




KÖSTER SL Premium

Technical Data Sheet SL 280 025

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Classification report K-2300/763/16-MPA BS: Classification of reaction to fire according to DIN EN 13501-1:2010-01

Fast hardening, self-levelling floor screed

	KÖSTER BAUCHEMIE AG Dieselstraße 1-10, 26607 Aurich 18 SL 280 EN 13813:2002 Cement screed for application in interiors
Reaction to Fire	A2 _{FI} -S1
Compressive strength	C30
Bending tensile strength	F7
Release of corrosive substances	SR
Water permeability	NPD
Wear resistance	AR 0,5
Tensile strength	B 2,0
Chemical resistance	NPD
Dangerous substances	NPD
Impact resistance	NPD

Features

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

It hardens within hours to a smooth, strong, and multifunctional leveling layer. It may be applied onto a variety of substrates such as KÖSTER VAP I 2000 coatings, concrete, etc. KÖSTER SL Premium accepts all major floor coverings and is compatible with most adhesives. It is resistant to abrasion and wear. If the material is installed onto smooth, non-absorbent substrates such as KÖSTER VAP I 2000 coatings, the substrate must be primed with KÖSTER VAP I 06 Primer. KÖSTER SL Premium can be applied in layer thicknesses between 5 and 15 mm, can be feathered out to 2 mm, and installed in depressions up to 30 mm. It cures quickly and crack-free with up to 90% reduced shrinkage. KÖSTER SL Premium has a high surface hardness and a very good bond strength to the substrate. KÖSTER SL Premium is not a decorative top coat, but is suitable as a low-wear wearing layer in cellars or storage rooms.

Technical Data

Bulk density (powder)	1.3 g/cm ³
Compressive strength (28 days)	approx. 45 N/mm ²
Bending tensile strength (28 days)	approx. 10 N/mm ²
Tensile strength (depending on substrate)	up to 4 N/mm ²
Application temperature	min. + 5 °C to +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 (self-leveling)
 in depressions up to
 Not self-leveling
 Can be feathered out to
 *depending on temperature

5 - 15 mm
 30 mm
 2 mm to 5 mm
 2 mm

Fields of Application

KÖSTER SL Premium is designed for leveling uneven concrete surfaces as well as for surfaces covered with KÖSTER VAP I 2000 vapor barriers. It is intended for interior use.

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 to reduce absorption before application. Non-absorbent tile substrates must be removed or ground down to an absorbent layer.

Application

The pull-off strength of substrates which are to be trafficked or that are to be treated with KÖSTER VAP I 2000 coatings 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 Premium. Expansion joints must be installed in accordance with local guidelines. Mix each 25 kg bag of KÖSTER SL Premium with 5.2 l 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 Premium 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.

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%.

Installation with pump equipment

For mixing pumps, the water settings must be set so that the consistency is suitable for processing. The settings to be selected depend on the machine, the type of screw and the wear and tear of the screw jacket. Suitable machines are e.g. PFT G4 with post mixer,

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

