

Powder Screed Additive

UZIN AS 51 EXPRESS

Additive to reduce the amount of mixing water and to shorten the setting time of cement screeds

MAIN APPLICATION FIELD:

- ▶ screed additive to create conventional cement and calcium sulphate screeds according to DIN 18 560-1. Helps reduce the amount of mixing water and shorten the time until the screed is ready for covering.

SUITABLE ON / FOR:

- ▶ bonded screeds according to DIN 18 560 - part 3
- ▶ unbonded screeds according to DIN 18 560 - part 4
- ▶ screeds on insulating layer according to DIN 18 560 - part 2
- ▶ heated screeds on insulating layer according to DIN 18560 - part 2
- ▶ warm water underfloor heating systems



PRODUCT BENEFITS/FEATURES:

UZIN AS 51 Express is a highly effective screed additive to create screeds with reduced setting time. It reduces the mixing water amount by up to 25% and the tendency of detrimental bleeding. It increases the strength with good tension behaviour and also reduces crack formation in the cured screed. For interior and exterior use.

- ▶ reduces the amount of mixing water by up to 25%
- ▶ shortens the setting time
- ▶ for conventional cementitious and calcium sulphate screeds
- ▶ reduces tensions and cracks
- ▶ heatable after 3 days
- ▶ very high strength

TECHNICAL DATA:

Packaging	plastic canister incl. measuring cup
Pack size	10 kg / 14.7 l
Shelf life	min. 18 months
Water / cement value	max. 0.5
Color	white-yellowish
Functional heating	after 3 days*
Ready for covering	after 12 - 14 days*
Minimum application temperature	5 °C at ground level
Strength	with 50 kg cement: min. C25-F5; with 75 kg calcium sulphate: min. C25-F4
Dosage	max. 0.24 % (ref. to cement weight), see "Recommended mixture per pump filling"

*At 20 °C and 65% relative humidity, with thickness up to 5 and 7 cm with underfloor heating system.



SUBSTRATE PREPARATION:

Test the substrate in accordance with applicable standard or notices and report any deficiencies. Possible deformations in the substrate should be inhibited as far as possible.

Bonded screeds:

Depending on condition, brush, abrade, grind or shot-blast the substrate, remove loose material and thoroughly vacuum the surface. Install UZIN Foam Expansion Strip 8/100 at all rising building elements. Dampen the concrete several times. Create a bonding slurry and apply it onto the pale damp or properly primed concrete using a hard broom. Apply the screed mortar immediately "wet in wet".

Screeds on separating or insulating layer:

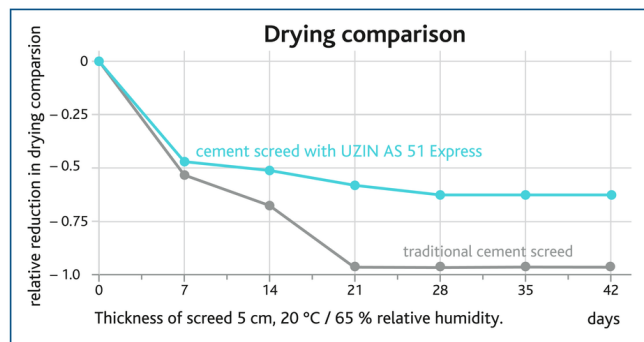
Install UZIN Foam Expansion Strip 8/100 at all rising building elements. Properly clean the supporting substrate and install separating layer crease-free and with sufficient overlapping at the joint area. Install insulations with sufficient dynamic stiffness and flat-laid. Pay professional attention when covering heating pipes, as well as foam expansion strips, bay joints and movement joints.

The datasheets for other used products have to be observed.

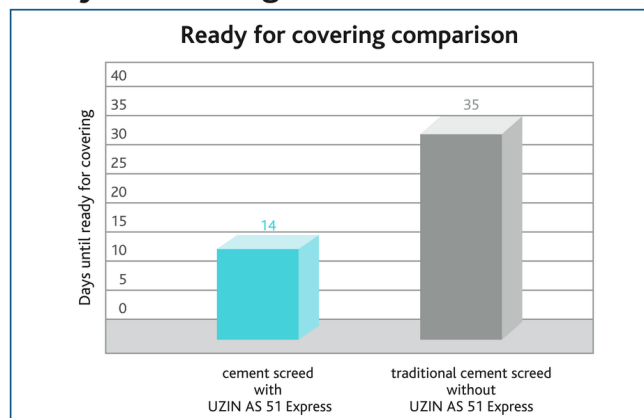
APPLICATION:

1. Stir powder before use. Mix the desired amount of UZIN AS 51 Express directly into the screed pump.
2. The addition of water (respect the w/b value of max. 0.5) depends on the screed sand's moisture and the added quantity of UZIN AS 51 Express. The amount of water should be set so that light plastic mortar consistency is achieved, never mix too thin. Higher w/b-ratios result in reduced strength. At a mixing-ratio of 1:6 of cement to sand, 175 ml (119 g) of UZIN AS 51 Express per pump fill are recommended to get it ready for covering earlier (cement CEM I or CEM II 32.5 R or 42.5 N, screed sand 0/8 mm, screen line A/B). For conventional calcium sulphate screeds, the recommended dosage is generally 175 ml (119 g) of UZIN AS 51 Express per pump filling. The mixing time is then at least 2 minutes per filling from the time of adding UZIN AS 51 Express. The screed needs to be smoothed with a machine to achieve high surface strength.
3. Immediately empty and clean mixer, pump and pipes when work is interrupted. Quickly apply, spread, compress and smooth the mortar.
4. Test residual moisture with a suitable measuring instrument using the KRL method or with the CM-device.

Practical Notes:



Ready for covering:



*At 20 °C and 65% relative humidity.

RECOMMENDED MIXTURE PER PUMP FILLING:

mixing ratio	cement	UZIN AS 51 Express
1:5	62.5 kg	max. 0.24 % (220 ml / 150 g)
1:6	50 kg	max. 0.24 % (175 ml / 119 g)
mixing ratio	calcium sulphate	UZIN AS 51 Express
1:3	100 kg	175 ml / 119 g
1:4	75 kg	175 ml / 119 g

IMPORTANT NOTES:

- ▶ A shelf life of 18 months when stored in moderately cool conditions, in the original packaging.
- ▶ The technical properties of the on-site mixed screed have to be pre-tested and repeated periodically by the screed installer. If there are changes in the starting material, the pre-test has to be repeated.
- ▶ Best applied between 10 - 30 °C.
- ▶ UZIN AS 51 Express is to be used undiluted. The recommended mixing ratios always refer to the undiluted dispersion. Do not mix with other screed additives.
- ▶ Freshly installed screeds should be protected for at least 3 days from foot traffic and at least 7 days from loads (at 20 °C / 65% relative humidity).

- ▶ The rooms shall be aired out (intermittent full ventilation 3 – 5 times a day, min. 10 minutes) in a suitable manner to carry off excess moisture. Avoid drafts as much as possible. Climatic conditions of 20 °C and 65 % relative humidity constitute the best prerequisites for rapid drying.
- ▶ When using CEM II cements, particular attention must be paid to the drying conditions and application properties.
- ▶ Re-moisture does not occur under normal site conditions. Avoid exposure to moisture.
- ▶ Reduces the amount of water up to 25 % (depending on different parameter, e.g. the consistency of installation, the screed sand moisture, etc.).
- ▶ For cement screeds with UZIN AS 51 Express, the specified limits for readiness for covering apply in accordance with TKB bulletin 18 'KRL method' [80 % R. H. (unheated), 75 % R. H. (heated)] and in accordance with DIN 18 560 [2.0 CM-% (unheated), 1.8 CM-% (heated)]. For calcium sulphate screeds with UZIN AS 51 Express, the following limits apply for readiness for covering according to TKB bulletin 18 'KRL method' [80 % R. H. (unheated), 75 % R. H. (heated)] and 0.5 CM-% (unheated), 0.3 CM-% (heated).
- ▶ Follow the generally acknowledged rules of the trade and technology for the installation of wood flooring and floor covering in respective of the applicable national standards (e.g. EN, DIN, OE, SIA, etc.).

SEALS OF QUALITY & ECOLABELS:

- ▶ Solvent-free
- ▶ EMICODE EC 1 PLUS / Very low-emission

COMPOSITION:

Redispersible polymers and additives.

PROTECTION OF THE WORKPLACE AND THE ENVIRONMENT:

Solvent-free. The use of skin protection lotion is recommended as a rule. Wear protective dust mask when mixing. The basic prerequisites for optimal room air quality after floor covering work consist of installation conditions conforming to standards and well-dried substrates, primers and levelling compounds.

DISPOSAL:

Where possible, collect product residues and re-use. Do not allow to get into drains, sewers or ground. Empty packaging is recyclable. Collect waste product, mix with water, allow to harden, then dispose as Construction Waste.