



Emckrete Type A

Ready – to use, free flow, non-shrink micro-concrete

Product Properties

- High Bonding Strength
- Non-Shrink
- Good Flexural Strength
- Chloride free
- Labor saving
- Fire Resistant
- Economical

Areas of Application

- As Micro Concrete
- Repair of honeycombed concrete
- Repair of spalled concrete
- Repair of damaged structures
- Mortar for precast connections
- Repair of pre-fabricated units
- Bearing / Foundation pads
- Grouting

Application Notes

General

Emckrete Type A is a ready to use cement based Polymer Modified micro concrete for use in repair systems. **Emckrete Type A** is a non-shrink free-flow, micro concrete which can be used for repairs, especially when thicker overhead repairs are desired. **Emckrete Type A** can be poured into the erected formworks and bonds thoroughly to the existing surfaces on account of its polymer content.

Advantages:

Emckrete Type A is specially formulated to meet the requirements described above, owing to the selection of particularly suitable polymer binders and chosen aggregates. It guarantees a permanent reliable connection and bond between old substrate and new material. **Emckrete Type A** distinguishes itself particularly by the properties like good pourability and flowability despite a very small amount of water added and high initial and final strengths.

Also because of low air entrainment, **Emckrete Type A** forms a very dense grout. For fully flowable consistency, water can be increased to 5 liters for a sack of 30 Kgs. For thickness of 10 cm or more, it should be mixed with quartz aggregate of suitable graded grain size (e.g. 4 to 8 mm upto 20% by weight). The material possesses excellent bonding strength, which prevents de-bonding from concrete and wall faces. It is non-shrink and has high dimensional stability. The change of volume and shape after loading is negligible.

Instruction for use

All kinds of contaminants, such as dust etc must be removed from the surface to be prepared. The concrete substrate must be thoroughly wetted. After the depth has been adjusted, a tight shuttering is made before the micro concrete is placed.

For the Normal grouting work of thickness upto 5 cm the suitable mix is: 1 sack = 30 Kg. **Emckrete Type A** + 4.2 to 4.5 liters of water = 15 liters of ready compound. For Mixing take the water in the mixing bucket and add the **Emckrete Type A** Powder to it and not vice-versa.

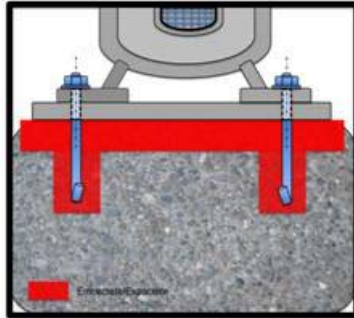
Air pockets are to be avoided. Pour **Emckrete Type A** from one side only. **Emckrete Type A** can also be placed by means of suitable grout pump.

While placing **Emckrete Type A** and upto approx. 2 hours thereafter, strong vibrations of any kind are to be avoided. Never mix more **Emckrete Type A** than can be placed within a period of 30 minutes. High temperatures accelerate the hardening process while low temperatures have a retarding effect. If the temperature is below 5°C, make sure that the ground where the mix is to be placed as well as the contact areas are heated to a temperature of +20°C.

Exposed surfaces of **Emckrete Type A** should be cured like concrete in order to avoid premature evaporation of water. It is advisable to spray **Emcoril** range of curing compounds on the newly placed micro concrete. As with all cementitious materials, rain or similar can cause slight surface blemishes.

Further Instructions / Precautions

Use in Machine Foundations



Before and After Repair



Technical Data For Emcecrete Type A

Characteristic	Unit	Value	Comments
Density	g/cm ³	1.98	± 0.01
Pot life	Minutes	30	
Minimum application temperature	°C	+50°C	
Mixing ratio	% by wt of Cement	13 % - 14%	Water content may be Slightly adjusted for increased of reduced flow.
Compressive Strength	Kg / cm ²	28 day: 600	Approx. Value. Test as per DIN on 40 x 40 x 160 mm Prisms
Flexural Strength	Kg / cm ²	28 day: 98	Approx. Value. Test as per DIN on 40 x 40 x 160 mm Prisms
Pull out Bond Strength	Kg / cm ²	12mm Φ rods: 6.6 28mmΦ rods: 3.4	Failure in steel Failure in concrete
Maximum processing time	Minutes	30	
Change in volume	%	1.84	After 1,7 & 28 days

Product Characteristics for Emcecrete Type A

Type of Product	Micro-Concrete / Grout
Form	Powder
Colour	Grey
Shelf Life	6 months from the date of manufacture
Delivery	30 Kg Sacks
Storage	In Unopened Packaging. Protect from Rain, Direct Sunlight, Heat and Frost
Disposal	Empty packs completely and dispose off carefully to protect our Environment

Note: The information on this data sheet is based on our experiences and correct to the best of our knowledge. It is, however, not binding. It has to be adjusted to the individual structure, application purpose and especially to local conditions. Our data refers to the accepted engineering rules, which have to be observed during application. This provided we are liable for the correctness of this data within the scope of our terms and conditions of sale-delivery-and-service. Recommendations of our employees, which may differ from the data contained in our information sheets, are only binding if given in written form. The accepted engineering rules must be observed at all times. E. & O.E.

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