

MICROCONE M90

Micro concrete in RCC repairing works with high workability



Description:

MICROCONE M90 is supplied as a ready to use blend of dry powder, which requires only the site addition of clean water to produce a free-flowing, non-shrink micro concrete for repairing works. The material is based on Portland cements, and fillers, and additives which impart controlled expansion characteristics in the plastic state, while minimizing water demand. The low water requirement ensures high early strength and long-term durability.

Uses:

- For repairs to damaged reinforced concrete elements particularly where access is restricted and where vibration of the placed material is difficult or impossible
- Suitable for various structural strengthening measures such as filling honeycombs and cracks

Advantages:

- Gaseous expansion system compensates for shrinkage and settlement in the plastic state.
- Can be pumped or poured into restricted locations.
- Highly fluid to allow for placement without vibration.
- Pre-packed to overcome site-batched variations.
- Low permeability
- Economical
- Contains no chloride
- Ease of use

Product Standard Compliance:

- DIN 1048 part-5
- BS 6319 pt. 3
- BS 1881 pt.1161 & pt. 122

Company Standard Compliance:



Technical Information:

Properties	Specification
Appearance	Powder
Color	Grey
Compressive strength	>50 N/mm ² @ 1 day >70 N/mm ² @ 7day >90 N/mm ² @ 28 day
Wet Density	2200 to 2500 Kg/m ³

Application Procedure:

Surface Preparation:

- Defective concrete surfaces must be cut back to a sound base than smooth surfaces should be mechanically roughened.
- Corroded reinforcing steel exposed around its full circumference and cleaned to remove all loose scale and corrosion deposits. It is important to clean the steel to a bright condition. Grit-blasting is recommended.
- Immediately prior to placing, any free water should be removed.

Mixing:

- Care should be taken to ensure that MICROCONE M90 is thoroughly mixed in a forced-action mixer of adequate capacity. The quantity water required will generally be between 3.75 to 3.8 liters per 25 kg bag of MICROCONE M90.
- Slurry tight form work that should not deform or leak when subjected to hydraulic pressure imposed by the micro concrete will be fabricated and erected where the material is gravityfed.

Placing:

- The mixed material should be placed immediately. If placed by pump, standard concrete pumping practice should be followed. The pump and pipeline must be primed with cement slurry. Pumping should be commenced immediately after priming. If poured in the form work, avoid air entrapment by pouring from one side only.

Low temperature working:

- In cold conditions down to 15°C, the use of warm water (up to 30°C) is advisable to accelerate strength development. Normal precautions for working with cementitious materials in winter should be adopted.

High temperature working:

- At ambient temperature above 35°C the material should be stored in the shade and cold water used for mixing.

Curing:

As MICROCONE M90 is a cement-based repair material, it must be cured immediately after stripping the formwork in accordance with good concrete practice.

Packaging:

MICROCONE M90 is supplied in 25 kg bags.

Storage & Shelf life:

MICROCONE M90 has a shelf life of 6 months if kept in a dry store in the original, unopened bags. If stored at high temperatures or high humidity conditions the shelf life may be reduced.

Health & Safety:

MICROCONE M90 contains cement powders which, when mixed with water or upon becoming damp, release alkalis which can be harmful to the skin. During use, avoid inhalation of the dust and contact with skin or eyes. Wear suitable protective clothing i.e, Mask - eye protection, gloves and respiratory equipment.

In case of contact with the skin, rinse with plenty of clean water, then cleanse thoroughly with soap and water.

In case of contact with eyes, rinse immediately with plenty of clean water and seek medical advice. If swallowed seek medical attention immediately - do not induce vomiting.




Fire:

MICROCONE M90 is non- flammable.

Value Base:

All technical data stated in this product datasheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

	It is the practice of increasing efficiency with which buildings use resources- energy, water and materials-while reducing building impacts on human health and the environment.
	ISO 45001 is the world's international standard for occupational health and safety, issued to protect employees and visitors from work-related accidents and diseases.
	ISO 9001:2015 is a globally recognized standard for quality management systems (QMS). It helps organizations of all sizes and sectors to: Improve performance, Meet customer expectations, Demonstrate commitment to quality, and Identify and improve processes that lack consistency.
	ISO 14001 is the internationally recognized standard for environmental management systems (EMS). It provides a framework for organizations to design and implement an EMS, and continually improve their environmental performance

	This symbol is used to identify Redwop products which give off a low level of volatile organic compounds(VOC) as certified by GEV (Gemeinschaft Emissionskontrollierte Verlegewerkstoffe, Klebstoffe und Bauprodukte e.V.), an international organisation for controlling the level of emissions from products used for floors.
	Our Commitment To The Environment Redwop products assist Project Designers and Contractors create innovative LEED (The Leadership in Energy and Environmental Design) certified projects, in compliance with the U.S. Green Building Council.
	ISO/IEC 17025 enables laboratories to demonstrate that they operate competently and generate valid results, thereby promoting confidence in their work both nationally and around the world.

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