

Grey waterproofing slurry

- against active or passive water pressure
- for concrete and masonry
- efflorescence-free
- applicable by spray equipment

Compressive strength	class R3 ≥ 25 MPa	CE 0761 Vandex Isoliermittel-GmbH Industriestr. 19-23 DE-21493 Schwarzenbek 09 005 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

VANDEX BB 75 is a cementitious, ready-mixed surface waterproofer.

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

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.

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 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/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 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.

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 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}]	0.06
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.



An RPM Company

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PRODUCTION:

Vandex Isoliermittel-Gesellschaft m.b.H.

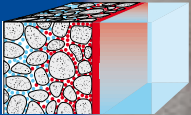
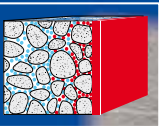
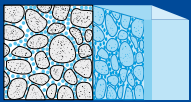
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VANDEX SPECIALISED PRODUCTS

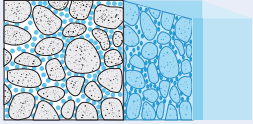
**WATERPROOFING
CONCRETE PROTECTION
CONCRETE REPAIR**

CRYSTALLINE WATERPROOFING

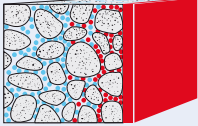


®
Vandex

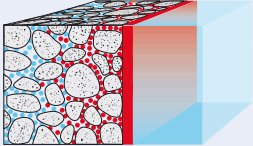
Vandex in-depth Waterproofing since 1946



1) Concrete wall exposed to water. The water has forced its way into the capillaries. Long-term effect: leaky, damaged concrete.



2) After Vandex treatment: The reaction between the free lime, moisture and the Vandex chemicals has set in. Vandex penetrates the concrete forming chemical complexes which substantially constrict the capillaries.



3) The concrete is now watertight but still allows water vapour to pass. The Vandex chemical complexes remain in the concrete, ready to reactivate upon water impact.

How does Vandex work?

Vandex cementitious waterproofing materials consist of ordinary Portland cement, carefully graded quartzite sands, and a blend of activating chemicals.

Vandex has two types of waterproofing products:

1. Capillary active components which work by penetration of the product into the concrete to provide in-depth waterproofing as shown above.

2. Slurries and mortars which form a waterproofing barrier.

The waterproofing effect of the capillary active Vandex products is produced by the Vandex coating which forms a waterproof layer and by activation of the chemicals which penetrate the concrete capillaries by the osmotic pressure of water. Here the Vandex chemicals react with the free lime in the concrete forming chemical complexes which block the capillaries and voids. Permeation of liquid water is no longer possible whereas water vapour is still allowed to pass.

In addition, Vandex waterproofing layers protect the concrete to a certain extent from exterior influences, such as carbonates, chlorides, sulphates and nitrates. Vandex becomes an integral part of the concrete structure, forming with the concrete a strong and durable homogeneous body.

Where is Vandex used?

Vandex products are recommended for solving problems such as:

- Concrete waterproofing
- Concrete protection
- Concrete repair
- Refurbishment of old buildings
- Grouting
- Waterproofing of joints

Areas of Application

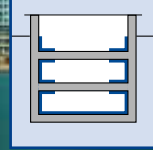
New and existing buildings:

Waterproofing of foundation walls, slabs below ground level, elevator pits, parking garages, landscaped roof slabs, swimming pools, industrial water structures, diaphragm walls as well as construction joints, all against hydrostatic pressure.

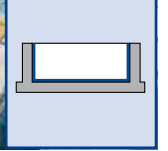
Drinking water structures, water filtration plants:

Waterproofing and coating.

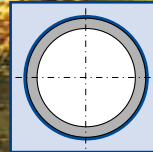
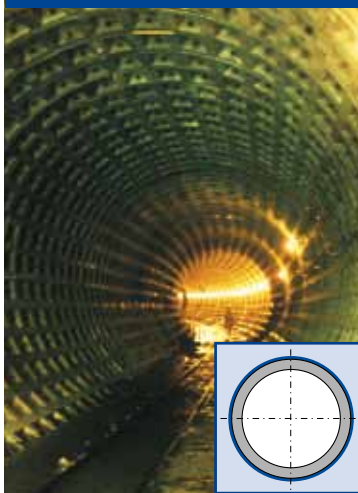
Structural and industrial engineering



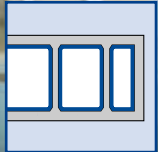
Industrial buildings



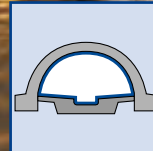
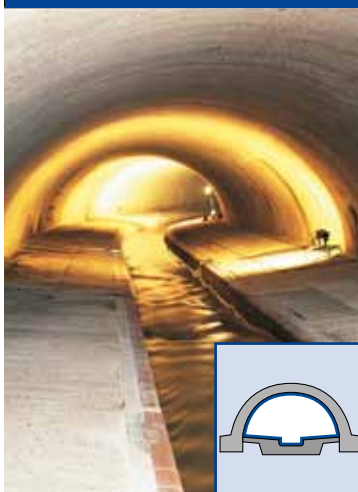
Tunnel



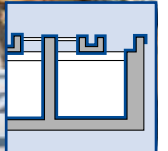
Drinking water reservoirs



Sewer



Sewage treatment plant



Sewage treatment plants and sewers: Waterproofing and protection against sewage and industrial waste water.

Hydroelectric plants, dams and hydraulic engineering structures:

Waterproofing and protecting marine structures.

Concrete protection.

Refurbishment of old buildings.

Vandex professionally used

Vandex technical documentation offers standard specifications for various typical applications:

- Below ground concrete walls and slabs, external or internal waterproofing
- Below ground multi-storied car parks
- Elevator pits
- Closed water retaining structures
- Swimming pools
- Sewage treatment plants
- Planters
- Construction joints
- Stopping of water leaks

Vandex Application

Cementitious Vandex materials can efficiently and safely be applied in various ways:



spray application



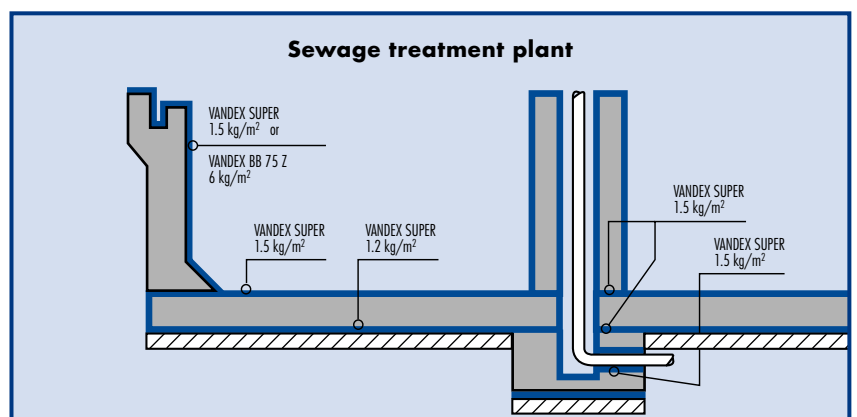
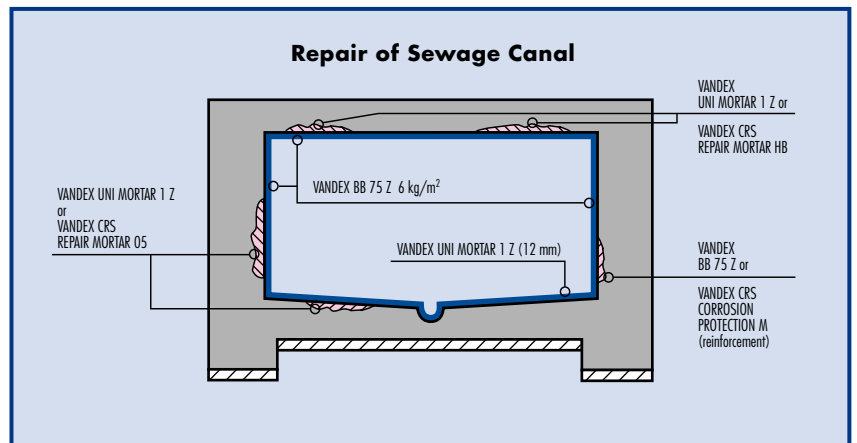
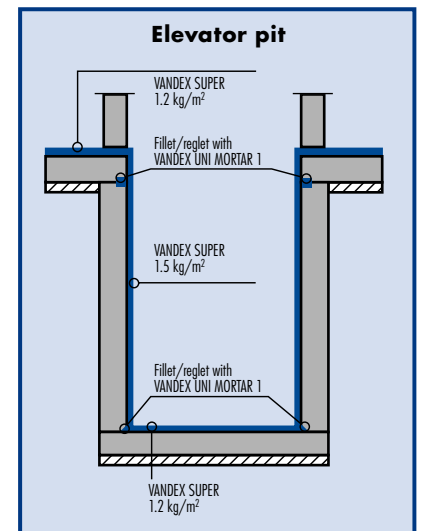
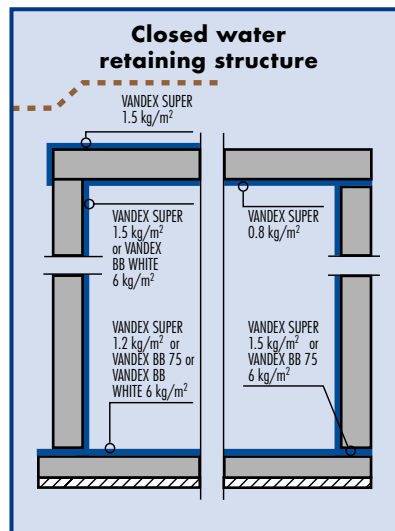
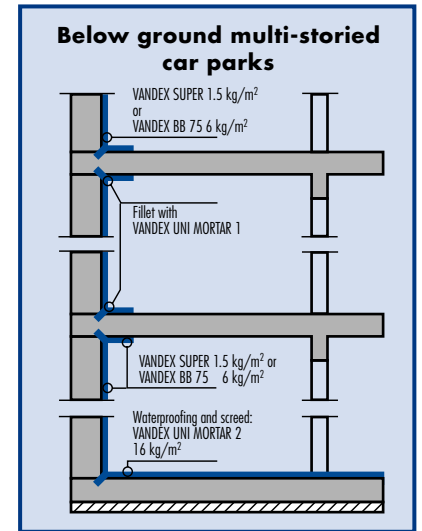
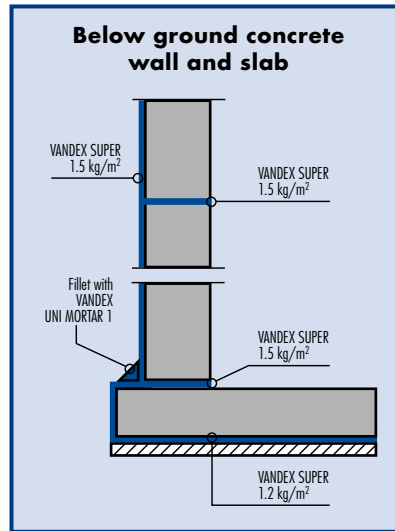
trowel application



brush application



power trowelling



Vandex Products are tested products

The cementitious Vandex products are regularly tested by approved and independent testing laboratories in various countries all over the world.

These tests serve as neutral proof of the efficiency and special properties of the various products.

The group of concrete repair products was specially tested for its physical properties and compatibility with concrete.

The relevant products are approved for use in direct contact with drinking water.



Vandex Management System

Vandex International Ltd, Switzerland is certified to the ISO 9001:2008 quality management system and the ISO 14001:2004 environmental management system (EMS) which verifies that Vandex International Ltd meets the requirements of international quality and environmental management standards. The Vandex management system offers the customer major advantages:

- consistently high product quality
- innovative products responding to actual customer needs
- a service package which safeguards engineering consultation and proper application of Vandex products

ISO 14001 EMS includes:

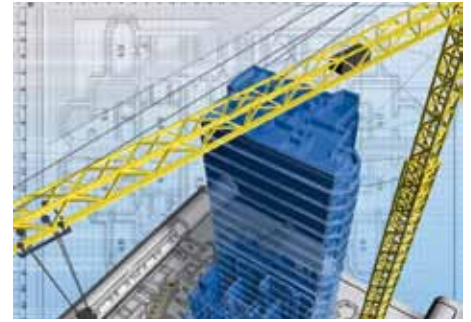
- adoption of an environmental policy
- organization to identify environmental aspects and impacts
- commitment to continual improvement
- commitment to overall prevention of pollution

Vandex Services. Our know-how – your success!



Technical consulting

Vandex-trained engineers provide professional consulting services for planners and applicators.



Assistance in specification writing

Vandex technical services include assistance in specification writing for standard or individual problem solutions.



Site supervision

If required, Vandex supervisors demonstrate or supervise applications to support Vandex local distributors or end users in the proper application of Vandex products right on the job.



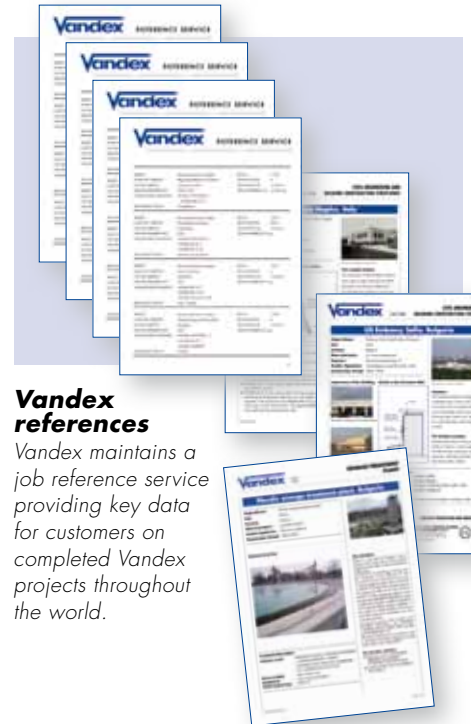
Training courses

Vandex regularly offers training courses given at Vandex Headquarters, at the Vandex demonstration center or customer premises.



Lab services

Our chemists and laboratories are available also to our customers for laboratory analyses and opinions.



Vandex references

Vandex maintains a job reference service providing key data for customers on completed Vandex projects throughout the world.

Vandex®

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An **RPM** company



