

VIMEPOX MORTAR

Epoxy mortar-paste

Properties

VIMEPOX MORTAR is a two-component epoxy mortar with fine aggregates. **VIMEPOX MORTAR** offers:

- Good workability and thixotropy for vertical surfaces and ceiling applications
- Hardening without shrinkage
- Optimal bonding to concrete, steel, bricks, marble, stones

After hardening, **VIMEPOX MORTAR** obtains:

- High mechanical strengths
- High chemical strengths to acids, alkalis, detergents, sea water, solvents
- Water impermeability

Applications

VIMEPOX MORTAR is used as a bonding material and repair mortar for:

- Bonding concrete to concrete or steel
- Anchoring steel support bars and dowel bars of concrete iron reinforcement
- Bonding of stone, marble, ceramics, wood
- Fastening nipples and sealing cracks for resin injections into concrete
- Repairing chemically and mechanically affected concrete structural members, such as ramps, stair steps, joint edges, drains, wells, kerbs etc.
- Forming bearings, bases, leveling layers of small thickness gradually fading into zero
- Restoring damaged floorings





Technical Data

Component A: white paste containing the resin

Component B: black paste containing the hardener

Mixing ratio: A:B = 4:1

Specific gravity of mixture (A+B): 1.85 kg/lit Pot life: at 20° C: 90 min – at 30° C: 25 min

Hardening time: at 20° C: 170 min – at 30° C: 50 min

Minimum hardening temperature: 10° C

Final strengths after 7 days at 23° C1:

Compressive strength: > 80 N / mm² **Modulus of elasticity in compression**: 5450 N / mm²

(DIN EN ISO 604)

Flexural strength: > 39 N / mm²
Modulus of elasticity in flexure: 6650 N / mm²

(DIN EN ISO 178)

Tensile strength: > 27 N / mm² **Modulus of elasticity in tension**: 3290 N / mm²

(DIN EN ISO 527)

Bonding Strength to concrete:

(DIN EN ISO 12636)

Tensile strength in flexure: > 8 N / mm² - rupture of concrete

Adhesion strength (bonding): 4 N / mm² - rupture of concrete

How to use

A precondition for achieving the final properties of **VIMEPOX MORTAR** is to mix component A (white paste with resin) and component B (black paste with hardener) well. Good mixing is achieved when paste – mixture (A+B) has a uniform grey colour. The two components are packed in different vessels in the right proportions. If you need a smaller quantity than the one contained in the packs, mix components A and B in a

¹¹ Test Report 00 02 79 0867/2 dated 30/10/2000, issued by the Institute of Compact Constructions and Technology of Structural Materials, University of Karlsruhe



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clean container using a ratio of A:B = 4:1 by weight. When using **VIMEPOX MORTAR** you should take into account the temperature that affects pot life and hardening time significantly. At temperatures below 10°C the hardening of mixture A + B is inhibited without altering the system and is completed later, when the temperature rises.

Bonding of epoxy materials is adversely affected by substrate moisture: this means that before application, you must allow the wet substrate to dry.

Clean the tools after use with **VIMEPOX SOLVENT**.

Installation / Bonding of anchors and reinforcement bars

VIMEPOX MORTAR is suitable for installing / bonding

- Steel anchor bolts (chemical anchor bolts)
- Concrete reinforcement bars

according to the experiment test of the Institute of Compact Constructions and Construction Materials Technology, University of Karlsruhe

The test showed that the strength of installation / bonding with **VIMEPOX MORTAR** is superior to that of anchorage at the same depth.

Due to its thixotropy **VIMEPOX MORTAR** can be used in both horizontal and vertical holes on a roof.

Concrete holes are drilled according to the following rules:

- Hole diameter: D = Bar diameter d + 6 mm
- Depth of hole $h \ge 10 \cdot d$

In order to avoid the reduction of strength in each anchor bolt the following values have been determined:

- Radial distance between anchor bolts s ≥ 2 · h = 20 · d
- Distance from concrete edge c ≥ h = 10 · d

For correct fastening of the anchors, clean the holes from the powder that remains after the hole-drilling, using pressured air. Make sure that concrete is dry. Fill the holes with **VIMEPOX MORTAR** paste (mixture A+B) up to about half their depth so that resin overflows after bar installation.

Consumption

2 kg of **VIMEPOX MORTAR** are required for filling a void of 1 lt or coating 1m², 1 mm thick.

Cleaning of tools



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Tools should be cleaned right after the application, using VIMEPOX SOLVENT.

Storage

Store the material in closed vessels and shady places at a temperature of 10 - 25°C. Storage duration is for at least 1 year.

Hygiene Measures - Precautions

Avoid contact with resin and hardener of the epoxy system with the eyes, the mouth or the skin. You should also avoid breathing their vapours. Protect yourself by wearing rubber or plastic gloves. If contact of the resin, the hardener or their mixture with the skin occurs, wipe the material away using a napkin and then wash with soap and water or cleaning cream.

The use of solvents for cleaning causes additional irritation to the skin.

