

RESISTO FLUID FLOOR

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

GRANTS *LEED* CREDITS

CHARACTERISTICS	ENVIRONMENTAL		METHOD OF USE	PRECAUTIONS
		3		
	ECO GREEN	RECYCLABLE	MIX MECHANICALLY	STORAGE: IN A DRY PLACE

PROBLEM

CONCRETE REPAIRS IN FORMWORK AND REPAIRS TO CONCRETE FLOORS



In more serious cases of concrete repairs, when greater thicknesses are required, you need to use mortar that can be poured into formwork, with high strength and fluidity. It is easier to repair deteriorated concrete floors using pourable mortars.

SOLUTION

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

With **RESISTO FLUID FLOOR** you can obtain a highly fluid mortar that can be cast in formwork.

APPLICATION FIELDS

RESISTO FLUID FLOOR mortar is used to repair and reinstate the structures of pillars and beams in concrete.

RESISTO FLUID FLOOR is excellent where substantial structural reinstatement work is required on concrete floors or other flat elements.



ADVANTAGES

- High fluidity with low water/cement ratio.
- High mechanical strength
- Excellent adhesion to substrate and to reinforcement bars.

METHOD OF USE

• PREPARING THE SUBSTRATE

It is necessary to remove any loose parts and parts lacking in solidity by chiselling, brushing or high power pressure cleansing. Remove any traces of oil, release agents, rust and dirt in general. Any exposed metal parts should be cleaned and passivated with cement grout and STRATO 4900.

Dampen the substrate without creating films of water; any which form can be eliminated using compressed air or a sponge.

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

• PREPARING THE MIX

RESISTO FLUID FLOOR must be mixed with clean water (3 litres per 25 kg bag). 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 you need to prepare small quantities of mortar, mix with a mechanical drill-stirrer only and not a trowel. Avoid incorporating too much air during preparation.

APPLICATION

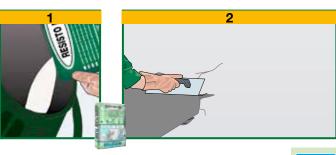
Pour RESISTO FLUID FLOOR continuously into the formwork from one side only so that any air is expelled. To prevent the formwork from drawing water from the mix, it should be treated with DISARMFER or DISARMWOOD release agents. With RESISTO FLUID FLOOR there is no need to vibrate the pour mechanically, but just to use wooden planks or iron bars to help the mortar into points that are particularly difficult to reach.

For laying on floors, use a stainless steel spatula or squeegee (2). The reinstated surfaces should be cured carefully and if necessary protected against heat, cold and dynamic actions

throughout the whole setting time. During the curing phase and especially in ventilated rooms, the mortar must be protected and kept constantly damp to prevent it from drying out too quickly. This treatment is performed by spraying mists of water on the surface over the first 24 hours of setting of the mortar or by applying special anti-evaporating protections over the surface.

Maximum recommended thickness: 10 cm. Greater thicknesses can be obtained by adding 20-30% of gravel (3-8 mm).

(See following)







TECHNICAL CHARACTERISTICS				
	Standard	RESISTO FLUID FLOOR		
Appearance		Powder		
Colour		Grey		
Particle size		0 to 3 mm		
Apparent density		$1.50 \pm 0.10 \text{ kg/}\ell$		
Mix water		12% ± 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 of mix		about 12		
Workable mix duration (*)		about 60 minutes		
Application temperature		+5°C to +35°C		
Expansion of mix	EN 13395-1	260-280 mm (without shocks)		
Minimum application thickness		10 mm		
Maximum application thickness		50 to 100 mm (with 30% gravel)		
Application		Manual		
Performance characteristics	Standard	Product performance		
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		
Elastic compression modulus	EN 13412	≥20 GPa		
Chloride ion content	EN 1015-17	Absent		
Bond strength	EN 1542	≥2.0 MPa		
Thermal compatibility frost-thaw cycles - Part 1	EN 13687-1	≥2.0 MPa		
Absorption of water by capillarity	EN 13057	$w \le 0.5 \text{ kg/m}^2 \cdot h^{0.5} - W1$		
Durability - Resistance to carbonation	EN 13295	Test passed		
Thermal resistance - Operating temperature		-30°C to +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, R.H. 50±5% and air speed 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 times indicated will be longer or shorter as the temperature drops or rises.

Compliant with the general principles defined in EN 1504-9 - Principles for evaluating the use of products and systems.

(See previous)

• CONSUMPTION

About 20 kg/m²percm of thickness.

• PRECAUTIONS

- Use cold water in summer and water at 20°C in winter.
- Application temperature from +5°C to +35°C.
- Do not add water once the mix has started to set.
- Do not add any other materials such as cement, 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 (if temperature is over 30°C) open 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.
- Store in original closed packaging in a dry place.

PACKAGING

RESISTO FLUID FLOOR 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 •



Via G. Rossini, 22 - 37060 Castel D'Azzano (VR) - Italy - C.P.67 T. +39 045 8546201 - F. +39 045 518390

Internet: www.index-spa.com
Informazioni Tecniche Commerciali
tecom@indexspa.it
Amministrazione e Segreteria
index@indexspa.it

Index Export Dept.

index.export@indexspa.it











Pu/dig. - 500 - 10/2015ing-6/2015it≀