



Diamakrete SLU-3

Premium Self-Leveling Underlayment

TECHNICAL DATA SHEET

1. DESCRIPTION

Diamakrete SLU-3 is a cement-based, nonshrinking, self-leveling floor underlayment designed for interior use. This single-component product produces a smooth subfloor that can be feather edged and is compatible with adhesives for carpet and tile. Just mix Diamakrete SLU-3 with water, pour or pump, and it will seek its own level to produce a smooth, flat hard surface.

2. FEATURES/BENEFITS

- Diamakrete SLU-3, when properly mixed, produces a flowable underlayment with a flow time of 20 minutes at 70°F.
- Can be featheredged without fear of chipping or spalling.
- Self-leveling, requiring no troweling
- Can be pumped
- Produces a smooth, blemish-free surface, requiring no grinding or sanding
- Compatible with adhesives for carpet, tile, etc.

3. APPLICATION

Diamakrete SLU-3 can be applied in thicknesses ranging from a feather-edge up to 2". It can be installed up to 5" in thickness with the addition of pea gravel. Diamakrete SLU-3 will develop a superior bond to the substrate and will normally accept foot traffic within 2 to 4 hours depending upon temperature, humidity and other job-site conditions.

PURPOSE: Diamakrete SLU-3 can be used to level or smooth interior floors. It can be used on new construction projects to correct rough, unfinished, or uneven floors.

PREPARATION: To prepare surface, follow all standard ACI recommendations. Remove all dirt, gas, oil, grease, asphalt, paint, curing compounds, and all loose surface materials. Concrete substrates should be profiled to a minimum CSP#3 via shot blasting or diamond grinding.

PRIMING: Prime all surfaces with Diamakrete Primer-3 at approximately 100 - 150 sq. ft. per gallon. Apply with a brush or broom, NOT a roller. Coverage will depend upon the condition and texture of the surface. Very porous surfaces may require two applications of primer. Allow Diamakrete Primer-3 to dry before applying Diamakrete SLU-3.

MIXING: Pour 4 quarts of water into a mixing container, then add one 50 pound bag of Diamakrete SLU-3. With a mixing paddle attached to a heavy duty drill (650 rpm), mix for 2 to 3 minutes until mixture is smooth and free of lumps. For pumping applications, mix for one to two minutes in the pump's mixing tank. Do not over water or retemper. Diamakrete SLU-3 can be extended by adding 25 pounds of clean 3/8" pea gravel for each 50 pounds of product. First mix Diamakrete SLU-3 per earlier instructions. During the last minute of mixing, add the required aggregate. Should a finish coat be required, apply an additional layer of Diamakrete SLU-3 without aggregate. Allow the 1st layer to harden and re-prime the first pour with another layer of Diamakrete Primer-3.

INSTALLATION: Pour Diamakrete SLU-3 over the substrate spreading the material with a gauge rake. Diamakrete SLU-3 can be pumped using an appropriately sized grout pump. For more information on pumps and pumping, please contact Superior Surface Solutions. No troweling is necessary. Diamakrete SLU-3 will level itself during the first 20 minutes at 70°F and will accept foot traffic in 2-4 hours depending upon jobsite conditions. We recommend wearing spiked shoes when installing Diamakrete SLU-3. Under normal conditions, floor coverings can be installed in 16-24 hours, depending upon job site conditions. All flooring adhesives compatible with concrete may be used on Diamakrete SLU-3. Do not install Diamakrete SLU-3

APPLICATION (Continued)

when the average daily temperature is less than 40°F. During hot weather, work quickly and use cold water for mixing, as the average working time will decrease.

DRYING TIME: Diamakrete Primer-3: 3-4 hours at 70°F and 50% relative humidity

4. TYPICAL TEST DATA

Set Time at 70oF (ASTM C266)	
Initial Set	50 min
Final Set	80 min
Compressive Strength (ASTM C109)	
1 day	3000 psi
7 days	4000 psi
28 days	5000 psi
Bond Strength (ASTM C882 modified)	
Prime	1000 psi
Flexural Strength (ASTM C348)	
28 days	1150 psi
Yield/Density	
Yield per bag	.50 cu-ft (125 lbs/cu-ft)

5. APPLICATION- WOOD FLOORS

Diamakrete SLU-3 can be applied over many different types of flooring and subfloor materials such as wood, sound mat, vinyl adhesive, cutback etc. To assure proper adhesion, a field test should be performed to confirm performance. In general, if Diamakrete Primer-3 can achieve proper adhesion without peeling, then a Diamakrete SLU-3 overlay will be acceptable. Proper substrate preparation is essential. Consult Superior Surface Solutions for further information.

SURFACE PREPARATION: Wood subfloors must be solid hardwood flooring a minimum of 3/4" thick. The wood floor must be solid and securely fixed to provide a rigid base that ensures no flexing. Any areas showing any movement must be re-nailed. The wood floor must also be completely clean, free of any wax, dust, grease and any contaminants that could possibly interfere with adhesion.

PRIMING: Wood subfloors also require priming with Diamakrete Primer-3, follow all instructions in regards to priming as stated on the Technical Data Sheet. Porous wood floors may require a second application of Diamakrete Primer-3. Allow the primer to dry between applications. Once the Diamakrete Primer-3 is applied, install galvanized, expanded metal lath mesh, stapling every 6 inches. Overlap adjacent pieces of lath mesh by approximately 1 inch. After the lath mesh is placed, allow the Diamakrete Primer-3 to dry thoroughly. The metal lath can be installed while the primer is drying, however, do not walk or stand on the wet primer. Allow the primer to dry. It is the contractors responsibility to ensure the subfloor is thoroughly clean, rigid and showing no flexibility prior to the application of Diamakrete SLU-3.



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6. LIMITATIONS/PRECAUTIONS

Do not allow uncured Diamakrete SLU-3 to freeze. In adverse temperatures, follow ACI recommendations for hot/ cold weather concreting practices. Use only potable water for mixing.

Diamakrete SLU-3 is adhered with Diamakrete Primer-3, a re-wettable primer. Therefore do not use in areas where frequent water contact or a continuous wet environment exists. Concrete should be free of hydrostatic pressure and vapor transmission rates should comply with finish flooring manufacturers requirements. Concrete should be a minimum 3000 psi.

Minimum surface and ambient temperature of 45°F and rising is required at the time of application. For optimum results, condition material to between 65°F and 85°F.

Caution: Contains Portland cement and sand. Cement will cause irritation. Avoid contact. A dust respirator, safety goggles, and rubber gloves are recommended. Avoid prolonged contact with clothing. In case of contact with eyes, immediately flush with water for at least 15 minutes. Get prompt medical attention. Do not wear contact lenses when working with this product. DO NOT take internally. Keep out of reach of children.

Avoid hazards by following all precautions found in the Safety Data Sheet (SDS), product labels, and technical literature. Please read this information prior to using the product.

7. PACKAGING

50 lb. bag
Coverage: approx. 24 square feet. @ 1/4"

8. CLEAN UP

Tools, pumps, and equipment may be cleaned with water before Diamakrete SLU-3 hardens.

8. SHELF LIFE

Shelf life of unopened bags stored in a dry facility is 12 months. Excessive temperature differential and/or high humidity can shorten the shelf life expectancy. Store in a cool, dry area away from direct sunlight.

9. WARRANTY

NOTICE-READ CAREFULLY CONDITIONS OF SALE

Superior Surface Solutions offers this product for sale subject to and limited by the warranty which may only be varied by written agreement of a duly authorized corporate officer of Superior Surface Solutions. No other representative of or for Superior Surface Solutions is authorized to grant any warranty or to waive limitation of liability set forth below.

WARRANTY LIMITATION

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INHERENT RISK

Purchaser assumes all risk associated with the use or application of the product.

NOTICE TO BUYER: DISCLAIMER OF WARRANTIES AND LIMITATIONS ON OUR LIABILITY

We warrant that our products are manufactured to strict quality assurance specifications and that the information supplied by us is accurate to the best of our knowledge. Such information supplied about our products is not a representation or a warranty. It is supplied on the condition that you shall make your own tests to determine the suitability of our product for your particular purpose. Any use or application other than recommended herein is the sole responsibility of the user. Listed physical properties are typical and should not be construed as specifications. NO WARRANTY IS MADE, EXPRESSED OR IMPLIED, REGARDING SUCH OTHER INFORMATION, THE DATA ON WHICH IT IS BASED, OR THE RESULTS YOU WILL OBTAIN FROM ITS USE. NO WARRANTY IS MADE, EXPRESSED OR IMPLIED, THAT OUR PRODUCT SHALL BE MERCHANTABLE OR THAT OUR PRODUCT SHALL BE FIT FOR ANY PARTICULAR PURPOSE. NO WARRANTY IS MADE THAT THE USE OF SUCH INFORMATION OR OUR PRODUCT WILL NOT INFRINGE UPON ANY PATENT. We shall have no liability for incidental or consequential damages, direct or indirect. Our liability is limited to the net selling price of our product or the replacement of our product, at our option. Acceptance of delivery of our product means that you have accepted the terms of this warranty whether or not purchase orders or other documents state terms that vary from this warranty. No representative is authorized to make any representation or warranty or assume any other liability on our behalf with any sale of our products. Our products contain chemicals that may CAUSE SERIOUS PHYSICAL INJURY. BEFORE USING, READ THE MATERIAL SAFETY DATA SHEET AND FOLLOW ALL PRECAUTIONS TO PREVENT BODILY HARM.