

Water-repellent, accelerated screed mortar













Material number	Contents	Unit of quantity	Packaging	Colour
205528001	25	KG	Вад	Cement grey

#### **Product features**

- Cementitious screed mortar
- Water-repellent
- Quality up to CT-C50-F6-A9 in accordance with DIN EN 13813
- Rapid setting
- Fibre reinforced and shrinkage compensated
- Pot life of approx. 45 minutes
- Foot traffic after ca. 6 hours

# **Advantages**

- Increased safety thanks to water-repellent properties
- rapid construction progress
- No efflorescence





### **Areas of application**

- For producing water-repellent cement-based screeds
- As binders for creating accelerated screeds
- For damp, wet areas, swimming pools and balconies, terraces
- Heated and unheated design
- For interior and exterior use

## Notes on areas of application

- Screeds and mortars made with ASO-EZ4-PLUS offer increased protection against frost damage and efflorescence due to their water-repellent properties. As a water-repellent, quick-hardening mortar bed when laying natural stone, tiles and boards outdoors and in wet areas such as balconies, terraces, loggias, stairs, swimming pools, intermittently wet rooms, wash bays and water tanks
- In areas exposed to water, such as swimming pools, areas around swimming pools and public showers or in water impact classes W1-I to W3-I per DIN 18534, in the exterior area on balconies, loggias etc. in accordance with DIN 18531-5 or W1-B to W3-B in accordance with DIN 18535, screed implemented with ASO-EZ4-PLUS should be sealed with a suitable bonded waterproofing system.
- ASO-EZ4-PLUS is a special cement without trass content. Some regulations, e.g. the VOB DIN 18332, DNV leaflets of the German Natural
  Stone Association, BIV leaflets of the Federal Association of German Stonemasons, ZDB leaflets published by the Association of German Tile
  Trades, describe the use of mortars with a high trass content for use in the exterior area/natural stone applications. ASO-EZ4-PLUS uses a
  more advanced technology which, due to its special properties, has significantly lower "lime efflorescence" than trass mortar. Screed and
  laying mortar made from ASO-EZ4-PLUS is therefore a special construction method. We therefore recommend that this be contractually
  agreed.

#### **Technical Data**

#### Material properties

Base material	Pre-blended dry mortar
Consistency	Powdered
Grain size max	< 4 mm
Bulk density of fresh mortar	approx. 2.2 kg/dm³
Heating, screed after	after 3 days
Flexural strength (28 days, DIN EN 13813)	≥6 N/mm²
Reaction to fire in accordance with Directive 96/603/EC	Alfl
Compressive strength (28 days, DIN EN 13813)	approx. 50 N/mm²
Mixing	
Mixing time	approx. 4 - 6 minutes
Water addition	from 1.6 l to 2 l
Application	
Substrate temperature	from 5 °C to 25 °C
Pot life	approx. 45 minutes
Consumption pro m <sup>2</sup> and cm layer thickness	approx. 20 kg/m²
Mixing method, machines, tools	Forced paddle mixer
Foot traffic after	approx. 6 hours
Ready for covering with tiles	approx. 3 days
Application temperature	from 5 °C to 25 °C
Overcoat after	approx. 3 days
Hardening time / full resilience	approx. 7



### **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®-EZ4-PLUS can be mechanically applied. For precise information, see the additional Technical Information No. 43.

#### Usage

#### **Application**

- 1. Observe the water addition and avoid excess water!
- 2. Mixing, application, and processing must be completed in immediate sequence.
- 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. With bonded screeds, first brush ASOCRET-HB-FLEX into the prepared, e.g. abraded concrete substrate.
- Apply the screed to the wet slurry coat. The relevant guidelines for cement-based screeds according to DIN18560 and DIN 18353 apply for processing.

#### Mixing recommendations for mixing and conveying machines

- In conventional mixing and conveying machines with a 220 l mixing vessel, e.g. the Estrich-Boy from Brinkmann, PFT, Putzmeister Mixocret, or similar, a total 250kg of ASO<sup>®</sup>-EZ4-PLUS is mixed with 16 to 20 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®-EZ4-PLUS and approx. 10 l water.
- 3. Then fill with the remaining  $125 \text{ kg ASO}^{\text{@}}$ -EZ4-PLUS and add 6–10 l water.
- 4. The total mixing time is ca. 4 6 minutes.

### Mixing recommendation for forced paddle mixer

- 1. First provide 100 kg of ASO®-EZ4-PLUS and add 6.4 to 8.0 l of water.
- 2. The mixing time is ca. 4 6 minutes.
- 3. Establish a consistency of damp earth to stiff plastic through water addition.
- 4. Protect the fresh screed to prevent it drying out too rapidly (e.g. due to heat or draughts).
- 5. With a water addition of 1.7 litres to 25 kg ASO®-EZ4-PLUS, 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 three days.
- 6. A moisture measurement must be carried out using the CM method to check the moisture content.

#### Cleaning tools

Clean tools thoroughly with water after use.

# Storage conditions

# Storage

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





#### **Notes**

- Do not add any other cement or binder!
- Observe the technical data sheets of the products mentioned before starting work.
- 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 on the surface of the screed indicates excessive water addition!
- 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!
- If the selected mixing time is too short or mixing is not sufficiently intense, this is not guaranteed to disperse all constituents sufficiently. A
  moisture measurement must be carried out using the CM method to assess whether it is ready to receive.
- 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!
- ASO®-EZ4-PLUS can crystalline bind approx. 8% of its weight to water. Water quantities that exceed this volume must evaporate and therefore delay the readiness to receive tiles and boards!

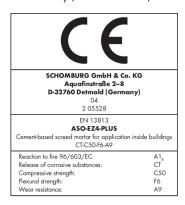
Planning, inspection of substrates and building site circumstances, laying, grouting and subsequent care of the work must be done in accordance with the relevant DIN standards and recognised rules of technology (e.g. the ZDB sheets of the Zentralverband Deutsches Baugewerbe e.V.) in the latest version.

# Observe applicable safety data sheet!

GISCODE: ZP1

#### **Annotations**

Conformity / Declaration / Verification



The rights of the buyer with regard to the quality of our materials are based on our terms and conditions of sale and delivery. Our technical advice team will be happy to advise you in the case of requirements that exceed the scope of the application described here. In order to be binding, a legally binding written confirmation is required. The product description does not release the user from a duty of care. Lay a test area in the event of uncertainty. This version becomes invalid in the event of a new version being issued.

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