



**FINOMIX**<sup>®</sup>  
DRY MORTARS

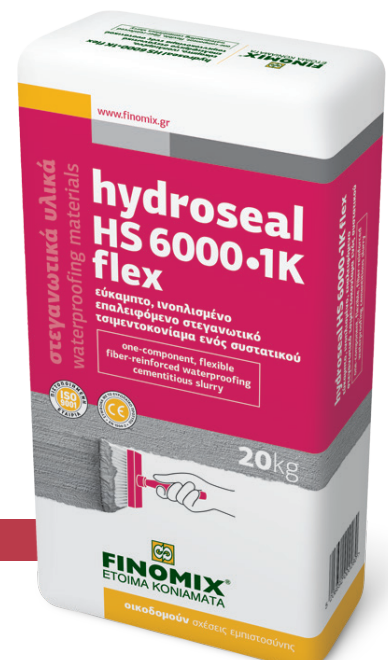
Technical Data Sheet

Release 1: 29/09/2020

# hydroseal HS 6000-1K flex

**one-component  
flexible fiber-reinforced  
waterproofing  
cementitious slurry**

- One-component product, ready with just the addition of water
- Strong adhesion to all substrates
- Waterproofing against positive and negative pressure
- Class A3 crack-bridging properties (>0,5mm)



# HYDROSEAL HS 6000•1K FLEX

## one-component flexible fiber-reinforced waterproofing cementitious slurry

### DESCRIPTION

One-component, flexible, fiber-reinforced cementitious mortar, modified with polymer resins, for waterproofing concrete structures and masonry against moisture and water ingress.

It exhibits high adhesion on substrate, crack-bridging properties (A3 >0.5mm) and excellent waterproofing properties against positive and light negative hydrostatic pressures.

Classified as coating mortar (C) for the protection of concrete structures according to European standard EN 1504-2.

### APPLICATIONS

HYDROSEAL HS 6000•1K FLEX is used for waterproofing of substrates to be covered with ceramic tiles (swimming pools, baths, balconies, etc.), foundation walls to be backfilled in ground, basement walls and floors against negative hydrostatic pressure, the protection of concrete structures against carbonation and water ingress through hairline cracks and pores.

It is applied with brush or trowel on common substrates, e.g. concrete, masonry, natural stone, renders, etc.

### PROPERTIES / ADVANTAGES

- Provides water-tightness against pressure up to 5 bar.
- Suitable for positive and negative pressure.
- Strong crack-bridging performance >0,5mm (class A3 - EN 1062-7).
- Strong adhesion to substrate.
- Protects concrete surfaces from carbonation due to CO<sub>2</sub> ingress.
- Excellent 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 - Mois-

ture Control) and 8 (IR - Increasing Resistivity), according to Methods 1.3, 1.4, 2.3 & 8.3.

- Regulation (EC) No. 305/2011: CE marked product with Declaration of Performance (DoP): HS6000/CPR-7-13/074/2020.

### 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 6000•1K FLEX** on them.
- Porous surfaces must be soaked with water before application. Allow the excess water to evaporate or remove it using compressed air.
- Add the bag content (20kg) into the necessary clean water corresponding to the chosen application method, under continuous stirring for at least 3 minutes, until a homogenous mixture without lumps is formed. A low-speed electric mixer (300 r.p.m.) should be used for mixing.
- Apply with a brush or spatula, in 2 or more layers of even thickness. The thickness of each layer should not exceed 1mm for brush application or 2mm for spatula application. Each layer is applied crosswise to the previous one after it has sufficiently dried.
- For the waterproofing of surfaces subject to move-

ments, contraction-expansions and prone to cracking, the waterproofing layer must be reinforced with the special fiberglass mesh of 60g/m<sup>2</sup>. The mesh is embedded into the first layer. 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 6000•1K 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.
- Do not mix the product with cement, aggregates or admixtures.
- Avoid application under direct sunlight or in case of strong winds.
- 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 6000•1K 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

Appearance	cementitious powder
Colour	grey
Bulk density	1.15 ±0.05 kg/lit

#### APPLICATION CHARACTERISTICS (+23°C / 50% R.H.)

Mixing ratio	22-29% w/w (4.4-5.8 kg water / 20kg bag) depending on the application method
pH	> 11
Density	1.05 ±0.05 kg/lit
Pot life	45 min (22°C)
Application temperature	minimum: +5°C / maximum: +35°C
Max. application thickness per layer	1-2 mm depending on the application
Consumption	approximately 1.2-1.3 kg/m <sup>2</sup> for a 1mm thick layer depending on the surface roughness

#### PERFORMANCE CHARACTERISTICS

Adhesion to concrete (EN 1542, MC 0.40)	2.65 ±0.05 kg/lit	
Adhesion after thermal compatibility	freeze-thaw with de-icing salts (EN 13687-1)	≥ 2.0 N/mm <sup>2</sup>
	thunder shower (thermal shock) (EN 13687-2)	≥ 2.0 N/mm <sup>2</sup>
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
Static crack-bridging (EN 1062-7, +23°C)	Class A3 (crack width > 0.50 mm)	
Capillary absorption and permeability to water (EN 1062-3)	≤ 0.02 kg·m <sup>-2</sup> ·h <sup>-0.5</sup>	
Permeability to water vapour (EN ISO 7783)	S <sub>D</sub> < 5m (Class I)	
Permeability to CO <sub>2</sub> (EN 1062-6)	CO <sub>2</sub> S <sub>D</sub> > 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 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:

- 20kg paper bags.

**Storage:** 12 months from production date in original, sealed packaging, protected from direct sunlight and moisture.

## 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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