



Very  
High  
Durability  
Repair &  
Prevention  
System



Certified Quality System since **FEBRUARY 1993**

*From Project to Jobsite*

## FLASH 10 and FLASH TIXO

**ONE OR TWO COMPONENT REPAIR MORTAR  
WITH FAST SET AND HARDENING  
FOR QUICK REPAIRS AND RESTORATIONS**

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

**FLASH 10 EN 1504-3 Class R4  
FLASH TIXO EN 1504-3 Class R3**

**R4**

**NORMA EUROPEA**

**FLASH 10**

**R3**

**NORMA EUROPEA**

**FLASH TIXO**

**Description** FLASH 10 and THIXO are cement based pre-packed mortars, which, when mixed with water, are easy to apply, have fast set and hardening properties and exhibit excellent initial resistance (6-13 N/mm<sup>2</sup> Mpa after 1 hour) and high final strengths (35-50 N/mm<sup>2</sup> after 28 days). With the compensated shrinkage, and the low exothermic reaction, optimal finish of the repair can be obtained. There are 2 versions available:

**FLASH 10 (for pouring):** to pour in formwork, anchoring, fixation or ornaments, ..

**FLASH TIXO (thixotropic repair mortar):** for the quick aesthetic and structural repairs.

**In all cases, if it is necessary to obtain an increased adhesion, (like on very smooth or difficult substrates, or substrates subjected to vibrations or in case of unfavourable ambient conditions, or when HIGHER ADHESION AND DUCTILITY IS REQUIRED) it is advisable to prepare the mortar FLASH with RMB – Resin for Mortars Bicomponent.** The use of RMB also has the advantage that the substrate does not have to be saturated with water for application, or that special post curing procedures have to be followed. → **FLASH 10 two component** → **FLASH TIXO two component**

**Fields of use** **FOR ALL REPAIR WORKS WHEN HIGH EARLY RESISTANCES ARE REQUIRED, WITH PRACTICALLY NO SHRINKAGE, VERY LOW EXOTHERMIC REACTION, AND A GOOD FINISH OF THE REPAIR.**

### **FLASH 10 one or two component**

- As pouring mortar in formwork or confined spaces.
- For repairs of concrete beams or horizontal slabs (due to the fast set and hardening, after 1-2 hours, the repair can be opened to mild traffic again)
- For the fast anchoring of machines, bolts, ..
- For the rapid fixing of railing, steps, ..
- For the fixing of steel nets onto the concrete for extra structural reinforcement.
- For the production of small prefabricated elements, demoulding is allowed after 30 minutes.

### **FLASH TIXO one or two component**

- For repair and reconstruction of concrete in general. It provides an aesthetical and structural finish at each thickness required.
- For the quick repair of prefabricated concrete elements, or other damages caused by demoulding.

**Method of use** **Remarks:** The adhesion to substrate is the main characteristic for durability and structural cooperation of the repair and restoration mortars.

It is recommended to consult the technical sheet: *"Appraisal and preparation of substrates to obtain better adhesion of repair and restoration mortars – recommendations for the correct finishing"*

Repair the substrate well by removing all incoherent parts or spalled concrete.

- Clean well, and saturate the substrate to avoid absorption. Before starting the application, remove all the excess water on the surface (the substrate must be saturated but touch-dry). Pour about 80% of the necessary mixing liquid in the recipient, water or resin RMB, and add the powder while mixing intensively during 1 minute. Adjust the consistency by slowly adding the remaining part of the mixing liquid. Use the repair mortar within 3 minutes after mixing.
- When temperatures are low, it is advisable to use warm water to prepare the product. When temperature is high, the mortar has to be used within 1-2 minutes. Eventually, use cold water and keep the bags stored in a colder place.

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FLASH 10 and FLASH TIXO  
pag. 1/2

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**Remarks** Do not use the content of opened or damaged bags if the powder is lumpy.  
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 POWDER

- Paper bags, PE lined, of 25 kg, 1200 kg per pallet
- Bags in thermo-welded polyethylene containing 5 kg, 600 kg per carton box .
- N. 2 thermo-welded bags of 5 kg/each in a HDPE pail.

**LIQUID RMB** (replaces the water in case it is required an improvement of ADHESION and DUCTILITY)

- Can of 5 or 20 Kg

### Technical characteristic (typical values)

	FLASH 10 (pouring)	FLASH TIXO (thixotropic)
Advised mixing water (or, if required, resin RMB – Resin for Mortars Bicomponent)	14%	16%
Setting time at 20°C		
Initial	10 min	12 min
Final	20 min	22 min

		FLASH 10	FLASH TIXO
• Compressive strength	N/mm <sup>2</sup>	12 (1 h) 50 (28 days.)	9 (1 h) 35 (28 d.)
• Flexural strength	N/mm <sup>2</sup>	7 (28 days.)	6,4 (28 d.)
• ELASTICITY MODULUS	N/mm <sup>2</sup>	29.000 (28 days.)	18.000 (28 d.)
• Adhesion to concrete	N/mm <sup>2</sup>	2,0 (28 days.)	1,5 (28 d.)
• Pull-out rebars	N/mm <sup>2</sup>	> 10 (28 days.)	> 10 (28 d.)
• Carbonation in time	8 years mm	3	6
	18 years mm	12	20
	25 years mm	22	30
• Resist. to CO <sub>2</sub> penetration	μ		600
• Water vapour permeability coeff.	μ	48	46
• ① Res. FROST/THAW	gr/m <sup>2</sup>	650	640
• ② Permeab. to CHLORIDES	Coulomb	900	910
• Type mortar		pourable mortar	thixo mortar
• N. components		mono or bic	mono or bic
• Advised layer thickness	mm	20÷50	10÷50
• Application		by hand	by hand
• Curing : wet		SE	SE
• Curing : protected		SE	SE
• Typical application		fast repairs	fast repairs
• Setting time		rapid	rapid
• Hardening		rapid	rapid
• Shrinkage compensation		YES+++	YES+++
• Consumption	Kg/m <sup>2</sup> /mm	1,9	2

① Freeze and thaw resistance in the presence of salt: SIA 162 1191 (<600 gr/m<sup>2</sup>=very high freeze and thaw resistance)  
② Chlorides permeability: FHWARD81 (100-1000 COULOMB = very low chlorides permeability)  
③ UNI 8148 restrained expansion

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

Very High Durability Repair & Prevention Systems  
 Very High Durability Reinforced Concretes

Multiple Corrosion Inhibiting Synergies  
AED Very High Deformation Energy

**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. Changes of this data sheet can be found in our web-site [www.tecnochem.it](http://www.tecnochem.it) where you can find the same technical data sheet updated in real time.

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