FINOMIX®
DRY MORTARS

Technical Data Sheet

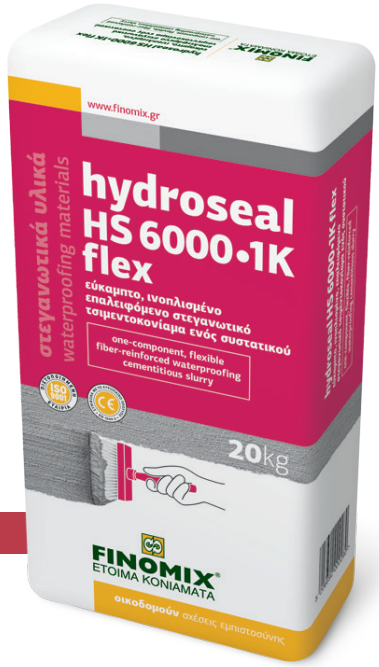
Release 1: 29/09/2020

hydroseal HS 6000•1K flex

one-component flexible fiber-reinforced waterproofing cementitious slurry

class A3

- 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 (>0.50mm)



FINOMIX®
DRY MORTARS

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 for cracks >0.50mm (class A3), 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 >0.50mm (class A3 - EN 1062-7).
- Strong adhesion to substrate.
- Protects concrete surfaces from carbonation due to CO_2 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 - Moisture 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 materials.
- 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 ro 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^2. 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/lt
APPLICATION CHARACTERISTICS (+23°C / 50% R.H.)		
Mixing ratio		22-29% b.w. (4.4-5.8 kg of water/20kg bag) depending on the application method
pH		> 11
Density		1.05 ±0.05 kg/lt
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^2 for a 1mm thick layer depending on the surface roughness
PERFORMANCE CHARACTERISTICS		
Adhesion to concrete (EN 1542, MC 0,40)		≥ 2.65 N/mm^2
Adhesion after thermal compatibility	freeze-thaw with de-icing salts (EN 13687-1)	≥ 2.00 N/mm^2
	thunder shower (thermal shock) (EN 13687-2)	≥ 2.00 N/mm^2
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^{-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: Measurements were conducted in a laboratory environment. The varying conditions present on-site (temperature, humidity, ventilation, substrate absorbency) may affect the material's properties.

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.

FINOBETON S.A.
16 Pithagora Str., 73134 Chania, Greece
tel. +3028210 27150 ▪ fax +3028210 27005
info@finomix.gr ▪ www.finomix.gr

FINOMIX® DRY MORTARS
building trusting relationships

ISO 9001 QUALITY MANAGEMENT SYSTEM
ISO 14001 ENVIRONMENTAL MANAGEMENT SYSTEM
ISO 45001 OCCUPATIONAL HEALTH & SAFETY