







# RESISTO UNIFIX

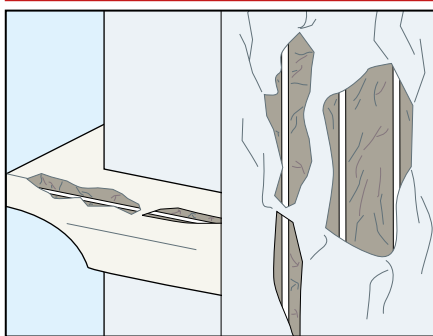
FIBRE-REINFORCED THIXOTROPIC MORTAR WITH IMPROVED ADHESION AND COMPENSATED SHRINKAGE FOR STRUCTURAL REFURBISHMENTS OF CONCRETE AND SKIMMING OPERATIONS

GRANTS *LEED* CREDITS

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

## PROBLEM

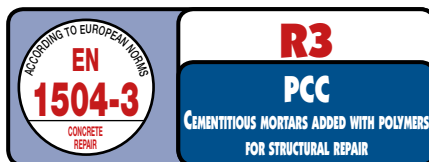
### SKIMMING AND CARRYING OUT SMALL REPAIRS ON CONCRETE



Various products are made for use in renovating concrete which perform different functions: repairs, grouting, skimming etc. A mortar for high-thickness repairs cannot generally be used for skimming and levelling surfaces, for which different products must be used.

## SOLUTION

For repairs in thick layers, even very thick, and very thin skimming jobs, the mortar with compensated shrinkage **RESISTO UNIFIX**, resolves all the requirements for repair work and skimming with a single, extremely versatile product. **RESISTO UNIFIX** is a premixed powder, based on high-strength cement, selected aggregates with a maximum particle size of 0.5 mm and additives which ensure excellent workability and adhesion to the substrate. **RESISTO UNIFIX** has a high thixotropic level for use in small high-thickness vertical repair jobs without the need for formwork. **RESISTO UNIFIX** has a fast setting time, high mechanical strength and elastic modulus suitable for repair work.



## APPLICATION FIELDS

**RESISTO UNIFIX** is recommended for numerous applications in renovating concrete, repairs, reconstruction of the layer covering the steel, levelling, skimming and grouting in drainage canals, viaducts and hydraulic works in general.

## ADVANTAGES

- High workability.
- High level of adhesion to the concrete substrate, elastic modulus and thermal expansion similar to concrete.
- High thixotropic level and compensated shrinkage, making it easy to apply without using formwork and without cracking problems.

## METHOD OF USE

### • PREPARING THE SUBSTRATE

Concrete substrates should be cleaned to ensure excellent adhesion of the **RESISTO UNIFIX** 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 steel bars should be cleaned and passivated with STRATO FER or cement grout and STRATO 4900 (1).

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

### • PREPARING THE MIX

**RESISTO UNIFIX** should be mixed with clean water (4.50 litres per 25 kg bag) (2). To mix the product use a normal cement mixer or a slow speed mixer drill, adding **RESISTO UNIFIX** to previously poured water and 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 degrade some of the product's properties, such as its mechanical strength, low shrinkage etc.

### • APPLICATION

The product is applied with a stainless spatula or a trowel without the need for formwork (3). **RESISTO UNIFIX** can also be applied by spraying with a plastering machine such as Turbosol or Putzmeister.

### • CONSUMPTION

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



(See following)

## TECHNICAL CHARACTERISTICS

	Standard	RESISTO UNIFIX
Appearance		Powder
Colour		Grey
Particle size		0 to 0.7 mm
Apparent density		1.25 ± 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>	1.95 ± 0.10 kg/ℓ
pH of mix		about 12
Workable mix duration (*)		about 60 minutes
Application temperature		+5°C to +35°C
Minimum application thickness		1 mm
Maximum application thickness		10 to 30 mm (small repairs)
Application		Manual or mechanical
<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
<b>Bending strength - after 28 days</b>	<b>EN 196-1</b>	≥5 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 frost-thaw cycles - Part 1</b>	<b>EN 13687-1</b>	≥1.5 MPa
<b>Capillarity water absorption</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
<b>Thermal resistance - Operating temperature</b>		-30°C to +90°C
<b>Fire reaction</b>	<b>EN 13501-1</b>	A1
<b>Hazardous substances</b>	<b>EN 1504-3</b>	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)

### • 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.
- Thick applications must be limited to small repairs. In case of wide surfaces use either RESISTO TIXO or RESISTO REP.
- 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 UNIFIX**  
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 •

 <p>Construction Systems and Products</p> <p>Via G. Rossini, 22 - 37060 Castel D'Azzano (VR) - Italy - C.P.67 T. +39 045 8546201 - F. +39 045 518390</p>	<p>Internet: <a href="http://www.index-spa.com">www.index-spa.com</a> Informazioni Tecniche Commerciali <a href="mailto:tecom@indexspa.it">tecom@indexspa.it</a> Amministrazione e Segreteria <a href="mailto:index@indexspa.it">index@indexspa.it</a> Index Export Dept. <a href="mailto:index.export@indexspa.it">index.export@indexspa.it</a></p>		<p>TOTAL QUALITY <b>Index</b></p>  <p>UNI EN ISO <b>9001</b></p>	<p>Environmental Management Systems <b>index</b></p>  <p>UNI EN ISO <b>14001</b></p>	 <p>socio del GBC Italia</p>	
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