



FOR SAFETY, EFFICIENCY &
BETTER INDOOR AIR QUALITY

ArmaFlex

Class 0

The trusted insulation system for HVAC
applications

- // Class 0 fire classification according to BS476 Parts 6 and 7
- // Reduces mould and bacteria growth with Microban antimicrobial product protection, unique to Armacell
- // Effectively reduces thermal and energy loss

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 **armacell**[®]
ArmaFlex[®]

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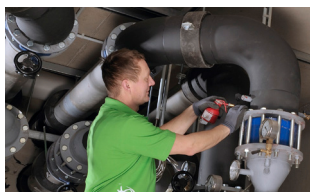
ArmaFlex Class 0

Your trusted insulation system for HVAC applications. Conserves energy and reduces heat loss. Class 0 fire classification according to BS476 Parts 6 and 7. Certified by leading international fire safety agencies. Fibre-free. Infused with Microban antimicrobial protection for even better indoor air quality.

Energy efficient



Easy to install



Better air quality



// Excellent fire performance

FM Approved for entire range of insulation thickness. Certified to conform to safety, reliability and performance standards of various local fire safety bodies.

// Closed-cell structure

Minimises moisture permeation to ensure long-term protection against corrosion under insulation. Removes the need for an additional water vapour barrier.

// Energy efficient

Low thermal conductivity minimises energy losses to give long term energy savings.

// Microban protection

When microbes come into contact with the insulation surface, Microban penetrates the cell wall of the microorganism, disabling its ability to function, grow and reproduce.

// Environmentally safe

Zero Ozone Depletion Potential and Global Warming Potential; rated "Excellent" by Singapore Green Building Council.

// Safer indoor air quality

Free of fibre and formaldehyde, and GREENGUARD® Gold certified for low emissions of volatile organic compounds.

// Easy-to-install

Highly flexible elastomeric foam that can be installed quickly on irregular shapes and installations in tight spaces.

TECHNICAL DATA - ARMAFLEX CLASS 0

Brief description	ArmaFlex 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.
Product colour range	Black
Special features	ArmaFlex sheets is infused with Microban antimicrobial protection to provide additional assurance against mould and bacteria growth.
Applications	Thermal insulation/protection of pipes, air ducts and vessels (including 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 and reduce energy loss.
Installation	Please refer to the ArmaFlex application manual for advice. ArmaFlex can be used together with ArmaFlex 520 adhesive and ArmaFix pipe hangers for a complete insulation system.

Property	Value / Assessment				Standard / Test method
Temperature range					
Service temperature	Min. °C		Max. °C		
	-50		105		
	Remarks		+85 °C if sheet or tape is glued to the object with its whole surface		
Thermal conductivity					
Declared thermal conductivity	Øm	-20°C	±0°C	25°C	ASTM C518, EN ISO 8497, GB/T 10295, GB/T 10296
	λd ≤ [W/(m·K)]	0.032	0.034	0.036	
Fire Performance and Approvals					
Surface spread of flame	Class 1				BS 476 Part 7
Fire propagation for products	Fire propagation index, I ≤ 12, Sub-index, i ₁ ≤ 6. Class 0 rating for achieving the above and Class 1 per BS 476 Part 7				BS 476 Part 6
Burning behaviour of building materials and products	Class B1				GB 8624
Surface flammability	Marine application: Low flame spread material				IMO 2010 FTP Code, Part 5
FM approved	Yes				FM 4924
Flammability					
Flammability of plastic materials	V-0 rating				UL 94
Fire performance					
Practical fire behaviour	Does not generate flaming droplets.				
Others	Registered by the Fire Services Department of Hong Kong for the entire range of thickness. Product conforms to the requirements for building products under the Fire Safety and Shelter Department, Singapore.				
Resistance to water vapour					
Water vapour diffusion resistance factor	μ ≥ 10,000				GB/T 17146, EN 12086, EN 13469
Water vapour permeability	≤ 1.96 x 10 ⁻¹¹ g/(m·s·Pa)				GB/T 17146, EN 12086, EN 13469
Resistance to water					
Water absorption	≤ 0.2% by volume				ASTM C1763
Water absorption by vacuum	≤ 0.5% by volume				GB/T 17794
Mechanical properties					
Resilience after compression relief	≥ 70%				GB/T 6669

Property	Value / Assessment	Standard / Test method
Weather and UV resistance		
Outdoor use	For UV protection, ArmaFinish Paint or Arma-Chek® covering system is required. For outside use, ArmaFlex should be protected within three days of installation.	
Health and environment		
Antimicrobial behaviour	Built-in Microban antimicrobial product protection in sheets	
Health aspects	Free of fibre and formaldehyde. Low volatile organic compounds (VOC) and total aldehyde. GREENGUARD Gold for even lower VOC and total chemical emissions.	UL 2818
Environmental aspects	Zero ODP and GWP. Complies with Restriction of Hazardous Substances Directive (RoHS).	
Environmental Product Declaration (EPD)	Type III EPD: Declaration number 4789125188.101.1, UL Environment.	ISO 14025
Green building assessment	Singapore Green Building Product Certified: "Excellent" rating.	
Other technical features		
Chemical resistance	Excellent resistance to ozone, oil and chemicals (consult product test list).	
Shelf life	Self-adhesive sheets, tubes and tapes: 1 year.	
Storage	Material shall be stored in dry, clean rooms at normal relative humidity (50% to 70%) and ambient temperature (0 °C to 35 °C).	

Tube – standard. Black. 2.0m length

6 mm						9 mm					
Pipe Ø [mm]	Steel pipe outer diameter (EN 10255) [mm]	Steel pipe DN	Item	Insulation thickness [mm]	Content [metric]	Pipe Ø [mm]	Copper pipe outer diameter [inch]	Steel pipe DN	Item	Insulation thickness [mm]	Content [metric]
10		6	COB-06X010	6	308 m	6	0.25		COB-09X006	9	312 m
22	22	8	COB-06X022	6	180 m	10	0.375	6	COB-09X010	9	264 m
25			COB-06X025	6	144 m	12	0.5		COB-09X012	9	220 m
-	-	-	-	-	-	15	0.625	8	COB-09X015	9	180 m
-	-	-	-	-	-	20	0.75		COB-09X020	9	144 m
-	-	-	-	-	-	22	0.875	15	COB-09X022	9	128 m
-	-	-	-	-	-	25	1.0		COB-09X025	9	108 m
-	-	-	-	-	-	28	1.125	20	COB-09X028	9	98 m
-	-	-	-	-	-	32	1.25		COB-09X032	9	84 m
-	-	-	-	-	-	35	1.375	25	COB-09X035	9	82 m
-	-	-	-	-	-	38	1.5		COB-09X038	9	72 m
-	-	-	-	-	-	42	1.625	32	COB-09X042	9	64 m
-	-	-	-	-	-	48	1.875	40	COB-09X048	9	56 m
-	-	-	-	-	-	54	2.125		COB-09X054	9	54 m
-	-	-	-	-	-	57	2.25		COB-09X057	9	54 m
-	-	-	-	-	-	60	2.375	50	COB-09X060	9	54 m

Tube – standard. Black. 2.0m length

13 mm						19 mm					
Pipe Ø [mm]	Copper pipe outer diameter [inch]	Steel pipe DN	Item	Insulation thickness [mm]	Content [metric]	Pipe Ø [mm]	Copper pipe outer diameter [inch]	Steel pipe DN	Item	Insulation thickness [mm]	Content [metric]
6	0.25		COB-13X006	13	180 m	6	0.25		COB-19X006	19	96 m
10	0.375	6	COB-13X010	13	144 m	10	0.375	6	COB-19X010	19	84 m
12	0.5		COB-13X012	13	128 m	12	0.5		COB-19X012	19	84 m
15	0.625	8	COB-13X015	13	112 m	15	0.625	8	COB-19X015	19	70 m
20	0.75		COB-13X020	13	90 m	20	0.75		COB-19X020	19	60 m
22	0.875	15	COB-13X022	13	90 m	22	0.875	15	COB-19X022	19	60 m
25	1.0		COB-13X025	13	80 m	25	1.0		COB-19X025	19	50 m
28	1.125	20	COB-13X028	13	72 m	28	1.125	20	COB-19X028	19	50 m
32	1.25		COB-13X032	13	64 m	32	1.25		COB-19X032	19	40 m
35	1.375	25	COB-13X035	13	58 m	35	1.275	25	COB-19X035	19	40 m
38	1.5		COB-13X038	13	54 m	38	1.5		COB-19X038	19	36 m
42	1.625	32	COB-13X042	13	48 m	42	1.625	32	COB-19X042	19	36 m
48	1.875	40	COB-13X048	13	42 m	48	1.875	40	COB-19X048	19	30 m
54	2.125		COB-13X054	13	42 m	54	2.125		COB-19X054	19	30 m
57	2.25		COB-13X057	13	36 m	57	2.25		COB-19X057	19	28 m
60	2.375	50	COB-13X060	13	36 m	60	2.375	50	COB-19X060	19	24 m
67	2.625		COB-13X067	13	36 m	67	2.625		COB-19X067	19	22 m
76	3.0		COB-13X076	13	32 m	76	3.0		COB-19X076	19	16 m

Tube – standard. Black. 2.0m length

13 mm						19 mm					
Pipe Ø [mm]	Copper pipe outer diameter [inch]	Steel pipe DN	Item	Insulation thickness [mm]	Content [metric]	Pipe Ø [mm]	Copper pipe outer diameter [inch]	Steel pipe DN	Item	Insulation thickness [mm]	Content [metric]
89	3.5	80	COB-13X089	13	24 m	89	3.5	80	COB-19X089	19	12 m
108	4.25		COB-13X108	13	16 m	108	4.25		COB-19X108	19	10 m
114	4.5	100	COB-13X114	13	16 m	114	4.5	100	COB-19X114	19	10 m

Tube – standard. Black. 2.0m length

25 mm						32 mm					
Pipe Ø [mm]	Copper pipe outer diameter [inch]	Steel pipe DN	Item	Insulation thickness [mm]	Content [metric]	Pipe Ø [mm]	Copper pipe outer diameter [inch]	Steel pipe DN	Item	Insulation thickness [mm]	Content [metric]
6	0.25		COB-25X006	25	60 m	10	0.375	6	COB-32X010	32	36 m
10	0.375	6	COB-25X010	25	54 m	12	0.5		COB-32X012	32	32 m
12	0.5		COB-25X012	25	48 m	15	0.625	8	COB-32X015	32	32 m
15	0.625	8	COB-25X015	25	40 m	20	0.75		COB-32X020	32	24 m
20	0.75		COB-25X020	25	36 m	22	0.875	15	COB-32X022	32	24 m
22	0.875	15	COB-25X022	25	36 m	25	1.0		COB-32X025	32	22 m
25	1.0		COB-25X025	25	32 m	28	1.125	20	COB-32X028	32	22 m
28	1.125	20	COB-25X028	25	32 m	32	1.25		COB-32X032	32	20 m
32	1.25		COB-25X032	25	32 m	35	1.375	25	COB-32X035	32	18 m
35	1.375	25	COB-25X035	25	30 m	38	1.5		COB-32X038	32	16 m
38	1.5		COB-25X038	25	24 m	42	1.625	32	COB-32X042	32	16 m
42	1.625	32	COB-25X042	25	24 m	45	1.75		COB-32X045	32	12 m
48	1.875	40	COB-25X048	25	20 m	48	1.875	40	COB-32X048	32	12 m
54	2.125		COB-25X054	25	20 m	54	2.125		COB-32X054	32	12 m
57	2.25		COB-25X057	25	16 m	57	2.25		COB-32X057	32	12 m
60	2.375	50	COB-25X060	25	20 m	60	2.375	50	COB-32X060	32	12 m
67	2.625		COB-25X067	25	14 m	67	2.625		COB-32X067	32	10 m
76	3.0		COB-25X076	25	16 m	76	3.0		COB-32X076	32	10 m
89	3.5	80	COB-25X089	25	16 m	89	3.5	80	COB-32X089	32	8 m
114	4.5	100	COB-25X114	25	6 m	108	4.25		COB-32X108	32	6 m

Tube – standard. Black. 2.0m length

40 mm						50 mm					
Pipe Ø [mm]	Copper pipe outer diameter [inch]	Steel pipe DN	Item	Insulation thickness [mm]	Content [metric]	Pipe Ø [mm]	Copper pipe outer diameter [inch]	Steel pipe DN	Item	Insulation thickness [mm]	Content [metric]
15	0.625	8	COB-40X015	40	22 m	20	0.75		COB-50X020	50	12 m
20	0.75		COB-40X020	40	18 m	22	0.875	15	COB-50X022	50	12 m
22	0.875	15	COB-40X022	40	18 m	28	1.125	20	COB-50X028	50	12 m
25	1.0		COB-40X025	40	18 m	35	1.375	25	COB-50X035	50	10 m
28	1.125	20	COB-40X028	40	16 m	42	1.625	32	COB-50X042	50	8 m
35	1.375	25	COB-40X035	40	12 m	48	1.875	40	COB-50X048	50	8 m

Tube – standard. Black. 2.0m length

40 mm						50 mm					
Pipe Ø [mm]	Copper pipe outer diameter [inch]	Steel pipe DN	Item	Insulation thickness [mm]	Content [metric]	Pipe Ø [mm]	Copper pipe outer diameter [inch]	Steel pipe DN	Item	Insulation thickness [mm]	Content [metric]
42	1.625	32	COB-40X042	40	12 m	54	2.125		COB-50X054	50	8 m
48	1.875	40	COB-40X048	40	12 m	60	2.375	50	COB-50X060	50	8 m
54	2.125		COB-40X054	40	10 m	67	2.625		COB-50X067	50	6 m
67	2.625		COB-40X067	40	8 m	76	3.0		COB-50X076	50	4 m
76	3.0		COB-40X076	40	8 m	89	3.5	80	COB-50X089	50	4 m
108	4.25		COB-40X108	40	6 m	108	4.25		COB-50X108	50	4 m
114	4.5	100	COB-40X114	40	4 m	114	4.5	100	COB-50X114	50	4 m
-	-	-	-	-	-				COB-50X022-P		

Roll - standard

Item	Insulation thickness [mm]	Width (m)	Length [m]	Content [metric]
COB-09150/E	9	1.5	10	15 m²
COB-09150/E	9	1.5	10	15 m²
COB-13150/E	13	1.5	8	12 m²
COB-19150/E	19	1.5	6	9 m²
COB-25122/E	25	1.22	4	4.88 m²
COB-25150/E	25	1.5	4	6 m²
COB-30150/E	30	1.5	3	4.5 m²
COB-32150/E	32	1.5	3	4.5 m²
COB-40122/E	40	1.22	3	3.66 m²
COB-50122/E	50	1.22	2.5	3.05 m²

Tape – insulation. Black

Item	Description	Content [quantity]
AS-ATAPECOB-9M	ArmaFlex Class 0 insulation tape (3mm thickness x 50mm width x 9.14 m)	24 roll

Pre-insulated PVC socket

6 mm			
Pipe Ø [mm]	Item	Insulation thickness [mm]	Content [quantity]
13	FCOSO-PF-6X13	6	300 piece
16	FCOSO-PF-6X16	6	190 piece
20	FCOSO-PF-6X20	6	100 piece
25	FCOSO-PF-6X25	6	70 piece

Pre-insulated PVC elbow

6 mm			
Pipe Ø [mm]	Item	Insulation thickness [mm]	Content [quantity]
13	FCOEL-PF-6X13	6	120 piece
16	FCOEL-PF-6X16	6	100 piece

Pre-insulated PVC elbow

6 mm			
Pipe Ø [mm]	Item	Insulation thickness [mm]	Content [quantity]
20	FCOEL-PF-6X20	6	60 piece
25	FCOEL-PF-6X25	6	40 piece

Pre-insulated PVC t-piece

6 mm			
Pipe Ø [mm]	Item	Insulation thickness [mm]	Content [quantity]
13	FCOTE-PF-6X13	6	180 piece
16	FCOTE-PF-6X16	6	80 piece
20	FCOTE-PF-6X20	6	70 piece
25	FCOTE-PF-6X25	6	40 piece

Adhesives and Cleaners

Item	Description	Content [quantity]
AS-AD5201E	4 cans of 1 Gallon (3.78litres) ArmaFlex 520 adhesive in a carton	4 tin
AS-AD520HL	12 cans of 500mL ArmaFlex 520 adhesive in a carton	12 tin

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ABOUT ARMACELL

As the inventor of flexible foam for equipment insulation and a leading provider of engineered foams, Armacell develops innovative and safe thermal 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 more than 3,300 employees and 25 production plants in 19 countries, the company operates two main businesses, Advanced Insulation and Engineered Foams. Armacell focuses on insulation materials for technical equipment, high-performance foams for acoustic and lightweight applications, recycled PET products, next-generation aerogel technology and passive fire protection systems.



For more information, please visit:
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