

# CONIPROOF EP 191/1 (old CONIPROOF 191/1)

Two-part EP resin primer, for cementitious substrates with increased moisture content, (total solid)

#### **Product description**

CONIPROOF EP 191/1 is a two component, unpigmented epoxy resin primer, "Total Solid accord. to the test methods Deutsche Bauchemie e.V." and ready to use on mineral substrates indoors and outdoors such as concrete and cementitious screeds.

CONIPROOF EP 191/1 can also be used at elevated residual moisture content and on substrates with the risk of rising moisture.

# Fields of application

CONIPROOF EP 191/1 is part of the car park system CONIPROOF PES, CONIPROOF PPC DL and CONIPROOF PPC SL and tested according to EN 1504-2 for surface protection.

It is suitable for use as a pore and capillary sealing for this purpose the product is – after mixing of component A and B – filled with oven-dried silica sand. It is also tested for higher residual moisture content on concrete surfaces.

#### **Properties**

CONIPROOF EP 191/1 has a longer working time and therefore shows high capillary activity.

The material has very good adhesion to substrates based on minerals and / or cement. The primer can used in universal applications and also as blocking primer.

Fully cured, CONIPROOF EP 191/1 exhibits very good mechanical properties. It is resistant to water, sea and wastewater as well as to a variety of alkalis, diluted acids, brine, mineral oils, lubricants and fuels.

CONIFLOOR 191/1 is used in following systems:

- CONIPROOF PEF
- CONIPROOF PPC SL
- CONIPROOF PPC DL and others

Mixing ratio	in parts by weight		A: B	100 : 60
Density	mix, at 23 °C		g/cm <sup>3</sup>	1.02
Viscosity	mix, at 23 °C		mPas	900
Working time (24 kg working packs)	at 10 °C at 20 °C at 30 °C		min min min	50 30 15
Re-coating interval	at 20 °C	min. max.	h h	12 48
Ready for foot traffic	at 10 °C at 23 °C at 30 °C		h h h	min. 24 min. 12 min. 8
Substrate and application temperature	minimum maximum		С° С	10 30
Max. permissible relative humidity			%	75
Shore D hardness	nach 7d / 23°C			81
Tensile bond strength			N/mm <sup>2</sup>	≥ 1.5

## **Technical Data**



## **Application method**

Please also note the information in our general processing guidelines.

CONIPROOF EP 191/1 is supplied in working packs, which contain the correct proportions of component A (resin) and component B (hardener).

## Mixing

Before mixing, precondition both A and B components to a temperature of approximately 15°C up to 25 °C.

Pour component B into component A and ensure that pail containing component B is emptied completely. Scrape the sides and the bottom of the pail several times to ensure complete mixing. Do not mix by hand, mix with a mechanical drill and paddle at a very low speed (ca. 300 rpm) for at 2 - 3 minutes. Keep the mixer blades submerged in the material to avoid introducing air bubbles. Do not work out of the original drum / pail.

After proper mixing to a homogeneous consistency, pour the mixture into a fresh pail and mix for another minute.

CONIPROOF EP 191/1 should be applied when the ambient temperature is constant or falling, as this will decrease the risk of bubble formation due to evaporation of air that is enclosed in the concrete.

CONIPROOF EP 191/1 is applied to the prepared substrate by rolling, spraying or spreading with a rubber squeegee. After waiting for at least 10 minutes, finish with a roller. Ponding or spots where the primer is applied thick have to be avoided

#### Consumption

The consumption of CONIPROOF EP 191/1 used as primer or scratch primer is minimum 0.3-0.5 kg/m<sup>2</sup> depending on the condition and porosity of the substrate. When used as blocking primer or with increased residual moisture up to max. 6 % by weight, the first application must be carried out film forming with min. 0.5 - 0.7 kg/m2. The 1<sup>st</sup> blocking primer is not broadcasted and recoated within the recoating interval with a second operation.

A 2<sup>nd</sup> coat of 0.2-0.4 kg/m<sup>2</sup> of primer CONIPROOF 191/1 is mandatory in order to seal concrete pores and capillaries completely.

The re-coating interval at +20°C is max. 24h. The first layer of primer isn't broadcasted with sand within the mentioned interval.

Unevenness  $\geq$  0.5mm must be equalized general by an additional scratch coat.

CONIFLOOR 190/1 is suitable for use as a pore and capillary sealing for this purpose the product is – after mixing of component A and B – filled with oven-dried silica sand.

The degree of filling depends on the temperatures as well as on the thickness of the layer and should be between 0.5 up to 1.5 referred to the primer (ratio by weight). The above consumption figures are intended as a guide only and may be higher on very rough or porous substrates.

## **PUR Coatings**

To improve the adhesion to a following coating oven dried sand (grain size 0.3-0.8 mm – approx.  $1 \text{kg/m}^2$ ) is broadcasted into the primer whilst still in order to improve adhesion of the following polyurethane based product.

Bald patches as well as excess broadcasting have to be avoided.

#### Temperatures

The ambient, material and substrate temperatures influence the working life and curing time of the material. At low temperatures, the chemical reactions are slowed down; this lengthens the pot life, open time and curing times. High temperatures speed up the chemical reactions thus the periods mentioned above are shortened accordingly.

To fully cure the material, substrate and application temperature should not fall below the minimum.

After application, the material should be protected from direct contact with water for approx. 24 h (at 20° C). Within this period, contact with water can cause a surface bloom and/or surface tackiness, both of which must be removed else the adhesion to the following coating is impaired.

#### **Cleaning agent**

Re-usable tools should be cleaned carefully with CLEANER 44 or e.g. isopropanol.

#### Substrate condition

All substrates (new and old) must be structurally sound, dry and free of laitance and loose particles. Clean floors of oil, grease, and rubber skid marks, paint stains and other adhesion impairing 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 only necessary, when the layer is soiled or the re-coating intervals have been exceeded.

After surface preparation, the tensile strength of the concrete should exceed 1.5 N/mm<sup>2</sup> (check with an approved pull-off tester at a load rate of 100 N/s).

The substrate surface may be damp, without a visible wet surface. It must be insured, that no rising moisture occurs underneath the substrate.

- Concrete max. 6 CM-%
- Green concrete Max. 6 CM-%
- Cement screed max. 6 CM-%

It is important that both primer layers form a closed film.

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

There must be a regular DPM between the stone base and the slab.



#### Pack size

CONIPROOF EP 191/1 is supplied in 24 kg working packs.

## Colour

Comp. A is transparent, comp. B is brownish

## Storage

Store in original closed packing under dry conditions at a temperature range of 15 - 25 °C.

Do not expose the drums to direct sunlight. Please check "best-before" date on the pail before usage.

## Safety precautions

CONIPROOF EP 191/1 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**

CONIPROOF EP 191/1 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

#### 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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