Techno Floor SL 400

Heavy duty, flow applied 4-6 mm thick epoxy resin floor topping

Uses

Techno Floor SL 400 is designed for use in industrial environments where high abrasion and impact loads are likely. It provides a dense, impervious, colored and chemically resistant floor surface which is hygienic and easy to clean. Typical areas of use include:

- Dry food process plants
- Traffic aisles in factories or warehouses
- manufacturing plants
- Pharmaceutical manufacturing areas.

Advantages

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

Description

Techno Floor SL 400 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 colours.

Specification

Heavy duty epoxy floor topping

The designated floor area shall be surfaced with Techno Floor SL 400, a 5 mm thick flow-applied epoxy resin floor topping. The topping shall achieve a compressive strength of 60 N/mm ^{2} and a flexural strength of 30 N/mm^2 at 7 days when tested to BS 6319. At 20°C, it shall be capable of accepting foot traffic at 24 hours and vehicular traffic at 48 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.

Pot Life	@25°C	@35°C
Techno Floor SL 400	1 hour	20 min
Techno epoxy 151 p	1.5-2 hours	30-60 min

Chemical Properties

Techno Floor SL 400 has excellent resistance at ambient temperatures to a wide range of industrial chemicals. Specific data is available on request.

Note that it is especially important that spillage is cleaned up quickly and not allowed to dry since much higher concentrations of chemicals may occur on evaporation.

Design criteria

Techno Floor SL 400 is designed for application at a nominal thickness of 5 mm.
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 400 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 400 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 SA 2.5 immediately prior to application. The prepared surface should then be primed with one coat of Techno Epoxy 151 P.

Priming

All surfaces treated with Techno Floor SL 400 should be primed with Techno Epoxy 151 P, a solvent based epoxy resin primer designed for maximum absorption and adhesion to concrete substrates. Once mixed, the primer should be applied immediately to the prepared substrate using stiff brushes and/or rollers.

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.

The minimum over coating times will vary slightly according to the porosity of the substrate. However, they should be in accordance with the following ambient, application temperatures

20ºC	8-12 hours
30ºC	6-8 hours
40ºC	4-6 hours

Mixing

Techno Floor SL 400 is supplied in four pre-weighed packs (base, hardener, and aggregate) 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 with proprietary mixing paddle attachment.

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 setting of the product.

Maintenance

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

Estimating

Supply

Techno Floor SL 400	10 kg
Techno Epoxy 151 P	5kg packs

Coverage

Techno Floor SL 400 thickness	8 kg /m^2@ 5 mm
Techno Epoxy 151 P	5m^2/Kg

Storage

Shelf life

Techno Floor SL 400 has a shelf life of 12 months if kept in warehouse conditions at 30ºC in the original, unopened pack.

Storage conditions

Store in dry conditions between 5ºC and 30ºC. away from sources of heat and naked flames,

in the original, unopened packs. If stored at high temperatures the shelf life will be reduced.

Modern Technologies for Construction Chemicals

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