

REC REPAIR M-312

High early strength and fast setting filling mortar with fiber

PRODUCT

Rec Repair M-312 is a ready-to-use mortar mainly made of specific cement, fibers, special additives and selected sands that provide special properties: low shrinking, high strength, fast setting.

With its high performance and fast setting, Rec Repair M-312 allows the repair of roads or industrial surfaces without a long traffic interruption.

PROPERTIES

- Low shrinking
- High strength
- Fast setting
- Excellent resistance to sea and sulfated waters
- Excellent resistance to high temperatures
- Excellent resistant to vibration and shock loads
- Precast repair

SCOPE OF USE

- Repair of industrial surfaces when high resistances are required
- Repair of grounds or roads under service
- Anchoring of manholes or poles in roads
- Airports runway concrete repair applications

CHARACTERISTICS	
Appearance	Grey powder
Free from chlorides and metallic particles	
Fresh density ASTM C 185 - 02 section 5.2	2.2 - 2.3
VOC	<10µg/l
Rapid Chloride Permeability ASTM C 1202	Low
Water permeability DIN 1048 Part 5	Nil

Results are obtained at 11% water under lab condition at 21°C ± 1, under air Curing.

Properties listed above are only based on controlled laboratory samples and tests: Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions

Setting time (at 20°C) - (ASTM C 403)

	Start	End
Plastic consistency	20 min	40 min

	Pedestrian	Vehicular
Traffic Time (at 25°C)	2 hours	3 hours

Compressive strength (at 20°C)

BS EN 12190

	3h	8h	24h	28d
Plastic consist. (MPa)	25	35	40	60

Flexural strength (at 20°C)

	3h	8h	24h	28d
Plastic consist. (MPa)	5	5.5	6.5	10

APPLICABLE STANDARDS

BS EN 12190
BS 1881: Part 118
ASTM C 403, BS EN 196-1: 1994
ASTM C 185-02 section 5.2
ASTM C 1202
DIN 1048 part 5

INSTRUCTIONS FOR USE

SURFACE PREPARATION

Rec Repair M-312 may be applied on sound concrete, masonry, rock or similar materials. Remove damaged concrete and laitance by chipping with a pick or cold-chiselling to get a rough surface. The surface must also be free from any trace of grease or oil. Saturate the surface with water by copiously spraying just before application, and if possible, 6 hours before application as well.

MORTAR PREPARATION

Prepare a plastic consistency mortar by mixing a 25 kg bag of Rec Repair M-312 with 2.75 to 3.5 liters of clean water. Mixing must be done for at least 3 minutes until a homogeneous paste is obtained.

Do not mix it with an other hydraulic binder (cement, lime or gypsum) or an admixture.



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MICRO-CONCRETE PREPARATION

For a thickness of more than 30 mm, Rec Repair M-312 may be used as a micro-concrete. In this case, mix a 25 kg bag of Rec Repair M-312 with 3-3.75 liters of water and 15 kg of 3/8 aggregates. Rec Repair M-312 must be used within 10 minutes (at 30°C) from mixing. Re-mixing with an extra amount of water is not recommended.

Ideal application temperature is between +5°C and +35°C. If the application temperature is higher than 35°C, make sure to use cool water to keep the mixed mortar temperature below 30°C.

YIELD

Mortar: 13 liters per 25 kg bag.

Micro-concrete: 20 liters per 25 kg bag.

STORAGE

12 months after manufacturing date in original and non-open packaging, under cover, in dry condition, away from humidity, protected from extreme temperatures and direct sunlight.

SAFETY PRECAUTIONS

The product contains cement powders which, when mixed with water, release alkalis that could be harmful to the skin. It is preferable that the application be done in a ventilated area, and to wear protective gear for hands, eyes and respiratory system and to avoid breathing of the dust. Splashes on the skin should be washed away by cleaning with soap and water. In case of contact with eyes, wash thoroughly with clean water. If swallowed, do not induce vomiting, in both cases seek medical attention. The product is non-flammable.

DISCLAIMER

While the company guarantees its products against defective materials, the use and application of these products are made without guarantee since the conditions of their application are beyond its control. It is recommended to verify with the company that the product is suitable for the intended use, and that this Data Sheet version is the latest one. The company may modify it without prior notice. Technical characteristics are listed for guidance only. For more information, please contact the company's office in your location.

NOTE

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