/2"	MC-M-140	3	6

Armaflex® MC tubes



Length 2.0 m, Color black

Pipe max. Outside-Ø [mm]	Inner Ø min/ max mm	25.0 mm (1 inch) insulation thickness				32.0 mm (1 1/4 inch) insulation thickness			
		Cu Pipe OD [inch]	Code	Tubes/carton	m/carton	Cu Pipe OD [inch]	Code	Tubes/carton	m/carton
10	9.5 - 11.5	3/8"	MC-R-010	28	56	-	-	-	-
12	13.0 - 15.0	1/2"	MC-R-012	28	56	1/2"	MC-T-012	16	32
15	16.0 - 18.0	5/8"	MC-R-015	20	40	5/8"	MC-T-015	16	32
20	19.5 - 21.5	3/4"	MC-R-020	20	40	3/4"	MC-T-020	12	24
22	22.5 - 24.5	7/8"	MC-R-022	20	40	7/8"	MC-T-022	12	24
25	27.0 - 29.0	1"	MC-R-025	18	36	1"	MC-T-025	12	24
28	29.0 - 31.0	1-1/8"	MC-R-028	16	32	1-1/8"	MC-T-028	12	24
32	31.5 - 34.0	1-1/4"	MC-R-032	14	28	1-1/4"	MC-T-032	12	24
35	35.0 - 37.5	1-3/8"	MC-R-035	14	28	1-3/8"	MC-T-035	9	18
42	42.5 - 45.0	1-5/8"	MC-R-042	11	22	1-5/8"	MC-T-042	8	16
48	48.5 - 51.0	1-7/8"	MC-R-048	11	22	1-7/8"	MC-T-048	6	12
54	54.5 - 57.0	2-1/8"	MC-R-054	9	18	2-1/8"	MC-T-054	6	12
60	60.5 - 63.0	2-3/8"	MC-R-060	9	18	2-3/8"	MC-T-060	6	12
67	67.5 - 70.5	2-5/8"	MC-R-067	8	16	2-5/8"	MC-T-067	5	10
73	74.0 - 77.0	2-7/8"	MC-R-073	8	16	2-7/8"	MC-T-073	4	8
76	77.0 - 80.0	3"	MC-R-076	6	12	3"	MC-T-076	4	8
80	81.0 - 84.5	3-1/8"	MC-R-080	6	12	3-1/8"	MC-T-080	4	8
89	89.5 - 93.0	3-1/2"	MC-R-089	6	12	3-1/2"	MC-T-089	4	8
93	94.0 - 97.5	3-5/8"	MC-R-093	4	8	3-5/8"	MC-T-093	3	6
102	102.0 - 106.0	4"	MC-R-102	4	8	4"	MC-T-102	3	6
105	106.0 - 110.0	4-1/8"	MC-R-105	4	8	4-1/8"	MC-T-105	3	6
114	115.0 - 119.0	4-1/2"	MC-R-114	4	8	4-1/2"	MC-T-114	3	6
140	141.5 - 145.5	5-1/2"	MC-R-140	3	6	5-1/2"	MC-T-140	2	4
168	170.0 - 174.0	6-5/8"	MC-R-168	2	4	6-5/8"	MC-T-168	2	4

Pipe max. Outside-Ø [mm]	Inner Ø min/ max mm	38.0 mm (1 1/2 inch) insulation thickness				50.0 mm (2 inch) insulation thickness			
		Cu Pipe OD [inch]	Code	Tubes/carton	m/carton	Cu Pipe OD [inch]	Code	Tubes/carton	m/carton
15	16.0 - 18.0	5/8"	MC-U-015	11	22	-	-	-	-
20	19.5 - 21.5	3/4"	MC-U-020	11	22	-	-	-	-
22	22.5 - 24.5	7/8"	MC-U-022	11	22	7/8"	MC-V-022	6	12
25	27.0 - 29.0	1"	MC-U-025	8	16	1"	MC-V-025	6	12
28	29.0 - 31.0	1-1/8"	MC-U-028	8	16	1-1/8"	MC-V-028	6	12
32	31.5 - 34.0	1-1/4"	MC-U-032	8	16	1-1/4"	MC-V-032	5	10
35	35.0 - 37.5	1-3/8"	MC-U-035	8	16	1-3/8"	MC-V-035	5	10
42	42.5 - 45.0	1-5/8"	MC-U-042	6	12	1-5/8"	MC-V-042	4	8
48	48.5 - 51.0	1-7/8"	MC-U-048	6	12	1-7/8"	MC-V-048	4	8
54	54.5 - 57.0	2-1/8"	MC-U-054	5	10	2-1/8"	MC-V-054	4	8
60	60.5 - 63.0	2-3/8"	MC-U-060	5	10	2-3/8"	MC-V-060	4	8
67	67.5 - 70.5	2-5/8"	MC-U-067	4	8	2-5/8"	MC-V-067	4	8
73	74.0 - 77.0	2-7/8"	MC-U-073	4	8	2-7/8"	MC-V-073	4	8
76	77.0 - 80.0	3"	MC-U-076	4	8	3"	MC-V-076	3	6
80	81.0 - 84.5	3-1/8"	MC-U-080	4	8	3-1/8"	MC-V-080	3	6
89	89.5 - 93.0	3-1/2"	MC-U-089	4	8	3-1/2"	MC-V-089	3	6
93	94.0 - 97.5	3-5/8"	MC-U-093	3	6	3-5/8"	MC-V-093	3	6
102	102.0 - 106.0	4"	MC-U-102	3	6	4"	MC-V-102	3	6
105	106.0 - 110.0	4-1/8"	MC-U-105	3	6	4-1/8"	MC-V-105	3	6
114	115.0 - 119.0	4-1/2"	MC-U-114	3	6	4-1/2"	MC-V-114	2	4
140	141.5 - 145.5	5-1/2"	MC-U-140	2	4	5-1/2"	MC-V-140	2	4
168	170.0 - 174.0	6-5/8"	MC-U-168	2	4	6-5/8"	MC-V-168	2	4

Armaflex® MC sheets



Width 1.22 m, Length 0.91 m, Color black

Code	Insulation thickness [mm]	m ² /carton
MC-03x122x91	3.0	70
MC-06x122x91	6.0	35
MC-09x122x91	9.0	26
MC-13x122x91	13.0	20
MC-19x122x91	19.0	13
MC-25x122x91	25.0	10
MC-32x122x91	32.0	8
MC-38x122x91	38.0	6
MC-50x122x91	50.0	5

Remark

The above items are packed in plastic bags.

Armaflex® MC sheets precut



Width 1.22 m, Color black

Pipe max. Outside-Ø [mm]	13.0 mm (1/2 inch) insulation thickness					19.0 mm (3/4 inch) insulation thickness				
	Code	Width [m]	Length [m]	Pieces/ carton	Fe Pipe Nom. OD [mm]	Code	Width [m]	Length [m]	Pieces/ carton	Fe Pipe Nom. OD [mm]
150	MC-13x122x60	1.22	0.60	20	150	MC-19x122x60	1.22	0.60	13	6
200	MC-13x122x75	1.22	0.75	20	200	MC-19x122x75	1.22	0.75	13	8
250	MC-13x122x95	1.22	0.95	20	250	MC-19x122x95	1.22	0.95	13	10
300	MC-13x122x110	1.22	1.10	20	300	MC-19x122x110	1.22	1.10	13	12
350	MC-13x122x120	1.22	1.20	20	350	MC-19x122x119	1.22	1.25	13	14
400	MC-13x122x135	1.22	1.35	20	400	MC-19x122x140	1.22	1.40	13	16
450	MC-13x122x150	1.22	1.50	20	450	MC-19x122x155	1.22	1.55	13	18
500	MC-13x122x165	1.22	1.65	20	500	MC-19x122x170	1.22	1.70	13	20
550	MC-13x122x185	1.22	1.85	20	550	MC-19x122x185	1.22	1.85	13	22
600	MC-13x122x195	1.22	1.95	20	600	MC-19x122x200	1.22	2.00	13	24

Pipe max. Outside-Ø [mm]	25.0 mm (1 inch) insulation thickness					32.0 mm (1 1/4 inch) insulation thickness				
	Code	Width [m]	Length [m]	Pieces/ carton	Fe Pipe Nom. OD [mm]	Code	Width [m]	Length [m]	Pieces/ carton	Fe Pipe Nom. OD [mm]
150	MC-25x122x60	1.22	0.60	10	6	MC-32x122x67	1.22	0.67	8	6
200	MC-25x122x75	1.22	0.75	10	8	MC-32x122x83	1.22	0.83	8	8
250	MC-25x122x95	1.22	0.95	10	10	MC-32x122x100	1.22	1.00	8	10
300	MC-25x122x110	1.22	1.10	10	12	MC-32x122x116	1.22	1.16	8	12
350	MC-25x122x125	1.22	1.25	10	14	MC-32x122x126	1.22	1.26	8	14
400	MC-25x122x140	1.22	1.40	10	16	MC-32x122x142	1.22	1.42	8	16
450	MC-25x122x155	1.22	1.55	10	18	MC-32x122x158	1.22	1.59	8	18
500	MC-25x122x170	1.22	1.70	10	20	MC-32x122x173	1.22	1.73	8	20
550	MC-25x122x185	1.22	1.85	10	22	MC-32x122x190	1.22	1.90	8	22
600	MC-25x122x200	1.22	2.00	10	24	MC-32x122x210	1.22	2.10	8	24

Pipe max. Outside-Ø [mm]	38.0 mm (1 1/2 inch) insulation thickness					50.0 mm (2 inch) insulation thickness				
	Code	Width [m]	Length [m]	Pieces/ carton	Fe Pipe Nom. OD [mm]	Code	Width [m]	Length [m]	Pieces/ carton	Fe Pipe Nom. OD [mm]
150	MC-38x122x75	1.22	0.75	5	6	MC-50x122x75	1.22	0.75	5	6
200	MC-38x122x95	1.22	0.95	5	8	MC-50x122x95	1.22	0.90	5	8
250	MC-38x122x110	1.22	1.10	5	10	MC-50x122x110	1.22	1.09	5	10
300	MC-38x122x138	1.22	1.25	5	12	MC-50x122x150	1.22	1.25	5	12
350	MC-38x122x140	1.22	1.40	5	14	MC-50x122x140	1.22	1.35	5	14
400	MC-38x122x155	1.22	1.55	5	16	MC-50x122x155	1.22	1.60	5	16
450	MC-38x122x170	1.22	1.70	5	18	MC-50x122x170	1.22	1.70	5	18
500	MC-38x122x185	1.22	1.85	5	20	MC-50x122x185	1.22	1.90	5	20
550	MC-38x122x200	1.22	2.00	5	22	MC-50x122x200	1.22	1.99	5	22
600	MC-38x122x220	1.22	2.20	5	24	MC-50x122x220	1.22	2.15	5	24

Remark

The above items are packed in plastic bags.

Armaflex® MC sheets endless



Width 1.0 m and 1.22 m, Color black

1.0 m width				1.22 m width			
Code	Insulation thickness [mm]	Roll length [m]	m²/carton	Code	Insulation thickness [mm]	Roll length [m]	m²/carton
MC-06100CS-15	6.0	15	15	MC-06122CS-15	6.0	15	18.3
MC-09100CS-10	9.0	10	10	MC-09122CS-10	9.0	10	12.2
MC-13100CS-8	13.0	8	8	MC-13122CS-8	13.0	8	9.76
MC-19100CS-6	19.0	6	6	MC-19122CS-6	19.0	6	7.32
MC-25100CS-4	25.0	4	4	MC-25122CS-4	25.0	4	4.88
MC-32100CS-3	32.0	3	3	MC-32122CS-3	32.0	3	3.66
MC-38100CS-3	38.0	3	3	MC-32122CS-6	32.0	6	7.32
MC-50100CS-3	50.0	3	3	MC-38122CS-3	38.0	3	3.66
-	-	-	-	MC-38122CS-6	38.0	6	7.32
-	-	-	-	MC-50122CS-3	50.0	3	3.66
-	-	-	-	MC-50122CS-6	50.0	6	7.32

Remark The above items are packed in plastic bags.

Armaflex® MC sheets endless (jumbo rolls)



Width 1.22 m, Length 15 m, Color black

Code	Insulation thickness [mm]	Roll length [m]	m²/carton
MC-03x122x1500	3.0	15	18.3
MC-06x122x1500	6.0	15	18.3
MC-09x122x1500	9.0	15	18.3
MC-13x122x1500	13.0	15	18.3
MC-19x122x1500	19.0	15	18.3
MC-25x122x1500	25.0	15	18.3
MC-32x122x600	32.0	6	7.32
MC-38x122x600	38.0	6	7.32
MC-50x122x600	50.0	6	7.32

Remark The above items are packed in plastic bags.

Armaflex® MC sheets endless self-adhesive



Width 1.0 m and 1.22 m, Color black

1.0 m width				1.22 m width			
Code	Insulation thickness [mm]	Roll length [m]	m²/carton	Code	Insulation thickness [mm]	Roll length [m]	m²/carton
MC-06100CS-15-T	6.0	15	15	MC-06122CS-15-T	6.0	15	18.3
MC-09100CS-10-T	9.0	10	10	MC-09122CS-10-T	9.0	10	12.2
MC-13100CS-8-T	13.0	8	8	MC-13122CS-8-T	13.0	8	9.76
MC-19100CS-6-T	19.0	6	6	MC-19122CS-6-T	19.0	6	7.32
MC-25100CS-4-T	25.0	4	4	MC-25122CS-4-T	25.0	4	4.88
MC-32100CS-3-T	32.0	3	3	MC-32122CS-6-T	32.0	6	7.32
MC-38100CS-3-T	38.0	3	3	MC-38122CS-6-T	38.0	6	7.32
MC-50100CS-3-T	50.0	3	3	MC-50122CS-6-T	50.0	6	7.32

Remark The above items are packed in plastic bags.

Armaflex® MC sheets endless self-adhesive (jumbo rolls)



Width 1.22 m, Length 15 m, Color black

Code	Insulation thickness [mm]	Roll length [m]	m ² /carton
MC-03x122x1500T	3.0	15	18.3
MC-06x122x1500T	6.0	15	18.3
MC-09x122x1500-T	9.0	15	18.3
MC-13x122x1500-T	13.0	15	18.3
MC-19x122x1500-T	19.0	15	18.3
MC-25x122x1500-T	25.0	15	18.3

Remark

The above items are packed in plastic bags.

Armaflex® MC tapes self-adhesive



Color black

Code	Article description	Width [mm]	Length [m]	Thickness [mm]	Rolls/carton
MC-03005CS-9.14-T	Armaflex® MC self-adhesive tape, black (9.14m x 50mm x 3mm)	50.0	9.14	3	12
MC-0600025CS-15-T	Armaflex® MC self-adhesive tape, black (15m x 25mm x 6mm)	25.0	15	6	12

Armaflex® MC accessories



Code	Article description	Pieces/carton
ADH-520-1G	Armaflex® 520 adhesive, 3.78 litre cans	4
ADH520/0,5E	Armaflex® adhesive 520, 0,5 liter cans	12
ADH520/1,0E	Armaflex® adhesive 520, 1,0 liter cans	12
ADH520/3.8-BLV	Armaflex® BLV520 low-VOC adhesive, 3.78 litre cans (LEED certified)	3
ADH820T/0.7-I	Armaflex® 820 adhesive, 0.7 litre cans	12
ADH820T/1G	Armaflex® 820 adhesive, 3.78 litre cans	3
CLEANER/1,0	Special cleaner for use with Armaflex® Adhesive 520 and Armaflex® Adhesive HT625	4
CUTTING-SET	Armaflex® knife-set (3 knives + 1 sharpening stone)	1
GLUEM-BRUSH11MM	Gluemaster extra brush points with cap (11mm diameter)	5x4
GLUEM-BRUSH17MM	Gluemaster extra brush points with cap (17mm diameter)	5x4
GLUEMASTER B	Armaflex® Gluemaster (adhesive pump)	12

notes