



**VEXCON**  
CHEMICALS, INC.

Protecting and improving concrete since 1974

7240 State Road, Philadelphia, PA 19135  
215-332-7709 or 888-839-2661  
Fax: 215-332-9997

vexcon.com

## CERTI-VEX® SLU #500

Self Leveling • Cement Based • Flooring Underlayment

### DESCRIPTION

**CERTI-VEX SLU #500** is a single component, smooth flowing, economic, pumpable, self-leveling, non-structural flooring, underlayment. It is intended for use over precast and cast-in place concrete, sound wooden floors and most non-porous substrates. Floors can be covered with carpet, linoleum, tile, hard wood or polymer coatings. Certi-Vex SLU #500 contains polymer modified Portland cement combined with fine aggregate to produce fast-setting, high-strength characteristics and meets ASTM C 33 standards.

### BENEFITS

- Ready to use with addition of clean water, or may be extended with properly graded sand.
- Economical in place cost
- Applied over concrete and structurally sound wood.
- Highly fluid for pumped or poured application
- Crack and shrink resistant
- Can be featheredged
- Rapid high early strength gain
- Ready for limited foot traffic in 4 hours
- Fast turnaround-ready for surface material in 24 hours
- Maintains workability for over 30 minutes @ 70° F
- Non-gypsum based
- Reduced sound transmission

### IDEAL FOR USE ON

- High rise structures
- Single and multi unit housing
- Office buildings
- Schools and gymnasiums
- Hospitals, nursing homes
- Correctional institutions
- Commercial complexes
- Showrooms

### APPLICATION

Ensure base slab temperature is over 40° F ( 5° C) and ambient temperature will not be below 50° F ( 10° C) during placement and/or before underlayment will take final set. Prime with Starseal Envio Bond. Pour or pump mixed underlayment to desired thickness. Properly mixed underlayment will seek its own level within 15 minutes at 65° F (19° C). A hand spreader or concrete come-along may be used to prompt material around pipes and hard to reach areas. Troweling is not recommended except to featheredge. When pumping, a progressive cavity (rotor stator tube) grout pump is recommended.

### YIELD AND RATE OF APPLICATION

One 50 LB bag of Certi-Vex SLU #500 mixed with 5.5-6 qt. of clean mixing water will yield approximately 55 sq. ft. of mixture at 1/8" in thickness or 23 sq. ft. at 1/4" in thickness (2.1 sq.m at 6.3 mm). Always add powder to the water. For thickness over 1", add equal parts of clean, washed, dry silica sand, preferably 20-30 mesh, per 50 LB bag of Certi-Vex SLU #500.

### TECHNICAL DATA

All data have been derived from tests under laboratory conditions. Field conditions may yield slightly different results.

- Mixing Water (per 50-LB bag): 5.5 - 6 qts.
- Compressive strength (ASTM C 109):
 

1 day	1700 psi (11.7 MPa)
3 days	4,200 psi (28.9 MPa)
7 day	5725 psi (39.5 MPa)
28 day	6800 psi (46.9 MPa)
- Flexural Strength (ASTM C 348):
 

28 day	1050 psi (7.2 MPa)
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- Flowing Time: 15 min
- Working Time 30 min
- Walk on material: after 12-24 hours

### PACKAGING

Certi-Vex SLU #500 is available in 50-pound bags. Contact Vexcon directly to discuss your customized packaging requirements.

### PRECAUTIONS

- DO NOT APPLY Certi-Vex SLU #500 Over fresh, plastic concrete less than 28 days old
- Over structurally unsound concrete or wood substrate
- Do not permit primed surfaces to become wet
- Outdoors
- Where exposed to rain, snow or other wet conditions
- DO NOT USE on floors that will be exposed to acids (or their salts) or other materials or liquids that may seriously and/or rapidly attack Portland cement.
- DO NOT APPLY Certi-Vex SLU #500 if base concrete slab is below 40° F (4.5° C) or when ambient temperature is expected to be below 50° F (10° C) during placement and/or before topping will take final set.
- DO NOT APPLY OVER WOOD OR NON-POROUS SUBSTRATES WITHOUT CONTACTING VEXCON

## **PREPARATION**

Drywall should be in place and taped. Substrate should have reached final cure.

It is suggested that a 10' X 10' (3m X 3m) test application be made. Remove loose, frozen, broken, carbonated concrete. Shotblasting equipment is recommended for achieving mechanical removal of unsound concrete, coatings, curing compounds, sealers, etc.

**CONCRETE SURFACES:** If (or after) substrate is cleaned, the concrete surface must be free of dust and any other matter that may cause loss of bond, cleaning may be achieved with the use of one of Vexcon's cleaners. Joints cracks and drilled or sawed holes should be filled or grouted to prevent seepage of primer and underlayment. Dampen all surfaces, being careful not to allow any standing water to remain.

**NOTE 1:** JOINTS IN SUBSTRATE MUST BE REFLECTED (TOOLED OR SAWED) IN APPLIED UNDERLAYMENT.

**NOTE 2:** Proper bond and preparation are crucial in obtaining a successful underlayment installation. The installing contractor is responsible for ensuring substrate is properly prepared prior to application of Certi-Vex SLU #500. Do not apply over lightweight or gypsum base concrete.

## **SUBSTRATE PRIMING**

**Starseal® Envio Bond** may be applied up to 72 hours before underlayment application. One gallon of bonding agent mixed with one gallon of clean water will cover approximately 350-400 sq. ft. of floor area.

Extremely porous concrete may require two coats of primer mixture or one coat of undiluted primer.

## **MIXING**

Add Certi-Vex SLU #500 to water. DO NOT reverse this process by adding water to material. Do not retemper mix.

**OVER CONCRETE:** Use precisely 5.5 quarts of clean water per 50-LB bag. Water should be approximately 70 ° F.

Maintain mixing water temperature between 50 ° F and 90 ° F. Following directions, mix in mixer/pump or mechanical concrete mixer and blend until mixture is smooth, fluid and free of lumps (approximately 2 minutes). For small jobs, use a stainless steel paddle with a 1/2" min. 400-600 rpm drill mixing to lump free consistency.

For applications over 1/2" in thickness: Add 15 lb. of clean, washed, dry sand per 50-lb. bag. When extending, mix neat as described above. Then, add sand and mix again until smooth and free of lumps.

## **CURING**

Air cure only. Do not apply a sealer or curing compound.

## **SHELF LIFE**

If properly stored in its original packaging, one year from date of manufacture. Rotate your stock.

Proper application of Vexcon material is the responsibility of the installer or user. Telephone consultation and/or field visits by Vexcon personnel are for the sole purpose of making technical recommendations only, and not for providing quality control or supervision on location.

## **CONTACT US @**

Additional product information, technical assistance and customer service are available by contacting Vexcon Chemicals directly or our distributors.

- vexcon.com
- technicalservice@vexcon.com
- customerservice@vexcon.com
- Sales@vexcon.com
- Voice: 888.839.2661
- Fax: 215.332.9997

## **WARRANTY**

Vexcon warrants that the goods supplied hereunder shall be of its standard quality and shall conform in all material respects to the sample which has been made available for testing by buyer prior to sale. As the EXCLUSIVE REMEDY for any breach of this Limited Warranty, Vexcon shall replace nonconforming goods or refund the purchase price. Since methods of use and application are beyond Vexcon's control, this Limited Warranty IS IN LIEU OF ALL OTHER WARRANTIES EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THOSE CONCERNING MERCHANT ABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THIS LIMITED WARRANTY IS ALSO IN LIEU OF ANY OTHER POSSIBLE LIABILITIES OF VEXCON, WHETHER ALLEGED TO ARISE BY AGREEMENT OR BY OPERATION OF LAW, RESPECTING THE SALE, APPLICATION, USE OR FUNCTION OF VEXCON'S PRODUCTS, INCLUDING BUT NOT LIMITED TO CLAIMS OR NEGLIGENCE, GROSS NEGLIGENCE, STRICT LIABILITY OR ANY OTHER TORT. IN NO EVENT SHALL VEXCON BE LIABLE FOR PERSONAL INJURY OR PROPERTY DAMAGE, REAL OR PERSONAL, ATTRIBUTED TO ITS PRODUCTS, NOR FOR ANY EXCAVATION, REMOVAL, REAPPLICATION, DOWN TIMES, CLEANUP, LOSS OF USE, LOSS OF OPPORTUNITY, LOSS OF MARKET VALUE, LOSS OF RENTAL VALUE OR FOR ANY LOSS OF PROFITS OR OTHER SPECIAL, INCIDENTAL, RESULTING, CONSEQUENTIAL OR EXEMPLARY DAMAGES. No person is authorized by Vexcon to assume for it any other liability of any kind in connection with the sale or use of products manufactured and sold by it, and there are no oral agreements or warranties collateral to or affecting any sale or use. All of the foregoing arises under the substantive law of Pennsylvania without regard to principles of conflicts of laws.