

# PERLITE AS NATURAL INSULATION BY SIVAPER® :

## GLOSSARY

6 in 1 Insulation Characteristics: Thermal, Fire, Sound, Moisture, Water, Wind insulation.

Apprentice: 1. A trainee, especially in a skilled trade. 2. (historical) One who is bound by indentures or by legal agreement to serve a tradesperson, or other person, for a certain time, with a view to learn the art, or trade, in which his master is bound to instruct him. 3. (dated) One not well versed in a subject; a tyro or newbie.

Architect: A professional who designs buildings or other structures, or who prepares plans and superintends construction.

Architects and Engineers: Inorganic and natural products of Sivaper® provide long lasting and healthy solutions to architects and engineers.

Breathable Plaster : Breathable plaster which prevents dampness and moulds inside the buildings. This makes healthy residences.

Breathable Walls: Sivaper® , Thermal Insulating Perlite Plasters provide breathable walls with its porous structure

Building Insulation Materials: Thermal insulation materials used in the construction or retrofit of buildings. The materials are used to reduce heat transfer by conduction, radiation or convection and are employed in varying combinations to achieve the desired outcome (usually thermal comfort with reduced energy consumption).

Building Material: Sivaper® is a building material which provides thermal insulation, sound insulation, resistance against fire (class A1) and prevents humidity.

Cement Mason: A concrete finisher, also known as a cement mason, is a tradesman who works with concrete. The job entails placing, finishing, protecting and repairing concrete in engineering and construction projects. Concrete finishers are often responsible for setting the concrete forms, ensuring they have the correct depth and pitch. Concrete finishers place the concrete either directly from the concrete wagon chute, concrete pump, concrete skip or wheelbarrow. They spread the concrete using shovels and rakes, sometimes using a straightedge back and forth across the top of the forms to "screed," or level, the freshly placed concrete. After levelling the concrete, they smooth the surface using either a hand masonry trowel, a long handed "bull float" or powered floats. After the concrete has been leveled and floated, concrete finishers press an edger between the forms and the concrete to chamfer the edges so that they are less likely to chip.

Cementitious: Like or relevant to or having the properties of cement; "the adhesion of cementitious materials"

**Cementitious Mortar :** Cementitious mortar provides strong surfaces before Sivaper® perlite plasters are applied on the surfaces.

**Cementitious Perlite:** Cementitious perlite based lightweight Sivaper® perlite plaster usable on exterior and interior walls.

**Cementitious Satin Plaster:** Cementitious satin plaster by Sivaper® provides smooth surfaces. It is especially used on Sivaper® perlite plasters in order to provide smooth surfaces before painting.

**Coating:** A layer of a substance spread over a surface for protection or decoration; a covering layer.

**Coating Agents:** Along with the ability to be porous and lightweight, perlite enters into the formulas of “coating” agents used to cover external facades of buildings.

**Cold-Bridges:** A thermal bridge, also called a cold bridge, is a fundamental of heat transfer where a penetration of the insulation layer by a highly conductive or noninsulating material takes place in the separation between the interior (or conditioned space) and exterior environments of a building assembly (also known as the building enclosure, building envelope, or thermal envelope).

**Commercial Projects:** Sivaper® products can be used in any types of projects: Residential, Commercial, Industrial, Hotels, Institutional, Religion Places...

**Concrete:** SIVAPER S51 - Sprinkle Plaster. Cementitious mortar provides strong surfaces before Sivaper perlite plasters are applied on the surfaces. It is used on concrete, aac blocks and similar surfaces in order to provide reliable surfaces before Sivaper perlite plasters are applied.

**Construction Chemicals:** Construction industry stimulates construction chemicals industry.

**Contractor:** General contractor, organization or individual that contracts with another organization or individual (the owner) for the construction of a building, road or other facility. Subcontractor, an individual or business that signs a contract to perform part or all of the obligations of another's contract. 2. A person or company that performs specific tasks like electrical or plumbing work in construction projects. 3. A person or company hired to maintain existing facilities like air conditioning systems, groundskeeping, etc.

**Decorative Coating Plaster:** Sivaper® S41 - Decorative Coating Plaster: Cementitious decorative skim coat water repellent plaster provides final surface ready for paint. It is used especially on exterior surfaces with Sivaper® S01 plaster in order to provide decorative surfaces.

**Decorative Coating Primer:** Sivaper® S55 - Decorative Coating Primer: Polymer dispersion based primer applied on Sivaper® perlite plasters before Sivaper® S41 Decorative Coating Plaster is applied in order to get best adhesion on perlite plaster.

**Decorative Surfaces:** Sivaper® S41 is used especially on exterior surfaces with Sivaper® S01 plaster in order to provide decorative surfaces.

**Easy Application:** Add only water and apply it as traditional methods.

**Engineering:** Perlite expansion plants are produced with our own engineering capacity and sources. [www.teknikmak.com](http://www.teknikmak.com),

**Environment Friendly:** Made of natural and inorganic product. It doesn't decomposes or react with any material.

**Expanded Perlite:** Perlite that has been finely ground and subjected to extreme heat, causing the particles to become considerably expanded and porous because of release of water. Expanded perlite which is produced in our expansion plant convenient to world standards

**Exterior And Interior Walls:** Sivaper® products are used on exterior and interior walls as well as on floorings and roofs.

**Exterior Elevations:** Sivaper® products are used for Exterior elevations, Interior plastering and screed flooring, adding important value to your project "Big or Small" in addition to a light weight and very affordable prices.

**Exterior Surfaces:** Sivaper® water proofing products should be applied on exterior surfaces)

**Exterior Walls** A wall which is part of the envelope of a building, thereby having one face exposed to the weather or to earth. Sivaper® products are used on exterior and interior walls as well as on floorings and roofs. Cementitious perlite based lightweight perlite plaster usable on exterior and interior walls.

**Fire Resistance – Class A1:** Sivaper® products provides lightweight structures with thermal insulation, sound insulation and fire resistance.

**Fire Resistant** Fire safe product (Class A1): It protects the steel and concrete parts of the buildings covered for a few hours.

**Fire Safe Product (Class A1):** Fire safe product (Class A1). It protects the steel and concrete parts of the buildings covered for a few hours.

**Flammability Class:** How easily something will burn or ignite, causing fire or combustion.

**Floor Insulation :** Wall and floor insulation in a building is necessary to maintain constant temperatures of living spaces, preventing heat entering when it is warm and preventing heat from escaping when it is cold.

**Floorings And Roofs:** Sivaper® products are used on exterior and interior walls as well as on floorings and roofs.

**Healthy:** Breathable plaster which prevents dampness and moulds inside the buildings. This makes healthy residences. Inorganic and natural products of Sivaper® provide long lasting and healthy solutions to architects and engineers.

**Heat Insulating Material:** Perlite, is natural heat insulation material that would live with buildings.

**Heat Insulation Plaster:** We are producing expanded perlite-cement based heat insulation plaster and mortar in our factory. By using special chemicals and materials it becomes a wonderful building material and provides many benefits

Heat Transfer : Low Thermal Conductivity makes the walls and floors thermally efficient. Reduces heat transfer through the walls during winter and summer.

Higher Strength: Sivaper® Perlite Plasters contain powder additives enhance water repellency, higher strength and easy application.

Hotels: Sivaper® products can be used in any types of projects: Residential, Commercial, Industrial, Hotels, Institutional, Religion Places...

Humidity: Moisture content of the atmosphere, a primary element of climate. Humidity measurements include absolute humidity, the mass of water vapor per unit volume of natural air; relative humidity (usually meant when the term humidity alone is used), the ratio of the actual water-vapor content of the air to its total capacity at the given temperature; specific humidity, the mass of water vapor per unit mass of natural air; and the mixing ratio, the mass of water vapor per unit mass of dry air.

Industrial Projects: Sivaper® products can be used in any types of projects: Residential, Commercial, Industrial, Hotels, Institutional, Religion Places...

Innovation: "Innovation is a lifestyle in Sivaper®.

Innovation is a necessity in Sivaper®.

Innovation is an universal approach in Sivaper®.

Innovation is a continuous activity in Sivaper®.

Innovation should have mission and vision include obvious, clear and specific actions.

Innovation is a powerful activity in Sivaper®.

Innovation is liveliness in Sivaper®.

Innovation is the strongest capital in Sivaper®.

Innovation is the basic concept in Sivaper®.

Innovation is a bravely implemented activity in Sivaper®.

Innovation is the right education and staff in Sivaper®.

Innovation is the science and technology in Sivaper®.

Innovation is a continuous management mentality in Sivaper®.

Innovation determines our strategy in Sivaper®.

Innovation should be our main occupation in Sivaper®.

Innovation is practical and reliable way to success in Sivaper®.

Innovation is an advancement in Sivaper®.

Innovation is a guarantor for happiness and welfare in Sivaper®.

Innovation is determining right aims in Sivaper®

Innovation means continuous development in Sivaper®"

Innovation Lab: Serving as an innovation lab, our research&innovation center is the headquarter for creation of value added products.

Innovations: Remarkable achievements and records are standing on the basis of Sivaper® brand and innovations.

Innovative: R&D is the main important activity in our company. We observe Turkish and world building materials sector in order to develop innovative products for the market.

Innovative Perlite Based Products: Sivaper® mission is to improve especially product range of perlite based mortars and other innovative perlite based products for building industry.

Innovative Products: We observe Turkish and world building materials sector in order to develop innovative products for the market. We always aim to develop innovative perlite based building materials. We always aim to present innovative products and systems to our clients.

Inorganic Insulation Material: Sivaper® is inorganic and inert material and this makes it a long lasting product.

Institutional Projects: Sivaper® products can be used in any types of projects: Residential, Commercial, Industrial, Hotels, Institutional, Religion Places...

Insulating Building Materials: A material that reduces or prevents the transmission of heat or sound or electricity

Insulating Characteristics: Sivaper® products, never lose its insulating characteristics.

Insulating Material: If an insulation material provides a versatile and long lasting insulation in one, it is logical to use it for an efficient insulation. Sivaper® is a building material which provides thermal insulation, sound insulation, resistance against fire (class A1) and prevents humidity. Beside of all it is inorganic and inert material and this makes it a long lasting product.

Insulation: Material used in walls, ceilings, and floors to retard the passage of heat and sound.

Insulation Materials: If an insulation material provides a versatile and long lasting insulation in one, it is logical to use it for an efficient insulation.

Insulation Plaster: We are producing expanded perlite-cement based heat insulation plaster and mortar in our factory. By using special chemicals and materials it becomes a wonderful building material and provides many benefits

Insulator: Expanded Perlite is a thermal insulator material from the Nature.<http://www.tasper.com.tr/>

Interior And Exterior Walls: Sivaper® perlite-cement plaster (interior and exterior walls)

**Interior Plastering:** Sivaper® products are used for Exterior elevations, Interior plastering and screed flooring, adding important value to your project "Big or Small" in addition to a light weight and very affordable prices.

**Interior Walls:** Cementitious perlite based lightweight Sivaper® perlite plaster usable on exterior and interior walls.

**Journeyman:** A journeyman is someone who has completed an apprenticeship and is fully educated in a trade or craft, but not yet a master. To become a master, a journeyman has to submit a master work piece to a guild for evaluation and be admitted to the guild as a master.

**Lambda:** Lambda or Thermal Conductivity value. Defines a materials ability to transmit heat.

**Lambda ( $\Lambda$ ) Value:** Unit of Measurement.W/Mk. The Lambda is a given figure.Every material has its own Lambda value. The lower the figure the better the performance. The only other figure to concern yourself with is "Lambda", this is a measure of the effectiveness of an insulation.

**Light Weight:** Loose Density is low. This reduces the weight of the building walls and makes the structures stronger.

**Lighter And Safer Buildings:** Lightweight building materials are so important to provide lighter and safer buildings.

**Lighter Buildings:** In many project Sivaper® perlite products were used only because they are so lightweight. Sivaper® for Lighter Buildings

**Lightweight:** Our quality management starts from raw materials and continues to the finished products bought by the customers. We always aim to product highest quality and long lasting products.

**Lightweight Building Materials:** Lightweight building materials are so important to provide lighter and safer buildings.

**Lightweight Perlite Mortars :** Sivaper® produces lightweight perlite mortars which are much more lighter than traditional mortars.

**Lightweight Perlite Plaster :** Sivaper® S02 - Lightweight Perlite Plaster (Interior)

**Lightweight Structures:** Our mission is to observe world innovations in insulating building materials,

**Long Lasting:** Inorganic and natural products of Sivaper® provide long lasting and healthy solutions to architects and engineers.

**Low Thermal Conductivity :** Low Thermal Conductivity makes the walls and floors thermally efficient. Reduces heat transfer through the walls during winter and summer.

**Moisture Insulation:** Sivaper® products are "Perlite Cementitious" a volcano powder treated in special high temperature Furnaces (1000+ C degree), mixed with cement and other ingredients by a unique formula and proportion to offer an amazing 6 in 1 insulation characteristics: Thermal, Fire, Sound, Moisture, Water, Wind insulation.

Mortar: Sivaper® S21 - Water Proofing Mortar 2K. Sivaper® S22 - Water Proofing Mortar

Multi Purpose Primer: Sivaper® S54 - Multi Purpose Primer

Natural : Sivaper® products contain natural, inorganic and nonflammable expanded perlite.

Natural Insulation: "The best natural insulators are ones that are non-toxic, renewable, and widely available. Low cost insulation materials of expanded aggregates such as perlite make excellent non-toxic insulation. In developed countries with the requisite technologies, the perlite type materials may be preferable to straw-clay. "

Nature&Environment Friendly: Inorganic material, doesn't react with other materials and doesn't decompose by the time.

Noise And Sound Transmission: Sivaper® products reduce noise and sound transmission through walls and floors

Nonflammable: Sivaper® products contain natural, inorganic and nonflammable expanded perlite.

Patent: Sivaper® has developed patented products like S01 and S10, by Turkish Patent Institute.  
Patent No: TR 2009 02741 B.

Perlite Based Materials : Tasper Perlite Company has been producing expanded perlite and perlite based materials for many years. We have about 30 years experience in perlite industry.  
<http://www.tasper.com.tr/>

Perlite Based Mortars: Our perlite based mortars are produced under Sivaper® trade mark.  
A mixture of lime or gypsum, sand, and water, sometimes with the addition of fibres, that hardens to a smooth solid and is used for coating walls and ceilings.

Perlite Expansion Plant: We constructed different types of plants for different industries and some metal works for about 25 years. Currently we focus on constructing perlite expansion plants, dry mix plaster/mortar production plants and different metal works.  
<http://www.teknikmak.com/contact.html>

Perlite Insulation: Perlite insulation is made from Perlite, a naturally occurring substance that expands when exposed to heat.

Perlite Plaster Sivaper®: Cementitious perlite based lightweight perlite plaster usable on exterior and interior walls. Plaster is a building material used for coating walls and ceilings. Plaster starts as a dry powder similar to mortar or cement and like those materials it is mixed with water to form a paste which liberates heat and then hardens. Unlike mortar and cement, plaster remains quite soft after setting, and can be easily manipulated with metal tools or even sandpaper. These characteristics make plaster suitable for a finishing, rather than a load-bearing material.

Plasterer: A person whose occupation is to plaster walls.

Plastering : You can insulate your buildings easily with Sivaper® since the application of all types are same as traditional plastering methods.

**Polymer Dispersion Based Primer :** Sivaper® S54 - Multi Purpose Primer. Polymer dispersion based primer applied on Sivaper® perlite plasters in order to ready the surface for coatings.

**Porous Structure:** Sivaper® perlite plaster does not cause humidity with its porous structure.

**Prevents Humidity:** Sivaper® is a building material which provides thermal insulation, sound insulation, resistance against fire (class A1) and prevents humidity.

**Proper Insulation:** Sivaper® produces lightweight perlite mortars which are much more lighter than traditional mortars. Proper insulation will also save a lot of money on heating and cooling utility bills.

**Quality Control Laboratory:** All products are tested in our quality control laboratory.

**Quality Management:** Quality is the most important issue in our company. Our quality management starts from raw materials and continues to the finished products bought by the customers. We always aim to product highest quality and long lasting products. Because for us building materials should be high quality in order to provide safe and long lasting usage.

**R&D Research and Development:** Research and Development is the main important activity in our company. Studies take place continuously in our company in order to develop new perlite based building products. For this reason R&D is the main activity for us. We are trying to develop innovative perlite products for different applications in the buildings.

**R&I Research and Innovation :** "As a result of significant R&I, change speed of target technology became reachable and available to us. We know that technology alone does not create meaning products with added value and we run research and innovation services for a sustainable improvement."

**Reduces Noise: Sound Insulation:** It reduces noise and sound transmission through walls and floors.

**Reduces Pulsed Sounds :** Perlite based Sivaper® thermal insulating plasters reduce especially pulsed sounds

**Religion Places:** Sivaper® products can be used in any types of projects: Residential, Commercial, Industrial, Hotels, Institutional, Religion Places...

**Renovating:** Sivaper® products are used on new built construction as well as on renovating old buildings.

**Research And Innovation Laboratory:** R&I /Innovation Laboratory. Serving as an innovation lab, our research&innovation center is the headquarter for creation of value added products.

**Residential Projects:** Sivaper® products can be used in any types of projects: Residential, Commercial, Industrial, Hotels, Institutional, Religion Places...

**Resistance Against Fire (Class A1):** Sivaper® is a building material which provides resistance against fire (class A1)



Roof Insulation: Roof or ceiling insulation refers to insulation placed in the roof or ceiling of the top occupied floor in the building.

Roofs: Sivaper® products are used on exterior and interior walls as well as on floorings and roofs.

Screed: Sivaper® S03 - Thermal Insulating Perlite Screed. Cementitious perlite based lightweight perlite screed usable on floorings, roofs, terraces and so on. Sivaper® S21 or Sivaper® S22 water proofing products should be applied on the screed after application on open air places where rain and water shall contact on the screed. Sivaper® S05 - Thermal Insulating Perlite Screed . Sivaper® S07 - Lightweight Perlite Screed

Screed Flooring : Sivaper® products are used for Exterior elevations, Interior plastering and screed flooring, adding important value to your project "Big or Small" in addition to a light weight and very affordable prices.

Sivaper® Trade Mark: Our perlite based plasters, mortars and screeds are produced under Sivaper® trade mark.

Skim Coat Plaster: Sivaper® S42 - Skim Coat Plaster

Smooth Surfaces: SIVAPER S42-Skim Coat Plaster. Cementitious satin plaster provides smooth surfaces. It is especially used on Sivaper perlite plasters in order to provide smooth surfaces before painting.

Sound Insulation: Sivaper® reduces noise and sound transmission through walls and floors. It reduces especially pulsed sounds

Sprinkle Plaster : Sivaper® S51 - Sprinkle Plaster

Strong Surfaces: Cementitious mortar provides strong surfaces before Sivaper® perlite plasters are applied on the surfaces.

Terraces : Sivaper® S03- Cementitious perlite based lightweight perlite screed usable on floorings, roofs, terraces and so on.

Thermal Conductivity ( $\Lambda$  Value): See: Lambda ( $\Lambda$ ) Value

Thermal Conductivity : As it does not have the feature of chemical decomposition, thermal conductivity becomes low with Perlite

Thermal Insulating: Sivaper® S01 - Thermal Insulating Perlite Plaster. Sivaper® S03 - Thermal Insulating Perlite Screed. Sivaper® S04 - Thermal Insulating Perlite Plaster. Sivaper® S05 - Thermal Insulating Perlite Screed

Thermal Insulating Perlite Plaster: Sivaper® S01 - Thermal Insulating Perlite Plaster. Sivaper® S03 - Thermal Insulating Perlite Screed. Sivaper® S04 - Thermal Insulating Perlite Plaster. Sivaper® S05 - Thermal Insulating Perlite Screed

Thermal Insulating Perlite Screed: Sivaper® S03 - Thermal Insulating Perlite Screed is Cementitious perlite based lightweight perlite screed usable on floorings, roofs, terraces and so on.

**Thermal Insulation:** The reduction of heat transfer (the transfer of thermal energy between objects of differing temperature) between objects in thermal contact or in range of radiative influence. Sivaper® products provides lightweight structures with thermal insulation, sound insulation and fire resistance.

**Thermal Resistance (R Value):** R-Value = Thermal Resistance. Defines a materials ability to resist heat flow. The higher the figure the better the performance. Unit of Measurement.  $m^2K/W$ . To calculate the R-Value: Find the Lambda value (table in the building regulations, part L or on the packaging of the material).

**Thermal Transmittance (U-Value):** U-Value. Defines the ability of an element of a structure to transmit heat under steady state conditions. The lower the figure the better the performance. Unit of Measurement  $W/m^2$ . To calculate the U-Value: Divide 1 by the R-Value

**Thermally Efficient:** Low Thermal Conductivity makes the walls and floors thermally efficient. Reduces heat transfer through the walls during winter and summer.

**Tightness Against Sound And Heat:** Perlite has the attribute of tightness against sound and heat as well and melt down at 1300 degree.

**Traditional Mortars:** Sivaper® produces lightweight perlite mortars which are much more lighter than traditional mortars.

**Wall and Floor Insulation:** Wall and floor insulation in a building is necessary to maintain constant temperatures of living spaces, preventing heat entering when it is warm and preventing heat from escaping when it is cold. Proper insulation will also save a lot of money on heating and cooling utility bills.

**Wall and Floor Plasters:** Sivaper® products are special wall and floor plasters comprise high quantity of expanded perlite, primarily provide thermal insulation.

**Wall Insulation:** Wall and floor insulation in a building is necessary to maintain constant temperatures of living spaces, preventing heat entering when it is warm and preventing heat from escaping when it is cold.

**Walls And Ceiling:** A mixture of lime or gypsum, sand, and water, sometimes with the addition of fibres, that hardens to a smooth solid and is used for coating walls and ceilings.

**Walls And Floors:** Sivaper® products are special wall and floor plasters comprise high quantity of expanded perlite, primarily provide thermal insulation.

**Water Insulation:** Sivaper® S21 or Sivaper® S22 water proofing products should applied on the screed after application on open air places where rain and water shall contact on the screed.

**Water Proofing Mortar :** Sivaper® S21 - Water Proofing Mortar 2K. Sivaper® S22 - Water Proofing Mortar

**Water Proofing Products:** Sivaper® water proofing products should be applied on exterior surfaces)

**Water Repellency:** Sivaper® Perlite Plasters contain powder additives enhance water repellency, higher strength and easy application.

**Water Repellent:** Sivaper® S41 - Decorative Coating Plaster: Cementitious decorative skim coat water repellent plaster provides final surface ready for paint. It is used especially on exterior surfaces with Sivaper® S01 plaster in order to provide decorative surfaces.

**Wind Insulation:** Sivaper® products are "Perlite Cementitious" a volcano powder treated in special high temperature Furnaces (1000+ C degree), mixed with cement and other ingredients by a unique formula and proportion to offer an amazing 6 in 1 insulation characteristics: Thermal, Fire, Sound, Moisture, Water, Wind insulation.