



KÖSTER SL

Technical Data Sheet SL 281 025

Issued: 2016-09-29

Fast hardening hydraulic, self-levelling interior floor screed

Features

KÖSTER SL is a high quality, fast setting mineral underlayment that hardens tension free to a smooth, level surface ready to receive subsequent flooring systems.

It hardens within hours to a smooth, strong, and multifunctional leveling layer. KÖSTER SL is easy to mix and spread, is pour- and pump-able, and is self leveling and highly flowable during application. KÖSTER SL can be used for area covering from 5 to 15 mm, be feathered out to 2 mm, and can fill depressions up to 25 mm. KÖSTER SL hardens crack free and has a high surface strength and a very good adhesion to the substrate.

Technical Data

Bulk density (powder)	1.3 g/cm ³
Compressive strength (28 days)	approx. 30 N/mm ²
Bending tensile strength (28 days)	approx. 8 N/mm ²
Tensile strength (depending on substrate)	up to 3.5 N/mm ²
Application temperature	+ 5 °C - + 30 °C
Ideal application temperature	+ 15 °C
Pot life	20 minutes (+ 20 °C)
Resistant to foot traffic	after 3 - 4 hours*
Can be tiled over	after 4 - 6 hours*
Trafficable (soft tires)	after 24 hours*
Application of Parquet, carpet	after 24 - 72 hours*
Application of synthetic flooring	after 24 - 72 hours*
Layer thickness	5 - 15 mm
In depressions up to	25 mm
Can be feathered out to	1 mm
*depending on temperature	

Fields of Application

KÖSTER SL is designed for leveling uneven concrete surfaces. It is intended for interior use.

KÖSTER SL is used as a fast curing leveling layer on concrete, screed, and heated screeds as well as a leveling layer under tile, carpet, parquet, PVC, and laminated floors.

Substrate

The substrate has to be sound and solid as well as free of bond inhibiting agents such as grease and oil. Remove all bond breaking substances such as laitance, loose particles, dust, formwork release oil, etc. The substrate can be prepared according to need by shotblasting, grinding, or brushing. Concrete and screed substrates are primed with KÖSTER SL Primer according to the Technical Guideline to reduce absorption before application.

Application

The pull-off strength of substrates which are to be trafficked must have a min. tensile strength of 1.5 N/mm². Do not acid etch substrates or clean the substrate with chemicals. Do not apply over adhesive residue. Do not bridge expansion joints with the KÖSTER SL. Expansion joints must be installed in accordance with local guidelines. Mix each 25 kg bag of KÖSTER SL with 5.1 - 5.2 kg of potable water. The water is

placed in a clean mixing vessel and the powder added while constantly mixing. Use an electrical paddle mixer and mix intensively for 3 minutes until a flowable, lump free consistency is reached.

Distribute the material in the desired layer thickness directly after mixing. Mix and distribute the material in a constant work flow to avoid visible work edges. The material is self leveling when working "fresh in fresh". While working larger areas use a KÖSTER Gauging Rake to distribute the material. Rolling the surface with a KÖSTER Spiked Roller immediately after distribution creates a very smooth surface through better de-airing. Install the KÖSTER SL within 20 minutes. Do not delay successive pours by more than 10 minutes to avoid visible work edges.

The surface qualities of the underlayment depend on workmanship, layer thickness, and curing parameters so that variations from a sample surface may occur.

Only install at substrate, air, and material temperatures of + 5 °C - + 30 °C. Low temperatures will increase the pot life and high temperatures will decrease the pot life. Protect KÖSTER SL from premature drying due to wind and sunlight. When using in a wet room cover with a surface protection system or flooring.

Moisture sensitive floor coverings and sealers may not be applied before the material has fully cured. Depending on the temperature it may take between 24 and 72 hours for the material to attain a residual moisture content of less than 3 M%.

Aftertreatment

Curing can be aided by covering the hardened material with polyethylene sheets. This reduces surface shrinkage tension especially when the material has been applied in thick layers.

Consumption

Approx. 1.5 kg powder / m² per mm layer thickness

Cleaning

Clean tools immediately after use with water.

Packaging

SL 281 025 25 kg bag

Storage

Store the material in a dry place; when stored in originally sealed packages between + 10 °C and + 30 °C it can be stored for a minimum of 12 months.

Safety

Wear protective gloves and goggles when processing the material. Observe all governmental, state, and local safety regulations while processing the material.

Eye contact - Flush immediately with water and consult physician.

Do not rub eyes.

Skin contact - Wash off immediately with soap and water.

Related products

KÖSTER SL Primer

Prod. code SL 189
005

The information contained in this technical data sheet is based on the results of our research and on our practical experience in the field. All given test data are average values which have been obtained under defined conditions. The proper and thereby effective and successful application of our products is not subject to our control. The installer is responsible for the correct application under consideration of the specific conditions of the construction site and for the final results of the construction process. This may require adjustments to the recommendations given here for standard cases. Specifications made by our employees or representatives which exceed the specifications contained in this technical guideline require written confirmation. The valid standards for testing and installation, technical guidelines, and acknowledged rules of technology have to be adhered to at all times. The warranty can and is therefore only applied to the quality of our products within the scope of our terms and conditions, not however, for their effective and successful application. This guideline has been technically revised; all previous versions are invalid.

KÖSTER SL Premium

Prod. code SL 280
025

KÖSTER SL Flex

Prod. code SL 284
025

KÖSTER Self Leveling IB

Prod. code SL 287
025

The information contained in this technical data sheet is based on the results of our research and on our practical experience in the field. All given test data are average values which have been obtained under defined conditions. The proper and thereby effective and successful application of our products is not subject to our control. The installer is responsible for the correct application under consideration of the specific conditions of the construction site and for the final results of the construction process. This may require adjustments to the recommendations given here for standard cases. Specifications made by our employees or representatives which exceed the specifications contained in this technical guideline require written confirmation. The valid standards for testing and installation, technical guidelines, and acknowledged rules of technology have to be adhered to at all times. The warranty can and is therefore only applied to the quality of our products within the scope of our terms and conditions, not however, for their effective and successful application. This guideline has been technically revised; all previous versions are invalid.

KÖSTER BAUCHEMIE AG • Dieselstraße 1-10 • D-26607 Aurich • Tel. 04941/9709-0 • Fax -40 • info@koester.eu • www.koester.eu