

Waterproofing slurry for sewage treatment plants

- resistant against sulphates
- against active and passive water pressure
- for concrete and masonry
- applicable by mortar gun

Compressive strength	class R3 ≥ 25 MPa	CE 0761 Vandex Isoliermittel-GmbH Industriestr. 19-23 DE-21493 Schwarzenbek 09 070 EN 1504-3:2005/ZA.1a CC fine mortar for structural repair (based on hydraulic cement)
Chloride ion content	≤ 0.05%	
Adhesive bond	≥ 2.0 MPa	
Carbonation resistance	passed	
Modulus of elasticity	≥ 20 GPa	
Thermal compatibility		
Part 1: Freeze thaw with de-icing salt immersion	≥ 2.0 MPa	
Part 4: Dry thermal cycling	≥ 2.0 MPa	
Capillary absorption	≤ 0.5 kg/m ² ·h ^{0.5}	
Reaction to fire	class A1	
Dangerous substances	complies with 5.4	

PRODUCT DESCRIPTION

Waterproofing slurry for sewage treatment plants.

AREAS OF APPLICATION

- substrates: concrete and masonry
- protective coating for horizontal and vertical construction members against municipal sewage
- trafficable sewers, open sewage tanks, man holes, etc.

PROPERTIES

Owing to its composition of cement, quartz with graded grain-size distribution and selected additives, VANDEX BB 75 Z is waterproof. It can be employed against active and passive water pressures. By using appropriate binding agents, VANDEX BB 75 Z is suitable for open tanks and channels in sewage treatment plants.

The initial and final bonding capability of VANDEX BB 75 Z 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 Z is tested for use in contact with drinking water.

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.

MIXING

Mix 25 kg of VANDEX BB 75 Z 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 Z is applied with brush, trowel or suitable spray equipment.

A maximum of 2 mm (approx. 4 kg/m²) 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 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.

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 Z 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.

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

CONSUMPTION

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

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 Z 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]	approx. 6
Static modulus of elasticity 28 d	[GPa]	approx. 28
Capillary absorption	[kg/m ² ·h ^{0.5}]	0.08
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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