

## **GRANTS** *LEED* CREDITS

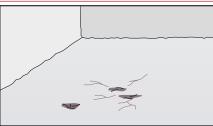


SISTO FLU

FIBRE-REINFORCED CASTABLE MORTAR WITH COMPENSATED SHRINKAGE FOR STRUCTURAL REFURBISHMENTS OF CONCRETE AND LEVELLING DAMAGED CONCRETE FLOORS

## PROBLEM

**CONCRETE REPAIRS** IN FORMWORKS WITH LOW THICKNESS AND REINSTATEMENT OF **CONCRETE FLOORS** 



It is easier to repair deteriorated concrete floors using castable mortars.

# SOLUTION

**RESISTO FLUID 07** is a ready-to-use premixed powder mortar with highly resistant cement base, selected aggregates, synthetic fibres and special additives.

With RESISTO FLUID 07 you can obtain a highly fluid mortar that can be cast in the floor and in the formworks.

# **APPLICATION FIELDS**

The RESISTO FLUID 07 mortar is used to repair and reinstate the structures of concrete floors, pillars and beams.

### PCC **CEMENTITIOUS MORTARS ADDED WITH POLYMERS** FOR STRUCTURAL REPAIR

# ADVANTAGES

- High fluidity with low water/cement ratio.
- High mechanical resistance

Maximum recommended thickness: 2 cm.

Greater thicknesses can be obtained by apply-

ing subsequent coats or using RESISTO FLUID

over the surface.

CONSUMPTION

Approx 20 kg/m<sup>2</sup>×cm.

FLOOR.

• Excellent adhesion to the surface and to the reinforcement bars.

#### • PREPARING THE SUBSTRATE

Remove any loose and brittle parts with a chisel, brush or water jet. Traces of oils, release agents, rust and dirt in general must be removed.

Any exposed bars must be cleaned and passivated in advance using STRATO FER. Soak the foundation without creating films of water, which can be possibly eliminated using compressed air or a sponge.

Rather porous surfaces shall be treated with PRIMER FIX. Rather smooth surfaces or surfaces that are not very absorbent shall be treated with a gripping mortar made out of STRATO 4900 plus cement and then cast fresh-on-fresh (or alternatively with PRIMER U).

#### MIX PREPARATION

**RESISTO FLUID 07** va mescolato con acqua pulita (4,5 litri per sacco da 25 kg). You are recommended to mix in a cement mixer (1) first pouring in 2/3 of the water required, then gradually adding the dry product and finally the remaining water. Mix for 3 minutes at the most until the mix is smooth and without lumps. If just small quantities of mortar are required,

mix exclusively using a mechanical drill mixer and do not prepare it with a trowel. Avoid incorporating too much air during preparation.

# **METHOD OF USE**

#### APPLICATION

Pour RESISTO FLUID 07 continuously into the formworks from just one side so that any air is expelled. To prevent the formworks from drawing water from the mix, they shall be treated with DISARMFER or DISARMWOOD release agents

With **RESISTO FLUID 07** nthere is no need to vibrate the cast mechanically, but just to use wooden planks or iron bars to help the mortar into points that are particularly difficult to reach. To lay on floors, use a stainless steel spatula or squeeqee (2).

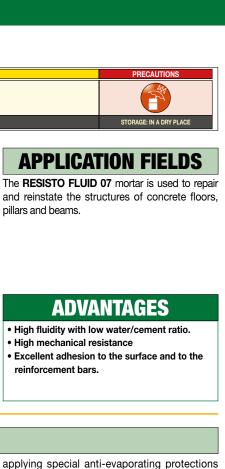
The reinstated surfaces shall be cured carefully and if necessary protected against heat, cold and dynamic actions throughout the whole setting time. Durante la maturazione e specialmente in ambienti ventilati, la malta deve essere

protetta e bagnata costantemente per evitare la rapida disidratazione.

This treatment is performed by spraying mists of water on the surface over the first 24 hours of setting of the mortar or by







(See following)





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### **TECHNICAL CHARACTERISTICS**

|  | Standard   | RESISTO FLUID 07                |
|--|------------|---------------------------------|
| Appearance                                       |            | Powder                          |
| Colour   |            | Grey                            |
| Granulometry                                     |            | 0÷0.7 mm                        |
| Apparent density                                 |            | 1.50 ± 0.10 kg/ℓ                |
| Mixing water                                     |            | 18% ± 1%                        |
| Storage in original packaging in a dry place     |            | 12 months                       |
| Mix properties and workability                   | Standard   |                                 |
| Density of mix                                   | EN 1015-6  | 2.20 ± 0.10 kg/ℓ                |
| pH mix   |            | 12                              |
| Workable mix duration (*)                        |            | about 60 minutes                |
| Application temperature                          |            | +5°C ÷ +35°C                    |
| Spreading  | EN 13395-1 | 260-280 mm (without vibrations) |
| Minimum application thickness                    |            | 2 mm                            |
| Maximum application thickness                    |            | 20 mm                           |
| Application                                      |            | Manual                          |
| Performance characteristics                      | Standard   | Prestazione prodotto            |
| Class and type                                   | EN 1504-3  | R4 - PCC                        |
| Compression strength - after 28 days             | EN 12190   | ≥45 MPa                         |
| Bending strength - after 28 days                 | EN 196-1   | ≥10 N/mm²                       |
| Modulus of elasticity in compression             | EN 13412   | ≥20 GPa                         |
| Chloride ions content                            | EN 1015-17 | Assenti                         |
| Bond strength                                    | EN 1542    | ≥2.0 MPa                        |
| Thermal compatibility frost-thaw cycles - Part 1 | EN 13687-1 | ≥2.0 MPa                        |
| Capillarity water absorption                     | EN 13057   | w ≤ 0.5 kg/m²·h⁰.⁵ - W1         |
| Durability - Resistance to carbonatation         | EN 13295   | Test passed                     |
| Thermal resistance - Operating temperature       |            | −30°C ÷ +90°C                   |
| Fire reaction                                    | EN 13501-1 | A1                              |
| Hazardous substances                             | EN 1504-3  | in accordance to ZA.1 note      |

Test conditions: temperature 23±2°C, 50±5% R.H. and air velocity in test area <0.2 m/s. The data shown may vary depending on the specific work site conditions: temperature, humidity, ventilation, absorbency of the base coat.

(\*) The stated times are longer or shorter as the temperature decreases or increases.

In accordance with the general principles defined in EN 1504-9 - Principles for evaluation of the use of products and systems.

#### (See previous) PRECAUTIONS

- · Use cold water in summer and water at approximately 20°C in winter.
- Application temperature from +5°C to +35°C.
- Do not add water once the mix starts to set.
- · Do not add any other materials, such as cements, aggregates and additives.
- In hot weather, keep damping the finished mortar surface for at least 24 hours to stop it from drying out too quickly.
- . In hot weather, when the temperature is higher than +30°C, the workability time is reduced to 20-30 minutes.
- Do not apply on smooth surfaces.
- · Straight after application clean the tools with water and the coated surfaces with a damp cloth.
- · Do not expose the material to the sun in hot weather.

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 Store in original closed packaging in a dry place.

PACKAGING

**RESISTO FLUID 07** 25-kg Sacks

• FOR ANY FURTHER INFORMATION OR ADVICE ON PARTICULAR APPLICATIONS, CONTACT OUR TECHNICAL OFFICE • IN ORDER TO CORRECTLY USE OUR PRODUCTS, REFER TO INDEX TECHNICAL SPECIFICATIONS •



the numerous possible uses and the possible interference of conditions or elements beyond our control, we assume no responsibility regarding the results which are obtained. The purchasers, of their own accord and under their own responsibility, must establish the suitability of the production the envised use.



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