

PCC repair mortar

- 1 component
- excellent workability
- freeze / thaw salt resistant

CRS REPAIR MORTAR 05

Vandex Isoliermittel-GmbH Industriestr. 19-23 DE-21493 Schwarzenbek EN 1504-3:2005

FN 1504-3·7Δ 1α PCC repair mortar for non-structural repair (based on hydraulic cement)

class R3 > 25 MPa Compressive strength Chloride ion content < 0.05 % $\geq 2.0~\text{MPa}$ Adhesive bond no performance determined Carbonation resistance Modulus of elasticity > 20 GPa

Thermal compatibility Part 1: Freeze thaw with de-icina

 $\geq 2.0~\text{MPa}$ salt immersion Part 4: Dry thermal cycling $\geq 2.0 \text{ MPa}$ $\leq 0.5 \text{ kg/m}^2 \text{h}^{0.5}$ Capillary absorption Reaction to fire class A1 complies with 5.4 Dangerous substances

PRODUCT DESCRIPTION

VANDEX CRS REPAIR MORTAR 05 is a cementitious, polymer modified, ready-mixed repair mortar.

AREAS OF APPLICATION

- reprofiling of localised concrete defects
- reprofiling and coating of concrete surfaces
- suitable for horizontal, vertical and overhead applica-

PROPERTIES

The balanced formulation of the material provides excellent workability as well as good freeze thaw salt resistance. VANDEX CRS REPAIR MORTAR 05 can be applied horizontally and vertically in a layer thickness up to 50 mm and overhead up to 25 mm.

SURFACE PREPARATION

The substrate to be treated must be sound and even, openpored, roughened and its surface free from voids, large cracks or ridges. Any adhesion reducing substances like bitumen, oil, grease, remains of paint or laitance must be removed by suitable means.

Water leaks must be stopped e.g. with VANDEX PLUG.

Thoroughly moisten the substrate, it must be damp but not wet at the time of application. Any surface water on horizontal surfaces must be removed.

MIXING

Mix 25 kg of VANDEX CRS REPAIR MORTAR 05 with 3-3.5 litres of tap water in a clean container for at least 3 minutes to a lump-free, homogeneous consistency. Use a mechanical mixer.

Restir briefly after a short standing time. Do not add more

APPLICATION

VANDEX CRS REPAIR MORTAR 05 is applied with trowel or suitable spray equipment.

Apply a minimum of 6 mm (approx. 12 kg/m²), a maximum of 50 mm (approx. 100 kg/m²) horizontally/vertically and a maximum of 25 mm (approx. 50 kg/m²) overhead in one working cycle.

If several coats are required it is recommended to apply the next coat whilst the previous coat is still damp at the surface. The previous coat must not be damaged during application of the following coat. The waiting time before applying the following coat depends on local climatic conditions such as humidity, temperature, etc. The previous coat must be textured by suitable means whilst still plastic to form a key. To maintain workability of the material do not add water, simply re-stir the mixture.

Trowel application

First a scratch coat is applied for maximum adhesion to the substrate. Ensure that all cavities in the substrate are filled in order to exclude any trapped air.

Spray application

VANDEX CRS REPAIR MORTAR 05 can be applied with a suitable fine mortar spraying device.

For maximum spray pattern it should be possible to adjust volume of product as well as air pressure and volume. The nozzle diameter is approx. 10 mm.

The first layer of Vandex is applied in a circular motion with the spray nozzle held at a 90° angle to the substrate. The material is then flattened and trowelled or keyed for a further layer.

Do not apply at temperatures below +5 °C, or to a frozen substrate.

CONSUMPTION

Approx. 2 kg/m² VANDEX CRS REPAIR MORTAR is required to produce a layer thickness of 1 mm.

Keep damp for at least 5 days and provide suitable protection against extreme weather conditions (e.g. sun, wind, frost) while setting. The freshly treated surfaces should be protected from rain for a minimum period of 24 h.

PLASTERING/COATING

Surfaces treated with Vandex products which are to be coated or painted should be left to cure for at least 28 days. Coatings on top of a Vandex treatment have to be alkali resistant.

PACKAGING

25 kg PE-lined paper bag

When stored in a dry place in unopened, undamaged original packaging, shelf life is 12 months.

HEALTH AND SAFETY

VANDEX CRS REPAIR MORTAR 05 contains cement. Irritating to respiratory system and skin. Risk of serious damage to eyes. – Keep out of the reach of children. Do

not breathe dust. Avoid contact with skin and eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable gloves and eye/face protection. If swallowed, seek medical advice immediately and show this container or label. – For further information please refer to Safety Data Sheet on www.vandex.com.

TECHNICAL DATA		
Appearance		grey powder
Aggregate size d _{max.}	[mm]	2
Density of wet mix	[kg/l]	approx. 2.1
Workability at 20 °C	[min.]	approx. 45
Setting time at 20 °C	[h]	approx. 3-5
Compressive strength 28 d	[MPa]	approx. 40
Bending tensile strength 28 d	[MPa]	approx. 6
Static modulus of elasticity 28 d	[GPa]	approx. 30
Further data		refer to CE marking

All data is averaged from several tests under laboratory conditions. In practice, climatic variations such as temperature, humidity, and porosity of substrate may affect these values.

The information contained herein is based on our long-term experience and the best of our knowledge. We can, however, make no guarantee since for a successful outcome, all circumstances in an individual case must be taken into consideration. Indications of quantities required are only averages which in certain cases might be greater.



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