

Vandex refurbishment system products in old buildings

Vandex[®] **OLD BUILDINGS**

- *environment-friendly*
- *proven over many years*
- *easy and safe*



Valuable properties need not decay!

Old buildings often show efflorescence, damp and plaster damage. Moisture, combined with harmful salts, is one of the main causes of structural dilapidation. Without appropriate counter-measures, buildings decay quickly. So Vandex, keeping abreast with modern technology, have further improved their waterproofing and protection materials, which have been proven over decades, in waterproofing and property refurbishment.

Decay can be stopped by the specific use of Vandex products, and the relevant knowledge.

Refurbishment of old buildings is worth it!

Damage in old properties means a considerable loss in value. Damp is unpleasant, unhealthy, and destructive. Damp thermal insulation can be ineffective, allowing condensation to form on structural components such as wall ties. Organic components rot and disintegrate. The presence of harmful salts not only causes unsightly efflorescence, but disrupts and destroys masonry, plaster, and decorations.

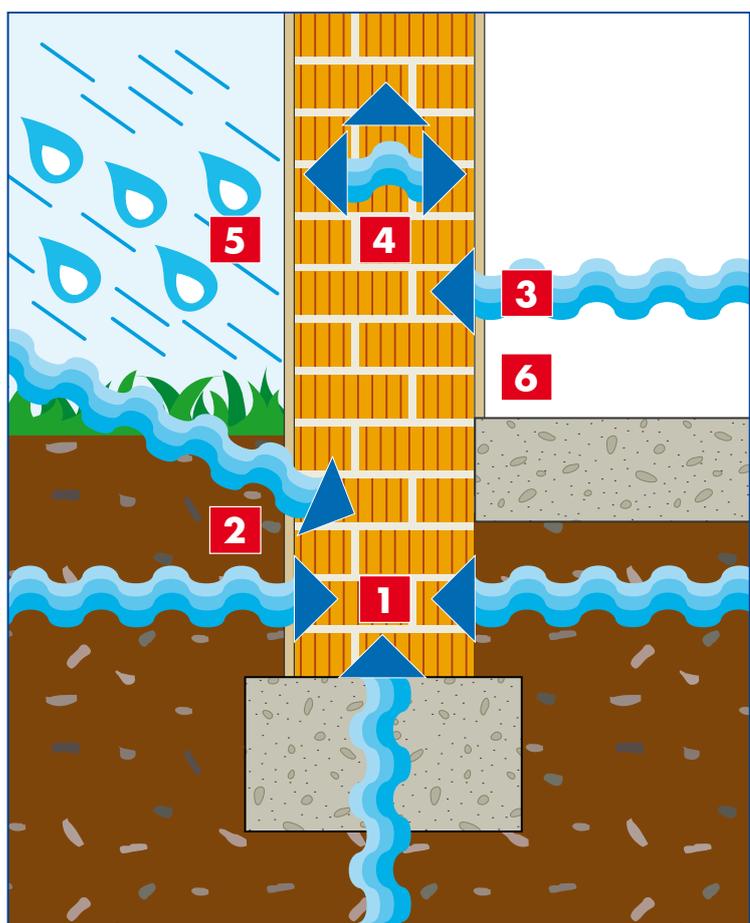
Investing in refurbishment pays dividends. Property values increase dramatically, and basement space becomes available again for long-term usage. Restoration to a healthy, pleasant room environment returns previously moisture-damaged building areas to a habitable standard. With thermal insulation effective again, considerable savings in heating costs can be realised.

Vandex property refurbishment system including modern system products

Our competence comes from 30 years experience in property refurbishment. Hence, the Vandex product line conforms both to the latest technical provisions (e.g., WTA* guidelines) and the presently applicable environmental protection regulations (e.g., mineral products and controlled disposal of containers).

Quality assurance starts with the checking of incoming raw materials and continues through applicator company training.

*WTA = International Association for the Science and Technology in Maintenance of Structures and Protection of Monuments.



System approach to successful property refurbishment:

Structural examination

Damage assessment using
Vandex checklists

Refurbishment concept based on
modular system

Structural refurbishment with
quality assurance measures

Moisture sources jeopardising property:

- 1 Rising damp
- 2 Lateral penetration
- 3 Hygroscopic moisture
- 4 Condensation
- 5 Exposure to wind-driven rain and splashing water
- 6 Plumbing leaks

VANDEX IC and VANDEX VIM as damp-proof course solutions

	VANDEX IC	VANDEX VIM	
TYPE OF MATERIAL	water-based ready-to-use silane / siloxane microemulsion cream	cementitious slurry with Portland cement, quartz sand and active chemicals	
DPC MECHANISM	lines pores to form an effective hydrophobic barrier against moisture	crystalline growth will block all pores and fine cracks and act as a barrier against moisture	
CONTENT OF MOISTURE IN THE WALL	< 90 %	> 50 %	
DRILLING OF HOLES	on one side of the wall	on one side of the wall	on both sides of the wall
DIAMETER	12 mm	22 mm	30 mm
DISTANCE APART	120 mm	110 mm	160 mm
ANGLE	horizontal	30° downwards	
ALIGNMENT	horizontal in mortar course	across min. one mortar course	
CONSUMPTION PER 10 CM WALL	100 ml per metre	1 kg per metre	
COMPONENT	one (single)	one (single)	
CONSISTENCY	cream	cementitious slurry	
APPLICATION	gun for 600 ml sausage	caulking or grout gun	
PACKAGING	600 ml sausage	20 kg bag	

Vandex horizontal DPC mechanism

Horizontal DPC's are installed in existing damp buildings to block or reduce the moisture rising through the capillaries.

DPC solution with VANDEX IC

VANDEX IC is a water-based ready-to-use silane/siloxane microemulsion cream that provides a barrier against rising damp. The active ingredients in VANDEX IC spread in the capillaries and form an effective hydrophobic barrier against moisture.

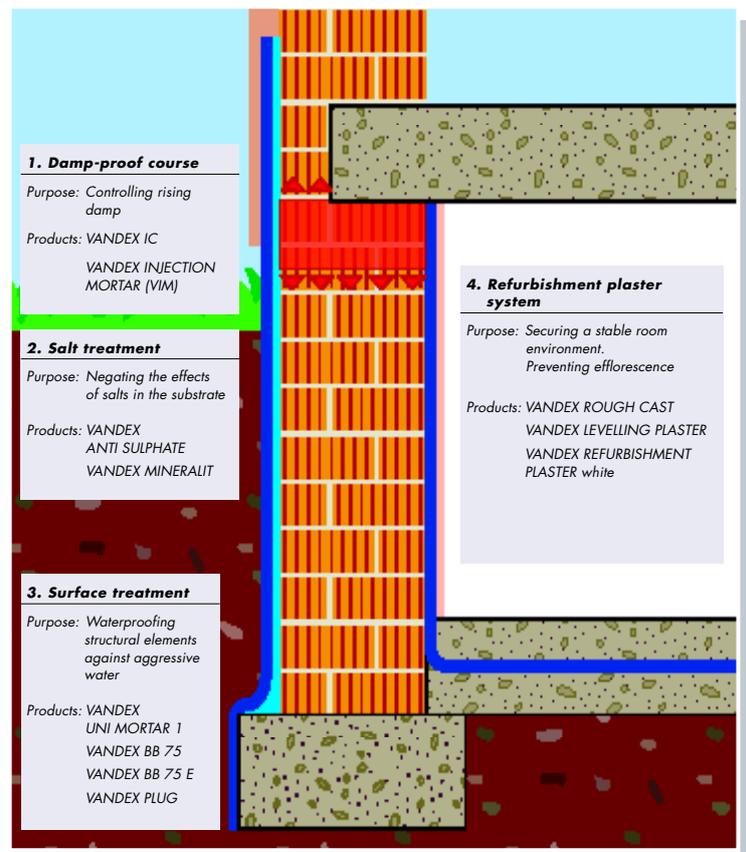
The holes with diameter of 12 mm are drilled with a distance of 120 mm on a horizontal level. Depth of the drill hole = wall thickness less 20 mm.

VANDEX IC is applied with a simple applicator gun for 600 ml sausages.



Vandex 4-module refurbishment system

Using the Vandex 4-module system, virtually any damage can be expertly and comprehensively remedied.



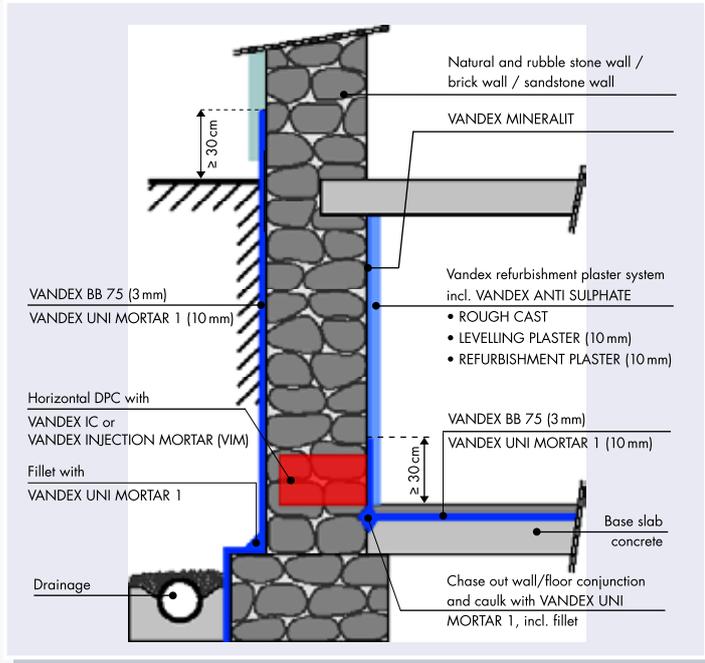
DPC solution with VANDEX VIM

VANDEX INJECTION MORTAR (VIM) consists of Portland cement, specially treated quartz sand and a compound of active chemicals. By means of a chemical reaction between reactive salts in the structure, moisture and the Vandex chemicals a crystalline growth will take place which will block all pores and fine cracks.

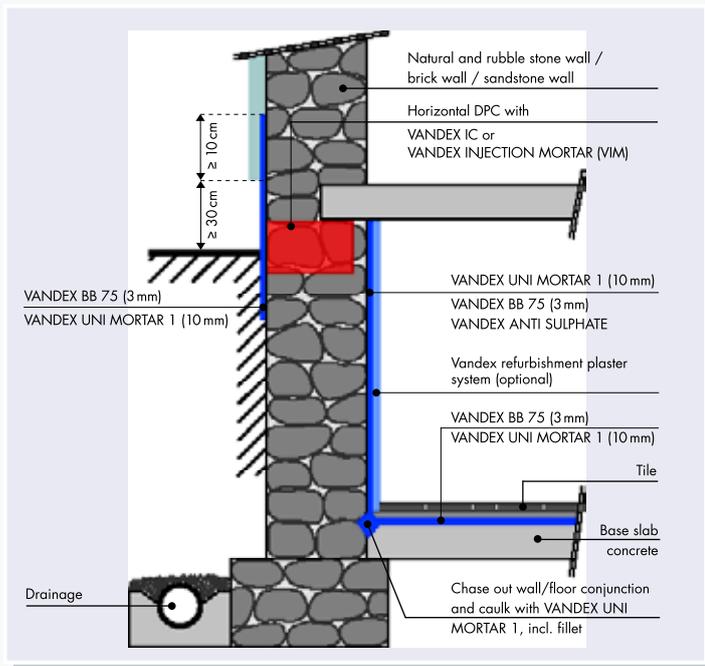
The holes with diameter of 22 mm are drilled with a distance of 110 mm and in a downward direction at an angle of approximately 30°. For injecting the VANDEX INJECTION MORTAR (VIM) a hand caulking gun or a grout pump can be used. Alternatively VANDEX INJECTION MORTAR (VIM) can be injected by means of a funnel connected with a pipe or hose.



External waterproofing of basement



Internal waterproofing of basement



Vandex products are comprehensively tested

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.



Vandex refurbishment plaster system – spray applied



Quality and environment

The Vandex group is certified according to the ISO 9001 „Quality management systems“ since 1994 and to the ISO 14001 „Environmental management systems“ since 2004. This verifies that the Vandex companies meet the requirements of international quality and environmental standards.

Implementing the Vandex company policy pursues:

- a consistently high product quality
- innovative products responding to actual customer needs
- a service package which includes engineering consultation and application supervision of Vandex products
- compliance with legal requirements
- protection of the environment
- safety of all employees



Vandex services. Our know-how – your success!



Technical consulting

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



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 also available to our customers for laboratory analyses and opinions.

Typical example of Vandex property refurbishment products



1 Situation before



2 Damaged surfaces



3 Damaged plaster removed



4 First layer; VANDEX UNI MORTAR 1



5 Second layer; refurbishment plaster



6 Finished work

Selected speciality products and their areas of application

Product name	Brief description	Consumption	Unit size	Damp-proof course	Salt refurbishment	Brick hardening	Levelling	Bonding	Salt repository	Waterproofing	Fillels	Ingress	Dwelling climate	Decorative finish	Mechanical processing
VANDEX IC	Silane/siloxane damp-proof course, single comp.	4 units/10 m and 25 cm wall thickness	600 ml	•											
VANDEX INJECTION MORTAR (VIM)	Mineral damp-proof course, single component	1 kg/meter and 10 cm wall thickness	20 kg	•	•										•
VANDEX ANTI SULPHATE	Sulphate converter, single component	approx. 1 kg/m ²	14 kg	•	•										
VANDEX UNI MORTAR 1	Waterproofing and repair mortar, single component	approx. 16 kg/m ² (layer thickness approx. 8 mm)	25 kg				•			•	•	•			•
VANDEX BB 75	Cementitious waterproofing slurry, single component	6 kg/m ² (layer thickness approx. 3 mm)	25 kg							•		•			•
VANDEX ROUGH CAST*	Ready-mix dry mortar for bonding	5 kg/m ² (open textured, covering approx. 50% of the surface)	30 kg			•		•							•
VANDEX LEVELLING PLASTER*	Ready-mix dry mortar for levelling the plaster substrate and as a salt repository	13,5 kg/m ² (layer thickness approx. 10 mm)	30 kg		•		•		•						•
VANDEX REFURBISHMENT PLASTER white*	Ready-mix dry mortar for refurbishment	12,5 kg/m ² (layer thickness approx. 10 mm)	25 kg		•								•	•	•
VANDEX PLUG	Rapid setting mortar to stop water ingress	site-dependent	15 kg							•		•			

* Products fulfil WTA specification 2-9-04/D.

- Vandex services:**
- Competent consultation in property refurbishment
 - Problem analysis, proposal of solutions
 - Applicator instructions

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.

Vandex®

CONCRETE PROTECTION AND WATERPROOFING

An RPM Company

HEADOFFICE AND INTERNATIONAL SALES:
VANDEX INTERNATIONAL LTD
 P.O. Box, CH-4501 Solothurn/Switzerland
 Phone: +41 32 626 36 36, Fax +41 32 626 36 37
 E-mail: info@vandex.com www.vandex.com

PRODUCTION AND SALES GERMANY:
VANDEX ISOLIERMITTEL-GESELLSCHAFT m.b.H.
 P.O. Box, 1406, D-21487 Schwarzenbek/Germany
 Phone: +49 4151 89 15-0, Fax +49 4151 89 15 50
 E-mail: info@vandex.de www.vandex.de

