



INSTALL IT. TRUST IT.

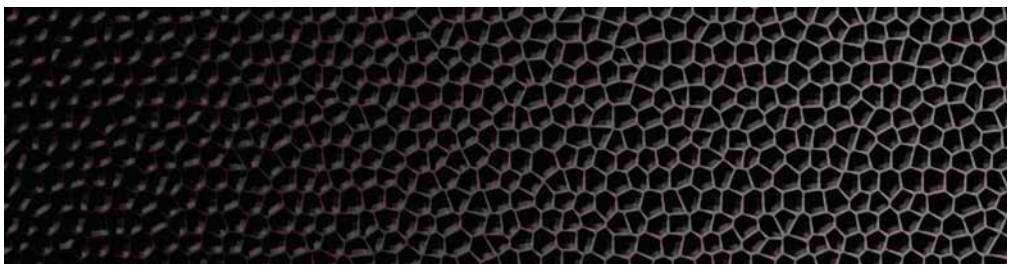
ArmaFlex® AC Class 0

The trusted insulation system
for HVAC/R applications

// Class 0 fire classification according to BS476 Parts 6 and 7
// Long-term reliable condensation control
// Effectively reduces thermal and energy losses

www.armacell.bh





armacell®
ArmaFlex®

SAFETY, EFFICIENCY AND
IMPROVED INDOOR AIR QUALITY

ArmaFlex® AC Class 0

Your trusted insulation system for HVAC/R applications. Built-in water vapour barrier ensures condensation control and creates long-term reliable operation. Reduce heat losses and enhance the energy efficiency. Class 0 fire classification according to BS476 Parts 6 and 7. Certified by leading international fire safety agencies. Dust and fibre-free. **ArmaFlex. Install it. Trust it.**

Energy-efficient



Easy-to-install



Improved indoor air quality



// Excellent fire performance
Entire range of insulation thicknesses FM approved. Certified to conform to safety, reliability and performance standards of various local fire safety bodies.

// Closed-cell structure
Built-in water vapour barrier. Prevents moisture penetration and ensures condensation control. Mitigates risk of corrosion under insulation (CUI).

// Energy efficient
Low thermal conductivity. Minimises energy losses and guarantees energy savings for the long-term.

// Top-notch indoor air quality
Dust- and fibre-free, free of formaldehyde and extremely low VOC emissions can contribute to green building certification schemes.

// Saves natural resources and tackles climate change
As a comprehensive life-cycle assessment ascertained, ArmaFlex saves 140 times more energy than is consumed in the production, transport and disposal of these products.

// Easy-to-install
Easy and quick installation even on irregular shapes and in tight spaces. As comparative tests of various insulation materials have shown, no other product can be installed as reliably, easily and neatly as the highly flexible ArmaFlex.



ArmaFlex 520 Adhesive

ArmaFlex accessories
ArmaFlex system components (adhesives, tapes or cleaners) are optimally coordinated with each other and ensure high reliablity and maximum performance.

TECHNICAL DATA
ARMAFLEX AC CLASS 0

Brief description	ArmaFlex AC Class 0 is a flexible insulation material that reliably protects against water vapour ingress due to its closed-cell structure. No additional water vapour barrier is required.
Material type	Elastomeric foam based on synthetic rubber.
Colour	Black.
Applications	Thermal insulation/protection of pipes, air ducts and vessels (incl. elbows, fittings, flanges etc.) in hot and cold water services, chilled water lines, heating systems, air conditioning ductwork and refrigerated pipework, installed in commercial, industrial, residential and public buildings to control condensation, protect against frost and reduce energy loss.
Assembly	Please refer to the ArmaFlex installation manual for advice. ArmaFlex can be used together with ArmaFlex 520 adhesive and ArmaFix® AF for a complete insulation system.

Property	Value/Assessment						Standard/Test method
Temperature range							
Service temperature	Max. service temperature		+110 °C		+85 °C if sheet or tape is glued to the object with its whole surface.		
	Min. service temperature		-50 °C				
Thermal conductivity							
	θm	-20	+/-0	+20	+40	[°C]	ASTM C518, EN ISO 8497, GB/T 10294,GB/T10296
	λ ≤	0.032	0.035	0.037	0.040	[W/(m·K)]	
Water vapour diffusion resistance							
Water vapour permeability	≤ 0,05 Perm Inch						ASTM E 96
Fire performance & approvals							
Surface spread of flame	Class 0						BS 476 Part 6&7
Fire propagation Index	Index of overall performance, I ≤ 12 Sub-index i ≤ 6						BS 476 Part 6
Flammability	V-0, FM4924						UL 94
Practical fire behavior	Does not generate flaming droplets.						
Other technical features							
Water absorption by volume	≤ 5%						ASTM C 209
Chemical resistance	Excellent resistance to ozone, oil and chemicals (consult product test list).						
UV resistance	For UV protection, ArmaFinish Paint 99 or Arma-Chek® Silver 350 covering system is required. For outside use, ArmaFlex should be protected with ArmaFinish Paint or Arma-Chek covering within 3 days of installation.						
Environmental aspect	Zero ODP and GWP.						
Storage	Material shall be stored in dry, clean rooms at normal relative humidity (50% to 70%) and ambient temperature (0 °C to 35 °C).						
Shelf (storage life)	Self-adhesive tapes, self-adhesive sheets, self-adhesive tubes: 1 year						

All data and technical information are based on results achieved under the specific conditions defined according to the testing standards referenced. Despite taking every precaution to ensure that said data and technical information are up to date, Armacell does not make any representation or warranty, express or implied, as to the accuracy, content or completeness of said data and technical information. Armacell also does not assume any liability towards any person resulting from the use of said data or technical information. Armacell reserves the right to revoke, modify or amend this document at any moment. It is the customer's responsibility to verify if the product is suitable for the intended application. The responsibility for professional and correct installation and compliance with relevant building regulations lies with the customer. This document does not constitute nor is part of a legal offer to sell or to contract.

At Armacell, your trust means everything to us, so we want to let you know your rights and make it easier for you to understand what information we collect and why we collect it. If you would like to find out about our processing of your data, please visit our Data Protection Policy.

© Armacell, 2021. All rights reserved. Trademarks followed by ® or TM are trademarks of the Armacell Group.
Microban® is a trademark of Microban Products Company and is used herein with permission.
00530 | ArmaFlex AC Class 0 I ArmaFlex I Mktbrochure I 052021 I MEA I EN MASTER

ABOUT ARMACELL

As the inventors of flexible foam for equipment insulation and a leading provider of engineered foams, Armacell develops innovative and safe thermal, acoustic 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 3,269 employees and 26 production plants, the company operates with two main businesses, Advanced Insulation and Engineered Foams. Armacell focuses on insulation materials for technical equipment, high-performance foams for hightech and lightweight applications and next generation aerogel blanket technology.

Manufacturing Location

Armacell Middle East Company W.L.L

Tel: +973 1737 6969, PO Box: 50121, Building 1284,
Block 115, Road 1516, Bahrain International Investment Park,
Salman Industrial City, Kingdom of Bahrain.
Website: www.armacell.bh

Sales Office

Armacell Middle East Co. Ltd.

Tel: +971 4 295 8832,
Dubai Airport Freezone Authority (DAFZA),
Building 6E, Block A, Office G20, Dubai, UAE
Email: dubai.office@armacell.com

For more information. please visit:
www.armacell.bh

armacell®
ArmaFlex®

Tubes

25 mm		32 mm		Insulation inner diameter	Cu pipe outer diameter	Fe pipe outer diameter	Nominal diameter (DN)
Item	Carton content	Item	Carton content				
	[m]		[m]	[mm]	[inch]	[mm]	
ACO-25X006	60			6	1/4		
ACO-25X006#	68						
ACO-25X010	54						
ACO-25X010#	64			10	3/8		6
ACO-25X012	50	**ACO-32X012**	36				
ACO-25X012#	62	**ACO-32X012#**	42	12	1/2		
ACO-25X015	48	**ACO-32X015**	34				
ACO-25X015#	58	**ACO-32X015#**	40	15	5/8	14	8
ACO-25X020	40	**ACO-32X020**	36				
ACO-25X020#	52			20	3/4		
ACO-25X022	40	**ACO-32X022**	28				
ACO-25X022#	50	**ACO-32X022#**	34	22	7/8	22	15
ACO-25X028	32	**ACO-32X028**	24				
ACO-25X028#	44	**ACO-32X028#**	30	28	1-1/8	28	20
ACO-25X035	24	**ACO-32X035**	20				
ACO-25X035#	38	**ACO-32X035#**	28	35	1-3/8		25
ACO-25X042	24	**ACO-32X042**	18				
ACO-25X042#	36	**ACO-32X042#**	24	42	1-5/8		32
ACO-25X048	22	**ACO-32X048**	16				
ACO-25X048#	32	**ACO-32X048#**	24	48	1-7/8		40
ACO-25X054	18	**ACO-32X054**	12				
ACO-25X054#	30	**ACO-32X054#**	22	54	2-1/8		
ACO-25X060	18	**ACO-32X060**	12				
ACO-25X060#	28	**ACO-32X060#**	20	60	2-3/8		50
ACO-25X067	16	**ACO-32X067**	12				
ACO-25X067#	26	**ACO-32X067#**	16	67	2-5/8		
ACO-25X076	14	**ACO-32X076**	10				
ACO-25X076#	24	**ACO-32X076#**	16	76	3	76	70
ACO-25X080	12						
ACO-25X080#	22			80	3-1/8		
ACO-25X089	12	**ACO-32X089**	8				
ACO-25X089#	20	**ACO-32X089#**	16	89	3-1/2	89	80
ACO-25X108	12						
ACO-25X108#	18			108	4-1/4	108	
ACO-25X114	8						
ACO-25X114#	18			114	4-1/2	114	100

Accessories

Item	Carton content	Article description
ADH 520 BLV	4 x 3.8 ltr. cans	ArmaFlex 520 BLV Adhesive
ADH 520	8 x 2.5 ltr. cans	ArmaFlex 520 Adhesive
IC1-TAPEA9T	24 rolls	ArmaFlex Tape 50 mm wide x 9 m

Tubes

9 mm		13 mm		19 mm		Insulation inner diameter	Cu pipe outer diameter	Fe pipe outer diameter	Nominal diameter (DN)
Item	Carton content	Item	Carton content	Item	Carton content				
	[m]		[m]		[m]	[mm]	[inch]	[mm]	
ACO-09X006	352	ACO-13X006	206	ACO-19X006	112	6	1/4		
ACO-09X006#	406	ACO-13X006#	234	ACO-19X006#	124				
ACO-09X010	280	ACO-13X010	188	ACO-19X010	104				
ACO-09X010#	320	ACO-13X010#	196	ACO-19X010#	112	10	3/8		6
ACO-09X012	240	ACO-13X012	162	ACO-19X012	92				
ACO-09X012#	280	ACO-13X012#	182	ACO-19X012#	104	12	1/2		
ACO-09X015	192	ACO-13X015	136	ACO-19X015	78				
ACO-09X015#	232	ACO-13X015#	156	ACO-19X015#	90	15	5/8	14	8
ACO-09X020	156	ACO-13X020	112	ACO-19X020	70				
ACO-09X020#	216	ACO-13X020#	136	ACO-19X020#	82	20	3/4		
ACO-09X022	140	ACO-13X022	104	ACO-19X022	64				
ACO-09X022#	200	ACO-13X022#	130	ACO-19X022#	78	22	7/8	22	15
ACO-09X028	98	ACO-13X028	78	ACO-19X028	50				
ACO-09X028#	158	ACO-13X028#	112	ACO-19X028#	66	28	1-1/8	28	20
ACO-09X035	84	ACO-13X035	60	ACO-19X035	40				
ACO-09X035#	144	ACO-13X035#	96	ACO-19X035#	60	35	1-3/8		25
ACO-09X042	60	ACO-13X042	56	ACO-19X042	32				
ACO-09X042#	120	ACO-13X042#	70	ACO-19X042#	46	42	1-5/8		32
ACO-09X048	56	ACO-13X048	40	ACO-19X048	30				
ACO-09X048#	112	ACO-13X048#	76	ACO-19X048#	44	48	1-7/8		40
ACO-09X054	54	ACO-13X054	38	ACO-19X054	24				
ACO-09X054#	104	ACO-13X054#	70	ACO-19X054#	42	54	2-1/8		
ACO-09X060	42	ACO-13X060	36	ACO-19X060	24				
ACO-09X060#	92	ACO-13X060#	68	ACO-19X060#	40	60	2-3/8		50
		ACO-13X067	36	ACO-19X067	20				
		ACO-13X067#	58	ACO-19X067#	36	67	2-5/8		
		ACO-13X076	28	ACO-19X076	18				
		ACO-13X076#	50	ACO-19X076#	34	76	3	76	70
		ACO-13X080	24	ACO-19X080	16				
		ACO-13X080#	48	ACO-19X080#	32	80	3-1/8		
		ACO-13X089	20	ACO-19X089	16				
		ACO-13X089#	44	ACO-19X089#	28	89	3-1/2	89	80
		ACO-13X108	16	ACO-19X108	16				
# Big Carton		ACO-13X108#	38	ACO-19X108#	24	108	4-1/4	108	
		ACO-13X114	14	ACO-19X114	10				
		ACO-13X114#	36	ACO-19X114#	22	114	4-1/2	114	100

Sheets

1 m width sheets					
Item	Insulation thickness	Carton content	Item	Insulation thickness	Carton content
	[mm]	[sqm]		[mm]	[sqm]
ACO06-99/E-1	6	34	ACO32-99/E-1	32	7
ACO09-99/EA-1 (SA)	9	23,5	ACO32-99/EA-1 (SA)	32	7
ACO09-99/E-1	9	23,5	ACO38-99/E-1	38	6
ACO13-99/EA-1 (SA)	13	17	ACO38-99/EA-1 (SA)	38	6
ACO13-99/E-1	13	17	ACO50-99/E-1	50	4
ACO19-99/EA-1 (SA)	19	12	ACO50-99/EA-1 (SA)	50	4
ACO19-99/E-1	19	12			
ACO25-99/EA-1 (SA)	25	9			
ACO25-99/E-1	25	9			

Remark: Aluminum-foil & Alu glass products are available on request.