

PLAM RESIN DRAIN

Draining gravel

DESCRIPTION

Plam Resin Drain Isoplam® is a system that allows the creation of monolithic architectural drainage floors in resin stone with a high aesthetic impact and in 1.8-2.2 cm thickness.

It is made by applying a mixture composed of:

- Epoxy Drain A+B Isoplam®: fluid, pure, solvent-free two-component epoxy resin with aliphatic curing agent;
- Washed and dried pebbles or ceramized quartz.

Plam Resin Drain is a solution for both indoor and outdoor use, where it is widely used for its draining and anti-stagnation properties.

The binder that makes it up, Epoxy Drain A+B, forms a film that wraps the pebbles together and creates a surface that resists weathering and wear.

Given the compactness of the surface film, easy-to-clean and dirt-resistant surfaces are obtained.

FIELDS OF USE

The Plam Resin Drain Isoplam® system is widely used in the construction of floors that require drainability such as: avenues, poolside, squares, sidewalks...

ADVANTAGES

Plam Resin Drain Isoplam® system:

- it is suitable for both external and internal creations;
- allows you to create floors with scenographic geometric designs;
- allows you to obtain a wide range of chromatic and architectural effects while respecting the most stringent provisions regarding aesthetic-environmental constraints;
- it is low thickness and can be applied to existing supports without having to demolish;
- it is eco-friendly;
- it drains and facilitates the normal flow of rainwater;
- it is resistant to both pedestrian and light vehicle traffic (it can be driven 2.2 cm thick);
- thanks to the use of Vertical Tixo Isoplam® it can also be used for vertical creations (step raises etc.);
- it is easy to make as the dough that makes it is easy to prepare and easily workable.

SURFACE PREPARATION

The surface must be dry, well cohesive and must not present any residue of dirt, dust or anything else that could affect adhesion.

Apply a coat of Isoplam® Skyprimer dusted with 0.6-1.2 quartz as per the datasheet, dry completely and carefully remove excess quartz.

In case of rising moisture, apply the Vapor Barrier Isoplam® epoxy primer as per the technical data sheet and let it dry completely.

PREPARATION OF EPOXY DRAIN MIXTURE A+B

Pour the curing component B of Epoxy Drain into the resin component A and mix for about 4 minutes with a low-speed drill that reduces air engulfment. The bottom and walls of the vessel should be thoroughly scraped.

In case of partial use of the packages, the weight ratio of the two components must be taken into consideration (A+B = 100+60).

The reaction between the two components begins immediately after mixing: the workability time is therefore limited and depends on the temperature.

MIXTURE PREPARATION

The decorative grit chosen, 4-8 mm or 1-4 mm, must be thoroughly washed and dried. It is then to be mixed with about 5% - 7% by weight of Epoxy Drain A+B (the percentage of resin varies according to the particle size of the pebbles used). Example: for 15 Kg of grit you need 0.75 – 1.05 kg of Epoxy Drain.

The resin should be mixed very well with the grit by means of a slow-mixing drill (ca. 400UpM).

Once ready, the dough should be poured into a clean container and mixed again. The workability of the mixture is approximately 40 minutes, taking into account that the two components of the Epoxy Drain must be mixed immediately before use.

APPLICATION AND MAINTENANCE

The dough should initially be distributed with a spatula, to the desired thickness, and then compacted and smoothed. It should be taken into account that the thickness of the package must be at least twice the size of the chosen grit.

To facilitate the smoothing work, it is recommended to clean the spatula, with a certain frequency, with the Epoxy Diluent Isoplam®. For large surfaces, it is also possible to employ a power trowel machine with a disc or mounted PVC blades.

The surfaces are treadable with caution after about 8 hours; complete hardening occurs after about 7 days.

Cleaning of tools should be done as soon as possible with Isoplam® Epoxy Diluent. Once the product is dried it will only be possible to remove the resin mechanically.

Surface cleaning and care can be carried out with a low-pressure washer with the possible aid of Wow Isoplam® or neutral detergents. It is recommended to do it regularly so that the gaps between one grain and another are not clogged so as not to cause the drainage power to be lost

Warnings:

- respect the processing temperatures (between +10°C and +30°C). Above +30°C the resin may slip off the coating surface, compromising the durability of the system;
- the surface of the support must be dry before starting to roll out the system;
- an overdose of Epoxy Drain A+B can cause the formation of bubbles and craters;
- the presence of moisture in the grit can cause a drastic decrease in cohesion resistance, creating material detachments;
- the percentages indicated refer to the use of 4-8 mm and 1-4 mm grit. If other types of grit are used, it is recommended to carry out preliminary tests;
- compact the draining gravel well to obtain a stable and homogeneous wear layer.

TECHNICAL DATA

EPOXY DRAIN

Appearance and color	comp A: straw-colored liquid comp B: transparent liquid
Package	comp A: 10 kg packages comp B: 6 kg tank
Mixture ratio A+B	100+60
Working temperature	da +10°C a +30°C

Workability (Pot life) at 10°C Workability (Pot life) at 20°C Workability (Pot life) at 30°C Hardening at 20°C Complete hardening	approximately 55 minutes approximately 45 minutes approximately 25 minutes approximately 9 hours 7 days
Packing and storage	at least 18 months in a dry and protected place, at a temperature between +10°C and +30°C in their original containers. The date of production is identifiable by the lot number as follows: first 4 digits progressive production number, subsequent 2 digits month and last 4 digits year of production
Disposal	in accordance with current local requirements

SYSTEM PLAM RESIN DRAIN

<i>Performance feature</i>	<i>Test method</i>	<i>Product performance</i>
Reaction to fire	-	NPD
Release of corrosive substances	-	NPD
Water permeability	-	NPD
Water vapor permeability	-	NPD
Mechanical compressive strength	EN 13813:2004	C40
Mechanical resistance to bending	EN 13813:2004	F6
Mechanical wear resistance	EN 13813:2004	AR0,5
Sound insulation	-	NPD
Sound absorption	-	NPD
Thermal resistance	-	NPD
Chemical resistance	-	NPD
Surface Adhesion Force	UNI EN 13892-8:2004	>1,8 N/mm ²
Drainage capacity (Cdre)	Indoor test	100%

CONSUMPTION

For Plam Resin Drain mixture for 1 cm of thickness you need:

- Epoxy Drain A+B approx. 1 Kg/m² (yield: 1 kg allows you to make approx. 1 m²);
- grit approx. 15 Kg/m².

SAFETY

The products indicated in this data sheet are intended for professional use only.
Consult safety data sheets before use.

IMPORTANT:

All information contained herein is based on the best practical experiences and laboratory research. It is the customer's responsibility to determine whether the product is suitable for the intended application. The manufacturer declines all responsibility on the results due to incorrect application of its products. The product shall always be tested on a small area before full scale application. This data sheet replaces all previous data sheets.

ISOPLAM reserves the right to change the data on the technical data sheet at any time. ItalianTerrazzo® Isoplam® is intended for professional use only.

ISOPLAM provides frequent and on demand trainings for its customers. The use of ISOPLAM products without receiving the proper certification will be at the customer's own risk.