

CONIFLOOR PU 450 (N)

Two-part PUR coating, low emission, total solid, self-levelling, pigmented, elastic, high UV- and colour stable for decorative indoor floorings

Product description

CONIFLOOR PU 450 (N) is a two component, [low emission](#), [aliphatic](#), total solid, self-levelling, and [pigmented decorative PUR coating](#), which is suitable to create [individual design floors](#).

Fields of application

CONIFLOOR PU 450 (N) is used as a [decorative](#) coating on mineral, primed substrates for indoor floorings and – when exposed to UV light – has a good colour stability.

Used as a decorative coating CONIFLOOR PU 450 (N) can be applied "wet-in-wet" (e.g., cement or concrete look), thus allowing a unique design on the floor or it could be broadcast with colour flakes.

Properties

CONIFLOOR PU 450 (N) is a [colour stable](#), [decorative](#), [elastic](#), [statically crack bridging](#), and thus comfortable coating and easy to apply.

CONIFLOOR PU 450 (N) – when exposed to UV-light – exhibits [good colour stability](#) indoor.

In order to improve the resistance to scratches and dirt and as well as to improve the mechanical and chemical durability CONIFLOOR PU 450 (N) needs to be sealed with our transparent top coat CONIFLOOR 541/1 W.

CONIFLOOR PU 450 (N) is used in the systems

- CONIFLOOR UPD
- CONIFLOOR UPD+

Technical Data

Mixing ratio	in parts by weight			100 : 30
Density	mix,	at 23 °C	g/cm³	1.49
Viscosity	mix,	at 23 °C	mPas	5740
Processing time	at 20 °C		min. approx...	50
Ready for foot traffic	at 10 °C		h.	24 - 36
	at 20 °C		h	14 - 18
	at 30 °C		h	14 - 18
Re-coating interval	at 20 °C	earliest after	h.	14
		latest after	h	48
Fully cured:	ready for chemical strain	at 20 °C	d	2 - 3
	ready for mechanical strain	at 20 °C	d	7
Substrate and application temperature	minimum		°C	10
	maximum		°C	30
Permissible relative humidity	maximum		%	75
Shore A hardness	after 7 d			89
Taber	ISO 5470-1 (1000g/CS10)		mg	63
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 PU 450 (N) is supplied in the correct proportions of component A (resin) and component B (hardener).

Before mixing, the A component must be stirred mechanically, then the B component is poured into the container of the A component. It must be ensured that the B component leaks completely, carefully scraping out the container by means of a spatula.

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 °C.

CONIFLOOR PU 450 (N) is applied in the systems CONIFLOOR UPD and UPD+ (on the pore-sealed pre-fabricated rubber or foam mat) using a squeegee, scraper, or a notched trowel. The teeth size of the tool needs to be adjusted to the calculated consumption per 1 m².

CONIFLOOR PU 450 (N) can be applied directly as thick-layered coating with a thickness of at least 2 mm.

The ambient and substrate temperature influences working life and curing time of CONIFLOOR PU 450 (N). 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. 10 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%](#).

Substrate condition

CONIFLOOR PU 450 (N) is usually applied to prefabricated rubber granulate or foam mats coated with CONIFLOOR 340 FL 2-fold, to a pore closure with e.g., CONIFLOOR 440/1 or directly to the pre-treated substrate primed and defined with CONIFLOOR EP 110, EP 712, EP 716 or 116 LE.

For other substrates, such as wood, it must be checked in preliminary tests whether and which primer is necessary.

On wood, we recommend a light intermediate sanding after the first primer because fibres can set up here and to apply a thin 2nd primer.

In order to ensure the absence of pores of a thick-layer gradient coating with CONIFLOOR PU 450 (N), an intermediate layer / pore closure of at least 0.5 – 0.8 kg/m² CONIFLOOR 440/1 is recommended on the scattered primer or applied to elastic layers on CONIFLOOR 340 FL. This is the only way to safely avoid bubbles and holes in the final coating.

PUR surfaces that are more than 72 hours old must be sanded and cleaned with a 1:1 mixture of acetone and water. After complete drying of the surface, an application of CONIFLOOR 541/1 W is possible.

The substrate pre-treatment is preferably carried out by dust-free shot blasting, if necessary, by milling and subsequent shot blasting or grinding with final vacuum cleaning of the surface to be coated.

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

The residual moisture in the subsoil must [not exceed 4%](#).

The background [temperature must be at least 3 °C](#) above the prevailing [dew point](#) temperature.

The substrate to be coated must be secured against rising moisture (pressing water).

In all other respects, the sections of the requirements for the substrate prior to coating application in the relevant directives apply.

Cleaning agent

Re-usable tools should be cleaned carefully with CLEANER 40, CLEANER 45 or other suitable solvents.

Never use water or alcoholic solvents as cleaners!

Consumption

Depending on the substrate and the thickness of the layer, the consumption rate is at least 2.5 – 3.0 kg/m².

Colour

Standard colours (PG 1) according to approx. RAL or on request

In order to ensure a uniform colouring of the surface, CONIFLOOR PU 450 (N) should only be processed from one production batch.

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

Pack size

CONIFLOOR PU 450 (N) is supplied in 13 or 25 kg (metal) working packs. Components A and B are supplied in the correct proportions and delivered separately.

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 PU 450 (N) 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 PU 450 (N) 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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