




Technical Data Sheet

UNIFIX®-S3-fast

Art. no. 2 04310

Highly-flexible rapid adhesive mortar for tiles

	
SCHOMBURG GmbH & Co. KG Aquafinstraße 2-8 D-32760 Detmold	
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EN 12004 UNIFIX-S3-fast Rapid-hardening, cement-based mortar for increased demands in interior and exterior areas for tiling and board-laying work.	
C2 F	
Reaction to fire:	Class E
Bonding strength as tensile adhesion strength after dry storage:	≥ 1 N/mm ²
Durability as tensile adhesion strength after water storage:	≥ 1 N/mm ²
Tensile adhesion strength after warm storage:	≥ 1 N/mm ²
Tensile adhesion strength after alternating frost/thaw storage:	≥ 1 N/mm ²
Early tensile adhesion strength, after 6 hours:	≥ 0.5 N/mm ²



- Highly-flexible special tile adhesive
- For critical substrates and high stresses
- Can also be used on new substrates
- Waterproof and frost-resistant
- Vapour permeable
- For interior and exterior areas
- Rapid-setting
- Rapid crystalline binding of the mixing water
- Creamy white
- In accordance with DIN EN 12004, C2 FTE S2

Areas of use:

UNIFIX-S3-fast is used as a thin-bed mortar, particularly for laying vitrified tiles with low water absorption ≤ 0.5% (porcelain stoneware), stoneware, clinker, and mosaic on new cement-based substrates. Thanks to the high deformability of UNIFIX-S3-fast, damaging shear stresses in the covering can be largely compensated out and so it is also particularly well suited to use as bedding mortar for large formats. UNIFIX-S3-fast is primarily used on floor areas.

UNIFIX-S3-fast is particularly well suited to use on balconies and terraces, in swimming pool surrounds,

on heated constructions, on new, load-bearing, cement-based substrates and for laying tiles and boards with low water absorption.

Thanks to the high elasticity, high stresses, such as occur between substrates and coatings in exterior areas or when laying on new, walkable cement-based screeds (approx. 3 days after being put down) and heated screeds, for example, can also be reliably absorbed with UNIFIX-S3-fast.

The vapour permeability of UNIFIX-S3-fast guarantee that cement-based substrates that are still moist will dry out properly, even when laying is carried out early. The obligatory heating of the screed before laying ceramic materials can be omitted.

As a result of the rapid crystalline binding of the mixing water, the flexible mortar is suitable for a variety of artificial and natural stone. When laying natural stone materials, the product-specific properties of the natural stone, e.g. sensitivity to discolouration and curling effects, must be taken into account. We recommend ASODUR-EK98 or ASODUR-DESIGN for laying stone that contains serpentinite.

UNIFIX-S3-fast is a system component on mineral and dispersion-bound SCHOMBURG bonded waterproof systems in the wear classes A, AO, BO and water influence classes WO-I, W1-I, W2-I, W3-I.

Technical data:

Combination product comprising:

	A component	B component
	Powder	Liquid
	component	component
Basis:	Aggregate special binding agent based on cement, additives	liquid polymer

UNIFIX®-S3-fast

Colour:	Creamy white	White
Mixing ratio:	3 parts by weight	1 part by weight
Packaging:	15 kg sack	5 kg canister
Storage:	Dry, 12 months	frost-free, 12 months
	in the original unopened container	

UNIFIX-S3-fast (combination product)

Mixing ratio:

15 kg A-comp. (powder): 5 kg B-comp. : up to 1.35 l water, depending on desired slump resistance

Application/

substrate temp.: +5 °C to +25 °C

Pot life*): approx. 45 minutes

Adhesive open

time*): up to approx. 30 minutes

Thin-bed mortar: up to approx. 5 mm layer thickness

Ready for grouting*): after approx. 6 hours

Foot traffic after*): after approx. 6 hours

Fully cured*): After minimum 7 days, depending on the absorbency properties of the substrate

Cleaning: Clean immediately after use with water

Deformability: > 5 mm per DIN 12004

Testing: In accordance with EN 12004 test report 1200/897/17a MPA Braunschweig

Consumption: approx. 2.9 kg/m² with 6 mm notched trowel
approx. 3.8 kg/m² with 8 mm notched trowel
approx. 4.8 kg/m² with 10 mm notched trowel

*) The values apply for +23 °C and 50% relative humidity; higher temperatures shorten, lower temperatures extend the time cited.

Substrate:

The substrate must be dry, load-bearing, adequately level, free of penetrating cracks and free of separating substances, such as oils, paints, laitance layers and

loose particles. It must have a primarily closed surface condition and exhibit strength typical of its type. Substrate preparation and application per DIN 18157, part 1, and the application specifications of UNIFIX-S3-fast that differ from this, are authoritative when laying tiles.

Prime absorbent substrates with ASO-Unigrund. Calcium sulphate screeds must be roughened, vacuumed and primed with ASO-Unigrund - as with all calcium sulphate bound substrates. Heated screeds must be heated in accordance with recognised standards before installation of coverings. Moisture measurement should be carried out with the CM device to assess whether it is ready for laying on. The CM moisture readings may not exceed

- CA without floor heating system ≤ 0.5%
- CA with floor heating system ≤ 0.3%.

Tiles can be laid on cement-based screeds with UNIFIX-S3-fast, as soon as the screed is able to withstand loads. Concrete substrates after 28 days. 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". Surface irregularities in substrates that are ready for laying can be compensated out beforehand with SOLOPLAN-30-PLUS, for example.

Application:

UNIFIX-S3-fast is a combination product and is shipped in accordance with the mixing ratio. First, add the B component into a clean mixing bucket. Next, add the A component (powder) and continue mixing until a homogeneous bulk density is produced. For lighter working up to 1.35 l of water can be added, depending on the desired slump resistance. After a short maturing time, mix again. Do not mix more UNIFIX-S3-fast than can be used within the pot life.

Mixing ratio:

15 kg A component (powder): 5 kg B component : depending on the desired consistency, spread up to

UNIFIX®-S3-fast

1.35 l water UNIFIX-S3-fast evenly onto the substrate and comb through with a suitable notched trowel, depending on the board size/material. Lay the surfacing materials within the adhesive open time (finger test). In exterior areas and continuously wet areas, ensure that there are no cavities in the bedding for the tiles and boards. Special notched trowels (e.g. HFV notch, Flowline) have proven useful for this.

Notes:

- When laying natural stone and synthetic stone, the product-specific properties of the coating materials (tendency for discolouration, curling effects, etc.) and the laying recommendations of the manufacturer must be taken into account. We recommend carrying out a trial laying.
- The relevant guidelines (DIN, ZDB data sheets [German construction industry association]) still insist on a 28-day waiting time for cement-based substrates. Our experience with the elastic thin-bed mortar UNIFIX-S3-fast have shown that damage-free laying is certainly possible on newer substrates. For this reason, we recommend agreeing this special construction method in the contract.
- With the combination of newer substrates and the laying of large-format tiles, the tile size should be restricted to max. 60 × 60 cm. A joint width of min. 3 mm should be planned. With formats larger than 60 × 60 cm, the CM moisture of the screed should also be checked. For cement-based screeds on insulation or separating layers, in this case a CM moisture readings of ≤ 2.0 CM % should be complied with.
- Prerequisite for laying tiles on new substrates is compliance with the following criteria: The arrangement of movement joints complies with the relevant guidelines. Use notched trowel of min. 10 mm in order to be able to accommodate minor deformations of the substrate. Heating screed constructions must generally be completed from the 21st day after laying the screed in accordance with the relevant guidelines (ZDB data sheet). The earliest possible time for starting laying is after the screed is walkable, generally after minimum 3 to 8 days. The screed must have reached minimum 70% of its final strength (in normal cases, after 7 days). Complete grouting with hydraulically hardening grout, e.g. ASO-Flexfuge or HF05-Brillanfuge.
- When working on new, cement-based substrates (screed, heated screed), the reduced full service conditions of the screed construction must be taken into account. Do not place heavy tools, surfacing materials, etc., on the screed, in particular in areas at risk of breakage – ensure load spreading measures.
- To avoid curling effects due to water absorption, we recommend using ASODUR-EK98 when working with agglomerates / synthetic stone.
- Direct solar radiation and draughts can result in a skin forming prematurely or to the open time being shortened.
- UNIFIX-S3-fast is a hydraulically hardening mortar with a dispersion component rate that can take several days before being fully hardened in unfavourable climatic conditions or when exposed to weather influences and so it must be protected from exposure to water and frost in the meantime.
- Protect surfaces that are not to be treated from the effects of UNIFIX-S3-fast.
- Avoid contact with eyes and skin.
- Prime calcium sulphate bound substrates with ASO-Unigrund-GE or ASO-Unigrund-K (mix ratio 1:3 with water)! When laying tiles on calcium sulphate bound substrates, UNIFIX-AEK is useful to avoid ettringite formation with residual moistures of 1.0% with heated or 1.5% per CM with unheated constructions!
- Do not add water or new mortar to existing thin-bed mortar already in the binding process in order to make it workable again as this would involve a risk of inadequate strength development!
- Direct contact between cement tile mortar and magnesite screeds leads to the destruction of the magnesite screeds through a chemical reaction known as "magnesite pouring". Moisture pressure from

UNIFIX®-S3-fast

the rear of the substrate must be prevented through appropriate measures. The magnesite substrate should be mechanically roughened and primed with the epoxy resin ASODUR-V360W plus max. 5% water (approx. 250 g/m²). After a waiting time of approx. 12-24 hours at +20 °C, the second coat of ASODUR-V360W should be applied (approx. 300-350 g/m²). While the second coat is still fresh, apply plenty of quartz sand with 0.5-1.0 mm grain size. Installation of coverings may be completed after a further waiting time of approx. 12-16 hours.

- The current relevant regulations are to be observed!

So, for example:

DIN 18157

DIN 18352

DIN 18560

DIN 18202

EN 13813

DIN 1055

The BEB data sheets, issued by the Bundesverband Estrich und Belag e.V. [Federal association for screed and covering].

The technical information "Interface coordination with heated floor constructions"

The ZDB data sheets, issued by the Fachverband des deutschen Fliesengewerbes [professional association of the German tile trade]:

[* 1] "Bonded waterproof systems"

[* 2] "Coatings on calcium sulphate screed"

[* 3] "Movement joints in cladding and coverings made of tile and boards"

[* 5] "Ceramic tiles and boards, natural stone and synthetic stone on cement-based floor constructions with insulation layers"

[* 6] "Ceramic tiles and boards, natural stone and synthetic stone on heated, cement-based floor constructions"

[* 7] "Exterior coverings"

[* 8] "Coverings on mastic asphalt screed"

[* 9] "Height differences"

[* 10] "Tolerances"

[* 11] "Cleaning, protecting, maintenance"

[* 12] "Swimming pool construction"

Please observe valid EU safety data sheets!

GIS CODE: A-comp. ZP1

B-comp. D1