

MARMURA



TECHNICAL DATA MARMURA

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TECHNICAL FEATURES:

MARMURA is a single-component ceramic paste with crystal microspheres, ready to use with very low thickness, with great performance in terms of yield, mechanical strength, flexibility and processing. Thanks to the absence of epoxy resins, MARMURA is in total absence of yellowing, it does not contain cements or other hygroscopic components which, in direct and prolonged contact with water, can preclude performance.

With the MARMURA system the pot-life problem that we find in epoxy resins and microcements is eliminated, once the container is opened, the leftovers, if properly closed, undiluted and well preserved, can be reused for about twenty-four months. MARMURA is resistant to mold, algae and bacteria, and in particular an extraordinary ability to oppose the spread of flames and the development of fumes, it is an ecologically sustainable and advanced product, it does not contain * added formaldehyde and * APEO, with a very low VOC content.

MARMURA is a multilayer coating for the decoration of indoor and outdoor floors and walls, swimming pools, bathrooms, saunas and furniture. Designed to be able to respond to the multiple technical and aesthetic needs of modern architecture in the private or commercial setting. MARMURA is made up of several products to meet the multiple needs of the market and to make the system technically advanced, the finishes are aesthetically natural able to give a new look to residential, work and commercial environments.

It is possible to intervene in a non-invasive way without demolition and reconstruction in less than 3 mm thickness with the complete cycle and with less than 0.650 kg/m² of product. MARMURA is classified A+ according to the French ministerial decree for indoor air quality.

FIELDS OF USE:

- MARMURA was created to cover floors, walls and ceilings both indoors and outdoors of great prestige, intended for great design and for the renovation of public and private environments, shopping centres, shops, bars, villas, residences, swimming pools, balconies, terraces, bathrooms, shower cubicles, saunas, kitchens, furniture and furnishing accessories with the particularity of the total absence of joints, allows for continuous solutions to be obtained between the floor and the wall, all of this to satisfy the furnishing needs of modern and contemporary architecture .

PREPARATION OF PRIMER BETON KA+KB:

- The package consists of 2 pieces, 12 kg Beton KA in powder and 5 l Beton KB liquid. Pour 3.5/4 liters of Beton KB into a clean bucket, add the Beton KA in small doses and mix thoroughly for approx. five minutes using a mechanical mixer, the primer is now ready to apply. In the case of colored floors or coverings, it is advisable to also color the primer. The yield of the primer is 10 m² in a single layer and has a pot-life of 3 hours from the mix.

APPLICATION OF KA+KB PRIMER:

- Make sure that the substrates are well anchored and free from oil and grease, proceed with the application of the primer in a single layer using a 3 mm stainless steel notched trowel, apply the primer for approximately 1 m² and immediately afterwards smooth the treated surface with the smooth of the trowel in order to level the product and make it uniform, continue with the same procedure for the entire surface and leave to dry for 24 hours.

WARNINGS BETON KA+KB:

- Cement screed floors and walls must have been cured for at least 30 days,
- Floors and walls with cracks, traces and cracks previously restored due to the passage of water pipes, for heating, etc., it is essential to spread the 70/80 g/m² fiberglass mesh over the entire surface before applying the primer treat and leave to dry for 24 hours, in this case the yield of Beton KA+KB primer is 7/8 m² per pack.

PREPARATION OF THE MARMURA:

- The MarmUra package consists of 7 liters of product and 2.1 kg of Crystal. Pour the product (MarmUra) into a clean bucket and add approximately 7% of drinking water, mix thoroughly using a mechanical mixer, pour in small dose the crystals (Crystal) and keep mixing for about five minutes, the product is now ready to be applied.

MARMURA APPLICATION:

- Apply a first layer of MARMURA using a stainless-steel trowel and taking care to give the surface the desired texture and leave the product to dry for 12h.
- Apply a second layer of MARMURA to perfect leveling and obtain the desired aesthetic effect and leave the product to dry for approximately 24 hours.
- It is essential in this phase to use a specific stainless-steel trowel that does not cause unpleasant greyish burns.
- If you want to obtain a perfectly smooth and soft to the touch surface, after the second layer of MARMURA has dried, sand the whole surface using a random orbital sander with 150 grit sandpaper and vacuum up perfectly all traces of dust and clean with a damp cloth so to perfectly dedust the surface.

PREPARATION OF VETROLIQUIDO PRP:

- VETROLIQUIDO PRP is ready to use and does not require dilution, except for the use of airless.

APPLICATION OF VETROLIQUIDO PRP:

- Internal and external floors and coverings treated in MarmUra, apply a first coat of VETROLIQUIDO PRP using a short-haired roller and immediately afterwards smooth the product with a stainless steel and/or plastic trowel, so as to eliminate any bubbles, after 12 hours at 20°C, proceed with the application of the second layer as in the previous step.
- Furniture, doors, kitchen tops and furnishing accessories treated in MarmUra, apply a first coat of VETROLIQUIDO PRP using a short-haired roller and immediately afterwards smooth the product with a stainless steel and/or plastic trowel, so as to eliminate any bubbles, after 12 hours at 20°C proceed with the application of the second layer as in the previous step.
- Swimming pools, tanks, fountains treated in MarmUra, apply a first layer of VETROLIQUIDO PRP using a short-haired roller and immediately afterwards smooth the product with a stainless steel and/or plastic trowel, so as to eliminate any bubbles, after 12 hours at 20°C proceed with the application of the second coat as done previously, 24 hours later at 20°C proceed with the application of the third coat as done for the second.

WARNINGS AND RECOMMENDATIONS:

- Avoid applying the product with relative humidity of the air above 80%;
- Do not apply on damp substrates or where the presence of rising damp or infiltration has been ascertained;
- Use a carbide hygrometer at a depth of 4 cm to check that the humidity level is less than 3%.
- Cover fixtures, doors, etc. well;

- The floor will be suitable for pedestrian traffic only after two days from the last layer of protective finish applied, for frequent washing and the laying of furniture it will be necessary to wait at least five days from the last layer of protective finish applied.

FEATURES OF INSTALLATION:

- Product in paste form and ready to use, max 5% water in the final layer to improve levelling
- Mix the crystal spheres well in the product using an electric mixer before use;
- Operating temperature: +5°C and +35°C;
- Drying time: About 8 hours;
- Total hardening: ~24 hours;
- Resistance to water and UV rays after applying VetroLiquido PRP: ~5 days;
- Store in a cool, dry place away from the sun, +5°C and +30°C.;
- Do not apply in the presence of beating sun, strong wind or rain;

PERFORMANCE CHARACTERISTICS:

- Tensile strength (EN 13892-2): 38 N/mm² after 28 days
- Compressive strength (EN 13892-2): 38 N/mm² after 28 days
- Flexural strength (EN 13892-2): 36 Nm after 28 days
- Impact resistance (UNI EN ISO 6272-1): 0.500/m Nm/501
- Resistance to permeability (UNI EN 1062-3): 0.0001 kg/m²*h0.5 after 5 days
- Reaction to fire (EN 13501-1) CLASS 1 after 28 days
- Adhesion resistance on concrete (EN 13892-8): 6 N/mm² after 28 days
- Determination of the chair with wheels (EN 425): absolute absence of defects
- Minimum/maximum thickness recommended for the application cycle is 3 mm. Consumption may vary according to the consistency, porosity and condition of the surface, as well as according to the method of application. The performance tests were carried out in our laboratories (laboratory temperature 21°C - humidity 65%).
- Slip: Method DIN 51097 Class A 19° ≤ α < 27° - Anti-slip (DIN 51130): Slip: Method DIN 51097 Class A 12° ≤ α < 18° - Anti-slip (DIN 51130): R11 - Environments for the production of foodstuffs, kitchens of catering establishments, work environments with a strong presence of water and mud, clinics, laboratories, laundries, hangars;

TECHNICAL DATA:

- Viscosity (UNI EN ISO 3219): ~ 130000 mPa*s;
- Specific Weight of MARMURA (UNI EN ISO 2811-1): ~ 1,5 Kg\Lt ± 3%;
- Specific weight Crystal balls (UNI EN ISO 2811-1): ~ 2,1 Kg\Lt ± 3%;
- Coverage with 7 liters: 20 m² in two layers;
- PH: >9.00;
- Appearance: White paste;
- Dilution: 7% drinking water (500 ml for both layers);
- Touch dry: 3h at 20°C.;
- Walkable drying: 24h at 20°C.;
- Seasoning: 10/15 days at 20°C.;
- Packaging: 7 Lt buckets + 2.1 kg of crystal spheres (12.6 kg);
- Storage: 24 months in unopened packaging and protected from UV rays and humidity;
- Tints: From folder.;
- Classification for final use (UNI EN 1062.1-4.1): Decoration and Protection;
- Classification by type of binder (UNI EN 1062.1-4.2): Acrylic Microresin;
- Classification by state (UNI EN 1062.1-4.3): Aqueous dispersion;
- VOC classification: In compliance with D.L. No.161 of 03/27/2006 (Implementation of Directive 2004/42/EC);

YIELDS OF PRODUCTS BY CYCLE:

- BETON KA+KB kg 12 + lt 5: **10 m² single layer**
- MARMURA LT 7: **20 m² in two layers**
- VETROLIQUIDO PRP LT 2,5: **18 m² in two layers**

FAQ FREQUENTLY ASKED QUESTIONS:

What resistance and hardness does a MarmUra floor have?

- Three of its properties are high strength, hardness and yield. MarmUra can also be used in environments with high pedestrian traffic both indoors and outdoors. Although it is a relatively hard material, the resistance to impact depends to some extent on the hardness of the substrate.
- Given its reduced thickness, if subjected to a violent impact, MarmUra will deform if the support is also deformed. This could happen, for example, in the case of plaster application. If the base deforms due to low strength, MarmUra will also deform. On supports such as marble or existing ceramics, however, the resistance will be greater.

On which substrates can MarmUra be applied?

- One of the main properties of the MarmUra application cycle is its high adherence. It allows you to apply it on difficult surfaces such as stoneware, marble, Venetian terrazzo, ceramic, seasoned screed, etc., facilitating renovations and avoiding the removal of the original coating, provided that the supports are stable and well anchored.
- The preparation of the support is as important as the application, if the support does not meet the necessary conditions, we will not be able to apply it providing the necessary guarantees.
- It should never be applied on natural wood or on substrates subject to expansion of various types.
- Support needs to be consolidated.
- The surface must be dry and free from dust and grease.
- The plan of the support will determine the final appearance.

Is it possible to apply MarmUra on a radiant floor?

- Yes, but before applying it we will have to follow the heating ignition protocol to prevent the cracks caused by sudden changes in temperature in the screed from reproducing in the MarmUra as well.

The ignition protocol will be as follows:

1. Turn on the heating at least four weeks after laying the cement mortar (screed).
2. Keep the inlet water in the circuits at 25°C for 2 or 3 days. Then gradually increase the water temperature to 45°C and maintain it for several days.
3. Turn off the heating at least 48 hours before laying the complete cycle of MarmUra. The maximum temperature of the floor must be 18°C.
4. After applying MarmUra, wait at least 48 hours before turning the heating back on gradually (+5°C per day).
5. Always avoid heat buildup due to rugs or carpets or lack of space between furniture and the floor.
6. In the case of cement mortar substrates, MarmUra flooring can be applied on screeds that have reached an advanced setting stage. This occurs after three to four weeks, depending on the climatic conditions. In any case, it must be ensured that the mortar is almost dry. Therefore, the support must have a maximum humidity of 3% to be detected using a relative humidity meter.
7. Supports containing powdered mortars are not suitable since the state of the base of the application must be consistent or, if not, it is necessary to proceed with its consolidation.

Is the complete cycle of MarmUra waterproof?

- ABSOLUTELY YES. To guarantee the waterproofing of the support, it is essential to choose the most suitable protective finish for the project to be carried out, for example, for the protection of MarmUra inside swimming pools it is of absolute importance to use the transparent finish Vetroliquido PRP.

Can a MarmUra floor discolour over time?

- NO! our pigments behave in a stable manner without undergoing alterations over time due to sunlight and climatic conditions, however, intense colors such as red and yellow can only have a slight discoloration if exposed to direct sunlight.

How should a MarmUra floor be cleaned?

- The very structure of the continuous surface facilitates cleaning operations as there are no crevices or joints in which dirt and bacteria can enter. The MarmUra floor is resistant to detergents and does not stain with oil, wine, coffee, sauce, etc., it is sufficient to wash it with water and a neutral detergent to

remove the dirt. Another easy property of MarmUra is its impermeability which makes the floor not subject to mould.

Does a MarmUra floor require frequent maintenance?

A well-executed MarmUra floor, on an adequate substrate and well protected with the right treatment, can last for many years requiring a simple maintenance procedure, consisting of surface washing with simple water and neutral detergent.

Although the advantages of floors in MarmUra are numerous, they are certainly not exempt from actions of deterioration over time and from incorrect use by those who live and use a floor in MarmUra, for this reason we recommend:

- Place a doormat at the entrance to the house
- Avoid chemical attacks with acid substances and degreasers
- Wipe up spilled liquids on the floor immediately
- Avoid falling heavy objects (blunt object)
- Use the adhesive pads under furniture and chairs
- Only use office chairs with rubber wheels

In these cases common maintenance is not enough; an extraordinary maintenance or restoration intervention is required to restore the layer of the MarmUra floor.

The data contained in these technical sheets refer to laboratory tests. The indicated indications and methods may be subject to changes over time according to possible improvements in production technologies. The application of the products takes place beyond our control as we cannot directly intervene on the conditions of the construction sites and on the execution of the works. All indications are of a general nature, they do not bind our company in any way and therefore the responsibility falls exclusively on the customer. A preventive test of the product is recommended in order to verify its suitability for the intended use. Our technical service is available to provide additional information.

* From 1 January 2016 in Italy, formaldehyde has been cataloged as a carcinogen. The IARC (International Agency for Research on Cancer) classifies these substances based on how harmful they are to humans.

** APEO-free indicates the characteristic of a product free from APEO (alkylphenol ethoxylate), a substance dangerous for the environment and aquatic organisms. The REACH regulation (Regulations EC 552/2009 EC 1907/2006 REACH) prohibits the use of APEO in concentrations equal to or greater than 1,000 ppm (parts per million) in Europe.