



HIDROIZOL ELASTIC

Two component flexible cementitious coating for waterproofing

PROPERTIES:

HydroBlocker Hidroizol Elastic is a two-component coating, based on cement, selected fine-grained sand, special additives and polymer water dispersion. Due to its high polymer content, the hardened coating remains remarkably flexible in various environmental conditions.

FIELD OF APPLICATION:

HydroBlocker Hidroizol Elastic is a waterproofing coating suitable for sealing:

- bathrooms and shower cabins,
- water tanks and accumulation pools,
- balconies and terraces,
- swimming pools,
- precast concrete elements, rendering mortars, cement and plaster surfaces, foam concrete elements,
- concrete structures which are backfilled.

It is also suitable for protection of cracked concrete, provided that these cracks are inactive.

ADVANTAGES:

In a fresh state:

- Easy preparation: just mix the dry component A into liquid component B on the place of application;
- Easy application: by trowel.

In a hardened state:

- Flexible;
- Crack-bridging ability of up to 1 mm;
- Resistant to freezing and deicing salts;
- Low capillary absorption - waterproof;
- For internal and external use.



TECHNICAL PROPERTIES

Property	Testing method	Declared value	
		Component A	Component B
Color and appearance	Visual	Grey powder	White liquid
Density (g/mL)	EN ISO 2811-1	-	1.04 ± 0.03
Largest aggregate grain size (mm)	EN 12192-1	0,5	-
Fresh mix			
Mixing ratio	-	Component A : Component B = 19 : 7.1	
Consistency	-	Thixotropic	
Density of fresh mix (kg/m ³)	EN 1015-6	1535 ± 75	
Workability (mm)	EN 1015-3	200 ± 30	
Workability time (min.)	-	ca. 20–30 depending on temperature	
Recommended temperature during use – mortar, substrate, environment (°C)	-	+5 to +35 Optimal: +15 to +25	
Recommended total application thickness (mm)	-	2 – 3	

Property	Testing method	Requirements of standard EN 1504-2	Declared
Hardened coating			
Adhesion strength to concrete - after 28 days at 20 °C and 50 % R.H. [N/mm ²]	EN 1542	> 0.8	> 0.8
Adhesion strength to concrete - after 7 days at 20 °C and 50 % R.H. and 21 days after immersion in water [N/mm ²]	EN 1542	-	> 0.8
Permeability to water vapour (m)	EN 7783-2	Class I $s_D < 5$ m Class II $5 \text{ m} \leq s_D \leq 50 \text{ m}$	$S_D = 6$

INSTRUCTIONS FOR USE***SUBSTRATE PREPARATION***

The surface to be protected must be cleaned from dust, greasy stains, mold and other impurities, as well as loose materials. If the surface is really dirty, very smooth or if cement milk appeared on its surface (film) it is necessary to clean it mechanically: e.g. by gritblasting, water blasting, grinding. Greater damages should be repaired before applying **HydroBlocker Hidroizol Elastic** with an appropriate repair mortar (**Tekamal MSM**, **Tekamal Silika MSM** or **Tekamal Alteks**). The surface to which **HydroBlocker Hidroizol Elastic** is applied must be deeply saturated with water, but there must not be any standing water on it, which prevents its adhesion.

COATING PREPARATION

Pour the prescribed amount of component B (liquid) in a suitable clean container, and then slowly add the component A (powder) during stirring. Mix with a slow speed drill so that the lowest possible amount of air penetrates into the mixture. Mix as much time as it takes to get a homogenous mass. Leave the mixed mass for 5 min, then stir it again and use it within 20 to 30 minutes. Time of pot life depends on the operating temperature.

APPLICATION

Apply **HydroBlocker Hidroizol Elastic** by trowel. Make sure that no air bubbles appear between the substrate and the fresh coating. Apply the first layer with a thickness of ca. 1 mm, apply the second/third layer in the same manner in mutually perpendicular directions. The time period between applying layers must be 12-24 hours. The recommended application temperature for HydroBlocker Hidroizol Elastic is 10 – 25 °C.

If **HydroBlocker Hidroizol Elastic** is used for terrace, balcony or pools, it is recommended to press the fiberglass netting into the fresh first applied layer. The same should be done in case of application of **HydroBlocker Hidroizol Elastic** onto cracked surfaces.

When sealing the connection between the horizontal and vertical surface, it is recommended to use rubber sealing tapes and corners from the **Tekatrak** family. Sealing tapes (HydroBlocker Tekatrak 120) and corners (HydroBlocker Tekatrak KN and HydroBlocker Tekatrak KZ) are glued to each other with a sealant **Tekaflex MS 15** or the sealing tape HydroBlocker Tekatrak SL 100 is used.

CURING

It is important to protect the fresh coating from rapid drying, strong sunlight, wind and draft, as well as from precipitation and freezing.

When insulating the water tank, the coating must harden at least 28 days before filling the tank with water.

EQUIPMENT CLEANING

All tools and accessories must be thoroughly washed with water immediately after completion of work.

ADDITIONAL RECOMMENDATIONS AND WARNINGS

- The coating should not be applied in temperatures lower than +5 °C and higher than +35 °C!
- Temperature has an impact on time of workability, setting and hardening. For achieving optimal properties, we recommend that the surface temperature before and during application, as well as 48 hours after application is between 15 and 25°C.

- At low temperatures (lower than +10°C) setting and hardening times are extended, so we recommend to keep the coating in heated rooms and to perform works during the warmest part of the day.
- At high temperatures (higher than +30°C) setting time is shorter, so we recommend to keep the coating in cooler rooms, and to perform works during the coldest part of the day.
- Thickness of one layer of HydroBlocker Hidroizol Elastic must not exceed 2 mm.
- The freshly installed coating must be protected from precipitation and accidental water penetration for 24 hours.
- Always use only originally packed, closed, undamaged and properly stored bags and canisters.
- Never apply the coating to a smooth and unclean surface!
- Never apply the coating to a dry surface!
- Never add water or dry mix to the already heavily hardened mixture. Such coating is to be disposed of!
- Walking CANNOT be done over the HydroBlocker Hidroizol Elastic coating due to its elasticity, and therefore it needs to be protected with finishing surfaces (ceramic tiles, stone, etc.) in case of protection or reconstruction of walkable surfaces.
- It is also necessary to comply with instructions of the standard EN 1504-10: Products and systems for the protection and repair of concrete structures – Part 10: Site application of products and systems, and quality control of the works.
- Please call our technical service for all additional information and explanations.

CONSUMPTION

- Ca. 1.8 kg/m²/mm

PACKAGING

Component A: 19 kg

Component B: 7,1 kg

Component A: 6 kg

Component B: 2,3 kg

STORAGE

- **Component A:** The powder must be stored in a well sealed packaging, in a dry and well ventilated space in order to protect it against damage and moisture.
- **Component B:** The liquid component must be stored at a temperature between +5°C and +35°C, and protected against damage, freezing and direct sunlight.
- In a well sealed and unopened packaging, the shelf life is a minimum of 1 year from the production date.
- After the expiry date, the product is not necessarily unusable, but it is required to test those properties which are significant for intended use.

SAFETY PRECAUTIONS

Due to cement content, the powdery component irritates the eyes and the skin. In contact with the skin, it may cause allergic reactions, which is why protection gloves must be worn when working with plaster and eye contact must be prevented (protection goggles). Inhaling the powder must also be avoided. During constant work with the mentioned material, breathing protection should be worn.

See Material Safety Data Sheet.



HydroBlocker

HIDROIZOL ELASTIC

WARNING

Instructions were given based on our research and experience, so due to specific conditions and manner of work we recommend prior trials to be done for each individual case of application. Since we cannot influence the performance of works, we are not liable for their quality.

HydroBlocker Hidroizol Elastic complies with requirements of the standard EN 1504-2: Products and systems for protection and repair of concrete structures – Part 2: Surface protection systems for concrete (for procedures based on principles: 2.2; 8.2).

Issue: 06 17