BUILDING TRUST

PRODUCT DATA SHEET

Sika® Level-399 XXL

FAST DRYING, SELF-LEVELLING UNDERLAYMENT FOR USE 15 - 100 MM

DESCRIPTION

Sika® Level-399 XXL is a polymer modified, pumpable, self levelling fast drying cementitious underlayment for higher thickness interior floors prior to the application of the final floor finish.

USES

- Sika® Level-399 XXL is an all-purpose floor levelling compound to level or smooth screeds and concrete floors at a thickness between 15 - 100 mm
- Sika® Level-399 XXL ist useable as underlayment with ceramic or stone tiles, linoleum, PVC sheet, wood flooring or carpets and resins floors
- From light until medium load (foot traffic and hand pallet truck without impact load)
- Useable as wearing layer for cellars and attics with low load
- Sika® Level-399 XXL is ready for use

CHARACTERISTICS / ADVANTAGES

- Self smoothing and highly fluid
- Easy to place by pump or manual application
- Low shrinkage - good bond and compaction
- 3 - 4 hours walk on time (+20°C)
- Placing of tiles after 24 hours possible
- Applicable on heated screeds
- Low dust during mixing

SUSTAINABILITY

- EMICODE EC1 Plus

APPROVALS / CERTIFICATES

- C40-F7 according to EN 13813, provided with CE-mark
- Fire Rating Euroclass A1 according to EN 13501-1, MA39 Vienna, test report MA39-K2013-0480

PRODUCT INFORMATION

Composition	polymer modified rapid hardening cement	
Packaging	25 kg bags	
Appearance / Colour	beige-grey	
Shelf life	12 months from date of production	
Storage conditions	store properly in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5°C and +30°C	
Density	~ 1.37 kg/litre	bulk density
	~ 2.17 kg/litre	fresh mortar density
Maximum Grain Size	3,2 mm	

TECHNICAL INFORMATION

Compressive Strength	~ 18 N/mm²	1 day at +20°C	(EN 13892-2)
	~ 40 N/mm²	28 days at +20°C	
Tensile Strength in Flexure	~ 7 N/mm²	28 days at +20°C	(EN 13892-2)
Tensile Adhesion Strength	~ 1.5 N/mm²	28 days at +20°C	(EN 13892-8)
Temperature Resistance	suitable for use with underfloor heating systems up to +55°C on cement screeds for all other floorings please refer to the Data Sheet of the manufacturer of the floor (wood, tiles, etc.)		

SYSTEMS

System Structure	Primer	Sika Level-01 Primer
	Trowel- / self-levelling compound	Sika® Level-399 XXL
	Floor	Textile, PVC, lino, hardwood and tile, resin floors *use solvent free adhesive to ensure EC1PLUS see relevant Product Data Sheet

APPLICATION INFORMATION

Consumption	~ 1.9 kg mortar powder per m² and mm layer thickness	
Layer Thickness	15 mm min. / 100 mm max.	
Ambient Air Temperature	+10°C min / +25°C max	
Relative Air Humidity	maximum 75 %	
Substrate Temperature	+10°C min / +25°C max	
Pot Life	**conditions**	**time**
	+23°C / 50 % r.h.	~ 30 minutes
	The temperature will affect the pot life. Application at temperatures above +23°C will reduce the pot life and the working time. Temperatures below +23°C will increase the pot life and extend the working time.	
Applied Product Ready for Use	foot traffic*	3 - 4 hours no heavy traffic or punctual loads!
	ready for overcoating	tiles or natural stone onto unheated screeds after 24 hours. For all other coverings the humidity of the substrate has to be lower than the maximum rest humidity for the planned covering material. See relevant Product Data Sheets.
	heated screeds	before overcoating/covering the substrate has to be heated up accordingly: heating begins after 24 hours after placing the screed forerun temperature at +25°C during 3 days heating up to maximum forerun temperature for further 4 days turning off the heating or lower to +25°C a heating protocoll has to be filled in

*at +23°C and 50 % r.h.

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

The concrete substrate must be sound and of sufficient compressive strength (min. 25 N/mm²) with a minimum pull off strength of 1.5 N/mm².
The surface must be clean, dry and free of all contaminants e.g. dirt, oils, grease, coatings and surface treatments. etc.
If in doubt apply a test area first.
Concrete substrates must be prepared mechanically using abrasive blast cleaning or scarifying equipment to remove cement laitance and achieve an open textured surface.
Weak concrete must be removed and surface defects such as blow holes and voids must be fully exposed.

If the substrate is strong and has a sufficiently rough texture, Sika® Level-399 XXL can be applied directly onto the substrate, we recommend priming with Sika Level-01 Primer.
Please refer to the relevant Product Data Sheet.

MIXING

~ 3.25 - 3.50 litres water per 25 kg bag
When mixing manually add the dry powder (25 kg) into a container with the clean water. The water required is between 3.25 and 3.50 litres per 25 kg bag of mortar powder.
After mixing leave the material to stand in the container for two or three minutes until the majority of air bubbles have dispersed.
Mix thoroughly for a minimum of 3 minutes.
Use an electric stirrer (> 500 rpm).
slump with Sika Set 6 cm diametre, hight 12 cm: 280 ± 5 mm, after 3 minutes on a plastic plate

APPLICATION

Pour the mixed material onto the primed surface and apply by trowel or pin screed rake to the required thickness. Roll thoroughly with a spiked roller in two directions to remove any entrapped air. Avoid too fast drying. Protect from solar radiation and draught.

CLEANING OF EQUIPMENT

Clean all tools and application equipment with water immediately after use. Hardened / cured material can only be removed mechanically.

IMPORTANT CONSIDERATIONS

- Do not mix Sika® Level-399 XXL with other binders or mortars.
- Mixing ratio must be observed.
- Binding product must not be diluted.
- Do not use Sika® Level-399 XXL as wearing course.
- Do not use Sika® Level-399 XXL in areas with rising humidity or without steam break.
- Sika® Level-399 XXL is not suitable for application on slopes.
- At the wall-ceiling joint a synthetic edge strip has to be inserted.
- Do not use Sika® Level-399 XXL as bonded screed on mastic asphalt screeds.
- Do not use Sika® Level-399 XXL on outside areas.
- Before application of wearing layer cleaning by grinding ist recommended.

BASIS OF PRODUCT DATA

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for the exact product data and uses.

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.

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.

Sika Services AG
Tüffenwies 16
8048 Zürich
Tel: +41 58 436 4040
www.sika.com

since 1986

since 1997