

PRODUCT DATA SHEET

Sikafloor®-421 Therm Screed

LIGHTWEIGHT INSULATION SCREED

DESCRIPTION

Sikafloor®-421 Therm Screed is a lightweight insulating screed suitable for floors of houses, buildings, or other structures. It is applied in the same way as floor screed and is processed by hand and/or machine.

USES

- Insulation lightweight screed on roofs
- Lightweight protective screed
- Lightweight floor underlayment, under carpets and tiles

CHARACTERISTICS / ADVANTAGES

- Pre-packed lightweight insulated screed, ready-to-use
- Chemically stabilized to avoid EPS beads from floating upwards
- Density of approx. 250 kg/m³
- Low thermal conductivity
- Allows reduction in structural dead load
- Acoustic insulation
- Water repellent to avoid loss of insulation properties after rain
- Non-flammable

PRODUCT INFORMATION

Chemical Base	1 bags of 17 kg Sikafloor®-421 Therm Screed 100 litres of Crushed EPS Beads (0 - 4 mm) (EPS beads density 1.2 kg/ 100 Liter)
Packaging	17 Kg bag
Shelf Life	12 months from manufacture date
Storage Conditions	Store properly in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5 °C and +30 °C. Protect from direct sunlight.
Density	Approx. 200 - 250 kg/m ³ (Dry)

APPLICATION INFORMATION

Mixing Ratio	Material	Weight
	Sikafloor®-421 Therm Screed	1 x 17 kg
	Crushed EPS Beads (0 - 4 mm)	100 Litres (EPS beads density 1.2 kg / 100 Liters)
	Water	18.5 - 20.5 Litres
Yield	Approx. 100 Litres	
Ambient Air Temperature	+6 °C min/ +40 °C max.	

Substrate Temperature +6 °C min/ +40 °C max.

Pot Life 60 - 120 min

BASIS OF PRODUCT DATA

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.

LIMITATIONS

Insulation properties are directly dependent on the thickness and density of the insulated screed.

ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY

The substrate must be clean, sound, dust free without any traces of oil, laitance, curing compound and other contaminants. The substrate must be fully cured and is sound enough to receive the weight of Sikafloor®-421 Therm Screed.

Deeply contaminated substrate must be abraded to clean and sound surface.

MIXING

- Drum mixer with a minimum capacity of 150 Ltr is required for mixing.
- Pour the required amount of clean water into the mixing drum.
- Pour in the required Sikafloor®-421 Therm Screed into the drum while mixing.
- Mix for 2 - 3 minutes, until a homogenous slurry is obtained.
- Lastly, add in the required crushed EPS Beads and continue mixing for 5 - 15 minutes until clumps are eliminated and a smooth consistency of mortar is achieved.

APPLICATION

Primer

Prime with a slurry scratch coat/key coat by mixing Davco 751 with cement and fine sand at 1:1:1 ratio. Apply a thin coat to form key coat and leave it to dry. Pour the light-weight insulation screed onto the primed substrate. Then use a straightedge to level-off the screed to the required thickness and levels. (Max. Thickness 100mm)

Additional layers: Allow the previous layer of light-weight screed to cure for up to 7 days or until it cures. Apply another layer of primer and leave it to dry before adding the additional layer of lightweight screed.

Sealing layer (Optional): After the insulation screed has hardened, use a steel trowel to smoothen the surface with a sealing layer (Davco Polycrete @ 3 - 5 mm thick, coverage 7.0-11.5kg/m²).

Concealed roof: Apply Sika waterproofing solution (liquid or sheet membrane) according to the related Sika Method Statement.

- Pour the lightweight insulation screed directly on top of the waterproofing layer. Then use a straightedge to level-off the screed to the required thickness and levels. (Sarnafil PVC membranes must be protected with a layer of geotextile).

- *Sealing layer.* After the insulation screed has hardened, use a steel trowel to smoothen the surface with a sealing layer. After the sealing layer has hardened, it is recommended that induce/control joints are saw-cut at the required intervals base on engineer's requirement. Seal the joints with Sika approved sealants.

Lightweight floor underlayment

Leave the final layer of lightweight screed to cure for 24 hours.

Apply a slurry key coat using Davco 751 onto the lightweight screed. Then apply a layer of 20 mm Davco Floor Screed before application of tiling, carpet or parquet work. A Use Sika approved tile adhesive or leveling compound.

CURING TREATMENT

Protect the lightweight screed from early hydration using a curing compound or wet hessian

CLEANING

- Clean mixing and application equipment with water immediately following use.
- Remove splatter or spills with water before material sets.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

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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