


Fibre reinforced spray and repair mortar

- resistant against sulphate
- low shrinkage
- excellent workability
- low rebound

 0761 Vandex Isoliermittel-GmbH Industriestrasse 19-23 DE-21493 Schwarzenbek 09 0761-CPD-0111	EN 1504-3 CC repair mortar for structural repair (based on hydraulic cement)	
	Compressive strength Chloride ion content Adhesive bond Carbonation resistance Modulus of elasticity Thermal compatibility Part 4: Dry thermal cycling Capillary absorption Reaction to fire Dangerous substances	Class R4 ≥ 45 MPa ≤ 0.05 % ≥ 2.0 MPa passed ≥ 20 GPa ≥ 2.0 MPa ≤ 0.5 kg/m ² h ^{0.5} A1 complies with 5.4

PRODUCT DESCRIPTION

VANDEX CEMLINE MG 4 is a cementitious, ready-mixed fibre reinforced spray mortar

AREAS OF APPLICATION

- reprofiling and coating of concrete surfaces
- reprofiling of localised concrete defects
- horizontal, vertical and overhead application

PROPERTIES

Owing to its composition of cement, quartz with graded grain-size distribution, fibres and selected additives VANDEX CEMLINE MG 4 is a low shrinkage spray mortar with low rebound and good freeze / thaw resistance. The modification with fibres results in an increased resistance against dynamic load and shear stress.

VANDEX CEMLINE MG 4 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.

MIXING

Mix 25 kg of VANDEX CEMLINE MG 4 with 3.5–4.5 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 CEMLINE MG 4 is usually applied with suitable spray equipment but it can also be applied by trowel. Apply a minimum of 5 mm (approx. 10 kg/m²) and a maximum of 30 mm (approx. 60 kg/m²) in one working cycle. For small areas such as coves or local repairs VANDEX CEMLINE MG 4 may be applied in layer thicknesses up to 50 mm. If several coats are required it is recommended to apply subsequent coat whilst previous coat is still damp at 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 must be 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.

Trowel application

First a scratch coat is applied for maximum adhesion to the substrate. Ensure that all cavities in the substrate are filled in order to exclude any trapped air.

Spray application

VANDEX CEMLINE MG 4 can be applied with a suitable fine mortar spraying device. For maximum spray pattern and minimum rebound it should be possible to adjust volume of product as well as air pressure and volume. The nozzle diameter is approx. 10–14 mm.

The first layer is applied in circular motion with the spray nozzle held at a 90° angle to the substrate. The material is then flattened and trowelled or keyed for a further layer.

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

CONSUMPTION

Approx. 2 kg/m² VANDEX CEMLINE MG 4 is required to produce a layer thickness of 1 mm.

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.

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

VANDEX CEMLINE MG 4 contains cement. Irritating to skin. Risk of serious damage to eyes. Keep out of reach of children. Do not breathe dust. 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 and eye/face protection. For further information please refer to actual Material Safety Data Sheet on www.vandex.com.

TECHNICAL DATA		
Appearance		grey powder
Aggregate size d _{max.}	[mm]	2
Density of wet mix	[kg/l]	approx. 2.3
Workability at 20 °C	[min.]	approx. 45
Setting time at 20 °C	[h]	approx. 2-4
Compressive strength 28 d	[MPa]	approx. 70
Bending tensile strength 28 d	[MPa]	approx. 8
Static modulus of elasticity 28 d	[GPa]	approx. 38
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.

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/AUSTRIA: 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