

UV stable, solvent based acrylic floor sealer / coating

Uses

A sealer for concrete floors to assist dustproofing and provide a more easily cleaned surface with resistance to penetration of oils and other liquids. Ideal for warehouses, car parks, light industrial buildings, etc.

Advantages

- Simple brush, roller or spray application
- Efficient curing media for where compatibility is required between an efficient curing compound and a final seal coat
- Good resistance to abrasion
- Totally seals the concrete surface preventing dusting
- Available in clear, grey and special colours made to order
- Single component - no mixing
- Easily applied by maintenance personnel
- UV Resistant - non yellowing

Description

Nitoflor FC100 is a one component, penetrating, synthetic acrylic coating. It has excellent adhesion to cementitious surfaces and when cured forms a semi-gloss, flexible film. It penetrates the surface to bind together the particles to produce a harder wearing surface.

When used as a floor coating, a minimum of two coats are recommended. One coat may be suitable when applied over approved and tested curing compound such as Concure CR.

Design Criteria

Nitoflor FC100 is designed for application in two coats to achieve an approximate total dry film thickness of between 50 and 60 microns.

Substrates must not suffer from rising damp. "Slab on ground" concrete floors should have a damp-proof membrane under the slab to prevent moisture transmission from the ground.

Specification Clause

Floor coating

The floor coating shall be Nitoflor FC100, an acrylic based coating suitable for application by brush, roller or spray. The coating shall be applied in two coats at a coverage rate of 6 to 8m²/litre per coat.

Properties

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

Solids content w/w. approx. (clear)	22%
Solids content v/v. approx. (clear)	16%
VOC content (clear):	712g / litre
VOC content (colours):	659g / litre
Drying time (minimum) at 25°C Tack free	3 hours
Full cure at 25°C	7 days
Line-marking paint adhesion to coating:	
Dulux Roadmaster A1	Excellent

Chemical resistance

Nitoflor FC100 is designed to seal the concrete and help reduce penetration of oils, dirt and mild chemicals etc.

Nitoflor FC100 is not resistant to concentrated acids, oxidising agents, aromatic or chlorinated solvents.

Good housekeeping is essential in areas where chemical spillage is likely to occur. It is especially important that such spillage should not be allowed to dry since much higher concentrations of chemicals will then result.

Application Instructions

Surface preparation

It is essential that Nitoflor FC100, as a sealer, is applied to sound, clean, dry substrates in order to achieve maximum adhesion between the floor coating and substrate.

Because Nitoflor FC100 is a relatively thin coating, the substrate must be fine textured. Any surface irregularities may show through causing excessive wear on high spots and changing the perceived colour of the coating.

New concrete floors

Dry removal of laitance by light diamond grinding is preferable but, where this is not feasible, treat with 3 to 5% Hydrochloric acid wash, followed by a neutralising solution then thorough rinsing with high pressure water (2000psi) and complete drying. Dust and other debris should then be removed by vacuum brush.

Old concrete floors

A sound, clean substrate is essential to achieve maximum adhesion when using Nitoflor FC100 as a sealer. Light diamond grinding should be carried out as for new concrete floors. Oil and grease penetration should be removed by hot compressed air treatment or with a chemical degreaser. A test area should be done to check sufficient preparation.

Note: Nitoflor FC100 will not fix bad or dusty concrete.

Fosroc® Nitoflor® FC100

Coating

Stir material before use. Apply not less than two (2) coats of Nitoflor FC100 by short nap roller, brush or spray at a coverage rate of 6 to 8m²/litre per coat. Fosroc recommends the first coat be roller or brush applied or at least “back-rolled” to assist with the penetration into the concrete substrate. The coverage obtained will vary depending on the nature of the surface to be coated. Three (3) coats may be required on porous or coarse surfaces.

Allow 2 - 4 hours between coats.

Cleaning

Nitoflor FC100 should be removed from tools and equipment with Fosroc Solvent 10 immediately after use.

Maintenance

The service life of a floor can be considerably extended by good housekeeping practices. Regular cleaning of Nitoflor FC100 may be carried out using a rotary scrubbing machine with a water miscible cleaning agent or by hot water washing at temperatures up to 50°C. Refer to the Fosroc “Floor Maintenance Guide”.

Limitations

Nitoflor FC100 should not be applied on to surfaces known to suffer from rising damp.

The durability of Nitoflor FC100 in foot traffic areas is reduced in areas of very heavy traffic such as around work benches, drinks machines etc. It is advisable to either:-

- a. specify additional coats in such areas or,
- b. specify a higher build system such as Nitoflor FC150 HP in such areas (see separate Technical Data Sheets)

Nitoflor FC100 should not be applied at temperatures below 10°C or where ambient relative humidity exceeds 85%.

Nitoflor FC100 should not be applied when the ambient temperature will exceed 30°C during application or within 24 hours after application, otherwise bubbling is liable to occur due to solvent entrapment.

Nitoflor FC100 contain a significant level of flammable solvent which is expelled to the surrounding air during the drying process. Sufficient ventilation and the relevant OH&S precautions must be employed during and after application.

Important notice

A Safety Data Sheet (SDS) is available from the Fosroc website. Read the SDS and TDS carefully prior to use as application or performance data may change from time to time. In emergency, contact any Poisons Information Centre (phone 13 11 26 within Australia) or a doctor for advice.

Product disclaimer

This Technical Data Sheet (TDS) summarises our best knowledge of the product, including how to use and apply the product based on the information available at the time. You should read this TDS carefully and consider the information in the context of how the product will be used, including in conjunction with any other product and the type of surfaces to, and the manner in which, the product will be applied. Our responsibility for products sold is subject to our standard terms and conditions of sale. Parchem does not accept any liability either directly or indirectly for any losses suffered in connection with the use or application of the product whether or not in accordance with any advice, specification, recommendation or information given by it.

Supply

Nitoflor FC100 Clear 20 litre:	FC610002-20L
Nitoflor FC100 T&G Grey 20 litre:	FC661574-20L
Also Special colours made to order	FC611022-20L

Coverage

Nitoflor FC100	6 - 8 m ² /L per coat
Theoretical wet film thickness (microns per coat):	125 - 165
Theoretical dry film thickness (microns per coat):	28 - 33

Nitoflor FC100 is designed as a penetrating sealer therefore dry film thickness is not necessarily a true guide to what is achieved on-site.

The coverage figures given are theoretical - due to wastage factors and the variety and nature of possible substrates, practical coverage figures will be reduced.

Storage

Product contains highly flammable liquids therefore must be stored in flameproof areas in accordance with local regulations.

Store well away from naked flames and sparks and all sources of heat. Store at ambient temperatures below 30°C. Keep container sealed when not in use.