

hydroseal HS 7000 fibro•flex

**flexible fiber-reinforced
2-component cementitious
waterproofing mortar**

- Waterproofing against positive and negative pressure
- Excellent performance even at -10°C
- Crack-bridging properties
- Protects concrete structures from carbonation



HYDROSEAL HS 7000 FIBRO•FLEX

flexible fiber-reinforced 2-component cementitious waterproofing mortar

DESCRIPTION

HYDROSEAL HS 7000 FIBRO•FLEX is a flexible, 2-component fiber-reinforced 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, reinforced with synthetic fibers, while component B is an acrylic 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 up to 2.5mm.

APPLICATIONS

Ideal for waterproofing against water under pressure and substrates subject to strain and that have the tendency to appear (or already have) micro-cracks due to contraction-expansion or vibrations. It is used for:

- Waterproofing of concrete water tanks.
- Waterproofing in baths, showers, swimming pools, roofs, balconies, etc., before the installation of ceramic tiles or other decorative layers.
- Waterproofing and protection of surfaces made of concrete, cement-based floor-screeds, bricks, AAC blocks, cement-blocks, etc., as well cement-boards, gypsum-boards, wood, etc.
- Protection of cracked concrete and render surfaces from the ingress of moisture and other corroding agents.
- Protection of concrete surfaces exposed to saline environment.

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.
- Strong crack-bridging performance up to 2,5mm at +23°C (class A4 - EN 1062-7).

- Retains flexible performance even at -10°C with crack-bridging ability up to 1,25mm (class A3 - EN 1062-7).
- Strong adhesion to concrete.
- Protects concrete surfaces from carbonation due to CO₂ ingress.
- Allows water-vapour permeability of structures.
- 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): HS7000/CPR-7-13/079/04-2021.

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 HS 7000 FIBRO•FLEX** 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 (8kg) into a clean vessel and then add component A (25kg) under continuous stirring. A low-speed electric mixer (300 r.p.m.) should be used for mixing. Let the mixture to 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 HS 7000 FIBRO•FLEX** 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.
- Don't mix component A with water and don't add water in the mixture. Water addition affects the performance of the product.
- Do not mix the product with cement, aggregates or admixtures.
- Each layer of **HYDROSEAL HS 7000 FIBRO•FLEX** should not exceed 2mm in thickness.
- 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 HS 7000 FIBRO•FLEX** 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	milky white
Bulk density		1.40 ±0.05 kg/l	
Density			1.10 ±0.05 kg/l
Dry solids content		100%	50%
APPLICATION CHARACTERISTICS (+23°C / 50% R.H.)			
Mixing ratio		A : B = 25 : 8 (parts by weight)	
pH		> 11	
Density		1.90 ±0.05 kg/l	
Pot life		60 min (22°C)	
Application temperature		minimum: +5°C / maximum: +35°C	
Max. application thickness per layer		2mm	
Consumption		approximately 1.5-1.6 kg/m ² for a 1mm thick layer	
PERFORMANCE CHARACTERISTICS			
Adhesion to concrete (EN 1542, MC 0.40)		≥ 1.50 N/mm ²	
Adhesion after thermal compatibility	freeze-thaw with de-icing salts (EN 13687-1)	≥ 1.0 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 A4 (crack width 1.25-2.50 mm)	
	at -10°C	Class A3 (crack width 0.50-1.25 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 33kg (25kg A + 8kg B) in grey colour.

Storage: Component A: 12 months from production date, if stored in original, sealed packaging, protected from direct sunlight and moisture. ■ Component B: 24 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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