

Nitoflor SL2000*

Flow applied, 2 mm thick epoxy resin based floor topping

Uses

Nitoflor SL2000 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, coloured and chemically resistant floor surface which is hygienic and easy to clean. Typical applications include:

- Clean rooms and laboratories
- 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 colours to enhance the working environment

Specification

Flow-applied epoxy floor topping

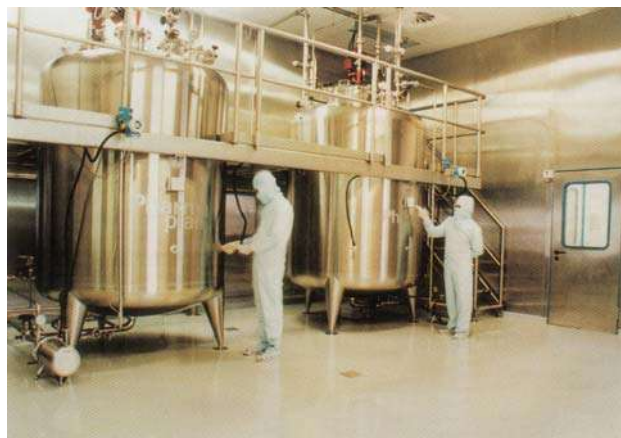
The designated floor areas shall be surfaced with Nitoflor SL2000, a 2 mm thick flow-applied epoxy resin floor topping. The topping shall achieve a compressive strength of 50 N/mm² and a flexural strength of 34 N/mm² at 7 days when tested to BS 6319. At 20°C, it shall be capable of accepting foot traffic at 24 hours and vehicular traffic at 48 hours.

Description

Nitoflor SL2000 consists of graded aggregates bound in a pigmented epoxy resin binder. It is supplied as a four 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.

Technical support

Fosroc offers a comprehensive range of high performance, high quality repair, maintenance and construction products. In addition, Fosroc offers a technical support package to specifiers, end-users and contractors, as well as on-site technical assistance in locations all over the world.



Design criteria

Nitoflor SL2000 is designed for application at a nominal thickness of 2 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.

Properties

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

	<i>Pot life</i>	@ 25°C	@ 35°C
Nitoflor SL2000	:	2 hours	20 minutes
Nitoprime 25IR	:	3 - 4 hours	1 - 1.5 hours

	<i>Physical properties</i>	@ 20°C	@ 35°C
Compressive strength @ 7 days (BS 6319)	:	50 N/mm ²	50 N/mm ²
Flexural strength @ 7 days (BS 6319)	:	34 N/mm ²	34 N/mm ²
Cure time			
Foot traffic	:	24 hours	16 hours
Vehicular traffic	:	48 hours	36 hours
Chemical resistance	:	7 days	4 days

Chemical properties

Nitoflor SL2000 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 since much higher concentrations of chemicals may occur on evaporation.

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Instructions for use

Nitoflor SL2000 should be applied by specialist contractors who must follow the procedures laid down in the Product Method Statement. Fosroc works with a network of such applicators who have been trained in the correct installation procedures. The following steps are involved in the application which would normally take place over 2 - 3 days period.

- Thoroughly prepare the floor surface. Correct surface preparation helps to achieve the necessary adhesive bond between the substrate and the new floor.
- All existing expansion or movement joints should be followed through the new floor surface. Joints should be cleaned and prepared.
- Apply Nitoprime 25IR and allow to cure for 8 to 24 hours at 20°C or 4 to 16 hours at 35°C.
- Apply the Nitoflor SL2000 topping. The material is poured on to the primed surface and spread with a steel trowel to achieve a 2 mm seamless topping.
- Using a spiked roller, remove air entrainment and allow to cure.
- Install the most appropriate Fosroc joint sealant. This will depend on the anticipated MAF (Movement Accommodation Factor) and the end use of the new floor. For further advice, consult the local Fosroc office.

The product can be applied to mild steel substrates provided that the steel is thoroughly cleaned so that all corrosion deposits and other contaminants are first removed and the prepared surface is treated with a single application of Nitoprime 28.

Installation times will vary according to site conditions and the size of the area involved.

Mixing

Nitoflor SL2000 flooring is supplied on 4 pre-weighed packs (base, hardener, aggregate and colour pack) which are ready for immediate on site use. Part mixing of these components is not acceptable and will affect both performance and appearance of the finished floor, and would furthermore automatically invalidate Fosroc standard product guarantee.

Mixing should be carried out using either a forced action mixer, or a heavy duty slow-speed drill with proprietary mixing paddle attachment.

All such equipment should be of a type and capacity approved by Fosroc. The components should be mixed in a suitability sized mixing vessel.

The colour pack should be added to the base container and mixer for 15 - 30 seconds, until homogenous. Then add the hardener and mix for 30 seconds, until an even colour 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.

Cleaning and disposal

Nitoprime 25IR, Nitoprime 28 and Nitoflor SL2000 should be removed from tools and equipment with Fosroc Solvent 102* immediately after use. Hardened material can only be removed mechanically.

Spillages of component products should be absorbed on to earth, sand or other inert material and transferred to a suitable vessel. Disposal of such spillages or empty packaging should be in accordance with local waste disposal regulations.

For further information, refer to the Product Material Safety Data Sheet.

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

- Nitoflor SL2000 should not be applied on to surfaces known to or likely to suffer from rising damp conditions or have a relative humidity greater than 75% as measured in accordance with BS 8203 Appendix A, or by a Vaisala thermohygrometer type HMI 31.
- In areas where significant thermal shock is likely to occur, please consult the local Fosroc office.
- Nitoflor SL2000 should not be applied to asphalt, weak or friable concrete, unmodified sand/cement screeds, PVC tiles or sheet or substrates known to move substantially e.g. steel walkways. For information on other substrates, consult the local Fosroc office.
- Nitoflor SL2000 should not be installed at temperatures below 10°C or above 45°C. If in doubt, or for application outside these temperature limits, please consult your nearest Fosroc office.



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Estimating

Supply

Nitoflor SL2000	:	17.15 kg pack (including colour pack)
Nitoprime 25IR	:	1 & 3 kg packs
Nitoprime 28	:	1 & 5 kg packs
Fosroc Solvent 102	:	4 & 20 litre cans

Coverage

Nitoflor SL2000	:	5 m ² /pack @ 2 mm thickness
Nitoprime 25IR	:	5 m ² /kg
Nitoprime 28	:	5 m ² /kg

Note: The coverage figures given are theoretical - due to wastage factors and the variety and nature of possible substrates, practical coverage figures will be reduced. Typically, an additional 10% should be allowed for surface irregularities and wastage although this will vary with site conditions.

Storage

All products have a shelf life of 12 months if kept in warehouse conditions in the original, unopened pack.

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

Precautions

Health and safety

Nitoflor SL2000, Nitoprime 25IR, Nitoprime 28 and Fosroc Solvent 102 should not come in contact with the skin and eyes, or be swallowed.

Ensure adequate ventilation and avoid inhalation of vapours. 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

Nitoprime 25IR, Nitoprime 28 and Fosroc Solvent 102 are flammable. Keep away from sources of ignition. No smoking. In the event of fire extinguish with CO₂ or foam. Do not use a water jet.

Nitoflor SL2000 is non-flammable.

Flash points

Nitoprime 25IR	:	59°C
Nitoprime 28	:	27°C
Fosroc Solvent 102	:	33°C



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The Right Chemistry for Construction

Fosroc is one of the world's major manufacturers of advanced technology chemical based products for the construction and refurbishment industries. It operates internationally through a network of operating companies, licensees, distributors and agents.

Having over 70 years experience and using global resources for research and technical development, Fosroc has built a substantial worldwide reputation in manufacturing the most comprehensive range of high performance construction chemicals:

- Concrete admixtures
- Surface treatments
- Grouts and anchors
- Concrete repair
- Industrial flooring
- Protective coatings
- Joint sealants
- Waterproofing
- Adhesives
- F.R.P Structural Strengthening
- Specific building products

* Denotes the trademark of Fosroc International Ltd.



Important note

Fosroc products are guaranteed against defective materials and manufacture and are sold subject to its standard Conditions for the Supply of Goods and Service.

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