

ITALIANTERRAZZO[®]

Washed gravel

DESCRIPTION

ItalianTerrazzo[®] Isoplam[®] is a system that allows you to create monolithic architectural floors in washed stone with a high aesthetic impact and in just 2-3 cm thickness.

It is made by applying a mixture composed of:

- Deco Ghiaino Isoplam[®]: colored mixture based on siliceous aggregates, fiber-reinforced, anti-shrinkage, anti-efflorescence and additives;
- white or gray concrete;
- grit.

It can be made with the "fresh on hard" technique on existing substrates or "fresh on fresh".

FIELDS OF USE

ItalianTerrazzo[®] Isoplam[®] is indicated for the enhancement of countless surfaces:

- external (squares, parking lots, courtyards, paths, pool edges, pedestrian areas, ramps...);
- vertically (creation of stair risers).

It is highly appreciated for its non-slip characteristics (choosing a split grit).

ADVANTAGES

The ItalianTerrazzo[®] system, through the use of Deco Ghiaino Isoplam[®], allows:

- to add the other ingredients of the mixture (cement and grit) directly on site, avoiding expensive transport costs, since the materials can be found on site;
- to vary the tone of the mixture by choosing greater or lesser quantities of white or gray cement to be mixed.

CARACTERISTICS

The mixture of ItalianTerrazzo[®] Isoplam[®]:

- allows to obtain a wide range of chromatic and architectural effects respecting the strictest provisions on aesthetic and environmental constraints (the grit can be found on site);
- it can be applied in minimum thicknesses, from 2 to 5 cm, depending on the size of the chosen grit and the intended use of the flooring;
- it can be applied fresh on fresh and fresh on hard;
- has a great resistance to abrasion;
- if used with "exposed stone" finish it is an excellent non-slip flooring that can also be used for the construction of ramps or sloping roads;
- slows down the degradation of the surface, thanks to its formulation with special fibers that increase the resistance to freeze and thaw cycles;
- it has excellent workability and ease of use.

TECHNICAL AND PERFORMANCE FEATURES

The ItalianTerrazzo® system complies with 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
Permeability to water	-	NPD
Permeability to water vapor	-	NPD
Mechanical resistance to compression	EN 13813:2004	C40
Mechanical resistance to bending	EN 13813:2004	F5
Mechanical resistance to wear	EN 13813:2004	24 µm AR0,5
Sound insulation	-	NPD
Sound absorption	-	NPD
Thermal resistance	-	NPD
Chemical resistance	-	NPD
Strength of adhesion to the substrate	UNI EN 13892-8:2004	1,62 N/mm ²
Adhesion after freeze-thaw cycles with de-icing salts	EN 13687-1:2002	1,38 N/mm ²
Dangerous substances	EN 13813:2004	Within the limits of article 31 and / or article 33 of Regulation 1907/2006

MIXTURE AND CONSUMPTION

The mixture for the realization of ItalianTerrazzo® requires Deco Ghiaino Isoplam® to be mixed directly in the cement mixer with the cement (white or gray or both), the grit and, finally, the water, following the basic formulation (which can be varied according to the type of grit and the required performance):

1 part of Deco Ghiaino
2 parts of cement
5 parts of grit
Water as required (indicativamente 1 parte di acqua)

The indicative consumption for a 1 cm thick mixture made using the basic formulation (9-12 mm grit) is:

DECO GHIAINO	2.5 Kg/m ²
CEMENT	5 Kg/m ²
GRIT	12.5-13 Kg/m ²
WATER	as required (approximately 20-25% of the total dry part)

“FRESH ON FRESH” PROCESSING

Prepare the substrate and the concrete according to the UNI 11146 and UNI EN 206 standards.
Take care to level the concrete leaving the thickness established for the subsequent application of the ItalianTerrazzo® Isoplam® mix.
Score the surface of the concrete that is not yet dry with the Isoplam® broom to improve adhesion.

Once it can be walked on, spread the ItalianTerrazzo® mixture to the established thickness and level it. Smooth with Isoplam® steel board.

Proceed immediately with the application of Iso Deactivator Isoplam® and the subsequent washing in the times and methods indicated in the Iso Deactivator Isoplam® technical sheet.

Proceed as soon as possible to cut the joints.

“FRESH ON HARD” PROCESSING

Preparation of the support.

The concrete substrate must comply with the UNI 11146 and UNI EN 206 standards and must be clean, intact and free of contamination (oils, greases, resins, waxes ...) and be roughened and made porous by milling, shot blasting or high pressure washing in order to get good adhesion.

It is necessary to wet the surface abundantly the day before the application of the ItalianTerrazzo® mix, taking care to remove any water stagnation that would compromise the bonding of the Isoplam® Cement Primer. It is necessary to wet the surface abundantly the day before spreading the ItalianTerrazzo® mix, taking care to remove any water stagnation that would compromise the bonding of the Isoplam® Cement Primer.

Preparation of the primer.

To a 20 kg bucket of Cement Primer add 4,5 to 5,5 liters of water and mix for about 3 minutes with a low speed mixer until a homogeneous consistency is achieved. Apply the product thus obtained on the surface using Isoplam® hard bristle broom until a thickness of 1-2 mm is reached. Then immediately apply the ItalianTerrazzo® mix “fresh on fresh”.

If Cement Primer dries too quickly, it is necessary to apply another coat of product. Incorrect use of the primer can cause the detachment of the ItalianTerrazzo®.

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

Spreading the ItalianTerrazzo® mix.

Roll out the ItalianTerrazzo® mixture to the established thickness. Straighten and smooth with Isoplam® Steel Board.

Proceed immediately with the application of Iso Deactivator Isoplam® and the subsequent washing in the times and methods indicated in the Iso Deactivator technical sheet.

Note: the existing joints must be respected and therefore must also be applied to the new “glued” flooring. The joints must be cut as soon as possible to avoid cracks due to shrinkage. Alternatively, it is possible to apply elements beforehand (marble, steel or other metal strips or PVC profiles such as Isoplam® Gravel Joints) to create joints.

SURFACE DEACTIVATORS

The Iso Deactivator Isoplam® line includes 3 versions:

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

Recommendations: Iso Deactivator Isoplam® must be mixed very well with a mixing drill and applied evenly using the Isoplam® professional pump. The temperatures of use of the products of the ItalianTerrazzo® Isoplam® cycle must be between 5°C and 28°C. It is important to pay attention to the climatic conditions present on the day the mix is spread. Windy days can create too fast drying and cause cracks on the surface (it is recommended to cover with a nylon cloth).

The surface deactivators act differently in the areas exposed to the sun from those in the shade, due to the different drying times: this can cause different degrees of exposure of the stone (it is recommended to lay a shading sheet and to pay particular attention to identify the most suitable time for washing the flooring from the deactivator).

Any residues of grout that may appear on the surface of the grit, once the surface has been washed by

the deactivator, can be removed with the aid of a floor machine with Isoplam® soft bristle disc and Plam Apripori Isoplam®, or by applying Grout Remover Isoplam® on the surface.
The effectiveness in removing residues is greater the more timely is the intervention.

RESIN COATING

It is recommended to protect exposed stone surfaces in ItalianTerrazzo® with Isoplam® protective products in order to make them resistant to freeze and thaw cycles and to the aggression of pollutants and to facilitate cleaning.

Please always consult the Isoplam® Technical Department for the choice of the most suitable protective.

PACKAGING, STORAGE AND COLORING

Deco Ghiaino Isoplam® is available in 25 kg bags. Keep in a cold and dry place.

If properly stored, it has a shelf life of at least 12 months from the date shown on the package (the lot number indicates, in sequence, year/week/day).

Deco Ghiaino Isoplam® is supplied in 5 color bases (Yellow Ocher, Mahogany, Cipria, Duna, Colorless) which can become 15 using white cement or gray cement.

Additional colors can be obtained by mixing gray and white cement in variable parts. Consult the individual technical data sheets of the other products that make up the ItalianTerrazzo® system before use.

SAFETY

The products that make up the Italian Terrazzo® system are intended for professional use only. Consult the safety data sheets of the individual products before use.

The individual works must be carried out with a single production batch. Otherwise Isoplam srl is not liable for any discrepancies in color.

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.