



TECHNICAL DATA CEMENTO 3D

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Description:

Cemento 3D is a next-generation structured nanocement, a premixed powder composed of selected quartz sands and marble powders, minerals, nanoresins, and special additives that provide excellent adhesion to all common substrates, are resistant to mold, algae, and bacteria, and are particularly effective at resisting the spread of flames and smoke. The complete Cemento 3D cycle is certified.

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 nanocement appearance
- Seamless, seamless 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 to 20 kg of 3D Cement.
1. Add the water to a clean bucket, pour in the desired amount of toner, and mix well.
 2. Add the 3D Cement in small doses and mix thoroughly using a mechanical mixer until a smooth, lump-free paste is obtained.

Preparation and application for interior walls:

- Substrates must be dry, solid, and free of dust, paint, wax, oil, loose, and weathered particles.
1. Apply a single coat of NK Primer evenly over the entire surface to be treated using a short-haired roller and a brush;
 2. Let dry for 24 hours (+20°C);
 3. Apply a first coat of Cemento 3D using a stainless-steel trowel, evenly over the entire surface;
 4. Let dry for 12 hours (+20°C);
 5. Apply a second coat of Cemento 3D over approximately 4-6 m², then go back and smooth the wet product by tilting the stainless-steel trowel until it is smooth and uniform;
 6. Let dry for 24 hours (+20°C);
 7. Apply a generous coat of ProteKto EcoSilan using a short-haired Mohair roller;
 8. Let dry for 24 hours (+20°C).

Preparation and application for interior and exterior furniture and doors:

- Substrates must be dry, solid, and free of dust, paint, wax, oil, loose, and seasoned particles.
1. Apply a single coat of Primer NK evenly over the entire surface to be treated using a short-haired roller and a brush;
 2. Let dry for 24 hours (+20°C);
 3. Apply a first coat of Cemento 3D using a stainless-steel trowel, evenly over the entire surface;
 4. Let dry for 12 hours (+20°C);

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5. Apply a second coat of Cemento 3D over approximately 4-6 m², then go back and smooth the product while it's still wet, tilting the stainless-steel trowel until it's smooth and even;
6. Let dry for 24 hours (+20°C);
7. Apply a first coat of VetroLiquido PRP using a short-haired roller (mohair) over approximately 1-2 m², then immediately smooth the product with a stainless-steel trowel to eliminate any bubbles;
8. Let dry for 12 hours (+20°C);
9. Apply a second coat of VetroLiquido PRP as described for the first;
10. Let the product dry for 24 hours (+20°C);
11. Apply a third coat of VetroLiquido PRP as done for the second;
12. Let the product dry for 48 hours (+20°C).

Preparation and application for floors, shower stalls, bathrooms, kitchen backsplashes, and interior and exterior surfaces:

- Substrates 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 coat of Primer Beton using a stainless-steel trowel, evenly and evenly over the entire surface to be treated;
 3. Let the product dry for 24 hours (+20°C);
 4. Apply a second coat of Primer Beton as before;
 5. Let the product dry for 24 hours (+20°C);
 6. Apply a first coat of Cemento 3D using a stainless-steel trowel, evenly over the entire surface;
 7. Let dry for 12 hours (+20°C);
 8. Apply a second coat of Cemento 3D over approximately 4-6 m², go back and smooth the product while it's still wet by tilting the stainless-steel trowel to make it smooth and uniform;
 9. Let dry for 24 hours (+20°C);
 10. Apply a first coat of VetroLiquido PRP using a short-haired roller (mohair) over approximately 1-2 m², then immediately smooth the product with a stainless-steel trowel to eliminate any bubbles;
 11. Let dry for 12 hours (+20°C);
 12. Apply a second coat of VetroLiquido PRP as described for the first;
 13. Let dry for 24 hours (+20°C);
 14. Apply a third coat of VetroLiquido PRP as described for the second;
 15. Allow the product to dry for 48 hours (+20°C).

Important Notes:

- Do not use on metal, rubber, vinyl, linoleum, or PVC surfaces.
- In unfavorable environmental conditions such as high temperatures, wind, and near rain, the pot life may be significantly reduced. Outdoor use is not recommended in these weather conditions.

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 damp surfaces and repairs;
- Do not apply where rising or seeping damp has been identified;
- Do not apply in strong sunlight (outdoor application);
- Do not apply in strong wind (outdoor application);
- Do not apply in rain (outdoor application);
- Check the local weather forecast (outdoor application);
- Ensure the temperature does not drop below +10°C;

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- Measure the humidity level below 3% using a carbide hygrometer at a depth of 4 cm.
- Cover windows, doors, etc. well.

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 (UNI EN 1062-3): 0.0001 kg/m²*h^{0.5} after 5 days,
- Fire reaction (EN 13501-1) CLASS 1 after 28 days;
- Adhesion strength to concrete (EN 13892-8): 6 N/mm² after 28 days;
- Test for castor chair (EN 425): absolutely free of defects;
- Minimum/maximum recommended thickness for the application cycle: 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%);
- Slip resistance: DIN 51097 Method Class A 19° ≤ α < 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.

Technical Data:

- Appearance: Powder;
- Color: White;
- Colors obtainable with toner: 32 shades;
- pH of the mixture: 12-14;
- Coverage: 16 m² in two coats;
- Bulk density: 1.20 kg/L;
- Bulk density of the mixture: 1.45 kg/L;
- Thermal resistance and operating temperature: -30°C to +50°C;
- Operating temperature: +10°C and +30°C;
- Touch dry: 3 hours at +20°C;
- Walkable dry: 48 hours at +20°C;
- Full hardening: ~7 days at +20°C;
- Furniture overlay: ~10 days at +20°C;
- Total curing time: 28 days at +20°C.
- Resistance to water and UV rays after application of VetroLiquido PRP: ~10 days;
- Shelf life: 24 months in unopened packaging, protected from UV rays and humidity between +5°C and +30°C;
- Packaging: 20 kg;
- Pot life: (*) workable for 6 hours;
- Application temperature: (*) +5°C to +30°C;
- Classification by end use (UNI EN 1062.1 – 4.1): Decoration and Protection;
- UFI Code: NC00-Y08C-J00G-9N29.

The written and verbal technical and application instructions provided to buyers 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 imply any contractual obligation or secondary commitment arising from the purchase contract. They do not exempt the buyer from personally verifying the suitability of our products for the intended application, at their own risk. 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.

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RULES AND USEFUL TIPS

Introduction:

Let's start by saying that the success of a floor depends largely on the substrate, 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 live with seamless surfaces. The more it is cared for, the longer the floor will last.

Advantages of Cemento 3D Flooring:

The floor 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 impacts. Furthermore, it holds up well in humid environments, has good fireproof properties, thus preventing the spread of flames, is highly resistant to chemicals, the surface is hygienic because it has no joints, and, finally, it is easy to clean and maintain.

Disadvantages of Cemento 3D Flooring:

The floor is very durable, but not as durable as a ceramic or stoneware floor. It can be repaired rather than replaced entirely if the damage affects a very small area, and this is also a good thing, but in any case, it must be applied by qualified professionals. It is not suitable for DIY.

Using the Cemento 3D 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 Cemento 3D Floor:

Start cleaning the floor by removing dust and dirt using a soft-bristled broom or a vacuum cleaner to gently sweep the surface. Be sure to cover the entire floor area, including hard-to-reach areas like 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 Cemento 3D floors:

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 overdo 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 Cemento 3D floors:

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

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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.