

DECO GHIAINO

Mixture for Italian Terrazzo® surfaces

DESCRIPTION

Deco Ghiaino Isoplam® is a colored mixture of silica sand, fiber-reinforced, anti-shrinkage, anti-efflorescence with additives, for the realization of architectural monolithic Italian Terrazzo® floors with high aesthetic impact.

ADVANTAGES

Deco Ghiaino Isoplam® mixture, as formulated above, allows:

- to mix directly on the building site the other ingredients (cement and gravel), avoiding transportation costs, since the materials can be found in that site;
- to modify the color tone of the mixture by mixing larger or smaller amounts of white or gray cement;
- to be more durable, as there are no reactive components inside.

CHARACTERISTICS

Deco Ghiaino Isoplam® mixture

- allows a wide range of colors and architectural effects in accordance with the strictest provisions on aesthetic and environmental constraints (the gravel can be found on site);
- can be applied in a minimum thickness, from 2 to 5 cm, depending on the size of the gravel selected and the intended use of the flooring;
- can be applied "fresh on fresh" as well as "fresh on hard";
- can be applied both for external surfaces (with an "exposed stone" finish) and for internal surfaces (by polishing/grinding it, in order to achieve the traditional "Venetian terrazzo");
- has a great resistance to abrasion;
- if used with "exposed stone" finish, it proves to be an excellent non-slip flooring that can be used also for the construction of ramps with a slope;
- it slows down the degradation of the surface, thanks to its formulation with special fibers that increase the resistance to freeze-thaw cycles;
- it is easy to work and to apply.

TECHNICAL AND PERFORMANCE DATA

The product Deco Ghiaino Isoplam® complies with the UNI EN 13813:2004.

<i>Performance characteristic</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 resistance to compression	EN 13813:2004	C40
Mechanical resistance to flexion	EN 13813:2004	F5
Mechanical resistance to wear	EN 13813:2004	24 µm AR0,5
Sound insulation	-	NPD
Sound absorption	-	NPD
Heat resistance	-	NPD
Chemical resistance	-	NPD
Strength of adhesion to the support	UNI EN 13892-8:2004	1,62 N/mm ²
Adhesion after cycles of freezing thawing with de-icing salts	EN 13687-1:2002	1,38 N/mm ²
Dangerous substances	EN 13813:2004	Within the limits of the art. 31 and/or art. 33 of Regulation 1907/2006

APPLICATION AREAS

Italian Terrazzo® Isoplam is indicated for the enhancement of:

- external surfaces (squares, parks, patios, walkways, pool sides, pedestrian areas, ramps, ...);
- interior floors (such as "terrazzo");
- vertical surfaces (production of staircases).

MIXTURE AND CONSUMPTION

Deco Ghiaino Isoplam® may be mixed directly in a professional mixer with the cement (white or gray, or both) and the gravel, following the basic ratio (which can vary depending on the type of gravel and on the performance required):

1 part of Deco Ghiaino
 2 parts of cement
 5 parts of gravel
 Water as required

The indicative consumptions for a 1 cm thick mixture obtained following the basic ratio (gravel 9-12 mm) are

DECO GHIAINO	2,5 Kg per m ²
CEMENT	5 Kg per m ²
GRAVEL	12,5-13 Kg per m ²

“FRESH ON FRESH” APPLICATION

Prepare the surface and the concrete according to UNI 11146 and UNI EN 206.

Be sure to strike off the concrete and to leave the right thickness for the following application of the Deco Ghiaino Isoplam[®] mixture.

It is advisable to work with preset “areas”, already delimited with steel joints, marble or other material.

Remove any excess water. Once you can walk on the concrete, scratch the surface (still wet) with Isoplam[®] Broom to improve the grip.

Apply Deco Ghiaino Isoplam[®] mixture as the established thickness, strike it off and smoothen it using a steel screed Isoplam[®].

Proceed immediately with the application of Iso Deactivator Isoplam[®] and with the subsequent washing in the times and manners specified in the technical sheet of Iso Deactivator Isoplam[®].

“FRESH ON HARD SURFACES” APPLICATION

Support preparation.

The substrate must comply with the UNI 11146 and UNI EN 206 regulations and must be clean, not damaged nor contaminated by oils, fats, resins, waxes and it must be roughened and made porous by milling, shot-blasting or high-pressure cleaning in order to achieve good adhesion. It is necessary to thoroughly wet the surface the day before the application of Deco Ghiaino Isoplam[®], making sure to remove any standing water that would compromise the attachment of Cement Primer Isoplam[®].

Primer preparation.

Cement Primer Isoplam[®].

Add 4,5 / 5,5 Lts of water to a 20 kg bucket of Cement Primer and mix thoroughly for about 3 minutes with a low speed stirrer until it reaches a homogeneous consistency. Apply the obtained product on the surface using a hard bristles broom Isoplam[®], until it is 1-2 mm thick. Then apply immediately Deco Ghiaino Isoplam[®] mixture “fresh on fresh”. If Cement Primer should dry too quickly, you need to apply another coat of the product.

An incorrect use of the primer may cause the detachment of Italian Terrazzo™ Isoplam[®].

Note: in order to have even greater guarantees of adherence, we recommend using the Skyprimer Isoplam[®] primer as per the technical data sheet. The next day carefully remove the excess quartz and apply the fresh Deco Ghiaino mixture on hard.

Application of the mixture Deco Ghiaino Isoplam[®].

Apply Deco Ghiaino Isoplam[®] mixture with the established thickness, level and smoothen it using a steel screed Isoplam[®].

Proceed immediately with the application of Iso Deactivator Isoplam[®] and with the subsequent washing in the times and manners specified in the technical sheet of Iso Deactivator Isoplam[®].

Note: Existing joints must be respected and therefore must also be reported on the new surface. The cutting of the joints must take place as soon as possible to avoid any cracks due to shrinkage.

SUPERFICIAL DEACTIVATOR

There are three versions of Iso Deactivator Isoplam®:

- Iso Deactivator Mini Isoplam®: deactivator water-based curing compound (anti-evaporation and rain protection), suitable for gravel sizes between 4-8 mm.
- Iso Deactivator Medium Isoplam®: deactivator water-based curing compound (anti-evaporation and rain protection), suitable for gravel sizes between 9-12 mm.
- Iso Deactivator Maxi Isoplam®: deactivator water-based curing compound (anti-evaporation and rain protection), suitable for gravel sizes between 13-18 mm.

Recommendations: Iso Deactivator Isoplam® should be mixed very well with an electric drill and applied in a uniform manner using only professional pumps for Deco Ghiaino Isoplam®.

The operating temperature of the products of the Italian Terrazzo™ Isoplam® cycle must be between 5°C and 28°C. It is important to pay attention to the climatic conditions during the day of the laying of mixture. A windy weather can cause a too quick drying of the compound and cracks on the surface (we suggest you to cover it with a nylon cloth). The deactivators react differently whether the areas are exposed to the sun or in the shade, because of the different drying times, and this can lead to different degrees of exposure of the stone (it is recommended to lay a nylon cloth Isoplam® or a shading towel Isoplam®, and to identify the most appropriate time to wash away the deactivator from the surface).

Any residues of grout that may arise on the gravel surface once the deactivator has been washed away can be removed using a floor buffer with Isoplam® soft bristles disc and Plam Apriori Isoplam®, or applying Grout Remover Isoplam®. A fast intervention will result in a greater removal of the residue.

PACKAGING, STORAGE AND COLORATIONS

Deco Ghiaino Isoplam® is available in bags of 25 kg. Store in a cool, dry place.

If properly stored, it lasts at least 12 months from the date on the package (the lot number indicates, in sequence, year/week/day).

Deco Ghiaino Isoplam® is available in 5 base colors (Giallo Ocra, Mogano, Cipria, Duna, Incolore (colorless)) which become 15, using white cement, gray cement, or mixing white and gray cement together in different percentages.

WARNINGS

Consult the technical and safety data sheets of the Isoplam® Deco Ghiaino, Isoplam® Iso Deactivator®, Isoplam® Cement Primer, Isoplam® Plam Apopori and Isoplam® Grout Remover before use. The products that compose the Italian Terrazzo® system are intended for professional use only.

Each individual work must be completed using the same production lot, otherwise "Isoplam SRL" is not responsible for differences in color

IMPORTANT:

The product DECO GHIAINO is intended for the use as indicated above. Adding any other product will impair the final result. 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 data sheet at any time. DECO GHIAINO 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.