

CONIPROOF 591/1

Two part Polyaspartic resin top coat, fast-curing, pigmented, UV- and colour-resistant, low solvent, for with quartz sand broadcasted tested car park deck coatings, outdoor

Product description

CONIPROOF 591/1 is a two-component, [fast curing](#), [pigmented](#), [UV and colour stable](#), low-viscosity, [low solvent](#), [Polyaspartic](#) resin-based top coat.

Fields of applications

CONIPROOF 591/1 is a system component of the [tested CONIPROOF parking garage](#) systems according to DIN V 18026 and DIN EN 1504-2 for products and systems for the protection and repair of concrete structures.

CONIPROOF 591/1 is used as a wear-resistant coloured top coat mainly in outdoor areas and on exposed surfaces with light to medium mechanical stress.

Properties

After curing, CONIPROOF 591/1 is characterized by its fast curing, mechanical strength and good abrasion resistance. The sealant is UV and colour stable.

After hardening, CONIPROOF 591/1 is resistant to water, seawater and wastewater and resistant to mineral oils, lubricants and fuels as well as a large number of alkalis, dilute acids and salt solutions.

CONIPROOF 591/1 will be in the certified parking garage coating systems

- CONIPROOF PES (OS 8)
- CONIPROOF PPC DL (OS 11a)
- CONIPROOF PPC SL (OS 11b)
- CONIPROOF PWC SU (OS 10)
- CONIPROOF PWC SP (OS 10)

and other systems.

Technical Data

Mixing ratio	in parts by weight			100 : 69
Density	mix,	at 23 °C	g/cm³	1.36
Viscosity	mix,	at 23 °C	mPas	950
Processing time (25 kg working packs)	at 10 °C		min.	30
	at 20 °C			20
	at 30 °C			10
Re-coating interval / ready for foot traffic (depending on layer thickness and air humidity)	at 20 °C		minimum h maximum h	1.5 - 4 24
Substrate and application temperature	minimum		°C	5
	maximum		°C	30
Permissible relative humidity	maximum		%	75
Ready for mech. strain light mech. Strain chem. strain	at 20 °C		d	2
	at 20 °C		h	4 - 8
	at 20 °C		d	5
Shore A hardness	after 7d / 23°C			87
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](#).

CONIPROOF 591/1 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.

Care must be taken to ensure that the B component leaks completely, while carefully scraping out the container of spatulas. First, the B component is poured into the container of the A component. Care must be taken to ensure that the B component leaks completely, while carefully scraping out the container of spatulas.

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.

CONIPROOF 591/1 can be applied directly to the pre-treated substrate (broadcasted epoxy primer, broadcasted scratch primer or broadcasted wear coat. For this, see the system data sheets to CONIPROOF PES, CONIPROOF PPC DL and CONIPROOF PPC SL.

CONIPROOF 591/1 is applied using a rubber squeegee and followed by back rolling.

[Both the processing time of CONIFLOOR 591/1 and the hardening of the coating is essentially determined by the temperature of the material, the substrate and the environment. At low temperatures, the chemical reactions are generally delayed. This also extends the pot life time, the walkability and the recoating times. At high temperatures and high humidity the chemical reactions and thus the curing are accelerated, so that named times are shorten accordingly!](#)

[To avoid roll-ons, gloss differences and microbubbles, the work-up and re-coating with ink rollers must not exceed approx. 5 minutes.](#)

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 15 °C). Within this period, contact with water can cause carbamate and/or tackiness on the surface of the coating.

The relative [humidity](#) level may not exceed [75%](#).

Consumption

The consumption rate of CONIPROOF 591/1 is approx. 0.6 to max. 0.9 kg/m² and depend on the grain size of the used silica sand for broad casting (here with size 0.3-0.8 mm). If the grain size 0.6-1.2mm in the system CONIPROOF PES is used, the consumption is min. 0.9 to max. approx. 1.2 kg/m².

Cleaning agent

Re-usable tools should be cleaned carefully with CLEANER 44, 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 1.5N/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 sub base must contain a moisture barrier (damp proof membrane (D.P.M.)).

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

Pack size

CONIPROOF 591/1 is supplied in 25 kg (metal) working packs. Components A and B are supplied in the correct proportions and delivered separately.

Colour

Colours upon request.

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

CONIPROOF 591/1 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 591/1 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/l 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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