

CONIFLOOR EP 431 (old CONIFLOOR 431)

Two-part EP structured coating, hard with a textured surface, (total solid)

Product description

CONIFLOOR EP 431 is a two component, [structured](#), [pigmented](#), [hard](#) and mechanical resistant epoxy coating, "Total Solid accord. to the test methods Deutsche Bauchemie e.V."

CONIFLOOR EP 431 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 431 is exposed to UV light, does not affect its mechanical properties.

Fields of application

CONIFLOOR EP 431 is used as a [structured coating](#) and used as a coating on mineral, with CONIFLOOR EP 110, EP 112 N or EP 116LE primed substrates for indoor floorings with low to medium mechanical stress.

CONIFLOOR EP 431 is used in our indoor flooring system

- CONIFLOOR IET.

Properties

CONIFLOOR EP 431 exhibits high mechanical properties, resistant to abrasion and is easy to apply.

Technical Data

Mixing ratio	in parts by weight			100 : 16
Density	mix,	at 23 °C	g/cm ³	1.49
Viscosity	mix,	at 23 °C	mPas	thixotropic
Processing time		at 12 °C	min. approx.	35
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		81

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 431 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 2 to 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 minutes.

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

CONIFLOOR EP 431 can then be applied directly to the pre-treated substrate.

CONIFLOOR EP 431 is applied using a squeegee, scraper or a notched trowel and [finished](#) at the end [with a structure roller in one direction](#).

The ambient and substrate temperature influences working life and curing time of CONIFLOOR EP 431.

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 min. 15 °C). Within this period, contact with water can cause white discoloration and carbamate formation on the surface of the coating.

The relative humidity level may not exceed 75%.

Consumption

The consumption rate of CONIFLOOR EP 431 is min. 600 g/m² up to max. 800 g/m².

Note: If the maximum consumption amount is exceeded, the structure of the thixotropic coating CONIFLOOR EP 431 will disappear by run again after rolling with the structure roller.

If CONIFLOOR EP 431 is required in the CONIFLOOR IET system structure with increased slip resistance, fire-dried quartz sand with a grain size of 0.3-0.8 mm can be added to the coating material with approx. 10-15%. The total consumption quantity remains unchanged. Further information can be found in the test reports.

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 subbase must contain a moisture barrier (damp proof membrane D.P.M.).

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

CONIFLOOR EP 431 is applied on the pre-treated and with CONIFLOOR EP 110, EP 112 or EP 116 LE primed subbase.

If the surface roughness is $\geq 0.5\text{mm}$, an additional levelling layer with CONIFLOOR EP 110, EP 112 or EP 116 LE must be taken into account which is not sprinkled with QS. The recoating time of CONIFLOOR EP 110, EP 112 N or EP 116 LE must be considered.

Pack size

CONIFLOOR EP 431 is supplied in 25 kg (metal) working packs. Components A and B are supplied in the correct proportions and delivered separately.

Colour

Colours accord. ca. RAL 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 431 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 431 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

CONICA AG
Industriestrasse 26
8207 Schaffhausen
Suisse
Tel.: + 41 52 644 3600
Fax: + 41 52 644 3699
info@conica.com
www.conica.com

Whilst any information contained herein is true, accurate and represents our best knowledge and experience, no warranty is given or implied with any recommendations made by us, our representatives or distributors, as the conditions of use and the professional competence involved in the application of the product are beyond our control.

As all CONICA data sheets are updated on a regular basis, it is user's responsibility to obtain the most recent issue. Registered users can obtain the actual data sheets from our webpage. Hard copies are available upon request.