

ASO®-SEB

Binder for screeds, quickly ready to receive tiles



Material number	Contents	Unit of quantity	Packaging	Colour
206544001	25	KG	Bag	Cement grey

Product features

- Cementitious binder
- Rapid setting
- Quality up to CT-C50-F7 in accordance with DIN EN 13813

Advantages

- rapid construction progress
- High strengths possible
- Can be heated and tiled soon

Areas of application

- As binders for creating rapid setting cement-based screeds
- As binder for producing bonded screeds, separating layer or as floating screed on an insulating layer
- Heated and unheated design
- For interior and exterior use

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Technical Data

Material properties

Base material	Special cement Additive
Consistency	Powdered
Heating, screed after	after 3 days

Mixing

Mix ratio, component A	1 weight proportion
Mix ratio, aggregate	from 4 weight proportion to 5 weight proportion
Mixing time	approx. 2 - 3 minutes
Water addition	from 6 l to 7.5 l

Application

Substrate/application temperature	from 5 °C to 25 °C
Pot life	approx. 45 minutes
Mixing method, machines, tools	Forced paddle mixer
Foot traffic after	approx. 24 hours
Ready for covering with tiles	approx. 24 hours
Overcoat after	approx. 24 hours
Hardening time / full resilience	approx. 7 days

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Material consumption

Material consumption rate according to the area of application

Consumption, kg/m² ASO-SEB:

Mix ratio, parts by weight		
Screed thickness, cm	1: 4 ^{**}	1: 5 ^{**}
1	3.3	2.5
4	13.3	9.9
5	16.7	12.3
6	20.0	14.8

^{**} 1 : 4 parts by weight, equates to approx. 1 : 2.7 parts by volume,
1 : 5 parts by weight, equates to approx. 1 : 3.3 parts by volume

Minimum nominal thickness in accordance with DIN 18560

Minimum nominal thickness per DIN 18560:

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

Layer thickness in accordance with grading curve

Grading	Minimum layer thickness	Maximum layer thickness
0-4 mm	10 mm	approx. 40 mm
0-8 mm	25 mm	approx. 80 mm
0-16 mm	50 mm	approx. 160 mm

Application technology

Machine application

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

Usage

Mixing recommendations for mixing and conveying machines

1. Half-fill the mixing drum with aggregate (0/8, approx. 15 scoops of 7 kg each), 50 kg ASO[®]-SEB and approx. 7.5 l water.
2. Add the remaining aggregate and then the remaining water.
3. The total mixing time is approx. 2 - 3 minutes.
4. Protect the fresh screed to prevent it drying out too rapidly, e.g. due to heat or draughts.
5. Tiles are ready for laying after one day if the following prerequisites are met: * Mix ratio of 1:4 parts by weight * Dry aggregate (DIN 4226; grading curve A8 - B8 close to B8; constant grading) * Water addition of 15 litres on 50 kg ASO[®]-SEB * Ambient and substrate temperature: +23 °C * Relative humidity of 50% * Layer thickness of 5 cm
6. When it comes to other surface coverings, use the CM method to test the moisture content.
7. In the case of screeds that are required to satisfy a certain screed quality in accordance with DIN EN 13813, a performance test is necessary. This must be performed before starting the work.

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Grading curve

The adjacent diagrams show typical grading curves for aggregates frequently used for screed production. These are aggregates rich with fine parts, which require a greater quantity of water and binder in comparison to the optimum grading curve between A8-B8 close to B8. However, in accordance with investigations by the institute for building material testing and flooring research ("IBF"), use of such aggregates stands at almost 70% nationwide. Such aggregates are generally good to apply and smooth, but they require a greater quantity of water and binding agent in order to achieve similar strengths as with optimum grains. Our investigations with the adjacent typical representatives of aggregates rich with fine parts have shown that ASO-SEB in conjunction with grading curves around C8 and above can be used to produce good screeds if the formula is correspondingly adjusted (binder and added water).

Cleaning tools

Clean tools thoroughly with water after use.

Storage conditions

Storage

Store in a cool and dry place. Min. 6 months in the original canister. Promptly use opened canister.

Disposal

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

Notes

- Do not add any additives and substances!
- Observe the technical data sheets of the products mentioned before starting work.
- For use in areas with inadequate aggregate quality or where storage of the mortar components is not possible or desirable, the ASO[®]-SEM / ASO[®]-EZ4-PLUS pre-blended dry mortars are available!
- A moisture measurement must be carried out using the CM method to assess whether it is ready to receive.
- 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 or aggregate addition (more than 3.3:1 volume parts, equates to approx. 5:1 parts by weight), an incorrect grading curve or inadequate mixing. A consequence of this will be a crumbling surface!
- The quality of the aggregate used is partly decisive for the properties of the screed produced with it. Aggregate in accordance with DIN 4226 should be used with a constant grading curve between A and B close to B according to DIN 1045. If aggregates with other grain distributions are used, a greater quantity of binder may be required. Aggregates with a grading curve between B and C per DIN 1045 require a higher proportion of ASO[®]-SEB. The grain size distributions that should be used with different layer thicknesses are available in the "Layer thickness in accordance with grading curve" table.
- ASO[®]-SEB can crystalline bind approx. 25% of its weight to water. Water quantities that exceed this volume must evaporate and therefore delay the readiness to receive tiles and boards!
- If the surface of the screed cannot be closed sufficiently when rubbed, this indicates that the proportion of fines in the aggregate is too low. A higher quantity of ASO[®]-SEB is required to replace the missing proportion of fine grain!
- 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!
- Do not add any other cement or binder!
- 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!

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.

Observe applicable safety data sheet!

GISCODE: ZP1

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