



Vertical & Overhead Repair Cementitious Mortar (Fast Repair Type I)

Rapid-setting mortar for vertical and overhead structural concrete repairs

Product Description

Fast Repair Type I is a specially formulated cementitious mortar designed for vertical and overhead structural concrete repairs. It features excellent bonding strength, rapid setting, high durability, and superior resistance to cracking, aging, and water penetration. It provides reliable compatibility with base concrete and reinforcement, making it suitable for quick, durable patching of damaged protective layers, honeycombs, voids, and surface defects in concrete structures.

Key Features & Benefits

- Strong adhesion to concrete substrate and reinforcement.
- Rapid setting and high early strength, allowing quick turnaround.
- Excellent resistance to cracking, carbonation, and water penetration.
- High compressive strength and long-term durability.
- Easy application for vertical and overhead surfaces; eco-friendly formulation.

Performance Parameters

Type	2h Compressive Strength (MPa)	24h Compressive Strength (MPa)	28d Compressive Strength (MPa)	Working Time After Mixing	Final Set Time	Repair Thickness
Fast Repair Type I	≥ 20	≥ 30	≥ 50	~30 min	~60 min	≥ 3 mm
Fast Repair Type II	≥ 10	≥ 20	≥ 50	~60 min	~120 min	≥ 3 mm
Fast Repair Type III	≥ 10	≥ 30	≥ 30	~60 min	~180 min	≥ 3 mm

Application Method

- Surface Preparation – Remove loose material, laitance, and contaminants with wire brush or mechanical tools.
- Moisture Conditioning – Clean the surface and saturate with water; keep moist for 2–3 h before application.
- Priming – Apply a bonding slurry (cement : water = 1:1) on prepared surfaces prior to repair mortar.
- Mixing – Mix repair mortar with clean water (water : mortar ≈ 0.14–0.16 by weight) using mechanical mixer for 2–3 min until uniform.
- Application – Apply repair mortar layer by layer with trowel or spatula; thickness 5–10 mm per pass.
- Curing – Protect from sun, frost, and vibration. Keep moist for ≥ 24 h after application.

Packaging & Storage

- Supplied in 25 kg composite kraft bags.
- Shelf life: 6 months in dry, ventilated storage.
- Store away from moisture, frost and direct sunlight.