

CONIFLOOR EP 110 (old CONIFLOOR 110)

Two-part EP resin primer, for priming and mortar resin, (total solid)

Product description

CONIFLOOR EP 110 is a [low viscosity](#), two-component [epoxy](#) resin based primer, "Total Solid accord. to the test methods Deutsche Bauchemie e.V.".

Fields of application

CONIFLOOR EP 110 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 and for levelling layers and scratch coats. 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 2 referred to the primer (ratio by weight), for epoxy

resin mortars up to 1:12 parts by weight based on the epoxy resin binder (see primer matrix and levelling mortars).

Properties

CONIFLOOR EP 110 has very low viscosity and therefore shows high capillary activity.

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

The material is easy to process and moisture blocking (in a 2-fold application when film forming).

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

Fully cured, CONIFLOOR EP 110 exhibits very good mechanical properties. It is resistant to water, sea and wastewater 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 : 43
Density	mix, at 23 °C	g/cm ³	1.09
Viscosity	mix, at 23 °C	mPas	508
Working time (25 kg working packs)	at 10 °C	min	60
	at 20 °C	min	30
	at 30 °C	min	15
Re-coating interval	at 20 °C	min.	h
		max.	h
Ready for foot traffic	at 10 °C	h	min. 24
	at 23 °C	h	min. 8
	at 30 °C	h	min. 4
Substrate and application temperature	minimum	°C	10
	maximum	°C	30
Max. permissible relative humidity		%	75
Shore D hardness	after 7 d		80
Tensile bond strength		N/mm ²	≥ 1.5
Above figures are guide values and should not be used as a base for specifications!			

Application method

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

CONIFLOOR EP 110 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 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.

Consumption

The consumption of CONIFLOOR EP 110 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 110 broadcasted with oven-dried sand is **mandatory** in order to seal concrete pores and capillaries completely.

Unevenness >0.5mm 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 110 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.

CONIFLOOR EP 110 is applied to the prepared substrate by rolling, spraying or spreading with a squeegee. **After** waiting for at least **10 minutes**, 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. 0.8 – 1.0 kg/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 have to be **avoided**.

Temperatures

The ambient, material and substrate temperatures influence the working life and curing time of the material. 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 periods 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. 24 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

The subsurface (old and new) must be structurally sound, solid, free of loose particles and laitance, dust, oils, greases, rubber abrasion and other separating substances. The surface tensile strength of the surface to be primed must be at least 1.5 N/mm² (smallest individual value at least 1.0 N/mm²), the compressive strength at least 25 N/mm². The substrates must have reached their equilibrium moisture content and also be protected from the effects of rising water during use or special measures must be taken, such as applying an additional blocking primer (ask our technical service).

Concrete	max. 4 M-% moisture
Cement screed	max. 4 M-% moisture
2-fold, film-forming primer up to	max. 6 M-% moisture (after consultation with technical service)

Calcium sulphate screed (heated)	max. 0.3 M-% moisture new 0.5 M-% moisture
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after manufacturer approval

Magnesite screed	2 - 4 M-% moisture
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In the case of calcium sulphate (anhydrite) and magnesite screeds, the ingress of moisture from building components or the ground must be prevented. In general, preliminary tests with adhesion tests are advisable for calcium sulphate and magnesite screeds. Systems capable of diffusing water vapor are recommended for magnesite screeds in the area in contact with the ground or where there is a risk of moisture penetration from the substrate.

There must be a regular damp proof membrane (DPM) between the stone base and the slab. The occurrence of moisture penetration on the rear side must be impossible.

The **temperature** of the substrate must be at least **3 °C** above the current dew point temperature.

Cleaning agent

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

Pack size

CONIFLOOR EP 110 is supplied in 25 kg working packs, drums on request.

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 110 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 110 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 and UKCA marking:

See Declaration of Performance

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