

# Armaflex®

Insulation Engineered For **HOSPITALS**



 **armacell**  
engineered foams

THE MAKERS OF  
**Armaflex®**

### » Hidden Health Risks

We may not always be able to see pollutants in the air we breathe but microscopic dust and fibres, along with biological particles such as mould spores and pollen, are always present in varying amounts. In even small quantities these can aggravate respiratory problems and cause discomfort.

People understand the impacts of pollution on outdoor air but indoor air pollution out gassing from building materials is often overlooked. This is ironic since we spend up to 90% of our time indoors and the risk is related to our overall exposure.

### » Indoor Air Quality

When patients strive for fresh air they are rallying against the poor indoor air quality yet often building designers fail to hear this call. Many modern buildings are air tight and rely on re-circulating filtered but stale air. Almost all gases remain within the envelope.

Our air is always contaminated with pollutants, these pollutants include not only naturally generated gases such as carbon dioxide but also harmful, man made, volatile organic chemicals, industrial fibres, highly acidic particles of dust and spores of mould and bacteria. Whilst breathing these may not result in any immediate signs of ill health they may all contribute towards "building related symptoms".

Carefully specifying pipe and duct insulation materials can minimise the contribution to indoor air pollution and so attention should always be taken when selecting your insulation.



### » A National Problem

Hospital building within the UK has become increasingly sophisticated and patient focused. Innovative hospital designs now provide a superior environment for recovery.

Despite this, many hospitals still suffer from poor indoor air quality. Often this can seem inexplicable because the contribution of hidden factors, including pipe and duct insulation, has been underestimated.

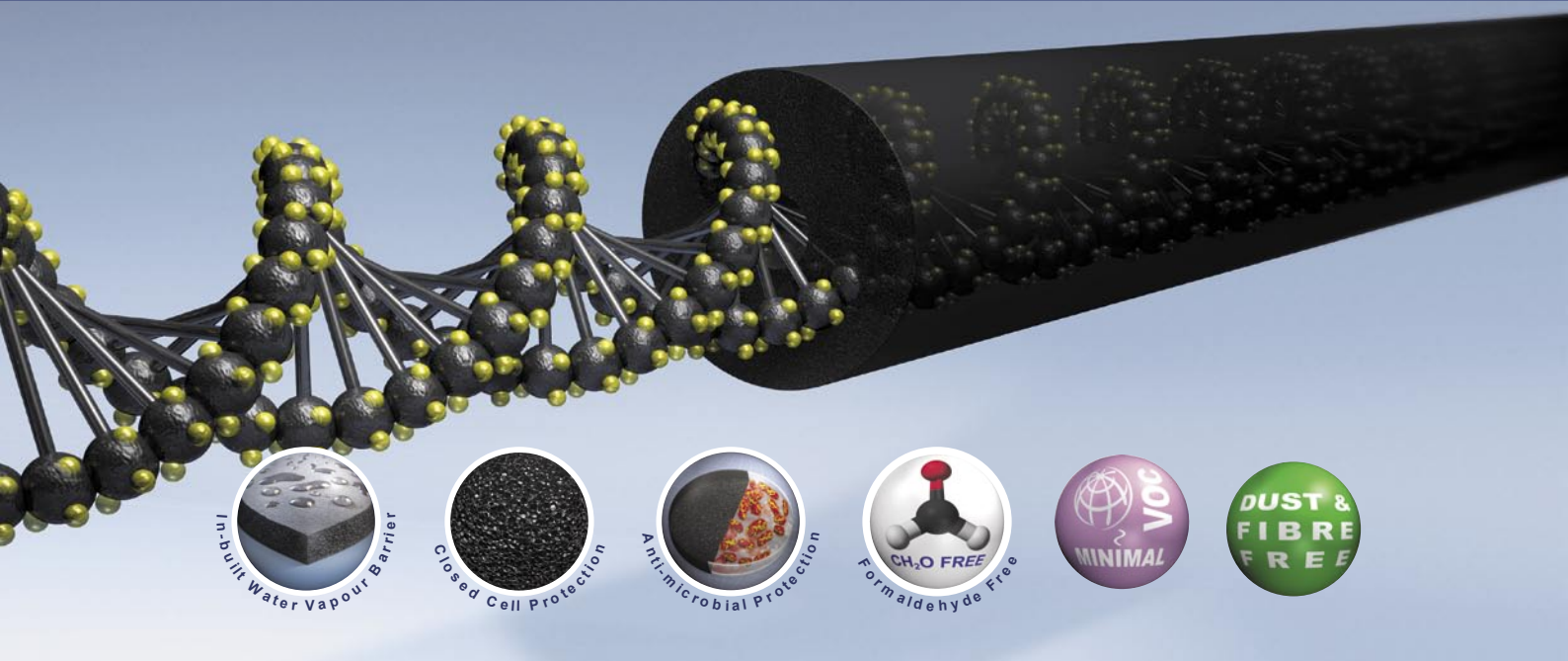
### » A Global Solution

The impact of pipe and duct insulation on the indoor air quality within hospitals is recognised as an problem around the world.

This is especially true in the USA where the link between indoor air quality and patient health is more widely understood. Buildings in the US must also demonstrate low VOC levels and prove emissions of other dangerous gases, such as Formaldehyde, remain within safe levels.

Following this level of scrutiny it is no surprise that, being a non-fibrous, closed cell material and featuring built-in anti-microbial protection, Armaflex is acknowledged as the insulation material which can not only provide the safest possible hospital environment but also help your project come in on time and on budget.

**Armaflex, Clean and Efficient Insulation designed for HOSPITALS**



As a closed cell dust and fibre free product which inhibits the growth of mould and microbes, Armaflex is the ideal insulation for hospital environments where the indoor air quality is paramount.

Whereas other insulation materials may be designed specifically for warm or cold service pipe or ductwork, Armaflex is equally as suited for hot water pipes as it is for chilled water pipes. Effectively saving energy whilst also preventing condensation and mould growth.

Highly flexible Armaflex tubes are quickly and easily applied – even onto the tightest pipe runs - and the in-built water vapour barrier negates the requirement for any external barrier to be applied.

On ductwork Armaflex sheet can be cut onsite to match contours exactly, releasing no dust or fibres.

It's the inherent attributes of Armaflex with Microban® anti-microbial protection which make it first choice for healthcare environments :around the globe:

**Closed cell protection**  
 Closed cell insulation materials possess a built-in resistance to the passage of water vapour. As a result closed cell materials do not rely on an easily pierced external water vapour barrier to prevent condensation and mould on refrigeration and air conditioning systems.


**In-built water vapour barrier**  
 Closed cell Armaflex material has such a high built in resistance to water vapour ingress that the insulation effectively acts as if it is itself the water vapour barrier. No easily compromised external foil barrier is required.

**In-built anti-microbial protection**  
 Armaflex contains Microban, an anti-microbial additive which actively inhibits mould and bacteria. Effective resistance against microbial growth is provided even if the surface is damaged or pierced.

**Dust & fibre free**  
 Dusty and fibrous materials create an additional health hazard, often combining with mould spores and bacteria to aggravate respiratory conditions. Armaflex is entirely dust and fibre free, making it particular suitable for use in schools, offices and hospitals.

**Formaldehyde free**  
 Formaldehyde is classified as a probable human carcinogen and maximum recommended exposure limits are set by the health and safety executive. Armaflex will not content or outgas formaldehyde and will not contribute to overall formaldehyde levels.

**Minimal VOC**  
 Volatile organic compounds (VOC's) vaporise into the indoor environment contributing towards sick building syndrome. Being classified as minimal VOC means Armaflex is not contributing to this effect.

What is Microban® protection?   
 antimicrobial product protection

Microban®\* technology is built-in protection for solid products, coatings and fibers. Microban anti-microbial protection gives Class O Armaflex products added level of protection against harmful microbes such as, bacteria, mould and mildew.

\*MICROBAN is a registered trademark of Microban Products Company.

### » Armaflex Products designed for hospitals

#### **CLASS O ARMAFLEX TUBES**

Closed cell, elastomeric, nitrile rubber pipe insulation material with a Class O fire rating and excellent thermal properties. Available in tubes and pre-slit tubes.

#### **CLASS O ARMAFLEX SELFSEAL**

Pre-slit Class O Armaflex tubes with a pair of self adhesive strips down the longitudinal seam. Specifically designed to reduce installation time on existing pipework.

#### **CLASS O ARMAFLEX SHEETS**

Closed cell, elastomeric, nitrile rubber insulation material with a Class O fire rating and excellent thermal properties. Ideal for use on ductwork, flanges and valve boxes. Also available in continuous and self adhesive formats.

#### **CLASS O ARMAFLEX DUCT**

Class O Armaflex Duct is Class O Armaflex sheet with a bright aluminium foil covering pre-applied. Class O Armaflex Duct is designed for rectangular and circular ductwork.

As a dust and fibre free, formaldehyde free product with an ODP of 0, Class O Armaflex Duct is suitable for use on ductwork in offices, schools and hospitals.

#### **ARMAFLEX AC COILS**

Long lengths of continuous Armaflex coils for air conditioning and domestic heating pipes. Achieves a Class O fire rating. Supplied in easy to carry boxes.

#### **NH/ARMAFLEX**

Halogen free, closed cell nitrile rubber based Armaflex insulation material with a low smoke toxicity rating. Achieves a number of maritime fire performance certificates.

#### **HT/ARMAFLEX**

Naturally UV resistant closed cell EPDM rubber based Armaflex insulation material capable of operating at line temperatures up to 150°C.

#### **ARMAFLEX TUFFCOAT**

Class O Armaflex tubes with a tough white covering pre-applied. Covering provides protection against UV exposure, impact damage and weathering.

#### **ARMAFIX PIPE SUPPORT**

Armaflex sections with load bearing PUR/PIR inserts and an aluminium outer cladding to prevent excessive material compression.



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