

CONIFLOOR EP 150 (old CONIFLOOR 150)

Two-part EP conductive layer, for antistatic (AS) and ESD coating systems, black

Product description

CONIFLOOR EP 150 is a [conductive layer](#), solvent-free, low viscosity, black pigmented, 2-component conductive water-based epoxy.

Fields of application

CONIFLOOR EP 150 is used as a [conductive layer](#) (grounding) on primed or levelled substrates in our conductive and dissipative ESD indoor flooring systems where conductive and ESD properties are required.

Properties

CONIFLOOR EP 150 exhibits good adhesion to non-porous substrates (e.g. on primer CONIFLOOR EP 110) and anti-static properties

CONIFLOOR EP 150 is always over coated with the conductive coatings (e.g., CONIFLOOR 420 AS, CONIFLOOR EP 430 AS or CONIFLOOR EP 436 ESD).

CONIFLOOR EP 150 is used in the systems

- CONIFLOOR IPS AS / IPS AS ESD
- CONIFLOOR IES AS / IES AS ESD / IES AS SR
- CONIFLOOR IET AS / IET ESD / IET AS SR
- CONIFLOOR IES ESD (N) / IES AS-ESD SR

and several other systems from CONICA.

Technical Data

Mixing ratio	in parts by weight		A: B	1 : 4
	in parts by volume		A: B	1 : 4,3
Density	mix, at 23 °C		g/cm ³	1.06
Viscosity	mix, at 23 °C		mPas	1333
Working time (10 kg working packs)	at 10 °C		min	60
	at 20 °C		min	30
	at 30 °C		min	15
Re-coating interval	at 20 °C	min.	h	14
		max.	h	48
Ready for foot traffic	at 10 °C		h	min. 24
	at 23 °C		h	min. 16
	at 30 °C		h	min. 12
Substrate and application temperature	minimum		°C	15
	maximum		°C	30
Max. permissible relative humidity			%	75
Tensile bond strength			N/mm ²	≥ 1.5
<i>Above figures are guide values and should not be used as a base for specifications!</i>				

Application method

Please also [note the information in our general processing guidelines](#).

CONIFLOOR EP 150 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.

CONIFLOOR EP 150 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.

CONIFLOOR EP 150 is always applied on a prepared and primed substrate by rolling, the self-adhesive copper tapes to connect the conductive primer to the earth point must be installed before.

Consumption

The consumption of CONIFLOOR EP 150 used as conductive primer is between **0.11 - 0.12 kg/m²** on with QS broadcast surface the surfaces should be prepared by grinding, consumption should not exceed more than 0.14 kg/m².

If the substrate temperature is 18°C or below, the dilution with water up to 5 % by weight is possible.

Important:

Unevenness >0.5mm of the substrate must be equalized by an additional scratch coat. For additional filling of CONIFLOOR EP 110 or EP 116LE oven dried silica sand grain size 0.1-0.3mm is recommended. For this see also the technical data sheet to CONIFLOOR EP 110 or EP 116LE and the system data sheets of CONIFLOOR IPS AS, CONIFLOOR IES AS und CONIFLOOR IES AS SR and others.

Temperatures

The working life and curing time of the material is influenced by the ambient, material and substrate temperatures. 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 time frames 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.

Note for checking the conductivity:

To check the conductivity, the guideline values actual state of the art report "Conductive coatings for industrial floors" Deutsche Bauchemie e.V. recommended. Note: **Before applying the conductive coating, the CONIFLOOR EP 150 conductive layer must be measured.**

Surface of coating system	Number of measurements
< 10 m ²	1 measurement / m ²
10 – 100 m ²	10 – 20 measurements
> 100 m ²	10 measurements / 100 m ²

Distance of the measuring points at least 50 cm. Measured e.g., with a MetrISO 2000 or 3000 measuring device. The measured value of the conductive layer should not exceed 10-15 kOhm. If the required measured value is not reached, further measurements must be done within 50 cm, which should then reach the measured value.

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/mm² (check with an approved pull-off tester at a load rate of 100 N/s).

The **moisture level** of the sub-base needs to be **less** than **4 %**.

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

There must be a regular D.P.M (damp proof membrane) between the stone base and the slab.

CONIFLOOR EP 150 is always applied over a primer or levelling coat.

Pack size

CONIFLOOR EP 150 is supplied in 10 kg working packs.

Colour: Black

Comp. A is transparent, comp. B is black

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

CONIFLOOR EP 150 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 EP 150 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 wb) is:

Level II (from 2010) <140 g/l VOC.

When ready to use, this product contains less than 140 g/l VOC.



CE and UKCA marking:

See Declaration of Performance

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