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# Repair 200 SR

Quick-setting, polymer-modified, thixotropic, fiber-reinforced cementitious mortar, certified according to UNI EN 1504-2 and classified R2 according to UNI EN 1504-3, with controlled hygrometric shrinkage, specific for restoring and smoothing concrete for application. cations with thicknesses from 3 to 30 mm

Repair 200 SR is a quick-setting, thixotropic, polymer-modified, controlled-shrinkage cementitious mortar based on high-strength hydraulic binders, selected aggregates, special additives and inorganic fibers. Repair 200 SR is specific for the reconstruction and smoothing of concrete, applicable in thicknesses ranging from 3 to 30 mm. Repair 200 SR drastically reduces the time needed to carry out concrete repair works. Formulated in the new Licata SpA Research & Development laboratories, Repair 200 SR is characterized by easy workability, high adhesion and wetting power and excellent thixotropy, together with the rapid development of high mechanical strengths. The controlled hygrometric shrinkage and the use of HT fibers minimize the formation of cracks, cracks and detachments. The excellent aesthetic finish, guaranteed by a grain size curve with a maximum head <0.8 mm, allows painting or decorative treatments even without further processing. Repair 200 SR also meets the requirements of UNI EN 1504-2 according to the 1.3 (C) principle and is also classified R2 according to UNI EN 1504-3.





















#### **MAIN FIELDS OF USE**

Repair 200 SR has been formulated to ensure the best performance in the restoration and renovation of the most common cement substrates used in construction. Repair 200 SR can be laid in variable thicknesses from 3 to 30 mm both by hand and by machine, effectively satisfying all the application needs of the construction site. The shortened setting times make it a product suitable to operate even at low temperatures. Find its main uses in:

- Repair of concrete even with exposed metal rods
- Repairs of faceplates, corners, gutters, damaged edges, etc.
- Interventions on concrete structures in general.

For application on different substrates, please contact the technical department.

# **CHARACTERISTICS**

- Quick setting. The use of special accelerating additives drastically reduces finishing times: Repair 200 SR can be troweled after 20-30 minutes and paintable after 12 hours.
- Easy workability. The combination of smoothness, easy detachment from tools and ease of processing is obtained thanks to the use of latest generation additives, reducing the difficulties and delays of installation.
- High adhesion power. Repair 200 SR is a modified polymer mortar (PCC). The adhesion values obtained after exposure to extreme conditions of frost, heat and chemical aggression are proof of its reliability over time in restoration interventions.
- Mechanical resistance. The high-performance hydraulic binders, the selected aggregates with a constant granulometric curve and the pozzolanic additions give high mechanical values





- Repair 200 SR fully satisfies the flexural and compressive strength requirements required by class R2 of the EN 1504-3 standard.
- Excellent wetting power and thixotropy. The special additives contained in **Repair 200 SR** make it easy to apply both vertically and overhead.
- Controlled hygrometric withdrawal. The presence of fibers and the particular formulation of **Repair 200 SR** reduce cracking phenomena to a minimum.
- Excellent aesthetic finish. Thanks to the selected aggregates with constant granulometric curve with maximum head <0.8 mm, the finishes made with **Repair 200 SR** allow painting or decorative treatments even without further processing.

#### **APPLICATION PROCEDURE**

#### Preparation of the substrate

Mechanically remove any friable or easily detachable parts. Thoroughly clean the application area so that it is free of dust, residues of surface treatments such as: detergents, oily substances, mineral or organic greases, waxes, traces of gypsum and salts.

# **Preparation of the product**

4.25-4.75 liters of clean water (UNI EN 1008) are required for each 25 kg bag (i.e. 17-19% by mass). Pour the product into a clean container, containing ¾ of the mixing water, mix for about 3 minutes with a low-speed mixer, gradually adding the residual water until a thixotropic, homogeneous and lump-free mixture is obtained. Avoid splitting the packs for partial mixing. The product stored in open bags and used only in part may no longer meet the technical characteristics listed in this document.

### **Application**

The previously prepared substrate must be wet to excess, bringing it to SSA (Dry Saturated Surface) conditions. Apply the product as it is by laying a thinner and well crushed layer of adhesion before loading the thickness. Even out with a spatula / trowel and, if necessary, straighten. Repair 200 SR can be troweled after 20-30 minutes, paintable after 12 hours and fully develops mechanical strength after 28 days of curing. For thicknesses higher than 30 mm proceed by layering a second coat on the first already hardened coat. Do not apply Repair 200 SR on substrates in the presence of a veil of water on the surface, completely dry or in extreme conditions such as: walls exposed to the beating sun or frozen. Make sure that the ambient, substrate and product temperatures during application are between +5 ° C and +35 ° C.

# PRODUCT INFORMATION

Appearance	gray powder
Grain size	<0,8 mm
Consumption of the powder	16 kg / m² every 10 mm of thickness
Water mixing	17-19% of the weight of the powder
Workability time at 20 °C	≈ 20 minutes
Application thickness per coat	3 - 30 mm
Application temperature	From +5 ° C to +35 ° C
Storage	6 months in a dry and protected place in unopened packaging, at temperatures between +5 $^\circ$ C and +35 $^\circ$ C
Packaging	25 kg
Density	1850-1950 kg/m³
pH of the product	aprox 12



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# PERFORMANCES required according to UNI EN 1504-3

Characteristic	Test Method	Regulatory requirement	Performance
Compressive strength	EN 12190	≥15 Mpa	≥15 Mpa
Chloride ion content	EN 1015-17	≤0,05%	≤0,05%
Adhesion bond	EN 1542	≥ 0.8 MPa	≥ 0.8 MPa
Thermal compatibility, freezing and thawing	EN 13687-1	Bond strength after 50 cycles	Bond strength after 50 cycles
		≥ 0.8 MPa	≥ 0.8 MPa
Thermal compatibility, thunderstorms	EN 13687-2	Bond strength after 30 cycles	Bond strength after 30 cycles
		≥ 0.8 MPa	≥ 0.8 MPa
Thermal compatibility, dry cycles	EN 13687-4	Bond strength after 30 cycles	Bond strength after 30 cycles
		≥ 0.8 MPa	≥ 0.8 MPa
Capillary absorption	EN 13057	≤0,5 kg m <sup>-2</sup> h <sup>-1</sup> / <sub>2</sub>	≤0,5 kg m <sup>-2</sup> h <sup>-1</sup> / <sub>2</sub>

#### PERFORMANCES required according to UNI EN 1504-2

Characteristic	Test method	Regulatory requirement	Performance
Permeability to CO <sub>2</sub>	EN 1062-6	Complies with the threshold value in m	>3
Permeability to water vapor	EN ISO 7783-1 EN ISO 7783-2	Class declared	V2
Capillary absorption and permeability to liquid water	EN 1062-3	Compliant with the threshold value in kg m <sup>-2</sup> h <sup>-1</sup> / <sub>2</sub>	W1
Adhesion force for direct traction	EN 1542	Complies with the threshold value in N $/ \ \text{mm}^2$	>0,8 (A/B)
Fire classification of construction products and building products	EN 13501-1	Euroclass declared	A1

### **WARNINGS**

- Product for professional use.
- Repair 200 SR is a quick-setting product therefore adding water or other powder to the already mixed product seriously affects its final performance.
- Alkaline material: protect the eyes and skin during application.
- After use, wash the tools with water when the dough is still fresh.
- The ambient temperature and the humidity rate affect the workability, setting and drying times.
- Adequately cure the product's maturation for at least 24 hours after laying, protect the fresh mortar from rapid drying, direct sunlight, strong wind and heavy rain.

#### **SAFETY**

Regarding information regarding the correct disposal, storage and handling of the product, please to consult the relative Safety Data Sheet.

# NOTE

This technical data sheet replaces and cancels the previous versions.

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