

SC 200 PENETRATE



Two component cement-based waterproofing mortar

- ▷ **Protects concrete from carbonization**
- ▷ **Suitable for waterproofing roofs, balconies, bathrooms**
- ▷ **Penetrates and seals concrete capillaries**
- ▷ **Ideal substrate prior to PLANOCOLOR coatings**

Description

SC 200 PENETRATE is a two-component cement-based mortar composed of selected aggregates, special additives, and a liquid, containing synthetic polymers in water dispersion. It can be easily applied using a roller, flat brush, or spatula on both horizontal and vertical concrete surfaces with excellent adhesion. Its special synthesis protects from humidity and significantly increases concrete's resistance to carbonation.

Certifications

CE marking with Declaration of Performance (DoP) C07605-CPR-2330403 as surface protection product for concrete – coating for moisture control and increased resistivity according to EN 1504-2: MC-IR.

Certificate for carbonation resistance of concrete according to EN 13295. Certificate number: 010-034064.

VOC emission classification GEV-Emicode EC1^{PLUS}, license number 14964/14.02.20

Uses

SC 200 PENETRATE is suitable for waterproofing and protecting in:

- Reinforced concrete in a highly corrosive environment such as bridges and structures near the sea while increasing resistance to carbonization
- Concrete and cement-based surfaces such as rooftops, terraces and surfaces exposed to weather conditions
- Masonry structures in direct contact with soil, including foundations, basements, etc.
- Waterproofing zone in External Thermal Insulation Systems ETICS
- Swimming pools, balconies, bathrooms, and exterior floors before the application of PLANOCOLOR SYSTEM decorative coatings
- Masonry coatings and mortars
- Cement- and gypsum-boards

Technical Data

Product Identification

	Component A	Component B
Consistency	Powder	Liquid
Color	Grey & White	White
Chemical base	Portland cement, quartz aggregates, special additives	Acrylic dispersion
Granulometry	$D_{max}: 0,3 \text{ mm}$	
Apparent weight	$1,4 \pm 0,1 \text{ kg/L}$	
Density		$1,05 \pm 0,05 \text{ kg/L}$
Storage	12 months stored in dry place in the original sealed packaging	

Application Data (+23°C % & 50% R.H.)

Mixing ratio	Part A : Part :B $\approx 25 : 7$
Density of fresh mortar	$1,95 \pm 0,05 \text{ kg/L}$
Pot life	$\approx 60 - 90 \text{ minutes}$
Application temperature	from +8°C up to +35°C
Application thickness	Total thickness at least 2 mm, 1 mm per layer

Final Performances according to EN 1504-2:2004 & 13295:2004

	Performance	Method
Permeability to water vapour	Class I: $S_D < 5 \text{ m}$	EN ISO 7783-1 & 2
Capillary absorption and permeability to water	$\leq 0,1 \text{ Kg/m}^2\text{h}^{0,5}$	EN 1062-3
Adhesion strength by pull-off test	$\geq 2 \text{ N/mm}^2$	EN 1542
Compressive strength	$\geq 20 \text{ N/mm}^2$	EN 12190
Flexural strength	$\geq 7 \text{ N/mm}^2$	EN 12190
Resistance to carbonation	pass	EN 13295
Resistance to fire	F	EN 13501-1

Application Procedure

Substrate Preparation

The application surface must be clean and solid, without cracks, free of dust, laitance, form release agents, oil, paint, and rust. Carbonized and degraded concrete should be removed till a solid and healthy substrate is obtained. If required repairs by using RUST CONVERTER, NOVAFER and RC 340 or RC 440. Existing cracks on the substrate should be bonded using the two-component epoxy adhesive EPO FLUID. In applications where we have constant water infiltration from the exterior (negative pressure) seal all the leakages with the cement based fast setting waterproofing product SC FAST.

Dampen the substrate up to saturation. Avoid standing water or condensed water on the surface prior to the application.

Preparation of the mix

In a clean container, first introduce component B (liquid, 7L). While continuously stirring, gradually add component A (powder, 25kg). Mix using an electric mixer at low speed for 3–5 minutes until a completely smooth and homogeneous mixture, free of lumps, is obtained. Under normal conditions, the prepared mixture should be applied within 60–90 minutes. Lower temperatures extend the working life of the mortar, whereas higher temperatures significantly reduce both its pot life and workability.

Application of the mix

Application should be made in two or more layers with a total thickness of at least 2 mm. Apply the first layer with a flat brush or roller on the properly prepared surface. Apply the second coat when the first one has hardened enough. For better thickness control, it is recommended to incorporate a suitable alkaline fiberglass mesh such as NOVAMIX FIBERGLASS NET on the first layer of the mortar while it is still fresh and smooth the surface with a metallic spatula.

In all critical areas, such as a floor joint with walls and vertical construction elements, the sealing zone must be reinforced using a sealing membrane. Apply a layer of SC 200 PENETRATE to a width of 10 cm on both the floor and the walls or any other vertical element of the structure and incorporating into the fresh still mortar a suitable waterproofing membrane. Then the membranes must be covered with a second layer of SC 200 PENETRATE.

In any case the application should overlap the entire surface with a uniform thickness coat. After application, SC 200 PENETRATE should be left to cure in a relatively humid environment. Protect the fresh mortar from rain, frost and fast drying by suitable means.

Recommendations

- Apply only upon structurally stable and well-prepared substrate
- Avoid application under direct sunlight or/and strong wind
- Do not add cement, gypsum, lime or other materials that might affect the properties of the mortar
- Do not apply upon PVC and bitumen membranes and in general materials which polymerize in the long run
- Do not apply in ambient temperatures less than +8°C and higher than +35°C

- Protect the application surface from rain or frost the first 24 hours
- Do not apply in swimming pools without covering
- For incorporating fiberglass mesh the thickness of the first layer must be 1mm
- Do not exceed the maximum thickness per layer
- Do not apply in total thickness less than 2 mm
- Do not wet between the layers
- It is recommended that the application be made by a professional

Consumption

The consumption of SC 200 PENETRATE is 1,9 kg/m² per mm of thickness. This consumption does not include additional consumption due to rough or porous substrate.

Cleaning

Due to the increased adhesion of SC 200 PENETRATE it is recommended to clean tools before the material starts to set. Once the material has dried, cleaning can be done only by mechanical means.

Storage

SC 200 PENETRATE remains stable for 12 months from the production date stored in dry a place and protected from humidity, frost and direct sunlight.

Packaging

Units consisted of 25kg component A and 7kg component B.

Safety Instructions

For information and instructions regarding storage, disposal, and safe handling, users shall refer to the most recent Safety Data Sheet, which contains ecological, toxicological, and other safety-related data concerning the handling of the product.

Avoid releasing uncured products into the environment and do not discharge it into drains or natural water bodies. Residues, packaging materials, and wash waters shall be collected and disposed of in accordance with applicable national and European legislation.

Legal Notes

The technical data and recommendations contained or listed in this leaflet are the result of laboratory measurements, of our current knowledge and experience. All the above-mentioned information and specifications should in any case be considered as indicative, as they may differ from each other. The Company makes every effort to ensure the accuracy of the information provided herein. Product specifications, prices and availability are subject to change without notice and may differ from those shown.

In practice, variations in materials, substrates and on-site implementation conditions are such that no warranty can be given or implied, as to the merchantability or suitability of the materials for a particular purpose and for the exact conditions of each project. Anyone interested of using the product must be sure beforehand that the product is suitable for the intended use and in any case, the user is solely responsible for any consequences due to the use of the product. Among other things, the Company is not responsible for any

normal wear or tear from environmental or other inappropriate conditions. We reserve the right to revise or change the data herein without prior notice.

Restrictions and disclaimers apply to the extent permitted by applicable law. The Company has a Technical Support Department, which is the only one responsible for providing technical advice and solutions to deal with problems. Requests to the Technical Support Department are addressed and answered, only in writing.

For the latest and a valid version of the Technical Data Sheet, the user of the material must refer to our website www.novamix.gr or directly to the QR Code of the product.



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