

VICAFLOOR-MQ®

Edition 08018

Heavy duty Abrasion and Impact resistant floor topping

Description

Vicafloor MQ is a one component floor screed based on **Prompt** cement, hardwearing graded aggregates, mineral additives and admixtures. When mixed with water, it produces a micro-concrete ready to be laid over old concrete floors after surface preparation in one application. After hardening, the surface may be grinded to expose the aggregates and obtain a smooth, shiny and easy to clean surface. **Vicafloor MQ** can also be used as a dry shake method over fresh concrete floors.

Advantages

- Non-shrink.
- High early strength with long term strength gain.
- Water proof in both Positive & Negative directions.
- Outstanding abrasion and scratch resistance.
- Characteristics improvement over 10 years.
- Resists alkalis and acids of PH as low as 4.
- Resists carbonation providing excellent protection for steel reinforcement.
- Formulated for short and long term efficiency.
- Excellent adhesion.
- Continuous pores filling and sealing by Autogenous healing provided by the slow hydration of Dicalcium Silicate (C₂S).
- No free lime, all the hydration products are solids.

Uses

Vicafloor MQ provides an extremely durable, seamless, high strength, impact, scratching and abrasion resistant floor which can be applied with a minimum thickness of 8.0 mm, with no maximum limit.

Vicafloor MQ is supplied in different colors enabling decorative designs to be applied.

Vicafloor MQ can be used indoor and/or outdoor.

Vicafloor MQ can be sprinkled on the fresh concrete surface as a surface hardener – Dry shake.

Vicafloor MQ is ideally suitable either where the floor is subjected to severe conditions of service, or where ever a luxury floor is required such as:

- Warehouses
- Industrial floors
- Storage Depots
- Shopping centers & supermarkets
- Garages
- Decorative floorings

Standards & Specifications

Color	Beij to Light grey (original), Dark grey, Brick red, Yellow, Orange, Brown, and Black					
Toxicity	Non-toxic					
Setting time at 20° C	Initial: 30 min Final: 1 hour					
Fresh density	≈ 2.26 Kg/liter					
Adhesion to concrete substrate	≥10 Kg/cm ²					
Linear Shrinkage at 28days BS EN 12617-4 (%)	0.028%					
Linear Expansion at 28days BS EN 12617-4 (%)	0.010%					
Böhme Abrasion resistance BS EN 13892-3	Class A12 at 28 days Class A 9 at 180 days *Wear resistance is improving thereafter					
Compressive Strength BS EN196-1 (Mpa) Water/ powder ratio: 0.16 (4.0L/25kg)	1 d	7 d	28 d	56 d	120 d	180 d
	30 Mpa	38 Mpa	44 Mpa	46 Mpa	47 Mpa	51 Mpa
	*Compressive strength is improving thereafter					
Depth of water penetration BS EN 12390-8 (mm)	1 day /1.0 bar		7 days / 2.0 bar		28 days / 4.0 bar	
	0		0		0	

Package & Coverage

Vicafloor MQ is supplied in 25 Kg packs.

After mixing with water, the 25 Kg pack yields about 12.50 liters of micro-concrete covering 1.25 m² of 10 mm thickness. Allowance should be made for any possible wastage when estimating.

As a surface hardener - dry shake the rate of application is 2 to 3 Kg / m².

Application Instructions

Surface preparation

A good floor topping is only as good as the preparation.

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

All concrete surface defects (Honey combs, Rock pockets, air voidsetc.) should be repaired following a proper repair procedure, using **Vicaseal Mortar**. Before applying **Vicafloor MQ**, all surfaces should be saturated with water with no running water (saturated surface dry).

For better adhesion, **Vicafloor MQ** should be applied over a wet coat of **Vicabond**.

Mixing

- Add 4.0 – 4.5 liters of water to one **Vicafloor MQ** 25 Kg bag.
- Mechanical mixing is essential for a rapid and homogeneous mix.
- Forced action mixers are suitable.
- Either the powder or the water may be introduced first in the mixer, for best results introduce half of the water then all the powder then the remaining water quantity.

Application

- **Vicafloor MQ** will be laid on the prepared surfaces in one application by screeding.
- No joints are needed but those in the original floor should be respected in the topping.
- Screeding (straight edging the surface), has the greatest effect on the surface tolerances. It should be performed over well leveled screed guides using straightedges specially made for this purpose including hollow magnesium straightedges.
- Temporary screed guides can be lumber, T bars ...etc. which should be removed after the screed hardening.
- Permanent screed guides include metallic strips and 10 cm width or more strips made from the same material with different colors, which will remain as a part of the screed.
- Permanent screed guides allow decorative designs or floor marking.
- Even surfaces can be obtained by proper straight edging prior to smoothing by mechanical grinding.
- Diamond-disk grinders are much faster than stone grinders and give better results.
- Where mechanical grinding is not requested, smoothing by hand troweling can be done provided the distance between the screed guides are limited to 01.20 m in order to minimize depressions.
- As a surface hardener – Dry shake, after floor concreting when the concrete is firm to take the weight of workman sprinkle **Vicafloor MQ** at the rate of 2 to 3 Kg / m² on the green concrete and trowel it in with metal floats or power trowel.
- Curing is very important at least during the first three days. It can be done by the use of water means or by the use of a suitable curing compound.

Precautions

- Protect the **Vicafloor MQ** bags from direct sun rays or any other source of heat before use, this can lead to a very fast setting.
- Avoid working on hot substrates.
- After application, **Vicafloor MQ** should be allowed to cure for at least 24hours before mechanical grinding (depending on water powder ration).
- **Avoid contact with gypsum or any other sulfates on substrate, mixing water or curing water in plastic state.**

Storage & shelf life

Vicafloor MQ 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.

Technical support

For any technical support, please consult our technical office or representatives.

Disclaimer...The information contained herein is included for illustrative purpose only and, to the best of our knowledge, is accurate and reliable. Hems cannot however under any circumstances make any guarantee of results or assume any obligation or liability in connection with the use of this information. As Hems has no control over the use to which may put its products, it is recommended that the products be tested to determine if suitable for a specific application and/or our information is valid in a particular circumstance. Responsibility remains with the architect or engineer, contractor and owner for the design, application and proper installation of each product. Specifier and user shall determine suitability of products for specific application and assume all responsibilities in connection therewith.

Hemts Construction Chemicals Ltd.

Head quarter: 35 ElGazayer St. 11435 Maadi, Cairo, Egypt
Factory: CPC industrial compound, 6th of October, Giza, Egypt
Tel: (+202)27030503 - 27542745 - 25180578 info@hemts.net

www.hemts.net

