DR. FIXIT MICRO CONCRETE

Flowable Mortar for repairs to damaged reinforced concrete members

Dr. Fixit Micro Concrete is supplied as a ready to use dry powder which requires only addition of clean water at site to produce a free flowing non shrink repair micro concrete. This is a cementitious material, with additives, which impart controlled expansion characteristics in the plastic state while minimising water demand. This is specially designed for repairs to damaged reinforced concrete elements, particularly where area is restricted and where vibration of the placed material is difficult or impossible.

AREAS OF APPLICATION:
- Repair to damaged reinforced concrete elements like beams, columns, wall etc., where access is restricted and compaction is not possible.
- For Jacketing of RCC columns to increase load taking capacity (strengthening of a vertical member)

FEATURES & BENEFITS:
- Can be pumped or poured into restricted locations
- Flowable mortar hence does not require compaction
- Gaseous expansion system compensates for shrinkage and settlement in the plastic state
- Develops high initial and ultimate final strengths
- Offers excellent resistance to moisture ingress
- Makes repaired sections highly durable
- Can be applied at 100 mm thickness at one stroke
- Contains no chloride admixture
- Rapid strength gain to facilitate early reinstatement

METHOD OF APPLICATION:
- Clean the surface and remove loose concrete, any dust, oil, paint grease etc.,
- Expose fully any corroded steel in the repair area and remove all scale and corrosion deposits. Shot blasting is highly recommended
- Apply Dr. Fixit Epoxy Zinc Primer over the cleaned re-bars and allow to dry before continuing
- Saturate the substrate with water to prevent absorption of water from the mixed material of Dr. Fixit Micro Concrete
- For a dry substrate, it should be primed by applying one coat of Dr. Fixit Epoxy Bonding Agent.
- Mix Dr. Fixit Micro Concrete with water (3.75 to 4 litres per 25 kg bag) till homogeneous mix is obtained, at 30°C
- Mixing should be done thoroughly with a forced action mixer of adequate capacity, atleast for 5 minutes
- Pour or pump the mixed Dr. Fixit Micro Concrete into a watertight shuttering in the repaired area, when primer becomes tacky
- Cure the repaired surface for minimum 7 days.

PRECAUTIONS & LIMITATIONS:
- Dr. Fixit Micro Concrete can be applied in section up to 100 mm deep.
- For thickness more than 100 mm, addition of pre-calculated aggregates may be required. Consult local Pidilite office for more details.
- Strictly follow water-powder ratio as specified
- Ensure that the shuttering is 100% watertight
- Ensure full exposure of reinforcement steel
- Consult structural engineer if the diameter of rebar is reduced by more than 20% than original diameter.

TECHNICAL INFORMATION:
- Compressive strength:
  - 100 kg/cm² at 1 day
  - 300 kg/cm² at 3 days
  - 400 kg/cm² at 7 days
  - 500 kg/cm² at 28 days
- Flexural strength:
  - 50 kg/cm² at 28 days
- % water absorption after 24 hrs: 0.45
- Chloride content: Nil
- Depth of carbonation, mm: Passes the Accelerated carbonation test
- 2 hours: Nil
- 4 hours: Nil
- Coefficient of thermal expansion: 10 - 12 x 10⁻⁶ /°C
- Yield: 13.5 liters
- Coverage: 1.3 sqm per 25 kg pack at 10 mm thickness

PACKING: 25 kg