Microcem-FB

TECHNICAL DATA MICROCEM-FB
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Description:

Microcem-FB is a next-generation fiber-reinforced microcement, a premixed powder composed of quartz microspheres and marble powders, white Portland cement 525, selected glass fibers, and special additives that provide excellent adhesion to ceramic tiles, marble, screed, etc., with extraordinary resistance to flame spread and smoke development.

Areas of use:

- Ideal for covering floors, walls, and ceilings, both indoors and outdoors, intended for large-scale design and renovation of public and private spaces, shopping centers, shops, bars, villas, residences, swimming pools, balconies, terraces, bathrooms, shower stalls, saunas, kitchens, furniture, and furnishings.
- The unique feature of the total absence of joints allows for seamless solutions between the floor and the wall, meeting the furnishing needs of modern and contemporary architecture.

Main features:

- Realistic and natural appearance of raw microcement;
- Seamless, jointless surface;
- Highly resistant and durable;
- Suitable for interior and exterior walls, furniture, and decorative panels.

Preparation, coloring, and mixing:

- The composition is 6 liters of drinking water per 20 kg of Microcem-FB.

1. Add the water to a clean bucket, pour in the desired amount of toner, and mix well;
2. Add the Microcem-FB in small doses and mix thoroughly using a mechanical mixer until a smooth, lump-free paste is obtained.

Important note:

We recommend applying a coat of Primer NK to surfaces such as:

- Doors, furniture, tables, and furnishings;
- Plasterboard walls;
- Parquet floors;
- Floors and walls with recesses for water pipes, heating pipes, and electrical systems.

Preparation and application:

- Substrates such as: Ceramic tiles, marble, or cement screeds must be dry, solid, and free of dust, paint, wax, oil, loose particles, and seasoned surfaces.

1. Lay out the 70/80 g/m² fiberglass mesh, taking care to position it so that it does not crease, overlapping the ends of the mesh by at least 10 cm;
2. Apply a first layer of Microcem-FB using a stainless steel trowel, evenly over the entire surface;
3. Let dry for 24 hours (+20°C);
4. Using a spray bottle with drinking water, slightly dampen the surface and proceed with the second layer of Microcem-FB;
5. Let dry for 24 hours (+20°C);
6. Apply a first coat of VetroLiquido PRP using a short-haired roller (mohair) for approximately 1/2 m² and then immediately smooth the product with a stainless steel trowel to eliminate any bubbles;
7. Let the product dry for 24 hours (+20°C);
8. Apply a second coat of VetroLiquido PRP as described above;
9. Let the product dry for 48 hours (+20°C).

Technical data:

- Appearance: Powder;

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Microcem-FB

- Color: White;
- Colors obtainable with toner: 32 shades;
- Dilution: ~300 ml of drinking water per kg of product;
- Mixture pH: 12;
- Coverage: 14 m² with two coats;
- Solids content: 100%;
- Pot Life: Workable for 6 hours at +20°C and depending on ambient humidity;
- Grain Size: Max 0.5 mm;
- Aggregate Mineralogical Nature: Silicon/Carbonate;
- Consistency: Thixotropic;
- Density of Mix: 1,500 kg/m3;
- Packaging: 20 kg;
- Apparent Density: 1.20 kg/L;
- Apparent Density of Mix: 1.50 kg/L;
- Optimal Application Temperature: (*) +5°C to +30°C;
- Operating Temperature and Thermal Resistance: –30°C to +70°C;
- Surface Drying: 3 hours at +20°C;
- Drying for Second Coat: 24 hours at +20°C;
- Drying for walking: 48 hours at +20°C;
- Full hardening: ~7 days at +20°C;
- Stacking of tables, chairs, and furniture: ~10 days at +20°C;
- Full curing: 28 days at +20°C;
- Resistance to water and UV rays after application of VetroLiquido PRP: ~7 days;
- Shelf life: 24 months in unopened packaging, protected from UV rays and humidity between +5°C and +30°C;
- Packaging: 20 kg;
- End-use classification (UNI EN 1062.1 – 4.1): Decoration and protection;
- UFI Code: NC00-Y08C-J00G-9N29.

Warnings and recommendations:

- Store in a dry, dry place, away from sunlight;
- Do not apply to dusty surfaces;
- Do not apply to wet surfaces;
- Do not apply to frozen surfaces;
- Do not apply to surfaces and repairs that are still damp;
- Do not apply where rising or seeping damp has been confirmed;
- Do not apply in strong sunlight (outdoor application);
- Do not apply in strong winds (outdoor application);
- Do not apply in rain (outdoor application);
- Check the local weather forecast (outdoor application);
- Make sure the temperature does not drop below +10°C;
- Measure the humidity level at a depth of 4 cm using a carbide hygrometer to ensure it is less than 3%;
- Cover window frames, doors, etc. well;
- Do not use on metal, rubber, vinyl, linoleum, or PVC surfaces.

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 Nm/501 m;
- Permeability resistance after Liquid Glass PRP (UNI EN 1062-3): 0.0001 kg/m²*h0.5 after 5 days,
- Fire reaction (EN 13501-1) CLASS 1 after 28 days;

Microcem-FB

- Adhesion strength to concrete (EN 13892-8): 6 N/mm² after 28 days;
- Determination of the rubber-castor chair (EN 425): absolutely free of defects;
- Slip resistance: DIN 51097 method Class A $19° \leq \alpha < 27°$ - Non-slip (DIN 51130): R11 - Food production environments, catering kitchens, work environments with a high presence of water and mud, clinics, laboratories, laundries, hangars;
- The minimum/maximum recommended thickness for the application cycle is 3 mm. Consumption may vary depending on the consistency, porosity, and condition of the surface, as well as the application method;
- Performance tests were conducted in our laboratories (laboratory temperature +21°C - humidity 65%).

The written and verbal technical and application instructions provided to purchasers and installers are based on our experience and the current state of the art in theory and practice; They are not binding and do not create any contractual obligation or secondary commitment arising from the purchase contract. They do not exempt the purchaser from personally verifying, at their own responsibility, the suitability of our products for the intended application. The processing cycles indicated above do not constitute any assumption of liability by Nikkolor Italia s.r.l., which is exempt from any liability for problems arising from incorrect installation.

RULES AND USEFUL TIPS

Preface:

Let's start by saying that the success of a floor depends primarily on the substrate to be covered, the correct application method, and the mixing and installation phases. However, proper cleaning and proper maintenance of the floor is the responsibility of those who use seamless surfaces. The more it is cared for, the longer the floor will last.

Advantages of Microcem-FB flooring:

The flooring is available in a wide variety of colors and textures, can be matte or satin, smooth or rough, and is highly resistant to wear, trampling, and impact. Furthermore, it stands up well to humid environments, has good fireproofing properties, thus preventing the spread of flames, and is highly resistant to chemicals. The surface is hygienic because it has no joints or seams, and, finally, it is easy to clean and maintain.

Disadvantages of Microcem-FB flooring:

The flooring is very durable, but not as durable as ceramic or stoneware. It can be repaired rather than replaced entirely if the damage affects a very small area, which is also a plus, but in any case, it must be installed by qualified professionals. It is not suitable for DIY.

Using the Microcem-FB floor:

In the first week after applying the complete cycle, it is very important not to clean the floor under any circumstances. Do not spill any liquid on the floor that could alter the color, lighten, or even bleach it. Therefore, avoid walking on the floor at all costs, as it has not yet reached its maximum hardness and chemical resistance.

Cleaning the Microcem-FB floor:

Start cleaning the floor by removing dust and dirt using a soft-bristled broom or a vacuum cleaner, gently sweeping the surface. Be sure to cover the entire floor, including hard-to-reach areas such as corners. Mopping the floor without sweeping away dust and dirt can damage the surface layer over time, leaving it looking dirty even after thoroughly mopping.

Helpful tips for cleaning Microcem-FB flooring:

Prepare a solution of warm water and neutral soap, following the manufacturer's instructions. Using a microfiber cloth, thoroughly clean the entire surface. Be sure not to overuse the detergent, as excessive amounts could leave residue on the floor. Neutral products are the best choice for interiors and home environments; they are simple, economical, and extremely effective.

Helpful tips for treating Microcem-FB flooring:

1. Use a doormat outside the door.
2. Use non-absorbent mats under the sink and washbasin.

3. Use cotton or natural fiber mats; those made of rubber or synthetic fibers may release oily substances and stain the surface.
4. Place shock-absorbent felt pads under the legs of chairs, tables, desks, and furniture.
5. Use silicone rubber casters for office chairs.
6. Clean up any spilled liquids immediately; if left to settle, they could damage the floor's surface protection.
7. Take extreme care not to spill anything on the surface, including substances such as oils, perfumes, creams, grease, stucco, mortar, and paint, which could permanently damage the floor.
8. Do not leave damp cloths on the floor.
9. Never use abrasive or aggressive products such as wire brushes, sandpaper, hydrochloric acid, acetone, or ammonia, as their corrosive properties will damage the floor.
10. Take extreme care when installing furniture (in any case, it is recommended to let the surface fully cure) and do not place objects on the floor. In fact, improperly curing the floor will result in unsightly stains, even after several days.
11. Do not drag any objects across the floor.
12. Walk on the surface only with clean shoes.
13. Avoid standing water and direct contact with humidity.
14. Knowledge of the substrates and their suitability for proper installation and product use is the responsibility of the person performing the work.
15. Proper treatment, maintenance, and cleaning of surfaces is the customer's responsibility.

However, since we cannot intervene directly, the company assumes no responsibility for the conditions of the construction sites, the execution of the work, or the proper treatment, maintenance, and post-installation cleaning of the floors, as these are beyond our control. For any information, please contact our technical support.