

# RESISTO TIXO RAPID

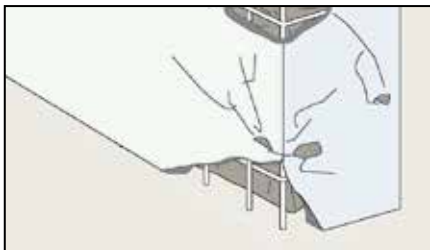
QUICK SETTING AND HARDENING FIBRE-REINFORCED THIXOTROPIC MORTAR WITH IMPROVED ADHESION AND COMPENSATED SHRINKAGE FOR THICK STRUCTURAL REPAIRS OF CONCRETE WITHOUT FORMWORK

GRANTS *LEED* CREDITS

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

## PROBLEM

**RAPID REPAIRS OF DETERIORATED CONCRETE PARTS WITHOUT HAVING TO USE FORMWORK**



Some concrete repair work requires the application of considerable thicknesses without using formwork. The reinstatement of corners of beams or pillars, front cornices and wall-floor joining mouldings requires the use of highly thixotropic mortar, with compensated shrinkage in order to avoid cracks and shrinkage hairlines.

## SOLUTION

RESISTO TIXO RAPID is ready mixed in powder form, ready to use, containing special high-strength cements, selected inert material, synthetic fibres and additives which guarantee excellent handling and adhesion to surfaces. When mixed with water it becomes a fast-setting thixotropic mortar. It may be applied vertically, even quite thickly, without the need to use formwork.

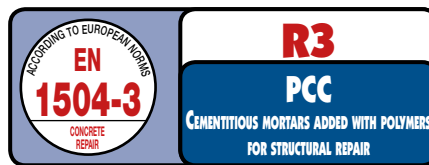
## APPLICATION FIELDS

RESISTO TIXO RAPID is particularly suitable for repairs, reconstruction of the layer covering the steel, repairing the corners of beams and pillars damaged by the oxidation of the reinforcing rods, creating joint mouldings etc. Generally for all jobs where considerable thicknesses must be applied without using formwork.

## ADVANTAGES

Speed of execution and finishes.

- Good adhesion to concrete surfaces.
- Highly thixotropic - does not drip.
- Shrink-resistance and reinforcing fibres eliminate the possible formation of cracks even when thickly applied.



## METHOD OF USE

### • PREPARING THE SUBSTRATE

Concrete surfaces must be prepared in order to achieve good bonding of RESISTO TIXO RAPID mortar.

It is therefore necessary to remove all loose particles and material which is lacking in solidity by chiselling, brushing or high pressure water cleansing.

Remove any traces of oil, release agents, rust and dirt in general.

Any exposed steelwork must be cleaned and passivated with STRATO FER or with a grout

consisting of STRATO 4900 and cement (1). Dampen the substrate without creating films of water; any which form can be eliminated using compressed air or a sponge.

Apply one coat of gripping agent with a stiff-bristled brush, using the same RESISTO TIXO RAPID, making sure to fill all the cavities in the concrete.

### • PREPARING THE MIX

RESISTO TIXO RAPID must be mixed with clean water (4.50 litres per 25 kg bag). To mix the product, you can use a conventional cement mixer or slow-speed mixing drill (2), adding RESISTO TIXO RAPID to previously poured water, mixing for 3-4 minutes.

Do not mix for longer than it takes to obtain a perfectly smooth mix. Remember that water is an important

component of the mortar and is to be added in the recommended quantities so as not to deteriorate some of the product's properties, such as its mechanical strength, low shrinkage etc.

### • APPLICATION

Apply the filling mortar, fresh-on-fresh, using a trowel (3). When applying the product on difficult substrates under stress, we recommend adding STRATO 4900 or COLLASEAL.

### • FINISHING

Painting of the repaired structure may be carried out 8 days after carrying out repairs, using water-based acrylic products, but solvent-based paint will need longer curing times.

### • CONSUMPTION

About 18 kg/m<sup>2</sup> per cm of thickness.



(See following)

## TECHNICAL CHARACTERISTICS

	Standard	RESISTO TIXO RAPID
Appearance		Powder
Colour		Grey
Particle size		0 to 2.5 mm
Apparent density		1.35 ± 0.10 kg/ℓ
Mix water		18% ± 1%
Storage in original packaging in a dry place		12 months
<b>Mix properties and workability</b>	<b>Standard</b>	
Density of mix	<b>EN 1015-6</b>	1.85 ± 0.10 kg/ℓ
pH mix		about 12
Workable mix duration (*)		about 15 minutes
Setting time (*)		20 ± 5 minutes
Application temperature		+5°C to +35°C
Minimum application thickness		5 mm
Maximum application thickness per layer		40 mm
Application		Manual
<b>Performance characteristics</b>	<b>Standard</b>	<b>Product performance</b>
<b>Class and type</b>	<b>EN 1504-3</b>	<b>R3 - PCC</b>
<b>Compression strength - after 28 days</b>	<b>EN 12190</b>	≥25 MPa
Bending strength - after 28 days	<b>EN 196-1</b>	≥7 N/mm <sup>2</sup>
<b>Chloride ion content</b>	<b>EN 1015-17</b>	Absent
<b>Bond strength</b>	<b>EN 1542</b>	≥1.5 MPa
<b>Thermal compatibility with frost-thaw cycles - Part 1</b>	<b>EN 13687-1</b>	≥1.5 MPa
<b>Water absorption by capillarity</b>	<b>EN 13057</b>	w ≤ 0.5 kg/m <sup>2</sup> ·h <sup>0.5</sup> - W1
<b>Durability - Resistance to carbonation</b>	<b>EN 13295</b>	Test passed
<b>Elastic compression modulus</b>		≥15 GPa
Thermal resistance - Operating temperature		-30°C to +90°C
<b>Fire reaction</b>	<b>EN 13501-1</b>	A1
<b>Hazardous substances</b>	<b>EN 1504-3</b>	Complies with note in ZA.1

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 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 TIXO RAPID**  
25-kg Sack

• 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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