



KOSTER LevelStrong SLU

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

Features

KOSTER LevelStrong™ 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. KOSTER LevelStrong™ SLU may be applied onto a variety of substrates such as concrete, screed, and KOSTER VAP I® 2000 moisture control systems. KOSTER LevelStrong™ 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, up to 5 inches with aggregate
Compressive Strength:	>5500 psi at 28 days (ASTM C109)
Flexural Strength:	>1000 psi at 28 days (ASTM C348)
Weight per bag at 1/4":	Approx. 2.5 lbs/sq ft
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™ 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™ 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™ 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 KOSTER LevelStrong™ 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™ 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 500-600 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™ SLU at a time. Pour 10 quarts (9.5 L) of clean potable water into a clean mixing vessel (5 quarts water (4.7 L) for each 50-lb bag). Do not over-water! Add two 50-lb. bags of KOSTER LevelStrong™ 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 minutes. The resulting consistency must be smooth, flowable, and lump free.

Installation

Pour mixed KOSTER LevelStrong™ 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™ 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.

