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NANTEN HM BIO TRUE COLORS



Product description

Tintable natural stone-filled trowel-applied coating system.
- Good mechanical resistance
- The coating has good resistance to fuels, salts, cleaning agents, and, under temporary exposure, diluted acids and alkalis

Applications

- Public spaces subject to heavy wear
- Lobbies and corridors
- Classrooms
- Offices
- Hospitals

Instructions

Base requirements and coating conditions

The concrete strength class must be at least C25/30 with a wear resistance class of 3. The relative humidity of the concrete must be below 95%, and the surface temperature must be at least +3°C above the dew point. During application and curing, the temperature of the air, surface, and coating must remain above +15°C, and the relative humidity of the air must be below 80%.

New concrete floor

Cement laitance and any uncured cement must be removed by surface grinding or shot blasting. All loose and adhesion-reducing material must be removed, and the surface must be thoroughly vacuumed to remove all cement dust.

Old concrete floor

Cement laitance and deteriorated concrete must be removed by grinding or shot blasting. All loose and adhesion-reducing material must be removed, and the surface must be thoroughly vacuumed. Dirty floors should be washed and rinsed with a synthetic detergent before any further surface preparation. Any existing old paint film must be completely removed from the substrate.

Priming

Priming is done with Nanten HM Bio Epoxy. The primer must seal all pores in the concrete so that a dense and continuous film is formed on the surface. Adhesion sand is broadcast onto the primer as work progresses.'

Patching

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Small holes and cracks are cleaned and filled with an epoxy putty made of, for example, HM Bio Epoxy and fine filler sand. Larger or more extensive overfills, leveling, and slope formation can be done using a filling/levelling mortar made of Nanten HM Bio Epoxy and filler sand (0.1–0.6 mm).

Mixing

Pre-mix Part A and Part B of HM Bio True Colors Epoxy in their own containers. Estimate the required amount of mixture based on the size of the area to be treated and the working time of the product. Combine the components in the correct ratio and mix with a low-speed mixer for approximately two minutes, avoiding air entrapment in the mixture. Add the required amount of precision-graded sand while mixing, and continue mixing for about one minute.

Mixing ratio

Part A: 2 parts by volume, Part B: 1 part by volume

Coverage

At 4 mm film thickness
For priming: 0.2–0.3 l/m^2
For top coating: 0.35–0.45 l/m^2
Resin consumption: approx. 1.3 l/m^2

Coating

The mixed material (HM Bio True Colors Epoxy + filler sand) is poured onto the floor in a continuous bead and spread with a notched trowel to the desired thickness. Application is carried out in strips, allowing surface finishing from untreated areas of the floor. After spreading, the material is compacted manually with a steel trowel or mechanically by power troweling to achieve a smooth surface. At 4 mm film thickness, the consumption is approx. 1.3 l of HM Bio True Colors Epoxy and approx. 7 kg of filler sand per m^2.

Top coating

Once cured, the compacted trowel-applied coating must be sealed with thinned True Colors Epoxy. We recommend applying two coats to achieve a hygienic and easy-to-clean surface.

Waste handling

Storage and handling of waste
See the separate storage and disposal instructions https://www.fescon.fi/en/material-bank

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Technical information

Colour	Available in 10 natural standard shades. The resin can be tinted in a wide range of colors.
Package size	Part A in a 10 l metal container, Part B in a 5 l plastic container or in 200 l drums
Storage	+5°C...+25°C, maximum shelf life 6 months. Store in a warm environment, sealed in original containers.
Mixing time	Approx. two minutes
Usage temperature	+15°C...+25°C
Usage time	Poured onto the floor: approx. 20 - 30 minutes. Working time decreases as temperature rises.
Drying time	Touch-dry in 7 h (+25°C) and 14 h (+15°C). Resists light traffic after approx. 12 h (+25°C) and approx. 24 h (+15°C). Fully cured in 7 days.
Adhesion strength	> 1.5 N/mm^2
Reaction to fire	Bfl-S1
Exposure class	BC5-Mec ja BC5-Chem (by 54/BLY 12)
Relative air humidity	Below 80% during application and curing of the coating
Chemical resistance	Class II
Thinner	For priming, dilute 10–30 vol-% with Nanten A Epoxy Thinner. Do not dilute the resin for trowel application. For top coating, dilute 20–40 vol-% with Nanten A Epoxy Thinner.
Method of application	Applied with a notched trowel and finished with a steel trowel or mechanically with a power trowel. For priming and top coating, use a suitable rubber squeegee or roller.
VOC content	< 150 g/l (ready-to-use mixture)EU VOC 2004/42/EC (Cat A/j) max. 500 g/l (2010)
GWP A1 raw material	5,33
GWP A2 transport	0,205
GWP A3 manufacturing	0,409
GWP A1-A3	5,95
GWP A4 transport	0,0315
GWP A5 assembly	0,121
GWP unit	kg CO2e/kg

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Remember to consult the Maintenance Instructions for Coated Floors and the product Safety Data Sheet on our website at www.fescon.fi, or request a copy by calling +358 9 274 7970. Although the technical details provided in this product description are based on our best knowledge and experience, the information above should always be regarded as indicative. The user is responsible for verifying the suitability of the product for the intended application. If the instructions are not followed, the user assumes full responsibility for any resulting damage or consequences. Limitation of liability, product use notes and restrictions: Please familiarize yourself with Fescon Oy's general terms of delivery and the design and work instructions related to the product.