

PROFILE OF INNOVATION



Self levelling screed

9.10

**Product data sheet** 

## **Application and function**

Schlüter®-BEKOTEC-SLS is a flowable self levelling screed with extremely low tension and smooth finish that was specifically developed for creating floating screeds for Schlüter®-BEKOTEC floor assemblies (see also product data sheets for the individual Schlüter®-BEKOTEC systems and information provided in the technical manual). Schlüter®-BEKOTEC-SLS is exclusively designed for use in interior spaces. For exterior applications see 9.11 Schlüter®-BEKOTEC-DPS datasheet.

It is installed with a minimum screed cover of 8 mm, and in case of sloped substrates up to a maximum cover of 25 mm over the studs of the Schlüter®-BEKOTEC system panels.

It is suitable as a level substrate for all coverings such as ceramic tiles or natural stone (in combination with Schlüter®-DITRA 25, -DITRA-HEAT, or -DITRA-DRAIN 4), and PVC, vinyl, parquet or carpet (in this case with a minimum screed cover over the studs of 15 mm minimum).

# Material properties and areas of application

The extremely low-tension screed has been specifically developed for use with the Schlüter®-BEKOTEC studded system panels EN/PF, EN 23 F, EN 18 FTS and EN 12 FK. The screed is installed with a minimum coverage of 8 mm over the studs. In case of uneven substrates, the coverage of EN/PF or EN 23 F panels can be partially increased to max. 25 mm (max. 20 mm for EN 18 FTS, max. 15 mm for EN 12 FK) over the studs. The screed can be installed without joints unless there is a requirement to pre-



rooms. Expansion, movement and day joints from the base substrate must be continued through the assembly to the covering. Edge strips must be installed at all wall transitions, supports etc. in such a way that the screed volume cannot flow underneath (for further information, see the technical product data sheets for individual Schlüter®-products). To prevent the potential spread of flowing screed into the insulation layers, we recommend installing a protective PE foil between the studded panel and the insulation layer. Prior to installing the screed, heated systems must be pressure tested to check for leakages. It must be assured that the system is

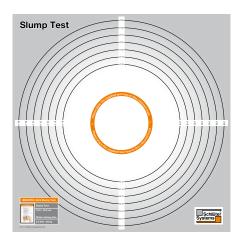
not heated during the installation and curing

process of the screed.









Flow table value: 18.5 - 19.5 cm (Vicat ring to DIN 1164; size: internal diameter 65 mm at top and 75 mm at bottom, height 40 mm; on suitable, dry, clean glass plate)

#### Installation

Mix the content of the bag (25 kg) with approx. 3 litres clean water to a pourable consistency that is free of lumps. For this purpose, of the water volume and mix for approx. 30 seconds, using a mixing paddle. Then add the remainder of the water and mix for another 30 seconds. Allow the screed mixture to rest for about 2 minutes and then briefly stir it again.

Schlüter®-BEKOTEC-SLS may be prepared and placed using suitable mixing and pumping equipment for self-leveling screeds. Whenever works are interrupted, thoroughly clean mixers, pumps and hoses immediately.

For control purposes, the proper consistency of the screed should be checked with the Schlüter®-BEKOTEC-SLS Slump test template and ring, ensuring ratio of water to screed is observed and achieves 18.5 - 19.5 cm (Ø 18 - Ø 20).

Once mixed, the Schlüter®-BEKOTEC-SLS screed can be installed within approx. 60 - 90 minutes. The curing process is accelerated by high temperatures and slowed down by low temperatures. Only mix the volume of material that can be installed during the working time in the proper consistency. Install the screed in a single layer in the corresponding layer thickness, making sure the material is evenly distributed. Then use a suitable paddle, spiked roller, hard broom or similar for optimal levelling and to remove air pockets from the screed material.

Protect freshly installed screed areas from overly quick drying (draft air, high temperatures, direct sunlight etc.). Do not install the material if the air and substrate temperatures are below +5 °C or above +35 °C.

The indicated curing times refer to +20 °C/65% relative humidity.

Where the surface covering is not being applied immediately, the screed surface should be protected against mechanical damage during the building construction process. Plywood sheets/boards may need to be considered where heavy trafficking is likely or where access equipment is being used.

## Readiness to apply covering

Prior to installing a covering over the screed, the surface may need to be cleaned mechanically.

- Ceramic tiles or natural stone can be installed in combination with Schlüter<sup>®</sup>-DITRA 25,
- -DITRA-HEAT or -DITRA-DRAIN 4 as soon as the screed is able to bear weight without leaving an indent.
- Vapour-proof and moisture-sensitive coverings (such as parquet or PVC) should be installed depending on the results of CM measurements.

Readiness to apply coverings depends on the situation of the individual construction site, the layer thickness and the ambient temperature. The curing process is accelerated by high temperatures and slowed down by low temperatures.

## Safety information

- Bonding agent as defined in DIN EN 197 (BS EN 197)
- Quartzite aggregates conforming to DIN EN 13139 (BS EN 13139)
- Low-chromate
- Very low emission EC 1 plus acc. to the EMICODE of GEV (Association for the Control of Emissions in Products for Flooring Installation)

#### **Notes**

Technical information refers to +20  $^{\circ}$ C/65  $^{\circ}$  relative humidity.

No additives may be mixed into the screed. Material that has already bonded may not be re-diluted with water. This product contains cement that has an alkaline reaction to moisture/water. Proper skin and eye protection must be used. Wash skin with water in all cases after contact. Immediately seek medical assistance in case of eye contact.

The statements above are based on extensive tests and practical experience. They are not transferable to all application scenarios. We recommend conducting special application tests if required. Technical modifications associated with product optimisation reserved. Subject to our general terms and conditions.



Please contact our Technical Service Office on +44 (0) 1530 813396 with any questions you may have with regard to suitable pump technology.

## **Product overview:**

Technical data:

Container size: 25 kg

Strength class: CT-C25-F4 acc. to DIN EN 13813 / DIN 18560

Compressive strength: average ≜ 25 N/mm²

Flexural strength: 4 N/mm<sup>2</sup>

Installation temperature: +5 °C to +35 °C
Working time: approx. 60 - 90 min.
Mixing time: approx. 1 min. (Rest: 2 min.)
Required water volume: approx. 3 litres per 25 kg

Curing time: approx. 3 hours

Layer thickness: 8 mm over the studs, in case of sloped substrates, max. partial coverage for EN/PF or EN 23 F

panels, 25 mm, max. 20 mm for EN 18 FTS, max. 15 mm for EN 12 FK over the studs.

Readiness to bear weight: After approx. 5 hours

Readiness to install tiles

and natural stone: with Schlüter®-DITRA 25, -DITRA-HEAT or -DITRA-DRAIN 4 as soon as the screed is able to bear

weight without leaving an indentation. approx. 14 litres per 25 kg fresh mortar

Yield: Consumption for 8 mm

coverage over studs: EN/PF, EN 23 F approx. 28.5 l/m²

EN 18 FTS approx. 26 l/m<sup>2</sup> EN 12 FK approx. 20 l/m<sup>2</sup>

Storage: 12 months, dry and proper

Further information available from: Schlüter-Systems Ltd on +44 (0) 1530 813396

\_m² flowing screed Schlüter®-BEKOTEC-SLS, is to be evenly installed over the studs in accordance with manufacturer instructions. The minimum thickness over the studs is 8 mm, however where a slope is present screed coverage can be increased to max. 25 mm (max. 20 mm for EN 18 FTS, max. 15 mm for EN 12 FK) over the studs for levelling. The installation must comply with the country specific codes of practice, where applicable (BS 8204 for the UK). In all cases the subfloor should be free from hollows and ridges so that the Schlüter®-BEKOTEC panels and insulation layers are fully supported. A vapour control layer should be included under the Schlüter®-BEKOTEC panels.

Apply Schlüter®-BEKOTEC-SLS with a coverage of

■ 8 mm ■ 15 mm ■ 20 mm ■ 25 mm

over the studs.

Supplied unit: 25 kg bag

Consumption: approx. 16.2 kg/m² per cm

of layer thickness

Total consumption with 8 mm coverage over

the studs:

Schlüter®-BEKOTEC

■ -EN/PF, -EN 23 F approx. 28.5 l/m²

■ -EN 18 FTS approx. 26.0 l/m<sup>2</sup>

■ -EN 12 FK approx. 20.0 l/m<sup>2</sup>

Area of application: internal only Screed quality: CT-C25-F4.

The manufacturer recommendations must be followed for installation.

Material :\_\_ Labour: \_\_ Total price: \_\_\_\_\_\_ ..../m<sup>2</sup>