Construction

SikaScreed® P-24

Rapid hardening ternary cement binder for rapid hardening floor screeds

Product description	SikaScreed P-24 is a ternary cement binder for the production of low-shrinkage cement screeds for rapid use and covering.
Uses	Suitable for heated and unheated screeds that are laid bonded or unbounded, over insulation or monolithically for interior use, with the capability for pedestrian traffic after 5 hours and covering after 24 hours, with all types of flooring.
Characteristics/ Advantages	■ Full crystalline water binding ■ Extremely low shrinkage for fast covering, even with rigid flooring systems ■ Rapidly open to pedestrian traffic – after about 3 hours at 20°C ■ Ready for covering after 24 hours with all types of flooring ■ Pot life of at least 40minutes

Product Data

Form

Appearance/Colours	Beige	
Packaging	Bag	25 kg
	Pallet delivery	1,000 kg (40 x 25 kg)

Storage

Storage Conditions /Shelf Life	9months from date of production if stored properly in undamaged, unopened and original sealed packaging, in dry conditions at between +5°C and +25°C. Opened packaging should be resealed immediately.

Technical Data

Chemical base	Special ternary cement binder Important Note: Do not mix with other binders!
Density	Bulk density: ca. 0.9 kg/l
Layer thickness	For 25 – 90 mm screeds

Mechanical / Physical Properties

Strength development	The strength development corresponds to a CT-C20-F4 after 24h. Final strength: Minimum to CT-C30-F5

System Data

Application Instructions

Coverage	Ca. 350 kg/m² screed mortar @ 90mm
Substrate preparation / Priming	Monolithic screeds The substrate must be sound, load bearing and free from cracks. Any unsound materials, cement slurry, de-bonding layers (e.g. dirt, dust, grease, oil, paint residues etc.) must all be removed. Extremely dense, impermeable and/or smooth substrates must be mechanically prepared and roughened. For monolithic installation of the screed, a bond coat of SikaScreed P-24 and sand (mixed 1:1) must first be brushed well into the pre-dampened substrate and the screed must be then be laid into this fresh bond coat 'wet on wet'. If in doubt apply sample areas first as a trial. Floating / un-bonded screeds The screed mix design and thickness must be adapted to the insulation characteristics and the required service stresses, all in accordance with the current standards for semi-dry cement screeds. Installation of a vapour barrier / separating layer on top of the insulation layer is generally recommended before laying this type of screed.

Notes on application / Limitations

Substrate temperature	Minimum: +5°C Maximum +25°C
Air temperature	Minimum: +0°C Maximum +25°C

Application instructions

Mixing	Keep screed mixes with SikaScreed P-24 as cool as possible, and use cold tap water for gauging. Pre-cool this when appropriate. Place half the quantity of damp sand in the screed pump or paddle mixer, add all of the SikaScreed P-24 and half the water, premix briefly and then add the remaining sand and water until the required consistency is obtained. The mixing time should be at least 2 minutes.
Mixing ratio	Mixing ratio for standard commercial screed pumps (220 litres): - 50 kg SikaScreed P-24 (2 bags) - 250 kg screed sand 0-8mm (3/4 filled pump) = approx. 33 shovels - 22 litres total water (sand moisture content to be taken into account and included) - w/c ratio 0.45 maximum Note: A standard screed pump holds about 320 kg of sand and therefore should only be 70% filled with this mix.
Application method/ Equipment	The prepared surfaces must not be larger than can be completed during the pot life of the binder and the screed mix produced. The semi-dry to stiff-plastic screeding mortar is applied using a rake, batten and suitable finishing trowels.
Tool cleaning	Clean containers, tools etc. with water during the pot life. After hardening, cleaning is only possible mechanically.
Pot life	Ca. 40 minutes at 20°C

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	Lower temperatures extend the pot life and higher temperatures will shorten it.
Curing conditions	
Waiting time before use	Pedestrian traffic After about 3 hours Covering After 24 hours with all flooring types* * If the specified mixing ratio is adhered to, the screed is ready for covering / overlaying after 24 hours at 20°C. A CM measurement should be taken to determine its readiness. The maximum residual moisture after 24 hours at 20°C is 2.5 CM% (reading after 10 minutes). For material and room temperatures below 10°C, the screed may be covered at up to 3.0 CM% for up to 48 hours, because subsequent crystalline binding of the entrained moisture occurs. When the screed is ready, it should be covered immediately to prevent re-wetting due to building moisture or cooling below dew point. For monolithic structures, wait until the substrate has also dried out. Heated screeds can start to be heated after 2 days (at 20°C room and material temperature) at a supply temperature of 25°C. The supply temperature can be raised to the maximum temperature after another 3 days. After 3 more days at maximum temperature, reduce the supply temperature and lay over the screed immediately at 15°C minimum. Avoid draughts while heating ready for covering. Screeds with SikaScreed P-24 are heat resistant to 50°C.
Notes	- Protect the screed mortar during setting from direct sunlight, draughts, frost, driving rain and high room temperatures (>+25°C). - Substrate movement and construction joints must be brought through and treated as such. - The technical data relates to +20°C and 65% relative humidity. Lower temperatures extend the values given and higher temperatures will shorten them.
Health and Safety Information	
Value Base	All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.
Important safety information	For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.
Legal Notes	The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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