

VICAREP-FINE®

Edition 06025

High performance, Polymer Modified, Non-shrink, Fine Repair & Fairing mortar.

Description

VICAREP-FINE is a high performance, one component, Non-shrink, cementitious Fine repair and leveling mortar based on hydraulic Binders, graded fillers, rheology adjustors and synthetic polymers. The mix contains no chlorides, ferrous metal or other deleterious materials. The product is pre-blended and ready for mixing on site to produce a non-shrink, easy to apply, homogenous mortar which hardens to a strong fine repair and leveling mortar as well as a base ready to receive toppings, linings, tiles, waterproofing membranes...etc. **VICAREP-FINE** may be applied on all types of substrates; concrete, bricks or stones.

Advantages

- Thixotropic consistency for easy vertical and overhead application.
- Non-shrink, Minimizes cracking potential as well as allowing jointless repair and leveling applications.
- Outstanding abrasion and scratch resistance.
- Characteristics improvement over 10 years due to slow hydration of Active dicalcium silicate.
- Application thickness from feather edge up to 3 mm.
- High early strength with long term strength gain.
- Formulated for short and long term efficiency – Life time.
- Nontoxic, suitable for food industry and potable water.
- Doesn't need any protection against U.V. after application.
- Excellent adhesion to concrete and bricks.

Uses

VICAREP-FINE is ideal for repair applications that require fast setting, dimensional stability and high durability with a thickness range from feather edge up to 3mm.

VICAREP-FINE provides an extremely durable, seamless, high strength, impact resistant repair & leveling coat for (but not limited to) the following applications:

- Swimming pools and water retaining structures.
- Masonry lining and repair.
- Structural concrete rehabilitation.
- Filling of honey combs and pinholes.
- Squash courts lining.
- Concrete Flooring repair.
- Grain silos.

VICAREP-FINE is also a complementary product to our products **Vicafloor, Vicaline, Vicatile B**...etc, as well as a leveling base for resin mortars, paints and waterproofing membranes.

Standards & Specifications

Color	Concrete Grey (other colors are available upon request)
Initial setting time	≈ 60 min @ 20° C
Final setting time	≈ 90 min @ 20° C
Potlife	≈ 30 min @ 20° C
Toxicity	Non-toxic
Processing Conditions	10 -35°C & 35-75% RH, recommended 40-65%
Fresh density / Bulk density	2.1 Kg/liter / 1.5 Kg/liter
Water/powder ratio	0.15 to 0.17
Depth of water penetration: BS EN 12390-8	7days/1.5 bar : No Penetration
Adhesion to concrete substrate	≥1.5 N/mm ²
Flexural strength: BS EN196-1	≥ 6.0 Mpa at 28 days
Compressive strength: BS EN196-1	typical values are as follows:

Water/powder ratio	Age		
	24 hours	7 days	28 days
0.16	18 Mpa	25 Mpa	41 Mpa

*Compressive strength is increasing thereafter due to the slow hydration of Active Dicalcium silicate(C2S).

Package & Coverage

VICAREP-FINE is supplied in 15Kg & 25Kg bags.

After mixing 4.25L water, the 25 Kg bag yields about 14 liters of mortar covering 14 m² / 1mm thickness.

On an even surface, the rate of consumption for 3mm thickness is 5.36Kg Powder /m². Allowance should be made for any possible wastage or surface unevenness when estimating.

Application Instructions

Surface preparation

In order that maximum bond strength is achieved between the substrate and the lining, all concrete substrates should be sound, clean, and free from laitance, dust, loose particles, grease, oil, curing compounds or any other foreigner matter.

All substrates must be absorbent and have a minimum ICRI Concrete Surface Profile of 2 (CSP #2) which can be achieved simply by using a wire brush, bush hammer, scabblor, grit blasting or any other means.

All concrete surface defects that are larger than 3mm should be repaired following a proper repair procedure, using **VICAREP-F** (Please refer to separate TDS). Before applying **VICAREP-FINE**, all surfaces should be **saturated with water** with no running water (saturated surface dry). Substrate temperature is recommended to be from 10°C to 35°C.

Mixing

- In a suitable container add 3.75 – 4.24 liters of potable water and start mixing with a slow speed drill (300 - 600)rpm with a helical mixing paddle attached, while adding gradually the content of a 25 Kg bag of **VICAREP-FINE** for enough time to produce a homogeneous mix. Mechanical mixing is essential for a rapid and homogeneous mix.

Application

- Apply the well mixed **VICAREP-FINE** using a spatula or a trowel or a brush for thin layers, as soon as the mixing is completed, to the damp substrate. If the substrate dried out, rewet it before application without leaving running water.
- The first layer (about 1mm thickness) should be pressed firmly with the trowel while troweling to ensure a good compaction and bond with the substrate.
- Consecutive layer(s) will be applied immediately after the first layer and trowel finished as usual.
- **VICAREP-FINE** can be applied with total thicknesses from feather edge up to 3mm.
- If time is elapsed between the two layers, the first one should be wetted before the application of the second layer.
- **VICAREP-FINE** can be smoothed after being hard enough for smoothing.
- **VICAREP-FINE** is self-curing and doesn't require any additional curing; however it must be protected for 24 hours against direct sun light, wind and hot temperature.

Precautions

- Protect the **VICAREP-FINE** bags from direct sun rays or any other source of heat before use, this can lead to a very fast setting and loss of workability.
- During the setting of **VICAREP-FINE**, exposure to drafts and intense sunlight should be avoided. This can lead to a too fast removal of moisture, whereby the mortar is more susceptible to cracking, shrinkage and the surface edges can be pulverized.
- Avoid working on hot substrates and avoid mixing with hot water.
- The temperature of **VICAREP-FINE** & the elements coming into contact with it should be in the range of 10°C -35°C.
- Never exceed the stated water dose and temperature to avoid bleeding, segregation and further cracking.
- Never remix with water to retrieve its initial workability.
- For application thickness other than the stated, please refer to our technical office.
- Never mix with cement or sand or any additional aggregates.
- **Avoid contact with gypsum or any other sulfates on substrate, mixing water or curing water in plastic state.**

Health and safety

VICAREP-FINE is alkaline when mixed with water and should not come into contact with skin or eyes. Avoid inhalation of dust during mixing and wear safety glasses, dust mask and gloves. If skin contact occurs, wash thoroughly with clean water. Should eye contact occur, rinse immediately with plenty of clean water and seek medical advice.

Full health and safety data are given in Product Safety Data Sheet.

Storage & shelf life

VICAREP-FINE should be stored in normal temperature and closed shaded dry area in undamaged original packing.

It is recommended to be re-tested after 6 months from the production date if packed in paper bags and retested after 18 months if packed in plastic bags.

Technical support

For any technical support, please don't hesitate to consult our technical office or representatives.

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