

PLAM ROCK

Thixotropic cement mixture for decorative mortars

DESCRIPTION

Plam Rock Isoplam® is a premixed fiber-reinforced product made of concrete, selected aggregates, oxides and additives; it is used to prepare high thickness thixotropic mortars and it can be both kneaded manually or stamped with Isoplam® rubber mats.
It is possible to shape it into fake rocks, stones, wood and scenic elements of various kind.

FIELDS OF USE

Plam Rock Isoplam® is very appreciated in all those environments where already existing vertical and horizontal elements have to be aesthetically enhanced, and it is widely used in the civil sector (to coat fireplaces, columns, walls ...) as well as in sales areas (walls of showrooms, shops, offices, etc.).
It is even more appreciated in all those places where the creation of important scenic structures is required (theme parks, water parks, gardens, bars and restaurants, etc.).

TECHNICAL FEATURES & PERFORMANCES

The product Plam Rock Isoplam® conforms to UNI EN 998-1:2010 standards.

<i>Performance feature</i>	<i>Test method</i>	<i>Product performance</i>
Reaction to fire	-	A1
Water absorption	UNI EN 1015-18:2004	W2
Water permeability	-	NPD
Vapor permeability	UNI EN 1015-19:2008	46μ , 17,4μ
Adhesion	UNI EN 1015-12:2002	1,48 N/mm ²
Adhesion after cycles of ageing and freeze-thaw	UNI EN 1015-21:2004	1,22 N/mm ² on concrete slab
Thermal conductivity / Density	-	0,54 [W/(m·K)]
Thermal conductivity	-	NPD
Durability of one coat	-	NPD
Durability of several coats	-	NPD
VOC emissions	UNI EN ISO 16000-9:2006	A+
Bending strength	UNI EN 1015-11:2007	5,44 N/mm ²
Compressive strength	UNI EN 1015-11:2007	16,14 N/mm ²
Hydraulic shrinkage	UNI 11307:2008	ε 0,0011 at 90 days
Sound absorption	UNI EN ISO 11654:1998	0,40

ADVANTAGES

The mortar made with Plam Rock Isoplam®:

- is easy to use and is very ductile;
- is suitable for both internal and external projects;
- can be used also in marine environments and at high altitudes;
- allows to realize high thickness without having to be applied in several steps;
- has a high degree of impermeability;
- has excellent resistance to impacts;
- has a good adhesion strength.

SUPPORT PREPARATION

a) BRICKWORK OR CONCRETE SUPPORT

The substrate must be mature, free from oils, resins, dirt, waxes, efflorescence and must be well-bonded and not crumbly. Any pre-existing paint on the surface must be removed by sanding. Roughen the substrate when possible.

If the substrate is particularly porous, in the case of high temperatures or in the presence of wind, it must be moistened shortly before applying Plam Rock in order to avoid the rapid absorption of the water contained in the mortar and its rapid drying.

Treat the substrate (especially if it is smooth concrete) with specific Isoplam primers.

Fill any cracks or holes with Ipm Epoxy Kit Isoplam, taking care to respect any structural joints. Apply a coat of Deco Primer Base Isoplam®.

Where necessary (recommended for high thicknesses), reinforce and perform a roughcast with a Hoppergun gun with a mixture of Plam Hardening + Deco Bind (already diluted 1:1.5 with water) in a ratio of approximately 5:1 by weight.

b) SHAPED POLYSTYRENE SUPPORT

Shape the polystyrene with density 25 into the desired shape. The various polystyrene blocks will be glued together with a special adhesive foam for polystyrene. Apply a coat of Deco Primer Base Isoplam®. Reinforce with Plam Net Isoplam, a galvanized mesh, well anchored to the bottom. The reinforcement must then be embedded in Plam Rock mortar.

Where necessary (recommended for high thicknesses), after the reinforcement, perform a roughcast with a Hoppergun gun with a mixture of Plam Hardening + Deco Bind (already diluted 1:1.5 with water) in a ratio of approximately 5:1 by weight.

c) GALVANIZED METAL STRUCTURE SUPPORT

Apply polyurethane foam to fill the structure and shape the foam once dry. Apply a coat of Deco Primer base Isoplam®.

Reinforce with Plam Net Isoplam, a galvanized mesh, well anchored to the bottom. The reinforcement must then be drowned in Plam Rock mortar.

Where necessary (recommended for high thicknesses), after the reinforcement, perform a roughcast with a Hoppergun gun with a mixture of Plam Hardening + Deco Bind (already diluted 1:1.5 with water) in a ratio of approximately 5:1 by weight.

Inadequate preparation of the substrate may compromise the adhesion of the mortar.

Plam Rock Isoplam cannot be applied to plaster, metal, wood (blocks and panels) substrates or to excessively damp masonry.

APPLICATION

In a mixer or by hand (avoid cement mixers) prepare the mortar with Plam Rock carefully mixed with 4-6 liters of clean water. The amount of water must be kept constant in order to prevent differences in shade.

The mortar obtained must be used within an hour.

Once applied, the mortar must be roughed out with Isoplam professional spatulas and then it can be modeled, printed with Isoplam wall molds (taking care to moisten them with Plam Liquid Rele Isoplam) or engraved with Isoplam corrector kits until the desired effect is obtained.

Plam Rock Isoplam can be engraved while still fresh or, at most, within 18-24 hours of application, depending on the weather conditions.

Variable thicknesses from 1 cm to 8 cm can be obtained.

The hardening time of the plaster varies depending on the support, the thickness of the mortar and the environmental conditions.

It is important to pay attention to the weather and climate conditions: avoid applying Plam Rock Isoplam® in the presence of strong winds, during the hottest hours of the day (in summer), in full summer sun (in this case, take care to keep the surface of the plaster moist for a couple of days) or with temperatures that are not between 5°C and 30°C. If applied indoors, it is necessary to avoid sudden changes in temperature. These precautions will prevent the formation of cracks and fissures.

Within a couple of days, if required, the plaster can be colored with Plam Wax Isoplam or Plam Paint Isoplam.

Alternatively, it is possible to directly color the mixture by adding approximately 0.5 kg of Plam Color Isoplam for every 125 kg of Plam Rock for customized colors.

After a few days (when completely dry and hardened) apply the most suitable protective product:

a) IN CASE OF PERMANENT CONTACT WITH WATER OR BATH DRYER

Apply Plam Pool glossy (diluted with 5% Rali solvent). To obtain a matt effect add 5% Plam Opacifying. Application using an airless pump.

b) FOR OUTDOOR USE NOT IN CONSTANT CONTACT WITH WATER OR BATH DRYER

Apply 1 coat of Idrorep/S and 1 coat of Plam Sealing/L with an airless pump.

c) FOR INTERIOR USE NOT IN CONTACT WITH WATER

Apply 2 coats of Plamacryl with a roller or airless or 1 coat of Plam Wax Neutral.

CONSUMPTION

12-13 Kg/m² for each 10 mm of thickness.

PACKAGING & COLORATIONS

Isoplam® Plam Rock is packaged in sealed polyethylene double-layer bags of 25 kg and it is available in the colors brown and white.

Upon request and for a minimum quantity of 1200 kg, Isoplam can supply customized colors.

STORAGE, EXPIRY, WARRANTY AND SAFETY

Plam Rock Isoplam® is guaranteed for 10 months if stored in the original packaging in a dry and ventilated place, with temperatures no lower than 5 ° C).

The packaging date is shown on the package (the lot number indicates, in sequence, year / week / day).

Isoplam® does not guarantee its products if mixed or overlapped with other similar products.

The quality of the raw materials used and Isoplam® production system are ensured by the ISO 9001: 2015 quality system.

Consult the Safety Data Sheet before use.

Each individual work must be completed using a single production lot, otherwise Isoplam Srl is not responsible for differences in color.

IMPORTANT:

All information contained in this data sheet is based on best practice and laboratory experience. It is the responsibility of the customer to verify that the product is suitable for the intended use. The manufacturer declines all responsibility for the results of incorrect applications. It is advisable to always carry out tests on small surfaces before application. This sheet replaces and cancels the previous ones. The data can be changed at any time. Please also note that Isoplam products are intended for professional use and that Isoplam provides periodic training to its customers who request it. Anyone who uses these products without being enabled does so at their own risk.