

Highly impermeable reprofiling mortar

- waterproof
- excellent workability
- easy to level and finish
- very low rebound
- approved according to German DVGW W 300 (potable water)

Compressive strength	class R4 ≥ 45 MPa	CE 0761 Vandex Isoliermittel-GmbH Industriestr. 19-23 DE-21493 Schwarzenbek 11/13 325/370 EN 1504-3:2005/ZA.1a VANDEX CEMLINE MG 4 FF / MG 4 FF H CC repair mortar for structural repair (based on hydraulic cement)
Chloride ion content	≤ 0.05 %	
Adhesive bond	≥ 2.0 / ≥ 1.5 MPa	
Carbonation resistance	passed	
Modulus of elasticity	≥ 20 GPa	
Thermal compatibility		
Part 1: Freeze thaw with de-icing salt immersion	≥ 2.0 / ≥ 1.5 MPa	
Capillary absorption	≤ 0.5 kg/m ² ·h ^{0.5}	
Reaction to fire	class A1	
Dangerous substances	complies with 5.4	

PRODUCT DESCRIPTION

VANDEX CEMLINE MG 4 FF grey / VANDEX CEMLINE MG 4 FF H white is a waterproof cementitious, ready-to-use reprofiling mortar.

AREAS OF APPLICATION

- substrates: concrete
- reprofiling and coating of soffits, walls and slabs
- suitable as smooth finish for drinking water tanks and industrial water installations

PROPERTIES

VANDEX CEMLINE MG 4 FF/H is applied in layers of 10 to 15 mm thickness in one working cycle. It is waterproof when applied in min. 10 mm layer thickness. The material has a very dense structure, thus a very low porosity and can easily be flattened.

VANDEX CEMLINE MG 4 FF/H is approved for application 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.

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 FF with 3.5–4.5 litres / VANDEX CEMLINE MG 4 FF H with 3–4 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 FF/H is usually applied by a fine mortar spraying device, but it can also be applied by trowel. Apply a minimum of 10 mm (approx. 20 kg/m²) and a maximum of 15 mm (approx. 30 kg/m²) in one working cycle. For small areas such as coves or local repairs, VANDEX CEMLINE MG 4 FF/H may be applied in layer thicknesses up to 30 mm. If several coats are required it is recommended to apply the next coat whilst the previous coat is still damp at the surface.

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.

On horizontal and slightly inclined surfaces it is possible to apply a bonding bridge with VANDEX BB 75. Apply by brush a small quantity of material into the surface until it is completely moist. The following VANDEX CEMLINE MG 4 FF/H layer must be applied wet in wet.

Spray application

VANDEX CEMLINE MG 4 FF/H 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. 10 mm.

The material is applied in a circular motion with the spray nozzle held at a 90° angle to the substrate. The material is then flattened.

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

CONSUMPTION

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

CURING

Provide a relative humidity of >85% in enclosed areas. Avoid formation of condensate and water film during the first 7 days after application.

While setting, surfaces exposed to weather must be kept moist for at least 5 days and be protected from extreme weather conditions (e.g. sun, wind, frost). 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 14 days after application. However, if earlier filling is specifically required, filling may be considered after not less than 7 days, provided the surface is thoroughly checked for hardness. A careful cleaning and disinfection prior to the first operation is essential.

Observe national laws and regulations.

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

Please refer to Safety Data Sheet on www.vandex.com.

TECHNICAL DATA		CEMLINE MG 4 FF (R4)	CEMLINE MG 4 FF H (R3)*
Appearance		grey powder	white powder
Grain size d_{max}	[mm]	2	2
Density of fresh mortar	[kg/l]	approx. 2.2	approx. 2.25
Application time, 20 °C	[min.]	approx. 45	approx. 45
Curing time, 20 °C	[h]	approx. 2–6	approx. 3–6
Compressive strength 28 d	[MPa]	approx. 55	approx. 65
Bending tensile strength 28 d	[MPa]	approx. 7	approx. 7
Static modulus of elasticity 28 d	[GPa]	approx. 35	approx. 40
Waterproof 28 d, 1.5 bar (water penetration)	[mm]	3–4	3–4

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.



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

PRODUCTION:

Vandex Isoliermittel-Gesellschaft m.b.H.

P.O. Box · D-21487 Schwarzenbek/Germany

