Fosroc Nitocote SN522

constructive solutions

Non staining water repellent

Uses

To provide a water repellent surface on exterior building surfaces such as brickwork, plasters, concrete and natural stone.

Advantages

- Penetrates into substrates
- Non staining
- Reduces water and chloride intrusion
- Increases freeze thaw resistance
- Minimises effloresence
- Allows water vapour to escape from the structure
- Resistant to atmospheric contaminants

Description

Nitocote SN522 is a single component, penetrating silane-siloxane which penetrates into porous substrates and then reacts to produce a bonded water repellent lining. Although allowing water vapour to escape from the substrate, it significantly reduces the absorption of water and water-borne salts.

Design criteria

Nitocote SN522 should be applied in a number of liberal flood coats. To achieve the correct penetration and protection, Nitocote SN522 must be applied on the substrate at the coverage rate recommended.

Specification

The penetrating water repellent treatment shall be Nitocote SN522, an oligomeric siloxane solution specifically designed to produce a water repellent surface to natural stones and neutral substrates. The initial surface water absorption of concrete treated with Nitocote SN522 shall be 0.01 ml/m^2 or less after 10 minutes. Concrete treated with Nitocote SN522 shall have 'low' chloride permeability when tested in accordance with AASHTO T277-83

Properties

14 day old concrete with a water:cement ratio of 0.50 was treated with Nitocote SN522 and the following values obtained:

Test method		Result
Rapid chloride permeability (AASHTO T277-83)	:	Low
Initial surface absorption (BS1881 Part 5:1970)	:	< 0.01 ml/m^2 after 10 minutes

Instructions for use

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. 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 SN522, it is important that the correct rate of application is achieved.

Number of coats	:	2 to 3 flood coats
Theoretical application rate	:	0.25 litres (total)/m^2

Nitocote SN522 should be applied as a continuous flood coat using either a soft brush or low pressure spray equipment.

Cleaning

Nitocote SN522 should be removed from tools and equipment using Fosroc Solvent 102* immediately after use.

Limitations

- Nitocote SN522 should not be contaminated with water.
- The application of Nitocote SN522 should not commence if the temperature of the substrate is below 2°C.

Technical support

Fosroc offers a comprehensive technical support service to specifiers, end users and contractors. It is also able to offer on-site technical assistance, an AutoCAD facility and dedicated specification assistance in locations all over the world.

Fosroc Nitocote SN 522

Estimating

Supply

Nitocote SN522	:	20 & 200 litre containers
Fosroc Solvent 102	:	5 litre tins

Coverage

Nitocote SN522	:	4 m^2/litre (total)

Note: The coverage figures given are theorotical - due to wastage factors and the variety and nature of substrates, practical coverage figures may be reduced, this will vary with site and application conditions.

Storage

When stored in cool, dry conditions, between 5°C and 20°C, away from sources of heat and naked flames, in the original, unopened containers, Nitocote SN522 will have a shelf life of 12 months. If stored at high temperature and/or high humidity conditions the shelf life will be reduced.

Precautions

Health and safety

Nitocote SN522 and Fosroc Solvent 102 should not come into contact with skin and eyes or be swallowed. Avoid inhalation of vapour and spray. Use only in well ventilated areas. In case of insufficient ventilation wear suitable respiratory protection.

Wear suitable protective clothing, gloves and eye/face protection. Barrier creams provide additional skin protection.

Should accidental skin contact occur, remove immediately with a suitable skin cleanser followed by washing with soap and water.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

If swallowed, seek medical attention immediately - **do not** induce vomiting.

For additional information consult the relevant Product Safety Data Sheet.

Fire

Nitocote SN522 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 CO_2 or foam.

Flash points

Nitocote SN522	:	37°C
Fosroc Solvent 102	:	33°C

Additional information

Fosroc manufactures a wide range of products specifically designed for the repair and refurbishment of damaged reinforced concrete. This includes hand-placed and spray grade mortars, fluid micro-concretes, chemical resistant epoxy mortars and a comprehensive package of protective coatings. In addition, a wide range of complementary products is available. This includes joint sealants, waterproofing membranes, grouting, anchoring and specialised flooring materials.

*** Denotes the trademark of Fosroc International Limited**

† **See separate data sheet**

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 Service. **All Fosroc datasheets are updated on a regular basis. It is the user's responsibility to obtain the latest version.**

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