

CONIFLOOR EP 118 (old CONIFLOOR 118)

Two part EP resin primer and scratch coat, fast and low temperature curing, (total solid)

Product description

CONIFLOOR EP 118 is a low viscosity; two component **fast and at low temperature curing epoxy** resin based primer, "Total Solid accord. to the test methods Deutsche Bauchemie e.V."

Fields of application

CONIFLOOR EP 118 is designed for use as a primer on mineral substrates indoors and outdoors such as concrete and cementitious screeds.

It is suitable for use as a pore and capillary sealing. For this purpose the product is – after mixing of component A and B – filled with oven dried quartz sand.

The **degree** of filling **depends** on the temperatures as well as on the thickness of the layer and should be between 0.5 up to 1 for a scratch coat and up to 8 parts as an epoxy mortar for repair works, referred to the primer (ratio by weight).

Properties

CONIFLOOR EP 118 is very low viscosity and therefore shows high capillary activity. The primer cures in between a few hours and for this reduce the re-coating interval.

The material has very good adhesion to substrates based on minerals and / or cement. The primer can is all-purpose.

The yellowing which occurs when exposed to UV light does not impair its technical properties.

Fully cured, CONIFLOOR EP 118 exhibits very good mechanical properties. It is resistant to water, sea and waste water as well as to a variety of alkalis, diluted acids, brine, mineral oils, lubricants and fuels.

Technical Data

| | | | |
|---|--------------------|-------------------|--------------|
| Mixing ratio | in parts by weight | A: B | 100 : 40 |
| Density | mix, at 23 °C | g/cm ³ | 1.11 |
| Viscosity | mix, at 23 °C | mPas | 750 |
| <u>Working time (10 kg working packs)</u> | at 10 °C | min | 20 |
| | at 20 °C | min | 10 |
| | at 25 °C | min | 5 !!!! |
| <u>Pot life (shorter than working time)</u> | at 10 °C | min | 15 |
| | at 20 °C | min | 6 !!!!! |
| | at 25 °C | min | 3 !!!!! |
| Re-coating interval (with broadcast primer earlier min.-value) | at 10 °C | min. / max. | h 10-12 / 48 |
| | at 23 °C | min. / max. | h 4-5 / 24 |
| | at 25 °C | min. / max. | h 3-4 / 12 |
| Ready for foot traffic (with broadcast primer earlier min.-value) | at 10 °C | h | min.10 |
| | at 23 °C | h | min. 4-5 |
| | at 25 °C | h | min. 3-4 |
| Substrate and application temperature | minimum | °C | 5 |
| | maximum | °C | 25 |
| Max. permissible relative humidity | | % | 75 |
| Shore D hardness | after 7 d | | ≥ 81 |
| Tensile bond strength | | N/mm ² | ≥ 1.5 |
| <i>Above figures are guide values and should not be used as a base for specifications!</i> | | | |



Application method

Please also [note the information in our general processing guidelines](#).

CONIFLOOR EP 118 is supplied in working packs, which contain the correct proportions of component A (resin) and component B (hardener).

Mixing

Before mixing, precondition both A and B components to a [temperature](#) of approximately 15°C up to [max. 25 °C](#).

Pour component B into component A and ensure that pail containing component B is emptied completely.

Scrape the sides and the bottom of the pail several times to ensure complete mixing.

Do not mix by hand, [mix](#) with a [mechanical](#) drill and paddle at a very low speed (ca. 300 rpm) for [at 2 - 3 minutes](#). Keep the mixer blades submerged in the material to [avoid](#) introducing air [bubbles](#). Do not work out of the original drum / pail.

After proper mixing to a homogeneous consistency pour the mixture into a [fresh pail](#) and mix for another minute. Due to the quick hardening time and the associated short pot life, we recommend mixing the two components quickly.

[After mixing, the material must be quickly emptied from the container](#) and distributed immediately, as the [processing time can thus be extended](#).

[For small areas and foreseeable longer service times of the mixed material, we recommend only mixing partial quantities in the appropriate mixing ratio.](#)

Consumption

The consumption of CONIFLOOR EP 118 used as primer is approximately between [0.3-0.5 kg/m²](#) depending on the condition and porosity of the substrate.

A [2nd coat](#) of [0.2-0.4 kg/m²](#) of [primer](#) CONIFLOOR EP 118 broadcasted with oven dried sand is [mandatory](#) in order to seal concrete pores and capillaries completely.

Unevenness $\geq 0.5\text{mm}$ must be equalized by an additional scratch coat.

The above consumption figures are intended as a guide only and may be higher on very rough or porous substrates. For additional filling with fire dried silica sand grain size 0.1-0.3 mm is recommended.

CONIFLOOR EP 118 should be applied when the ambient [temperature](#) is [constant](#) or falling as this will decrease the risk of bubble formation due to evaporation of air that is enclosed in the concrete.

After mixing the two components of CONIFLOOR EP 118 the pail have to be empty and to treat the material immediately.

CONIFLOOR EP 118 is applied to the prepared substrate by rolling or spreading with a squeegee. [After](#) waiting for at least [3 minutes](#) (at 20°C), finish with a [roller](#). Ponding or spots where the primer is applied thick have to be avoided.

PUR Coatings

To improve the adhesion to a following coating oven dried [sand](#) (grain size 0.3-0.8mm – approx. 1kg/m²) is [broadcasted](#) into the primer whilst still in order to improve adhesion of the following polyurethane based product. Bald patches as well as excess broadcasting must be [avoided](#).

Temperatures

The working life and curing time of the material is influenced by the ambient, material and substrate temperatures. At low temperatures, the chemical reactions are slowed down; this lengthens the pot life, open time and curing times. [High temperatures speed up the chemical reactions](#) thus the time frames mentioned above are shortened accordingly.

To fully cure the material, substrate and application temperature should not fall below the minimum.

After application, the material should be protected from direct contact with water for approx. 12 h (at 20° C). Within this period, contact with water can cause a surface bloom and/or surface tackiness, both of which must be removed else the adhesion to the following coating is impaired.

Substrate condition

All substrates (new and old) must be structurally sound, dry and free of laitance and loose particles. Clean floors of oil, grease, and rubber skid marks, paint stains and other adhesion impairing contaminants.

A pre-treatment of the substrate by grit or shot blasting, high pressure water jetting, grinding or scabbing including the necessary post-treatment is only necessary, when the layer is soiled or the re-coating intervals have been exceeded.

After surface preparation the [tensile strength](#) of the concrete should exceed 1.5 N/mm² (check with an approved pull-off tester at a load rate of 100 N/s).

The [moisture level](#) of the sub-base needs to be [less](#) than 4 %.

The [temperature](#) of the substrate must be at least [3 °C](#) above the current dew point temperature.

There must be a regular DPM between the stone base and the slab.

Cleaning agent

Re-usable tools should be cleaned carefully with CLEANER 44 or e.g. isopropanol.

Pack size

CONIFLOOR EP 118 is supplied in 10 and 25 kg working packs.

Colour

Transparent



Storage

Store in original closed packing under dry conditions at a temperature range of 15 - 25 °C.

Do not expose the drums to direct sunlight.

Please check "best-before" date on the pail before usage.

Safety precautions

CONIFLOOR EP 118 is non-hazardous in its cured condition.

For protective measures, transport regulations and waste management please refer to the Material Safety Data Sheet of the product.

VOC Contents

CONIFLOOR EP 118 meets the requirements of the EC directive 2004/42/EC.

The limit value for products ready for use (product type according to table IIA j Type sb) is:

Level II (from 2010) <500 g/l VOC.

When ready to use, this product contains less than 500 g/l VOC.



CE Declaration of Performance

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