DUCRETE MC

DUCRETE MC is a type of micro concrete that possesses strong durability and minimal shrinkage. It can easily flow without any obstruction and only necessitates the addition of water on-site to form a smooth concrete mixture. The components of DUCRETE MC include Portland cement, graded aggregates, and specific fillers, which are applied and cured according to the specified guidelines. By utilizing DUCRETE MC, one can achieve a micro concrete that flows freely without any issues of bleeding or separation. Additionally, DUCRETE MC maintains favorable handling qualities when mixed with water.

USES

- DUCRETE MC is specifically designed to be highly effective in situations where applying concrete by hand or with a trowel is challenging, making it an excellent choice for both vertical and horizon-tal concrete repairs. It is particularly suitable for tasks such as pile head reprofiling and filling general voids. The product is capable of accommodating large volume repairs ranging from 40mm to 150mm. Thanks to its rheoplastic properties, DUCRETE MC can also be used as a grout and poured into various applications.

ADVANTAGES

- Provides compensation for shrinkage.
- Exhibits excellent adherence to concrete surfaces even without
- using a primer. Reduces the risk of alkali silica reaction due to the presence of low alkali cement.
- Eliminates the formation of honeycombing due to its self-compacting properties.
- Efficiently removes air voids without requiring vibration.

APPLICATION

PREPARATION

To prepare the concrete substrate for repair, it is essential to ensure its soundness, cleanliness, and freedom from contaminants. Rigid and tightly sealed formwork should be used to prevent material loss and water absorption. To establish a well-defined repair area, saw cutting or cutting back the edges to a depth of at least 10mm is recommended, preventing feather edging and promoting a square edge for optimal adhesion. Removing unsound concrete using light pneumatic chipping tools or a chisel hammer is necessary, along with eliminating oil, grease, and any corroded steel through thorough cleaning. By prioritizing meticulous surface preparation, a solid foundation is created for the repair process, facilitating effective adhesion and durability of the repair material.

- Before applying DUCRETE MC it is advised to prepare the substrate as follows: first, moisten the surface with water for several hours. This helps to prevent rapid absorption of moisture from the repair material, allowing for better workability and curing. Additionally, immediately before applying DUCRETE MC, it is recommended to prime the substrate with DUBOND SBR. Priming with DUBOND SBR enhances the adhesion between the substrate and the repair material, promoting a strong and durable bond.

TECHNICAL SPECIFICATIONS

Property	Value
Standard Confirms to	ASTM C 387:77A Din 1048 & DIN 1045 Class B
Color and Appearance	1.65
Compressive Strength @ 28Days	> 60 N/mm^2
Flexural Strength @28Days	> 9 N/mm^2
Tensile Strength @ 28Days	> 5 N/mm^2
Bond Strength @28Days	< 26N/mm^2
Water Absorption	<2%
Pot Life @ 25°C	30 min
Recommended Application thickness	10-50mm/ layer

MIXING

- Prepare a suitable-sized drum and use an approved spiral paddle in a heavy-duty drill operating at a slow speed of 400/500rpm. For each bag of DUCRETE MC (25kg), you will need approximately 2.75 to 3.15 liters of clean potable water. Begin by pouring the required amount of water into the mixer, and then add the DUCRETE MC powder. Mix the components together for approximately 3 minutes to achieve a homogeneous consistency in the mixture. This thorough mixing process ensures the optimal performance and uniformity of the DUCRETE MC material.

PLACING

Once the DUCRETE MC is properly mixed, it should be promptly placed within 30 minutes to ensure optimal workability. The mixed material can be easily poured or pumped onto the repair area, filling the cavity to the desired level. No additional vibration is needed. As the concrete begins to slightly harden, the surface can be finished to achieve the desired texture. This allows for customization and ensures a visually appealing and functional end result.

COVERAGE AND YIELD

12.8 liter per 25Kg/Bag

CURING

Start curing **DUCRETE** MC immediately after finishing and formwork is stripped with clean water or **DUCRETE MC**

Note:
Not recommended to be used @ temperature under 5°c.
Should not mix with any other product.
Ponding method of curing is not suitable.

PACKING AND STORAGE

DUCRETE MC is conveniently packaged in 25 kg and 15kg bags. To maintain its quality, it is crucial to store **DUCRETE** MC in cool, dry, and shaded warehouses. When stored under appropriate conditions, such as being covered and protected from direct sunlight and extreme temperatures, the shelf life of **DUCRETE** MC is 12 months. In regions with extreme tropical climates, it is necessary to store the product in a cooled environment to prevent any adverse effects. Excessive humidity and prolonged exposure to UV rays can lead to a reduction in the shelf life of **DUCRETE** MC. Therefore, proper storage conditions are essential for preserving the product's quality and performance.

SAFETY

DUCRETE MC is formulated without any hazardous substances. However, as with all construction chemical products, it is important to exercise caution. When handling **DUCRETE** MC, it is recommended to wear protective clothing such as gloves and goggles. For maximum safety, wearing a long sleeve overall, safety shoes, and a face mask is also advised. After each use, reseal the containers and store the product according to the safety instructions on the label. In case of contact with the skin or eyes, immediately rinse with fresh water. If any of the product is accidentally swallowed, do not induce vomiting, but seek immediate medical assistance. For more detailed information, please consult the Material Safety Data Sheet (MSDS) provided.

CTRT By Duproof:

Duproof

PRODUCT CONFORMITY

IN-COUNTRY VALUE

PEERS QUALITY ASSURANCE LTD

UKAS MANAGEMENT SYSTEMS

ISO 9001:2015 9940

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