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Technical Data Sheet

INDUCRET®-KIS-6/40

Channel / ducting mortar

Properties:

INDUCRET-KIS-6/40 is a channel/ducting mortar with the following properties:

- cementitious
- highly resistant to sulphate attack
- easy to use at low temperatures
- can be used on horizontal, vertical and overhead surfaces
- sprayable

INDUCRET-KIS-6/40 guarantees a strong bond to the concrete substrate.

Areas of application:

INDUCRET-KIS-6/40 is used as a PCC (Polymer modified concrete) concrete replacement system for the renovation and coating of concrete surfaces that are especially subjected to chemical contact:

- sewerage pipe systems
- rain overflow basins
- sewerage works
- sewerage collection
- retention ponds.

INDUCRET-KIS-6/40 is to be applied at a minimum thickness of 6 mm up to maximum of 40 mm.

Technical Data:

Particle size: 0.1 – 2.0 mm
Wet mortar density*): 2.23 kg/dm³
Consumption: 1.99 kg/dm³

Pot life*): approx. 45 minutes

Expansion*): +0.4% volume after 24 hours

Compressive strength

(DIN 1164)*: approx. 10 N/mm²

after 24 hours

approx. 46 N/mm²

after 7 days

approx. 66 N/mm² after 28 days

Flexural strength*: approx. 2.0 N/mm²

after 24 hours approx. $8.0 \ N/mm^2$

Art.-No. 5 50021

after 7 days

approx. 9.0 N/mm^2

after 28 days

*) These values are valid for +20 $\,^{\circ}\mathrm{C}$ and 65% relative humidity.

Cleaning & Equipment Maintenance:

Thoroughly clean tools after use with water.

Packaging:

25 kg bags.

Storage & Shelf Life:

Cool and dry, 9 months in the original unopened packaging above $+10\,^{\circ}\text{C}$. Use opened packaging promptly.

Surface preparation:

Before application of INDUCRET-KIS-6/40 exposed steel reinforcement must be treated with INDUCRET-BIS-0/2 corrosion protection according to product instructions. Cementitious surfaces must be solid with a good grid and be load-bearing, free from cement laitance, loose particles as well as adhesion inhibiting substances (oil, grease, rubber marks, paint residues or other contamination). Surface preparation is necessary such as e.g. grit or shot blasting, high-pressure water jetting or scabbling. The substrate is to be intensively pre-wetted but during application of INDUCRET-BIS-0/2 the relevant substrate may however only be matt damp.

Average surface tensile strength: min. $1.5\ N/mm^2$

Product preparation:

- 1. Production of the repair mortar:
- INDUCRET-KIS-6/40 = 25.0 kg
- Water = approx. 3.75 litres

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Fill a mixing vessel with up to 80% of the above mentioned water quantity.

Add the required quantity of INDUCRET-KIS-6/40 under constant mixing with a suitable stirrer (approx. 300 rpm). Mix thoroughly for approx. 3 – 5 minutes to a lump free mortar. Add the remaining 20% water and mix for a further 2 minutes. 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:

Hand trowel, wood float, steel lath, hand smoother, rubbing board.

Application by hand:

INDUCRET-KIS-6/40 may only be used in combination with the bonding agent INDUCRET-BIS-0/2.

Bonding agent:

Brush apply INDUCRET-BIS-O/2 with a hard broom onto the prepared matt damp substrate ensuring complete coverage and pore filling.

Subsequent application of INDUCRET-KIS-6/40 must be wet in wet with the bonding agent. Spread INDUCRET-KIS-6/40 onto the fresh bonding agent to the required thickness with a suitable tool. Finish by compacting the mortar and smoothening.

Wet application with spray equipment:

When spraying in wet form, a bonding slurry is not required. The substrate must have a matt damp surface after thorough saturation with water. After mixing, the material is applied to the substrate with appropriate spray equipment using a MAWO-nozzle. To ensure even coverage, an industrial compressor is required (min. 5m^3 air/5 bar pressure).

Pump system PFT:
PFT MULTIMIX batch mixer combined with
PFT N 2 FC 400
Conveying pump/ Rotor stator D8-1.5
25mm diameter mortar hose

Spray gun with 35/10mm nozzle (MAWO)

Pump system Inotec:

inoMIX ZM 80 turbocharged compulsory mixer combined with

inoBEAM F21 light feeding pump/Rotor stator D8-1.5 $25 \, \mathrm{mm}$ diameter mortar hose

Spray gun with 35/10mm nozzle (MAVVO)

Material application:

Through 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 wall, 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 proper smoothing methods.

Curing and protection:

Protect the surface for at least one day after application of INDUCRET-KIS-6/40 using suitable measures (e.g. covering with polythene) against rapid drying out resulting from direct sunlight, draughts and/or high temperature fluctuations.

Health and safety:

INDUCRET-KIS-6/40 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 immediately and thoroughly washed off with plenty of water. Seek medical attention from an eye specialist when contact with eyes occures. Store INDUCRET-KIS-6/40 out of the reach of children.

Important advice:

- The application temperature range lies between +5 °C and +35 °C. Lower temperatures and cold gauging water delay the strength development.
 Higher temperatures accelerate the strength development.
- Protect areas not be treated from the effects of INDUCRET-KIS-6/40.

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- 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.
- When the mortar INDUCRET-KIS-6/40 is to be spray applied then separate technical advice is to be requested.

Please observe a current EU health and safety data sheet.

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