

CONIPROOF PPC dl

Car park system according EN 1504-2 and DIN V 18026 class OS 11a - System Set Up

System for multi-storey car park, with separate membrane and wear coat, enhanced dynamic crack bridging properties, for areas with pedestrian and vehicle traffic, slip resistant, polyurethane system with low to medium mechanical stress

Fields of application exposed and intermediate parking decks

System data

		Product	Consumption	Application	Remarks
Primer	Concrete or cementitious screed	CONIPROOF 190/1 or CONIPROOF 191/1	0.3 – 0.5 kg/m ²	brushing in / roll / squeegee	moisture level of concrete ≤ 4% (CM-measure). If no scratch coat is applied, the primer must be broadcasted with fire dried quartz sand, in excess with grain size 0.3 - 0.8 mm.
		CONIPROOF 190/1 or CONIPROOF 191/1 filled with oven dried quartz sand, grain size 0.1 - 0.3 mm fire dried quartz sand, grain size 0.3 - 0.8 mm	0.7 – 1.3 kg/m ² including sand 2.5 – 4.0 kg/m ²	trowel / notched squeegee broadcast in excess	as scratch coat for unevenness ≥ 0,5 mm. Mixing ratio primer : quartz sand 1 : 0.5 - 1 in parts by weight depending on the thickness of the layer and on the temperature of the sub-base
High elastic water proofing membrane		CONIPROOF 490/1	1.8 – 2.1 kg/m ²	trowel / notched rubber squeegee	no filling or broadcast with sand
Wear Coat		CONIPROOF 491/1 filled with oven dried quartz sand, grain size 0.1 - 0.3 mm oven dried quartz sand, grain size 0.3 - 0.8 mm or 0.6 – 1.2 mm	2.25 – 2.5 kg/m ² including sand	trowel / notched rubber squeegee broadcast in excess	mixing ratio resin : quartz sand 1 : 0.25 in parts by weight resin share = 1,8 – 2,00 kg/m ² Quartz sand = 0,45 - 0,5 kg/m ² Quartz sand which is after curing still loose or not bonded is to remove.
		CONIPROOF 590/1	0.6 - 0.9 kg/m ²	trowel / rubber squeegee and roller	epoxy top coat, solvent-free
Top Coat	alternative	CONIPROOF 591/1	0.6 - 0.7 kg/m ²	Trowel / rubber squeegee and roller	UV-resistant, solvent-based polyaspartic top coat

Top Coat	alternative	CONIPROOF 592	0.6 - 0.7 kg/m ²	Trowel / rubber squeegee and roller	UV-resistant, solvent-based polyurethane top coat
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Total thickness of the system: min. approx. 4 mm

CONIPROOF PPC dl - Technical Data

Property	Standard	Result
Adhesive strength at T _{NORM}	EN 1542	≥ 2.2 N/mm ² (≥ 1.5 N/mm ²)
Adhesive strength after freeze-thaw with de-icing salt	EN 13687-1 and -2	≥ 1.5 N/mm ² (≥ 1.5 N/mm ²)
Dynamic crack bridging (-20°C)	EN 1062-7	II _{T+V} (B 3.2)
Grip and slip resistant	EN 13036-4 DIN 51130	≥ 56 Skt (≥ 55 Skt) R12 V6
Chemical resistance	EN 13529	Test liquids DIBt no. 1, 3, 10
Abrasion resistance (H22 wheel)	EN ISO 5470-1	1375 mg /1000 U (≤ 3000)
Carbon dioxide permeability	EN 1062-6	class III ≥ 61 m (> 50 m)
Water vapour permeability	EN ISO 7783-1 and -2	class III ≥ 52 m (> 50 m)
Water absorption coefficient	EN 1062-3	< 0,01 kg/m ² x h ^{0.5} (< 0,1)
Impact resistance	EN ISO 6772-2	4 Nm – no cracks
Fire behaviour class system	EN 13501-1	B _{fl} -s1



CE-Label: See Declaration of Performance

Preparation

Substrates to be coated must, be firm, dry, load bearing and free of loose and brittle particles and substances, such as oil, grease, rubber skid marks, paint or other contaminants, which impair adhesion

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, if 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.

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

Application method

Priming

CONIPROOF 190/1 or CONIPRROOF 191/1 are rolled on the pre-treated substrate by a roller or applied with a rubber squeegee and back rolling to a thin layer – **puddles** need to be **avoided**.

The consumption of CONIPROOF 190/1 or CONIPRROOF 191/1 is approximately 0.3 - 0.5 kg/m², depending on the conditions on site and of the subbase.

A 2nd application of CONIPROOF 190/1 or CONIPRROOF 191/1 with approx. 0.2 - 0.4 kg may be necessary to ensure that all pores and capillaries are completely sealed.

When there is unevenness of >0.5mm, a scratch coat has to be applied general in order to equalize the substrate.

Sanding

When applying the epoxy-based coating **within** the time frame of **1 day** (20°C), there is **no need** to broadcast quartz sand into the wet primer.

In case the maximum over coating time is **exceeded**, the primer **must** be broadcasted with oven dried quartz sand (grain size 0.3 – 0.8 mm) whilst still wet - **without excess sand / no bald** patches to ensure the adhesion of the following epoxy-based layer.

Consumption of the quartz sand is approximately 1 kg/m² (primer) and up to approx. 2 - 4 kg/m² (scratch coat).

Quartz sand, which is – after curing – still loose and unbound needs to be pushed off with a steel scraper. The whole surface has to be cleaned (before the next coat is applied) either sweeping or by vacuum cleaning.

Wear Coat

The crack bridging membrane CONIPROOF 490/1 is applied, either directly with trowel or notched rubber squeegee.

The wear coat CONIPROOF 491/1 is applied, either directly with trowel or notched rubber squeegee. CONIPROOF 491/1 is applied filled 1:0.25 parts by weight with fire dried quartz sand (grain size 0.1–0.3mm) in this system.

The consumption of the resin CONIPROOF 490/1 is min. 1.8 - 2.1 kg/m² (**no additional filling**) depending on the conditions on site and of the subbase. The consumption of CONIPROOF 491/1 is min. 1.9 - 2.3 kg/m² including sand. For this see also the product data sheets.

This wear coat coat is directly and full broadcasted with oven-dried quartz sand (grain size 0.3–0.8mm).

Quartz sand, which is – after curing – still loose and unbound needs to be pushed off with a steel scraper. The whole surface has to be cleaned (before the next coat is applied) either sweeping or by vacuum cleaning.

Top coat

Then the coating CONIPROOF 590/1 or CONIPROOF 591/1 or CONIPROOF 592 is applied, either directly with trowel or squeegee and roll with a "Microtex" roller (tuft size 8-10 mm). Roll out well and keep the **overlap** areas to a **minimum**. The consumption is min. 0.5 until max. 0.9 kg/m².

Questions

Please contact our Technical Department, if there are any questions.