

# Class 0 Armaflex SHEET

## Sound Absorption with Closed Cell Protection

**New!** Built-In Anti-Microbial Protection Reduces Mould and Bacteria Growth

- ▶ Dust and fibre free insulation with thermal and acoustic properties
- ▶ Impressive airborne noise absorption at problem frequencies





## Class O Armaflex Sheet

### Sound Absorption with Closed Cell Protection

Armaflex is a flexible closed cell elastomeric sheet with a Class O fire rating and energy saving thermal performance. Being a closed cell material, Armaflex requires no external vapour barrier and will not absorb moisture by “wicking”.

Armaflex has the unique capability of providing significant sound absorption while remaining completely closed cell. Aerodynamic and fan noise within the ducting can be reduced when Armaflex is used as an internal lining. Due to its excellent thermal values, Armaflex also performs as a thermal insulator which negates the need for additional thermal insulation on the exterior of the ductwork.

When Armaflex is used as an external acoustic lining, noise break-out from the duct wall can be significantly reduced.

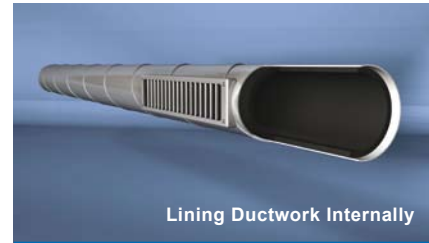
Class O Armaflex now also comes with Microban anti-microbial protection built-in, offering enhanced resistance against bacteria and mould growth. This makes Class O Armaflex suitable for use in offices, schools and hospitals.

Armaflex is dust, fibre and formaldehyde free, and inhibits the onset of “sick building syndrome”.

**New** Built-in anti-microbial protection reduces mould and bacteria growth

- ▶ Dust and fibre free insulation with thermal and acoustic properties
- ▶ Impressive airborne noise absorption at problem frequencies
- ▶ Meets recommended Part L energy performance when internally lining ductwork\*
- ▶ Excellent de-coupling and isolation performance on pipes and ducts in contact with other structural and service elements
- ▶ Suitable for use in areas of high humidity and areas with possible oil and chemical contact

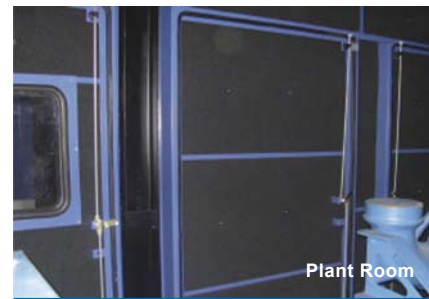
\*Applies to warm ductwork only at 32 mm thickness. Assumes a high emissivity ductwork finish.



Lining Ductwork Internally



Insulating Ductwork Externally



Plant Room








### Special Product Attributes

- ▶ Anti-Microbial Protection
- ▶ Combined thermal & acoustic insulation
- ▶ In-built Water Vapour Barrier
- ▶ Dust & Fibre free
- ▶ 0 GWP
- ▶ Class O fire category
- ▶ No mechanical fixings needed



## PRODUCT PROFILE

	Values	Remarks
<b>Material</b>	Foamed nitrile rubber	
<b>Max. Surface Temperature</b>	+105° C	* For temperatures between -50° C and - 200° C, please consult our Technical Department. Tel. +44 (0)161 287 7038 · Fax +44 (0)161 633 2685
<b>Max. Temperature for Flat Surface</b>	+85° C	
<b>Min. Surface Temperature</b>	-200°C*	
<b>Thermal Conductivity at 0° C</b>	0.034 W/(m · K)	Test acc. to EN ISO 8497
<b>Thermal Conductivity at +20° C</b>	0.036 W/(m · K)	
<b>Thermal Conductivity at +40° C</b>	0.038 W/(m · K)	
<b>Water Vapour Permeability</b>	Moisture Resistance Factor $\mu$ <b>7,000</b> BS EN ISO 9346:1996 $2.79 \cdot 10^{(-14)}$ kg/(m s Pa)	
<b>Water Absorption</b>	0.2% by volume	Test acc. ASTM C 209
<b>Surface Spread of Flames</b>	Class 1	Surface Spread of Flame acc. BS 476 Part 7: 1997 Fire Propagation acc. BS 476 Part 6: 1989
<b>Fire Propagation</b>	Total Index Performance (I) $\leq 12$ Sub Index ( $i_1$ ) $\leq 6$	Test results for <b>Surface Spread of Flames and Fire Propagation</b> meets <ul style="list-style-type: none"> <li>• Building Regulations 2000 (England and Wales)</li> <li>• Building Standards (Scotland) Regulations 1990</li> <li>• Building Regulations 2000 (Northern Ireland)</li> <li>• Building Regulations 1997 (Republic of Ireland)</li> </ul> for the Class O fire category  Tested in accordance with UL 94
<b>Fire Performance acc. to Building Regulation</b>	<b>Class O</b>	
<b>Reaction to fire</b>	Self-extinguishing, does not drip	
<b>Noise Reduction</b>	Sound Absorption Coefficient ISO 354:2003 up to 0.8	Also suitable for use in the prevention of sound passage
<b>Resistance to</b>	Building Materials Very Good Chemicals Consult Product Test List Ozone Very Good	     
<b>Environmental Aspects</b>	<b>ODP zero, GWP zero</b>	
<b>Health Aspects</b>	<b>Dust &amp; Fibre Free</b> <b>Microban anti-microbial protection</b>	

**Outdoor applications:** Class O Armaflex should be painted with Armafinish FR paint to the recommended thickness within 3 days. Two or more coats may be required.

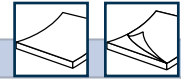
Absorption coefficient acc. to EN ISO 354	Octave band centre frequency, Hz					
	125	250	500	1000	2000	4000
at 10 mm sheet	0.02	0.04	0.08	0.19	0.53	0.44
at 32 mm sheet	0.08	0.17	0.51	0.56	0.25	0.24

acc. to EN ISO 11654	at 10 mm	at 32 mm
Weighted Sound Absorption Coefficient $\alpha_w$	0.02 (H)	0.35
Sound Absorption Class	E	D

acc. to ASTM C423	at 10 mm	at 32 mm
NRC Rating	0.2	0.35



## CLASS O ARMAFLEX Flat Sheet



Colour black, skin on both sides

Insulation Thickness mm	Width m	Length m	Standard Sheet (skin on both sides)		Sheet with Self-Adhesive Backing	
			Reference	Carton Content m <sup>2</sup>	Reference	Carton Content m <sup>2</sup>
9	0.5	2	CO-09MM	13	CO-09MM/A	13
13	0.5	2	CO-13MM	9	CO-13MM/A	9
19	0.5	2	CO-19MM	7	CO-19MM/A	7
25	0.5	2	CO-25MM	5	CO-25MM/A	5
32	0.5	2	CO-32MM	4	CO-32MM/A	4

## CLASS O ARMAFLEX Continuous Sheet



Colour black, skin on both sides

Insulation Thickness mm	Width m	Length m	Continuous Sheet (skin on both sides)		Continuous Sheet with Self-Adhesive Backing	
			Reference	Carton Content m <sup>2</sup>	Reference	Carton Content m <sup>2</sup>
3	1	30	AC-03-99/E	30		
6	1	15	AC-06-99/E	15	AC-06-99/EA	15
9	1	10	CO-09MM/E	10	CO-09MM/EA	10
13	1	8	CO-13MM/E	8	CO-13MM/EA	8
19	1	6	CO-19MM/E	6	CO-19MM/EA	6
25	1	4	CO-25MM/E	4	CO-25MM/EA	4
32	1	3	CO-32MM/E	3	CO-32MM/EA	3

## CLASS O ARMAFLEX Tape



Reference	Thickness mm	Length m	Width mm	Carton content
CO-TAPE	3	15	50	12 rolls



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