



CONIFLOOR EP 712

Two-part EP resin primer, pre-filled, as primer and scratch coat, (total solid), benzyl alcohol and ethanol free, very low emissions

Product description

CONIFLOOR EP 712 is a prefilled, low viscosity, pigmented, two component epoxy resin-based primer, low emission, solvent free accord "Total Solid to the test methods Deutsche Bauchemie e.V." and benzyl alcohol and ethanol free.

Fields of application

CONIFLOOR EP 712 is designed for use as a primer, or a scratch coat, on mineral substrates indoors and outdoors such as concrete and cementitious screeds.

If necessary CONIFLOOR EP 712 can additionally be filled with oven dried quart sand size 0.1-0.3 or 0.1 – 0.5 mm. The degree of filling depends on the temperature as well as the thickness of the layer and can be filled up to 1:0.7 part per weight.

The layer thickness is in between min. 0.5 till max. 3 mm when filled like given above per layer.

Properties

CONIFLOOR EP 712 is pre-filled in the factory, has a low viscosity and therefore shows high capillary activity.

The material has very good adhesion to substrates based on minerals and / or cement.

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

Fully cured, CONIFLOOR EP 712 exhibits very good mechanical properties. It is resistant to water, sea and waste water, as well a variety of alkalis, diluted acids, brine, mineral oils, lubricants and fuels.

Technical Data

Mixing ratio	in parts by weight	A : B	100 : 20	
Density	mix, at 23 °C	g/cm ³	1.45	
Viscosity	mix, at 23 °C	mPas	1480	
Working time (25 kg working packs)	at 10 °C	min.	50	
	at 20 °C	min.	25	
	at 30 °C	min.	12	
Re-coating interval	at 20 °C	min.	h	8
		max.	h	48
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		84	
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 712 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.

Before mixing, the A-component must be mechanically stirred, then the B-component is poured into the container of the A-component.

Make sure that the B component runs out completely, carefully scraping out the container with a spatula. Scrape the sides and the bottom of the pail several times with the mixer 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 [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 712 used as primer or a scratch coat is approximately between [0.4-0.8 kg/m²](#) [depending](#) on the condition and porosity of the substrate.

A [2nd coat](#) of [0.3-0.6 kg/m²](#) of [primer](#) CONIFLOOR EP 712 can be necessary [in](#) order to seal concrete pores and capillaries completely.

CONIFLOOR EP 712 is used especially at unevenness of $\geq 0.5\text{mm}$.

In the case of highly absorbent substrates, it may be necessary to first prime with the unfilled primer CONIFLOOR EP 110 or EP 116 LE.

The above consumption figures are intended [as a guide only](#) and may increase on very rough or porous substrates. For filling CONIFLOOR EP 712 as a scratch / levelling layer, fire-dried quartz sand with a grain size of 0.1-0.3 mm is recommended

CONIFLOOR EP 712 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 712 is applied to the prepared substrate by a squeegee and if necessary finished with a roller. Puddles need to be avoided.

PUR Coatings

To insure a good adhesion to a subsequently applied polyurethane or polyaspartic resin-based coating, we recommend [broadcasting the still fresh primer](#) layer CONIFLOOR EP 712 with [fire-dried quartz sand](#) with a grain size of [0.3-0.8 mm](#) (consumption at least approx. 0.5- 0.8 kg / m²). Avoid scattering in excess.

For [surfaces with low mechanical stress](#), a reworking with polyurethane or polyaspartic resins can be carried out without sanding [within the given reworking time](#), or the primer that [has not been broadcasted with quartz sand](#) must be sanded well.

Temperatures

Both the processing time of CONIFLOOR EP 712 and the hardening of the covering are largely determined by the temperature of the material, the substrate and the environment. [At low temperatures, the chemical reactions are generally delayed; This also extends the pot, walk-on and recoat times](#). At the same time, the consumption per unit area may increase as a result of increasing viscosity. [Conversely, chemical reactions are accelerated at high temperatures, so that the above times are correspondingly shortened](#).

For CONIFLOOR EP 712 to cure completely, the mean temperature of the substrate must not fall below the lowest processing or object temperature.

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.

Cleaning agent

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

Substrate condition

The substrate (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
with single layer application	

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

With higher residual moisture up to max. 6 M-%, CONIFLOOR EP 712 can be used with an [additional film-forming blocking primer](#). The first step is to be applied in a film-forming manner (min. 600 g/m²) and [not sanded](#). The [second work step](#) must take place within the revision times with a [minimum consumption rate of 300 g/m²](#).



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.

Substrate preparation

The substrate must be prepared using suitable measures, such as shot blasting or diamond grinding, so that the requirements listed above are met. Fill broken areas and defects in the substrate with CONICA EP mortar flush with the surface.

The substrate to be coated must have an average adhesive tensile strength of at least 1.5 N / mm² (verification e.g. with Herion device, pulling speed 100 N / s).

The substrate temperature must be at least 3 °C above the prevailing dew point temperature.
The substrate to be coated must be secured against rising damp (pressing water).

The consumption and the quantities given are guidelines and may be higher on very rough or porous surfaces.
If necessary, exact consumption values can be determined on the object after the substrate has been pre-treated.

Pack size

CONIFLOOR EP 712 is supplied in 30 kg working packs. A- and B-component are filled in separate cans in the suitable mixing ratio.

Color: light grey

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 712 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 712 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-Label / UKCA-Label:

See Declaration of Performance.

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