

RESISTO FLUID RAPID

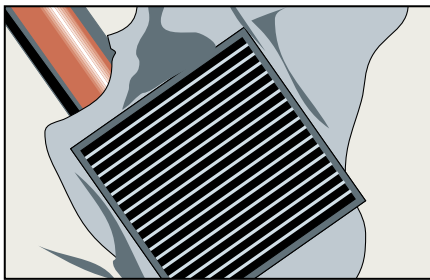
HIGHLY RESISTANT QUICK SETTING AND HARDENING FIBRE-REINFORCED POURABLE MORTAR WITH COMPENSATED SHRINKAGE FOR STRUCTURAL REFURBISHMENTS OF CONCRETE AND FIXING OPERATIONS

GRANTS *LEED* CREDITS

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

PROBLEM

CONCRETE REPAIRS IN FORMWORK AND REINSTATEMENT OF CONCRETE FLOORS



Patching concrete or industrial, road or airport pavings quickly with a fast-setting mortar which is easy to use by pouring. Fixing road manhole covers.

SOLUTION

RESISTO FLUID RAPID is a premixed mortar with base of quick-setting high-strength cement, synthetic resins, selected sands and additives that improve its workability and performance. It provides excellent resistance even in places subject to particular stress.



APPLICATION FIELDS

RESISTO FLUID RAPID is used as a reinstatement mortar for concrete and cement-based floors and pavings. Repairs of airport pavings, fixing of manhole covers and pits, street furniture, fencing, sign posts, barriers etc. In view of its quick-setting performance and strength it is used for work where it must be able to be walked or driven over after just a few hours. It can be used in thicknesses of up to 10 cm. For thicker applications, it is reinforced with 4-10 mm gravel.

ADVANTAGES

- High workability.
- Excellent chemical-physical compatibility with the various types of substrate
- High speed of execution and putting into operation

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.

Soak the foundation 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 ANCHOR must be mixed with clean water (3.3 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 and not a trowel. Avoid incorporating too much air during preparation.

• APPLICATION

Pour **RESISTO FLUID RAPID** 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 RAPID** 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. To lay on floors, use a stainless steel spatula or squeegee (2).

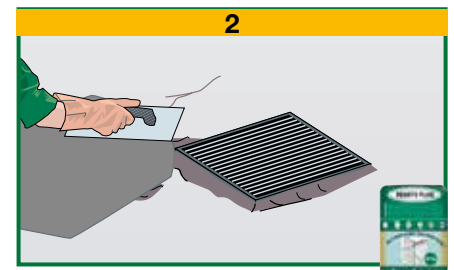
The reinstated surfaces should be cured carefully and if necessary protected against heat, cold and dynamic actions throughout the whole setting time. During the curing phase and especially in venti-

lated rooms, the mortar must be protected and constantly damped 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. For very thick applications, add about 30% of gravel (4-10 mm).

• CONSUMPTION

About 20 kg/m² per cm of thickness.

(See following)



TECHNICAL CHARACTERISTICS

	Standard	RESISTO FLUID RAPID
Appearance		Powder
Colour		Grey
Particle size		0 to 3 mm
Apparent density		1.50 ± 0.10 kg/ℓ
Mix water		13% ± 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		about 12
Workable mix duration (*)		about 20 minutes
Application temperature		+5°C to +35°C
Expansion of mix	EN 13395-1	280-300 mm (without shocks)
Minimum application thickness		10 mm
Maximum application thickness		over 100 mm (with 30% gravel)
Application		Manual
Performance characteristics	Standard	Product performance
Class and type	EN 1504-3	R4 - CC
Compression strength - after 28 days	EN 12190	54 MPa
Compression strength - after 7 days	EN 12190	43 MPa
Compression strength - after 1 day	EN 12190	40 MPa
Compression strength - after 4 hours	EN 12190	29 MPa
Compression strength - after 2 hours	EN 12190	25 MPa
Bending strength - after 28 days	EN 196-1	9.0 N/mm ²
Bending strength - after 7 days	EN 196-1	7.5 N/mm ²
Bending strength - after 1 day	EN 196-1	7.0 N/mm ²
Bending strength - after 4 hours	EN 196-1	6.5 N/mm ²
Bending strength - after 2 hours	EN 196-1	6.0 N/mm ²
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
Capillarity water absorption	EN 13057	w ≤ 0.5 kg/m ² ·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	Complies with note in ZA.1

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)

• 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.

- Do not apply on smooth surfaces.
- Straight after application, clean 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 RAPID
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 •

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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 product for the envisaged use.

The figures shown are average indicative figures relevant to current production and may be changed or updated by INDEX at any time without previous warning. The advice and technical information provided, is what results from our best knowledge regarding the properties and the use of the product. Considering