

TechnoCrete™FC

Fiber Reinforced Cementitious Repair Mortar

TECHNOPOL

مقاوم سازی تکنوپل

PRODUCT DESCRIPTION

TechnoCrete™FC is a two-component high performance, cement based, polymer modified, fiber reinforced, structural concrete repair mortar. Suitable for horizontal, vertical and overhead applications.



Buildings
Structures



Transportation
Infrastructure



Water &
Wastewater



Oil, Gas &
Industrial



Waterfront
Structures



Industrial
Facilities

TECHNICAL DATA

	Unit	TechnoCrete™FC
Compressive Strength	Approx.	MPa
7 days		40
28 days		50
Tensile Strength in Flexure	Approx.	MPa
7 days		7
28 days		12
Tensile Adhesion Strength	Approx.	MPa
28 days		1.5

PHYSICAL PROPERTIES

Chemical base	Cement, selected aggregates and additives	
Color	Mixed components light grey. Component A: white liquid Component B: grey powder	
Density	Kg/L	0.22
Layer Thickness(mm)	Min	Max
	5	20
Pot Life	at +30 °C	~25 minutes

ADVANTAGES

- Excellent adherence
- Good mechanical strength
- High compression resistances at all ages
- Good water and oil resistance
- Increase resistance to salt water, chlorides and carbonation
- Synthetic fiber reinforced
- High abrasion, wear and impact resistance

TYPICAL USES

- Use as concrete repair mortar for repairing damages in concrete structures like beams, piles, slabs, posts, pipes, precast elements, etc.
- Use in horizontal, vertical and overhead applications without the need of formworks.
- Repairing concrete defects like pores, honeycombs and level irregularities.
- Use as high adhesion render, with high abrasion resistance, waterproof to protect, repair and maintain concrete structures.

PACKAGING

30 kg set: A (4.1 kg) + B (25.9 kg)

MIXING

TechnoCrete™FC can be mixed with a low speed (<250 rpm) hand drill mixer. Shake Component A (liquid) and pour it into a suitable mixing vessel. While mixing add Component B (powder) into the mix. Mix the two components together for a minimum 3 minutes. Do not add water.

INSTALLATION PROCEDURE

PREPARATION OF SUBSTRATE

The concrete shall be thoroughly clean, free from dust, loose material, surface contamination and materials which reduce bond or prevent suction or wetting by repair materials. De-



laminated, weak, damaged, and deteriorated concrete and where necessary sound concrete shall be removed by suitable means.

APPLICATION

TechnoCrete™FC can be applied manually using traditional techniques. Thoroughly pre-wet the prepared substrate a recommended 2 hours before application. Keep the surface wet and do not allow to dry. Before application remove excess water e.g. with a clean sponge. The surface shall appear a dark matt appearance without glistening and surface pores and pits shall not contain water. Apply first a scratch coat by firmly scrapping the repair mortar over the substrate surface to form a thin layer and fill any pores or pits in the surface. Ensure the whole surface to be repaired is covered by the scratch coat. Build up layers from bottom to top by pressing mortar well into the repair area. The surface can be finished according to the requirements using a float while wet or with a relevant roughcast tool as soon as the mortar has started to stiffen.

LIMITATIONS

- Do not add water.
- Maximum thickness per application: 20 mm Avoid application in direct sun and/ or strong wind and/ or rain.
- Protect freshly applied material from freezing and rain.
- Apply only to sound, prepared substrate. Do not add additional water during the surface finishing as this will cause discoloration and cracking.
- Variation in cement could cause shade differences in color of the mortar.

FAIRST AID

Skin

Wash fibers off skin with water and soap. If fibers are embedded in the skin, remove with tweezers. Discard clothing that may contain embedded fibers. Seek medical advice if exposure results in adverse effects.

Eyes

Immediately flush with a continuous water stream for at least 20 minutes. Washing immediately after exposure is expected to be effective in preventing damage to the eyes. Seek medical advice.

Inhalation

If there is inhalation exposure to the fibers of this product, remove source of exposure and move victim to fresh air. If victim is not breathing, give artificial respiration. If there is breathing difficulty, give oxygen. Seek medical advice for any respiratory problems.

Ingestion

Ingestion is not a likely means of exposure for this product. If ingestion does occur, do not induce vomiting. Give nothing by mouth if victim is unconscious. Seek medical advice.

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