

Roka Micro Crete

Free Flowing Micro Concrete for Grouting and Large Repairs

Roka Micro Crete is a single component, cementitious, free flowing micro concrete with a maximum aggregate size of 10mm.

Uses & Advantages:

- Single component.
- Economical.
- Excellent adhesion.
- Rapid strength development.
- Compatible with the properties of typical concrete.
- Shrinkage compensated.
- High resistance to freeze/thaw cycling.

Fields of Application:

- Structural repair of deteriorated concrete.
- Ideal for casting sections where volumes are large for conventional grouts.
- Small areas that are inaccessible for normal concrete applications.
- Suitable for base plate grouting where thickness exceeds 75 mm.















Technical Information:

Color	Grey Powder
Chemical Base	Mixture of Portland cement and special
	aggregates
Mixing Ratio	8.75 – 9.5% water by weight of powder
Density	~2400 kg/m³ at 25°C
Pot Life	Up to 3 hours at 25°C
Yield	~18 liters per 40 kg bag
Thickness	Minimum 50mm per pour
	Maximum: 500mm per pour
Modulus of Elasticity	~ 33000 N/mm²
Compressive Strength	1 Day: 35 N/mm ²
	7 Days: 50 N/mm²
	28 Days: 65 N/mm²
Bond Pull Off Strength	~3 (28 days / at 25°C)
Co-efficient of Thermal Expansion	11 x 10 ⁻⁶ m/m per ^o C
Flexural Strength	8 – 10 N/mm²
Shelf life	12 months from date of production
Storage	Store in a dry, shaded area, away from sunlight.













Surface Preparation:

Before the application, the surface must be sound, clean, and free from any oil, laitance, grease and any other contaminants. Absorbent surfaces must be fully saturated. The application of a suitable bonding agent like Roka Crete Bond or Roka Latex will improve adhesion on large areas or where particularly dense concrete substrates are involved.

Steel reinforcements to be embedded must be from rust, scale and other contaminants and should be treated with a suitable protective coating like Roka ZR Primer.

For any information specific information about Roka Crete Bond, Roka Latex, and Roka ZR Primer, check their respective technical data sheets.

Mixing:

Empty the full contents of the bag into a suitable mixture and dry mix for 3 minutes before adding any water. Add 3.5 to 3.75 liters of water per 40 kg bag and mix using a slow speed drill with a clean, rust-free mixing paddle.

For best results, it is recommended to add 3.0 to 3.25 liters of water first and mix for at least 3 minutes or until a uniform, free flowing consistency is achieved. Then add the remaining water and mix for an additional 2 minutes.

Let the mixed material stand for 2 – 3 minutes to allow the entrapped air to escape.













Application:

Before the application, the surface should be thoroughly dampened with water. Maintain sufficient hydrostatic head to keep the product flowing. It is important to ensure that the air is allowed to escape during grouting. Protect the application from rain until the initial set has been achieved.

Curing:

Exposed surfaces must be treated with a suitable curing compound like Roka Cure WB, or any other approved curing methods like polyethylene sheeting or wet hessian. Do not commence fogging until the final set has been reached.

Remarks:

- Ensure the framework is secure and watertight to prevent movement and leaking during placing and curing.
- Use chilled water for mixing to keep grout temperature below 30°C.
- In hot weather, base plates and foundations must be shaded from direct sunlight.

Cleaning:

All the tools and equipment must be cleaned with clean water immediately after use.

Hardened material can only be removed mechanically.













Important Note:

The information provided in this data sheet is based on ongoing development efforts and extensive field experience. While we strive to ensure the accuracy and reliability of the information, we cannot assume responsibility for any work performed using our materials, as we have no control over application methods, site conditions, and other factors. Due to ongoing research and development in our laboratories, we recommend that customers verify that this data sheet has not been replaced by a more recent publication.

All products are sold under our standard conditions of sale, which are available upon request. Any field services offered do not imply supervisory responsibility. For further information, please contact your local representative of Roka Chem Solutions.









