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DATA SHEET 1568
7 01.07.2019

TEKNOFLOOR 660F
Polyurethane Coating

PAINT TYPE

TEKNOFLOOR 660F is a solvent-free, two-component polyurethane coating.

USAGE

Used on industrial floors where elasticity and good resistance to mechanical abrasion is required. The coating has very good adhesion properties and elasticity, and therefore it is suitable also on e.g. asphalt surfaces.

SPECIAL PROPERTIES

The coating withstands water, chemicals, oils, grease and petrol. It will not withstand strong acids nor continuous action of organic acids and strong solvents. The mechanical abrasion properties are excellent. If the top coat is required to have excellent gloss and colour retention the coating can be overcoated with TEKNODUR 0100 -series Polyurethane Top Coats.
The coating will even out on a level surface by itself.

Properties of a 2 mm screed:

Property	Value	Standard
Tensile strain at break	90%	ISO 527-2
Tensile strength	8.8 MPa	ISO 527-2
Crack bridging ability	1.7 mm	EN 1062-7, method A
Compressive strain at 50% compression	50 MPa	ISO 604

APPROVALS

The product has CE approval for protection of concrete structures. Additional information: see page 3: "CE MARKING".

TECHNICAL DATA

Mixing ratio

Base (Comp. A): 4 parts by volume
Hardener (Comp B): TEKNOFLOOR HARDENER 660H 1 part by volume

Pot life, +23 °C

30 - 60 min (mixture poured out on the floor)
10 - 15 min (mixture kept in the vessel)

Solids

100 % by volume

Total mass of solids

abt. 1400 g/l

Volatile organic compound (VOC)

abt. 0 g/l

Spreading rate

0.5 - 3.3 m²/l depending on the film thickness.

Average film thickness

0.3 - 2.0 mm

Drying time at +23°C / 50% RH
- fit for light traffic after 16 h
- fully cured after 7 days

The drying time is as previously mentioned when the temperature of the product as well as air and surface is +23°C.

Increase in film thickness and rise in the relative humidity of the air in the drying space usually slow down the drying process.

Clean up

TEKNOSOLV 9521
Do not dilute the coating!

Finish

Full gloss

Colours

RAL-7038
NOTE! Sunlight will change the colour and glossiness of the coating in the course of time.

SAFETY MARKINGS

See Safety Data Sheet.

PTO

DIRECTION FOR USE

Surface preparation

NEW CONCRETE FLOOR: The concrete must be at least 4 weeks old and well-hardened so that all moisture from casting is bound and the surface dry. The moisture of the concrete must nor exceed 97% as relative humidity or 4% by weight (by 54 / BLY 12).

Dense laitance is to be removed from steel-trowelled concrete by shot-blasting or surface grinding. Brittle and powdery top layers are treated so that the solid concrete containing aggregate is exposed. Thereafter all cement dust is removed by vacuum cleaner or brush. The concrete surface must be clean of anything that might hinder the adhesion.

OLD CONCRETE FLOORS: Uncoated, greasy floors are cleaned by emulsion wash. Thereafter laitance is removed by shot-blasting, scarifying, surface grinding or etching. Scarifying and shot-blasting are the best methods for removal of disrepair concrete or old flaking paint or composition layers.

OLD ASPHALT FLOOR: Wash the surface carefully with e.g. high pressure machine or with brushing machine. The asphalt surface is not primed but is applied straight with TEKNOFLOOR 660F. If the asphalt's surface is very smooth, grind it slightly to achieve sufficient adhesion.

Choosing the preparation method

The surface preparation method for both new and old concrete is chosen according to condition of the concrete and strain the floor will be exposed to. The best method for floors to be attacked by heavy abrasion, chemicals or hot water is scarifying or shot-blasting. Surface grinding is enough if the floor will be subjected to minor abrasion only. In general, surface preparation by etching is not recommended for composition floors within industry. Etching is mainly used for small areas when mechanical preparation methods are not applicable.

Etching is to be done with RENSA ETCHING etching liquid or with diluted hydrochloric acid (1 part acid to 4 parts water). Rinse the floor with water after etching and allow to dry.

Application conditions

The surface to be coated must be dry. The temperature of the ambient air, the surface and the coating shall be above +10°C and the relative air humidity below 80% during the application and drying period.
Additionally during the application and the drying period the temperature of the coating and the surface to be coated shall be at least 3°C above of the dew point of the air.

Special jobs

All special jobs should be done before the application of the actual priming. E.g. cutting grooves at joints between steel and concrete. Cutting working and expansion joints open. Fitting up skirting and rounding of corners. Filling cavities and cervices, and possible levelling down the floor.
Filling can be done with TEKNOPOX FILL or with stiff putty prepared by adding an adequate amount of dry sand (e.g. 0.1 - 0.6 mm) to undiluted varnish.

Priming varnishing

The priming is done with TEKNOFLOOR PRIMER 310F Epoxy Varnish. For mohair roller application the varnish is diluted about 30% with TEKNOSOLV 9515 or TEKNOSOLV 9506. Spread the varnish 0.2 - 0.3 l/m². If the concrete floor is very porous, the second coat can be applied with TEKNOFLOOR PRIMER 310F Epoxy Varnish according to the instructions for overcoating time given in the Data Sheet. TEKNOFLOOR PRIMER 306F Epoxy Varnish can be used on fresh, 2 - 3 days old concrete surface according to the instructions given on Data Sheet.

Application

Mixing of components: Mix Base and Hardener with each other immediately before use and stir thoroughly. It is recommended to use a slow-rotating drilling machine equipped with a stirrer for mixing. Careless stirring or incorrect mixing ratio will cause an irregular curing and impaired film properties.

Depending on the temperature the coating is done after 4 - 24 h from priming .
The recommended coat thickness is achieved by a suitable indentation of the steel trowel. Smooth down with a short-haired mohair roller.

Coating

Spread the composition (over 1.0 mm) with an adjustable trowel, the slit of which can be adjusted to give the coat thickness required. If desired, the composition can after this be smoothed with a broad mohair roller. Finish then with a porcupine roller to make sure that air bubbles are being removed.

Clean, dry natural sand of granule size 0.1 - 0.6 mm can be added to the product, by volume: 1 part of sand and 1 part of coating mixture. This will however lead to changes in the properties of the coating, e.g. the elasticity will deteriorate.

It is recommended that paint of the same batch is used for painting large uniform floors. If paint from different batches must be used, the application is to be planned so that the seams between batches are done to natural lines, i.e. sills and expansion joints.

Wash the equipment immediately after finishing the application with TEKNOSOLV 9521.

ADDITIONAL INFORMATION

The storage stability is shown on the label. Store in a cool place and in tightly closed containers.

Continues...

CE MARKING

CE

0809

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Declaration of Performance No. 0007

0809-CPR-1063
EN 1504-2:2004
Surface protection products – Coating
Physical resistance (5.1)
Chemical resistance (6.1)

Abrasion resistance	Requirement: Weight loss less than 3000 mg
Capillary absorption and permeability to water	Requirement: $w < 0,1\ kg/m^2 \times \sqrt{h}$
Resistance to severe chemical attack	Requirement: Reduction in hardness of less than 50 %
Impact resistance	Class II: > 10 Nm
Adhesion strength by pull-off test	Requirement: Crack-bridging system with trafficking: ≥ 1,5 (1,0) N/mm^2
Dangerous substances	See safety data sheet

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