



# SHETH INSULATIONS PVT. LTD.

Dealers & Contractor in Thermal Insulation & Waterproofing Materials

Your Energy Saving Partner



## Perlite Insulation Boards:

Perlite is a versatile and sustainable mineral occurs naturally in environment. It is mines and processed. When Perlite is expanded by exposure to rapid controlled heating (About 900 Deg C ), its volume grow up to 20 times than original volume and this physical transformation makes expanded Perlite, which is a low density thermal Insulator. Structure of Expanded Perlite consist of millions air cell. Through a proprietary process these particles are bonded together with special inorganic binder and reinforced fibers, molded and backed.

## Characteristics:

Density (kg/M3 )	192-224
Standard Size	900x 500 mm
Standard Thickness (mm)	25, 30, 38, 50, 63, 75, 88, 100
Asbestos	Free from Asbestos
Chloride content	8 PPM
Availability	It s Natural Volcanic Grass, easily available in nature
Toxicity	Does not emit toxic gases when exposed to heat, fire etc.
Durability	Recoverable and reusable
Moisture content	Max. 1.1% by weight
Temp Range	Up to 650 Deg C
Life span	16 years

## Application:

- Petroleum Refineries
- Petrochemicals & Chemical Plants
- In Generation of Power
- In indoor & outdoor Steam piping
- Hot and cold insulation of Piping and vessels, tanks Etc.



## Advantages:

- **Low Conductivity:** Perlite has low thermal Conductivity. Its Principal ingredient is real reason for low conductivity. Due to low thermal conductivity heat loss can be drastically reduced.
- **Sustainability:** Perlite is naturally occurs in environment. Its main constituent is silica. It can be safely used for landfill without causing any environmental Damage.
- **Fire Resistance:** It has property to resist fire as no Hydro-carbon in compound. So, in case of some fire accident in plant it can protect the pipe line and equipments. Some time it can be use in oil or gas storage tank as a fire protection. It does not generate any toxic or any other smoke in case of direct contact with flame.
- **Low water absorption:** Perlite is water repellent substance, and due to this property it retain its low thermal conductivity even if water in-grossed into the system. Other material loses its Insulation Property on water ingression.
- **Non Corrosive:** Due to extremely water repellent nature of Perlite insulation water cannot pass through. So that material under the insulation can be protected against corrosion.
- **Good Compressive strength (Withstand foot traffic):** Molded expanded Perlite has high mechanical strength. Due to this nature it retains its shape long life. It is easy to climb on the insulation for any maintenance work without fear and damage.
- **Acid & Alkali Resistance:** Perlite has a high resistance to concentrated acid such as Sulphuric, Hydrochloric and Nitric. It is entirely free from acid erosion.
- **High Resistance to Thermal Stress:** Perlite maintains its mechanical integrity in the most demanding conditions of use.
- **Environment Friendly:** The main content of Perlite is Silica so that it can be safely use for landfill without causing any environmental damage. Due to this unique property of Perlite it can be used for Horticulture and agriculture.