galileo

SI 310

Cement mortar, thixotropic, polymer modified, for the in-depth shaving of concrete structures.



Product description

GALILEO ISI 310 is a premixed mortar, cementous, mono-component, polymer modified, fiber-reinforced with polyacrylonitrile fibers, specifically designed for concrete structures.

Supply and Storage

Packaging: 25 kg. bag (60 bags pallet - 1.500 kg.)

Consumption: approx. 1.6 kg./sqm. per cm. thickness. GALILEO ISI 310 is available in special paper and high-density and thickness polyethylene bags that allow for the product to be stored in a dry place for at least 8 months, without loss of performance characteristics.



Surface Preparation and Application

Before applying GALILEO ISI 310, it is necessary to properly clean the surface by scraping, sand-blasting or other suitable methods, to obtain a sufficiently rough surface. This method ensures the removal of inconsistent parts and dust, the disposal of any pollutants that might hinder the proper adhesion of the product (roes of cement, oil, disarming). The clean and steady surface thus obtained, will be saturated with water, taking the precaution not to apply the product when there is water stagnation or if the wall is covered by a water film not fully absorbed by the surface.

If there is outcropping iron reinforcement and they need to be repaired, remove the surface rust and apply a treatment with GALILEO PASSIVANTE, protective slurry for the restoration of oxidized reinforcements.

The mixing of GALILEO ISI 310 should be done, if you do not use plaster machine, with a power drill at reduced speed, so as not to promote the incorporation of air.

Always pour the water first (4/5 of total) and then, gradually, the powder. After a first blending, add the remaining water quantity and mix to obtain a homogeneous mixture free of lumps, with a consistency suitable for further processing. GALILEO ISI 310 should be mixed with water at a rate of approx. 22-23 liters per 100 kg of powder (about 5.5 liters per 25 kg bag).

GALILEO ISI 310 can be applied by hand with a trowel or by spraying, with a plastering machine. In any case, the surface should be prepared as described. The application thickness, depending on the type of intervention, may range from 2-3 to 10 mm.

Once the product has reached the condition known as "out of touch", finish with a float. A proper finishing can effectively counteract the appearance of any superficial cracks.

Fields of use

GALILEO ISI 310 is designed for in-depth shaving interventions on concrete structures. It is used to perform light preventive restoration (crawl spaces or openings) and for subsequent shaving of the work. If the thickness does not exceed 1 cm., it can be used to restore any missing portions of the cover. It may be applied with a plastering machine (type Maltech M5) or with an American hand trowel. The application thickness may vary from 10 mm. to a maximum of 50 mm.

Technical data	
Water in the mix	approx. 23%
Max. particle size	0.6 mm.
Mechanical resistance to compression (UNI 196)	7 days: > 15 MPa / 28 days: > 25 Mpa
Mechanical resistance to flexion (UNI 196)	7 days: > 4 MPa / 28 days: > 6 Mpa
Elastic module UNI 6556 (at 28 days)	> 25.000 MPa
Adhesion to concrete UNI EN 1542	1,5 MPa
CO2 penetration by phenolphtaleine coloration method	Not measurable

Disclaimers

GALILEO ISI 310 should be applied at temperatures between 5°C and 30°C; in case of low temperatures (5°C to 10°C), it is recommended to mix the material with warm water (30°C to 40°C). Conversely, if ambient temperatures are high, it is recommended to mix the material with cold water. In the presence of particularly harsh conditions (high temperature or strong wind), it is recommended to protect the application for the next few days after the intervention. In the case of low temperatures, mechanical performance may develop somewhat slower.



