TECNOFLOOR T-3020 N - TWO-COMPONENT, AROMATIC, 100% SOLIDS EPOXY RESIN FOR FLOORING

TECNOFLOOR T-3020 N, is a two-component fluid, neutral color coating, 100% epoxy solid based; high chemical and mechanical resistance of concrete pavement coating; suitable for floor finishing. It is applied manually, using a roller or brush, and to be pigmented using PIGMENTS EP range.

CE

USES

Epoxy resin for flooring and protection in the next uses:

- Pavements of heavy traffic as for garages, car parks (traffic deck)
- Pavements of high decontamination and cleaning requirements as in chemical and food industries
- Pavements where required anti-slipping finished surfaces (a multilayer application)
- As protection against liquid spills and aggressive chemicals

NOTE: call our technical department about the application to other supports or situations.

density at 23ºC	1,65 g/cm³
consumption	275~300 g/m²/coat
repaint at 23 ºC	12~24 hours
dry time at 23 ºC	±24 hours
application method	by roll, brush or squeeze

COLORS

	Neutral

GENERAL FEATURES:

- Excellent bond and great coverage.
- Breathable (permeable to steam).
- 100% solids.
- High chemical resistance.
- No solvent, odorless
- Satin-gloss finish.
- It is recommended that the same batch number is used in each area of application to ensure an even color is obtained.
- To reduce the risk of condensation, both the substrate and the ambient temperature should be a least 3 ºC above dew point at the time of application.
- TECNOFLOOR T-3020 N d should be applied in dry conditions avoiding the presence of humidity or water coming from the surface to be coated or the substrate, whether at the time of application or subsequently (pressure from phreatic water level).
- In the event there is humidity in the substrate at the time of application, consult the technical specifications of our primers where the maximum humidity ranges are specified.
- Don't add water.
- Given that it is an epoxy, an outdoor application should be avoided as its initial color will yellow if exposed to UV rays. When applying in such outdoor conditions, finish with a top layer of colored TECNOTOP 2C, although in this case, the surface loses its initial brightness
- Total curing takes 7 days; until then, avoid direct contact with water or other reactants.
- Do not apply at temperatures below 8 ºC or above 30 ºC and with relative humidity above 80%.
- If you add solvent, max 5% and ever in the self-leveling system.
- Do not apply, under any circumstances, on surfaces treated with high alkalinity products.
- It is important to ensure good ventilation in the area treated to promote TECNOFLOOR T-3020 N curing and prevent color tone changes in the finish.

PACKAGING

Metal tins on these two formats:

- COMPONENT A: 20,60 kg + COMPONENT B: 4,40 kg
- COMPONENT A: 4,12 kg + COMPONENT B: 0,88 kg

COLORS

Grey, brown, green.

SHELF LIVE

24 months at temperatures between 5° C and 35° C, provided it is stored in a dry place. Once the tin has been opened, the product must be used immediately.

APPLICATION METHOD

The following factors should be considered during the application process:

Surface

- The concrete slab should have a minimum tensile strength of >1.5 N/mm² (MPa) and be free from grease, oil, concrete laitance, curing liquids or any other treatments, such as silicones or deteriorated paint.

- The substrate should be has the pore opened and, therefore, it is essential to sanding or grinding (regarding the support conditions), followed by dust aspiration.
- Concrete must be more than 28 days old (finished setting process), or a moisture content <4%.
- The substrate can be damp, but it should be noted that TECNOFLOOR T-3020 N may not be applied on concrete that exudes water or in areas where the phreatic water level could affect bonding of the system's components, which could cause the coating to bubble.

Primer

- It's essential to first of all to prime the surface using our primers PRIMER EP-1020/PRIMER EPw-1070 (according to the kind and conditions of the support) to improve surface bonding and saturate the concrete's pores, clogging them to ensure a perfect bond with the surface and absence of bubbles in the subsequent finish.
- The primer should be left to dry for between 6 to 8 hours at the most before applying the epoxy paint TECNOFLOOR T-3020 N; ambient temperature should be around 23 ºC with no more than 80% relative humidity.

Mixing

- TECNOFLOOR T-3020 N comes pre-weighed in the appropriate amounts for subsequent mixing. Partial mixes of the pre-weighed components are not recommended.
- Shake the bucket containing Component A and then pour in the contents of Component B. Mix using a rod stirrer at low speed until the mixture is thoroughly combined. Make sure you stir well around the edges and at the bottom of the tin.
- In case of adding aggregates to increase surface roughness, do the mixture described above first and, once made, add the aggregate to obtain a homogeneous product.

Cleaning

- While fresh cleaned with DESMOSOLVENT, once hardened only by mechanical means.

APPLICATION TYPOLOGIES

Paint

- Prior to applying TECNOFLOOR T-3020 N, we recommend the application of one of our primers, PRIMER EPw-1070 or PRIMER WP-1020, which ensures a perfect seal and bond and prevents the possible appearance of variations in the gloss due to different absorption levels in extremely heterogeneous concrete substrates.
- Open the buckets, homogenize both components by means of mechanical agitation equipment.
- Mix the two components until getting a homogeneous product mixed
- Apply the first coat of TECNOFLOOR T-3020 N. For the application, use a brush, short hair roller or air-less gun can be used.
- Wait for it to dry completely.
- Apply the second coat. A brush, short hair roller or air-less gun can be used for the application.
- The third coat of TECNOFLOOR T-3020 N may be necessary on very absorbent substrates or for very light colors.

Multilayer

- This system provides a non-slip surface to give the coating a slip resistance level of >45 (Class 3).
- Open the buckets, homogenize both products by means of mechanical agitation equipment.
- Mix the two components and mix until a homogeneous product mixture is obtained.
- Apply the first coat of TECNOFLOOR T-3020 N. For the application, a brush, short hair roller or air-less gun can be used.
- Wait for it to dry completely.
- Sprinkle the surface with siliceous aggregate until saturation.

- Once hardened, the remaining aggregate must be removed by sweeping.
- Lightly sand the surface and then vacuum the residues generated.
- Apply a second coat of TECNOFLOOR T-3020 N with the help of a rubber rake, finishing with a short hair roller.
- The consumption is approximately 275-400 g/m²/coat, depending on the roughness of the support.
- The presence of high relative ambient humidity during application and drying time can give a matte finishing or even whitish due to the difficulties of water drying. To prevent this, we recommend to keep well ventilated the work area during the application, and the next twenty-four hours, it is possible, by mechanical means.

Self-leveling

- In this type of application is possible to mix graded clean and dry quartz sand 0,1~0,5 mm. In mixing ratio of ±1:0.7 or ±1:1 depending on the temperature and desired workability
- For this type of application, the material is poured on the support, then distributing it with a notched trowel with which you can control thickness and consumption. Once past 20 minutes is necessary to pass a spiked roller with which the air outlet will facilitate within the material
- The minimum thickness to get self-leveling is 2 mm.without sand and, 3 mm. mixed with. The performance is more or less 1,65.kg/m²/mm (pure material), depending on the degree of roughness of the substrate.

COMPLEMENTARY PRODUCTS:

The TECNOFLOOR T-3020 N epoxy system may be complemented with the following products as a means of protection or to improve its physical-mechanical properties depending on its exposure, the desired finish or the type of substrate.

- PRIMER EP-1020: a specific primer for this kind of epoxy paint; for improving adhesion system and optionally for filling and capping existing voids on surfaces of concrete, mixed with dry silica sand in a ± 1:4. This achieves a fast, a base fills consistent and rapid drying.
- PRIMER PU-1050 | PRIMER EPw-1070 | PRIMER PUc-1050|PRIMER PU-1000: Primers for prior application supports to improve adherence and regularize the flatness of the support. These primers' applications regularize the humidity of the support (see the degrees of permissibility in their data sheets).

Performance may vary depending on the type of support, nature or surface texture. Check the technical specifications of each product or contact our technical department.

PERFORMANCE TABLE (DEPENDING ON SUBSTRATE AND APPLICATION SYSTEM USED):

product	paint	paint multilayer	self-leveling
PRIMER EPw-1070	±150g/m²/coat		
PRIMER EP-1020	±200 g/m²/coat		
TECNOFLOOR T-3020 N	±275~300 g/m²/coat	±275 g/m²/coat + spreading of silica sand+400 g/m²/coat	1,65 kg/m²/mm

All values that are included in the table above, are approximate and may fluctuate due to the situation of the support or the methodology employed.

HANDLING AND TRANSPORT:

These safety recommendations for handling, are necessary for the implementation process as well as in the pre and post, on exposure to the loading machinery.

- Respiratory Protection: When handling.

- Skin protection: Use rubber gloves, remove immediately after contamination. Wear clean body-covering. Wash thoroughly with soap and water after work and before eating, drinking or smoking.
- Eye / Face: Wear safety goggles to prevent splashing and exposure to particles in the air.
- Waste: Waste generation should be avoided or minimized. Incinerate under controlled conditions in accordance with local laws and national regulations.

Anyway, consult the safety of a material data sheet of the product (MSDS)

TECHNICAL DATA

PROPERTIES	VALUES
Density at 23ºC ISO 1675	1,65 g/cm³
Viscosity at 23ºC ISO 2555	250 cps
Solids content ISO 1768	100 %
VOC (volatile organic compounds)	10 g/l comp. A+ 0g/l comp. B
Hardness Shore D at 7 days at 23ºC DIN 53.505	>80
Concrete adherence	>2 MPa
Pot life at 23 ºC	±50 minutes
Initial dry at 23 ºC	±40 minutes
Total curing at 23 ºC	±7 days
Recoat time at 23 ºC	6~8 hours
Walkable(pedestrian)	±24~48 hours
Support and environmental range of temperature (of applications)	8 ºC ~ 30 ºC
Service temperature resistance	-20 ºC ~ 80 ºC
Abrasion resistance TABER EN ISO 5470-1:1999	155 mg (C5-17 1kg)
Max. environment moisture	80 %

These values in this table are approximate and can vary depending on the situation of the carrier or application methodology employed.

CHEMICAL RESISTANCES

INORGANIC ACIDS

Sulfuric 10%	++	(loss of color)
Hydrochloric 37%	++	(loss of color)
Nitric 20%	++	(loss of color)
Phosphoric 20%	+++	

ORGANIC ACIDS

Citric 10%	+++	
Lactic 10%	++	(loss of color)
Acetic 10%	++	(loss of color)
Formic 10%	+	
Tartaric 10%	+++	

ALKALIES

Sodium hydroxide 50%	+++
Potassium hydroxide 50%	+++
Ammonia 25%	+++

SOLVENTS

White spirit	+++
Xylene	+++
Gasoline	+++
Diesel	+++
Acetone	+ / +++ (casual exposure)

+++ Resistant
++ Resistant with a lighter lose of properties
+ Resistant to spills or splashes

NOTA: resistance's measurements were measured in permanent immersion during 21 days at 23 °C.

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