



Fosroc Nitodek FS System for Bridge Decks



constructive solutions

Bridge Deck Waterproofing

Bridge decks are exposed to aggressive environmental and weather conditions which can cause them to deteriorate over time, with water penetration being a major cause of damage to the concrete substrate through corrosion of the steel reinforcement. Should water penetrate through to any habitable spaces below, disruption can be significant. These areas require rapid reinstatement to minimise inconvenience to users of the affected areas, while at the same time ensuring the concrete structure will remain watertight and protected from future damage.

Fosroc Nitodek FS System

The Nitodek FS System is a high performance, multi-layer, trafficable, waterproofing system that provides a seamless, highly resistant, elastomeric, anti-slip finish.

Typically polyurethane technology has been used to provide durability and flexibility, however the slow speed of curing in UK climates can be restrictive in projects requiring fast turnaround.

Fosroc's Nitodek FS system is a hybrid system that combines MMA Technology with polyurethanes, the benefits being that the product is fast curing (at approximately 60 minutes per layer) as well as hard wearing and flexible.

Bespoke Nitodek FS systems can be produced from the suite of system products to suit specific situations and performance requirements; from balconies and walkways, to bridge and roof decks, podium decks, car park decks, factory floors and airport hangars.

Nitodek FS forms part of Fosroc's comprehensive repair and protection offer.

Colour Range

Note: Colours are indicative due to the printing process. RAL colours are approximate.

Applied samples are available upon request.



Traffic Blue (RAL5017)



Traffic Green (RAL6010)



Basalt Grey (RAL7012)



Traffic Grey (RAL7042)



Tele Grey (RAL7046)

Other colours are available on a made to order basis. Minimum order quantity applies.

Nitodek FS offers the following advantages:

- Extremely short curing times
- Outstanding impact resistance
- Speed of application
- Crack bridging
- Easy to apply even at low temperatures down to 0°C
- Highly resistant to a wide range of chemicals
- Seamless finish resistant to mechanical stresses
- Anti-skid finish
- Easy care
- Fire resistant
- Attractive colour range
- Warranty up to 20 years*
- Specialist contractor application
- Waterproof

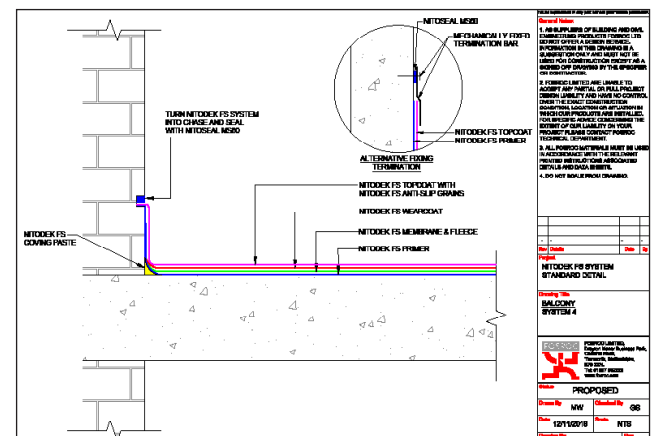
* Warranty details available upon request

Design Support

Design support is on hand through our Specification Hub Team who can help provide the optimum solution and technical advice for your project. Standard details are available for all the Nitodek FS Systems and bespoke drawings can be provided if required.

e: specification.hub@fosroc.com

t: 01827 265 256

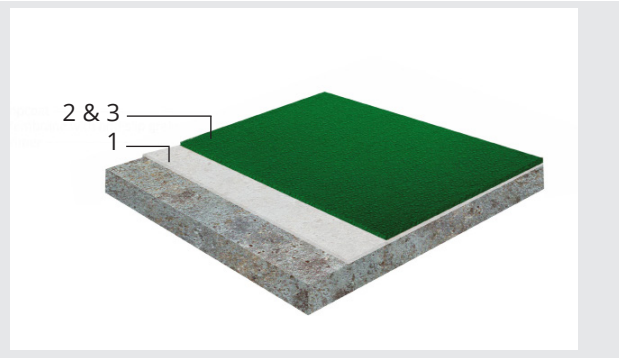


Nitodek FS System 1

Existing clean sound prepared substrate

1. Nitodek FS Primer
2. Nitodek FS Topcoat (with Nitoflor Anti-Slip Grains)
3. Nitodek FS Topcoat

Total thickness: 2 -3mm
(inclusive of Anti-Slip Grains)

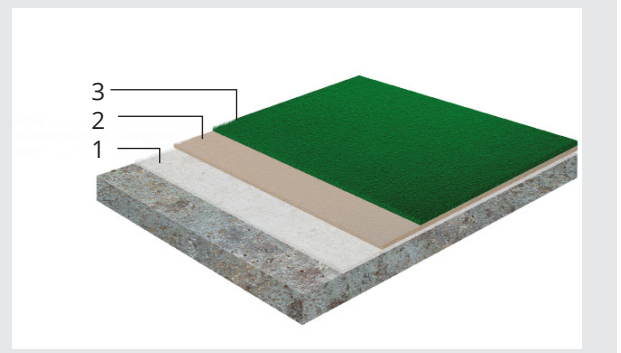


Nitodek FS System 2

Existing clean sound prepared substrate;

1. Nitodek FS Primer
2. Nitodek FS Membrane (with Nitoflor Anti-Slip Grains)
3. Nitodek FS Topcoat

Total thickness: 3 - 4mm
(inclusive of Anti-Slip Grains)

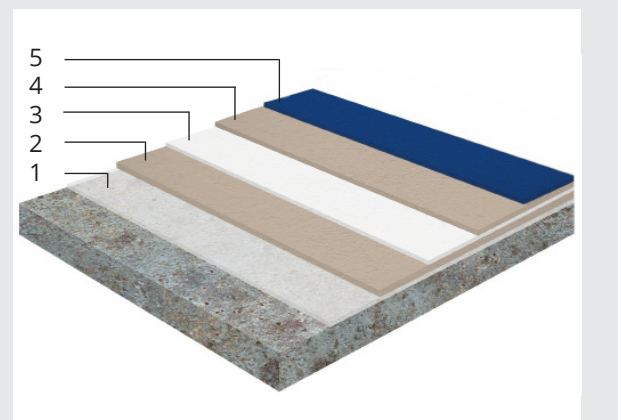


Nitodek FS System 3

Existing clean sound prepared substrate;

1. Nitodek FS Primer
2. Nitodek FS Membrane
3. Nitodek FS Fleece
4. Nitodek FS Membrane (with Nitoflor Anti-Slip Grains)
5. Nitodek FS Topcoat

Total thickness: 4 - 5mm
(inclusive of Anti-Slip Grains)

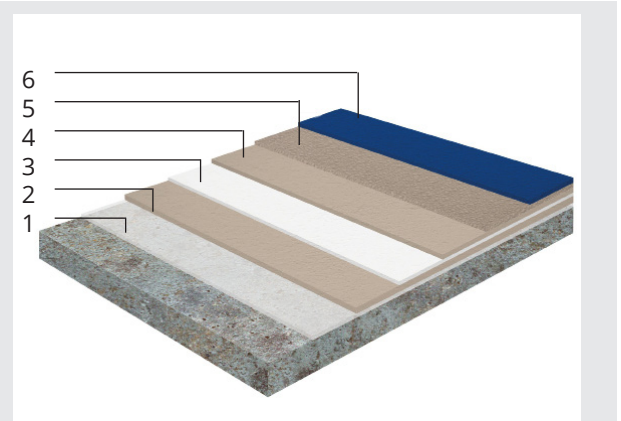


Nitodek FS System 4

Existing clean sound prepared substrate

1. Nitodek FS Primer
2. Nitodek FS Membrane
3. Nitodek FS Fleece
4. Nitodek FS Membrane
5. Nitodek FS Wearcoat (with Nitoflor Anti-Slip Grains)
6. Nitodek FS Topcoat

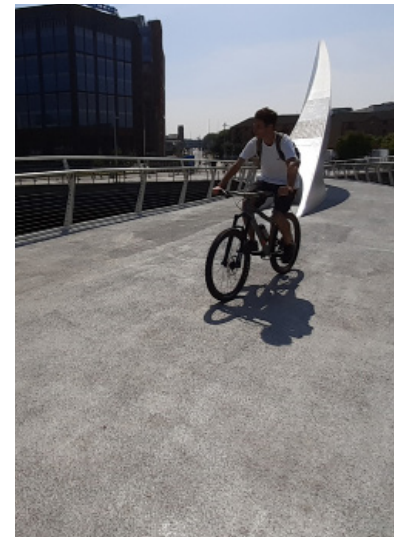
Total thickness: 5 - 6mm
(inclusive of Anti-Slip Grains)



Nitodek FS Quantity Calculator

A quantity calculator is available to accurately calculate the amount of material required for your Nitodek FS System Application

Case Study



Glasgow's Squiggly Bridge was originally opened in 2009 to link the districts of Anderston on the north bank to Tradeston and the neighbouring district of Kingston on the south bank. The walkway was refurbished in May 2021, including resurfacing, cleaning and partial painting. The existing coating needed to be removed from the bridge and replaced with a new system which would not only provide waterproof protection, but also a safe, anti-slip surface.

A fast setting protective system was required to provide waterproofing as well as protection against carbonation/chloride ingress. Fosroc proposed Nitodek FS which is a hybrid, fast curing, trafficable, waterproofing system combining MMA Technology with polyurethanes. It produces a slip resistant solution which is both hard wearing and flexible. A bespoke Nitodek FS System was selected meeting the specific project criteria.

The Nitodek FS System will provide long lasting repair and protection to the bridge. The ease of application and fast curing of the products ensured that the project could be completed quickly and with minimal disruption.



Fosroc Product Range



Fosroc offer a full range of concrete repair and sealant products, compatible with the Nitodek FS System, ensuring complete and durable refurbishment. Our range includes Patchroc and Paveroc for rapid patch repairs and Nitoseal MS300 joint sealant for floors. To see our other waterproofing solutions and full range of products visit our website: www.fosroc.com

Technical Support

Our Technical Advisors are always ready to provide detailed advice on:
Tel: 01827 265136 / 5270 or email UKTechnicalhelp@Fosroc.com

Fosroc International Limited
Drayton Manor Business Park
Coleshill Road
Tamworth
B78 3XN

T: 01827 262222
E: enquiryuk@fosroc.com
www.fosroc.com

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