

# YAPIFINE HYDRA<sup>®</sup> BITUMEN PU 2C

Bitumen-Polyurethane Based Two Component  
Liquid Waterproofing Material



## Product Definition

Rapidly curing polyurethane based elastic two component liquid waterproofing material that also includes bitumen that is applied cold.

## Areas of Use

- Water tanks (except for drinking water reservoirs),
- Floors,
- Foundations,
- Bridge platforms,
- Cut-and-cover tunnels,
- Underneath the tiles in bathrooms, terraces and roofs,
- Concrete buildings,
- Retaining walls,
- Plaster and cement boards,
- On EPDM and asphalt membranes,
- Lighter roofs (made of metal or fibrous cement)
- Green terraces and roofs.

## Technical Specifications

Colour	Black
Brightness	Semi-gloss
Mixture Ratio	1/1 (Component A / Component B)
Pot Life (+20°C)	30 minutes
Density (+20°C)	1 g/cm <sup>3</sup> ± 0.02
Viscosity (+25°C)	3000 – 3500 cP (A+B)
Application Temperature	Between +5°C to +35°C
Temperature Resistance	200 days at +80°C Dry sudden heat at +150°C
Drying Period (at +23°C, 55% relative humidity)	Drying Time: 2 hours Time for New Coat: 6-24 hours Through-dry Time: 7 days

## Advantages

- Easy to apply.
- Adheres perfectly to almost any surface with or without a primer application creating a film of high elasticity.
- Never causes water leakage in application area.
- High elasticity.
- Rapid curing.
- Resistant against dead water and frost.
- Prevents water vapour.
- Has crack bridging property.
- In a vast range of heat, heat resistance performance is between -40°C and +90°C.
- Resistant against cold. Film maintains elasticity up to -40°C.
- Ensures effective resistance against chemicals.
- Also applicable as joint material.
- Perfect mechanic features; high tensile, tear and abrasion resistances.

Adherence on Concrete	≥ 2 N/mm <sup>2</sup>
Tensile Strength	≥ 2 N/mm <sup>2</sup>
Rupture-Expansion Percentage	≥ 2000 %
Hardness (Shore A)	35
QUV	1000 hours
Crack Bridging	CB2
Resistance to Rain	R1
Impermeability	W1
Resistance to Pressure	C2B
Reaction to Fire	E

\* 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.

<b>Packaging</b>	Component A: 20 L tin drum
	Component B: 20 L tin drum

<b>Consumption</b>	Minimum 0.75 – 1 L/m <sup>2</sup> for each layer. Applied in a minimum of two layers. Total theoretical consumption is 1.5 – 2 L/m <sup>2</sup> .
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## 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.

Water infiltration should be eliminated with the usage of YAPIFINE HYDRA SHOCK. Dynamic cracks should be filled with YAPIFINE GOOP HYBRID or YAPIFINE GOOP Sealant.

Sharp corner and edge joints should be chamfered.

If possible, the surface should be washed with highly pressurized water and then dried off.

## Lining

YAPIFINE HYDRA PU PRIME or YAPIFINE BASE EPOXY PRIME should be used for absorbent surfaces such as concrete, cement, screed, wood. (humidity should be max 5% on these surfaces). YAPIFINE BASE EPOXY PRIME H should be used as primer on moisturized surfaces instead.

YAPIFINE HYDRA PU TILE PRIME should be used on non-absorbent surfaces such as metal, ceramic or old coating. Application is done with a brush or a roller. The resting time between the layers should not exceed 48 hours. In case 48 hour-limit is exceeded and you are not sure about the adhesion performance then YAPIFINE HYDRA PU PRIME should be used instead.

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### Mixture Preparation

After each component is stirred in its own container with a low speed mixer they are then mixed together. The mixed components A and B are then stirred for a few more minutes together with a low speed mixer and are then prepared for use.

Pot life of the mixture is between 30-35 minutes at 20 °C. The pot life of the mixture is directly proportional to the change in ambient temperature.

### Application Information



The mixture is poured onto the surface and is then applied in a minimum of 2 layers with a brush, scraper or roller until the whole surface is covered.

The second layer should be applied 12 at minimum and 24 hours at maximum after the application of the first layer. The resting time between the layers should not exceed 48 hours.

The tools used during the application should be cleaned within 2 hours after the application.

Also applicable as one thick layer. Should be applied with a usage of 1.5 – 2 L/m<sup>2</sup>.

### Application Conditions

Should not be applied to surfaces that were exposed to sunlight for too long or to surfaces that are too hot or frozen.

Should not be applied when the ambient temperature is not within the values of +5°C and +30°C.

The application area should be protected from the effects of wind and direct sunlight.

The final consumption amount might vary depending on application conditions and surface characteristics.

### Shelf Life

The shelf life of the product is 12 months when stored on wooden pallets in its original packaging in dry (maximum relative humidity 60 %), cool (ambient temperature between +5°C and +25°C) and moisture-free environment.

### Safety Precautions

No smoking should take place during application.

The work environment should be well ventilated and should not include any open flames.

Since the solvents are heavier than air it should be remembered that they will be in circulation over the floor.

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations.

In case of contact with the eyes, rinse with plenty of water before seeking immediate medical attention.

In case of accidental ingestion of the product seek immediate medical attention.

Rinse with plenty of water in case of contact with the skin.

For further information on the safe handling of this product please read the Safety Data Sheet (SDS).