



ELASTOCEM

TWO-PART FLEXIBLE CEMENT MORTAR FOR WATERPROOFING SUITABLE WHEN IN CONTACT WITH DRINKING WATER

DESCRIPTION

Special pre-batched two-part fibre-reinforced cementitious product. The powder part consists of cement, aggregate and special additives. The liquid part consists of a synthetic resin dispersed in water. When mixed together, the two components (pre-batched in the package) form a highly elastic and adhesive mortar that can be applied both horizontally and vertically up to a maximum thickness of 2 mm without running.

After hardening, the product has:

- Extremely high elasticity and waterproofing capacity.
- Excellent adhesion to concrete, any kind of cementitious substrate and smooth, compact and non-absorbent substrates such as ceramic tiles, polished natural stone, PVC, linoleum.
- Excellent resistance to carbon dioxide, chlorides and sulphates.
- Suitable when in contact with drinking water according to D.M 174 of 06.04.04.

FIELDS OF APPLICATION

Suitable for:

- Waterproof membranes for protecting concrete surfaces from chemical attack.
- Flexible waterproof smoothing layers for ground walls and microcracked plaster.
- Waterproof membrane for cementitious substrates prior to laying ceramic tiles in internal and external areas, such as balconies, terraces, swimming pools, etc.
- Flexible smoothing layer for structures subject to deformation under load.
- Flexible smoothing layer on interior substrates consisting of ceramic tiles, PVC, linoleum, etc., prior to installation of ceramic tiles or natural stone with cementitious adhesives.
- Waterproofing covering of tanks, cisterns, canals.

SUBSTRATES

	MINIMUM CURING TIME	MAXIMUM RESIDUAL MOISTURE	GENERAL CONDITIONS
Cementitious screeds	28 days	3%	Clean and dry
Heated cementitious screeds	≥28 days	3%	Solid and compact
LITOCEM screeds	24 hours	3%	Free from cracks
Concrete	6 months		Sufficiently cured
Cementitious plaster	1 week per cm thickness		Free from rising damp
Old floor covering consisting of ceramic tiles, agglomerate, PVC, linoleum			

SUBSTRATE PREPARATION

In case of structures that contain drinking water, check the suitability with a test ???

The substrate must be solid, clean, free of loose material, dust, form oil, rust or anything else that could prevent proper adhesion. Substrates consisting of old PVC or linoleum floors etc. must be cleaned and degreased using suitable solvents. Old ceramic tile or natural stone floors must be dewaxed using water and caustic soda, then rinsed and dried. Wet cementitious surfaces lightly with clean water and wait until excess water has completely evaporated before applying the product. To speed up the operation it is advisable to remove excess water using a sponge or compressed air.

MIXING RATIO

Part A (powder)

24 kg (1 bag)

Part B (liquid)

8 kg (1 can)

The two parts are pre-batched in their respective containers

MIX PREPARATION

Pour part B (liquid) into a clean container and add part A (powder) while stirring. Stir using an electric drill equipped with mixing paddle until a uniform, lump-free mix is obtained. Hand mixing is not recommended.

Leave the mix to sit for about 5 minutes then re-mix briefly.

APPLICATION

Apply the mortar using a smooth steel trowel directly to the substrate in a thickness of 2 mm within its pot life, which is about 1 hour at a temperature of +23°C.
If a second coat is required, it must be applied after the first coat has partially hardened (about 3-4 hours at T=+23°C). In areas with microcracks or subject to high stress (swimming pools, terraces, etc.), it is advisable to install an anti-alkaline fibreglass net with 4 mm meshes inside the ELASTOCEM layer.
Final smoothing can be performed using the same smooth trowel a few minutes after applying the product.

MATURING AND TREATMENT IN CASE OF CONTACT WITH DRINKING WATER

When waterproofing structures that contain drinking water, let the mortar mature for 6 days after having applied the second coat.
In case of low temperatures or high humidity, the mature times are longer.
Then clean the surface filling up the tank with clean water for at least 24 hours.
Then empty and rinse for few minutes.

ADHESIVES RECOMMENDED FOR INSTALLATION

Ceramic tiles or natural stone can be installed over the ELASTOCEM based membrane after at least 5 days of curing in favourable temperature conditions (+23°C) and with an open grout joint. Refer to the application chart for proper choice of the adhesive according to the size of the tiles.
If in doubt, consult Litokol technical service.

CAUTIONS

- Do not add lime or cement to the product.
- Do not apply the product to substrates that show signs of rising damp.
- When using outdoors, protect from rain and frost for at least 24 hours.
- Apply the product at temperatures of between +8°C and +35°C.
- Do not use for thicknesses greater than 2 mm.
- In hot climates, the product should be kept out of direct sunlight. After application, it is advisable to protect the treated area with plastic sheets to prevent rapid evaporation.
- Do not use for applications not stated on this technical sheet.

IDENTIFICATION DATA

Appearance	Part A: powder	Part B: liquid
Colour	Grey	
Customs code	3824 5090	
Shelf life	12 months in original packaging in dry place at temperatures no lower than +5°C. Part B (liquid) is susceptible to frost damage.	

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Shelf life	Part B (liquid) is susceptible to frost damage.	
APPLICATION DATA	Part A: 3 parts (24 kg)	Part B: 1 part (8 kg)
Mixing ratios	5 minutes	
Maturing time	Fluid paste	
Mix consistency	About 60 minutes	
Pot life	From +8°C to +35°C	
Application temperature	2 mm	
Maximum applicable thickness	3-4 hours at T=+23°C	
Time between applying 1st and 2nd layers	1.7 kg/m ² per mm thickness	
Consumption	5 days	
Time before installing ceramic tiles		
PERFORMANCE	> 1 N/mm ²	
Adhesion strength to concrete after 28 days in standard conditions	> 0.5 N/mm ²	
Adhesion strength to concrete after 7 days in standard conditions + 21 days in water immersion	Waterproof	
Waterproofing after 7 days at pressure of 3 bar DIN 1048	19.7%	
Elongation at rupture after 14 days in standard conditions DIN EN ISO 527		
PACKAGING	24 kg bags 8 kg can Complete package 32 kg	Standard pallet 1440 kg Standard pallet 480 kg
SAFETY INFORMATION Part A (powder)	<p>The product contains cement Xi – IRRITANT</p> <p>R36/37/38 Irritating to eyes, respiratory system and skin. R43 May cause sensitisation by skin contact. S2 Keep out of reach of children. S22 Do not breathe dust. S24/25 Avoid contact with eyes and skin. S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S36/37 Wear suitable protective clothing and gloves. S46 If swallowed, seek medical advice immediately and show the container or label.</p>	

Although the information provided on this technical sheet is accurate to the best of our knowledge and experience, it is intended purely as a guideline. The user must carry out preliminary practical tests for each specific job and is solely responsible for the final result.

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