

REFOR-tec® GF 3 / ST - HS

Micro-concrete UHPFRC

Ultra High Performance Fibre Reinforced Cementitious Composites

CE approved – Certificate n. 1305 - CPD - 0808
EN 1504-3 Class R4

R4

EN 1504-3

NORMA EUROPEA

Description Is a cement based three-component formulation of the REFOR-tec series that combines an auto levelling rheology with exceptional physical-mechanical values and ductility.

Packaging, proportions and way to use For one bag of component A

Comp. A	POWDER (in bag)	:	25.0 Kg.
Comp. B	LIQUID (in can)	:	2.3 Kg.
Comp. C	FIBRE FIB-energy® ST / HS (in bottle):		2.25 Kg.
TOTAL:			29.55 Kg.

The components are dosed on the jobsite for every mixing unit. Mix with suitable and efficient vertical axes mixer, for about 12-15 minutes in the following sequence:

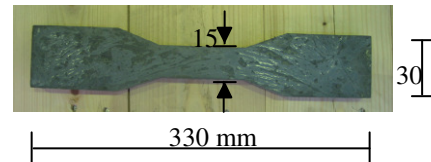
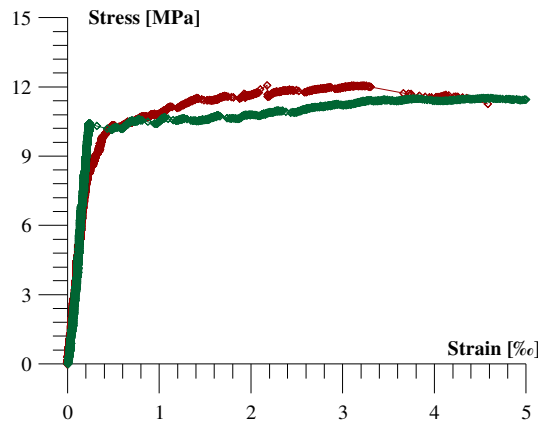
f.ex. : 250 lt. Mixer - 10 bags powder = **250 Kg. comp. A powder + 23 Kg. comp. B liquid (9.2 % ref. to the powder A) + 22.5 Kg. comp. C fibre (9% ref. to the powder A) :**

- 5 bags of powder (comp. A) in the mixer
- + comp. B liquid until a fluid consistence is obtained (about ~ 11-12 Kg.)
- + 5 bags, adding little amount of component B with every bag, always mixing to a homogeneous consistency and respecting the dosage rates
- + at the end, adding component C fibres; gradually while mixing until homogeneous paste is obtained.

Applications

- For the fabrication of light structural elements with thin sections
- For structural repairs by casting in mould or confined spaces
- For the structural repair of floors at low thickness
- For seismic adaptation with absorption and transfer of shear or tensile stresses in the case of events with high dynamic stresses.
- For the structural and fire resistant reinforcement of pillars and beams
- For the repair of pavements with the need to resist to high static and dynamic loads and impact resistance

Tensile behaviour



Technical characteristics (typical values)

• Workability time	Ca. 30 min at 20 °C
• Walk ability	12 h at 20 °C
• Acceptable for max. load	24 h at 20 °C
• Density	2.530 Kg/m ³
• Compression resistance	182 MPa
• Resistance to direct traction	12 MPa
• Resistance to flexion	50 MPa
• Elastic modulus	44 GPa
• Fracture energy	65.000 N/m
• Shrinkage	< 0,05 %
• Carbonation depth	0

Remarks

INFORMATION ACCORDING TO 2003/53/CE:

Storage: 12 months in original packaging, unopened, stored protected and dry, +5°C and +35°C.

Do not use the content of opened bags if you notice lumps. Avoid the freezing of the liquid component.

Safety indications

Read carefully the indications on the packaging, or request the relative Material Safety Datasheet of this material.

The above information is based on our best experiences and lab results and on results of the application of the product in various fields. Tecnochem Italiana is not responsible for negative performances due to not proper use of the product or for defects due to elements not connected with the quality of the product included wrong storage. Technical characteristic in this technical data sheet are up-to-dated periodically .Revision date of this technical data sheet is indicated below.