

Class O Armaflex

The Professional Insulation with Double Performance:

Reliable Condensation Control and Effective Energy Saving

- Built-In Vapour Barrier Prevents Condensation ≫
- » Long-Term Thermal Performance / Energy Conservation
- » Ease Of Application

FM

APPROVED

Armaflex[®]

The Armaflex Assurance System - your peace-of-mind assurance that Armaflex is made to the strictest quality, technical performance and environmentally friendly standards.

Prevents Moisture Permeation

Multi-layered closed wall cells provide a built-in vapour barrier which can't be compromised by surface punctures or rips - this ensures the vapour barrier stays working for the lifetime of the insulation system.

Provides Long-Term Thermal Performance

Non-wicking - No transmission of water vapour is possible through the insulation due to the closed cell nature of Armaflex. Moisture will not migrate through professionally installed Armaflex.

Long-Term Durability

No fragile water vapour barrier - The built-in vapour barrier can't be "damaged" during installation or over the lifetime of the insulation.

Avoids Thermal Bridging

Armaflex is a seamless insulation system - these same technical properties provide a secure system.

Long-Term Energy Efficiency

By minimising the ingress of water vapour into the insulation the multi-layered cells in Armaflex prevent the thermal conductivity from rising. Increased thermal conductivity can in the long term lead to increased energy costs and surface condensation.

Inhibits Growth of Mould

- Minimises moisture permeation, the first requirement for mould growth
- Minimises the second requirement: No cellulosic vapour jacket, and the smooth surface doesn't trap dust

Formaldehyde-Free

Ensures that Armaflex is a low-emitting product. It is also low VOC.

Support Requirements of Health & IAQ (Indoor-Air-Quality)

- Dust and Fibre-Free
- Will not emit any particles or fibres even when cut into shapes and fittings
- No outgassing CFC & HCFC free manufacturing process

Supervised Manufacturing & Technical Values

Factory Mutual Approval Guide - guarantee consistent performance to published values by monitoring

- Fire Performance (FM pipe chase test, Flammability test)
- Water Vapour Transmission
- Thermal Conductivity

Supervised Quality Standards

ISO Registration ensures that all Armacell manufacturing facilities consistently meet customer requirements . . . by managing all processes with ongoing quality assessments.





The Insulation System which

- ✓ Protects your investment
 - ✓ **Provides** high energy efficiency
 - ✓ Keeps your operating costs low





the makers of Armaflex® Class O Armaflex is the flexible, closed cell, elastomeric, nitrile rubber insulation that offers reliable protection against condensation and effectively prevents energy loss.

A highly efficient method of insulating hot and cold water services, chilled water lines, heating systems, air conditioning duct work and refrigerated pipe work for frost protection, energy conservation and condensation control. Armaflex is dust free, fibre free and CFC free with an ODP of zero which means an environmentally friendly product.

- » Built in vapour barrier prevents condensation
- » Long-term thermal performance / energy conservation
- » Lightweight and flexible, quick and easy installation with low maintenance requirements, resulting in time and cost savings
- » Excellent resistance to the effects of ozone, oil and chemicals (consult product test list)



ARMAFLEX Adhesive 520

Armaflex 520 adhesive is based on modified chloroprene rubber in a blend of flammable solvents. The material has low viscosity for ease of application and quick drying characteristics. In the dry state, Armaflex 520 Adhesive is not flammable. The adhesive is particularly suitable for joining Armaflex flexible elastomeric insulation and for bonding the material to clean prepared surfaces. When properly cured the adhesive maintains the resistance to water vapour expected of Armaflex.



ARMAFLEX Gluemaster

Glue pump enhanced to use with Armaflex adhesives. Metal can and brush in one with dose pump. Gluing is made faster and more efficient than manual application, requiring no manual "dunking" of an application brush. By adequately spreading the glue onto the surface Gluemaster provides savings by reducing waste to an absolute minimum.

ARMAFIX Pipe Support Section

Armafix Insulation Pipe Hangers (IPH) is quick, innovative alternative to traditional block and dowel pipe supports. The engineered, foam-to-foam solutions provide optimum load bearing while protecting against thinkness compression and condensation gaps that can compromise system integrity

ARMAFINISH CO Paint

Armafinish CO is a water-based coating using an advanced terpolymer resin system. When properly applied the coat-ing is suitable for the protection of Armaflex flexible thermal insulation materials against sunlight, UV radiation and chemical attack. The coating, when fully cured, maintains the flexibility, resistance to water vapour and fire performance of the Armaflex material. Where resistance to damage is a particular requirement the coating may be further strength-ened using a random mesh glass fibre scrim.



ARMAFLEX Tape Self-Adhesive

Self-Adhesive tape (available in Class O Armaflex, NH/Armaflex or HT/Armaflex) which may be used for insulating diffcult shapes or areas not easily accessible



Technical Data and product range

Class O Armaflex Technical Data								
Temperature range Minimum line temperature Maximum line temperature +10 Flat surfaces and tape +3								
Thermal Conductivity (mean temperature BS874 Part 2 1986) 0 +20 +40 °C ${\leq}0.034 {\leq}0.036 {\leq}0.039$ W/(m·k)							
Water vapour permeability Moisture Resi BS EN ISO 9346:1996 BS4370 Part 2 1973	stance factor µ > 5,000 3.6 x10 [™] kg/(m⋅s⋅Pa) 0.13µgm/(N.h)							
Water absorbtion, by volume after 28 d	ays 0.9% average, 1.5%maximum							
* Fire performance, surface spread of flame, BS476 Part 7 199	7 Class 1							
* Fire propagation , BS476 part 6 1989 Total Index of Performance(I) Sub index(i)	Less than 12 Less than 6							
Reaction to fire Self-extinguishing, does not drip								
Noise reduction	Acoustic level to 30 dB(A)							
Resistance to building materials	Very good							
Resistance to chemicals	Consult product test list							
Health Aspects	Dust & Fibre Free							
Dimensions Standard tube 2m lengths								
Outdoor applications should be painted with Arma thickness. Two or more coats may be required	finish CO paint to the recommended							

thickness. Two or more coats may be required.

Tube Size Range

Armaflex is ideal for all thermal and

acoustic insulation required on:

- Chilled water lines
- · Hot and cold water services
- · Heating systems
- Air conditioning ductwork
- Refrigeration pipework
 and ancillary equipment
- Drainage pipe / rain water pipe
- * If lower temperatures, down to -200 °C, are involved please consult our sales.
- * This meets the 1991 Building Regulations (England and Wales) and the Building Standards (Scotland) Regulations 1990 for the Class O fire category.

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 by the recipient.

Copper Tube		Iron & Steel Pipe		Minimum ID Armaflex	D F Nominal Nominal Thickness 6mm 9mm		H Nominal Thickness 13mm		M Nominal Thickness 19mm		R Nominal Thickness 25mm		T Nominal Thickness 32mm		U Nominal Thickness 40mm		V Nominal Thickness 50mm				
NB in	Nom OD in	Nom OD mm	NB in	Nom OD mm	Min ID mm	Ref.	m/cm	Ref.	m/cm	Ref.	m/cm	Ref.	m/cm	Ref.	m/cm	Ref.	m/cm	Ref.	m/cm	Ref.	m/cm
	1 _{/4}	6			6.5	CO-D-006	612	CO-F-006	352	CO-H-006	180	CO-M-006	112	CO-R-006	70	-		-		-	
	3 _{/8}	10			10.5	CO-D-010	440	CO-F-010	264	CO-H-010	144	CO-M-010	100	CO-R-010	60	CO-T-010		CO-U-010		_	
3/8	1 _{/2}	12			12.5	CO-D-012	352	CO-F-012	220	CO-H-012	128	CO-M-012	90	CO-R-012	56	CO-T-012	32	CO-U-012		CO-V-012	
1/2	5 _{/8}	15			16.0	CO-D-015	264	CO-F-015	180	CO-H-015	112	CO-M-015	80	CO-R-015	48	CO-T-015	32	CO-U-015	22	CO-V-015	
5/ ₈	3 _{/4}				20.0	CO-D-020	220	CO-F-020	144	CO-H-020	90	CO-M-020	72	CO-R-020	40	CO-T-020*	24	CO-U-020*	22	CO-V-020*	12
3 _{/4}	7 _{/8}	22	1 _{/2}	21.3	22.5	CO-D-022	180	CO-F-022	128	CO-H-022	90	CO-M-022	60	CO-R-022	40	CO-T-022	24	CO-U-022	18	CO-V-022	12
1	1 ¹ /8	28	3 _{/4}	26.9	29.0	CO-D-028	144	CO-F-028	98	CO-H-028	72	CO-M-028	40	CO-R-028	32	CO-T-028	22	CO-U-028	16	CO-V-028	12
1 ¹ /4	1 ³ /8	35	1	33.7	35.5			CO-F-035	82	CO-H-035	58	CO-M-035	36	CO-R-035	24	CO-T-035*	18	CO-U-035*	16	CO-V-035*	10
1 ¹ / ₂	1 ⁵ /8	42	1 ¹ / ₄	42.4	43.5			CO-F-042	60	CO-H-042	48	CO-M-042	28	CO-R-042	22	CO-T-042*	16	CO-U-042*	12	CO-V-042*	8
			1 ¹ /2	48.3	49.0			CO-F-048	50	CO-H-048	40	CO-M-048	24	CO-R-048	20	CO-T-048*	12	CO-U-048*	12	CO-V-048*	8
2	2 ¹ /8	54			55.0			CO-F-054	48	CO-H-054	36	CO-M-054	24	CO-R-054	20	CO-T-054*	10	CO-U-054*	8	CO-V-054*	8
			2	60.3	61.0			CO-F-060	32	CO-H-060	28	CO-M-060	20	CO-R-060	16	CO-T-060*	10	CO-U-060*	10	CO-V-060*	8
2 ¹ / ₂	2 ⁵ /8	67			68.0					CO-H-067	24	CO-M-067	16	CO-R-067	14	CO-T-067*	8	CO-U-067*	8	CO-V-067*	6
2 ¹³ / ₁₆	3	76.1	2 ¹ / ₂	76.1	77.0					CO-H-076	22	CO-M-076	14	CO-R-076	12	CO-T-076*	8	CO-U-076*	8	CO-V-076*	4
			3	88.9	90.0					CO-H-089*	18	CO-M-089	12	CO-R-089*	12	CO-T-089*	8	CO-U-089*	8	CO-V-089*	4
4	4 ¹ /4	108			109.0							CO-M-108*	10	CO-R-108*	8	CO-T-108*	8	CO-U-108*	6	CO-V-108*	4
			4	114.3	115.5							CO-M-114*	10	CO-R-114*	6	CO-T-114*	4	CO-U-114*	4	CO-V-114*	4
			5	139.7	142.0							CO-M-140*	6	CO-R-140*	4	CO-T-140*	4	CO-U-140*	4	CO-V-140*	4
			6	165.2	168.0									CO-R-168*	4	CO-T-168*	4	CO-U-168*	4	CO-V-168*	4

*Delivery quoted on request. Continuous Sheet

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	al Sheet Size ss Widthx Length mm mm		I Sheet Size ss Widthx Length mm mm	Armaflex Tape self-adhesive	
6	1,220 x 15,000	25 32	1,220 x 4,000 1,220 x 3,000	Width:50mm	
9 13	1,220 x 10,000 1,220 x 8,000	40	1,220 x 3,000	Thickness:3mm	If any other size request,
19	1,220 x 6,000	50	1,220 x 2,500	Length:9.14m	please contact sales



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