

# Waterproofing slurry for sewage treatment plants

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

## **BB 75 Z**

Compressive Strength	class R3 ≥ 25 MPa		
Chloride ion content	≤ 0.05%	( (	
Adhesive bond	≥ 2.0 MPa		
Carbonation resistance	passed	0761	
Modulus of elasticity	≥ 20 GPa	V 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Thermal compatibility		Vandex Isoliermittel-GmbH Industriestr. 21	
Part 1: Freeze thaw with		DE-21493 Schwarzenbek 09	
de-icing salt immersion	≥ 2.0 MPa	005 EN 1504-3:2005/ZA.1a	
Part 4: Dry thermal cycling	≥ 2.0 MPa	CC fine mortar for structural repair (based on hydraulic cement)	
Capillary absorption	≤ 0.5 kg/m²·h <sup>0,5</sup>		
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, 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.

## 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 lumpfree, 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/m²	1.5-2mm
Water under pressure	4-6 kg/m² depending on water pressure	2-3mm

**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

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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**

values.

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

## **HEALTH & SAFETY PRECAUTIONS**

The Safety Data Sheet (SDS) must be read and understood prior to use.

## **TECHNICAL SERVICE**

Tremco CPG Australia Pty Ltd has a team of Representatives who provide assistance in the selection and specification of products. For more detailed information or service and advice, call Customer Service on (02) 9638 2755 or fax (02) 9638 2955.

#### **GUARANTEE/WARRANTY**

Tremco CPG Australia Pty Ltd products are manufactured to rigid standards of quality. Any product which has been applied (a) in accordance with Tremco CPG Australia written instructions and (b) in any application recommended by Tremco CPG Australia, but which is proved to be defective, will be replaced free of charge.

Any information provided by Tremco CPG Australia in this document in relation to Tremco CPG Australia's goods or their use is given in good faith and is believed by Tremco CPG Australia to be appropriate and reliable. However, the information is provided as a guide only, as the actual use and application will vary with application conditions which are beyond our control. Tremco CPG Australia makes no representation, guarantee or warranty relating to the accuracy or reliability of the information and assumes no obligation or liability in connection with the information. To the extent permitted by law, all warranties, expressed or implied are excluded.

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/m²·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			

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 certain cases might be greater.





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