



Buildcrete-MC (High Performance, Self Compacting Micro-concrete)

Buildcrete-MC is a high performance, self compacting micro-concrete, designed to repair or replace section of concrete. It is designed for large volume repairs in excess of 50 mm deep by pour or pump application. It is shrinkage compensated and provides high early and ultimate strengths. It can be applied to sections up to 180 mm thickness and greater thickness can be achieved in multiple layers.

Usage: Buildcrete-MC is basically designed to use for larger volume concrete repairs where hand placing is impractical. It can be used in repairs of columns, ring beams, concrete walls, soffits, car parks, balconies and bridge repair, replacement of beams and support joints and many more applications.

Advantages: Can be poured or pumped, free flowing into shuttering and formwork to foam profiles, fluidity ensures coverage and compaction around reinforcing steel, shrinkage compensated to ensure long-term stability, high early strength development, self compacting formulation.

Directions for use:

Surface Preparation: The concrete surface should be sound, and free from grease, laitance, etc. Chisel off the cracks & loose concretes, expose reinforcement steel as necessary and apply Zinc Rich Primer on the steel. Erect shuttering and test for water tightness. A suitable formwork must be installed and constructed respecting good quality concreting practice to avoid any loss of Buildcrete-MC during the pouring operation.

Mixing: Use a forced action mixer by adding 6 litre of fresh clean water to a 40 kg bag of Buildcrete-MC. All materials should be in the proper temperature range of 16°C to 32°C. Do not mix more material than can be placed within 20 minutes. Add the appropriate amount of water for the batch size and then add Buildcrete-MC. Mix for 3-5 minutes quickly and transport to the repair area and pumped or placed immediately.

Application: Pour or pump mixed Buildcrete-MC into shuttering in a continuous operation taking care not to introduce entrapped air voids.

Curing:

When the material is set, cure the entire exposed surface with water or protect the exposed surface with wet burlap and hessian cloth. Keep the area moist for a minimum of 48 hours.

Workability:

Working time of Buildcrete-MC is 45 minutes at 25°C, after 5 minutes standing time.

Coverage:

40 kg bag will yield approximately 20 litres, and 50 bags of Buildcrete-MC will yield 1m³.

Composition:

Buildcrete-MC is composed of graded silica sand and aggregates, Portland cement, flow improvement

compounds, shrinkage compensating polymer additives and admixtures.

Typical Properties:

Compressive Strength	: 45.0 N/mm ² at 7 days
(ASTM C 109: 99)	: 50.0 N/mm ² at 28 days
Flexural Strength	: 6.0 N/mm ² at 7 days
(ASTM C 580)	: 7.0 N/mm ² at 28 days
Tensile Strength	: ≥ 3 at 7 days
(ASTM C 307)	: ≥ 4.5 at 28 days

Appearance: Grey Granular Powder

Pack Size: 40 kg plastic sacks

Shelf Life & Storage:

12 months if stored properly in original unopened packing in a cool, dry, ventilated conditions away from direct sunlight.

Technical support:

GMC offers comprehensive technical support service & specification assistance in locations to our channel partners, end users, and contractors.

Quality & Care:

All the products manufactured and originated from Gulf Minerals and Chemicals, UAE facility are independently tested and certified under a GMC Management System to conform to the requirements of the quality, environmental, health & safety Standards.

Code Practice:

Concrete repairing should be carried out in accordance with up-to-date relevant British Standard or BS Codes of Practice, details of which can be obtained from British Standard Institute, British Standard House, 2 Park Street, London W.1.



BUILD PLUS
CONSTRUCTION CHEMICALS

Health & Safety Precautions:

Buildcrete-MC contains cement powders which, when mixed or become damp, release alkalis which can be harmful to the skin. During use, avoid inhalation of dust and contact with skin and eyes. Wear suitable protective clothing, gloves, eye protection and respiratory protective equipment. In case of contact with skin, rinse with plenty of clean water, then cleanse with soap and water.

----- Buildcrete-MC -----



Manufactured in the U.A.E by:
Gulf Minerals and Chemicals L.L.C
P.O. Box: 22323, Sharjah, U.A.E
www.buildplus-gmc.com

Build Plus Construction Chemicals GmbH
Koblenzer Strabe 33
56321 Rhens , Germany
info@buildplus-gmc.com