

## HFE-tec® thixo 200

**THIXOTROPIC MORTAR WITH VEY HIGH DUCTILITY AND ACCELERATED SETTING TIME.**

**CE approved – Certificate n. 1305 - CPD - 0808**

**EN 1504-3 Class R3**

**Description** HFE-tec® thixo 200 is a two-component mortar, reinforced with **FIB-energy® MC** polymer fibres with a high elasticity modulus and exceptional fracture energy. The deformation capacity of this mortar is more than 500 times this of a standard structural repair mortar.

**Advantages** The fibres in the mortar do not corrode. The mortar has a very high ductility, as well as a high capacity to absorb energy and deformation. The quick setting allows fast finishing after application.

**Application field** Restoration of structures in reinforced concrete or masonry in severe environmental conditions, particularly of structures subjected to dynamic loads, seismic or shock; wherever it is necessary to absorb high energy without fracture or collapse.

**How to apply** Apply the product on a sound substrate, free from greases, oil, dust and loose particles. Prepare sufficiently the support by scarification (we recommend high pressure hydro-jetting) so the mortar can adhere well to the substrate  $\geq 1,2 \text{ N/mm}^2$  (direct traction). We advice the use of a vertical axes mixer. First add component B (liquid) and then, adding (and mixing) component A (powder); mix until homogeneous, with fibres well dispersed, without lumps. Apply by trowel or spraying, layers of 2-4 cm in succession (on the intrados, 1 cm per layer), finish roughly. Perform the final smoothing after the total applied thickness is cured (after 24 hours or more).

**Remarks** **Storage:** INFORMATION ACCORDING TO 2003/53/CE:  
12 months in original packaging, not opened, maintained in dry and protected environment, from +5°C to +35°C.  
Do not use the content of opened bags is you notice lumps. At all times, avoid the freezing of component B.

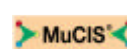
**Packaging** Bag of 25 Kg. + can of 5,25 Kg.

<b>Technical characteristics (typical values)</b>	• First setting	min.	15
	• Fracture energy	N/m	~20.000
	• Compression resistance	N/mm <sup>2</sup>	10 (1 d.)
		N/mm <sup>2</sup>	33 (28 d.)
	• Flexural resistance	N/mm <sup>2</sup>	3,5 (1 d.)
		N/mm <sup>2</sup>	8,2 (28 d.)
	• Elastic modulus	N/mm <sup>2</sup>	10.000
	• Adhesion to concrete	N/mm <sup>2</sup>	$\geq 1,5$
	• Pull-out	N/mm <sup>2</sup>	> 12
	• Carbonation in time	8 years	3,5
		mm	
	• CO <sub>2</sub> penetration resistance	$\mu$	1.050
	• Vapour transmission	$\mu$	44
	• ① Freeze/Thaw resistance	gr/m <sup>2</sup>	500
• ② Chloride permeability	Coulomb	690	

• Type mortar	High fracture energy thixotropic mortar
• N° components	Two
• Advised thickness	mm 5÷50
• Application	Vertical, intrados
• Curing humid	NO
• Curing protected	SE
• Typical application	HFE-tec® (see literature)
• Setting	Accelerated
• Hardening	Accelerated
• Shrinkage compensation	SI+++
• Consumption	1,8 Kg/m <sup>2</sup> /mm

- ☐ Frost/thaw resistance in presence of salts SIA 162 11/91 (< 600 gr/m<sup>2</sup>= high resistance)
- ☐ Chlorides permeability. FH WA RD/81 (100÷1000 COULOMB = low permeability)
- ☐ UNI 8148 restrained expansion

**SE** Depending on the applicative conditions (rain, sun, hot temperatures, humidity)

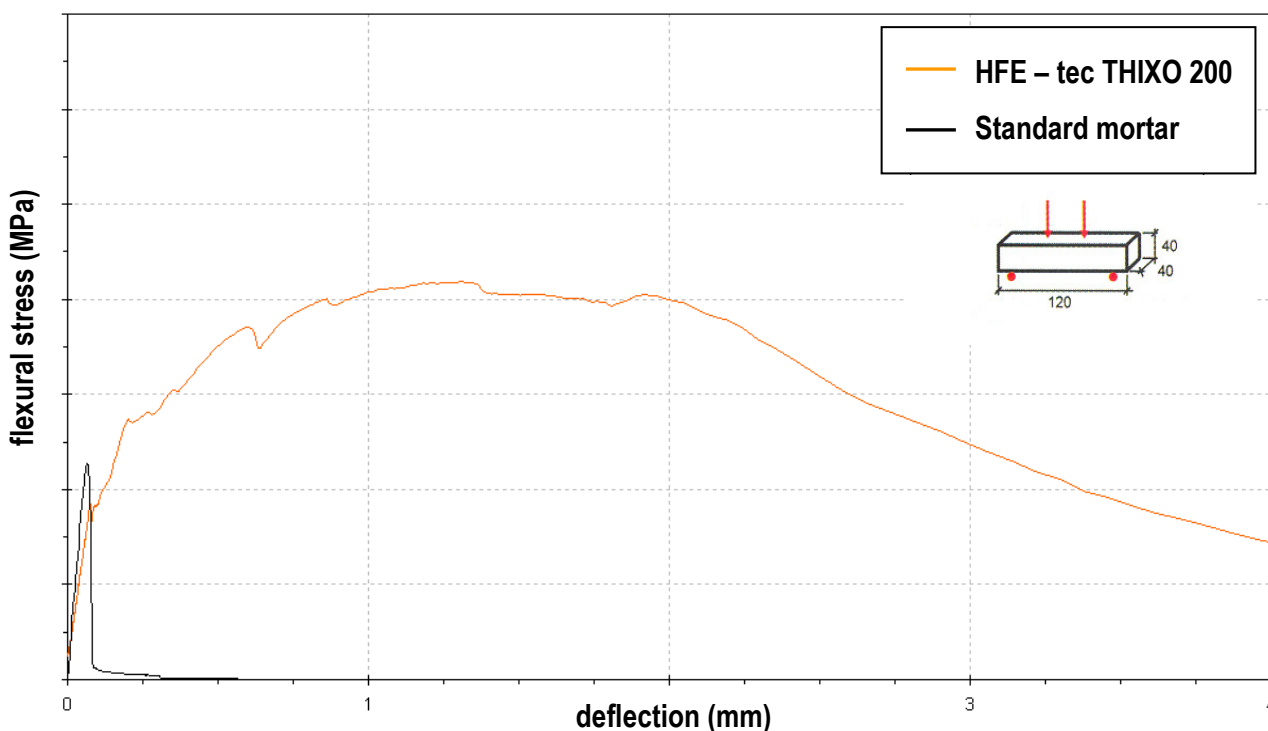


Multiple Corrosion Inhibiting Synergies



Very High Durability Repair & Prevention Systems

**AED** Very High Deformation Energy



**Safety and precautions**

Follow the instructions and precautions as when working with standard cement based products. Read carefully the information of the packaging or consult the relevant Material Safety Datasheet.

The above data are based on our actual and most experienced practical and laboratory knowledge and the results are collected from application of the product in different situations. Tecnochem Italiana does not assume any responsibility regarding inadequate or negative performance as a result of improper use of the product or for defects deriving from factors or elements other than the quality of the product including improper storage. The technical characteristics and performance mentioned in this datasheet are updated periodically. The revision dates and number of revision of the datasheets are listed in the table below. Eventual variations are traceable on our website [www.tecnochem.it](http://www.tecnochem.it) where the most updated datasheets can be retrieved.