



Technical Data Sheet

ASO®-EZ2-Plus

Art.-No. 2 05530

Rapid setting pre-blended mortar with high strength

Properties:

- High strength
- High application security
- Constant screed quality
- For interior and exterior areas
- Long pot life
- Traffic after 6 hours
- Rapid hardening
- Lay tiles and slabs early
- Can be heated after 3 days

Areas of application:

ASO-EZ2-Plus is a pre-blended mortar for the production of rapid setting cement-based screeds ready to be laid on early and with high strength. Suitable for bonded, unbonded or screeds over insulation and heated screeds either as a wearing surface or as a base under tiles, slabs, textile coverings, parquet or PVC. Install in accordance with the general guidelines for screeds DIN 18560 and DIN 18353. The base must be load bearing in accordance with DIN 1055. Provided that a suitable SCHOMBURG waterproofing system has been applied, screeds produced with the binder ASO-EZ2-Plus can be installed in wet duty areas e.g. swimming pools, swimming pool surrounds and communal showers as well as in wet duty areas classified as A2, B and C in accordance with technical test criteria and wet duty areas classified as O, AO2, BO in accordance with the ZDB information sheet [* 1]. [* 1] see advice section

Technical Data:

Basis: Special cement, additives, aggregate
 Colour: grey
 Water demand: 1.6 – 2.0 litres / 25kg ASO-EZ2-Plus (semi-dry 6.5 – 8.0% water)
 Mixing technique: Forced paddle mixer, free fall mixer

Apparent density – fresh mortar: approx. 2.2 kg/dm³
 Storage: 12 months when stored dry in the original unopened packaging. Use opened packaging promptly.
 Consumption: approx. 20kg ASO-EZ2-Plus per m² / cm screed
 Packaging: 25kg bags
 Cleaning: clean tools and equipment immediately after use with water
 Classification: EN 13813 CTC80-F7-A9
 Fire rating: A1 according to resolution 96/103/EG
 Traffic after *): approx. 6 hours
 Fully cured after *): approx. 7 days
 Pot life *): approx. 60 minutes
 Application/substrate temp: min. approx. +5° C to max. approx. +30° C

*1) Valid at 23° C and 65% relative humidity. Higher temperatures shorten and lower temperatures lengthen these given times.

Minimum nominal thickness to DIN 18560:

Beneath tiles	40 mm on insulation or separating layer *2
Beneath parquet, carpet, linoleum or PVC	30 mm on insulation or separating layer *2
In general	10 mm bonded

*2) Reduced thicknesses are possible due to static calculations and measurements obtained from values from the active ingredients.

Product preparation:

For preparation we recommend using the Brinkmann screed boy with a 65mm hose diameter, or other conventional screed mixers PFT, Putzmeister Mixocret or similar. Watch the water addition and avoid surplus water! The working life is approx. 60 minutes at

ASO®-EZ2-Plus

+20 °C. Mixing, laying and screeding must follow one another continuously. Only install in an area that can be screeded within the working life. High temperatures shorten while lower temperatures lengthen the working life and setting time. With bonded screeds brush apply ASOCRET-HB-flex into the shot-blasted concrete base before laying the screed in the wet slurry. Installation should be in accordance with screeding guidelines DIN 18560 and 18353.

Mixing recommendations for mix machines with conveyor feed:

A total of 250 kg ASO-EZ2-Plus can be mixed with 16 – 20 litres of tap water in a conventional mixing machine with a 220 litre mix vessel e.g. Brinkmann screed-boy or PFT Putzmeister Mixocret. This relates to a mixing capacity of approx. 80% which is generally recommended by the equipment manufacturer.

Carry out the following procedures:

Firstly half fill the mix vessel with 125 kg ASO-EZ2-Plus and add approx. 10 litres of water. Afterwards add the other 125 kg ASO-EZ2-Plus and pour in 6 – 10 litres of water. Keep to a total mix time of 4 minutes so that the all components are dispersed and the final consistency is achieved.

Mixing recommendations for free fall mixers:

Pour in 4 litres of water, add 100 kg of ASO-EZ2-Plus and a further 2.5 – 4.0 litres of water. Mix subsequently for 5 minutes. Adjust the consistency through water addition to a semi-dry to stiff-plastic. Protect the fresh screed from rapid drying e.g. from heat or draught. Tiles can be laid on to a screed after 3 days when prepared with 1.7 litres of water per 25 kg ASO-EZ2-Plus under an ambient and substrate temperature of +23° C with 50% relative humidity and a screed thickness of 5 cm.

Checks should be carried out by measuring the dampness with a carbide hygrometer (CM-device).

Important notes:

- By high temperatures, direct sunlight and drafts, protect the screed from water loss during drying. To ensure ideal hydration of cement, the screed can be protected during the curing phase e.g. with plastic sheeting or with continuous light misting.
 - Instead of ASOCRET-HB-flex an alternative slurry bonding coat of ASOPLAST-MZ diluted 1:1 with water and a screed mortar consisting of 25 kg ASO-EZ2-Plus and 5 kg ASO-EZ2 can be used.
 - Follow the technical data sheets for the above products!
 - If too short a mix time is selected or mix intensity is insufficient the dispersion of all components cannot be guaranteed. Early readiness and high strength is no longer applicable.
 - To determine the readiness of the screed moisture readings need to be carried out with a carbide hygrometer keeping to the following limits (see table 1).
 - Low temperatures, high humidity and greater thicknesses delay the hardening, drying out and the readiness for overlaying (see BEB information sheet construction climatic requirements for the drying of screeds). Trials have shown that at low temperatures (+5° C to +12° C) water binding proceeds at a greatly reduced rate so that readiness to accept finishes occurs later.
 - Water that bleeds to the screed surface indicates too much mix water (more than 2 litres water per 25 kg ASO-EZ2-Plus).
 - ASO-EZ2-Plus can bind approx. 8% of its weight in crystalline water. Greater quantities in excess of this amount of water must evaporate and delay the readiness for use!
 - A functioning water barrier is necessary when laying screeds over rising damp from the substrate.
 - Ventilation is necessary where the screed is laid. The interior and floor temperature must be at least +5° C during installation and for one week after! Do not use dehumidifiers during the first three days.
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Important advice table 1:

Maximum moisture content of screeds determined by carbide hygrometer

Floor finish		Heated	Unheated
Water vapour permeable coverings		1.8 %	2.0 %
Textile coverings	Vapour barrier	1.8 %	2.5 %
	Vapour permeable	2.0 %	3.0 %
Parquet		1.8 %	2.0 %
Laminate floors		1.8 %	2.0 %
Ceramic tiles and natural stone	Sand: cement fixing	2.0 %	2.0 %
	Adhesive fixing	2.0 %	2.0 %

Carbide hygrometer measurements are to be carried out in accordance with the current working practices (document FBH-AD) from the technical information for interface coordination for heated floor construction.

- Do not add other cements or binders!
- Perimeter, bay, structural and movements joints are to be brought through and stopped with suitable material e.g. edge strips. Contraction joints should be cut in one third the depth of the installed screed!
- Do not add any additives.
- Relevant current regulations are to be observed!
Therefore e.g.
DIN 18157
DIN 18352
DIN 18560
DIN EN 13813
DIN 1055

The BEB information sheets available from the Federal Association for screeds and coverings. Technical information for interface coordination in heated floor construction.

Information sheets from the ZDB (Central building industry association), issued by the Technical association of the German tile industry:

- [*1] Advice for the installation of waterproofing combined with ceramic tiles and slabs in interior and exterior areas (August 2000).
- [*2] Mechanically heavy-duty ceramic floor coverings.
- [*3] Movement joints in tile and slab finishes.
- [*6] Ceramic tiles, slabs, natural stone and concrete blocks on heated cement-based screeds.
- [*7] Tile and slab finishes on the exterior of buildings.

Please observe a valid European safety data sheet!
GISCODE: ZP1