

CONIFLOOR 440/1

Two-part PUR coating, pigmented, low emission, high elastic, self-levelling for indoor comfort and decorative floorings

Product description

CONIFLOOR 440/1 is a two component, solvent free, low emission, pigmented, elastic, aromatic and self-levelling PUR coating.

Fields of application

CONIFLOOR 440/1 is used as a self-levelling coating and on pre-fabricated rubber granule or foam mats, which have been pore-sealed with our CONIFLOOR 310 or 340 FL, or on concrete pre-treated with our primer CONIFLOOR EP 110, EP 712 or 116 LE.

Properties

CONIFLOOR 440/1 exhibits high mechanical properties, good self-levelling, and excellent de-aeration properties.

The product shows high elasticity, noise dampening, impact sound insulation and high resistance to impact at a medium hardness.

To improve the chemical resistance and light and colour stability, a sealing lacquer (CONIFLOOR 541/1 CW) has to be applied on top of CONIFLOOR 440/1.

CONIFLOOR 440/1 is used in our systems

- CONIFLOOR LPC
- CONIFLOOR LPC+

Application on wooden or other substrates is possible.

Technical Data

Mixing ratio	in parts by weight			100:28,5
Density	mix,	at 23 °C	g/cm ³	1.29
Viscosity	mix,	at 23 °C	mPas	1500
Pot life	at 12 °C at 23 °C at 30 °C		min min min	45 30 25
Re-coating interval / ready for foot traffic	at 23 °C and 50 % relative humidity		h	8
Substrate and application temperature	minimum maximum		°C °C	10 30
Permissible relative humidity	maximum		%	75
Shore A hardness		after 24 h, at 23 °C and 50 %		60
	relative humidity after 28 d			75 - 80
Tensile strength	DIN 53504		N/mm ²	7
Elongation at break	DIN 53504		%	190
Tear strength	DIN 53515		N/mm	15

Above figures are guide values and should not be used as a base for specifications!

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Application method

Please also note the information in our general processing guidelines.

CONIFLOOR 440/1 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 approximately 2- 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 both components should be between 15-25 $^{\circ}\text{C}$.

CONIFLOOR 440/1 is applied in the systems CONIFLOOR LPC, LPC+ (on the pore-sealed pre-fabricated rubber or foam mat) using a squeegee, scraper, or a notched trowel. The toothing of the tool needs to be adjusted to the calculated consumption per 1 m².

CONIFLOOR 440/1 can is applied directly as thick-layered coating with a thickness of at least 2 mm which is a min. consumption rate of 2.6 kg/m². Additional filling up to 30% with fired dried quartz sand grain size 0.1-0.3 mm is in the system CONIFLOOR LPC possible. The quartz sand has to be mixed thoroughly into the pre-mixed coating.

To achieve a flawless, blister-free surface, it is normally not necessary to de-aerate the coating with a spike roller when processing in the recommended temperature range. However, we recommend keeping a spike roller ready for use when needed.

The ambient and substrate temperature influences working life and curing time of CONIFLOOR 440/1. 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. 12 hours (at 20 °C). Within this period, contact with water can cause foaming on the surface of the coating.

The relative humidity in the air may not exceed 75%.

Cleaning agent

Re-usable tools should be cleaned carefully with CLEANER 40 or other suitable solvents (e.g., butyl acetate). Never use water or alcoholic solvents as cleaners!

Substrate condition

CONIFLOOR 440/1 is usually applied to pre-fabricated rubber granule or foam mats (previously sealed with pore sealer CONIFLOOR 310 or 340 FL), on liquid mats or on pre-treated substrates (primed with CONIFLOOR EP 110, EP 712 or 116 LE).

In case of coatings or pore sealers older than 3 days, grinding and cleaning with a 1:1 mixture of water - acetone of the surface is mandatory. After thoroughly drying, a coating with CONIFLOOR 440/1 is possible.

For application on other substrates, e.g., wood, preliminary tests have to be performed in order to determine if a primer / which primer is needed.

A pre-treatment of the substrate by grit or shot blasting, high-pressure water jetting, grinding, or scabbing including the necessary post-treatment is only necessary, when the layer is soiled, or the re-coating intervals have been exceeded.

After the pre-treatment, the bond strength of the concrete must be at least 1.5N/mm². The sub base must contain a moisture barrier (damp proof membrane D.P.M.). The moisture level must not exceed 4 %.

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

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

In order to ensure a 100 % seal of elastic layers, an interlayer of approx. 0.5 kg/m² CONIFLOOR 440/1 must be applied, prior to the final coat of CONIFLOOR 440/1, using a notched trowel or squeegee. This eliminates the possibility of bubbles in the coating.

Pack size

CONIFLOOR 440/1 is supplied in 25 kg working packs. Components A and B are supplied in the correct proportions and delivered separately.

Consumption

The consumption of CONIFLOOR 440/1 is at least min. 2.6 kg/m², which corresponds to a layer of approximately 2mm.

When applying to hard, cementitious sub-bases, the sanded epoxy primer is covered with a pore sealing for which the consumption is approximately 0.5 kg/m².

For the following layer of coating of approximately 2 mm the addition of oven dried quartz sand (grain size 0.1-0.3 mm) in the system CONIFLOOR LPC is possible. The mixing ration is 1:0.3 (parts by weight, resp. 30%). The share of binder (coating) then is approximately 2.3 kg/m^2 .



Colours

Standard colours approx. RAL or others on request

Note: Please note that aromatic polyurethane resins turn yellow due to UV light. This also applies to indoor applications. As we generally recommend an additional UV and colour-stable, pigmented aliphatic polyurethane resin sealing lacquer on these products, no colour matching is performed. The colour meets colour standards such as RAL or NCS and others with a colour deviation of $\Delta E \leq 2$ (otherwise $\Delta E \leq 1$).

Please also note our supplementary information on colours and surfaces.

If necessary, and especially with very light shades, it may be necessary to seal twice in white shades up to three times.

If you have any questions, please contact the technical service of CONICA AG.

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 440/1 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 content

CONIFLOOR 440/1 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/I 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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