



# FLOW CRETE

FLOW CRETE is flowable micro concrete suitable for repairing damaged concrete elements. It is also advisable to use where access is restricted and the vibration of placed material is difficult. It's a blend of dry powders, aggregates, additives etc. For larger repairs, FLOW CRETE can be modified by adding 5-12 mm dry aggregate. It is suitable for various structural strengthening measures such as encasement build-ups, jacketing, pile top encapsulation resin system, etc. FLOW CRETE can be applied in sections up to 100 mm deep. For larger areas, the addition of approved aggregates may be required. This will depend on the specific configuration of the repair location.

## RECOMMENDED APPLICATION SUBSTRATE

- Concrete Repairs
- Beams Repairs
- Structural
- Repairs Jacketing
- Columns Repairs

## BENEFITS & KEY FEATURES



PUMPABLE



HIGH STRENGTH



NON-SHRINK



FLOWABLE

## TECHNICAL SPECIFICATION

Appearance & Form	Free Flowing Powder
Wet density	Approx. 2100-2300 kg/m <sup>3</sup>
Water Ratio	16% of Powdermaterial
Compressive Strength	10 N/mm <sup>2</sup> @ 1 Day 40 N/mm <sup>2</sup> @ 7 Days 60 N/mm <sup>2</sup> @ 28 Days
Flexural Strength	>8 N/mm <sup>2</sup>
Tensile Strength	>2 N/mm <sup>2</sup>
Expansion Characteristics Unrestrained expansion (ASTMC827-1987)	1-4%

PACKAGING	COVERAGE	SHELF LIFE
25 kg	13.0 Ltr yield / per 25 kg bag It also depends on the consistency and quantity of coarse aggregate added. * Part Mixing of bag is strictly prohibited.	12 months from date of packing. It must be seal pack & stored under proper condition. Store in a cool & dry place, keep away from direct sunlight.

## FORM WORK CRITERIA

- The form of work should not deform or leak.
- The provision in the form of work will be made for a suitable feed hopper at the highest point.
- Provision will be made for Air vents to prevent air entrapment.
- The form of work should include drainage outlets for pre-soaking.
- The form of work should be treated with mould releasing agents before fixing.

## DIRECTION FOR USE

### SURFACE PREPARATION



- Defective concrete surfaces treated to their sound base. Smooth surfaces should be mechanically roughened. Corroded reinforcing steel should be exposed around its whole circumference and cleaned to remove all loose scale and corrosion deposits. It is essential to clean the steel to a bright condition. The proper anti-

corrosion treatment should be carried out before application. It is necessary to clean the steel into a bright situation. Zinc primer should be applied to the reinforcing steel. Several hours before placing, the concrete substrates should in SSD conditions.

- Alternatively, all prepared concrete substrates should be primed with a slow setting epoxy primer on a dry substrate for better bonding.

### MIXING AND PLACING



- Add 4 ltr water to 25 kg bag. The water ratio is approx. 16 % of powder material.
- Mix with a high torque (400/500 rpm) rotary drill fitted mixer with a mixing paddle.
- In case of addition of graded coarse aggregate has been specified, and it should be added after the water

properly mixed.

- Do not attempt to add more water to mix. Mix the required quantity only.
- The adequate mixing capacity and labour availability should be there for continuous applications.
- Mix continuously for 5 minutes, ensuring a smooth, even consistency of the mix.
- The mixed material should be placed immediately to avoid the air entrapment by pouring from one side only if place by pumping method maintains the proper procedure.

## CURING

- Curing should be done immediately after removing the form of work.
- Standard curing practices should be maintained.
- The concrete curing agent can be used.
- Supplementary curing such as wet hessian or polythene sheets must be used.

## NOTE

For repair sections generally deeper than 100 mm, it may be necessary to modify the FLOW CRETE with properly graded 5mm to 12mm silt-free aggregate to minimize temperature rise. The quantity of total required may vary depending on the Nature and configuration of the repair location. However, it can add between 50-100% by the weight of micro concrete.

## HEALTH & SAFETY

- Wear suitable protective clothing, gloves, eye protection and respiratory protective equipment during application
- In case of contact with skin, rinse with plenty of clean water and then cleanse with soap water
- In case of contact with eyes, rinse immediately with plenty of clean water and seek medical advice. Mould releasing agents before fixing.