

Fosroc® Nitocote SN502

constructive solutions

Penetrating, hydrophobic silane-siloxane treatment for concrete and masonry

Uses

To protect atmospherically exposed reinforced concrete structures from attack by chloride ions and water intrusion. The product is also suitable to protect other cementitious substrates and masonry. Nitocote SN502 is suitable for use on all types of structures, including those in coastal environments. It is equally suitable for new and existing structures.

Advantages

- Penetrates into substrates
- Non-staining
- Reduces water and chloride intrusion
- Increases freeze thaw resistance
- Minimises efflorescence
- Allows water vapour to escape from the structure
- Chemically resistant to ice melting compounds, fuels, oils and atmospheric contaminants

Description

Nitocote SN502 is a single component penetrating silane-siloxane system which penetrates into porous substrates and then reacts to produce a bonded hydrophobic lining to the pores. Although allowing passage of water vapour from the substrate it significantly reduces the absorption of water and water borne salts.

Nitocote SN502 does not discolour most substrates and has excellent resistance to weathering.

Specification clauses

Silane-siloxane penetrating treatment

The penetrating treatment shall be a silane-siloxane system with a reduction in chloride ion penetration not less than 92% and a reduction in water absorption of not less than 85% when tested to the NCHRP 244 standard.

Properties

The values obtained are for Nitocote SN502 applied at the minimum recommended application rate.

Reduction in chloride ion penetration —	
To NCHRP 244 Standard:	92%
Australian C.T.I. method:	98%
Reduction in water absorption —	
To NCHRP 244 Standard:	85%
Australian C.T.I. method:	94%

Application instructions

Preparation

All surfaces should be dry and free from contamination such as oil, grease, loose particles, decayed matter, moss, algal growth, laitance and all traces of mould release oils and curing compounds. This is best achieved by lightly grit-blasting the surface. Where moss, algae or similar growths have occurred, treatment with a proprietary biocide should be carried out after the grit-blasting process.

Application

In order to obtain the penetrating properties of Nitocote SN502, it is important that the correct rates of application and overcoating times are observed.

Number of coats:	2 flood coats
Theoretical application rate per coat:	0.2 litres/m ²
Overcoating time:	2 hours @ 20°C

Nitocote SN502 should be applied in two flood coats until the recommended total application rate of 0.4 litre per square metre has been achieved. This is best accomplished by using portable spray equipment of the knapsack-type. If in doubt about the condition of the substrate, the local Fosroc office should be consulted.

Nitocote SN502 should be allowed to dry for a minimum of 2 hours (at 20°C) before continuing.

Cleaning

Nitocote SN502 should be removed from tools and equipment using Fosroc Solvent 102 immediately after use.

Limitations

Nitocote SN502 should not be contaminated with water. The application of Nitocote SN502 should not commence if the temperature of the substrate is below 2°C.

Nitocote SN502 may darken some polymer modified substrates and white cement. A trial area is recommended.

Estimating

Supply

Nitocote SN502:	25 and 200 litre containers
Fosroc Solvent 102:	5 and 25 litre tins

Coverage and yield

Nitocote SN502:	5 m ² per litre per coat
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Fosroc® Nitocote SN502

Storage

Store in cool, dry conditions, away from sources of heat and naked flames, in the original, unopened containers. Nitocote SN502 has a shelf life of 12 months if kept in a dry store in the original, unopened containers.

If stored at high temperatures and/or high humidity conditions the shelf life may be reduced.

Precautions

Health and safety

For further information refer to appropriate Product safety Data Sheet.

Fire

Nitocote SN502 and Fosroc Solvent 102 are flammable. Do not expose to naked flames or other sources of ignition. No Smoking. Containers should be tightly sealed when not in use. In the event of fire, extinguish with CO₂ or foam.

Flash point

Nitocote SN502:	38°C
Fosroc Solvent 102:	33°C

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Fosroc Limited

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

www.fosroc.com

telephone:
+44 (0) 1827 262222

fax:
+44 (0) 1827 262444

email:
uk@fosroc.com



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