



Technical Data Sheet

ASOCRET-FS


Art.-No. 2 05551

**Mineral-based fine repair mortar for 1-6 mm voids;
 largest grain size 0.5 mm**

Properties:

ASOCRET-FS is a fine mineral-based repair mortar for 1-6 mm voids with the following properties:

- Fine grain cement-based mortar for vertical and horizontal surfaces
- Trowel or spray application
- Ready to use once mixed with water
- Water vapour permeable
- Resistant to frost and de-icing salts
- Very easy to use
- Reduces CO₂ penetration
- High resistance to carbonation

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SCHOMBURG GmbH & Co. KG Aquafinstraße 2-8 D-32760 Detmold 10 2.05551	
DIN EN 1504-3 ASOCRET-FS 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"

Cleaning:

Thoroughly clean work tools with water after use

Packaging:

25 kg bag

Storage:

12 months when stored dry in the original unopened packaging. Use opened packaging promptly.

Substrate preparation:

Before applying ASOCRET-FS, thoroughly pre-wet the substrate. However, the substrate should only have a matt damp surface when applying ASOCRET-FS. Preparation of the substrate is necessary e.g. grit blasting, shot blasting, high pressure jet washing (500–2000 bar) if no other concrete restoration measures were carried out. Cementitious surfaces must be sound, open textured with a good key and be load-bearing, free from cement laitance, loose areas as well as adhesion inhibiting substances (oil, grease, rubber marks, paint residues or other contamination).

Minimum concrete substrate age: 28 days

Medium surface tensile strength: min. 1.5 N/mm²

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

Areas of Application:

ASOCRET-FS is used to repair concrete where a slump resistant fine repair mortar is required

- on horizontal, vertical and overhead areas with 1-6 mm voids
- for levelling in swimming pools and surrounds as well as for forming pool edge details prior to waterproofing or tile installation.

Technical Data:

Colour:	cement grey
Basis:	cement
Grain size:	up to 0.5 mm
Bulk density:	1.3 kg/dm ³
Settled apparent density:	2.0 kg/dm ³
Pot life:	approx. 60 mins at +20 °C
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

Product preparation:

Preparing the fine mortar:

- ASOCRET-FS 25 kg
- Water approx. 5.0 – 5.25 litres

Material consumption (prepared mix):

Approx. 1.6 kg/m²/mm thickness

Approx. 1.0 l / mix = 2.0 kg

Place up to 80% of the water quantity given above into a clean mixing bucket.

Slowly add the above quantity of ASOCRET-FS whilst continuously mixing with suitable equipment (approx. 300 rpm). Thoroughly blend the material for approx. 3 minutes to a lump free mortar. Then add the remaining water and mix for a further 2 minutes. Allow to stand for 2 minutes then briefly re-mix. When mixing large quantities, use a forced paddle mixer. Only mix as

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much material as can be used within the pot life given above.

Application tools:

Hand trowel, steel float, lath, rubbing sponge

Application by hand:

Apply ASOCRET-FS to the prepared matt damp substrate to the desired thickness. Pores and cavities should be trowelled over initially. After allowing the appropriate waiting time, smoothen the surface. The surface may not be post-treated with a wet brush or wet trowel. It is possible to rub up after application using a dry sponge to achieve a neat transition within the repaired area.

Wet spray application:

When applying with wet spray techniques, it is necessary to thoroughly dampen the surface to be coated 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-FS, 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 cannot take place. 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-FS.
- Cover with suitable sheeting to protect from rain.
- Building substrate and ambient temperatures below +20 °C retard the set time. Building substrate and ambient temperatures above +20 °C accelerate the set time.

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- When preparing ASOCRET-FS only use mains or drinking water. Material that has started to stiffen may not be diluted with water or more powder added. There is a risk of an inadequate bond.
- 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 GmbH & Co. KG.
- Observe the "Additional technical contractual terms and regulations" from the ZTV-ING.

Please adhere to the valid EC Materials Safety Data Sheet (MSDS).

GISCODE: ZP1