

Dual shrinkage-compensated flowable micro concrete

DESCRIPTION

DUCON Micro Concrete is a high-strength, dual shrinkage-compensated, flowable cementitious repair material designed for structural concrete repair. It offers excellent flowability, early and ultimate strength, and durable performance for beams, columns and other structural elements while remaining compatible with the host concrete.

RECOMMENDED USE

- Structural repair of concrete elements
- Repair of beams, columns and slabs
- Jacketing and strengthening of members
- Filling large defects and voids

FEATURES AND BENEFITS

- Dual shrinkage compensated formulation
- High flowability and easy placement
- High early and ultimate strength
- Compatible with host concrete
- No bonding agent required
- Durable and impermeable repair system

PRODUCT INFORMATION

Application Areas	Structural repairs, beams, columns, jacketing
Compressive Strength (1 Day)	≥20 MPa
Compressive Strength (7 Days)	≥50 MPa
Compressive Strength (28 Days)	≥60 MPa
Water / Powder Ratio	0.14 (Powder : Water)
Density	Approx. 2250 kg/m ³
Packaging	25 kg bag
Shelf Life	6 months
Special Feature	Compatible with existing concrete

APPLICATION PROCEDURE

General

DUCON Micro Concrete shall be applied in accordance with the recommended application guidelines by trained personnel.

Surface Preparation

Remove all loose concrete, mortar, dust, grease, oil and other contaminants. Remove deteriorated concrete to expose a sound, mechanically prepared surface. Repair edges shall be cut vertically to a minimum depth of **20 mm**. Clean exposed reinforcement and remove rust before application.

Formwork

Use rigid, watertight and adequately braced formwork. Provide suitable vent/drain holes where required and apply a release agent before installation.

Mixing Procedure

Mix one **25 kg** bag with **3.25–3.75 litres** of clean water using a forced-action or low-speed mixer (300–600 rpm) for approximately **3 minutes** until a homogeneous, flowable consistency is achieved. Allow the mix to stand for **2–3 minutes**, then remix briefly before use.

Application

Pre-soak the substrate for **24 hours** and remove standing water before application. Pour or pump the mixed material continuously into the prepared formwork until the repair area is completely filled.

Curing

After formwork removal, cure the exposed surfaces immediately using a curing compound, wet hessian or polyethylene sheeting to prevent rapid moisture loss.

Precautions

Wear suitable PPE, avoid contact with eyes and skin, and refer to the SDS/MSDS before use.

Statement of Responsibility (Disclaimer)

The technical information and application advice are based on present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a products suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.