

# **Grey waterproofing slurry**

- waterproofing against active or passive water pressure
- for concrete and masonry
- efflorescence-free
- applicable by spray equipment
- suitable also for corrosion protection for reinforcing steel
- approved for potable water

Compressive strength Chloride ion content Adhesive bond Carbonation resistance Modulus of elasticity Thermal compatibility Part 1: Freeze thaw with de-icing salt immersion Part 4: Dry thermal cycling Capillary absorption Reaction to fire	class R3 ≥ 25 MPa ≤ 0.05% ≥ 2.0 MPa passed ≥ 20 GPa ≥ 2.0 MPa ≥ 2.0 MPa ≥ 2.0 MPa ≥ 0.5 kg/m <sup>2</sup> ·h <sup>0.5</sup> class A1	0761 Vandex Isoliermittel-GmbH Industriestr. 21 DE-21493 Schwarzenbek 09 005 EN 1504-3:2005/ZA.1a CC fine mortar for structural repair (based on hydraulic cement)
Dangerous substances	complies with 5.4	(based on hydraulic cement)
Shear resistance	NPD	EN 1504-7:2006/7A.1a
Corrosion protection Dangerous substances	passed complies with 5.3	CC fine mortar as reinforcement corrosion protection (based on hydraulic cement)

BB 75

## **PRODUCT DESCRIPTION**

VANDEX BB 75 is a cementitious, ready-mixed surface waterproofer. It is also suitable as corrosion protection for reinforcing steel.

## **AREAS OF APPLICATION**

- Substrates: concrete and masonry
- active or passive waterproofing and protection against water and moisture
- foundations, slabs, retaining walls, etc.
- drinking water structures
- corrosion protection for reinforcing steel

#### PROPERTIES

Owing to its composition of cement, quartz with graded grain-size distribution and selected additives, VANDEX BB 75 is waterproof. It can be employed against active and passive water pressures. The initial and final bonding capability of VANDEX BB 75 is excellent, making it suitable to be applied to horizontal as well as vertical surfaces. It is durable, resistant to frost and heat after setting, but all the same permeable to vapour. VANDEX BB 75 is tested for use in contact with drinking water.

Applied as corrosion protection, it does not only enhance rebar corrosion protection, but also improves adhesion to subsequently applied Vandex repair and coating mortar. It forms a hard coating, is resistant to frost and de-icing salts, allows vapour diffusion and reduces  $CO_2$  penetration.

#### **SURFACE PREPARATION**

The substrate to be treated must be sound and even, open-pored, 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.

#### 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.

#### For application as corrosion protection

Exposed reinforcing steel should be cleaned and the residue removed by sandblasting or by using other suitable tools (be sure to achieve SA 2½ clean rating in accordance with DIN EN 12944-4 resp. ISO 8501-1). Remove concrete surrounding the corroded steel to a sound substrate. Steel and concrete may be moist.

## MIXING

Mix 25 kg of VANDEX BB 75 with 4.5-6 litres of tap water in a clean container for at least 3 minutes to a lump-free, homogeneous consistency. Use a mechanical mixer.

#### **APPLICATION**

VANDEX BB 75 is applied with brush, trowel or suitable spray equipment.

A maximum of 2 mm (approx. 4 kg/m<sup>2</sup>) can be applied in one working cycle. In most cases the application of more than one coat is recommended; please refer to relevant specification. It is recommended to apply the next coat whilst the previous coat is still damp on 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 is 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.

#### **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, working from the bottom up. Ensure that all cavities in the substrate are filled in order to exclude any trapped air.

#### Spray application

VANDEX BB 75 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. 6 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 keyed. The final layer can be left as a spray finish or treated to a specified finish.

## Application as corrosion protection

Using brush or roller, carefully apply at least two coats of VANDEX BB 75 with no breaks on prepared steel. Each subsequent coat may be applied after about 1 hour on sufficiently hardened first coat.

Depending on temperature, use within 45 to 60 minutes.

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

## CONSUMPTION

## Waterproofing:

Type of water impact	Recommended overall appli- cation rate	Total layer thickness (approx.)
Pressureless water	3-4 kg/m²	1.5-2 mm
Water under pressure	4-6 kg/m² depending on water pressure	2-3 mm

#### **Corrosion protection:**

Approx. 2 kg/m<sup>2</sup> per layer.

Note:

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

## CURING

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. When a plaster or render finish is required on top of a Vandex treatment it is essential to apply a rough cast of sand and cement on the final Vandex coat while it is still tacky. On hardened Vandex surfaces apply an appropriate bonding agent before rendering. Coatings on top of a Vandex treatment have to be alkali resistant. Decorative coatings applied on the passive water pressure side are recommended to be water vapour permeable.

## PACKAGING

25 kg PE-lined paper bag

## STORAGE

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

## **HEALTH AND SAFETY**

Please refer to Safety Data Sheet on www.vandex.com.

TECHNICAL DATA			
Appearance		grey powder. VANDEX BB 75 is not a decorative material.	
Density of wet mix	[kg/l]	approx. 2.0	
Workability at 20 °C	[min]	approx. 45	
Setting time at 20 °C	[h]	approx. 5-8	
Compressive strength 28 d	[MPa]	approx. 40	
Bending tensile strength 28 d	[MPa]	арргох. 6	
Static modulus of elasticity 28 d	[GPa]	approx. 28	
Capillary absorption	[kg/m²·h <sup>0.5</sup> ]	0.06	
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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