

ReArm Crete RM-HS

(Formerly known as MYK CRETE RN HS)

Polymer modified one component repair mortar for hand and machine application



TECHNICAL DATA SHEET

Product Description

ReArm CRETE RM HS is a pre-batched one component polymer modified repair mortar.

Uses

Repair of spalling and damaged concrete in buildings, bridges, infrastructure and superstructure works

Features and Benefits

- Easy to use (only to be mixed with water)
- Structural and cosmetic repairs
- Can be applied up to 40 mm thick in vertical layers
- Good adhesion
- Suitable for hand and machine application by dry spray application
- Fiber reinforced

Application Methodology

Application Instruction:

Consumption ~2100 kg/m³ At water: powder ratio 0.14

Substrate Quality:

Concrete:

The concrete shall be free from dust, loose or friable material, surface contamination or other materials which reduce bond or prevent suction or wetting by repair materials.

Steel Reinforcement:

Rust, mild scale, mortar and concrete residues, dust and other loose or friable material and other contamination which reduces bond shall be removed.

Substrate Preparation Concrete:

Delaminated, weak, damaged and deteriorated concrete and where necessary sound concrete shall be removed by suitable mechanical or very high pressure water-blasting techniques (up to 110 MPa). Tie wire fragments, nails and other metal debris embedded in the concrete should be removed.

The edges around areas of concrete removal should be angle cut at a minimum of 90° to avoid undercutting and a maximum angle of 135° (with the top surface of the adjacent sound concrete), to reduce the possibility of de-bonding. They should then be roughened sufficiently to provide a mechanical key between the original material and ReArm CRETE RM HS repair mortar. Ensure sufficient concrete is removed from around embedded or exposed steel reinforcement to allow application of the anti corrosion coating when required and adequate compaction of the repair material.

Steel reinforcement:

Surfaces should be prepared using abrasive blast cleaning techniques or high pressure water-blasting techniques (up to 60 MPa) or by applying ReArm Rust R to remove rust (Refer to the relevant Product Data Sheet

Where exposed reinforcement is contaminated with chlorides or other material which may cause corrosion, the reinforcement should also be cleaned by low pressure water-blasting (up to 18 Mpa)

Bonding primer:

On a well prepared and roughened substrate a bonding primer is generally not required. When a bonding primer is not required pre-dampen the surface to a saturated surface dry condition. The surface should not be allowed to dry before application of the concrete repair mortar. The surface should have a darkened matt appearance without glistening and the surface should not have free-standing water.

When a bonding primer is necessary, apply ReArm SBR 45/ ReArm Bond EBA/ bond Slurry coat-Cempo - (Refer to the relevant Product Data Sheet). Pressed well on to the substrate. In all cases, subsequent application of the repair mortar should be done 'wet on wet'. Measured 'pull off' values - Structural Repairs minimum value 1.2 - 1.5 MPa; Non Structural repairs minimum value 0.7 MPa (Dependent on the strength of the concrete being repaired).



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Application Conditions / Limitations

Substrate Temperature- +5°C min. / +40°C max.
Ambient Temperature- +5°C min. / +40°C max.

Application Instructions:

Mixing-

Water : Powder = 0.14 by weight (3.500 l water per bag) Mixing Time- 3 minutes minimum

Mixing Tools- Mix powder mechanically in the correct ratio with water with low speed (max. 500 rpm) electric drill to avoid entraining too much air. In case of 2 or more bags at once use forced action mixer.

Put around 80 to 90% of required water in the mixing drum, followed by ReArm CRETE RM HS and then add the balance water. Don't use concrete tilting mixer. Do not mix more material which cannot be used within Pot Life. DO NOT ADD EXTRA WATER.

Application Method / Tools:

ReArm CRETE RM HS can be applied either manually using traditional techniques or mechanically using dry spray equipment. When a bonding primer is used, ensure it is still 'tacky' when the repair material is pressed on ('wet on wet' technique). When applied manually, press the repair mortar firmly with a trowel, pushing it well on to the substrate. Finishing with both hand and machine application should be done as soon as mortar has started to stiffen. Cleaning of Tools Clean all tools and application equipment with water immediately after use. Hardened material can only be removed mechanically.

Pot life- +20°C : 30 minutes

Notes on Application/Limitations

Avoid application in direct sun and/or strong winds. Do not add water over recommended dosage. Do not add additional water during the surface finishing as this will cause discoloration and cracking. Cure freshly applied material correctly and protect from freezing etc.

Curing Details

Curing Treatment:- Protect the fresh mortar from excess evaporation from the surface and early dehydration using the relevant curing method



TECHNICAL DATA SHEET

Technical Data:

Product	ReArm CRETE RM HS meets to BS EN 1504-3,R4 requirements
Chemical Base-	Portland cement, polymer redispersable powder, selected aggregates and additives.
Bluk Density- ~	1.3 kg/l at 27 °C ,
Grading-	2.36 mm down
Mechanical/Physical Properties:	
Compressive Strength: Ambient temperature: +30°C (According to ASTM C109, 70 mm Cube)	
1 day	≥15 N/mm ² ,
7 day	≥45 N/mm ²
28 day	≥60 N/mm ²
Flexural Strength: Ambient temperature: +30°C (According to ASTM C293-79)	
28 day	9 N/mm

Packaging

ReArm Crete RM HS is available in 25 kg bags.

Storage and Shelf Life

ReArm Crete RM HS has a shelf life of 6 months from date of production if stored properly in undamaged original sealed packaging, in dry conditions at temperatures between +5°C and +40°C.

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Health & Safety

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data..

Product Categories Available



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.

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