



CONIFLOOR EP 830

2C-EP resin, self-levelling, and wear coating as well as top coat on scattered coatings, benzyl alcohol and ethanol free, very low emission, hard, (total solid)

Product description

CONIFLOOR EP 830 is a two-component, self-levelling, pigmented, hard and chemically resistant floor coating based on (benzyl alcohol and ethanol free) very low-emission epoxy resins, "Total Solid according to test methods of Deutsche Bauchemie e.V."

Applications

CONIFLOOR EP 830 is used as a self-levelling and wear coating on primed (e.g., with CONIFLOOR EP 712 or EP 716) cementitious substrates in indoor areas with moderate to heavy mechanical stress. Furthermore, CONIFLOOR 830 can also be used as a top coat on with quartz sand sprinkled coatings.

Properties

After curing, CONIFLOOR EP 830 is characterized by its mechanical strength and good abrasion resistance.

After curing, CONIFLOOR EP 830 is resistant to water, seawater and wastewater and is resistant to mineral oils, lubricants, and fuels as well as a variety of alkalis, diluted acids, and salt solutions.

The slow yellowing in UV-exposed areas does not affect the mechanical and technical properties. The coloured, light-stable sealing lacquer with CONIFLOOR 520 CW reduces and avoids yellowing and increases scratch resistance. The transparent CONIFLOOR 520 W sealing lacquer is used for levelling coatings with colour flake scattering, but this can only slow down yellowing but not prevent it.

CONIFLOOR EP 830 is used in our system structures

- **CONIFLOOR IES (BA-free)**
- **CONIFLOOR IES SR (BA-free)**

and others.

Technical Data

Mixing ratio	in parts by weight			100 : 25
Density	mix,	at 23 °C	g/cm ³	1.63
Viscosity	mix,	at 23 °C	mPas	ca. 3750
Processing time	at 12 °C		min. approx.	25
Re-coating interval / ready for foot traffic	at 20 °C		minimum h	14
			maximum h	36
Substrate and application temperature	minimum		°C	10
	maximum		°C	30
Permissible relative humidity	maximum		%	75
Ready for	mech. strain	at 20 °C	d	3
	light mech. strain	at 20 °C	d	1
	chem. strain	at 20 °C	d	7
Shore D hardness	after 28 d			80
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 830 is supplied in the correct proportions of component A (resin) and component B (hardener).

Before mixing, the A component must be stirred up by machine, then the B component is poured into the container of the A component and ensure that the pail containing component B is [emptied](#) completely.

To achieve a homogenous mix, thoroughly mix with a slowly rotating mixing device at about 300 rev/min. Ensure that the mixing device reaches side and bottom areas of the mixing vessel.

The [mixing](#) process takes [at least 3 minutes](#) and should be performed until the blend is [homogenous](#) and streak free.

[Pour](#) the mix into another [clean](#) pail and mix it again for 1 additional minute.

The [temperature](#) of the components should be between 15-25 °C.

CONIFLOOR EP 830 can then be applied directly to the pre-treated substrate or – when used as thick self-levelling coating of at least 2mm thickness – the coating can be filled while constantly stirring from 30% up to 70% by weight with quartz sand with a grain size of 0.1-0.3 mm.

CONIFLOOR EP 830 is applied using a squeegee, scraper, or a notched trowel. The teeth size of the tool needs to be adjusted to the calculated consumption per 1m².

We recommend cross-wise [spike rolling](#) after application to [de-aerate](#) the coating.

Both the processing time of CONIFLOOR EP 830 and the curing of the coating as well as the levelling properties (viscosity) are essentially determined by the temperature of the material, substrate, and environment. At low temperatures, the chemical reactions are generally delayed; this also extends the pot-life, walkability and rework ability times and the viscosity and possible the consumption values are increasing. Conversely, at high temperatures, chemical reactions are accelerated, so that the times mentioned above are shortened accordingly.

To fully cure the material, the substrate and working temperature must not fall below the minimum.

[After application, the material should be protected from direct contact with water for approx. 24 hours \(at 20 °C\)](#). Within this period, contact with water can cause sticky and whitish surface (carbamate).

The relative [humidity](#) level may not exceed [75%](#).

Consumption

The [consumption rate](#) of CONIFLOOR EP 830 for a layer of at least [1.5 mm](#) is [2.45 kg/m²](#).

The [maximum layer thickness](#) should not exceed 2.5 mm [in one operation](#), otherwise there is a risk of running off at inclined surfaces.

If CONIFLOOR EP 830 is used in the [slip resistant system](#) CONIFLOOR IES SR (BA-free), the [consumption is 1.2 up to 1.5 kg/m²](#). For this, see also the system description.

In case of layers, $\geq 1.5 - 2$ mm the coating can be filled with oven dried quartz sand with a grain size of 0.1-0.3 mm. The mixing ratio coating: quartz sand can be 1:0.3 up to 1:0.7

Cleaning agent

Re-usable tools should be cleaned carefully with CLEANER 45 or e.g., isopropanol.

Substrate condition

Cement bound substrates to be coated must be firm, dry, load bearing and free of loose and brittle particles and substances, which impair adhesion such as oil, grease, rubber skid marks, paint, or other 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 mandatory.

After the pre-treatment, the bond strength of the concrete must be at least 1.5 N/mm².

The [moisture level](#) must not exceed [4 %](#).

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

The sub base must contain a moisture barrier (damp proof membrane D.P.M.).

CONIFLOOR EP 830 is applied on the pre-treated and with epoxy primed substrate.

After the pre-treatment, the bond strength of the concrete must be at least 1.5 N/mm².

As for the rest the sections of the requirements concerning substrates to be coated shown in the according guidelines apply.

Pack size

CONIFLOOR EP 830 is supplied in 25 kg (metal) working packs. Components A and B are supplied in the correct proportions and delivered separately.

Colour

Standard colours: ca. RAL 7032 (grey)
further colours upon request.

In order to ensure a uniform colouring of the surface, CONIFLOOR EP 830 should only be processed from one production batch.

When processing different batches on the same project, several containers must be divided and mixed with each other at the transition to the next batch, so that a smooth transition can be made. Alternatively, a deliberate working seam (day section) or separating rail at the transition can be planned.

Please also note our general information on shades and finishes, which you can request from us.



Care

In order to preserve the properties of synthetic resin floor coverings in the long term, we recommend regular maintenance. Please request our [general care instructions](#). Before using the coatings for the first time, we recommend that you carry out a thorough cleaning with initial care. As a result, the cleanability is significantly improved.

Storage

Store in unopened pails under dry conditions at a temperature range of 5-25 °C.

Do not expose to direct sunlight.

Before use, please see "best before" date on the pail / drum.

Safety precautions

CONIFLOOR EP 830 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 830 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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