ShaliFix MC

High Performance Cementitious Repair Micro Concrete

STP Limited

Description

ShaliFix MC (formerly known as ShaliMortar M) is a versatile, one part, patching and repair compound for repair project of all types. Requiring only the addition of water, **ShaliFix MC** 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 Age, Mpa • 1 day • 3 days • 7 days • 28 days	 10 30 40 50	Flexural Strength 28 days, Mpa	6
		Physical Appearance	Cementitious grey powder

The following results were obtained at a water:power ratio of 0.15 @ 30 ^{O}C

Application

- Parking decks
- Floor toppings
- Joint repairs
- Equipment bases
- Pedestals
- Pavements

Advantages

- Can be used as a pumpable or pourable repair micro concrete where access is restricted.
- Highly fluid to allow for placement without vibration.
- Compensates for shrinkage by expansion.
- Premixed, ready to use.
- Long working time
- High strengths with low permeability.
- Chloride free.

Application Methodology

- New concrete must be a minimum of 28 days if an epoxy adhesive will be used to the topping. If a slurry bond coat is used, the concrete must be a minimum of 3 days old.
- The concrete must be clean and rough. All oil, dirt, debris, paint and unsound concrete must be removed. The surface must be prepared mechanically using a scrabber, brush hammer, shot blast or scarifier which will give a surface profile of a minimum 1/8" (# mm) and expose the large aggregate of the concrete.
- The final step is cleaning should be the complete removal of all residue with a vacuum cleaner or pressure washing. 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.
- After the surface has been prepared, prime all area with either a slurry coat of ShaliSBR Latex or an epoxy bonding agent such as ShaliBond Concrete. The primer bonding agent must be ordered separately.

- Edges should be saw cut 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 such as ShaliBond Concrete or ShaliPrime Zn R. Remove all loose rust and scaling, preferably by sandblasting to white metal prior to coating the rebar.
- For repair sections generally deeper than 100 mm it may be necessary to mix the **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 kg pea gravel per bag of **ShaliFix MC**.
- Small quantities may be mixed with a drill and "jiffy" mixer. Use a paddle type mortar mixer for large jobs. All materials should be in the proper temperature range of 15 ^{O}C – 32 ^{O}C.
- Add the appropriate amount of water for the batch size and then add the dry product. Mix a minimum of three minutes.
- If pea gravel is to be added, do so now and mix an additional 2-3 minutes. The mixed product should be transported to the repair area and placed immediately.
- Discharge material from mixer and place. For patching with a trowel, come –a-long, or square tipped shovel to a thickness that matches the surrounding concrete.
- Finish to desired texture. On large floor areas, used screed strips as guides in combination with vibratory screeding to level. Compact and finish by hand or machine trowel.
- 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.

Yield

25 kg bag yields 0.0125 m^3 of **ShaliFix MC** when mixed with 3.875 L of water.

Cleaning & Maintenance

Clean tools and equipment with water before the material hardens

Health & Safety

- Use goggles and hand gloves and mask during application.
- Clean hands with warm soap water after application.

Packaging

Available 25 kg bag.

Storage

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

Shelf Life

9 months in original unopened sealed condition.

STP's Businesses

Waterproofing & Insulation
Road Surfacing
Pipeline Coating
Protective / Anti-Corrosive Coating
GARA (Grouts & Admixtures)
Sealant & Additives
Repairs & Rehabilitation
Epoxy Flooring
Other Products