

Techno Floor SL 200

Flow applied, 0.5 - 1.5mm thick based floor topping

Uses

Techno Floor SL 200 is designed for use in wide range of industrial environments where a lasting solution to floor maintenance problems is required. It provides a dense, impervious, colored and chemically resistant floor surface which is hygienic and easy to clean. Typical applications include:

- Clean rooms
- Kitchens
- Plant rooms
- Light industrial plants

Advantages

- Fast application - minimizes downtime
- Chemically resistant - good resistance to a wide range of chemicals
- Durable - good abrasion resistance
- Hygienic - provides a dense, impervious, seamless floor surface which is easily cleaned
- Attractive - available in a wide range of colors to enhance the working environment

Description

Techno Floor SL 200 consists of graded aggregates bound in a pigmented epoxy resin binder.

It is supplied as a three component system, Pre- weighed for on-site mixing. When laid, it provides a smooth, light-reflective surface. It is available in a range of standard colors.

Specification

Flow-applied epoxy floor topping

The designated floor areas shall be surfaced with Techno Floor SL 200. a 0.5mm - 1.5mm thick floor-applied epoxy resin floor topping.

The topping shall achieve a compressive strength of 50 N/mm² and a flexural strength of 34 N/mm² at 7 days when tested to BS6319. At 35°C, it shall be capable of accepting foot traffic at 24 hours and vehicular traffic at 48

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hours.

Properties

The values given below are average figures achieved in laboratory tests. Actual values obtained on site may show minor variations from those quoted.

@ 23°C

@ 35°C

Pot Life

1 hour

30 min.

Complete cure

7 days

5 days

Tensile strength @25°C @ 7 days (BS 6319 pt7)

20 N/mm²

Adhesion strength (ASTMD412)

1.5 N/mm² (Concrete failure)

Application thickness

0.5-1.5 mm

Chemical resistance

Techno Floor SL 200 is resistant to spillages of the following, when tested in accordance with ASTM D1308CI. 3.1.2.:

Acids (m/v)

HCL18%

Resistant

H2SO425%

Discolors

Citric acid 25%

Resistant

Acetic acid10%

Resistant

Alkalis (m/v)

NaOH50%

Resistant

KOH50%

Resistant

Solvents & organic*

Petrol

Resistant

Skydrol

Resistant

Diesel

Resistant

Brake fluid

Resistant

Engine oil

Resistant

Kerosene

Resistant

Aqueous solutions

Water (Tap/distilled/potable)

Resistant

Sodium Chloride (Sat)

Resistant

Urea solution (Sat)

Resistant

Chemical properties

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Techno Floor SL 200 has good resistance at ambient temperatures to a wide range of industrial chemicals. Note that it is especially important that spillage is cleaned up quickly since much higher concentrations of chemicals may occur on evaporation.

Design criteria

Techno Floor SL 200 is designed for application at a nominal thickness of between 0.5-1.5mm. Substrates should be dry and not suffer, or be likely to suffer, from rising damp. If necessary, suitable damp-proof membranes should be installed to prevent this. Substrates should not have a relative humidity greater than 75% at the time of installation.

Instructions for use

Techno Floor SL 200 should be applied by specialist contractors who must follow the procedures laid down in the Product Method Statement.

The following steps are involved in the application which would normally take place over a 2 to 3 day period.

Surface Preparation

It is essential that Techno Floor SL 200 is applied to sound, clean and dry surfaces in order that maximum bond strength is achieved between the substrate and the flooring system. All dust and debris should be removed prior to application of the product or its primer.

Steel surfaces

Steel surfaces should be degreased and grit blasted to SA2^{1/2} immediately prior to application. The prepared surface should then be treated with one coat of Techno prime 31 or Techno prime 25.

Priming

All surfaces treated with Techno Floor SL 200 should be primed with Techno Epoxy 151 P designed for maximum absorption and adhesion to concrete substrates. Allow the primer to dry (see table below) before proceeding to the next stage, do not proceed whilst the primer is 'tacky' as this will lead to unsightly marks in the finished surface.

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20°C	8- 12 hours
30°C	6-8 hours
40°C	4-6 hours

Mixing

Techno Floor SL 200 is supplied in four pro-weighed packs (base hardener, aggregate and color Pack) which are ready for immediate on-site use.

Mixing should be carried out using either a forced action mixer; or a heavy duty, slow-speed drill the components should be mixed in a suitably sized mixing vessel The color pack should be added to the base container and mixed for 15-30 seconds, until homogeneous.

Then add the hardener and mix for further 30 seconds. Until an even color and texture is obtained Thereafter, the contents of the graded aggregate pack should be slowly added and mixing carried out for a further 3 minutes until a completely homogenous material is obtained.

Application

The applicator should ensure that there are sufficient supplies of plant, labour and materials to make the mixing and subsequent application process a continuous one for any given independent floor area .Once mixed, the material must be used within its specified pot life - see "Properties " section.

The material should be poured onto the prepared and primed substrate as soon as mixing is complete It should be spread to the required thickness using a serrated trowel; with care taken not to overwork the resin, spreading evenly and slowly.

Immediately after laying, the material should be rolled, using a spiked nylon roller. to remove slight trowel marks, and to assist air release. The rolling should be carried out using a 'back and forth' technique along the same path. An overlap of 50% with adjacent paths is recommended. Further light rolling may be required to remove surface imperfections, or for subsequent release of trapped air, but should be prior to the setting of the product.

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Cleaning

Techno Epoxy 151 P and Techno Floor SL 200 should be removed from tools and equipment with Techno solvent 102 immediately after use. Hardened material can only be removed mechanically.

Maintenance

The service life of a floor can be considerably extended by good housekeeping. Regular cleaning may be carried out using a rotary scrubbing machine with a water miscible cleaning agent at temperatures up to 50°C.

Limitations

- Techno Floor SL 200 should not be applied on to surfaces known to, or likely to suffer from, rising dampness, potential osmosis problems or have a relative humidity greater than 75% as measured in accordance with BS 8203 Appendix A
- Techno Floor SL 200 should not be installed at temperatures below 10°C or above 45°C.
- In common with all epoxy materials some light shade changes may be experienced over the long term when placed in adverse exposure conditions. Any such change in shade is not regarded as being detrimental to performance

Estimating Supply

Techno Floor SL 200	18 kg pack (incl. colour pack)
Techno Epoxy 151 P	1kg or 5 kg
Techno solvent 102	4 liter pack

Coverage

Techno Floor SL 200	10.5 m ² /pack @ 1 mm
thickness	
Techno Epoxy 151 P	3 to 5 m ² /kg

Storage

Shelf life

Techno Floor SL 200 has a shelf life of 12 months if kept in warehouse conditions at 30°C in the original, unopened pack.

Storage conditions

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Store in dry conditions between 5°C and 30°C. away from sources of heat and naked flames, in the original, unopened packs. If stored at high temperatures the shelf life will be reduced.

Precautions

Health and safety

Techno Floor SL 200 and Techno Epoxy 151 P and Techno solvent 102 should not come in contact with the skin and eyes, or be swallowed. Ensure adequate ventilation and avoid inhalation of vapor. Some people are sensitive to resins, hardeners and solvents. Wear suitable protective clothing, gloves and eye protection. In case of contact with skin, rinse with plenty of clean water, then cleanse with soap and water. Do not use solvent. In case of contact with eyes. Rinse immediately with plenty of clean water and seek medical advice. If swallowed seek medical attention immediately - do not induce vomiting.

Fire

Techno Epoxy 151 P and Techno solvent 102 are flammable. Keep away from sources of ignition. No smoking Techno Floor SL 200 is non-flammable.

Flash points

Techno Epoxy 151 P over 100°
Techno solvent 102 33°C

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