

# TOUFFCRETE MC28

## FREE FLOWING STRUCTURAL MICRO CONCRETE

TOUFFCRETE MC 28 a ready to use product in powder form. Which requires only the on-site mixing with water to produce a shrinkage compensated micro concrete of predictable performance. The larger size aggregate TOUFFCRETE MC permits precision grouting of thickness >80mm between bed plate and foundation and especially suitable in high ambient temperatures.

### ADVANTAGES

- ▶ Shrinkage compensated.
- ▶ Formulated for deep section grouting
- ▶ Proven and predictable performance
- ▶ Excellent workability retention even at high ambient temperatures.
- ▶ High bond strength development even at fluid consistency good fatigue impact resistance.
- ▶ Micro silica content enhances strength and durability.
- ▶ Low heat gain and early strength gain

### APPLICATION FIELD

Formulated for all structural repairs. Application ranges include and does not necessarily be limited to :-

- ▶ Structural loss in columns
- ▶ Reinstatement of large , structural sections of concrete
- ▶ Resurfacing substrates where high compressive strength and low water permeability are required ( eg. Piles cap, traffic areas etc)
- ▶ Any repair zones which requires heavy load – bearing and with restricted access or congested reinforcement
- ▶ Can be used as the solution to rectify uneven slabs.

### PROPERTIES

Compressive strength (after 1 day)	28N/mm <sup>2</sup> BS 196-1 : 1995
(after 3days)	35N/mm <sup>2</sup>
(after 7 days)	45N/mm <sup>2</sup>
(after 28days)	78N/mm <sup>2</sup>
Flexural strength (after 28days)	94N/mm <sup>2</sup> BS 196-1 :85
Tensile Strength	4.0 ASTM D 412 – 87
Setting time	6-8 hours at 20°C
Wet density	2500kg/m
Bulk Density	1.2 Kg/L

## APPLICATION PROCEDURE

### Preparation

The surface onto which the grout is to be applied should be TOUFFCRETE MC to remove laitance and expose aggregate. Do not use bush hammers or similar preparation equipment that can crush the aggregate but leave it in place. The surface must be free of oil, dust, dust, paint, curing compounds etc. soak area to be grouted with water for 24 hours prior to grouting to minimize localized absorption and to assist in the free flow of the grout surface should be damp but free from standing water. Particular attention should be paid to bolt holes to ensure that these are water-free. Use oil free compressed air to blow out bolt holes and pockets as necessary.

Base plates, bolt, etc. must be clean and free of oil, grease, paint residual curing compound or other contaminants that could impair adhesion. Set and align equipment. If shims are to be removed after the grout has set, then lightly grease them for easy removal. Ensure formwork is secure and water tight to prevent movement and leaking during the placing and curing of the grout. The area should be free of excessive vibration. Shut down adjacent machinery until the grout has hardened priming

Prior to placing of TOUFFCRTE MC soak the mixing.

One bag 25kg of TOUFFCRETE MC requires 3.17-3.75 liter of clean water. In hot climate, use of cold water is recommended. Mix in a suitable size drum using an approved spiral paddle at a slow speed (400/500rpm) with a heavy-duty drill is recommended.

Pour required amount of water in the mixer followed by TOUFFCRTE MC. Mix for 3 minutes to get a homogeneous and consistent mixture

### Placing

The mixed material should be placed within 30minutes. It can be poured or pumped on to the repair area to fill the cavity at the required level. No vibration is required. After concrete has initially set, the surface may be finished to the desired texture.

### Curing

Start curing TOUFFCRETE MC with clean water or TOUFFCRETE MC immediately after finishing and formwork is stripped

## PACKAGING

TOUFFCRETE MC is supplied in 25kg bags

## STORAGE

Start under cover, out of direct sunlight and protect from extreme temperatures. In tropical climate the product must be stored in air-conditioned environment.

