



GROUT MACROFILL 3

1. Product Description

Grout MacroFill 3 is a high-build cement-based patching grout designed for thicker concrete repairs up to 6 cm in a single lift. It incorporates coarser graded aggregates (up to 1.5 mm) and a dual-fiber reinforcement system, combining two complementary types of fibers that work together to control shrinkage, increase toughness, and improve long-term durability. The formulation ensures structural performance, crack resistance, and reduced shrinkage in heavy-duty applications.

2. Applications

- Section concrete repairs up to 6 cm in one lift
- Structural patching of deteriorated concrete elements
- Rebuilding of large voids, honeycombs, and broken edges
- Repairs in industrial floors, beams, columns, and heavy-duty structures
- Applications requiring high durability and toughness

3. Advantages

- High-build application up to 6 cm without sagging
- Dual-fiber reinforcement for superior shrinkage control
- Excellent crack resistance and durability
- High compressive and flexural strength
- Coarse aggregate for improved stability and reduced shrinkage
- Strong adhesion to sound concrete substrates
- Designed for structural and non-structural repairs

4. Technical Data

- **Maximum repair depth per layer:** 6 cm
- **Aggregate size:** ≤ 1.5 mm
- **Appearance:** Grey powder
- **Mixing water:** 16–18% by weight
- **Workability time at 25°C:** ~25–30 minutes
- **Compressive strength (28 days):** ≥ 60 MPa
- **Flexural strength (28 days):** ≥ 7 MPa
- **Density of mixed mortar:** ~2200 kg/m³

5. Surface Preparation

- Substrate must be structurally sound, clean, and free of dust, oil, or loose particles.
 - Remove all weak concrete and expose sound substrate.
 - Pre-wet the surface with clean water.
 - Bring to **SSD condition** before application like following
1. Spray or brush the surface with clean water.
 2. Allow time for the water to soak into the pores.
 3. Just before applying the mortar, wipe away or blow off any **visible free water** so the surface is damp but not shiny or dripping.

6. Mixing

- Place the recommended quantity of clean water into a mixing container.
- Slowly add Grout MacroFill 3 powder while mixing with a low-speed drill (400–600 rpm).
- Mix for 3–4 minutes until a uniform, lump-free mortar is obtained.

7. Application

- Apply manually using a trowel or by form-and-pour method.
- Compact the mortar properly to ensure complete contact and bond with the substrate.
- Finish the surface as required.
- For sections deeper than 6 cm, build up in successive layers, allowing the previous layer to set before the next.

8. Packaging

- 25 kg bag.

9. Storage & Shelf Life

- Store in a dry, cool place protected from direct sunlight and moisture.
- Shelf life: 12 months in unopened original packaging.

10. Health & Safety

- Contains cement, which may cause skin and eye irritation.
- Wear protective gloves, goggles, and clothing during application.
- In case of contact, rinse immediately with plenty of clean water.

