

Aerolam Insulations Pvt. Ltd

Saving Energy | Saving Green





COVER.PROTECT.SAVE



INSULATION : THE OBJECTIVE The energy crisis globally has brought about an increase in combustible costs, where only an appropriate insulation system can bring about significant economic savings. The need to insulate buildings at all exposed or susceptible surfaces from inside or outside is an indisputable reality that finally goes on to increasing the comfort of occupants – both temporary and permanent, humans and livestock and finally products and goods that are heat and moisture sensitive.

And the objective stems from a basic understanding to keep the heat out during summers and to keep the heat in during winters. In order to keep the insulation effective and efficient, it needs to be well protected with a good air and vapor barrier – which Aerolam Insulations' products do extremely well.

A GOOD INSULATION SYSTEM The surfaces that create or make the cover or envelope of any building including its sub- structural system is mainly composed of five essential elements: general weather barrier, an air barrier, the insulation, the vapor barrier and the interior finishing –

All these together must

- provide thermal resistance
- limit air flow
- limit diffusion of moisture
- allow moisture to evaporate towards exterior from within the envelope

ROOF AS MAIN ENVELOPE Roofing, in all cases is the largest surface exposed to the vagaries of the weather especially heat in tropical countries like India. The exposure to sun is inevitable and therefore heat gain through this surface is high. Insulating the roof – preserves energy, amends comfort and lessens utility cost.

A Roof Insulation Foil lessens the amount of radiant heat that accedes the building by as much as up to 97 % with even better results if united with conventional bulk insulation to create a complete insulation system. Conclusively foil insulation works best by also diminishing energy consumption for cooling, decrease the potential for condensation that causes mold mildew, rot and dripping – thereby increasing overall user comfort.

All modern construction requires high performance insulation which is capable of stopping heat transfer by conduction, convection and radiation as well as be efficient against an infiltration. Aerolam Insulations' products follow these basic principles to deliver the best solution across industries.



THE COMPANY

VISION To be among the top ten companies internationally providing Reflective Insulation material for construction purposes.

MISSION To be known as a quality provider of Reflective Insulation material
To match and surpass international standards in the manufacturing processes of Reflective Insulation material
To establish an employee friendly structure to enhance productivity
To provide relief from heat and cold to people from varied countries and background
To encourage the establishment of a greener planet by bringing about a reduction in the use of energy

AT THE CORE Having freshly ventured into the industry, Aerolam Insulations Pvt. Ltd. oozes confidence and the urge to grow and develop briskly. The managing team of the organization boasts of some highly qualified and experienced stalwarts with a pedigree of business enterprise and venturing. Mr. Dhaval Patel takes up the onus of being the chair person of the organization. Mr. Brijesh Patel, on the other hand, is the managing director of the company, over looking the day to day operations of the firm, equipped with a solid experience in the international banking industry.

Having an extensive experience of eight years in the insulation industry, Mr. Krunal Pandya is the face of the organization, taking up the position of Vice President of sales and marketing. The post of General Manager for Technical and Production finds its responsibility being shouldered by the strong shoulders of Mr. Kalpesh Patel, who comes with a total of ten years of experience in the insulation industry.

Besides the expertise and a vision of a promising future, the company is based on a strong belief and passion for a successful future relying upon good business accumen and a good value system.





MANUFACTURING UNIT

READY FOR A GLOBAL MARKET The Indian manufacturing industry is in demand beyond the consumption awareness within the country. The perspective has broadened and in general the marketing is focused onto large relevant international markets.

Aerolam Insulations Pvt. Ltd. is well aware of both the domestic and the international markets – with an aim to become among the top ten global players in the reflective insulation material industry equipped with Global manufacturing standards, with highest quality benchmarks. Along with a large market and better quality manufacturing, large volume production facility would demand larger volume consumption too.

With one of the largest ranges of insulation products and variants in terms of layers or varied backing material as per usage, Aerolam is looking omni directional across industries within roofing both domestic and industrial and beyond roofing (especially packaging).

Today, Aerolam Reflective Insulation fits in with parameters beyond just combating heat transfer or preventing air infiltration – but goes on to being a product that is 100% vapor and air barrier – besides, it is environment friendly, has good flame spread and smoke development rating resistant, easy to install, carry and is affordable.



THE PRODUCTS

The entire AEROLAM™ Insulation product range is conceived to fulfil a wide range of insulation needs across climates – to work both during summer and winter. Its effectiveness is purely based on its unique construction. Various AEROLAM™ products are composed of varying layer structures, layer formulations, nominal thickness changes and surface finish – all in turn attributing to bettering its thermal and acoustic properties.

As its composition - AEROLAM™ is constructed of pure aluminum foil (at least 99%) attached to polyethylene bubble sheeting using layer-bonding thermal process making it free of adhesive or chemicals. AEROLAM™, a PRODUCT free from FIBRE, is designed to block 97% of the radiated heat, that penetrates through a given structure or building. In Fact, multiplying AEROLAM™ insulation layers can improve the overall system R- value. The overall benefits depend on the installation of the additional layers wherein using proper air spaces between AEROLAM™ layers can improve system –value significantly.

Understanding the product future, AEROLAM™ products are manufactured using the latest available machinery and go on to offer a 10 years manufacturing warranty* with all their insulation products.

TO RECAP SOME BASIC PRINCIPLES THAT ENABLE AEROLAM REFLECTIVE INSULATIONS TO WORK AT 100% EFFICIENCY

- Trapped air is the best anti-conductor available
- Pure aluminum is the material with the best reflective (low emissivity) properties and still utilizable as a construction material
- The aluminum and the polyethylene layers which Aerolam is made of makes it a 100% air and vapor barrier product
- Up to 80% of all, heat transfers are by radiation. It is therefore, very important to stop them at the source instead of absorbing the heat and slowing down penetration
- A system including a mass insulation and a reflective insulation makes it an extremely efficient way to combat heat transfer





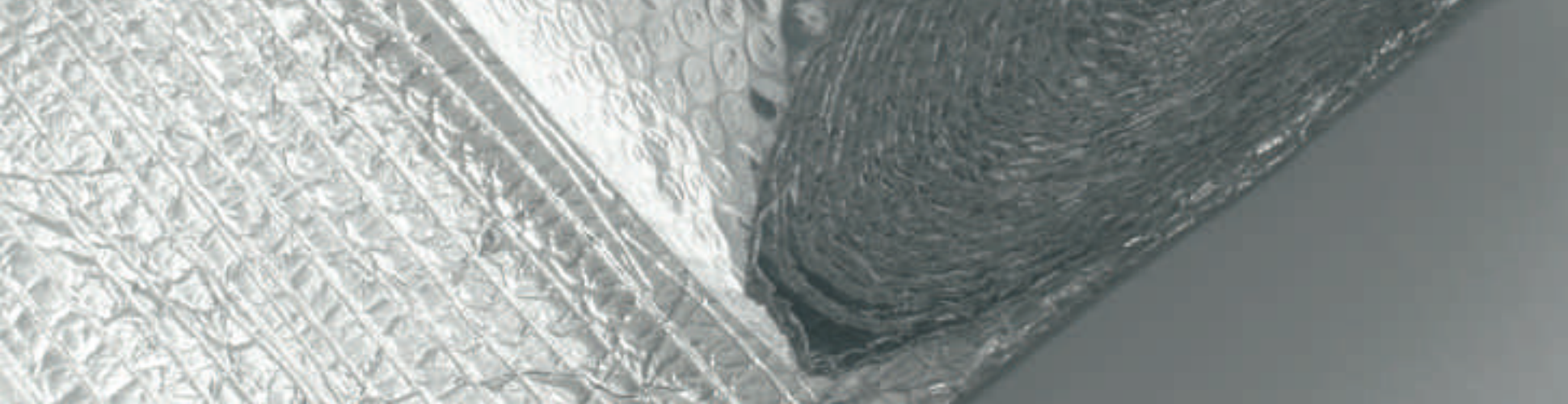
AEROLAM™ SUPER is based on SINGLE LAYER OF FIRE RETARDANT AIR BUBBLE FILM laminated with both sides pure aluminum foil. While AEROLAM™ PREMIUM is constructed with two layers of fire retardant air bubble film laminated with both side pure aluminum foil. This follows the simple principle - 'Higher The Airgap, Higher the R-Value'.

AEROLAM™ Insulations is the first and only manufacturer in India to produce the double layered bubble insulation products.

PREMIUM INSULATION PRODUCT AEROLAM-PREMIUM
AEROLAM-PREMIUM-PE
AEROLAM-PREMIUM-WF
AEROLAM-PREMIUM-FG
AEROLAM-PREMIUM-METPET
AEROLAM-PREMIUM-METPET-PE

PACKAGING AIR BUBBLE FILM
UV STABILIZED AIR BUBBLE FILM
FIRE RETARDENT AIR BUBBLE FILM

SUPER INSULATION PRODUCT AEROLAM-SUPER
AEROLAM-SUPER-PE
AEROLAM-SUPER-WF
AEROLAM-SUPER-FG
AEROLAM-SUPER-METPET
AEROLAM-SUPER-METPET-PE
AEROLAM-SUPER-METPET-WF



AEROLAM-PREMIUM Two layers of fire retardant air bubble film laminated with both side pure aluminum foil

AEROLAM-PREMIUM-PE Two layers of fire retardant air bubble film laminated with pure aluminum foil on one side and white poly on the other

AEROLAM-PREMIUM-WF Two layers of fire retardant air bubble film laminated with pure aluminum foil laminated woven fabric on the both side

AEROLAM-PREMIUM-FG Two layers of fire retardant air bubble film laminated with fibre glass laminated pure aluminum foil both side

AEROLAM-PREMIUM-METPET Two layers of fire retardant air bubble film laminated with METPET foil both side

AEROLAM-PREMIUM-METPET-PE Two layers of fire retardant air bubble film laminated with METPET foil on one side and white polyvinyl on the other





AEROLAM-SUPER One layer of fire retardant air bubble film laminated with pure aluminum foil on both side

AEROLAM-SUPER-PE One layer of fire retardant air bubble film laminated with pure aluminum foil on one side and white poly on the other

AEROLAM-SUPER-WF One layer of fire retardant air bubble film laminated with pure aluminum foil on one side and pure aluminum laminated woven fabric on other

AEROLAM-SUPER-FG One layer of fire retardant air bubble film laminated with fibre glass laminated pure aluminum foil both side

AEROLAM-SUPER-METPET One layer of fire retardant air bubble film laminated with METPET foil on both side

AEROLAM-SUPER-METPET-PE One layer of fire retardant air bubble film laminated with METPET foil on one side and white polyvinyl on the other

AEROLAM-SUPER-METPET One layer of fire retardant air bubble film laminated with METPET foil on both side

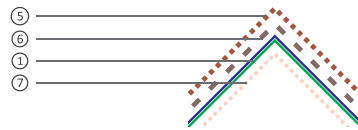
AEROLAM-SUPER-METPET-WF One layer of fire retardant air bubble film laminated with METPET foil on one side and METPET foil laminated with woven fabric on other side

AEROLAM INSULATIONS LAYER DIAGRAM

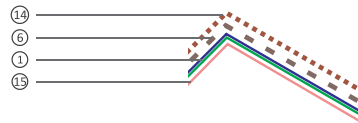
RESIDENTIAL INSULATION

STRUCTURAL

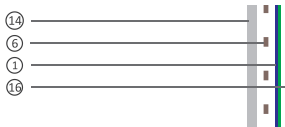
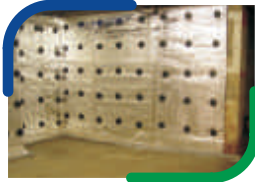
ROOF INSULATION



GARAGE AND SHADE

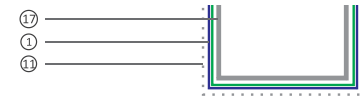


WALL

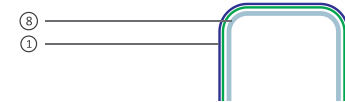


NON STRUCTURAL

WATER TANK



HVAC/AC DUCTING



1. Aerolam
2. Metal roof
3. Channels
4. Roof
5. Tile roof
6. Wooden strip
7. Plaster of Paris strip
8. Duct
9. Metal sheet

10. Metal strip
11. Aluminum adhesive tape
12. Roof support channel
13. Other insulation
14. Concrete wall
15. Cover with deco paint
16. Plaster of Paris
17. Outer Surface of Water Tank

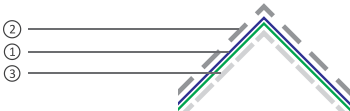


AEROLAM INSULATIONS LAYER DIAGRAM

INDUSTRIAL INSULATION

ROOF AND WALL

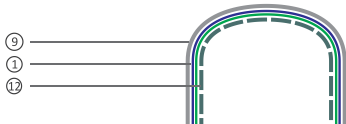
METAL ROOFING



CONTAINER INSULATION

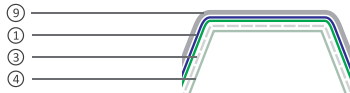


MOBILE HOUSE INSULATION

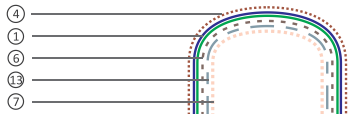


MISCELLANEOUS

CAR INSULATION



SUPPORTIVE /DUCT INSULATION



AEROLAM IS YOUR ENERGY-SAVER PARTNER FOR LIFE

EASE OF TRANSPORTATION

AEROLAM™ products are thin and light. (For a truck of bulk insulation, you will require only ¼ or less space) Thereby making AEROLAM™ products

- cut transportation costs (reduce energy spend and CO2 emission)
- cut storage space
- cut overhead costs while providing an effective solution for today's competitive market

A TRUE GREEN PRODUCT

AEROLAM™

- cuts energy bill (reduces usage of air conditioning /heating)
- is a safe product (reduced impact on health and environment)
- has no health risk (as compared with some bulk insulation products)
- reduces cost of operation, transportation, handling and wastage - making it a green product
- being such an effective insulation solution helps all to deliver a better and greener future

HEALTH FRIENDLY

All AEROLAM™ products do not cause any harm to the health of occupiers, installers or handlers.

AEROLAM™ is :-

- 100% Recyclable
- non-itchy, non-cancerous
- hypoallergenic, no crumbling material, so no airborne micro particles, does not promote respiratory problems
- hygiene antistatic, does not collect dust, does not retain bacteria, odors nor dirt
- does not retain moisture, does not promote fungus nor bacteria
- does not attract nesting, rodents, birds or insects





EASE OF INSTALLATION Besides no limitations as to where AEROLAM™ can be used, it provides total ease of installation as the process is clean, fast and efficient. AEROLAM™ installation :-

- requires less labor and less time covering similar area in comparison with bulk insulation
- can be installed anywhere in the buildings
- only requires measuring tape, cutting knife, ducting tape and pair of hands
- can be left exposed for the installation duration. No need for an extra cover or handling
- can be shaped and cut to size, reducing wastage
- requires no gloves or special protection aids

PERFORMANCE With confirmed and tested thermal resistance and great insulation effectiveness along with being thin and light-weight, AEROLAM™ insulation also comes with a 10 years manufacturer's warranty* giving you the internal confidence as user, supplier, installer or specifier. AEROLAM™ products are :-

- 100% impermeable to air and water
- have high resistance treatment to the aluminum surface, reducing possible corrosion over time
- not affected by solvents, grease, roofing frame treatments (solvent or aqueous solutions)
- has zero moisture absorption while even acting as vapor barrier when required

HIGH DURABILITY AEROLAM™ thermal reflective insulation material is designed to ensure long term performance with complete peace of mind. We manufacture AEROLAM™ from top quality materials in order that it performs to its fullest.

- Firstly , it is prepared with thick aluminum foil (8 to 18 microns, compare to 6 and 7 microns used by most producers.) This guarantees durability, sustainability and unmatched performances under various tough conditions.
- Secondly , as we understand that insulation may be exposed to conditions affecting corrosion due to humidity, acidity, fume, we have introduced an unparalleled anti-corrosion formula applied onto the aluminum foil surface.
- Thirdly, to ensure long term satisfaction, we produce AEROLAM™ products with a glue free process wherein our bubbles formation and lamination process occur at the same time, using 200°C heating process. Such production practice is proven to be very effective for reflective insulation durability, minimizing possibilities for delaminating due to buildings and environmental conditions.

These three winning features help us reinforce the fact we believe in - that AEROLAM™ insulation IS your silent energy saver partner for life.

THE PRODUCT LIST - INSULATION

PRODUCT NAME	BUBBLE SIZE	DIMENSIONS OF ROLL	THERMAL RESISTANCE EMISSIVITY	REFLECTIVITY %	TOTAL THICKNESS (MM)	TEMPERATURE RANGE
AEROLAM-PREMIUM	10MM X 4 MM	1.2 MTR X 40 MTR	0.03-0.04	97	8 MM	-122 °F to 230 °F (-50 °C ~ 110 °C)
AEROLAM-PREMIUM-PE	10MM X 4 MM	1.2 MTR X 40 MTR	0.03-0.04	97	8 MM	-122 °F to 230 °F (-50 °C ~ 110 °C)
AEROLAM-SUPER	10MM X 4 MM	1.2 MTR X 40 MTR	0.04-0.05	95	4 MM	-122 °F to 230 °F (-50 °C ~ 110 °C)
AEROLAM-SUPER-PE	10MM X 4 MM	1.2 MTR X 40 MTR	0.04-0.05	95	4 MM	-122 °F to 230 °F (-50 °C ~ 110 °C)
AEROLAM-PREMIUM-METPET-PE	10MM X 4 MM	1.2 MTR X 40 MTR	NA	NA	8 MM	-122 °F to 230 °F (-50 °C ~ 110 °C)
AEROLAM-SUPER-METPET	10MM X 4 MM	1.2 MTR X 40 MTR	NA	NA	4 MM	-122 °F to 230 °F (-50 °C ~ 110 °C)
AEROLAM-METPET-PE	10MM X 4 MM	1.2 MTR X 40 MTR	NA	NA	4 MM	-122 °F to 230 °F (-50 °C ~ 110 °C)
AEROLAM-SUPER-WF	10MM X 4 MM	1.2 MTR X 40 MTR	0.04-0.05	95	4 MM	-122 °F to 230 °F (-50 °C ~ 110 °C)
AEROLAM-PREMIUM-WF	10MM X 4 MM	1.2 MTR X 40 MTR	0.03-0.04	97	8 MM	-122 °F to 230 °F (-50 °C ~ 110 °C)
AEROLAM-SUPER-METPET-PE	10MM X 4 MM	1.2 MTR X 40 MTR	NA	NA	4 MM	-122 °F to 230 °F (-50 °C ~ 110 °C)
AEROLAM-SUPER-METPET	10MM X 4 MM	1.2 MTR X 40 MTR	NA	NA	4 MM	-122 °F to 230 °F (-50 °C ~ 110 °C)
AEROLAM-PREMIUM-METPET	10MM X 4 MM	1.2 MTR X 40 MTR	NA	NA	8 MM	-122 °F to 230 °F (-50 °C ~ 110 °C)
AEROLAM-SUPER-FG	10MM X 4 MM	1.2 MTR X 40 MTR	0.04-0.05	95	4 MM	-122 °F to 230 °F (-50 °C ~ 110 °C)
AEROLAM-PREMIUM-FG	10MM X 4 MM	1.2 MTR X 40 MTR	0.03-0.04	97	8 MM	-122 °F to 230 °F (-50 °C ~ 110 °C)



THE PRODUCT LIST - AIR BUBBLE FILM

Gauge*	GSM	Weight of 1mtr Roll	Weight of 1.2mtr Roll
200	50	5.000Kgs	6.000Kgs
225	55	5.500Kgs	6.600Kgs
250	60	6.000Kgs	7.200Kgs
275	65	6.500Kgs	7.800Kgs
300	70	7.000Kgs	8.400Kgs
325	75	7.500Kgs	9.000Kgs
350	80	8.000Kgs	9.600Kgs
400	90	9.000Kgs	10.800Kgs
435	100	10.000Kgs	12.000Kgs
500	115	11.500Kgs	13.800Kgs
560	130	13.000Kgs	15.600Kgs
600	140	14.000Kgs	16.800Kgs
650	150	15.000Kgs	18.000Kgs
700	160	16.000Kgs	19.200Kgs



THE END USER INDUSTRIES



INDUSTRY WISE ADVANTAGES OF USING AEROLAM INSULATIONS

THE ROOFING INDUSTRY The need is to cut down the heat from the largest exposed surface area. Integrating Aerolam's Reflective Insulation into any conventional – single or multi layered roofing systems provides efficient and comfortable working environment across industries .The benefit of integration by the roofing solutions-provider helps deliver a better wholesome solution for the end user.

**THE AGRICULTURE / DAIRY /
POULTRY FARMING INDUSTRIES** All these industries comprise of buildings such as stables, barns and crop stores which are exposed to major stresses. Transpiration and excretions from animals, exhaust fumes from agriculture vehicles, high levels of humidity and condensation affect the building construction along with existing weather conditions. In all the above, it makes immense sense to first keep the heat out while retaining acceptable moisture content in order to provide a conducive working environment for both humans and animals.

**THE TEXTILE / DYEING / GARMENT /
ENGINEERING INDUSTRIES** All these even today work with two common factors – a mix of old and new heat producing machinery and equipment and second, a large human workforce. To ensure better working environment inside, Aerolam's Reflective Insulation works best to primarily cut down external heat gain by above 90% making it more effective for a more workable environment.

THE FOOD / HOSPITALITY INDUSTRIES Insulation is a key concern especially for the low temperature preservation of food during processing, storage and distribution across the supply chain – which can save as much as fifty percent of valuable food that would otherwise rot before it is packed, processed or consumed.

THE PHARMA / ELECTRONIC INDUSTRIES Hygiene and HVAC energy conservation is of key importance for many processes that require controlled temperatures, better working temperatures, controlled environment conditions especially in the pharmaceutical and the electronic industries. The application of Aerolam's Reflective Insulation can ensure the right amount of moisture retention along with keeping out unwanted heat which only creates unfavorable breeding of unhygienic conditions.

The image is a composite. The top half shows a bright blue sky with wispy white clouds and a large, pale, circular moon-like object on the right side. The bottom half shows a vast, flat field of green crops, likely corn, stretching to a flat horizon. The crops are arranged in neat rows that recede into the distance.

THE WAY FORWARD



THE FUTURE OF THE WORLD

As we know, climate change is one of the major industrial challenges of our time – industries, science and politics are called upon to slow down any further rise in greenhouse gas emissions and use available resources more efficiently. Faced with these facts, various ideas and strategies for sustainable protection of the environment and climate, for the future, have been put forward.

A key approach is IMPROVING THERMAL INSULATION in buildings; a concern for all (governments, industrial houses, cooperates, developers and property owners) is energy conservation measures and costs entailed.

The Future therefore will be larger collective efforts towards achieving energy goals, adhering to directives and taking small to large steps to conserve energy.

THE FUTURE OF THE REFLECTIVE INSULATION INDUSTRY

New and old buildings are today and will be in the future largely subject to energy saving and environmental protection requirements. With roofs the most exposed parts of a building, largest consumption will obviously be the roofing industry directly or through separate application – which already promises a great future for the reflective insulation industry.

THE FUTURE OF AEROLAM

Equipped with complete Future-ready manufacturing set-up, located in one of the fastest developing nations' progressive and industry-friendly state, Aerolam is geared for the future in terms of the need of the world, global technical know-how, as well as a long term vision to manufacture, supply and collaborate for the future of the industry and the future of the world as a whole.

Aerolam sees a promising working future for all concerned and connected with Aerolam; from suppliers, distributors, knowledge partners and other stake holders.



Saving Energy | Saving Green



501 | Maurya Atria | Opp. Kalgj Appt | Nr. Atithi Dining Hall | Judges Bungalow Road
Bodakdev | Ahmedabad - 54 | Gujarat | India
Phone : +91-79-26872108 | Fax: +91-79-30121633
www.aerolaminsulations.com