CONIFLOOR EP 430 (old CONIFLOOR 430)

Two part EP self-levelling coating, low emission, pigmented, hard (total solid)

Product description

CONIFLOOR EP 430 is a two component, low emission, self-levelling, pigmented, hard epoxy coating, "Total Solid accord. to the test methods Deutsche Bauchemie e.V.".

Fields of application

CONIFLOOR EP 430 is used as a self-levelling coating or with silica sand broadcasted wear coat on primed (e.g. with CONIFLOOR EP 110, EP 112 or EP 116LE) substrates such as concrete and cement screeds for indoor floorings with medium to heavy mechanical stress. Furthermore, it can be used as top coat on with sand broadcasted coatings.

CONIFLOOR EP 430 is used in our indoor flooring systems.

Properties

CONIFLOOR EP 430 exhibits high mechanical properties, resistant to abrasion and is easy to apply.

CONIFLOOR EP 430 is easy to clean and resistant to water, sea and wastewater, a variety of alkaline substances, diluted acids, brine, mineral oils, lubricants and fuels.

The yellowing, which occurs when CONIFLOOR EP 430 is exposed to UV light, does not affect its mechanical properties. To avoid the yellowing the coating can be sealed with CONIFLOOR 520 CW which at the same time increases the resistance against scratches.

CONIFLOOR EP 430 is used in the systems

- CONIFLOOR IES
- CONIFLOOR IES SR
- CONIFLOOR IES AS-SR

or others.

Technical Data

Mixing ratio	in parts by weight			100 : 19
Density	mix,	at 23 °C	g/cm³	1.54
Viscosity	mix,	at 23 °C	mPas	2000
Processing time	at 12 °C		min. approx.	25
Re-coating interval / ready for foot traffic	at 20 °C		minimum h maximum h	14 36
Substrate and application temperature	minimum maximum		°C °C	10 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 430 is supplied in the correct proportions of component A (resin) and component B (hardener). Pour component B into component A 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 430 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 430 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 1m^2.

We recommend cross-wise spike rolling after application to de-aerate the coating.

The ambient and substrate temperature influences working life and curing time of CONIFLOOR EP 430. At low temperatures, the chemical reactions are slowed down; this lengthens the pot life, re-coating interval and open time. High temperature and humidity accelerate chemical reactions so the contrary is true.

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 foaming on the surface of the coating.

The relative humidity level may not exceed 75%.

Consumption
The consumption rate of CONIFLOOR EP 430 for a layer of at least 1.5 mm is 2.3 kg/m^2.
If CONIFLOOR EP 430 is used in the slip resistant system CONIFLOOR IES SR, the consumption is 1.2 up to 1.5 kg/m^2. For this, see also the system description.
In case of layers, ≥ 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 44 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/mm^2.

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 430 is applied on the pre-treated and with CONIFLOOR EP 110, EP 112 or EP 116 LE primed sub-base.

The maximum thickness of this coating layer should not exceed 2.5 mm in one layer.

After the pre-treatment, the bond strength of the concrete must be at least 1.5 N/mm^2.

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

Pack size
CONIFLOOR EP 430 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.

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 430 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 430 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

CE-Label:
See Declaration of Performance.

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