YAPIFINE **HYDRA®** **PROOF FLEX**

Two Component Flexible Waterproofing Material

TS EN 14891 April 2017 | CE EN 1504-2

Product Definition

Cement and acrylic based, polymer reinforced, two component, flexible waterproofing material modified with chemical additives and applicable exclusively on positive side.

Areas of Use

- Horizontal and vertical applications,
- Balconies and terraces, on the condition of being covered,
- Foundations, basement walls, garages, flumes and shear walls,
- Houses, shopping malls, hospitals.
- Wet areas such as bathroom, toilet and kitchen,
- On surfaces of concrete, plaster and screed,
- Water tanks, swimming and decorative pools,
- Facilities such as spa and turkish bath.

Advantages

- Fully elastic.
- Creates waterproof covering without joint or juncture.
- Offers long service time.
- Easy to apply. Applicable with trowel, roller, brush or spraying machine.
- Prevents carbonation on concrete.
- Does not cause shrinking or cracking.
- Highly resistant against chlorine ions.
- Applicable on fresh screed and concrete surfaces due to its crack bridging property.
- Allows the concrete to breathe due to its water vapour permeable structure.
- Resistant to freeze-thaw cycle.
- Nontoxic and noncorrosive.
- Not affected by vibration and deformation due to its high elasticity.

Technical Specifications

Appearance	Component A: Grey powder Component B: White liquid
Mixture Density	1.80 kg/L ± 0.50
Pot Life	6 hours
Application Temperature	Between +5°C and +30°C
Service Temperature	-40°C / +80°C
Time Before Use	3-7 days
Waiting Period Between Layers	5-6 hours
Adhesive Strength	≥ 0.8 N/mm^2
Capillary Water Absorption	< 0.1 kg/(m^2.h$^{0.5}$)
Crack Bridging	≥ 2.5 mm

Adhesion Strength After Thermal Ageing	≥ 1 N/mm^2
Adhesive Strength Without Defrosting Salt Effect	≥ 1 N/mm^2
Pressurised Water Strength	7 Bar Positive
Water Vapour Permeability	Class I ; Sd < 5
Chlorine Ion Diffusion	≤ 200 Coulomb (Class: very low permeability)
Carbon Dioxide Permeability	Sd > 50 m
Reaction to Fire	Cs1d0

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Packaging	Component A: 20 kg kraft bag Component B: 10 kg plastic drum

Consumption	2.5 – 3 kg/m^2 of powder consumption for 2 mm of application thickness

Surface Preparation

The surface should be cleaned of all residual materials such as dust, oil, dirt, paint, curing materials, bitumen and other foreign substances.

The damaged parts of the concrete, fractures and static cracks on the surface should be repaired with the appropriate YAPIFINE MEND repair mortar first. The application of the YAPIFINE HYDRA PROOF FLEX should start 3-4 days after the usage of the repair mortar.

Water infiltration should be eliminated with the usage of YAPIFINE HYDRA SHOCK, the dynamic cracks should be filled with YAPIFINE GOOP HYBRID or YAPIFINE GOOP Mastik.

Sharp corner and edge joints should be chamfered.

The application surface should be saturated with water, the saturation procedure should begin 24 hours before the application and the surface should be kept wet during the application as well. Make sure there are no water puddles on the surface. (last sentence might change)

On absorbent surfaces it is recommended to use YAPIFINE UNI PRIME.

Mixture Preparation

20 kg of powder component should be slowly added to 10 kg of liquid component. No foreign substances or liquids should be added the mixing process.

The mixing process should be performed with a low-speed mixer for 5 minutes until the mixture reaches a homogenous state. Once a homogenous state is reached the mixture should rest for 5 minutes before it is mixed again for 1-2 more minutes and finally should be applied within 30 minutes of the last mixing step.

Application Information

The mixture should be applied on the intended surface in a minimum of two layers. The first layer should be fully dry before the second and any additional layers are applied perpendicular to the previous application.

Make sure layers are homogenous and smooth. Application should be in the same direction on each layer.

Wait for at least 5-6 hours between layers depending on temperature.

Total application thickness of 2-3 mm will be sufficient.

Recommended to use waterproofing mesh or seal between layers in order to improve carrying capacity of product.

After topcoat application, the surface can be smoothed by means of a dry sponge.

After topcoat, substrates should be protected from direct sunlight, air circulation and frost for 3 days. The substrate should be wetted and kept damp if needed.

Application Conditions

Do not apply on surfaces exposed to sunlight for too long, as well as too hot and frozen surfaces.

Ambient temperature: between +5 °C and +30 °C.

Avoid application under strong wind or direct sunlight.

Only use YAPIFINE liquid component for mixture and never add water.

The indicated consumption amount is in general sense. It may vary depending on application conditions and surface characteristics.

The application area becomes completely watertight within 5-7 days. In order to attain the projected and required long-lasting performance, it is recommended to cover the surface with appropriate material after application.

Shelf Life

The shelf life of the product is 12 months when stored within non-tampered original packaging in dry (maximum relative humidity 60 %) and cool (ambient temperature between +5°C and +25°C) environment.

Safety Precautions

In case of contact with eyes or ingestion, rinse immediately with plenty of clean water and seek medical attention.

Avoid direct contact with eyes and skin

Since it's cement based, do not breathe.

Please read Safety Data Sheet (SDS) for further safety information.