



KOSTER LevelStrong High Strength SLU

Technical Data Sheet SL 293 022

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High Quality, Self-Leveling, Cementitious Underlayment Intended for Interior Use on Concrete Floors

Features

KOSTER LevelStrong™ High Strength SLU is a high quality, self-leveling, fast setting, cementitious underlayment intended for interior use on concrete floors. It is easy to mix, pour, and spread, producing a smooth, level surface ready to receive flooring systems. It cures crack free in a few hours with high compressive strength. KOSTER LevelStrong™ High Strength SLU may be applied onto a variety of substrates such as concrete, screed, radiant heated floors, and KOSTER VAP I® 2000 moisture control systems. KOSTER LevelStrong™ High Strength SLU accepts all major types of floor coverings and is compatible with most adhesives. It is not intended as a wearing surface.

Technical Data

Working Time:	Approx. 25-30 min at 70°F (ASTM C1708)
Thickness:	1/8 in to 1 1/4 in (neat)
Compressive Strength:	>6000 psi at 28 days (ASTM C109)
Initial Set:	Approx. 30 min (ASTM C191)
Walkable:	Approx. 3-4 hr
Install Flooring:	Approx. 16 hr (depending on temp. and humidity)

Fields of Application

KOSTER LevelStrong™ High Strength SLU is designed for levelling unevenness of plain concrete surfaces as well as surfaces covered with KOSTER VAP I® 2000 moisture control coatings. It is intended for interior use.

Substrate

Substrates to receive KOSTER LevelStrong™ High Strength SLU must be sound, clean, and free of curing compounds, oil, grease, paint, loose particles, or any contaminant that may weaken bond. The tensile pull off strength of the substrate must be at least 200 psi (ASTM C1583). Do not acid etch substrates. Do not clean concrete substrate with chemicals. May be applied over traces of adhesive residue. Do not bridge movement joints with KOSTER LevelStrong™ High Strength SLU. Environmental temperature must be 60 - 90 °F.

For use directly on concrete: Concrete moisture must be less than 90% RH. Test concrete moisture according to ASTM F2170. If concrete moisture exceeds 90% RH, install KOSTER VAP I® 2000 moisture control coating before installing LevelStrong™ High Strength SLU. For direct application to concrete the concrete surface must be absorptive. Dense, hard-troweled concrete, or concrete with residual curing compounds must be mechanically abraded to minimum ICRI CSP3 until water is easily absorbed. Clean the surface thoroughly by sweeping and vacuuming to remove dust. Prime the cleaned concrete

substrate using KOSTER SL Primer. Apply a thin, even coat of primer at 400 - 800 sq ft/gal. Thick application may cause bonding problems. Allow to dry to a translucent green film, usually 30 min to 1 hr at 70 °F and 50% RH. High humidity or low temperature will extend drying time. Keep the primed surface clean until the underlayment is installed. Install KOSTER LevelStrong™ High Strength SLU within 48 hours after primer application.

For use on KOSTER VAP I® 2000 systems: Prime clean, cured KOSTER VAP I® 2000 coating with undiluted KOSTER VAP I® 06 Primer. Apply a thin, even coat at 650-800 sq ft/gal using a short-nap roller. Ensure thin, uniform, complete coverage. Thick applications may cause bonding problems. Allow to dry to a transparent blue film, usually 1 - 2 hr at 70 °F and 50% RH. High humidity or low temperature will extend drying time. DO NOT wear metal spike shoes when walking over hardened KOSTER VAP I® 2000 coating to avoid damage to the coating.

Application

Mixing

Mix TWO bags of KOSTER LevelStrong™ High Strength SLU at a time. Pour 11.0-11.5 quarts (10.4-10.9 L) of clean potable water into a clean mixing vessel (5.5-5.75 quarts water (5.2-5.4 L) for each 50-lb bag). Do not over-water! Add two 50-lb. bags of KOSTER LevelStrong™ High Strength SLU in increments while mixing with an electrical mixer equipped with a suitable helical or egg-beater style mixing paddle at 600 - 700 rpm. After all material has been added into the mixing water, continue mixing for 2-3 minutes. The resulting consistency must be smooth, flowable, and lump free.

Installation

Pour mixed KOSTER LevelStrong™ High Strength SLU onto the floor and spread using a gauge rake. A smoothing tool can be used to blend freshly poured material into adjacent pours. Wear non-metallic cleated shoes, NOT metal spikes, to avoid damage to hardened KOSTER VAP I® 2000 moisture control coating. KOSTER LevelStrong™ High Strength SLU will level itself over 15-20 minutes at 70 °F with no troweling or spike rolling. Protect poured underlayment from excessive heat, cold, premature drying, or freezing. Setting and drying times will be shortened in hot temperatures and extended in cold temperatures.

Coverage

Dependent on application.

3/16-in. (4.8 mm)	33 sq ft
1/4-in. (6.3 mm)	25 sq ft
1/2-in. (13.0 mm)	12 sq ft
3/4-in. (19.0 mm)	8 sq ft
1-in. (25.0 mm)	6.25 sq ft

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 installer is responsible for the correct application taking into consideration the specific conditions of the construction site and 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 deviate from the specifications contained in any Company literature may not be relied upon in the absence of written confirmation from the Company. The installer must comply with all testing, technical requirement, guidelines, and industry customs at all times. The terms, conditions, and limitations contained in the written warranty for the product controls over the specifications contained herein. This guideline has been technically revised; all previous versions are invalid.

Cleaning

Clean mixing equipment thoroughly with water and stiff scrub brush to avoid getting hardened product into subsequent batches. Keep mixing bucket clean.

Storage

Store in a cool, dry place.

Safety

Causes skin irritation. Causes serious eye irritation. May cause serious eye damage. May cause respiratory irritation. Keep out of reach of children. Avoid breathing dust. Wear eye protection/face protection. IF IN EYES: Rinse thoroughly with water for several minutes. Remove contact lenses, if present, and continue rinsing. Seek medical attention. IF INHALED: Remove victim to fresh air, keep at rest, monitor breathing, and seek medical attention. Empty bags can be disposed normally. Dispose left over material in accordance with regulations. Contains: Silica sand CAS No.14808-60-7 (45-65%), Calcium aluminate cement CAS No. 65997-16-2 (8-20%), Portland cement CAS No. 65997-15-1 (3-10%). **SILICA WARNING:** Contains quartz sand (crystalline silica). Excessive exposure to respirable crystalline silica can cause silicosis and may cause other lung disease. Crystalline silica is considered a hazard by inhalation and under IARC is classified in Group 1, carcinogenic to humans. Use engineering controls and work practices such as local exhaust ventilation to avoid exposure and wear a N-95 dust mask while mixing. Consult Safety Data Sheet for further information.

Limited Warranty:

KOSTER warrants that its product shall be in accordance with the specifications published in the current revision of the products data sheet. KOSTER covenants that in the event any of its products fail to meet their published specifications, KOSTER shall replace those products proved to be defective. KOSTER shall not be responsible for any incidental or consequential damages due to the breach of its warranties. Notwithstanding the foregoing, KOSTER's sole liability hereunder shall not exceed the cost of the defective product originally purchased. EXCEPT AS SET FORTH ABOVE, KOSTER MAKES NO OTHER WARRANTIES EXPRESS OR IMPLIED AND MAKES NO WARRANTY AS TO THE MERCHANTABILITY OR FITNESS OF THE PRODUCT FOR A PARTICULAR PURPOSE. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. The user must determine if the product is suited for the intended use and the user must bear the risks and liabilities associated with it.

Related products

KOSTER VAP I 2000 Zero VOC	Art.-Nr. CT 230
KOSTER VAP I 2000 FS	Art.-Nr. CT 233
KOSTER VAP I 2000 UFS	Art.-Nr. CT 234
KOSTER VAP I 2000	Art.-Nr. CT 235
KOSTER VAP I 06 Primer	Art.-Nr. SL 131 009
KOSTER SL Primer	Art.-Nr. SL 189 005
KOSTER SL Premium	Art.-Nr. SL 280 025
KOSTER SC	Art.-Nr. SL 282 022

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