

Waterproofing and Repairing Mortar for Sewage Treatment Plants

- with increased sulfate resistance
- for open sedimentation tanks and open channels

Material VANDEX UNI MORTAR 1 Z is a cementitious, ready-mixed surface waterproofing and repairing mortar, resistant to water and moisture, with increased sulfate resistance.

Areas of Application VANDEX UNI MORTAR 1 Z is used to repair and coat open tanks and channels in sewage treatment plants as well as horizontal and vertical concrete or masonry surfaces which are subject to water or humidity and at the same time to eventual mechanical wear.

Properties VANDEX UNI MORTAR 1 Z is applied in layers of 6 to 12 mm thickness, in one working cycle because of its granulometry. The material is resistant to abrasion and deicing salts and thus capable to resist to strong mechanical wear.

Owing to its composition of cement, quartz with graded grain size distribution, and special chemical ingredients of an inorganic nature, VANDEX UNI MORTAR 1 Z is waterproof (tested up to 7.0 bar at a layer thickness of 10 mm). It is durable and resistant to frost and heat after setting, but all the same permeable to vapour.

VANDEX UNI MORTAR 1 Z is resistant to domestic sewage.

Surface Preparation The substrate has to be firm, and its surface open-pored and free from voids and larger cracks. Bitumen, oil, grease or remains of paint must be removed.

All contaminations, laitance as well as unsound concrete have to be removed by bush hammering or sand blasting. The substrate should be well prewatered and slightly damp at the time of application.

Mixing Depending on the type of application, place 25 kg of VANDEX UNI MORTAR 1 Z in a clean container, add 3 - 4 litres of water and stir for at least 3 minutes with a mechanical mixer.

Application Pour VANDEX UNI MORTAR 1 Z in one working cycle over horizontal surfaces, then compact and strike off. After initial hardening it can be briefly treated with a plasterer's float, or provided with a broom finish to increase the non-skid quality. Apply VANDEX UNI MORTAR 1 Z to vertical surfaces like normal render. It might also be laid on by a suitable mortar pump.

Do not apply at temperatures below + 5°C, or to a frozen substrate, and provide protection against extreme weather conditions while setting.

Consumption 2 kg VANDEX UNI MORTAR 1 Z/m² are required per one millimetre of layer thickness. Layer thickness of about 6 - 12 mm corresponds to a consumption of 12 - 24 kg/m².

Packaging 25 kg PE-lined paper bags.

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

Technical Data

Aggregate state	powder
Colour	grey
Bulk density	approx. 1,60 kg/l
Setting time	approx. 5 to 6 hours
Compressive strength	45 N/mm ² 28 days Water storage
Bending tensile strength	7 N/mm ² 28 days Water storage
Modulus of elasticity	2.45 x 10 ⁴ N/mm ² 28 days Air storage/23°C/50% relative humidity
All data are averages of several tests under laboratory conditions. In practice, climatic variations such as temperature, humidity, and porosity of substrate may affect these values.	

Health and Safety VANDEX UNI MORTAR 1 Z contains cement. Irritating to eyes and skin. Keep out of reach of children. Avoid contact with skin and eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable gloves. For further information please refer to Material Safety Data Sheet.

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.



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