

# PRO-TEC

Trust our chemistry

## TEC MICRO 400

High-Flow Micro-Concrete for Structural Repair

TEC MICRO 400 is an easy-to-use, high-flow micro-concrete formulated for structural repair and casting applications at high thicknesses, up to 500 mm in a single pour. It combines the flow characteristics of a grout with the strength and durability of a structural concrete.

### SCOPE OF USE

- Structural repair and reconstruction of concrete elements such as columns, beams, and foundations
- Casting of new concrete sections at high thickness where formwork access is restricted
- Repair of heavily reinforced or congested sections requiring high flowability
- Suitable for pour thicknesses up to 500 mm in a single stage

### ADVANTAGES

- High flowability allows placement in congested reinforcement and restricted formwork
- Suitable for large pour thicknesses in a single application
- High-strength micro-concrete performance
- Easy to mix and place by pouring or pumping
- Reduces the need for multiple lifts and pours

### TECHNICAL PROPERTIES

Technical values below are pending confirmation from PRO-TEC's Technical / R&D Department based on lab testing. Do not publish or distribute until verified and completed.

|                      |                                                                  |
|----------------------|------------------------------------------------------------------|
| COMPRESSIVE STRENGTH | 60N/mm <sup>2</sup> at 28 days                                   |
| Flexural strength    | 5N/mm <sup>2</sup> at 28 day                                     |
| Fresh density        | 2.45±0.05                                                        |
| Appearance           | Grey powder + aggregates                                         |
| CONSUMPTION          | 78kg kit + 6 liters of water give a volume of around 34.5 liters |
| MAX POUR THICKNESS   | Up to 500 mm per single stage                                    |

## APPLICATION GUIDE

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### 1. Surface Preparation

The area to be cast or repaired should be sound, clean, and free of oil, grease, and loose material. Concrete surfaces should be pre-saturated with water, with no standing water at the time of casting, and formwork should be built to contain the fluid micro-concrete.

### 2. Mixing

Add TEC MICRO 400 gradually to the specified quantity of clean water (mixing ratio to be confirmed by the Technical Department) and mix with a slow-speed drill mixer until a smooth, flowable, lump-free consistency is achieved.

### 3. Pouring

Pour the mixed micro-concrete continuously from one side to avoid air entrapment, allowing it to flow around reinforcement and completely fill the formwork. Protect from rapid moisture loss during curing.

## PACKAGING & STORAGE

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- Packaging: Available in 25 kg bags.
- Storage Conditions: Store at temperatures between 5°C and 35°C in unopened, closed packaging. Keep in a dry, well-ventilated area away from heat and direct sunlight.
- Shelf Life: 12 months from the date of manufacture when stored as recommended.
- Support: If these requirements are breached, contact the Technical Department of Pro-Tec for assistance.

## HEALTH, SAFETY & CAUTIONS

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**TEC MICRO 400 is a cement-based product; always take care and adhere to standard safety precautions during handling and application.**

- Protective Gear: Wear protective clothing, gloves, and goggles. Apply in a well-ventilated area and avoid inhaling dust.
- Skin & Eye Contact: Splashes on the skin should be washed away with soap and water immediately. In case of contact with eyes, wash thoroughly with clean water and seek medical attention if irritation persists.

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