



Technical Data Sheet

INDUCRET®-TIM-20/40

Art.-No. 5 50033

Repair mortar for drinking water and service water containers for thicknesses from 20 – 40 mm

Properties:

INDUCRET-TIM-20/40 is a repair mortar for drinking water and service water containers for thicknesses from 20 - 40 mm with the following properties:

- cementitious
- modified with micro silica
- vapour permeable
- water impermeable
- minimizes the ingress of CO₂
- corrosion inhibiting
- microbiologically harmless
- smooth and efficient application by hand or by wet or dry spray methods to vertical or horizontal surfaces
- conforms to the DVGW (The German Technical and Scientific Association for Gas and Water) work sheets W 270, W 347 and W 300 and fulfils the "drinking water issues" working group's recommendations for the KTW commission (synthetic materials and drinking water) of the government public health department for container materials regarding water performance.

Areas of application:

For producing protective coatings to wall and floor surfaces in drinking and service water containers and constructions for water storage retrospectively on to substrates with no risk of cracking. Also suitable for repairing concrete, render and screed surfaces.

Technical Data:

Basis:	cement mortar
Colour:	grey
Particle size:	0 – 4.0 mm
Thickness of coats:	20 – 40 mm
Wet density (fresh mortar):	2.12 kg/dm ³
Water demand:	approx. 10 – 12%
Consumption:	approx. 1.85 kg/m ² /mm
Pot life:	approx. 60 minutes
Application temperature:	+5 °C to +35 °C

Compressive strength:	approx. 28.0 N/mm ² after 1 day approx. 42.0 N/mm ² after 3 days approx. 55.0 N/mm ² after 7 days approx. 66.0 N/mm ² after 28 days
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Tensile adhesion strength:	28 days >2.0 N/mm ²
Modulus of elasticity (static):	33,000

Cleaning:

In the fresh state with water. Dried material is difficult to remove.

Packaging:

25 kg paper bags.

Storage:

Cool and dry, 9 months in the original unopened packaging. Use opened packaging promptly.

Load capacity:

Foot traffic after 2 days, container can be filled after approx. 28 days.
All data given are reference values tested at +20 °C and 50% relative humidity.

Surface preparation:

The substrate to be waterproofed must be load bearing, largely even, free from surface pockets, cracks and ridges and be free from adhesion inhibiting substances. The concrete quality should be in accordance with the relevant guidelines and standards and achieve a minimum of B 25 and tensile adhesion strength of > 1.5 N/mm².

- A load bearing substrate is a prerequisite for a durable bond between the substrate and coating systems. Poorly consolidated substrates are to be

INDUCRET®-TIM-20/40

appropriately prepared using suitable methods to a sustainable grain structure. Exposed steel reinforcement must be completely de-rusted and rendered inactive in accordance with restoration guidelines.

- High-pressure washing (> 400 bar), very high pressure washing (up to 2000 bar) and blasting with solid blasting media are suitable methods. The final treatment must be by pressure washing. The substrates are to be wetted to saturation whereby puddle formation is avoided.

Mixing instructions:

Mix INDUCRET-TIM-20/40 with a rotary stirrer (approx. 300 – 700 rpm) or in a forced paddle mixer (mix time approx. 5 minutes) until the material is homogenous and lump free. After a maturation time of 2 minutes briefly stir again. Only mix as much material that can be used within 60 minutes.

Product application:

Prior to the application of the coating, the substrate must be treated with an adhesion promoting primer of INDUCRET-TIM-5/10. INDUCRET-TIM-20/40 is applied to the adhesion slurry, whilst it is still wet, at a pliable consistency to the desired thickness and smoothed.

Spray application:

INDUCRET-TIM-20/40 can be used with suitable spray equipment. The surface should have a dense, orange peel structure. An adhesion promoting primer is not required when spray applying. According to the work sheet W 300 – DVGW the required minimum total thickness is 5 mm. Consumption (prepared mortar mix): approx. 2.2 kg/m²/mm thickness.

Equipment parameters for

wet spray application:

COMPRESSED AIR COMPRESSOR:

Air quantity: > 5 m³ / minute

Air pressure: > 5 bar

Spray machine: e.g. HM2/N2V from PFT

Nozzle: Cover stream nozzle (MAWO)

FEEDER PIPE:

Feed length: max. 40 m

Feed cross section: 35 mm

End reduction: 5 – 6 m diameter 25 mm

Post treatment:

- Protect the fresh coating from rapid drying out (draught etc.) and early exposure to water e.g. by lightly spraying with water or covering with polythene.
- In drinking water containers the temperature is mostly around +10 °C to +15 °C. In order to guarantee complete hydration of the cement, keep the coating damp for an appropriate length of time (constant relative humidity of > 80%) and protect against drying out. In general 7 days is sufficient. It is fundamental that the formation of condensation or standing films of water on the coating is avoided during this time period after application. Where there is danger of dropping below the dew point (formation of condensation) install dehumidifiers until the mortar is cured. At no time should uncontrolled warm air be blown in.
- INDUCRET-TIM-20/40 is complimented by the following products:
 - INDUCRET-TIM-2/6, particle size 0 – 0.5mm (render and sprayable mortar)
 - INDUCRET-TIM-5/10, particle size 0 – 1.0mm (corrosion protector and fine mortar)
 - INDUCRET-TIM-10/30, particle size 0 – 2.0mm (bonding aid and fine mortar)

Important advice:

- Protect areas not to be treated with INDUCRET-TIM-20/40 from its effects.
- Observe the guidelines “DVGW work sheet W 300, water storage”.
- Where the hardness of drinking water has a degree of hardness <3° dH the water will need analysing. Please observe a valid EU safety data sheet.

GISCODE: ZP1