

ShaliFix® MC

High Performance Cementitious Repair Micro Concrete



STP Limited

Description

ShaliFix® MC is a one-part, versatile, pourable, non-shrink, patching / repair compound, requiring just addition of water. Recommended water and coarse aggregate are to be added at site as per requirement. It is a high strength material, which is easy to use with an extended working time for ease of placement. It is similar in appearance to concrete and is suitable for use as a topping, patching mortar or repair material on horizontal surfaces.

Characteristics

Compressive Strength, MPa <ul style="list-style-type: none">• 1 day• 3 days• 7 days• 28 days	15	Flexural Strength (28 days), MPa	6
	30		
	40	Tensile Strength, (28 days), MPa	2
	50		
Theoretical Coverage,* kg / m ³	2500	Wet Density, gm / cc	2.4-2.5

*These results were obtained at a water: powder ratio of 0.15 @ 30°C

Field of Application

Mainly recommended for repair of :

- Repair of damaged concrete structures like columns / beams / slabs, etc.
- Parking decks.
- Floor toppings.
- Joint repairs.
- Equipment bases.
- Pedestals.
- Pavements.

Advantages

- Can be used as a pumpable or pourable repair concrete where access is restricted.
- Highly fluid to allow for placement without vibration.
- Compensates for shrinkage by expansion.
- Premixed, ready to use, having rapid strength development.
- Good bond with old concrete.
- High strengths with low permeability.
- Chloride free.

Application Methodology

➤ Surface Preparation

- New concrete must be a minimum of 28 days.
- Remove all loose gravel, dirt, oil, grease and foreign matter by jet of dry air and clean the surface mechanically to make it textured before application.
- Shot blast or scarify the surface to give a profile of minimum 1/8" (3 mm) and expose the large aggregate of the concrete.
- All concrete must possess an open surface texture with all curing compounds and sealers removed. Several hours prior to placing, the concrete substrates should be saturated with clean water. Remove any standing water. Alternatively, use a bonding system.

➤ **Material Preparation**

- Slowly empty bag of **ShaliFix® MC** in 3.5 L of water, while mixing with slow speed mixture fitted with a suitable mixing paddle till homogenous mix is obtained.
- After achieving consistency in the mix, add the remaining 1 L of water and continue mixing till applicable consistency is achieved.
- Allow the mix couple of minutes to let the entrapped air escape.
- For repair deeper than 100 mm, mix **ShaliFix® MC** with properly graded 5 mm to 12 mm silt free aggregate to minimize temperature rise. The quantity of aggregate required may vary depending on the nature and configuration of the repair location. It should be a max. of 8 - 10 kg of aggregate per bag of **ShaliFix® MC**.
- Use the entire prepared material within the pot life time.

➤ **Application of Material**

- Prime the prepared surface with **ShaliPrime® S**.
- Saw cur edges to ¼ " (6 mm) deeper than the topping thickness and repair to provide a locked in reinforced edge. Moving joints as in the case of expansion joints should be brought up through the repair by saw cutting or with the use of divider strip.
- Exposed rebar may be treated with an anti-corrosion coating with ShaliPrime Zn R. Remove all loose rust and scaling, preferably by sandblasting to white metal prior to coating the rebar.
- Finish to desired texture. On large floor areas, use screed strips as guides in combination with vibratory screeding to level.
- For higher thickness development, 6 mm down aggregate can be used with **ShaliFix® MC** in the ratio of 50 : 50.
- If placed by pump, standard concrete pumping practice should be followed.
- If poured in the form work, avoid air entrapment by pouring from one side only.
- Finish the repair material to the desired texture. Do not add additional water to the surface during the finishing operation.
- To prevent surface cracking, cure the floor with curing compound, such **ShaliCure® Acrylate**. In hot, windy or direct sunlight situations, re-wet the surface after the curing compound has dried and cover with polyethylene for a minimum of three days. If curing compound is not desired, wet cure for a minimum of three days.
- For laying of pavement / topping shuttering, if required, should be in segment and water tight.

Cleaning & Maintenance

Clean tools and equipment with water before the material hardens.

Health & Safety

- Avoid contact with skin / eyes and avoid swallowing.
- Ensure adequate ventilation and avoid inhalation of vapour.
- Wear suitable protective clothing, gloves and eye protection.
- In case of skin contact, rinse with plenty of clean water, then cleanse with soap and water. Do not use solvent to clean the contacted area.
- In case of eye contact, wash with plenty of clean water and seek medical advice.
- If swallowed, seek medical attention immediately. Do not induce vomiting.

Packaging

Available 30 kg bag.

Storage

Keep in cool and dry place, under shed, away from heat and moisture.

Shelf Life

6 months in original unopened sealed condition.



STP Limited
Enhancing Structures' Life

Product Range

- Waterproofing and Insulation ■ Road Surfacing
- Sealants and Additives ■ Pipeline Coating
- Protective / Anti-Corrosive Coating ■ Epoxy Flooring
- Grouts / Admixtures ■ RestoFix- Repair / Rehabilitation
- Other Construction Chemicals



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