

R4 REPAIR MORTAR

PRODUCT

Composed of high-strength cements, selected aggregates, special additives and fiber reinforcement. **Thixotropic repair mortar.**

USES

- Rebuilding of the reinforcement cover layer in reinforced concrete structures.
- Repair of columns, girders, cantilevers, pillars, balconies and degraded concrete areas..., caused by reinforcement corrosion, where fast setting is required.
- Repair of surfaces exposed to heavy abrasion (channels, pavements, ramps...).
- Leveling of walls, tunnels...
- Restoration and repair of road viaducts.
- Indoors and outdoors.

SUBSTRATES

Concrete and cement mortars; concrete block.

PROPERTIES

- High performance.
- Suitable for concrete remediation.
- Controlled-shrinkage mortar.
- High immediate strength.
- Fiber-reinforced.
- Crack-free.

CONDITIONS OF USE

- Dampen thoroughly before applying R4 Repairer.
- **Do not add any additive to the mortar.**
- Do not apply R4 Repairer on plaster or painted surfaces.
- Do not add water once the mix begins to set.
- Do not apply where water may stagnate.
- When a second coat is needed, apply it before the first one has set.

APPLICATION

Application recommendations

- Application temperatures between 10 and 30 °C.
- Where the steel reinforcement is exposed, clean by sandblasting or with a wire brush, cover with Anti-Corrosion Mortar and leave to dry for at least 1 hour.
- Do not apply R4 Repairer on smooth concrete substrates (first roughen and open the pores).
- Do not use by pouring for fillings.
- Remove deteriorated concrete, including any detaching material, until a solid substrate is reached.

Substrate and application conditions

- Substrates must be sound, stable and strong, and free of dust, plaster, paint...
- Remove deteriorated and degraded concrete until a solid, strong and rough substrate is reached.
- Before applying R4 Repairer, wet to saturation and apply once the surface is free of standing water.
- In structural repairs, and where reinforcement is exposed, sandblast, remove dust and cover with Anti-Corrosion Mortar; leave to dry for at least 1 hour.
- On non-absorbent, very smooth or low-absorbency surfaces, strip and open the pores to ensure good adhesion.
- Avoid applying the coating at low temperatures, in high humidity, rain... In the hours following application of the mortar, the risk of efflorescence due to carbonation increases.

Mixing and application

Manual mixing:

Mix one bag of R4 Repairer (25 kg) with **5-5.5 liters** of clean water until a homogeneous mass is obtained.

Machine spraying:

Mix the mortar with approximately **18-20 %** clean water.

Where the steel reinforcement is exposed, clean and apply Anti-Corrosion Mortar; leave to dry for at least 1 hour.

Apply the final coat of R4 Repairer and give it the desired finish.

Place the fiberglass or metal mesh in areas at risk of cracking.

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CHARACTERISTICS

Parameter	Result
Application temperature:	10-30 °C
Bulk density (powder):	1.4 g/cm ³
Mixing water:	± 18-20 %
Density of the mix:	1.7 g/cm ³
Pot life:	approx. 1 h (20 °C)
Time between coats:	3-4 h (20 °C)
Full setting:	24 h (20 °C)
Coverage:	1.4 kg/m ² per mm of thickness
Compressive strength at 28 days:	≥ 45 MPa
Flexural strength:	≥ 10 MPa
Direct tensile adhesion:	≥ 2 MPa
Freeze-thaw with salts:	≥ 2 MPa
Capillary absorption:	≤ 0.5 kg/(m ² ·h ^{0.5})
Standing time after mixing:	5 min
Maximum tolerated thickness:	3-15 mm (in 5 cm layers)
Tensile strength at break:	≥ 2 MPa
Compressive modulus of elasticity:	≥ 20 GPa

* These results were obtained under standard conditions and may vary depending on on-site execution.

COLORS

White and gray

COVERAGE

1.4 kg/m² per mm of thickness

STORAGE

12 months from the date of manufacture, in original closed packaging, protected from the weather and humidity.

SPECIAL PRECAUTIONS

This product contains cement. Avoid contact with eyes and skin, as well as inhalation of dust. Wear **rubber gloves and protective goggles**. Keep out of the reach of children.

Do not apply the product at ambient temperatures **below 5 °C or above 30 °C**.

Empty containers must be disposed of in accordance with current legislation.

PACKAGING



Moisture-proof paper bags of 25 kg
Pallets of 48 bags

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