



Very
High
Durability
Repair &
Prevention
System

From Project to Jobsite



Certified Quality System since **FEBRUARY 1993**

TECNORASO CT 10

**FIBRE-REINFORCED MONOCOMPONENT RHEOPLASTIC MORTAR
FOR SMOOTHENING OR REPAIRS AT LOW THICKNESSES
SHRINKAGE COMPENSATED, HIGHLY ADHESIVE**

R3

EN 1504-3

NORMA EUROPEA

**CE approved – Certificate n. 1305 - CPD - 0808
EN 1504-3 Class R3**

type MR1 : *“cementitious mortar, for thin smoothening (1-3 mm), polymer modified, premixed, thixotropic, monocomponent, containing polyacrylonitrile synthetic fibres”* according to CAPITOLATO AUTOSTRADE PER L'ITALIA “tixotropic mortars type MR1”



Description TECNORASO CT 10 is a monocomponent fibre reinforced mortar, based on cement, and silica sand, with maximum dimension of 0,3 mm. The product contains special polymers which allow smoothening operations at very low thickness. After mixing with water, a paste is formed with excellent workability by trowel and, once hardened, Tecnoraso CT 10 shall have optimal adhesion to the substrate, durability, impermeability for water, good permeability to watervapour, and high physico-mechanical properties. The product has a low elasticity modulus.

Advantages and characteristics

- The thixotropic qualities of the product give excellent adhesion, make it easy to spread on vertical surfaces, on the lower parts of beams, shelves or slab. Often it can be applied to structures which are subject to dynamic stress from traffic.
- The product applies and adheres well to difficult substrates. **TECNORASO CT 10** can be applied in thickness varying about from 2 to 3 mm (apply by trowel, finish by sponge).
- Exceptionally strong adhesion to the support and maximum durability to carbonation and damaging acid rain.
- It has excellent waterproofing properties, but is permeable to watervapour.

Fields of use

- The product must be applied at room temperature > 4-5°C ensuring the maintaining of the environmental temperature and the surface to >2°C for at least 24 hours after application.
- For all type of repairs, and resurfacing of good quality concrete.
- For the levelling of substrates in concrete or masonry in general.
- To homogenize the aesthetics of concrete substrates.

Method of use

- Prepare the substrate well by sand or water-blasting. Eliminate all remains of previous coatings, dirty spots, oil, grease, etc.
- Eventually eliminate spalling concrete, expose the rusted steel bars, remove rust and apply MuCis® PROTEZIONE FERRO (see brochure) before applying any other product.
- For extended and higher thickness applications, interpose proper steel mesh.
- Add the water to the powder and mix until the desired consistency is obtained (about 22% referred to the powder = about 5,5 litre of water for a bag of 25 kg).
- Mix well with an appropriate mixer till all lumps are disappeared, and the mix is homogeneous. Allow a minute to saturate, and remix for another 30 seconds.
- Prepare only the amount of product, which can be applied in about 15-30 minutes. Do not remix, or add any water once the product has started to set.
- Apply the product directly to the well prepared and sound substrate.
- When applying on incoherent or difficult substrates, we recommend "brushing" the surface with a fluid version of the product using a hard brush. This will improve adhesion.
- Normally it is not necessary to take any anti-evaporation measures (curing-compounds) or to wet the surface after application. In extreme climate conditions, proper protection is needed.

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Remarks Information according to 2003/53/CE:

Storage: The product can be kept for at least 12 months if stored in dry and protected conditions, in the original packaging, between +5° C and +35° C.

Do not use the content of opened bags in case of powder agglomeration.

Packaging Bag of 25 kg.

Technical characteristics (typical values) Initial setting time: about 30 min. at 20°C

Compressive strength	N/mm ²	30 ÷ 35 (28 days.)
Flexural strength	N/mm ²	7 ÷ 9 (28 days.)
ELASTICITY MODULUS	N/mm ²	15.000 ÷ 18.000 (28 days.)
Adhesion to concrete	N/mm ²	2,0 (28 days.)
Pull-out	N/mm ²	> 10 (28 days.)

Carbonation in time	8 years mm	2,0
	18 years mm	11
	25 years mm	16
Resist. to CO ₂ penetration	μ	1.150
WATER VAPOUR permeability coeff.	μ	38
① Res. to FROST/THAW	gr/m ²	90
② Permeab. to CHLORIDES	Coulomb	380

Type of conglomerate		thixo mortar
N. components		one
Advised thickness per layer	mm	2÷3
Application		by hand
Curing: wet		NO
Curing: protected		SE
Typical application		smoothing/repair

Setting time		Normal
Hardening		Normal
Shrinkage compensation		YES+
Consumption	Kg/m ² /mm	1,9

1 N/mm² = 1 MPa = 10,19 Kg/cm²

<p>* The formulation for this type of products can be also made with the addition of corrosion inhibitors MuCis®</p> <p>① Freeze and thaw resistance in the presence of salt. SIA 162/191 gr/m² (< 600 gr/m² = very high freeze and thaw resistance)</p> <p>② Chlorides permeability. FHWARD/81 (100÷1000 COULOMB = very low chlorides permeability.)</p>	<p>SE Depending on the applicative conditions (rain, sun, hot temperatures, humidity)</p> <p> Very High Durability Repair & Prevention Systems</p> <p> Very High Durability Reinforced Concretes</p>	<p> Multiple Corrosion Inhibiting Synergies</p> <p>AED Very High Deformation Energy</p>
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Safety indications Read carefully the safety indications on the packaging, or consult the relevant Material Safety Data Sheet of this product.

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

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