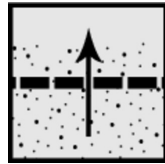
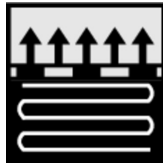


ASO®-SEM

Accelerated screed mortar with high strength



Material number	Contents	Unit of quantity	Packaging	Colour
206543001	25	KG	Bag	Cement grey

Product features

- Cementitious screed mortar
- CT-C40-F6-A9 in accordance with DIN EN 13813
- Rapid setting
- Pot life of ca. 45 minutes
- Can be tiled with ceramic tiles after ca. 24 hours
- Foot traffic after ca. 14 hours
- Very low emission - EMICODE® EC 1^{PLUS}

Advantages

- rapid construction progress
- Can be removed and smoothed particularly simply and effortlessly
- Sealed screed surface

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Areas of application

- For producing rapid setting cement-based screeds
- For producing bonded screeds, separating layer screeds or as floating screed on an insulating layer
- Layer thicknesses from 10 till 80 mm depending on the construction method
- Heated and unheated design
- For interior and exterior use

Technical Data

Material properties

Base material	Pre-blended dry mortar
Consistency	Powdered
Grain size max	< 4 mm
Bulk density of fresh mortar	approx. 2.1 kg/dm ³
Heating, screed after	after 3 days
Flexural strength (28 days, DIN EN 13813)	≥ 6 N/mm ²
Reaction to fire in accordance with Directive 96/603/EC	A1fl
Compressive strength (28 days, DIN EN 13813)	approx. 40 N/mm ²
Vapour diffusion behaviour	Vapour permeable

Mixing

Mixing time	approx. 2 - 3 minutes
Water addition	from 1.5 l to 1.5 l

Application

Substrate temperature	from 5 °C to 25 °C
Pot life	approx. 45 minutes
Consumption pro m ² and cm layer thickness	approx. 20 kg/m ²
Mixing method, machines, tools	Forced paddle mixer Free fall mixer
Foot traffic after	approx. 14 hours
Ready for covering with tiles	approx. 24 hours
Application temperature	from 5 °C to 25 °C
Overcoat after	approx. 24 hours
Hardening time / full resilience	approx. 7 days

Material consumption

Minimum nominal thickness in accordance with DIN 18560

Minimum nominal thickness in accordance with DIN 18560 or ZDB data sheet "Coverings on cement and calcium sulphate screeds":

under tiles	45 mm on insulation or separating layer
under parquet, carpet, linoleum or PVC	30 mm on insulation or separating layer
general	10 mm bonded

Application technology

Machine application

ASO[®]-SEM can be mechanically applied. For precise information, see the additional Technical Information No. 43.

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Suitable covering

- Tiles
- Boards
- Textile covering
- Parquet
- PVC

Substrate preparation

Measures for substrate preparation

1. The substrate must correspond to the payloads associated with the load-bearing capacities in accordance with DIN EN1991-1-1.
2. In areas with water impact class W0-I to W3-I in accordance with DIN 18534 and the ZDB data sheet [* 1], screed produced with ASO[®]-SEM pre-blended dry mortar is applicable for use if a suitable SCHOMBURG bonded waterproof system has been applied.

Substrate moisture content

Maximum moisture content of the screed, determined with the CM device			
Top layer		heated	unheated
Water vapour barrier covering		1.8 %	2.0 %
Textile	Water vapour retarder	1.8 %	2.5 %
	Water vapour permeable	2.0 %	3.0 %
Parqu		1.8 %	2.0 %
Laminate floor		1.8 %	2.0 %
Ceramic tiles or natural / artificial stone at +23 °C, 50 % r.h.	Thick	2.5 %	2.5 %
	Thin-bed	2.5 %	2.5 %
The CM measurement must be completed in accordance with the current working instructions FBH-AD from the technical information "Interface coordination with heated floor constructions".			

Preparing the surface

With a water addition of 1.5 litres to 25 kg ASO-SEM, an ambient and substrate temperature of +23 °C, a relative humidity of 50% and a layer thickness of 5 cm, the screed is ready for laying with tiles after one day.

Usage

Application

1. With bonded screeds, first brush ASOCRET-HB-FLEX into the prepared, e.g. abraded concrete substrate.
2. Apply the screed to the wet slurry coat. The relevant guidelines for cement-based screeds according to DIN 18560 and DIN 18353 apply for processing.
3. The dimensions of surfaces must be such that the application can be completed within this pot life.
4. Higher temperatures shorten the pot life. Lower temperatures increase the application and hardening times.
5. Mixing, application, and processing must be completed in immediate sequence.

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Mixing recommendations for mixing and conveying machines

1. In conventional mixing and conveying machines with a 220 l mixing vessel, e.g. the EstrichBoy from Brinkmann, PFT, Putzmeister Mixokret, or similar, a total 250kg of ASO[®]-SEM is mixed with 15 l of tap water. This equates to a mixing vessel level of approx. 80% - as recommended by the machine manufacturers in general.
2. Half-fill the mixing drum with 125 kg ASO[®]-SEM and approx. 10 l water.
3. Then top up the remaining 125 kg ASO[®]-SEM and add 5 l water.
4. The total mixing time is ca. 2 - 3 minutes.
5. Establish a consistency of damp earth to stiff plastic through water addition.
6. Protect the fresh screed to prevent it drying out too rapidly, e.g. due to heat or draughts.
7. Tiles are ready for laying after one day if the following prerequisites are met: * water addition of 1.5 litres to 25 kg ASO[®]-SEM*, ambient and substrate temperature of +23 °C*, relative humidity of 50% * layer thickness of 5 cm
8. A moisture measurement must be carried out using the CM method to check the moisture content.

Cleaning tools

Rinse tools with water immediately after use.

Storage conditions

Storage

Store in a cool and dry place. Min. 12 months in the original canister. Promptly use opened canister.

Disposal

Product leftovers can be disposed of in accordance with disposal code AVW 17 01 01.

Notes

- All values given in the TM apply at +23 °C and 50% relative humidity.
- Observe the technical data sheets of the products mentioned before starting work.
- ASO[®]-SEM can crystalline bind approx. 6% of its weight to water. Water quantities that exceed this volume must evaporate and therefore delay the readiness to receive tiles and boards!
- If moisture rises from the substrate, effective waterproofing is essential prior to laying the screed!
- The installation location must be ventilated. However, draughts and direct solar radiation should be avoided during application and the hardening process. The indoor temperature and floor temperature must be at least +5 °C during application, and during the following week! Air dehumidifiers may not be used during the first 3 days!
- A moisture measurement must be carried out using the CM method to assess whether it is ready to receive.
- Do not add any other cement or binder!
- Low temperatures, high humidity and heavy layer thicknesses delay hardening, drying and extend the time until ready to receive tiles. (Also see the BEB data sheet "Building climate preconditions for drying screeds"). Tests showed that the crystalline binding of the mixing water is slower at low temperatures (+5 to +10 °C), meaning that the screed was only ready to receive tiles after a longer period of time!
- Water that is pressed out of the surface of the screed indicates excessive water addition (more than 1.5 l water/25 kg ASO[®]-SEM)!
- If the selected mixing time is too short or mixing is not sufficiently intense, this is not guaranteed to disperse all constituents sufficiently. The screed will not be ready to receive tiles and boards quickly, and it will no longer exhibit a high strength!
- Border, field, structural movement joints and movement joints should be carried over to or installed at the designated location; suitable means, e.g. edge strips, should be used to detach them! Crack control joints should be cut in up to a third of the introduced layer thickness!

Relevant regulations

Planning, inspection of substrates and building site circumstances, laying, grouting and subsequent care of the work must be done in accordance with the relevant DIN standards and recognised rules of technology (e.g. the ZDB sheets of the Zentralverband Deutsches Baugewerbe e.V.) in the latest version.

GISCODE: ZP1

ASO[®]-SEM

Annotations

Conformity / Declaration / Verification

	
SCHOMBURG GmbH & Co. KG Aquafinstraße 2-8 D-32760 Detmold (Germany) 19 2 06543	
EN 13813 ASO-SEM Cement-based screed mortar for application inside buildings CT-C40-F6-A9	
Reaction to fire 96/603/EC	Class A1 ₁
Release of corrosive substances	CT
Compressive strength	C40
Flexural strength	F6

Impact classes and typical applications in accordance with DIN 18534-1

Impact classes and typical applications according to DIN 18534 and DIN 18535			
Water exposure class	Water exposure		Example applications
W0-I	Low	Surfaces with less frequent exposure to splash water	Areas of wall surfaces above wash-basins in bathrooms and sinks in domestic kitchens. Areas of floor surfaces in domestic areas without drains, e.g. in kitchens, utility rooms, guest WCs
W1-I	Mode	Surfaces with frequent exposure to splash water or less frequent exposure to service water, without intensification due to accumulating water.	Wall surfaces above bath-tubs and in showers in bathrooms. Floor surfaces in the domestic area with drain. Floor surfaces in bathrooms with/without drain without high exposure to water from the shower area.
W2-I	High	Surfaces with frequent exposure to splash water and/or service water, mainly on the floor but temporarily intensified by accumulating water	Wall surfaces of showers in sports facilities/commercial sites. Floor surfaces with drains and/or gutters. Floor surfaces in rooms with showers that are flush with the floor. Wall and floor surfaces of sports facilities/commercial sites.
W3-I	Very high	Surfaces with very frequent or long-lasting exposure to splash and/or service water and/or water from intensive cleaning procedures, intensified by accumulating water	Surfaces in the area around the perimeters of swimming pools. Surfaces of showers and shower facilities in sports facilities/commercial sites. Surfaces in industrial sites (professional kitchens, laundries, breweries, etc.).
W1-B	Very high	Waterproofing containers and pools up to a water depth of 5 m	Containers and swimming pools.
W2-B	Very high	Waterproofing containers and pools up to a water depth of 10 m	Containers and swimming pools.

Impact classes for container in accordance with DIN 18535

Impact classes for container in accordance with DIN 18535	
The water exposure class of a container depends on the filling level.	
Water exposure class	Filling level
W1-B	≤ 5 m
W2-B	≤ 10 m
W3-B	> 10 m

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