

ASOCRET-BIS-1/6

Art.-No. 2 06437

Mineral-based fine repair mortar for 1–6 mm voids

CE 1119	
SCHOMBURG GmbH & Co. KG Aquafinstraße 2 - 8 D-32760 Detmold 20 2 064372	
DIN EN 1504-3 ASOCRET-BIS-1/6 Concrete replacement for non-structural repair to EN 1504-3: ZA.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 ^{-0.5}
Carbonation resistance	passed
E-modulus	≥ 20 GPa
Reaction to fire	Class A1
Durability	NPD

NPD = „No Performance Determined“

- Impermeable to water
- Water vapour permeable
- Frost fast and resistant to de-icing salts
- Very good working properties
- Application by trowel or spray
- Reduces CO₂ penetration
- High resistance to carbonation

Areas of Application:

ASOCRET-BIS-1/6 is used for horizontal and vertical areas as well as overhead areas as a non-sag fine repair mortar for voids up to max. 6 mm. It is furthermore suitable as a levelling compound for swimming pool tanks and other tanks as well as for forming pool edge details for the subsequent application of bonded waterproof membranes or the installation of tiles.

Technical Data:

Basis:	factory blended dry mortar
Colour:	cement grey
Grain size:	< 1.0 mm
Bulk density:	approx. 2.0 kg/dm ³
Pot life*:	approx. 60 minutes
Overcoat after:	min. 1 day

Substrate/ application temp:	min. +5 °C, max. +30 °C
Compressive strength:	24 hrs, approx. 11 N/mm ² 7 days, approx. 30 N/mm ² 28 days, approx. 40 N/mm ²
Flexural strength:	24 hrs, approx. 2 N/mm ² 7 days, approx. 7 N/mm ² 28 days, approx. 8 N/mm ²
Consumption:	approx. 1.6 kg/m ² /mm thickness
Cleaning:	Thoroughly clean work tools with water after use
Packaging:	25 kg bag
Storage:	cool and dry, 12 months in the original unopened packaging. Use opened packaging promptly.

*) At +23 °C and 50% RH. Due to weather and site conditions, these given figures may lengthen or shorten.

Substrate preparation:

The substrate must be load-bearing, sound, have a good key and be free from adhesion inhibiting materials such as release agents, dust, laitance layers etc. Substrate preparation e.g. grit-blasting, shot-blasting or high pressure water jetting (500–2,000 bar) is required if no previous concrete repair works have been carried out. Adequately pre-wet the prepared substrate before applying ASOCRET- BIS-1/6 at a time when the substrate is matt-damp.

Minimum age of concrete substrate:	28 days
Tensile adhesion strength of the concrete substrate:	min. 1.5 N/mm ²

Product preparation:

Dependent on the desired consistency, place approx. 5.0–5.25 l of clean water into a clean mixing bucket and whilst mechanically stirring (drill approx. 300–700 rpm), mix in as much dry powder until a lump free, smooth paste

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is achieved. The mixing time is approx. 2-3 minutes. Allow to mature for 5 minutes then mix through once again. When mixing larger quantities, use a forced action mixer. Only mix as much material as can be used within the pot life given above.

Application by hand:

Apply a scratch coat of ASOCRET-BIS-1/6 to the prepared substrate and then lay to the desired thickness. Striking off the mortar is determined by the application involved using a suitable tool (lath, trowel etc) within the pot life. After leaving for the appropriate length of time, the surface can be finished using a felt-board or sponge-board.

Wet spray application:

The surface to be treated must be adequately wetted until matt-damp. Re-profiling with wet spray techniques is carried out after mixing in a compulsory mixer with a suitable feed pump using a 12 mm spray re-profiling gun or a 35/12 mm MAWO nozzle. For an even spray pattern a high output construction compressor (min. 4 m³ air / 4-5 bar operating pressure) is a mandatory requirement.

Without compulsory mixer:

Pump system: High Comp Power
Pump unit: XP 120
Water demand: approx. 160-180 l/hr
Nozzle: MAWO nozzle 35/12 mm or 12 mm re-profiling spray gun

Max. Pipe length: 30 m

Control nozzle displacement: 0.5 - 1.0 m

PFT pump system:

Multi Mix compulsory mixer
Feed pump N2FU4000 / screw conveyor D8-1.5
Reprofiling spray gun 12 mm
Max. Pipe length: 30 m
Control nozzle displacement: 0.5 - 1.0 m

Inotec pump system:

Inomix compulsory mixer ZM80 Jet Mix
Inobeam F21 light / screw conveyor D8-1.5
Reprofiling spray gun 12 mm
Max. Pipe length: 30 m
Control nozzle displacement: 0.5-1.0 m

Material application:

Through the addition of air at the spray nozzle, the mortar is sprayed in a circular manner in order to achieve a clean spray pattern. The first pass of the spray head is to fill holes and cavities and to even out irregularities in the substrate. The second spray pass is to achieve the required thickness and to finish with a suitable smoothing tool.

Post-treatment:

Following the application of ASOCRET-BIS-1/6, it is fundamentally necessary to protect the mortar surfaces from drying out too quickly using suitable measures. Keep damp for at least 3-5 days using mist spray nozzles or wet jute sacking as required also covered with polythene sheets. The polythene sheets must be fastened to the area treated, so that air exchange is excluded. If the area in question is exposed to direct sunlight, draughts, large temperature fluctuations and/or low humidity then after care treatment must be intensified. If it is intended to apply a mineral-based waterproof slurry, then this can be used as an alternative after care treatment after approx. 24 hours.

Important advice:

- Prior to carrying out concrete repair works the actual condition should be inspected by an expert or Structural Engineer. The inspection report is to be given to the applicator prior to commencement of repair work.
- Protect surfaces not being treated with ASOCRET-BIS-1/6.

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- ASOCRET-BIS-1/6 mortar, which has already stiffened should not be re-lifted by adding more water or fresh mortar as there is a risk of inadequate strength development.

Please adhere to the valid EC Safety Data Sheet.

GISCODE: ZP1