

Elasticized waterproofing slurry

- resistant to water under pressure
- crack bridging
- carbonation protection
- resistant to water aggressive for concrete
- suitable for wet rooms
- easy application

| | | |
|---------------------------------|---|--|
| Permeability to CO ₂ | $s_b > 50 \text{ m}$ | CE 0761 Vandex Isoliermittel-GmbH Industriestr. 19-23 DE-21493 Schwarzenbek 13 383/150 EN 1504-2:2004/ZA.1d,1e Surface protection coating |
| Water vapour permeability | class II $5 \text{ m} \leq s_b \leq 50 \text{ m}$ | |
| Capillary water absorption | $w < 0.1 \text{ kg/m}^2 \cdot \text{h}^{0.5}$ | |
| Crack bridging ability | class A2 (20 °C) | |
| Adhesion strength | $\geq 0.8 \text{ MPa}$ | |
| Reaction to fire | class E | |
| Dangerous substances | complies with 5.3 | |

PRODUCT DESCRIPTION

VANDEX CEMELAST 100 is a 2-component, polymer modified, cementitious waterproofing slurry. It consists of VANDEX CEMELAST 100 POWDER (dry component) and VANDEX CEMELAST LIQUID (polymer component).

AREAS OF APPLICATION

- substrates: concrete and masonry
- waterproofing against water under pressure and moisture
- for cracks and areas of potential cracking
- foundations, slabs, below-ground walls
- waterproofing under tiles, in wet rooms and in swimming pools

PROPERTIES

Owing to its composition of cement, quartz with well graded aggregate and selected additives, as well as the admixture of the polymer component, a waterproof and elastic coating is achieved. The initial bonding ability of VANDEX CEMELAST 100 is excellent, making it suitable to be applied on horizontal as well as vertical surfaces. It is durable, resistant to frost and heat after setting and at the same time vapour permeable. VANDEX CEMELAST 100 achieves an excellent carbonation resistance and is resistant to water aggressive for concrete.

SURFACE PREPARATION

The substrate to be treated must be sound and even, open-pored, roughened and its surface free of 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.

Brick- and blockwork substrates

Any remaining plaster, render or other substances that could inhibit bonding must be removed back to the substrate. Gypsum, remains of wood or other foreign material must be removed by appropriate means. Loose pointing must be routed out and the substrate cleaned thoroughly.

MIXING

Before use, shake the container of the liquid component well.

Mix 18 kg of VANDEX CEMELAST 100 POWDER with 4.5 kg VANDEX CEMELAST LIQUID in a clean container for at least 3 minutes to a lump-free, homogeneous consistency. Use a mechanical mixer.

Where site conditions require it, rinse the container with clean water and add it to the mixture.

APPLICATION

VANDEX CEMELAST 100 is applied by brush, trowel or suitable spray equipment.

Depending on consistency, a maximum of 4 kg/m² can be applied in one working cycle. The application of more than one coat is recommended; please refer to relevant specification.

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.

Brush application

Ensure that all cavities in the substrate are filled.

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 CEMELAST 100 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. The nozzle diameter is approx. 6 mm. The first layer is applied in a circular motion with the spray nozzle held at a 90° angle to the substrate. The material is then flattened and keyed. The final layer can be left as a spray finish or treated to a specified finish.

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

CONSUMPTION

| Type of water impact | Recommended overall application rate | Total layer thickness (approx.) |
|-----------------------|--------------------------------------|---------------------------------|
| Moisture above ground | 2 kg/m ² | 1.2 mm |
| Pressureless water | 3.4 kg/m ² | 2.0 mm |
| Water under pressure | 5.1 kg/m ² | 3.0 mm |

Note:

Substrate and application conditions have to be observed. Depending on surface roughness, consumption may vary.

CURING

Provide suitable protection against extreme weather conditions (e.g. rain, sun, wind, frost) while setting. The freshly treated surfaces should be protected from rain for a minimum period of 24 h.

The VANDEX CEMELAST 100 coating must be fully cured before getting in contact with water. Provide a relative humidity of ≤ 80% and good air exchange in enclosed areas.

BACKFILLING

Backfilling can be carried out 3 days after completion of the Vandex treatment. If there is a risk that the layer of Vandex will be damaged during back-filling (sharp-edged material) it must be protected by suitable means.

PLASTERING/COATING

Under excellent curing conditions, surfaces treated with VANDEX CEMELAST 100 can be treated with a tile adhesive after 24 hours; in moist environments after at least 5 days of curing. Vapour permeable, alkali resistant paints or other decorative coatings should be applied only after 7 days. Please study the technical data sheet of the concerned products and clarify the compatibility. – When applying paint on an elasticized polymer modified product, it must have equivalent elastic properties.

PACKAGING

VANDEX CEMELAST 100 POWDER: 18 kg PE-lined paper bag

VANDEX CEMELAST LIQUID: 9 kg PE-container

1 container of VANDEX CEMELAST LIQUID is enough for mixing 2 bags of VANDEX CEMELAST 100 POWDER.

STORAGE

VANDEX CEMELAST 100 POWDER: When stored in a dry place in unopened, undamaged original packaging, shelf life is 12 months.

VANDEX CEMELAST LIQUID: Store in a frost-free place. Shelf life in unopened, undamaged original packaging is 8 months.

HEALTH AND SAFETY

Please refer to Safety Data Sheets for VANDEX CEMELAST 100 POWDER and VANDEX CEMELAST LIQUID on www.vandex.com.

| TECHNICAL DATA | | Dry component | Polymer component |
|---|--|---------------|---|
| Appearance | | grey powder | milky white liquid |
| | | Wet mix | Hardened |
| Colour | | grey | grey VANDEX CEMELAST 100 is not a decorative material. |
| Density of wet mix | [kg/l] | approx. 1.7 | |
| Workability at 20 °C | [min] | approx. 45 | |
| Setting time at 20 °C | [h] | | approx. 3–6 |
| Capillary absorption | [kg/m ² ·h ^{0.5}] | | 0.017 |
| Adhesive strength | [MPa] | | approx. 1.5 |
| Adhesive strength after frost-thaw cycles with deicing salt attack | [MPa] | | approx. 1.2 |
| Crack bridging at +20 °C | [mm] | | ≤ 0.5 |
| 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.



An RPM Company

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