

NORMAFLOOR 3000 COLOR

TECHNICAL DATA SHEET 4/20

PROPERTIES AND RECOMMENDED USAGE

Paint type

NORMAFLOOR 3000 Color is a two-component self-leveling epoxy coating containing quartz sand. The product is a solvent-free epoxy based coating for concrete floors and is a mix of NORMAFLOOR 200 Color and quartz sand.

Typical and recommended uses

NORMAFLOOR 3000 Color is used for the protection of heavy mechanical, mechanical and light and medium chemical wear on concrete floors. The product has been tested and found suitable for use in the food industry.

Applications

Lightly and heavily trafficked industrial warehouses, auto repair shops and halls. Process halls of chemical and wood processing industry and paper halls etc.

Chemical resistance

Resistant to occasional water, oil and a range of process chemical contact and immersion.

Colour

NOR 114 (grey), RAL7038. Other colours with limitations.

Finish

Gloss

TECHNICAL DATA

Volume solids*	100%
Total mass of solids*	1190 g/l
VOC value*	0 g/l

* Values are calculated (without sand filling.)

Mixing ratio and package sizes (Standard packages)

	Light traffic	Heavy traffic
Normafloor 200 Color	0.5 - 0.8 mm	2 - 3 mm
Resin (l)	20	20
Cure (l)	10	10
Filler 1 0.1 - 0.35 mm (l)	15 (= 20 kg)	27 (= 36 kg)
Total (l)	40	46

The sand quantity should be adjusted according to the temperature and stiffness of the paint mixture. A cold or stiffer-textured mixture will take less sand. The sand must be dry, clean, sifted quartz powder. The actual coarsest grain size in commercial sand may exceed the nominal maximum grain size. In this case, the film thickness should be adapted to suit the grain size in order to ensure a smooth surface.

Pot life (+23 °C)

approx. 45 min after mixing (when poured on the floor)

Drying time

	+15 °C	+23 °C
Surface dry	6 h	4 h
To walk on	24 h	16 h
Fully cured	10 d	7 d

Drying times are typical on recommended film thicknesses at given temperatures.

Recommended film thickness / coverage

Dry	Ready mixed	Normafloor 200 Color
0.5 mm	2.0 m ² /l	0.4 l/m ²
0.8 mm	1.3 m ² /l	0.6 l/m ²
2.0 mm	0.5 m ² /l	1.3 l/m ²
4.0 mm	0.25 m ² /l	2.6 l/m ²

Practical coverage

Depends on how flat the floor is and the actual mass of the film thickness.

Cleaner

OH 17

Compr. strength (ASTM C 579) approx. 52 N/mm²

Tensile strength (ASTM C 307) approx. 15 N/mm²

Bond strength (BS 1881/207) approx. 3 N/mm²

APPLICATION INSTRUCTIONS

New concrete surfaces

The concrete must be dry and at least 4 weeks old, and humidity no more than 97 % (4 % by weight). The floor humidity can be tested, if a humidity gauge is not available, by using a rubber mat. The colour of the floor under the rubber mat must not be darker than the rest of the floor after a 24 hour test. Additives such as melamine resins, silicones or silicates that might decrease the adhesion or absorption of the coating, must not be used. Loose concrete, laitance, residues of plastic dispersions and waxes should be removed from the concrete surface with abrasive blasting or grinding. If required a 15 - 20 % hydrochloric acid solution could be used.

Old concrete surfaces

Remove oils and other contaminants by emulsion cleansing. Surfaces that are contaminated by oils and fats should in addition be flame cleaned. Possible laitance removal as for new concrete surfaces.

Environmental conditions during application

During application and drying time the temperature of the varnish should be above +15 °C, air and surface temperature should not be below +10 °C and the relative humidity below 70 %. The surface temperature should be min 3 °C above the dew point of the air. Best result and easiest working conditions are in temperatures between +18 °C - +25 °C. Application direct sunlight and rising surface temperatures can result in bubbling of the surface due to release of air or moisture from concrete.

Mixing the components

The cure is added to the resin in the correct mixing ratio 2 : 1 (resin : cure) shortly before the application. Must be thoroughly mixed by a mechanical mixer. The mixture should then be emptied into a bigger vessel and mixed again. The possible sand addition is made after that during mixing. Curing and final finish may be affected if mixing has been insufficient. The pot life of the mixture can be prolonged if it is poured on to the surface to be painted immediately after mixing.

Disclaimer

The above information is given to the best of our knowledge based on laboratory tests and practical experience. However, as the paint is often used under conditions beyond our control, we cannot guarantee anything but the quality of the paint itself. We reserve the right to change the given data without notice. Please contact our office for more specific information. The product is intended for professional use only. If there are deviations in the different language versions of the technical data sheets, the English version applies.

Priming

Uncoated concrete surface: To improve adhesion and to avoid air bubbles the concrete surface is primed with thinned NORMAFLOOR 205 solvent free epoxy primer according to data sheet. If the concrete is damp or new and the temperature is below +15 °C, the primer recommended is NORMAFLOOR 105 Epoxy Primer.

Previously coated surface: Priming is done with Epocoat 210 epoxy coating.

In order to ensure the best possible performance it is recommended that the paint is at room temperature before the application.

Method of application


Recoating starts 6 - 24 hours after priming. The mixture should be poured evenly over the whole floor where it then is spread by a mohair roller or toothed trowel to required thickness. To avoid bubbles the coating should be pierced with a porcupine roller after 20 minutes. This procedure can be repeated if needed.

Storage and shelf life

The product must be stored in original sealed containers at temperatures from 5 °C to 30 °C. The storage conditions are to keep the containers in a dry, well ventilated space away from source of heat and ignition. When stored as described above, the unopened component A will keep up to 2 years and unopened component B to 2 years from the date of manufacture. The manufacturing date found in the label is also the batch number of the paint.

Safety

Please follow the environmental and safety instructions displayed on the container and Safety Data Sheet. Use under well ventilated conditions. Do not breathe or inhale mist, use respirator mask. Avoid skin contact. Spillage on the skin should immediately removed with suitable cleanser, soap or water. In case of contact with eyes, rinse immediately with plenty of clean water and if necessary seek medical advice.

	
Nor-Maali Oy Vanhatie 20 15240 Lahti, Finland 17 DoP Nr. NOR1-0420 0416-CPR-7826	
EN 1504-2:2005 Surface protection products - Coating Physical resistance (5.1)	
Abrasion resistance	Weight loss < 3000 mg
Capillary absorption and permeability to water	W ₃ (w < 0,1 kg/m ² ·h ^{0.5})
Impact resistance	Class II: ≥ 10 Nm
Adhesion strength by pull-off test	≥ 2.0 N/mm ²
Dangerous substances	See safety data sheet

	
Nor-Maali Oy Vanhatie 20 15240 Lahti, Finland 17 DoP Nr. NOR6-0420	
SR-B2, 0-RWA10-IR10 EN 13813:2002 Synthetic resin screed	
Release of corrosive substances	SR
Capillary absorption and permeability to water	W ₃ (w < 0,1 kg/m ² ·h ^{0.5})
Abrasion resistance EN 13892-5	RWA 10
Adhesion strength by pull-off test	B2.0
Impact resistance	IR10
Dangerous substances	See safety data sheet