



NATURAL ECOLOGICAL PERLITIC PLASTER AND SCREED MORTAR



www.ulusalperlit.com

ABOUT US

Ulusal Perlit (National Perlite) is a brand of Ulusal Yapı that has any years of experience in the construction sector and has provided services in the field of material production and supply besides application. As a result of years of research and development processes, it has been accomplished to produce superior quality mortars with raw material of 100% domestic and national perlite mine and made it ready for the market. It provides services throughout the country both through its sales network and application network. It is a follower of product performances with its competent sales staff and technical support services.

OUR MISSION

To make a difference with its corporate and principled approach while providing sales and application to the customers with the best service quality in the construction sector.

OUR UISION

To provide added value to its employees, customers and country by trying to do the best within its field with its contemporary, innovative and dynamic structure.



PERLITE, COMFORT THAT COMES WITH NATURAL HEAT INSULATION MATERIAL



"Perlite is a type of volcanic amorphous rock with masses of water droplets formed by cooling of lava formed in acid phase in the magma. Perlite is an insulating material. Perlite is a radioactive-free mineral. Perlite is an inorganic substance. It does not lose its property at high temperature and prevents the spread of fire with such property. Perlite contains plenty of air voids."

ADVANTAGES;

THERMAL INSULATION

Due to its low thermal conductivity coefficient, it is preferred for both exterior and interior insulation and floor insulation.



FIRE INSULATION

It meets the use of A1 class non-combustible materials as required by the fire regulations (Regulation on Fire Protection of Buildings). It does not cause the development of fire, but detains it.



WATER REPELLENT

It does not absorb water due to its structure and it is preferred especially on the exterior with its water repellent additives.



BREATHABLE

Its low vapor diffusion coefficient gives it a great breathability, which prevents condensation in our homes and it is effective in providing comfort conditions.



LIGHT

It enables to lighten our structures and reduce earthquake loads. At the design stage, it reduces construction costs due to lower cross sections.



SOUND ABSORBER

It is a good sound absorber thanks to the still air it contains. It has satisfactory results in the common walls between two apartments.



ECOLOGICAL

It does not contain any carcinogenic materials as it is a natural mine and while it does not release its own carbon, it also reduces the carbon monoxide emission by reducing the need for heating.



RAW MATERIAL 100% DOMESTIC AND NATIONAL

This mine, with 76% of the world reserves in our country, contributes to the economy of the country by reducing the consumption of the petroleum - derived insulation materials to which we are foreign-dependent.



EASY TO APPLY

It reduces both the application time and labor defects with a single layer of plaster instead of applying it in layers on the exterior.





PERLITE EXTERNAL PLASTER MORTAR

Heat Insulated Exterior Plaster

DESCRIPTION

It is a plaster mortar which can be applied manually or by machine that provides heat and sound insulation and is pearlitic. USAGE AREAS

It is used as insulation plaster on the exterior, surfaces such as brick, concrete, briquette, aerated concrete etc. It contributes to sound and heat insulation on the surfaces it is applied.

ADVANTAGES

High thermal insulation (T1)
Sound insulation
A1 class fireproof
2-3 times lighter than conventional plasters
Helps buildings with earthquake resistance with its light weight
Enables easy and quick application
Suitable for hand and machine applications

Color	White
Dry Unit Stack Weight	$400 \pm 50 \text{ kg/m}3$
Compressive Strength	CSII
Flexural Strength	> 0,5 Mpa
Bond Strength	> 0,2 N/mm2
Thermal Conductivity	T1
Capillary Absorption	W1
Water Vapor Permeability	< 15
Fire Response Class	Al

INSTRUCTIONS FOR USE

The application surface must be clean and free of dust and oil, be table and moist. Before application, the surface must be moistened and be saturated with water in very hot and windy weathers. Repair of cracks and holes must be done before application. The surface should be smooth. Bright surfaces such as exposed concrete and surfaces with high water absorption should be undercoated with Exposed Concrete Primer at least 24 hours before application. It should be mixed in a plastering machine by adding 9-10,5 l. of water to a bag of 13 kg and the prepared mortar should be applied through spraying. The water should not be added at one time considering the specified water ratios and it should be adjusted according to the consistency of the mortar. In manual applications, the mixture should be made in accordance with the mixing times specified with a low speed mixer and jigged by applying to the surface with a steel trowel.

Application thickness should be between 10 mm and 30 mm in one layer. Once the first coat is hardened (after at least 2 days), the second coat is applied with a maximum thickness of 30 mm. It can be optionally polished when it is hard enough. Depending on the climatic conditions, one day after the application, the surface shall be watered twice a day in the morning and evening in the shade for at least 3 days.

No foreign material should be added to the mortar, each bag should be used as a whole and attention should be paid to the specified water ratios. It shall not be used with expired products. Plaster mesh should be used at different material joints and at points where movement may be considered. All tools used for application should be washed with water before drying. The stated times are valid at 20 ° C surface and ambient temperature, the time is extended at low temperature and the time is shortened at high temperature. The application conditions given in the Technical Data Sheet must be complied. Otherwise, the final product performance of the product may be affected by application methods and ambient conditions. Do not apply under + 5 ° C and above 35 ° C. Avoid application in very humid and / or very hot weather. Avoid application under strong wind and direct sunlight. It should not be applied on frozen, melting or surfaces with frost hazard within 24 hours.

PACKING

It is prepared as shrinked palletized in 13 kg kraft bag.

CONSUMPTION

4 - 4.5 kg / m2 for 1 cm plaster thickness

APPLICATION INSTRUMENTS

Plastering machine, low speed mixer, gauge, steel trowel.

APPLICATION LIMIT

5 min. mixing-3 min. **Mixing Process** resting-2 min. mixing **Availability Time** 2 hours Workability Period 20 minutes **Drying Time** 4-6 days **Application Thickness** 10 mm - 30 mm Consumption 4 kg 9,5-10,5 l. water / bag Mixture Packaging 13 kg

It should not be applied directly on metal, wood and wooden surfaces. It shall not be applied on plaster surfaces. Do not apply on old painted surfaces, ready-made colored plaster, exterior coating, unsafe old plastered, asbestos cement or insulation panel surfaces that may be exposed to constant humidity.

Complies with TS EN 998/1 T1 standard. CE Certificate Public Works Pos No: 04.481



PERLITE INTERIOR PLASTER MORTAR

Heat Insulated and Light Interior Plaster

DESCRIPTION

It can be applied to indoors by hand and machine, provides sound and heat insulation, perlite ready plaster mortar.

USAGE AREAS

It is used as rough cast in order to contribute to sound and heat insulation in the interior spaces.

ADVANTAGES

- High sound and heat insulation
- Fireproof (A1 class)
- Quick and easy application
- Suitable for hand and machine applications
- Lightweight
- Approx. 2-3 times less consumption compared to gypsum plaster

INSTRUCTIONS FOR USE

Color	Beyaz
Dry Unit Stack Weight	$500 \pm 50 \text{ kg/m}^3$
Compressive Strength	CSI
Bond Strength	> 0,2 N/mm2
Thermal Conductivity	T1
Capillary Absorption	W1
Water Vapor Permeability	< 15
Fire Response Class	A1

The application surface must be clean and free of dust and oil, be table and moist. Before application, the surface must be moistened and be saturated with water in very hot and windy weathers. Repair of cracks and holes must be done before application. The surface should be smooth. Before application, the surface must be moistened and saturated with water in very hot and windy weather. Bright surfaces such as exposed concrete and surfaces with high water absorption should be undercoated with Exposed Concrete Primer at least 24 hours before application. 10-11 l. of water should be added to a bag of 13 kg Perlite Interior Wall Plaster and mixed with plaster machine and applied by spraying the prepared mortar. In manual applications, the mixture should be made in accordance with the mixing times specified with low speed mixer and applied on the surface with a steel trowel. Application thickness should be between 15 mm and 20 mm. Depending on the climatic conditions, the surface shall be watered twice a day in the morning and evening in the shade for at least 3 days. No foreign material should be added to the mortar, each bag should be used as a whole and attention should be paid to the specified water ratios. It shall not be used with expired products. Plaster mesh should be used at different material joints and at points where movement may be considered.

All tools used for application should be washed with water before drying. The stated times are valid at 20 °C surface and ambient temperature, the time is extended at low temperature and the time is shortened at high temperature. The application conditions given in the Technical Data Sheet must be complied. Otherwise, the final product performance of the product may be affected by application methods and ambient conditions. Do not apply under + 5 °C and above 35 °C. Avoid application in very humid and / or very hot weather. Avoid application under strong wind and direct sunlight. It should not be applied on frozen, melting or surfaces with frost hazard within 24 hours.

PACKING

It is prepared as shrinked palletized in 13 kg kraft bag.

CONSUMPTION

4 - 4.5 kg / m² for 1 cm plaster thickness

APPLICATION INSTRUMENTS

Plastering machine, low speed mixer, gauge, steel trowel.

APPLICATION LIMIT

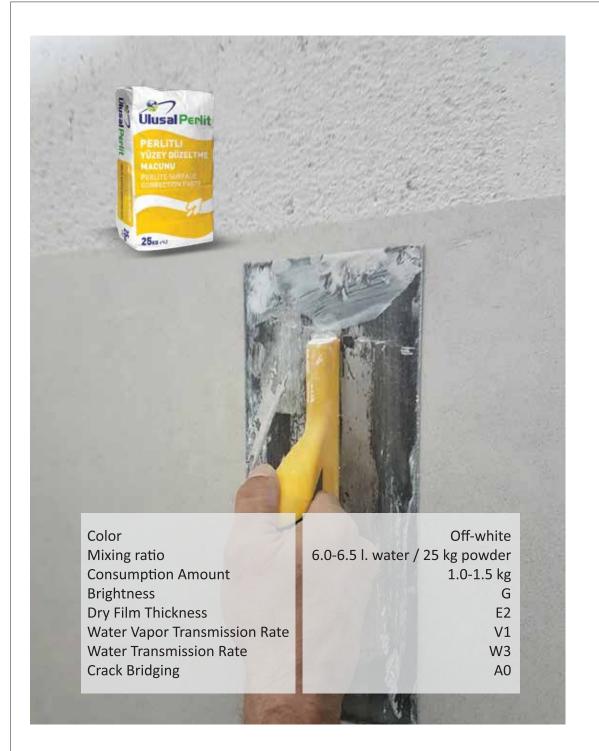
It should not be applied directly on metal, wood and wooden surfaces. It shall not be applied on plaster surfaces. Do not apply on old painted surfaces, ready-made colored plaster, exterior coating, unsafe old plastered, asbestos cement or insulation panel surfaces that may be exposed to constant humidity.

Complies with TS EN 998/1 T1 standard. CE Certificate

Mixing Process
Availability Time
Workability Period
Drying Time
Application Thickness
Consumption
Mixture
Packaging

5 min. mixing-2 min. resting-2 min. mixing Max. 1 hour 20 minutes 4-6 days 15 mm - 20 mm 4 -4,5 kg / m² 9,5-10,5 l. water / bag 13 kg





PERLITE SURFACE CORRECTION PASTE

DESCRIPTION

It is a surface correction and cast mortar that contains special expanded natural aggregates special expanded natural aggregates, silicate and fiber-reinforced, that can be used both indoors and outdoors, used to obtain a ready-to-paint surface, have excellent water vapor permeability and high stability.

PROPERTIES

It has high water vapor permeability. It allows buildings to breathe. An extremely smooth surface is obtained. It does not collapse and shrink. It is resistant to external factors by means of special additives. It does not cause moisture, algae and dust. It is applied with trowel. It has waterproof feature. It has a natural and decorative appearance. It is easy to apply. It can be painted with exterior and interior paints.

USAGE AREAS

It is used as the last layer of perlite plaster applications on exterior and interior facades of all buildings.

ADVANTAGES

It is easy to prepare and apply. It is ready to use. It provides high adherence to concrete and plastered surfaces. It is water and frost resistant. It is not affected by temperature differences.

INSTRUCTIONS FOR USE

The application surface must be cleaned of dust, swollen layers, dirt, oil and so on. The surface must be clean, smooth and stable. Before application, the surface must be moistened and be saturated with water in very hot and windy weather. 25 kg PERLITE SURFACE CORRECTION PASTE should be mixed with 6-6.5 liters of clean water with low speed mixer until it reaches a homogenous consistency. The mortar should be rested for 5 minutes before application and then mixed again. The application thickness should be adjusted according to the biggest pattern stone with a stainless steel trowel. The surface should be patterned with a plastic trowel in circular motions. The pattern process should always be done when the mortar is wet. It cannot be left on the surface as a topcoat material. It must be painted after drying. When preparing the mortar, recommended water ratio and resting periods must be followed. Avoid application under direct sunlight. Hardened materials that have already been prepared should not be included in the newly prepared mortar.

REFERENCE STANDARDS

TS 7847 / June 2016

PACKING

It is a kraft bag of 25 kg. (PE reinforced)

APPLICATION INSTRUMENTS:

Steel trowel, plastic trowel, hand mixer

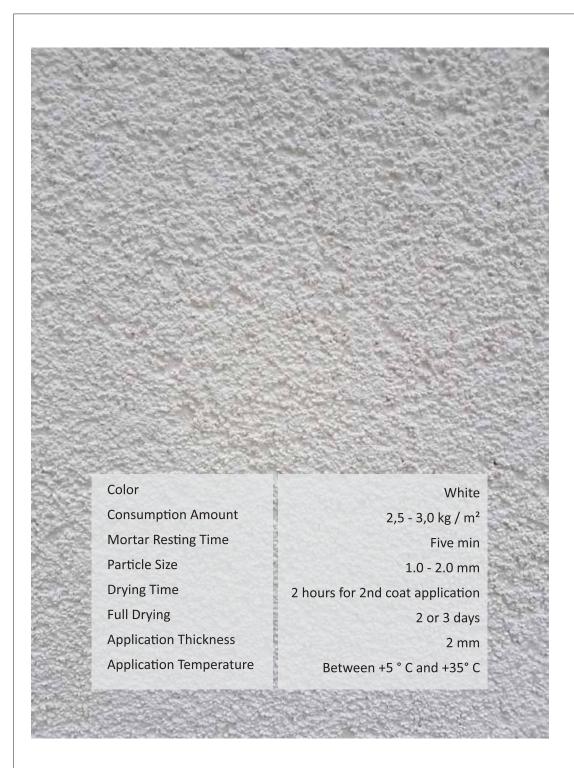
CO² Permeability
Mold Growth Resistance
Mortar Resting Time
Particle Size
Drying Time
Full Drying
Application Thickness
Application Temperature

Application Tools

K2
5 mins.
S2
2nd coat application: 2 hours
2 or 3 days
1 mm
+ 5 ° C to + 35 ° C
Steel trowel, sandpaper

CO





PERLITE DECORATIVE PLASTER Mineral Siding

DESCRIPTION

Special additive, perlite decorative mineral exterior coating.

PROPERTIES

It has high water vapor permeability. Allows buildings to breathe. It is resistant to external factors due to special additives. It is waterproof. It has a natural and decorative appearance. It is easy to apply. It can be painted with exterior paints.

USAGE AREAS

It is used as a topcoat on cement based plasters, exterior walls and exterior thermal insulation systems of all buildings and on perlite insulating plasters.



ADVANTAGES

It is easy to prepare and apply. It is ready to use. It provides high adherence to concrete and plastered surfaces. It is water and frost resistant. It is not affected by temperature differences.

INSTRUCTIONS FOR USE

The application surface must be cleaned of dust, swollen layers, dirt, oil and so on. The surface must be clean, smooth and stable. Before application, the surface must be moistened and be saturated with water in very hot and windy weather. 25 kg Perlite Decorative Plaster should be mixed with 6-6.5 liters of clean water with low speed mixer until it reaches a homogenous consistency. The mortar should be rested for 5 minutes before application and then mixed again. The application thickness should be adjusted according to the biggest pattern stone with a stainless steel trowel. The surface should be patterned with a plastic trowel in circular motions. The pattern process should always be done when the mortar is wet. It cannot be left on the surface as a topcoat material. It must be painted after drying. When preparing the mortar, recommended water ratio and resting periods must be followed. Avoid application under direct sunlight. Hardened materials that have already been prepared should not be included in the newly prepared mortar.

PACKING

In 25 kg kraft bag

REFERENCE STANDARDS

TS 7847 / June 2016

CONSUMPTION

 $2.5 - 3.0 \text{ kg} / \text{m}^2$

APPLICATION TOOLS

Steel trowel, plastic trowel





Dry Unit Stack Weight Compressive Strength

Flexural Strength

Fire Response Class

Grev

 $500 \pm 70 \text{ kg} / \text{m}^3$

C5 (TS EN 13813)

F2 (TS EN 13813)

Α1

PERLITE LIGHT SCREED

DESCRIPTION

It is a lightweight screed that provides heat and sound insulation and can be applied manually or by machine with perlite.

USAGE AREAS

It is used to create a flat surface before the final layer coating such as ceramic, parquet and laminate on the floors exposed to light and medium density pedestrian traffic in buildings. It contributes to sound and heat insulation on the surfaces it is applied.

ADVANTAGES

- High sound and heat insulation
- 5-7 times lighter than conventional screeds
- Helps buildings with earthquake resistance due to their light weight
- Practical and quick application
- Suitable for hand and machine applications
- Fireproof (A1 class)



INSTRUCTIONS FOR USE

The application surface must be clean, free of dust and grease, stable and dry. If there are residues on the surface (concrete, adhesive, paint, etc.), the residues should be scraped and cleaned.

A 20 kg bag of PERLITE LIGHT SCREED shall be mixed in a low speed application machine by adding an average of 10-12 l. of water and applied by spraying the prepared mortar. In manual applications, the mixture should be made in accordance with the mixing times specified with the low speed mixer and gauged by applying to the surface with a steel trowel. Depending on the climatic conditions, the surface is watered twice in the morning and evening in the shade for at least 3 days.

PACKING

It is prepared as shrinked palletized in 20 kg kraft bag.

CONSUMPTION

7-8 kg / m2 for 1 cm screed thickness

APPLICATION INSTRUMENTS

Screed application machine, low speed mixer, gauge, steel trowel.

Complies with TS EN 13813 standard CE Certificate Public Works Pos No: 04.481

Availability Time

Working Time

Drying Time

Application Thickness

Consumption

Mixture

Packaging

2 hours

20 minutes

4-6 days

30 mm - 70 mm

7-8 kg / m²

10-12 liters of water / bag

20 kg





It is a light material that is radioactive - free used as soil conditioner in greenhouse, vegetable growing, seedling, floriculture, mushrooming and soilless farming environments.

Since there is substantial air gap in the perlite material, it keeps the air and water permeability high in the soil. It keeps the soil warming at the appropriate temperature.

It does not carry or contain any disease. It does not cause problems in terms of salt and alkalinity due to the very few soluble ions. It easily regulates the pH of the environment with its neutral (pH = 6.5-7.5) and low chemical buffering. It does not show any ponding, swelling, crust formation, poor drainage and cracking properties.

USAGE AREAS

It is successfully used as a soil regulator in greenhouses additive in seedling mortars, growing medium in soilless agriculture.

PROPERTIES

It enables aeration of the soil with its total porosity of over 90% and aeration porosity of around 60%, regulates drainage, increases infiltration, and reduces evaporation. It does not carry weed seed and disease by reason of being inorganic.

Due to the negligible amount of soluble ions, it does not cause any problems in terms of salinity and alkalinity. It easily regulates the pH of the environment with its neutral (pH = 6.5-7.5) and low chemical buffering.

As the thermal conductivity is low, it minimizes the damage of the plant from daily temperature changes and thus, plant roots are not affected by the air change.

