

# A high vapour resistant insulator for air-conditioning applications

The Supreme Industries Ltd, founded in 1942, pioneered many path-breaking products in the country and became trendsetters in plastics industry by introducing many advanced solutions for various applications and industries.

Supreme's Insulation division offers solutions in: Ducting insulation; Underdeck insulation; Pipe insulation; Floor insulation; Insulation joint sealing tapes; Sound insulation; Overdeck insulation; Wall insulation

The main goal of a good insulation material should be that of preventing water vapour from spreading through insulation as water is an optimal heat conductor. INSUFlex, by Supreme Industries, is a CFC-free, black flexible elastomeric closed-cell Nitrile Rubber thermal insulation that provides a highly efficient method of insulation and effectively controls condensation against both heat loss and heat gain.

The material is particularly suitable for insulating pipe works for condensation control. It can be

used on chilled water pipe lines, refrigerated pipe-works, hot & cold water services and on sheets or rolls in air-conditioning ductworks.

INSUFlex, has a very high diffusion resistance factor to water vapour transmission  $\geq 7000$ , a low thermal conductivity and an excellent fire safe performance. It is suitable for a temperature ranging from

-55°C to +105°C. The product does not depend on any additional outer thick skin or covering but is in built with the insulation and extends through the full thickness.

INSUFlex range is resistant to corrosion, fungal and mildew growth and is therefore suitable for clean room applications. Insulation material with a low 'K' value equates to a high energy saving potential and thermal performance. Thermal conductivity is the main data used to technically calculate insulation thickness required to prevent condensation.

## Other 'INSU' range products

'INSUshield' is a non-fibrous, fire retardant ('Class O' in Fire Propagation

and 'Class 1' in Surface Spread of Flame), closed cell, tri dimensional chemically crosslinked polyethylene XLPE foam. An ideal environment friendly insulation material, with a perfect solution for all your insulation needs for ducts, roofs, pipes, vessels, etc.

The divergent advantages of 'INSUshield' are ease of installation, low thermal conductivity and good moisture & vapour resistance preventing microbial growth and optimum condensation protection.

'INSUreflector' is a radiant heat reflective insulation material made of polyethylene air bubble film (ABF) laminated with aluminum foil on one or both sides. It is a low e-reflective insulation material with a low mass to air ratio, which effectively blocks the radiant heat transfer.

The bright surface of the aluminium foil, which encases the FR polyethylene air bubble material, reflects 96 per cent to 99 per cent infra-red radiation received by the surface of the heated slated roof.

Amongst others, there are 4 primary reasons why Supreme's Thermal Insulation Division is a choice of discerning customers seeking superior insulation solutions:

Quality: A methodical, systematic and stringent approach to quality ensures all our products are not only world-class but also durable. We adhere to international quality standards while manufacturing our products. ISO 9001:2000 and ISO 14001 certifications and NABL Accreditation for our various plants is a testimony to our serious approach to quality.

## Major & frequent problems faced:

Idling of machineries due to incomplete document.

It is observed there is a lack of transparency in the system during tax & document update which forces project authority seeks help of RTI

## architecture

(Contd. from 14)

**What aspects of global warming and other climate changes do architects take into account when planning housing, commercial projects, etc?**

The question of global warming is a very complex and critical one and it is linked strongly to environmental preservation. A conscious architect would work with awareness of using materials thoughtfully and not blindly add to carbon footprint by mindless use of certain materials like glass aluminium and steel in pursuit of style.

The architect's role also lies in creating relevant space prototypes that bring people together and provide a sense of making community stronger in every possible way. Well connected and meaningful spaces create a psychology of appreciation of nature and harmonious coexistence. Inhabiting the right kind of space creates a mindset, out of which the right action can emerge.

**What are some of the irresistible advantages of pre-engineered steel building technology?**

A pre-engineering steel building essentially assists a speedy construction. It also provides a good



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