



Technical Data Sheet

INDUCRET®-BIS-1/6


Art.-No. 5 50040

Cementitious fine smoothing mortar for voids from 1 – 6 mm depth, maximum grain: 0.5 mm

Properties:

INDUCRET-BIS-1/6 is a mineral-based fine smoothing mortar for voids from 1 – 6 mm depth with the following properties:

- ready to use after mixing with water
- water impermeable
- water vapour permeable
- resistant to frost and de-icing salts
- very easy to use
- impairs the passage of CO₂

	
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SCHOMBURG GmbH & Co. KG Aquafinstraße 2-8 D-32760 Detmold 10 5 50040	
DIN EN 1504-3 INDUCRET-BIS-1/6 Concrete replacement for non-structural repair to EN 1504:3ZA:1a	
Compressive strength	R2
Chloride ion content	≤ 0.05%
Adhesive bond	≥ 0.8 N/mm ²
Restrained shrinkage/expansion	NPD
Resistance to temperature change, part 1	≥ 0.8 N/mm ²
Capillary water absorption	≤ 0.5 kg/m ² h ^{1/2}
Carbonation resistance	passed
E-modulus	≥ 20 GPa
Reaction to fire	Class A1
Durability	NPD

NPD = „No Performance Determined“

Areas of application:

INDUCRET-BIS-1/6 is a fine grain thixotropic repair mortar for use in repairing and re-forming concrete on:

- Horizontal and vertical surfaces as well as for overhead areas for 1 – 6 mm deep defects.

Typical Properties:

Colour:	cement grey
Basis:	cement
Components:	1
Particle size:	up to 0.5 mm
Bulk density:	1.3 kg/dm ³
Wet density:	2.0 kg/dm ³
Working life:	approx. 60 minutes at +20 °C
Overcoat after:	min. 1 day
Application temp:	min. approx. +5 °C, max. approx. +30 °C

Technical Data:

Compressive strength:	24 hours approx. 11 N/mm ² 7 days approx. 30 N/mm ² 28 days approx. 40 N/mm ²
Flexural strength:	24 hours approx. 2 N/mm ² 7 days approx. 7 N/mm ² 28 days approx. 8 N/mm ²

Cleaning:

Thoroughly clean tools with water after use.

Packaging:

25 kg bag

Storage:

12 months when stored dry in the original unopened packaging under dry and cool conditions above +10° C

Substrate preparation:

Before application of INDUCRET-BIS-1/6 the substrate is to be thoroughly pre-wetted, however the substrate surface must only be matt damp during application of INDUCRET-BIS-1/6. Preparation of the substrate is necessary, such as e.g. by grit or shot blasting, high-pressure water jetting, if no previous restoration work has been carried out. Cementitious surfaces must be solid and open porous with a good key and be load-bearing, free from cement laitance, loose constituents as well as adhesion inhibiting substances (oil, grease, rubber marks, paint residues or other contamination). Minimum concrete substrate age: 28 days.

Abrasion resistance required for concrete substrates: min. 1.5 N/mm²

Product preparation:

1. Production of the fine repair mortar:

- INDUCRET-BIS-1/6 = 25.0 kg
 - Water = approx. 5.0 – 5.25 litres
- Fill a clean mixing vessel with up to 80% of the above mentioned water quantity. Continuously add the required quantity of INDUCRET-BIS-1/6 whilst constantly stirring with a suitable mixer (approx. 300 rpm). Thoroughly blend for approx. 3 minutes to a lump free mortar. Add the remaining water and mix for a further 2 minutes. Allow to stand for 2 minutes, then briefly remix. Use a forced paddle mixer for preparing large quantities. Only mix as much material as can be used within the stated working life.

Application tools:

Gauging trowel, steel float, long-handled hand trowel, rubbing sponge.

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Application by hand:

Apply INDUCRET-BIS-1/6 to the prepared and matt damp substrate to the desired thickness. Pre-fill pores and voids by trowel. Smooth the surface after the appropriate time interval. Do not rework the surface with a wetted brush or trowel. For a seamless repair to the area it is possible to rub down with a dry sponge.

Wet spray application process:

When wet spraying, the substrate must be thoroughly wetted until matt damp. Re-profiling repairs with wet spray techniques requires the material to be mixed in a compulsory batch mixer with a suitable feed pump and with the use of re-profiling spray machine. To ensure an even coverage is achieved when spraying, a high performance industrial compressor is a mandatory requirement (min. 4 m³ air/4-5 bar pressure).

Without a compulsory batch mixer:

Pump system: High Comp Power
Pump unit: XP 120
Water demand: approx. 160-180 litres/hour
Nozzle: MAWO nozzle 35/12 mm
Max. hose length: 30 m
Control nozzle displacement: 0.5 – 1.0 m

Pump system PFT:

Compulsory batch mixer Multi Mix
Feed pump N2FU400 / Feed screw D8-1.5
Re-profiling spray machine: 10 mm
Max. hose length: 30 m
Control nozzle displacement: 0.5 – 1.0 m

Pump system Inotec:

Inomix compulsory mixer ZM 80 Jet Mix
Inobeamlight / feed screw D8-1.5
Spray gun for decorative plaster: 10 mm
Max. hose length: 30 m
Control nozzle displacement: 0.5 – 1.0 m

Material application:

Through the introduction of compressed air at the spray nozzle, the material should exit the nozzle in a uniform

circular pattern. During the first spray coat application, blow holes, honeycombs, voids behind the rebar, irregularities in the substrate etc, should be filled and evened out. The second spray coat should be used to build up desired material thickness, which can then be finished with suitable smoothing tools.

Material consumption (finished mix):

Approx. 1.6 kg/m²/mm thickness
approx. 1.0 litre/ mix = 1.95 kg

Curing and protection:

Protect the surface and repeatedly dampen for at least one day after application of the INDUCRET-BIS-1/6 using suitable measures (e.g. covering with polythene) against rapid drying out resulting e.g. from direct sunlight, draughts and/or high temperature fluctuations. Areas where the mortar has been applied must be kept damp with e.g. a water mist spray or Jute sheeting to prevent the water evaporating too soon after application. After waiting for at least one day further suitable surface protection systems can be applied.

Health & Safety:

INDUCRET-BIS-1/6 contains cement that forms an alkaline reaction with moisture. Therefore contact with the eyes and skin is to be avoided and mortar splashes are to be thoroughly washed off immediately with plenty of water. On contact with the eyes, seek medical attention from an eye specialist. Store INDUCRET-BIS-1/6 out of the reach of children.

Important advice:

- Prior to implementing any concrete restoration measures the actual condition should generally be assessed by an authorised expert and/or a Structural Engineer. The inspection protocol is to be given to the contractor before the commencement of the restoration works.
- Areas not to be treated are to be protected from the effects of INDUCRET-BIS-1/6.
- Cover with suitable sheeting to protect against rain.
- Building substrates and ambient temperatures below +20° C delay setting times and above +20° C accelerate setting times.

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- Only use mains water of drinking quality when mixing INDUCRET-BIS-1 /6. Do not add additional water or powder to material which has begun to stiffen in an attempt to restore original consistency. This can result in inadequate bonding.
- 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.
- Observe the "Additional technical contractual terms and regulations" from the ZTV-ING.

Please observe a valid EU safety data sheet.

GISCODE: ZP 1