



Technical Data Sheet

INDUFLOOR®-IB3351

Universal coating

Art.-No. 5 55007

Properties:

INDUFLOOR-IB3351 is a solvent free two component epoxy resin with the following properties:

- solvent free in accordance with the recommendations of the Deutsche Bauchemie e.V.
- viscoplastic
- pigmented
- highly resistant to 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
- as a protective coating on steel substrates

Areas of application:

INDUFLOOR-IB3351 is used

- as a heavy duty industrial floor coating on cementitious surfaces such as concrete and screed
- in production areas and warehouses
- on floors in the food industry and commercial kitchens, workshops, laundries, on loading ramps and roadways
- as a priming coat for the production of decorative finishes together with INDU-ColorChips.

Technical Data:

Basis:	two component epoxy resin
Standard colours:	approx. RAL 7032, approx. RAL 7030
Viscosity:	approx. 1.600 mPas \pm 15% at +20° C
Density:	approx. 1,45 g/cm ³ at +23° C
Mixing ratio:	4:1 parts by weight
Pot life:	approx. 45 minutes at +10° C approx. 30 minutes approx. 10 minutes at +30° C

Min cure temperature:	+8° C
Traffic after:	approx. 12 hours at + 23° C
Overcoat after:	approx. 12 hours, max. 24 hours at +23° C
Fully cured:	after approx. 7 days at +23° C
Compressive strength:	approx. 71 N/mm ²
Flexural strength:	approx. 51 N/mm ²
E-module:	approx. 3.500 N/mm ²
Tensile adhesion strength:	B 1,5 (concrete)

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.
- prepare iron and steel surfaces by appropriately de-rusting to standard purity Sa 2.5 in accordance with DIN 55 928.

Use suitable means to prepare the substrate dependent on its condition such as e.g. shot blasting, scabbling, planing, grit blasting, brushing, sweeping, vacuuming. In addition the following minimum substrate requirements for cementitious substrates are to be fulfilled.

• Concrete quality:	min. C20/25
• Screed quality:	min. EN 13813 CT-C25-F4
• Tensile adhesion strength:	> 1.5 N/mm ²
• Plaster quality:	P IIIa/P IIIb
• Tensile adhesion strength:	approx. 0.8 N/mm ²

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

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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.

Production of a flowing mortar:

The flowing mortar consists of:

INDUFLOOR-IB3351:	1.0 part by weight
Quartzsand:	0.5 – 0.8 parts by weight (grain size 0.2 – 0.7 mm)

The quartz sand is mixed into the previously homogeneously prepared and decanted resin and hardener components. Ensure that the liquid and solid components are evenly mixed. When mixing aggregate (e.g. quartz sand) ensure that the aggregate is dry and also at a temperature of +15° C. For roller or trowel applied coatings on vertical or sloping surfaces it is recommended that INDU-FibreFiller is added. The

addition rate is approx. 2% by weight for roller application and between 3 - 5 % for trowel application dependent on the degree of slope.

Advice:

It is advantageous to pre-mix the INDU-FibreFiller into the resin component followed by addition of the hardener component.

Method of application/consumption:

INDUFLOOR-IB3351 is either roller or trowel applied. Before applying INDUFLOOR-IB3351 prepare the substrate as described above and prime with INDUFLOOR-IB1260.

- When intermediate broadcasting, sprinkle with 0.2 – 0.7 mm quartz sand.
- With excessive unevenness use a smoothing coat (see valid technical data sheet for INDUFLOOR-IB1260 universal primer).

Thin coating (smooth surface),

thickness: approx. 1.0 mm:

After application of the primer trowel apply INDUFLOOR-IB3351 in one application.

Consumption: approx. 1.0 – 1.5 kg/m².

Thin coating (slip resistant surface),

thickness approx. 1.5 – 2.0 mm:

After application and sanding of the primer apply INDUFLOOR-IB3351 with a rubber squeegee in one application and spread evenly with a short nap wool roller. Consumption: approx. 1.0 – 1.5 kg/m².

Protective coating for a steel surface,

Thickness: approx. 400 µm

1. Surface preparation:

Sand blasting according to Rost Pt. 2.213 (optimum abrasion depth 50 µm) (bare metal). Apply protective coating in two applications by roller, brush or airless spray.

Roller or brush application:

First coat, consumption: approx. 250–300 g/m²

Second coat, consumption: approx. 150–200 g/m²,
recoat time 12–24 hours

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Airless spray application:

Standard spray equipment:

Adjust product viscosity to designated material thickness with INDUThixPowder, when required.

Apply first coat at 150–300 g/m²

Allow min. gelling time of 60 min. at + 20°C,
20 min. at + 35°C

Apply second coat within 24 h

Spray pressure: min. 200 bar

Nozzle orifice: 0.019 in to 0.025 in.

Intake filter: 60 Mesh

Spray equipment with heated Nozzle intake

Heat intake to 60–90 °C depending on desired gelling time

Apply first coat at 150-300 g/m²

Immediately apply second coat, but not later than 6 h after first coat

Spray pressure: min. 200 bar

Nozzle orifice: 0.013 in to 0.019 in.

Intake filter: 60 Mesh

Dependent on the degree of slip resistance required broadcast the wet coating with quartz sand (0.2 - 0.7 or 0.5 - 1.0 mm). Consumption of broadcast sand: approx. 2 – 3 kg/m². Once hardened thoroughly remove all unbonded quartz sand before the finish coating is applied.

Finish coat: apply INDUFLOOR-IB3351 with a rubber squeegee in one application and spread evenly with a short nap wool roller. Consumption: approx. 600 - 800 g/m².

High build coating (smooth surface):

Fill INDUFLOOR-IB3351 with up to 50 – 80% quartz sand (0.2 – 0.7 mm) and trowel apply in one application.

Consumption: approx. 0.9 – 1.0 kg/m²/mm thickness.

Consumption (finished mix): approx. 1.6 kg/m²/mm thickness.

To de-aerate the applied flow coating it is imperative that a spiked roller is used to prevent the formation of bubbles.

High build coating (slip resistant surface):

Fill INDUFLOOR-IB3351 with up to 50% quartz sand (0.2 – 0.7 mm) and trowel apply in one application. Consumption: approx. 0.9 – 1.0 kg/m²/mm thickness. Consumption (finished mix): approx. 1.6 kg/m²/mm thickness.

To de-aerate the applied flow coating it is imperative that a spiked roller is used crossways to prevent the formation of bubbles. Dependent on the degree of slip resistance required broadcast the wet coating with quartz sand e.g. grain size 0.5 - 1.0 mm or 0.7 - 1.2 mm. Consumption of broadcast sand: approx. 3 - 6 kg/m² dependent on thickness. Once hardened thoroughly remove all unbonded quartz sand before the finish coating is applied.

Finish coat: apply INDUFLOOR-IB 3351 with a rubber squeegee in one application on to the sanded priming coat and spread evenly with a short nap wool roller.

Consumption: approx. 0.6 – 1.0 kg/m².

Optional: production of a decorative surface:

Spread INDU-ColorChips into the wet coating.

Consumption:

Closed surface: approx. 700 - 800 g/m²

Open surface: from approx. 15 - 100 g/m²

With a closed surface thoroughly remove all unbonded coloured chippings, once the coating has hardened, by vacuuming or sweeping. Afterwards lightly abrade and thoroughly clean by vacuuming.

Application of the finish coat:

Evenly seal the closed or open broadcast surface to a matt finish with e.g. INDUFLOOR-IB 2250 Protec-Ultra.

Consumption:

Porous substrates: approx. 100 – 150 g/m²

Non-porous substrates: approx. 60 – 80 g/m².

Advice:

The waiting time between coatings is approx. 16 hours up to a maximum of 24 hours at +23° C and 65% relative humidity.

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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 next 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-IB3351 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).

Cleaning & Equipment Maintenance:

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

Packaging:

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-IB3351 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.
- The bond between the individual coats 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 completely new closed-pore coating should be applied. It is not sufficient simply to overcoat.
- Surface protective systems must be protected for approx. 4 – 6 hours from dampness after application (e.g. rain, melt water). 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.
- 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 are to be disposed of under the waste disposal code 57123 "Epoxy resin".

Please observe a valid EU safety data sheet.

GISCODE: RE 1