NEF 700 EPOXFLOOR DIAMOND
SOLVENT-FREE EPOXY FLOOR SYSTEM

SR-B2,0-AR0,5-IR4 ACCORDING TO **EN 13813**

DESCRIPTION

Two-component epoxy system enhanced with select hardeners and resins without solvents. Also suitable for highly stressed surfaces that require great resistance to mechanical strength, chemical agents, friction and yellowing. Fully compatible with Directive 2004/42/EC on the use of organic solvents in decorative paints and varnishes. In case of permanent contact with food and alcoholic drinks containing ≤15% alcohol: in accordance with European Regulations 1935/2004 and 1895/2005 and Chap. II, Article 28 of the Foodstuffs and Drinks Code. Classified as SR-B2,0-AR0,5-IR4, according to Standard EN 13813. Apply at least 4 weeks after the last layer of concrete has been laid. Direct and continuous exposure to ultraviolet radiation causes chalking.

APPLICATION FIELDS

Suitable for highly stressed floors that require great resistance to mechanical strength and chemical agents and can be found in factories, malls, warehouses, garages, car-shops, slaughter houses, food-processing plants and hospitals. Also recommended for repairing old floors and for applications requiring instant walkability and coverage of defects.

SUBSTRATE PREPARATION

The substrate should be rigid and all loose materials, such as dust, oil and grease, should have been removed with a metal brush, roller refiner and vacuum cleaner. Proper preparation is also necessary in case of new structures for smoothening surfaces so that you can save material and achieve the right adhesion. The substrate should be dry, with a maximum moisture of 4%, while proper waterproofing should previously have been achieved through THRAKON materials for protection against rising damp. The concrete should have a compression strength ≥ 25N/mm^2 and a tensile strength ≥1.5 N/mm^2. Then apply the suitable THRAKON primer depending on the requirements of the substrate. In case surface moisture is < 4%, apply the **NLX 710 PRIM** epoxy primer with brush, roller or airless sprayer. When moisture is >4% or there is rising damp, apply **NLX 712 MOIST PRIM** or **NLX 716 SPECIAL PRIM**. Finally, when substrate moisture is up to 8% and the temperature of the substrate is +12°C, without any rising damp, **apply NLX 714 AQUA PRIM**. In case you apply the epoxy floor after 24 hours, you should spread M-32 quartz sand while the primer is still fresh. When it dries, clean the excess sand with a vacuum cleaner. After priming, stuff any cracks and holes on the substrate with a mixture of **NEF 700 EPOXFLOOR DIAMOND** and **QZS 700 EPOX** (M-32) quartz sand in a ratio of 1:3 to 1:4 by weight.

SHADES

Available in white (RAL 9003), light ivory (RAL 1015), grey (RAL 7047, Ral 7040) and oxide red (RAL 3009).

APPLICATION

Mix components A and B according to the specified ratio and weights. Use an electric mixer at low speed at the bottom of the container. Let the mixture calm for a couple of minutes and start gradually adding M-32 quartz sand in a ratio of 1:0.8-1.2 to the weight of the mixture. Stir for 3-5 minutes until the mixture becomes homogeneous without lumps. Apply with a serrate spatula and then work the freshly applied layer with a spiky roller in order to create an extremely smooth final surface without any entrapped air. Application thickness should be 1.5-3.0 mm. If you want the epoxy floor to have antiskid properties, spread M-32 quartz sand to saturation while the layer is still fresh. When the material hardens, remove the excess quartz sand with the help of a vacuum cleaner. Finally apply a last layer of **NEF 700 EPOXFLOOR DIAMOND** with a roller, without adding any quartz sand in order to maintain the antiskid properties. Apply the material in order to avoid high temperatures and polymerization of the material in the container. The temperature of the substrate should be 3°C above the dew point so that any risks resulting from condensation and air pockets can be avoided.

APPLICATION RATE

Mixing ratio **NEF 700 EPOXFLOOR DIAMOND / QZS 700 EPOX (M-32) Quartz Sand**	Application Rate **NEF 700 EPOXFLOOR DIAMOND ($kg/m^2/mm$)**	Application Rate **QZS 700 EPOX (M-32) Quartz Sand ($kg/m^2/mm$)**
1:1	0.8	0.8
1:0.8	0.9	0.7
1:1.2	0.7	0.9

- For antiskid floor layer: Quartz sand 3-4kg/m^2, **NEF 700 EPOXFLOOR DIAMOND** (as paint): 0.3-0.4 kg/m^2.
- Painting: for 2 layers of **NEF 700 EPOXFLOOR DIAMOND** with roller 0.25 – 0.3 kg/m^2/layer.
- Antiskid painting: Quartz sand: 0.4-0.5kg/m^2, **NEF 700 EPOXFLOOR DIAMOND:** 0.2-0.3kg/m^2.

CLEANING OF TOOLS / STAINS

Clean with **EF SOLV** solvent while it is still freshly applied. If possible, use mechanical means.

PACKAGING – STORAGE

Set of 13.5kg. In the original, sealed package, in dry and cool places and at temperatures between +5°C and +35°C, protected against direct sunlight and frost, for 3 years after production date.

PRECAUTIONS

For information about safe use, storage and disposal of the product read the information on the label and in the most recent MSDS of the product, which is available upon request to professionals.

The remains of the paints should not be disposed of together with domestic waste. Ask for advice from the local government with regard to the disposal and removal of waste.
Poisoning Centre Tel. No.: 210 77.93.777

NEF 700 EPOXFLOOR DIAMOND
SOLVENT-FREE
EPOXY FLOOR SYSTEM

ACCORDING TO THE EN13813 EUROPEAN STANDARD – CATEGORY SR – B2,0 – AR0,5 – IR4

TECHNICAL CHARACTERISTICS	UNITS	STANDARD	VALUE
Appearance			Glossy
Density	(kg/l)	EN ISO 2811.01	1.34
Mixture ratio	(w/w)		100A:35B
Hardening interval (+25°C)	(h)		10
Substrate temperature	(°C)		+12 to +35
Atmospheric temperature	(°C)		+12 to +35
Substrate humidity	(%)		<4
Relative atmospheric humidity	(%)	-	<70
Fully hardened after	(days)		~ 7
Hardness		Shore D, ASTM 2240	80
Resistance to friction	(mg)	with the addition of M32 quartz sand in a ratio of 1:1 by weight TABER TEST, CS 10/1000/1000	61
Compressive strength	(N/mm^2)	DIN 53452	104
Flexural strength	(N/mm^2)	DIN 53452	75
Impact resistance		EN ISO 6272	IR4
Resistance to adhesion	(N/mm^2)	EN 13892-8	≥ 2.5
Resistance to temperature fluctuations	(°C)	dry loading	-30 to +100
Workability interval	(min)	+12 °C	60
		+25 °C	40
		+30 °C	30
Recoating after	(h)	+12 °C	36
		+25 °C	24
		+30 °C	24
Light traffic	(h)	+12 °C	36
		+25 °C	24
		+30 °C	24

Note: *The measurements were taken in laboratory environment under a temperature of +23°C, Relative Humidity 50 % and without ventilation. They may vary depending on the conditions prevailing at the worksite, such as temperature, humidity, ventilation and absorbability of the substrate.*