

# CONIPROOF 490/1

Two component polyurethane crack bridging waterproofing layer, tested in the systems for parking decks

## Product description

CONIFLOOR 490/1 is a two component, solvent free, highly elastic water proofing layer for substrates with cracks or where cracks may occur.

## Fields of application

CONIPROOF 490/1 is part of the tested car park system CONIPROOF PPC dl as a high elastic water proofing membrane and in the system CONIPROOF PPC sl as a wear coat and tested according to EN 1504-2 for surface protection.

## Properties

CONIFLOOR 490/1 is highly elastic, also at very low temperature (-20°C) and therefore able to bridge deformations (occurring cracks under static and/or dynamic stress) in the sub-base.

CONIFLOOR 490/1 is general overcoated by a following layer (wear coat or top coat). For this see the following informations in the data sheet and to the systems data sheets to CONIPROOF PP dl or CONIPROOF PP sl. Because of the high yellowing as applied membrane it is recommended to overcoat as soon as possible with CONIPROOF 491/1.

## Technical Data

<b>Mixing ratio</b>	in parts by weight		1 : 2
<b>Density</b>	mix, at 23 °C	g/cm <sup>3</sup>	1.20
<b>Viscosity</b>	mix, at 23 °C	mPas	5300
<b>Processing time (30 kg working packs)</b>	at 10 °C at 20 °C at 30 °C	min. min. min.	40 30 15
<b>Re-coating interval / ready for foot traffic</b>	at 10 °C at 20 °C at 30 °C	min. / max. h min. / max. h min. / max. h	24 / 48 18 / 36 8 / 16
<b>Substrate and application temperature</b>	minimum maximum	°C °C	10 30
<b>Permissible relative humidity</b>	maximum	%	75
<b>Ready for</b>	at 20 °C at 20 °C	d d	7 3
<b>mech. strain</b>			
<b>light mech. strain</b>			
<b>Shore A hardness</b>	after 7d /23°C		≥ 70
<b>Elongation</b>	after 7d /23°C	%	≥ 600
<b>Tensile strength</b>	after 7d /23°C	N/mm <sup>2</sup>	≥ 9
<b>E-module</b>	after 7d /23°C	N/mm <sup>2</sup>	≥ 7
<i>Above figures are guide values and should not be used as a base for specifications!</i>			

### Application method

CONIFLOOR 490/1 is supplied in the correct proportions of component A (resin) and component B (hardener). Pour component A into component B and ensure that the pail containing component A 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 490/1 can then be applied directly to the pre-treated substrate with the minimum consumption according the system build-up of CONIPROOF PPC dl as a waterproofing membrane. As the wear coat in the system CONIPROOF PPC sl CONIPROOF 490/1 is filled while constantly stirring with 30% fire dried quartz sand with a grain size of 0.1-0.5mm.

CONIFLOOR 490/1 is applied using a rubber squeegee, scraper or a notched trowel. The toothing of the tool needs to be adjusted to the calculated consumption per 1m<sup>2</sup>.

Cross-wise **spike-rolling** after application is necessary to **de-aerate** the coating.

Working life and curing time of CONIPROOF 490/1 are influenced by the ambient and substrate temperature. 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.

After the pre-treatment the bond strength of the concrete must be at least 1.5N/mm<sup>2</sup>.

After application, the material should be protected from direct contact with water for minimum 36 hours (at 15 °C). Within this period, contact with water can cause foaming on the surface of the coating.

The relative **humidity** level may not exceed **75%**.

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

The time to overcoat CONIPROOF 490/1 as water proofing membrane is approx. 12 to maximum 24 h and depends on the ambient and substrate temperature.

### Pack size

### Consumption

For the right consumption rate of CONIFLOOR 490/1 see the system data sheets to CONIPROOF PPC dl and CONIPROOF PPC sl.

### 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

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 1.5N/mm<sup>2</sup>.

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 490/1 is applied on the pre-treated and primed sub-base. CONIFLOOR 490/ is supplied in 30 kg (metal) working packs. Components A and B are supplied in the correct proportions and delivered separately.

### Colour

Standard colour: Grey

### Storage

Store in unopened pails under dry conditions at a temperature range of 15-25 °C.

Do not expose to direct sunlight.

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

### Safety precautions

CONIFLOOR 490/1 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 contents

CONIFLOOR 490/1 meets the requirements of the EC directive 2004/42/EC.



**CE-Label:**

See Declaration of Performance.

**CE-Mark according to EN 1504-2**

Products and systems for the protection and repair of concrete structures - Definitions, requirements, quality control and evaluation of conformity - Part 2: Surface protection products and systems for concrete.

Details see CE-conformity mark and conformity declaration.

**CE-Mark according to EN 13813**

EN 13813: 2003-01, Screed material and floor screeds - Screed materials - Properties and requirements is the basis for requirements for floor screeds used in indoor flooring constructions. Resin coatings and sealer are also subject to this norm.

Details see CE-conformity mark and conformity declaration.

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