INSTRUCTIONS FOR USE (IFU)

1.12.2013/1st issue

PRODUCT DESCRIPTION

VANDEX SUPER is a grey cementitious, indepth waterproofer. For application VANDEX SUPER powder is mixed with water to slurry consistency.

Packaging
25 kg PE-lined paper bag

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

AREAS OF APPLICATION

- substrate: concrete
- active or passive waterproofing and protection against water and moisture
- foundations, slabs, retaining walls, construction joints, etc.
- drinking water structures

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.

MIXING

Mix by volume 5 parts of VANDEX SUPER with approx. 2 parts of tap water (25 kg + approx. 7–8.5 litres) in a clean container for at least 3 minutes to a lump-free, homogeneous consistency of thick oil paint. Use a mechanical mixer.

APPLICATION

VANDEX SUPER is applied with brush, suitable spray equipment or by dry sprinkling.

Brush application
Ensure that all cavities in the substrate are filled. Crosswise application: vertically bottom-up, then horizontally.

Spray application
VANDEX SUPER 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. 4 mm. The first layer of Vandex is applied in circular motion with the spray nozzle held at a 90% angle to the substrate. The final layer can be left as a spray finish or treated to a specified finish.

Apply subsequent coat whilst previous coat is still damp at the surface. The waiting time before applying the following coat depends on local climate conditions such as humidity, temperature, etc. The previous coat must not be damaged during application of the following coat.

To maintain workability of the material do not add water, simply re-stir the mixture. Workability at 20 C approx. 30 minutes.

Dry sprinkle and power trowel application
The concrete is poured, vibrated and screeded as usual. When the concrete to be treated starts to reach initial set, the specified amount of VANDEX SUPER is dry-distributed by hand using a sieve (mesh size of 1 mm) or suitable spreader on to the concrete surface. The powder is then trowelled into the substrate until coverage is uniform and the specific finish is achieved.

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

CONSUMPTION

Structural element	*Type of impact*	*Type of application*	*Consuption*
Concrete slab	positive or negative water pressure	dry sprinkle, brush or spray in 1 coat	1.2 kg/m²
Concrete slab	moisture/no water pressure	brush or spray in 1 coat	0.8 kg/m²
Concrete walls	positive or negative water pressure	brush or spray in 2 coats	1.5 kg/m²
Construction joints (horizontal and/or vertical)	water pressure	brush in 1 coat	1.5 kg/m²

For UK market only

CURING

Provide a relative humidity of > 85% in enclosed areas and avoid formation of water films or condensation on top of coating during 7 days after application.
Keep surfaces exposed to weathering 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.

FILLING OF WATER RETAINING STRUCTURES

Filling can take place when the surface treatment has hardened sufficiently, usually not less than

21 days	after application at a curing temperature	≥ 7 °C
14 days	after application at a curing temperature	≥ 15 °C
7 days	after application at a curing temperature	≥ 20 °C

and provided that the surface is thoroughly checked for hardness.

The required cure time may be calculated from the minimum daily temperature recorded by the water company's representative, or if no records are kept, 21 days minimum.

CLEANING AND DISINFECTION

A careful cleaning and disinfection prior to the first operation is essential. Observe national laws and regulations (e.g. Principles of Water Supply Hygiene & Technical Guidance Note No. 8 "Water treatment [disinfection]").

Cleaning and disinfection of the tanks prior to the first filling
A careful cleaning and disinfection prior to the first operation is essential:

- rinsing of all inner surfaces (ceiling, walls, floor, columns, stairs) with drinking water (pressure ≤ 30 bar)
- disposing of the rinsing water

The use of detergents prior to the first operation is generally not necessary.

For disinfection all inner surfaces have to be treated with approved disinfectants (e.g. aqueous solutions of sodium hypochlorite, calcium hypochlorite etc.) and afterwards rinsed with clear water.

The disinfectant contaminated water has to be disposed of according to legal requirements (also refer to Principles of Water Supply Hygiene & Technical Guidance Note No. 14 "Disposal of chlorinated water").

At the time of filling the tank samples for bacteriological analysis shall be taken. When the samples are approved to comply with legal requirements the tank can be put into operation.

Periodical cleaning and disinfection
The drinking water tanks shall be cleaned periodically (min. once a year) and disinfected if necessary.

For the cleaning water jetting and the use of appropriate mechanical equipment is suitable. Chemical detergents shall only be used exceptionally, increasing the water pressure and careful scrubbing brings in most cases the same effect.

The water tank shall be cleaned immediately after emptying as the residues can be removed more easily when still humid.

Suitable means for the cleaning:

- combined brushing (scrubbing) and rinsing with water (≤ 30 bar)
- water jetting (≤ 30 bar)

The use of chemical detergents shall be reduced to a minimum and prior to application be discussed with the local Vandex distributor.

Chemical additives to the cleaning water reduce the cleaning time and shall be applied only to remove very resistant residues. Acid containing detergents attack cement based Vandex coatings. In order to prevent damages Vandex coatings shall be exposed to aggressive detergents only for a short period.

Furthermore, the following recommendations shall be considered:

- Chemical detergents must be assessed for their toxicology and drinking water suitability prior to their application. It is highly recommended to apply only detergents which are approved for contact with drinking water. This includes also assessments regarding potential consequences on the microbiology of the water, the compatibility with the coating material, the disposal and work and safety related issues.
- It has to be checked if and under which conditions the detergent containing water can be disposed of safely into the municipal wastewater system.

For UK market only

– Adverse effects of the cleaning on the inner surfaces or mounting parts, e.g. roughening or corrosion, shall be kept as little as possible.

ADDITIONAL INFORMATION

The grey VANDEX SUPER treatment is not a decorative finish. Discolouration of the treated surface may occur. Such discolouration in no way detracts the water-proofing effect.

HEALTH AND SAFETY

For safe handling procedures and precautions, instructions on safe disposal of spillage and excess product, avoidance of harm to the environment etc. please refer to Safety Data Sheet of VANDEX SUPER.

For UK market only

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

HEAD OFFICE AND INTERNATIONAL SALES:
Vandex International Ltd
P.O. Box · CH-4501 Solothurn/Switzerland
+41 32 626 36 36 · info@vandex.com · www.vandex.com

UK SALES:
Safeguard Europe Ltd
Redkiln Close · Horsham, West Sussex · RH13 5QL/UK
+44 (0) 1403 210204 · www.safeguardeurope.com

PRODUCTION:
Vandex Isoliermittel-Gesellschaft m.b.H.
P.O. Box · D-21487 Schwarzenbek/Germany

VXI IFU UK 001 E 1213/1