

# Fosroc® Nitoflor® HD-S System



constructive solutions

(Previously known as Duraflor HD-S)

## Low sheen liquid floor hardener / densifier system for concrete floors

### Uses

Nitoflor HD-S System can be used on any new or existing internal concrete or masonry surface.

- Manufacturing facility floors
- Warehouse floors
- Restaurants & retail environments
- Supermarkets and grocery stores
- Storage facility floors

### Advantages

- New improved formulation, designed to provide an enhanced appearance, requires less maintenance
- Hardens and reduces dusting of concrete
- Defined sheen levels
- Durable and stain resistant

### Description

Nitoflor HD-S System offers improved level of sheen and stain resistance over the regular Nitoflor HD product.

The finished floor will have a clear and defined sheen and can be an alternative to or complement polishing concrete using diamond grinding processes.

It is a application for new or existing concrete, natural or pigmented. This environmentally friendly system is easy to clean and maintain.

The Nitoflor HD-S System is a two component system involving Nitoflor HD and Nitoflor HD-S. Nitoflor HD-S is applied to concrete previously treated with Nitoflor HD.

Nitoflor HD-S has a VOC content of 33g / litre.

### Design Criteria

Nitoflor HD-S is designed for application at approximately 30 to 40 m<sup>2</sup>/litre on concrete previously treated with Nitoflor HD. Multiple coats may be required to achieve the desired sheen level.

### Specification Clause

#### Concrete floor hardener densifier

The designated area shall be treated with Nitoflor HD-S System, consisting of Nitoflor HD, a penetrating lithium silicate treatment followed by application of Nitoflor HD-S to achieve the required sheen level. The system will be applied strictly in accordance with the manufacturers instructions.

## Application Instructions

### Surface preparation - hardened concrete

It is essential that Nitoflor HD be applied to a sound, clean, dry concrete, free of previous coatings, grease, oil, dirt, adhesives, laitance and any other surface contamination.

The surface must be thoroughly cleaned with a neutral cleaner and then fresh water to remove any contaminants or surface barriers.

The surface to be treated must be dry before initial application.

### Surface preparation - fresh concrete

Nitoflor HD can also be applied as a stand alone hardener / densifier to freshly laid concrete as soon as there is no free water on the surface and the concrete is firm enough to walk on.

Subsequent application of the Nitoflor HD-S must be delayed until the concrete has cured for 28 days.

### Application

Agitate Nitoflor HD and Nitoflor HD-S before use.

Apply Nitoflor HD with a low-pressure sprayer or scrubber at approximately 7 to 10 m<sup>2</sup>/litre. Floor must be kept wet with material for 20 minutes. If an area begins to dry, re-mist with material. Do not add water to the material or to the surface being treated.

Let the surface dry without any puddling by brooming the product around if necessary. After the material dries, clean-up any excess material with a scrubber.

Allow the Nitoflor HD treated surface to dry for at least 2 hours. Surface must be "bone dry" before the initial application of Nitoflor HD-S.

Apply Nitoflor HD-S by using a low-pressure airless sprayer and spread out with a 100% polyester micro-fibre applicator. Material will appear milky when first sprayed onto surface, however, when spread out with the micro-fibre applicator, Nitoflor HD-S will appear clear. If not, the material has been applied too heavy.

Apply first coat at approximately 30 to 40 m<sup>2</sup>/litre. Increase coverage rate on highly polished floors. Allow to dry for at least 30 minutes and apply subsequent coats at the same application rate allowing each coat to completely dry. Apply a minimum of two coats of Nitoflor HD-S.

Allow Nitoflor HD-S at least one hour to dry after final coat, prior to foot traffic.

Nitoflor HD-S System must be free from contact with water for at least 72 hours in ambient temperature to allow cure time. Humidity will delay cure time, therefore humidity should be reduced by using a fan etc. After 72 hours, the surface treated can be damp mopped or scrubbed with an auto scrubber and neutral cleaner.

# Fosroc®

## Nitoflor® HD-S System

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### Using with polished concrete

The Nitoflor HD-S System can be used to compliment the process of polishing concrete. Apply Nitoflor HD-S after hardening and grinding/polishing the concrete to yield an improved sheen level and improved stain resistance.

### Cleaning

Clean all equipment with soap and warm water.

### Maintenance

Surface should be regularly cleaned with a pH neutral cleaner to achieve optimum performance and longevity. Regular maintenance coats of Nitoflor HD-S will help retain the floor sheen level.

### Limitations

Nitoflor HD and Nitoflor HD-S will not penetrate curing compounds or other coatings on the concrete being treated. These must be removed by mechanical means such as diamond grinding.

Coverage and consumption rates will vary depending on porosity and roughness of concrete being treated.

Stain resistance and sheen level will vary depending on porosity and roughness of concrete being treated.

Liquid hardeners / densifiers work by reacting with Calcium Hydroxide available in the concrete. If the concrete had been rain affected or overworked in the laying process there may not be sufficient Calcium Hydroxide present for the reaction to occur. These products will not fix bad concrete.

The final grind may affect the overall characteristics of the floor. It is recommended to carry out grinding and slip trials on projects where slip may be of concern.

Material cannot be applied in below freezing temperatures.

Adverse weather conditions or humidity may affect cure time and application rates.

### Supply

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Nitoflor HD 5 litres:	FC605105-5L
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Nitoflor HD 20 litres:	FC605105-20L
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Nitoflor HD-S 5 litres:	FC605110-5L
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Nitoflor HD-S 20 litres:	FC605110-20L
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### Coverage

Apply Nitoflor HD at approximately 7 - 10m<sup>2</sup>/litre depending on surface porosity.

Apply Nitoflor HD-S at approximately 30 - 40m<sup>2</sup>/litre/coat depending on surface porosity and sheen.

### Storage

Nitoflor HD-S should be kept in a dry store in the original, unopened packs.

Do not allow to freeze. Keep container closed when not in use. Do not transfer material into other containers for storage or disposal.

### 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.