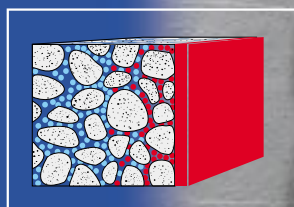


VANDEX SPECIALIZED PRODUCTS

**WATERPROOFING
CONCRETE PROTECTION
CONCRETE REPAIR**



CAPILLARY ACTIVE WATERPROOFING

Vandex[®]



How does Vandex work?

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

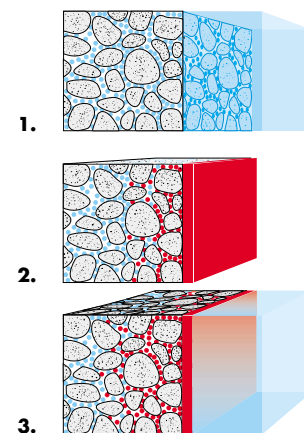
Vandex has two types of waterproofing products:

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

Vandex in-depth Waterproofing



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.

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.

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.

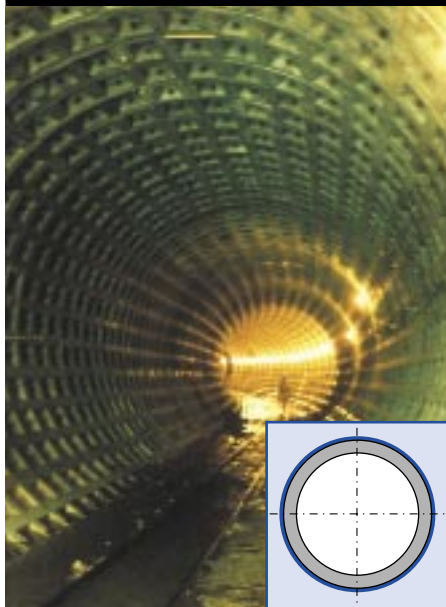
Structural and industrial engineering



Industrial buildings



Tunnel



Drinking water reservoirs



Sewer



Sewage treatment plant



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



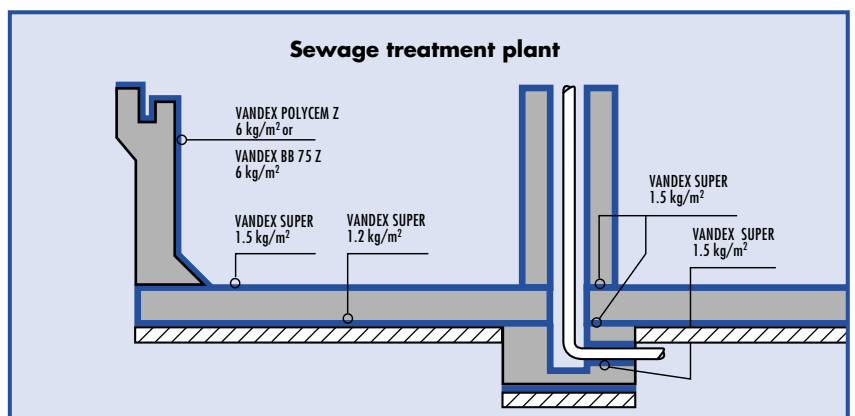
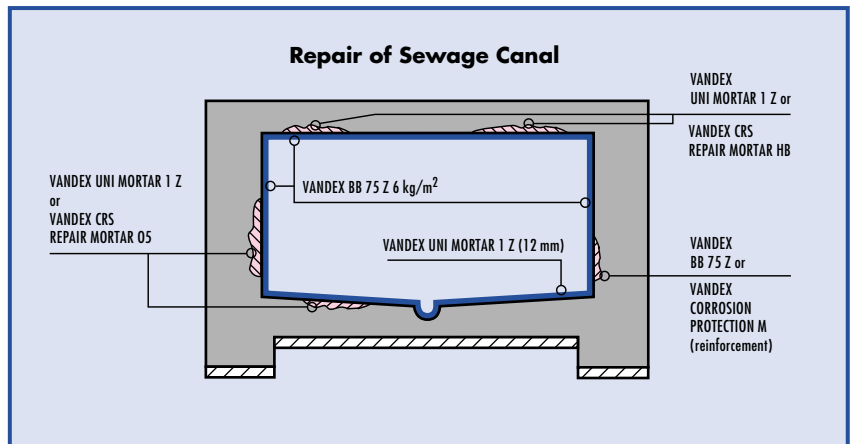
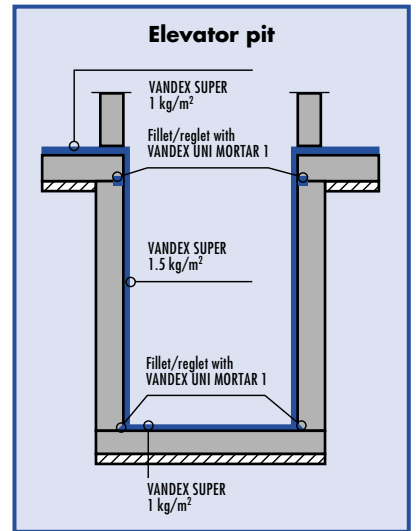
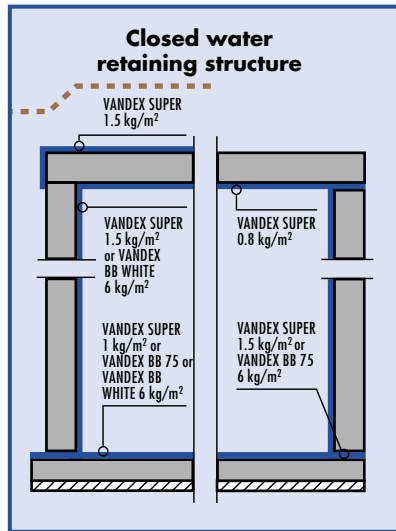
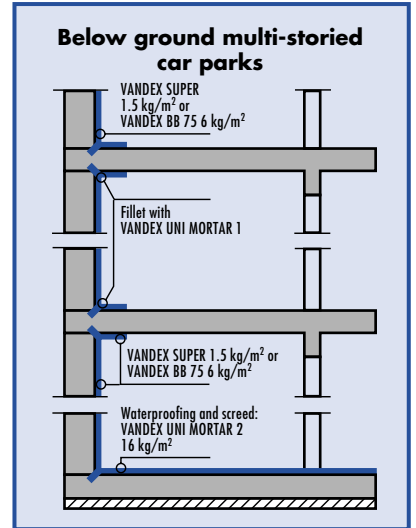
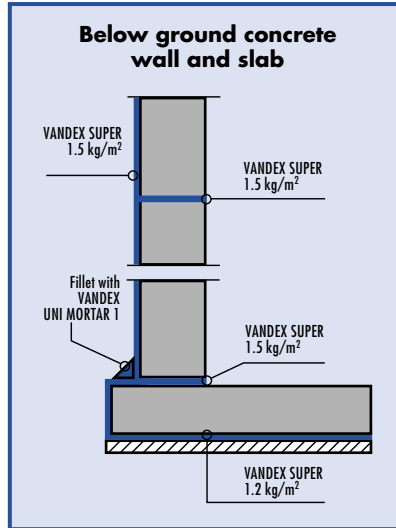
trowel application



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 9001:2000 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 specialized products and areas of application



Product name/ type of product		consumption	packaging	active waterproofing	passive waterproofing	structural/industrial engineering	traffic installations	diaphragm walls	slabs	parking garages	tunnel waterproofing	swimming pools	drinking water retaining structures	sewage treatment plants	sewers/shafts	marine structures	concrete repair	concrete protection	water leaks
VANDEX	refer also to Technical Data Sheets																		
SUPER SUPER WHITE	penetrating waterproofing slurry for waterproofing and protection of concrete	1–1.5 kg/m ²	25 kg	●	●	●	●	●	●	●	●	●	●	●	●	●			
BB 75 / BB 75 Z	waterproofing slurry (grey) for waterproofing and protection of concrete	3–6 kg/m ²	25 kg	●	●	●	●	●	●	●	●	●	●			●			
BB 75 E	elasticized waterproofing slurry with crack bridging capacities	4–5 kg/m ²	35 kg (2 comp.)	●	●	●	●				●	●		●	●	●			
BB WHITE	cementitious waterproofing slurry against water and moisture, white	6 kg/m ²	25 kg	●	●	●					●	●							
CEMELAST	elasticized waterproofing slurry for use in drinking water reservoirs, 2 components	4–6 kg/m ² 2–3 mm per layer	34 kg (2 comp.)	●	●	●	●				●	●	●	●	●	●			
POLYCEM Z	polymer-modified cementitious protective coating	6 kg/m ²	30 kg (2 comp.)	●	●	●								●	●			●	
UNI MORTAR 1/ UNI MORTAR 1 Z	waterproofing and repairing mortar resistant to abrasion and deicing salt	12–24 kg/m ² 6–12 mm per layer	25 kg	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
UNI MORTAR 2	rapid setting waterproofing and repairing mortar resistant to abrasion and deicing salt	12–24 kg/m ² 6–12 mm per layer	25 kg	●	●	●	●		●	●	●								
PLUG	rapid setting mortar for plugging water leaks	approx. 200 g/100 cm ³	15 kg																●
CRS REPAIR MORTAR OS	mortar for the repair of concrete, 1 component	approx. 19.5 kg/m ² / 10 mm dry weight	25 kg														●		
CRS REPAIR MORTAR HB	cementitious polymer-modified highbuild repair mortar with lightweight aggregates	approx. 14 kg/m ² / 10 mm dry weight	20 kg														●		
CRS OS 95	elasticized slurry with crack bridging capacities, 2 components	approx. 1.8 kg/m ² / 1 mm wet weight	32.5 kg (2 comp.)															●	
EXPASEAL 2520/2010	expanding waterstop for construction joints and movement joints (up to 5 mm movement) pipe encasements (*)	1.0 m VANDEX EXPASEAL per meter joints	Box 2520: 30 m 2010: 60 m	●	●	●	●	●	●	●	●	●	●	●	●	●			
CONSTRUCTION JOINT TAPE	waterproofing tape for construction joints and cracks	1.0 m tape 1.0 kg/m BB 75 E	30 m	●	*	●	●	●	●	●	●	●	●	●	●	●			

More Vandex products are offered, please ask for Technical Data Sheets.

* with supporting measurement
(*) can be glued with VANDEX EXPASEAL ADHESIVE



CONCRETE PROTECTION AND WATERPROOFING

The information contained herein is based on our longterm 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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