

# ASOCRET BIS 5/40

## Repair Mortar for voids from 5-40mm

### Properties:

ASOCRET-BIS-5/40 is a system component and is only to be used in combination with ASOCRET-KS/HB


- Water impermeable
- Water vapour permeable
- Resistant to frost and de-icing salts
- Impairs the passage of CO<sub>2</sub>
- High resistance to carbonation
- Trowel and spray applications

### Areas of application:

ASOCRET-BIS-5/40 is used as an anti-sag re-profiling mortar for vertical, horizontal and overhead areas for voids up to 40 mm. It is also suitable as a levelling compound on swimming pools and tanks as well as for forming pool edge details for subsequent waterproofing or tile installation.

### Technical data:

Colour:	cement grey
Basis:	cement
Particle size:	up to 2 mm
Bulk density:	1.6 kg/dm <sup>3</sup>
Wet density:	2.1 kg/dm <sup>3</sup>
Working life:	approx. 60 minutes at +20 °C
Overcoat after:	min. 1 day
Application temp:	+5 °C to +30 °C
Compressive strength:	24 hours approx. 14 N/mm <sup>2</sup> 7 days approx. 50 N/mm <sup>2</sup> 28 days approx. 60 N/mm <sup>2</sup>
Flexural strength:	24 hours approx. 4 N/mm <sup>2</sup> 7 days approx. 8 N/mm <sup>2</sup> 28 days approx. 9 N/mm <sup>2</sup>
Overcoating with bonded waterproofing membranes / tiles:	approx. 24 hrs.
Consumption:	approx. 1.8 kg/m <sup>2</sup> /mm thickness
Cleaning:	thoroughly clean tools with water after use
Packaging:	25 kg bag
Storage:	12 months when kept in the original unopened packaging under dry and cool conditions above +10 °C.

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<b>SCHOMBURG GmbH &amp; Co. KG</b> <b>Aquafinstraße 2-8</b> <b>D-32760 Detmold</b> 16 2 06438	
DIN EN 1504-3 <b>ASOCRET-BIS-5/40</b> Concrete replacement for structural and non-structural repair EN 1504-3: ZA. 1a	
Compressive strength:	R4
Chloride ion content:	≤ 0.05 %
Adhesive bond:	≥ 2.0 N/mm <sup>2</sup>
Restrained shrinkage/expansion: NPD	
Resistance to temperature change, part 1:	≥ 2.0 N/mm <sup>2</sup>
Capillary water absorption:	≤ 0.5 kg x m <sup>2</sup> x h <sup>0.5</sup>
Carbonation resistance:	passed
E-modulus:	≥ 20 GPa
Reaction to fire:	Euroclass A1
Durability:	NPD

NPD = „No Performance Determined“

### Surface preparation:

Cement-based areas must be sound with a good key and be load-bearing, free from cement laitance, loose components as well as adhesion inhibiting materials such as release agents, dust, laitance layers etc.

Dependent on the project, prepare the substrate e.g. by grit blasting, shot blasting, high pressure water jetting (500-2000 bar), scabbling or planning. The prepared substrate must have an open textured surface structure. Adequately pre-wet the treated substrate 24 hours as well as 2 hours before applying ASOCRET-BIS-5/40, which at the time of mortar application must be matt damp. Exposed reinforcing steel is to be treated with the corrosion protection ASOCRET-KS-HB (see requirements in the technical data sheet).

Minimum age of the concrete substrate:

28 days

Tensile adhesion strength of the concrete substrate:

min. 1.5 N/mm<sup>2</sup>

### Product preparation:

Each 25 kg ASOCRET-BIS-5/40 requires a water quantity of approx. 3.5 - 3.75 l water. Initially add approx. 2.8 - 3.0 l water / 25 kg ASOCRET-BIS-5/40 and mix with the powder for approx. 3 minutes. Then add the remaining quantity of water and mix for a further 2 minutes to a homogenous and lump free consistency. When mixing larger amounts, we recommend the use of a compulsory mixer. Only mix as much material as can be used within 60 minutes.

**Hand application:**

ASOCRET-BIS-5/40 is applied together with the mineral-based bonding agent ASOCRET-KS/HB. ASOCRET-KS/HB is brushed into the prepared matt-damp substrate using a hard broom to give full coverage and fill surface pores. Apply the ASOCRET-BIS-5/40 repair mortar to the required thickness whilst the bonding agent is still wet.

Subsequently compact the mortar and strike off flush with the surface. When applying to larger areas, the thickness can only be applied up to 20 mm in one layer. We recommend building up layers for thicker applications. As an alternative, applications up to 40 mm in one layer can be achieved by spraying.

**Wet spray application process:**

When applying by wet spray techniques, the use of a mineral-based bonding agent can be skipped. Apply 2 layers of ASOCRET-KS/HB corrosion protection at least 72 hours before applying the ASOCRET-BIS-5/40 mortar by wet spray techniques.

The substrate must be matt-damp when installing ASOCRET-BIS-5/40. Re-profiling by wet spray is carried out after the material has been mixed in a compulsory mixer with a suitable feed pump and the use of a MAWO nozzle. To ensure a regular spray pattern, the use of a high performance site compressor is mandatory (min. 4 m<sup>3</sup> air/4-5 bar operating pressure).

**Without compulsory mixer:**

Pump system: High Comp Power

Pump unit: XP 120

Water demand: approx. 190-200 litres/hour

Nozzle: MAWO nozzle 35/12 mm

Max hose length: 30 m

Control nozzle distance: 0.5 - 1.0 m

**PFT pump system:**

Multi Mix compulsory mixer

Conveyor pump N2FU400/screw feed D8-1.5

Reprofiling nozzle 35/12 mm

(Reprofiling spray tool)

Max hose length: 30 m

Control nozzle distance: 0.5 - 1.0 m

**Inotec pump system:**

Inomix compulsory mixer ZM80 Jet Mix

Inobeam F21 light/screw feed D8-1.5

Mortar hose 25mm diameter

Reprofiling nozzle 35/12 mm

(Reprofiling spray tool)

Max hose length: 30 m

Control nozzle distance: 0.5 - 1.0 m

**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.

**Post application treatment:**

Once the ASOCRET-BIS-5/40 has been applied, carefully protect the mortar surface from drying out too quickly by using suitable measures. This may be achieved by keeping damp for at least 3-5 days using water mist spray or wet jute sheeting or covering with other sheeting as necessary. The sheeting must be fixed to the area so that there is no air exchange possible. Pay particular attention to post application treatment when the mortar surface is exposed to direct sunlight, draughts, large temperature variations and/or low humidity. If the application of a mineral-based waterproof slurry is planned, then this can be applied after approx. 24 hours as an alternative post application treatment method.

**Important advice:**

- Prior to commencing any concrete restoration measures, the actual condition is generally to be assessed by a specialist and/or Structural Engineer. The test record is to be made available to the applicator before starting the renovation work.
- Protect areas not to be treated from the effects of ASOCRET-BIS-5/40.
- ASOCRET-BIS-5/40 mortar that has already started to harden, may not be re-lifted through the addition of water or fresh mortar as there is a risk of inadequate strength development.
- Applications that are not clearly explained in this technical data sheet may only be carried out after consultation with and written confirmation from your Equus Representative.
- Observe pertinent regulations and guidelines.

Please observe a valid EU safety data sheet.

**GISCODE: ZP 1**

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