MICROCONE RGL

Micro concrete in RCC repairing works with high workability

Description:

MICROCONE RGL 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. 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 ASTM C157-93

Company Standard Compliance:

Technical Information:

Properties	Specification
Appearance	Powder
Color	Grey
Compressive strength	>20 N/mm² @ 1 day >35N/mm² @ 7day >45N/mm² @ 28 day
Wet Density	2100 to 2150 Kg/m³

Application Procedure:

- Defective concrete surfaces must be cut back to a sound base than smooth surfaces should be mechanically roughened.
- Corroded reinforcing steel should be 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.
- Care should be taken to ensure that MICROCONE RGL is thoroughly mixed in a forced-action mixer of adequate capacity. The quantity water required will

- generally be between 4.5 to 4.75 liters per 25 kg bag of MICROCONE RGL.
- 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 gravity fed.

Note:
Maximum 40% clean Aggregate (< 5mm size) or clean Sand can be used.

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

Packaging:
MICROCONE RGL is supplied in 25 kg bags.

Storage & Shelf-life:
MICROCONE RGL has a shelf life of 12 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 RGL contains cement powders which, during normal use, have no harmful effect on dry skin. However, when MICROCONE RGL is mixed, or becomes damp, alkali is released which can be harmful to the skin. During use, avoid inhalation of dust and contact with skin and eyes. Wear suitable gloves, eye protection and dust masks. The use of barrier creams is recommended. In case of contact with skin, wash with clean 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 RGL is non-flammable.

Indian Green Building Council

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.

REDWOP CHEMICALS PVT. LTD.
Head Office Regd. Office: 2nd Floor, Pearlplaza Complex, Nr. GT Sheth School, 150 ft. Ring Road, Rajkot Gujarat 360005 India
info.redwop@gmail.com http://redwop.net 9724655551 ☎ 0281 2576664