



Technical Data Sheet

INDUFLOOR®-IB3350

Conductive coating

Art.-No. 5 55006

Properties:

INDUFLOOR-IB3350 is a two component, pigmented conductive epoxy resin with the following properties:

- solvent free in accordance with the recommendations of the Deutsche Bauchemie e.V.
- continuously conductive in the cured state
- viscoplastic
- will take heavy mechanical and chemical loading
- high compressive and flexural strength
- resistant to many acids and alkalis as well as conventional cleaning agents at application concentrations
- resistant to weathering
- tends due discolour under UV light.

Areas of application:

INDUFLOOR-IB3350 is used as a coating for cementitious surfaces e.g. in

- computer rooms
- printers, weaving mills
- hospitals
- gas transfer stations, electrical charging stations.

INDUFLOOR-IB3350 is a system component of the INDUFLOOR-IB3350 system 1 and the INDUFLOOR-IB3350 system 2.

Technical Data:

Basis:	two component epoxy resin
Colours:	approx. RAL 7030, 7032
Viscosity:	approx. 8000 ± 15% m Pa s at +23° C
Density:	approx. 1,50 g/cm ³ at +23° C
Mixing ratio:	4:1 parts by weight
Application temperature:	min. +8° C, max. +30° C
Pot life:	approx. 50 minutes at +10° C approx. 35 minutes at +20° C approx. 15 minutes at +30° C

Minimum cure temperature:	+8° C
Relative humidity:	< 75%
Foot traffic after:	approx. 16 hours at +23° C
Overcoat after:	approx. 16 hrs up a max of 24 hrs at +23° C
Fully cured:	after 7 days at +23° C
Compressive strength:	approx. 65,0 N/mm ²
Flexural strength:	approx. 30,0 N/mm ²
Tensile adhesion strength:	B1,5

Surface preparation:

The area to be treated must be:

- dry, firm, sound and have a good grip
- free from separating and adhesion inhibiting substances such as dust, laitance, grease, oil, rubber marks, paint residues and similar.
- protected from moisture ingress from the rear.

Use suitable means to prepare the substrate dependent on its condition such as e.g. sweeping, vacuuming, brushing, planing, scabbling, sand blasting, high pressure water jetting or shot blasting. Level irregularities with a smoothing material in order to ensure an even thickness of the conductive finished coating. In addition the following minimum substrate requirements are to be fulfilled.

Cementitious surfaces:

- Concrete quality: min. C20/25
- Screed quality: min. EN 13813 CTC25-F4
- Age: min. 28 days
- Tensile adhesion strength: > 1.5 N/mm²
- Residual moisture: < 4%
(carbide hygrometer method)
- Protected against moisture ingress from the rear
- Plaster quality: PIIIa / PIIIb
- Age: min. 28 days

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- Tensile adhesion strength: = 0.8 N/mm²
- Residual moisture: < 4%
(carbide hygrometer method)
- Protected against moisture ingress from the rear

Product preparation:

Components A (resin) and B (hardener) are delivered in a predetermined mixing ratio. Tip component B into component A. Ensure that the hardener drains completely from its container. Mixing of the components is to be carried out with a suitable mixer at approx. 300 rpm (e.g. drill with paddle). It is important to also stir from the sides and the bottom to ensure that the hardener is evenly dispersed. Stir until the mix is homogenous (free from striations); mixing time approx. 3 minutes. The minimum temperature during mixing should be +15° C. **Do not use mixed material directly from the packaging.** Decant the material into a clean container and mix through thoroughly once again.

Production of levelling/scratch coat:

INDUFLOOR-IB1260: 1.0 part by weight
Quartzsand: 1.0 part by weight
(grain size: 0.1 – 0.6 or 0.2 – 0.7 mm diameter)
INDU-FibreFiller: approx. 1.5 to 2.0 weight by percentage

The quartz sand is mixed into the previously homogeneously prepared and decanted resin and hardener components of the INDUFLOOR-IB1260 binder. Ensure that the liquid and solid components are evenly mixed. Before application to vertical or sloping surfaces it is recommended that INDU-FibreFiller is added to the levelling/scratch coat. The addition rate is between 3 and 5% by weight dependent on the slope.

Method of application/consumption:

System 1 construction: coating with INDU-ConductiveQuartz

Production of the primer coat:

1. Lay the copper strips of INDU-ConductiveStrip in a 5/5 m grid.
2. Application of the primer: Close surface pores with one application of INDUFLOOR-IB1260. Consumption: approx. 400 – 600 g/m².
3. Sprinkle the wet primer evenly with INDU-ConductiveQuartz. Consumption: approx. 1.2 kg/m². Once cured thoroughly remove all unbonded INDU-ConductiveQuartz.
4. Application of the finish coat: Trowel apply INDUFLOOR-IB3350 in one application. Thickness: 2.0 mm. Consumption: min. 2.5 kg/m².

To remove air, roll a spiked roller through the applied finish coat after a waiting time of 10 -15 minutes at +20° C to avoid the formation of bubbles.

System 2 construction: Coating with INDUFLOOR-IB2115 conductive lacquer

1. Prepare substrate as above.
2. Application of the primer: Close surface pores with one application of INDUFLOOR-IB1260. Consumption: min. 300 – 500 g/m².
- 2.1 Sprinkle the wet primer evenly with kiln dried quartz sand of grain size 0.2 – 0.7 mm. Consumption: approx. 0.8 - 1.0 kg/m². Once cured thoroughly remove all unbonded quartz sand.
3. Application of the conductive coat, consisting of: copper strips: INDU-ConductiveStrip (in approx. 5/5 m grid), conductive lacquer: INDUFLOOR-IB2115 applied in one application with a roller. Consumption: approx. 200 g/m².
4. Application of the finish coat: Trowel apply INDUFLOOR-IB3350 in one application. Thickness: approx. 2.0 mm. Consumption: min. 2.5 kg/m².

To remove air, roll a spiked roller through the applied finish coat after a waiting time of 10 - 15 minutes at +20° C to avoid the formation of bubbles.

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Possible situation:

Levelling of voids, large pores and unevenness:

After application of the primer, apply a scratch coat of the mixed mortar (see above) in a single application.

Consumption of finished mortar:
approx. 1.6 kg/m²/mm thickness.

To avoid the formation of bubbles in the following finish coat seal the scratch coat pore-tight with INDUFLOOR-IB1260.

Consumption: approx. 0.3 – 0.5 kg/m².

When waiting times will exceed 24 hours before the application of following coatings, broadcast kiln dried quartz sand of grain size 0.2 - 0.7 mm into the wet sealing coat. Consumption: approx. 0.8 - 1.0 kg/m². Once the sealing coat has cured, thoroughly remove all unbonded quartz sand. After a waiting time of min. 16 to max. 24 hours apply the conductive coating.

Notes:

Before application to vertical or sloping surfaces it is recommended that INDU-ThixPowder or INDU-FibreFiller is added. The addition rate is between 3 and 5% by weight. Apply INDUFLOOR-IB3350 by trowel.

Where there is residual moisture of > 4% or where there is negative moisture pressure use the moisture barrier INDUFLOOR-IB1250 as a primer (see Technical Data Sheet).

Slip resistant surface coating

(slip resistance approx. R11):

Trowel apply INDUFLOOR-IB 3350 in one application. Consumption: approx. 1.5 kg/m² per mm thickness.

After application of the smoothing coat roll the surface immediately at 90° C with a spiked roller in order to orientate the grain in the coating and to avoid the formation of air bubbles.

Broadcast fused corundum / silicon carbide (particle size e.g. 0.5 - 1.0 mm) into the wet coating.

Consumption: approx. 4 kg/m².

Thoroughly remove all unbonded broadcast material

once the coating has cured and before the application of the finish sealing coat.

Finish sealing coat:

Spread INDUFLOOR-IB3351, dependent on the required slip resistance, in one application with a rubber squeegee on to the broadcast finish coat and evenly apply with a short nap wool roller.

Consumption: approx. 600 - 800 g/m².

Cleaning & Equipment Maintenance:

Thoroughly clean tools immediately after use with INDU-IB Cleanser.

Packaging:

INDUFLOOR-IB3350 is available in 15 kg and 30 kg containers. Components A and B are delivered in a predetermined mixing ratio.

Storage & Shelf Life:

18 months when stored dry and cool above +10° C in the original unopened packaging.

Health and safety:

Once cured INDUFLOOR-IB3350 is considered harmless. The hardener (B) component is corrosive. Current relevant legislation should be followed at all times when working with epoxies, e.g. hazmat transportation, etc. For more information please consult www.plasticseurope.org.

Important advice:

- The application temperature may not fall below +10° C nor exceed +40° C.
 - Higher temperatures shorten the pot life. Lower temperatures increase the pot life and curing time. Material consumption is also increased at lower temperatures.
 - To increase pot life/working time at higher temperature store material in a cool environment above +10° C and only expose to warm temperature shortly before mixing.
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- Colour: Minor colour variations due to production plants and raw material fluctuations are unavoidable. This should be considered when applying coatings. Neighbouring sections should be completed with the same production units (see batch number on the packaging).
- The bond between the individual coats to one another can be heavily impeded through the influence of dampness or contamination between the applied coats.
- When longer waiting times occur between application of the coats or where surfaces already treated with liquid resin must be re-coated after a long time, the surface must be well cleaned and abraded, after which a new sealing coat should be applied free from pores. It is not sufficient simply to overcoat.
- Protect surface protective systems from moisture (e.g. rain) for approx. 4 - 6 hours after application. Dampness produces a white discolouration and/or stickiness on the surface and can impede the cure. Discoloured and/or sticky surfaces should be taken off e.g. by abrading and renewed. If the INDUFLOOR-IB3350 system is to be overcoated anew with INDUFLOOR-IB 3350 and be conductive, the conductive coating must firstly be abraded and furnished with the conductive layer (INDU-ConductiveStrip and INDUFLOOR2115) as otherwise adequate conductivity values cannot be achieved.
- Applications that are not clearly explained in this technical data sheet may only be carried out after consultation with and written confirmation from the Technical Services Department of SCHOMBURG ICS GmbH.
- Cured product residues can be disposed of under the waste disposal code 57123 "epoxy resin".

Please observe a valid EU safety data sheet.

GISCODE: RE 1