

ReArm Crete MC(M)

(Formerly known as MYK CRETE MC(M))

General purpose, non-shrink, cementitious micro concrete Grout 9Economical)



TECHNICAL DATA SHEET

Product Description

ReArm Crete MC(M) is a ready to use preblended pourable polymer modified single component dry Cementitious non shrink, repair concrete powder material with selected cement, aggregate and other chemicals. Recommended water and coarse aggregate to be added at site as per requirement.

This is specially designed for repair to damaged reinforced concrete. It is suitable for use in wide range of repairs, pavements, columns, beams etc.

Uses

Structural strengthening measures such as filling honeycombs. Column, beam, slabs etc. it is also recommended for grouting of large gaps.

Features and Benefits

- Can be pumped or poured into restricted locations.
- Highly fluid to allow for placement without vibration.
- Pre-packed for better result on site.
- Expansion system compensates for shrinkage settlement in plastic stage.
- Low permeability
- Economical
- Contains no chlorides.
- Easy to use and Mix

Application Methodology

Step no 1: Surface Preparation:

Defective concrete surface must be cut back to a sound base. Smooth surfaces should be mechanically abraded. Corroded reinforcing steel should be exposed around its full circumference and cleaned to remove all scale. One coat of zinc rich epoxy Primer (FloArm Coat ZP) should be applied on the reinforcing steel. If any discontinuity in the applied film is noticed, one more coat has to be applied. Prior to placing, the concrete substrates should be saturated with clean water, the standing water on the surface if any shall be removed. On the well prepared repaired substrate apply slow setting bonding agent ReArm Bond EBA to enhance the bonding properties. It shall be applied only on dry substrate

Note: If the repair section depth is 100mm or more recommend to replace with 10mm graded washed cleaned air dry aggregates. Can be replaced with 25% to 50%

Step no 2: Product Mixing:

W/P Ratio : 0.18 (4 .50 liters per 25 Kgs bag)

For better results mix the material mechanically using paddle stirrer as per the design recommended by MYK Arment. Mix continuously for 5 minutes, ensuring a smooth even consistency of the mix. To enable the grouting operation continuously it is essential that sufficient man power and mixing capacity are available at the site.

Form Work:

The form work constructed should be leak proof. This can be achieved by using suitable material or by using foam rubber strip or mastic sealant beneath the constructed form work and between joints

The formwork should include drainage outlets for pre-soaking to drain out

Provision must also be made for suitable access points to pour or pump the mixed micro concrete

Placing:

Standard concrete pumping practices should be followed if it is placing through pump. The pump and pipeline must be primed with cement slurry and the mixed material shall be placed immediately.

ReArm Crete MC (M)

(Formerly known as MYK CRETE MC (M))

Economical, General purpose, non-shrink, cementitious micro concrete Grout

Low temperature working:

In cold conditions the temperature is down to 15°C, recommend to use warm water which 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 recommended to use cold water for mixing.

Yield:

ReArm Crete MC(M): Approximately 13 liters per 25kg bag.

Curing:

As ReArm Crete MC(M) is a cement based repair material, it must be cured immediately after stripping the formwork in accordance with good concrete practice. In harsh drying condition, the use of Curing Compound sprayed on the surface of the ReArm Crete MC(M) in a continuous film is recommended soon after stripping the form work. Supplementary curing such as wet hessian and/or polythene sheeting must be used.

Specification clauses: ReArm Crete MC(M) is a single component, cement-based material to which only the addition of clean water at the site (and approved graded coarse aggregates where specified) shall be added. The repair grout in the flowable consistency should achieve a compressive strength of not less than 20N/mm² after 24 hours at 30°C. Most importantly, the cured micro concrete shall contain no metallic aggregates, or chlorides and shall be shrinkage compensated in the plastic state. The micro concrete shall have a coefficient of thermal expansion similar to that of the host concrete.



TECHNICAL DATA SHEET

Design Criteria

ReArm Crete MC(M) can be applied in sections up to 100mm depth. For larger sections, the addition of approved aggregates may be required. This will depend on the specific configuration of the repair location. Consult the local MYK Arment office for further information.

Technical Data

Fresh wet density 2150 - 2250 kg/m³
(Mixed density @27°C)

Compressive strength:

Age Days	Compressive Strength: (ASTM C 109)
Flowable W/P 0.18	
1 Day	>10N/mm ²
3 Days	>20N/mm ²
7 Days	>30N/mm ²
28 Days	>40N/mm ²

Note: Size of the cubes used 70.6mm*70.6mm*70.6mm, tested at 30°C.

Flexural Strength (ASTM C 348)	3.5 N/mm ²
Tensile Strength @ 28 days 30°C (ASTM C 307)	3 N/mm ²
Controlled Expansion: (in the plastic state) (ASTM C 827)	0 – 2%



ReArm Crete MC (M)

(Formerly known as MYK CRETE MC (M))

Economical, General purpose, non-shrink, cementitious micro concrete Grout

Packaging

ReArm Crete MC(M) is available in 25 kg bags.

Storage and Shelf Life

ReArm Crete MC(M) has a shelf life of 6 months if kept in a dry store in the original, unopened bags. If stored at high temperatures and/or high humidity conditions the shelf life may be reduced.

Health & Safety

ReArm Crete MC(M) contains cement powders which, during normal use, have no harmful effect on dry skin. However, when ReArm Crete MC(M) 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. ReArm Crete MC(M) is non-flammable.



TECHNICAL DATA SHEET

Product Categories Available



Legal Note

The information, and, in particular, the recommendations relating to the application and end-use of MYK Arment products, are given in good faith based on MYK Arment current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with MYK Arment's recommendations. In practice, the difference in materials, substrates and actual site conditions are such that no warranty in respect of merchant ability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application & purpose. MYK Arment reserves the right to change the properties of its products. the proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local product data sheet for the product concerned, copies of which will be supplied on request.

MYK Arment Private Limited
8-2-703/A, 3rd Floor, Leela Gopal Towers, Road No. 12, Banjara Hills, Hyderabad -500 034
Tel: +91 40 6816 0001 | Email: myk@mykarment.com | www.mykarment.com