



FINOMIX[®]
DRY MORTARS

Technical Data Sheet

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hydroseal elastic

**flexible 2-component
brushable sealing slurry**

- Waterproofing against positive and negative pressure
- Excellent crack-bridging properties > 2.5mm
- Elastic performance and crack-bridging even at -10°C
- Protects concrete structures from carbonation



HYDROSEAL ELASTIC

flexible 2-component
brushable sealing slurry

DESCRIPTION

HYDROSEAL ELASTIC is a 2-component cement-based mortar for the protection and waterproofing of concrete structures. Component A composes of a cement-based mortar with specially selected aggregates, polymers and special additives, while component B is a synthetic polymer emulsion.

Mixing of component A into component B forms, after hardening, an elastic, watertight membrane which is resistant to chlorides, CO₂ and de-icing salts, and at the same time is capable to absorb substrate movements and bridge cracks >2.5mm.

APPLICATIONS

It is applied for the waterproofing and protection of concrete, masonry, renders. It exhibits high elasticity and strong bonding to the substrate which makes it ideal for applications that are subject to movements, contraction-expansions and vibrations, and substrates that are prone to cracking.

Indicatively, it is applied in the following cases:

- Waterproofing of concrete water-tanks and swimming pools.
- Waterproofing under tiles or other coverings (e.g. microcements) in balconies, terraces, baths, showers, etc.
- Waterproofing of gypsum boards, AAC blocks, renders, etc.
- Protection of concrete surfaces and renders against corrosive agents (CO₂, chlorides, etc.)
- Waterproofing and protection of surfaces subject to movements and vibrations.

Suitable for waterproofing against positive and negative pressure.

PROPERTIES / ADVANTAGES

- Provides water-tightness against pressure up to 5 bar.
- Suitable for positive and negative pressure.
- Excellent crack-bridging performance >2.5mm (Class A5 - EN 1062-7).
- Retains elastic performance even at -10°C with crack-bridging ability of 1.25-2.50 mm (Class A4 - EN 1062-7).

- Protects concrete surfaces from carbonation due to CO₂ ingress.
- Excellent workability and application efficiency.

HARMONIZED STANDARDS / REGULATIONS

- **EN 1504-2:2004:** Cement-based product for the protection of concrete surfaces - Coating (C). Meets the requirements of the standard.
- **EN 1504-9:2008:** Products and systems for the protection and repair of concrete structures - General principles for the use of products and systems. Meets the requirements of the standard according to Principle 1 (PI - Protection against Ingress), 2 (MC - Moisture Control) and 8 (IR - Increasing Resistivity).
- **Regulation (EC) No. 305/2011:** CE marked product with Declaration of Performance (DoP): HS-ELASTIC/CPR-7-13/048/10-2013.

APPLICATION INSTRUCTIONS

- Surfaces must be clean, free from dust, oil and loose material.
- Decomposed parts of concrete or render must be properly removed (manually, mechanically, by sandblasting or waterblasting, etc.) until the surface remains stable and clean. Restoration must be done using the proper **FINOMIX** repairing products.
- Leaks must first be repaired using the ultra-fast setting mortar **WATER•PLUG**.
- Steel elements protruding from concrete should be cut to a depth of 2-3cm and the holes should be repaired with the appropriate repair mortar (**RP 4000** or **RP 4100**) or using the polyurethane sealing mastic **PU•FIX**.
- Inner corners (floor-wall interface) must be shaped into gutter with sides of about 5cm using suitable repairing mortars (**RP 4000**, **RP 4000 RAPID**, **RP 4100**, **RP 4200**).
- Render surfaces must be dry and adhere strongly to the substrate.
- Existing surfaces like old tile layers, terrazzo floors, marble, etc., must be sound and properly cleaned before the application of **HYDROSEAL ELASTIC** on them.

- Porous surfaces must be soaked with water before application. Allow the excess water to evaporate or remove it using compressed air.
- Empty component B into a clean vessel and then add component A under continuous stirring. A low-speed electric mixer (300 r.p.m.) should be used for mixing. Let the mixture settle for 5 minutes and then stir again slightly.
- Apply the mixture with a brush, a spatula or by spraying, in 2-3 layers with a maximum thickness of 2mm per layer. The number of total layers depends on the demands for waterproofing. Each layer is applied crosswise to the previous one after it has sufficiently dried. In cases where the application is done by spraying, special attention should be paid to the uniform thickness of each layer.
- For the waterproofing of surfaces subject to movements, contraction-expansions and prone to cracking, the waterproofing layer must be reinforced with the special fiberglass mesh of 60g/m². The mesh is embedded into the first layer and then two more layers are applied. Take special care for the mesh to be embedded completely without leaving gaps.
- Joints and corners should also be reinforced the same way with 10cm wide fiberglass mesh strips.
- The finished surface of **HYDROSEAL ELASTIC** must be left to cure for 5-7 days before applying any other layer on it. Use only high quality cementitious adhesives type C2 according to EN 12004-1 for tile bonding.

CLEANING OF EQUIPMENT

Clean all tools and application equipment with water immediately after use. Hardened material can only be mechanically removed.

RECOMMENDATIONS

- Temperature during application should be between +5°C and +35°C.
- Each layer of **HYDROSEAL ELASTIC** should not exceed 2mm in thickness.
- Do not add cement, water or aggregates in **HYDROSEAL ELASTIC**.
- Postpone the application if high temperatures or frost are expected for the following 24 hours after application.
- During the curing period protect the fresh surface from dehydration.
- Fresh surface must be protected from rainfall and frost for the first 24-48 hours.
- **HYDROSEAL ELASTIC** must not be exposed directly to chlorine water (e.g. swimming pools). It must be covered with tiles or other protective/decorative coatings.

TECHNICAL CHARACTERISTICS		
PRODUCT CHARACTERISTICS	COMPONENT A	COMPONENT B
Appearance	cementitious powder	liquid
Colour	grey / white	milky white
Bulk density	1.40 ±0.05 kg/lit	
Density		1.10 ±0.05 kg/lit
Dry solids content	100%	52%
APPLICATION CHARACTERISTICS (+23°C / 50% R.H.)		
Mixing ratio	A : B = 2.5 : 1 (parts by weight)	
pH	> 11	
Density	1.85 ±0.05 kg/lit	
Pot life	90 min (22°C)	
Application temperature	minimum: +5°C / maximum: +35°C	
Max. application thickness per layer	2mm	
Consumption	approximately 1.5-1.7 kg/m ² for a 1mm thick layer.	
PERFORMANCE CHARACTERISTICS		
Adhesion to concrete (EN 1542, MC 0.40)	≥ 1.15 N/mm ²	
Adhesion after thermal compatibility	freeze-thaw with de-icing salts (EN 13687-1)	≥ 0.8 N/mm ²
	Thunder shower (thermal shock) (EN 13687-2)	≥ 1.0 N/mm ²
Static crack-bridging (EN 1062-7)	at +23°C	Class A5 (crack width >2.50 mm)
	at -10°C	Class A4 (crack width 1.25-2.50 mm)
Dynamic crack-bridging (EN 1062-7)	at +23°C	Class B3.1 (1,000 cycles with crack movement 0.10-0.30 mm)
	at -10°C	Class B2 (1,000 cycles with crack movement 0.10-0.15 mm)
Depth of penetration of water under pressure	under positive pressure (EN 12390-8, 3 days, 5bar)	no penetration
	under negative pressure (1.5bar)	no penetration
Capillary absorption and permeability to water (EN 1062-3)	≤ 0.01 kg·m ⁻² ·h ^{-0.5}	
Permeability to water vapour (EN ISO 7783)	S _D < 5m (Class I)	
Permeability to CO ₂ (EN 1062-6)	CO ₂ S _D > 50m	

Note: Measures were carried out in laboratory environment conditions. The different conditions on site (temperature, humidity, wind, substrate absorption) may affect the properties of the material.

SAFETY PRECAUTIONS

- The product (component A) contains cement which has an alkaline reaction with water and is classified as irritant.
- Always wear appropriate personal protective equipment for eyes and skin (protective clothing, gloves and goggles).
- If skin contact occurs, rinse well with plenty of clean water.
- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- Consult product's Safety Data Sheet for further instructions on safety handling.
- **PRODUCT FOR PROFESSIONAL USE.**

PACKAGING - STORAGE

Available in:

- Package of 35kg (25kg A + 10kg B) in white and grey colour.
- Package of 7kg (5kg A + 2kg B) in white colour.

Storage: Component A: 12 months from production date, if stored in original, sealed packaging, protected from direct sunlight and moisture. ■ Component B: 12 months from production date, if stored in original, sealed container, protected from direct sunlight and frost.

LEGAL NOTICE

The technical characteristics and recommendations for the use and application of the **FINOMIX** range of products are based on the knowledge and experience of the company. The above information shall be considered merely indicative and subject to confirmation after long-term practical application. For this reason, anyone who intends to use the product must

ensure that it is suitable for the envisaged application. Since the specific site conditions during the applications are beyond the control of our company, the user alone is fully responsible for any consequences deriving from the use of the product. **FINOBETON S.A. (FINOMIX)** has the right to modify the properties of its products without prior notice. This release voids any previous publications issued for this technical specifications sheet.

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