



# HIDROSTOP MEDIUM

2K component waterproof coating for flexible sealing

- ▶ Easy to work with
- ▶ Waterproofing
- ▶ For exterior and interior application
- ▶ Frost resistance
- ▶ Permeability to vapor
- ▶ Good adhesion on different surfaces



**PRODUCT DESCRIPTION** Vapor permeable and frost resistant two component cement-based compound for waterproof protection of concrete and other suitable substrates. The use of alkali-resistant glass fiber mesh enables sealing on substrates that are subjected to shrinking and expansion. The product complies with the requirements of EN 1504-2, suitable for the protection of concrete.

**FIELD OF USE** It is used for sealing interior and exterior surfaces. The product is used for protection of moisture and water in showers, bathrooms and other various concrete structures in building construction and civil engineering. Suitable also for surface protection of concrete in accordance with the standard EN 1504-2, as coating C to the principle MC - Moisture control in concrete. It is useful also for protection of concrete from damages due to freezing and thawing in presence of salts.

- PRODUCT PROPERTIES**
- Easy to work with
  - Waterproofing
  - For exterior and interior application
  - Frost resistance
  - Permeability to vapor
  - Good adhesion on different surfaces

## PRODUCT DATA

### BASIC INFORMATION

**Appearance** Component A : Grey powder Component B : Liquid component white color

**Packing** 28 kg complete 20+8 (component A: 20 kg in paper bag (plastificated) and component B: 8 kg in plastic pail)  
17,5 kg in a plastic bucket (12,5 + 5 kg), 24 buckets on pallet

**Storage and expiration date** 12 months from date of production if stored properly in undamaged original sealed packaging in dry and cool conditions. Date of production is printed on packaging.

### TECHNICAL DATA

**Type of product** Cementitious polymer modified compound

**Bulk density of powder** 1,31 kg/dm<sup>3</sup> EN 1015-6:1999/A1:2007

**Weight of fresh mortar** 1,90 kg/dm<sup>3</sup> EN 1015-6:1999/A1:2007

**Weight of hardened mortar** 1,75 kg/m<sup>3</sup> EN 12190:2000

**Grain size** Dmax: 0,4 mm EN 12192-1:2002

**Layer thickness** 2-5 mm

**pH** Approx. 11

**Adhesion to concrete** 2,25 MPa EN 1542

**Adhesion to concrete after thermal cycling** 2,53 MPa EN 13687-3

**Equivalent air layer thickness Sd** 0,37 m - Sd EN ISO 7783

**Depth leak - passive water pressure of 1,5 bar** 0 mm EN 12390-8

**Liquid water permeability** 0,05 kg/m<sup>2</sup> . h<sub>0,5</sub> EN 1062-3

**Compressive strenght after 28 days** 27,0 MPa EN 196-1

**Flexural strenght after 28 days** 9,5 MPa EN 196-1

**Modulus of elasticity in compression** 2,527 kN/mm<sup>2</sup> EN 13412

## INSTRUCTIONS FOR USE

**CONSUMPTION** Approx.: 1,75 kg/m<sup>2</sup> for one coat

**BASE** The substrate must be clean and free of all oil, grease, and wax, latex compounds, curing compounds, dust and all foreign matter. Prior to applying HIDROSTOP MEDIUM coating, the surface has to be moistened with clean water. The coating is applied when the surface is apparently dry or when it is mate. Any standing water on surface has to be removed.

The reinforced cement floor base and concrete has to be at least 28 days old.

**BASE PREPARATION** Suitable method for cleaning of surface is with water under big pressure or sandblasting. If applying on too smooth surfaces, previous roughening by sand-blasting, grinding or brushing with a wire brush is recommended. Absorptive surfaces has to be impregnated with the polymer dispersion (KEMACRYL or KEMAGRUND A) diluted with water in the ratio 1:1 to 1:3 (consider direction for use in technical data sheets for primers KEMA). Cracks, damages, segregation nests, and other irregularities on the surface must be previously repaired with HIDROSTOP KIT quick-setting putty.

Active water intrusions are stopped with the HIDROZAT mortar.

Contacts of vertical and horizontal surfaces are rounded into grooves with HIDROSTOP KIT quick-setting putty.

The waterproof penetrative coating HIDROSTOP MEDIUM can be applied onto the following foundations:

- Concrete with thickened structure, at least MB 12/15, that is solid and without segregation nests, cracks, and bad load capacity layers.
- Brick walls and concrete block walls constructed with cement mortar with at least 10 mm thick cement plaster coating. (In case of sealing clay brick wall below the level of the ground, the waterproof coating always has to be applied on the water flow-in side of the wall).
- Onto at least 10 mm thick cement plaster, applied as smooth or rubbed coating with perfect adherence to the surface.

**MIX RATIO** 20 kg com. A + 8 kg com. B

**MIX TIME** Component B is pour into clean container and the dry component HIDROSTOP MEDIUM is added and well stirred to achieve a homogenous coating of soft-plastic consistency without clods. Prepare as much coating as you can use in one hour. Such prepared coating has to rest for approximately 5 minutes to mature and then it has to be stirred again. Once the coating is prepared, fresh material or water must not be added in order to make it workable after the time of workability has already expired.

**MIX TOOL** Stir with an electrical drill with suitable accessory for mixing. Number of revolutions has to be set to minimum. (400-800 revolutions/min.)

**INSTALLATION** Notched trowel, brush and air-less spray is possible.

**NOTCHED TROWEL APPLICATION:**

Apply HIDROSTOP MEDIUM with a notched trowel on the surface in completely covering layer. When HIDROSTOP MEDIUM is still fresh we install glass fibre mesh and apply HIDROSTOP MEDIUM to cover the glass fibre mesh. When the first layer achieves sufficient strength (after 3-5 hour), the second is applied and smooth. The glass fibre mesh should be completely covered. A common thickness should not exceed 5 mm.

**BRUSH APPLICATION:**

Apply HIDROSTOP MEDIUM with a brush on a surface in completely covering layer (consumption approx. 1,5 kg/m<sup>2</sup>). When the first layer achieves sufficient strength, the second is applied perpendicularly to the previous. (consumption additional 1,5 kg/m<sup>2</sup>). If smooth surface is required, the third layer should be applied with a brush and levelled with a finishing trowel. If individual layers dry before applying of the next layer, they have to be previously moistened.

**AIR LESS SPRAY APPLICATION:**

Apply HIDROSTOP MEDIUM with machine with wet procedure. Coat is to splash in thickness of app. 2 mm and smooth with trowel. When the first layer achieves sufficient strength (after 3-5 hour), the second is applied and smooth.

While applying the coating, be careful to achieve complete covering, especially in corners, semicircular contacts and edges.

When HIDROSTOP MEDIUM coating is applied on horizontal walking surfaces, they have to be additionally mechanically protected (concrete layer, ceramics, various tiling).

The final coatings, tiles and similar can be built in after sufficient strength of the waterproof coating is achieved or not before three days have passed.

**TOOL** Brush, notched trowel or air-less spray machine.

**CLEANING OF TOOL** Clean tools immediately after the use before mortar hardens. Hardened material on tools can only be removed mechanically.

**USAGE TIME** app. 1 hour

## LIMITATIONS

**BASE TEMPERATURE** +5°C min./ +30°C max.

**AIR TEMPERATURE** +5°C min./ +30°C max.

**MATERIAL TEMPERATURE** +5°C min./ +30°C max.

- WARNINGS**
- Ideal temperature for applying of the coating HIDROSTOP MEDIUM is between + 15°C and +20°C.
  - In case of high air and surface temperature, the surface has to be substantially moistened. If the coating layer is drying too quickly, it has to be additionally moistened.
  - If rain is expected in 4-6 hours after applying the coating, it must not be applied. As well it must not be applied if a drop of temperature below +5°C is expected in 2 hours after applying.
  - The coating has to be protected from too quick drying at least for 24 hours after it has been applied. In extremely unfavourable weather conditions (strong sunshine, wind) the adequate curing is recommended (sprinkling with water, covering etc.).
  - Times specified in the technical sheet were measured at the temperature of +23°C and relative air humidity of 50 %. Higher temperatures reduce, while lower temperatures prolong those times.
  - Protect freshly installed material from freezing, rain and other weather conditions. The material should not be used at (surface, air, material) temperatures lower than +5°C.

**Recommendation:** Remains of unhardened/unset material had to be removed in accordance with the legislation.

**Data source:** All technical data in this technical sheet was obtained by laboratory research. Actual data may differ due to different working conditions.

**Local restrictions:** Due to specific local regulations the installed product can differ from country to country. For exact instructions for use a country specific technical sheet should be obtained.

## PROOFS

**NORMS/ STANDARDS** In accordance with European standards EN 1504-2

## SAFETY DATA

Irritating. Contains cement. Irritating to eyes, skin and respiratory tract. In case of eye contact wash thoroughly with water at once and consult a doctor. In case of skin contact flood with a lot of water. Keep away from the reach of children. More data on storage, handling and use of mixture can be found in the safety sheet which contains safety, toxicological and ecological data. Warnings on the original packaging should also be considered.



## LEGAL BASE

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