

CONIFLOOR IES AS – System Set Up

Hard Epoxy, Indoor Flooring System with smooth surface, approved according antistatic property (EN 1081)

Fields of application

production areas, warehouses, filling station, laboratories
(where explosion prevention is required)

System data

		Product	Consumption	Application	Remarks
Primer	concrete	CONIFLOOR 110	0.3 – 0.5 kg/m ²	roll / brush-in	moisture level of concrete ≤ 4%
	cement screed				
Scratch coat	optional	CONIFLOOR 110	0.6 – 1.5 kg/m ²	notched squeegee / trowel	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 no broad cast
		filled with oven dried quartz sand, grain size 0.1 - 0.3mm			
Grounding		Copper Strips		max. distance to the grounding point 10m	In combination with the following conductive primer
Conductive layer		CONIFLOOR 150	0.11 - 0.12 kg/m ²	roll	Measurement of the complete grounding after min. 12 h at 20°C
Coating		CONIFLOOR 430 AS	2.0 – 2.5 kg/m ²	notched squeegee / trowel	CONIFLOOR 430 AS Spike roll latest 5 - 10 min. after application

Total thickness of the system approx. 1.5 – 2.5 mm

Resistance to ground 10⁴ until 10⁶ Ohm (= max. 1 MΩ) according EN 1081



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, 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 only necessary, when 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 1.5 N/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

CONIFLOOR 110 is rolled on the pre-treated substrate by a roller in a thin layer – **puddles** need to be **avoided**.

The consumption of CONIFLOOR 110 used as primer is approximately 0.3 - 0.5 kg/m², depending on the conditions on site and of the sub-base.

A 2nd application of CONIFLOOR 110 with approximately 0.2 - 0.4 kg/m² 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 in order to equalize same.

Grounding

In order to assure conductivity, self-adhesive copper strips are glued crosswise underneath the conductive layer at maximum intervals of 10 m. Generally the maximum distance of a measuring point to a grounding point is 10m. The conductive copper strips are taken vertically up the wall panels to a height of at least 20 to 30 cm vertically and connected to on earth loop or directly to the earth connection points.

Apply CONIFLOOR 150 as a conductive primer with a paint-roller (consumption 0.11 – 0.12 kg/m²).
Re-coating interval 12 up to 24 hours at 20°C.

The installation of the earth loop and the connection of the copper strips may only be carried out by a qualified electrician.

Before the application of the conductive bodycoat a measurement of the complete grounding have to be done. The conductivity of the conductive layer CONIFLOOR 150 and the measured values depend on the distance to the earth point and should be in a range of approx. 10 kΩ to max. 80 kΩ.

Measurement:

It is recommended to measure the different layers to the installed earth-point during the application and to minute the results.

Conductive Coating

After mixing the bodycoat CONIFLOOR 430 AS is applied to the substrate coated with CONIFLOOR 150, using a notched trowel or scraper.

The teeth size should be selected according the thickness of layer required (take care not to exceed max. recommend coverage rate). To remove air bubbles, spike roll latest 10 min. after application is necessary.

This also helps to achieve a homogeneous surface of this conductive layer containing conductive fibres.

Remarks

Please contact our Technical Department if there are questions.