



MC 100

High Performance Cementitious
Repair Micro Concrete

Pack Size
30Kg

TDS Technical Data Sheet



Description

CLI MC 100 is a versatile, single-component patching and repair compound designed for a wide range of repair projects. This high-strength material only requires the addition of water and offers an extended working time for easy placement. With a similar appearance to concrete, CLI MC 100 is ideal for use as a topping, patching mortar, or repair material on horizontal surfaces.

Advantages

CLI MC 100 can be used as a pumpable or pourable repair micro concrete in situations where access is restricted. Its highly fluid nature allows for placement without the need for vibration. The product compensates for shrinkage through expansion and is premixed, ready for immediate use. CLI MC 100 provides long working time, high strength, low permeability, and is completely chloride-free.

Applications

CLI MC 100 is suitable for a variety of applications including parking decks, floor toppings, joint repairs, equipment bases, pedestals, and pavements.

Application Methodology

For new concrete, ensure a minimum curing period of 28 days if an epoxy adhesive will be used for topping. If a slurry bond coat is used, the concrete must be at least 3 days old. The concrete surface must be clean, rough, and free from oil, dirt, debris, paint, and unsound concrete. Surface preparation should involve mechanical methods such as scrubbing, brush hammering, shot blasting, or scarification to achieve a surface profile of at least 3 mm and expose the large aggregate of the concrete.

The final cleaning step should involve the complete removal of all residue with a vacuum cleaner or pressure washing. The concrete must have an open surface texture with all curing compounds and sealers removed. Several hours before placement, saturate the concrete substrates with clean water, and remove any standing water. Alternatively, a bonding system can be used.

After surface preparation, prime all areas with a slurry coat of CLI Cretebond or an epoxy bonding agent like AT 107/ N 18 Primer (ordered separately). Edges should be saw-cut to 6 mm deeper than the topping thickness to provide a locked-in reinforced edge. Moving joints, such as expansion joints, should be brought up through the repair by saw cutting or using a divider strip.

Exposed rebar should be treated with an anti-corrosion coating like Prime Zn 40 after removing all loose rust and scaling, preferably by sandblasting to white metal. For repair sections deeper than 100 mm, it may be necessary to mix CLI MC 100 with properly graded 5 mm to 12 mm silt-free aggregate to minimize temperature rise. Use up to 8 kg of pea gravel per bag.

Small quantities of CLI MC 100 can be mixed with a drill and "jiffy" mixer, while a paddle-type mortar mixer is recommended for larger jobs. Ensure all materials are within the temperature range of 15°C - 32°C. Add the appropriate amount of water for the batch size, then add the dry product, mixing for at least three minutes. If adding pea gravel, mix for an additional 2-3 minutes. Transport the mixed product to the repair area and place it immediately.

Discharge the material from the mixer and place it using a trowel, come-a-long, or square-tipped shovel to achieve a thickness that

matches the surrounding concrete. Finish to the desired texture using screed strips as guides, followed by vibratory screeding. If placed by pump, follow standard concrete pumping practices. For poured formwork, avoid air entrapment by pouring from one side only. Finish the repair material to the desired texture without adding additional water during the finishing process. To prevent surface cracking, cure the floor with a curing compound. 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.

Characteristics

Compressive Strength (Age, MPa):	1 day: 10 MPa 3 days: 30 MPa 7 days: 40 MPa 28 days: 50 MPa
Flexural Strength (28 days, MPa)	: 6 MPa
Physical Appearance:	Cementitious grey powder

Yield

A 25 kg bag yields approximately 0.0125 m³ of CLI MC 100 when mixed with 3.875 liters of water.

Cleaning & Maintenance

Clean all tools immediately after use with Xylene. Do not allow the material to harden.

Health & Safety

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

Storage and Shelf Life

Store in a cool, dry place under a shed, away from heat. The shelf life of CLI MC 100 is 9 months in its original unopened sealed condition.

Conditions of Sale

This product is sold subject to the company's conditions of sale, which are available on request.

Note

The information provided in this datasheet is based on extensive experience and is given in good faith to assist you. Our company policy is one of continuous research and development, so we reserve the right to update this information without prior notice. We guarantee the consistent high quality of our products; however, since we have no control over site conditions or the execution of the work, we accept no liability for any loss or damage that may arise as a result.

Pack Size

30Kg



Data Reliability

All technical data provided in this document are based on laboratory tests. Actual performance may vary due to factors beyond our control.

Regional Compliance

Product specifications may vary based on local regulations. Please refer to the local Product Data Sheet for precise information.

Legal Disclaimer

The information and recommendations regarding the application and end-use of Carbolink products are provided in good faith based on our current knowledge and experience. Due to variations in materials, substrates, and actual site conditions, no warranty of merchantability or fitness for a specific purpose can be inferred. The user must determine the product's suitability for the intended application. Carbolink reserves the right to change the properties of its products. All proprietary rights of third parties must be observed. Orders are subject to our current terms of sale and delivery. Always refer to the most recent local Product Data Sheet, available upon request.