

# **CEMREP 202**

# Fast setting repair mortar for traffic area repairs

- >30 MPa compressive strength after 1 hour
- trafficable after 1 hour
- for horizontal concrete surfaces
- abrasion and thaw salt resistant
- high final strength
- easy application
- usable in sub-zero temperatures down to -14°C

Compressive strength	class R4 ≥ 45	Œ
MPa		
Chloride ion content	≤ 0.05 %	0761
Adhesive bond	≥ 2.0 MPa	Vandex Isoliermittel-GmbH
Carbonation resistance	passed	Industriestr. 21
Modulus of elasticity	≥ 20 GPa	DE-21493 Schwarzenbek
Thermal compatibility		14
Part 1: Freeze thaw with de-icing	390	
immersion	≥ 2.0 MPa	EN 1504-3:2005/ZA.1a
Capillary absorption	$\leq 0.5 \text{ kg/m}^2 \cdot \text{h}^{0.5}$	CC repair mortar for structural
Reaction to fire	class A1	repair
Dangerous substances	complies with 5.4	(based on hydraulic cement)

#### **PRODUCT DESCRIPTION**

VANDEX CEMREP 202 is a cementitious, fibre reinforced, ready-mixed repair mortar for horizontal surfaces.

#### **AREAS OF APPLICATION**

- substrate: concrete
- concrete repair mortar for traffic areas like roundabouts, roads, parkings, garages, ramps and industrial floors
- recoatable repair mortar for horizontal concrete surfaces
- in situations where minimum shutdown time is essential
- protection against water and humidity
- usable in cold environments and situations

#### PROPERTIES

VANDEX CEMREP 202 has very high initial and final strength and is applied in one working cycle in a layer thickness of 5 up to 100 mm. The material offers high abrasion and mechanical resistance and excellent adhesion to substrate.

Owing to its composition of specific cement, quartz with graded grain-size distribution and selected additives, VANDEX CEMREP 202 is durable, resistant to frost, thaw salt and heat after setting, but all the same permeable to vapour.

## **SURFACE PREPARATION**

The substrate to be treated must be sound and even, open-pored, roughened and its surface free of 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 CEMREP 202 with 1.9-2.1 litres of tap water in a clean container for at least 5 minutes to a lump-free, homogeneous consistency. Use an appropriate mixer, e.g. a double-whirl or forced action mixer. Do not add more water ahead of time as the plastic consistency is only achieved after approx. 2-3 min. of mixing.

Install mixing place nearest possible to application place. At temperatures around 0  $^{\circ}$ C, it is possible to use warm mixing water. Below -5  $^{\circ}$ C water and powder temperature must be +20  $^{\circ}$ C.

#### **APPLICATION**

VANDEX CEMREP 202 is hand applied.

A minimum of 5 mm and a maximum of 100 mm can be applied in one working cycle. For higher thickness, it is possible to add up to 5 kg of coarse sand (4-8 mm, round, washed) per 25 kg.

For maximum adhesion first apply VANDEX CEMREP 202 to the substrate using a stiff brush. Pour then the product over the prepared surface, compact and strike off. As the product starts quickly to harden, all this must be carried out speedily.

Do not apply to a frozen substrate.

#### **CONSUMPTION**

Approx. 2.2 kg/m² VANDEX CEMREP 202 is required to produce a layer thickness of 1 mm.

#### CURING

After 1 hour of curing, moisten carefully. No need of further curing. At sub-zero temperatures cover with winter construction insulation matts.

#### **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			
Appearance		grey powder	
Grain size d <sub>max</sub>	[mm]	2	
Density of wet mix	[kg/l]	approx. 2.4	
Application time at 20 °C	[min.]	approx. 10	
Setting time at 20 °C / -14 °C	[min.]	approx. 15 / approx. 120	
Compressive strength at 20 °C	[MPa]	1 h: >30 24 h: >55 7 d: >60 28 d: >70	
Bendile tensile strength at 20 °C	[MPa]	1 h: >4 24 h: >7 7 d: >9 28 d: >10	
Adhesion strength at 20 °C / -14 °C	[MPa]	28 d: >2 / 7d: >1.9	
Dyn. modulus of elasticity	[GPa]	28 d: >50	
Linear expansion	[%]	approx. 0.05	
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.

