

Fosroc® Nitodek FS Primer



10
November 2017

constructive solutions

A two component primer for the Nitodek FS systems

Uses

The Nitodek FS system is a hybrid fast curing trafficable waterproofing system that combines MMA Technology with polyurethanes to produce a slip resistant solution that is both hard wearing and flexible suitable for balconies, car park decks, ramps and turning circles. Bespoke systems can be produced from the suite of system products to suit specific situations and performance requirements. Nitodek FS Primer is used as a primer for concrete and cement substrates. For other substrates please contact the Fosroc Technical Department.

Advantages

- Fast setting allows for quick over-coating
- Easy to apply
- Suitable for priming vertical and absorbent substrates
- Seamless
- Solvent free

Description

Nitodek FS Primer is a transparent, solvent-free, 2-component methacrylic resin that cures rapidly, even at low temperature.

Properties

Typical properties at 20°C unless otherwise noted:

Viscosity	270 – 330 mPa·s
Density	0.98 g/cm ³
Pot life 100pbw resin + 3pbw hardener	approx 12 min

Application

Substrate

The concrete substrate must reach a minimum of 25N/mm² compressive and 1.5 N/mm² tensile strength, generally achieved only after a curing period of 28 days

Surface preparation

All surfaces must be clean, dry and free from contamination.

Dry abrasive blasting, vacuum-assisted abrasive blasting and centrifugal shot blasting as described in BS 8204, may be used to remove contaminants, laitance, weak concrete and to expose blow holes, to produce a sound concrete surface with adequate profile and surface porosity.

All blow holes and minor surface imperfections should be filled with Nitodek FS Wearcoat; deeper repairs should use Nitodek FS Repair Mortar.

New concrete surfaces

Surfaces should be clean, dry and free of laitance, oil, grease. The concrete should have a moisture content of <75% RH.

Existing concrete surfaces

Should be structurally sound, any concrete repairs carried out using Fosroc repair products; refer to your local Fosroc office for more details.

Surfaces should be clean, dry and free of laitance, oil, grease. The concrete should have a moisture content of <75% RH.

Steel surfaces

Must be of first class quality and must not have been allowed to rust more than corresponding to grade B of ISO 8501-1:2007. Any laminations must be removed. Blast cleaning to SA 2½ (ISO 8501-1:2007).

Roughness: using abrasives suitable to achieve a coarse surface of Grade Medium G (50-85µm, Ry5) (ISO 8503-2).

Treatment of cracks/joints/day-joints/up-stands

Consult Fosroc Technical Help Desk for details of treatment.

Application Temperature

Normal application temperature range is 5 - 30°C.

For application temperatures <5°C or >30°C please contact Fosroc Technical Help Desk.

Application of Fosroc Nitodek FS Primer

Before commencing application the user should undertake the following checks:

Moisture content of concrete (must be <75%)

Substrate temperature (to determine % hardener)

Ventilation (a flow of fresh air is required for proper cure)

Patch test primer to concrete (to ensure no inhibition of cure from substrate contaminants)

Adhesion (tensile strength >1.5N/mm²)

The quantity of hardener to be added to Nitodek FS Primer Resin must be adjusted dependent on the temperature of the substrate. For the exact quantities, please refer to the table "Nitodek FS Hardener dosages".

Do not under-dose the hardener powder, as this will lead to curing problems. Do not overdose the hardener powder, as this can also lead to serious curing problems.

Observe the recommended mixing quantities to avoid flash setting of the material in the pot before it can be fully applied. This also ensures good penetration of the primer into the substrate. The mixed material must be applied as soon as the hardener powder has been properly dispersed into the resin component.

Nitodek FS Primer must be applied evenly without leaving puddles by means of a squeegee, paint roller or brush. If rubber blades are used, the surface must always be rolled with a paint roller afterwards. Matt and heavily absorbent patches

Fosroc® Nitodek FS Primer

must be re-primed wet-into-wet before hardening until the pores are closed up. Resin consumption is about 0.4 kg/m². Nitodek FS Primer must be allowed to properly cure before over-coating.

Recommended mix size

Item	Component	Batch size for 15 litre bucket
1	Nitodek FS Primer Resin	10 kg (approx 10 litres)
2	Nitodek FS Hardener	200 - 600g See "Nitodek FS Hardener dosages" table for quantities
Total:	Average consumption: 400 g/m ²	Approx 10 kg (approx 10 litres)

Curing

Nitodek FS Primer must be completely cured before any further coat is applied.

Nitodek FS hardener dosages

Temperature	Hardener powder % (of resin)	Pot life approx. min.	Curing time approx. min.
+5 °C	6.0	15	50
+10 °C	5.0	15	40
+20 °C	3.0	12	35
+30 °C	2.0	12	30

The quantity of hardener is calculated as a % of the weight of resin to be used.

For further Hardener information, please refer to the separate product information sheet "Nitodek FS Hardener Powder".

Limitations

Nitodek FS Primer should not be used below 5°C or above 30°C. For application temperatures <5°C or >30°C please contact Fosroc Technical Help Desk. Use in a well-ventilated area. Do not apply to wet or damp surfaces. If in any doubt concerning substrate condition or temperature consult the local Fosroc office.

Cleaning

Tools and equipment can be cleaned immediately after use with Nitodek FS Solvent.

Estimating

Refer to your local Fosroc office regarding estimation of Nitodek FS Systems quantities and dosage rates.

Yield

25kg of Nitodek FS Primer, applied at 0.4kg/m², will cover approximately 62m².

Storage

Store all materials in dry conditions away from sources of heat and naked flames. All products have a shelf life of 6 months if stored in the unopened original container in a cool (< 25 °C), dry and frost-free location. The optimal storage temperature is +15 °C to +20°C. Do not expose to direct sunlight!

Precautions

Health and safety

For further information refer to the appropriate Product Safety Data Sheet available from www.fosroc.com

Fire

Nitodek FS Primer Resin is flammable. Keep away from sources of ignition. No smoking. In the event of fire extinguish with foam or CO₂. Do not use water jet. Nitodek FS Primer Resin and Nitodek FS Hardener Powder must be stored separately.

Flash point

Nitodek FS Primer Resin +10 °C

Nitodek and Fosroc are trade marks of Fosroc International Limited



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 Services, copies of which may be obtained on request. Whilst Fosroc endeavours to ensure that any advice, recommendation, specification of information it may give is accurate and correct, it cannot, because it has no direct or continuous control over where or how its products are applied, accept any liability either directly or indirectly arising from the use of its products, whether or not in accordance with any advice, specification, recommendation of information given by it.

Fosroc Limited

Drayton Manor Business Park
Coleshill Road, Tamworth,
Staffordshire B78 3XN. UK

www.fosroc.com

telephone:
+44 0 (1827) 262222

fax:
+44 0 (1827) 262444

email:
enquiryuk@fosroc.com



Certificate number FM 610