



## SHOCK-CRETE SL/SF

### Catalog Literature

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#### SEMI-SELF LEVELING OR SEEDED WATER DISPENSED POLYURETHANE FLOOR TOPPING, 1/16"– 3/16" (1/6 mm-4.8 mm)

##### FEATURES

Thermal Shock Resistant  
Excellent Chemical Resistance  
Low Odor  
Fast Setting  
Low Temperature Cure  
USDA Compliant  
100% Reactive  
Inhibits Bacteria & Fungus Growth  
Anti-Skid Version Available  
Coefficient of Thermal Expansion  
Similar to Concrete  
VOC Compliant

##### RECOMMENDED APPLICATIONS

General Concrete Restoration  
Breweries and Beverage Plants  
Automotive Aisleways  
Food Processing Plants  
Meat Packaging Plants  
Loading Ramps  
Packing Plants  
Machine Shops  
Laboratories

##### CHEMICAL RESISTANCE

Organic Acids  
Dilute Inorganic Acids  
Alkali Solutions  
Salts  
Oils  
Aliphatic Solvents

##### TEMPERATURE LIMITS

-120°F to 200°F  
100°F – Continuous Chemical Exposure  
200°F – Occasional Steam Cleaning

**COLORS:** Red and Grey  
Consult Dudick, Inc. for additional colors.

##### PHYSICAL PROPERTIES

Coefficient of Thermal Expansion	1.1 x 10 <sup>-5</sup>
ASTM C-531	
Compressive Strength	7,300 PSI
ASTM C-579	
Modulus of Elasticity	1.7 x 10 <sup>5</sup> PSI
ASTM C-579	
Tensile Strength	825 PSI
ASTM C-307	
Flexural Strength	1,800 PSI
ASTM C-580	
Taber Abrasion	70 mg
ASTM D-4060	
Tensile Bond Strength	Cohesive failure of Concrete
ASTM D-4541	
Density	125lb/cu.ft.

##### SPECIFICATIONS

**Shock-Crete SL** shall be a 1/16" – 3/16" thick, semi-self-leveling, aggregate filled, polyurethane floor topping. **Shock-Crete SF** shall be a 1/16"-3/16" thick seeded polyurethane floor topping.

Both products are manufactured by Dudick, Inc. and applied in accordance with the manufacturer's recommendations.

**SHOCK-CRETE SL/SF SYSTEMS**

The Shock-Crete SL/SF systems can only be applied to concrete or a previous layer of Shock-Crete, Shock-Crete SL or Shock-Crete SF. It will not bond to epoxy or other polymer systems.

**THE SHOCK-CRETE SL SYSTEM**

**Fill Coat (Optional):** The fill coat must be applied prior to the top coat to fill the surface profile and create a relatively smooth surface.

**Topcoat:** The aggregate filled Shock-Crete SL system develops a cure strength approximately 2 times that of the concrete base to which it is applied. The monolithic topping exhibits excellent physical and mechanical strength and chemical resistance.

**THE SHOCK-CRETE SF SYSTEM**

**Fill Coat:** Same as for Shock-Crete SL

**Topcoat:** Same as for Shock-Crete SL

**Broadcast:** Sand or aluminum oxide is used for anti-skid texture. Aluminum oxide provides additional chemical and abrasion resistance.

**Sealer (Optional):** If the broadcast surface requires encapsulation, it can be sealed with Shock-Crete SL/SF Clear Sealer. Refer to separate product bulletin.

**SHOCK-CRETE SL/SF and FILL COAT PACKAGING**

- Component A 8 lbs.
- Component B 7 lbs. 5 oz.
- Aggregate 40 lbs.

**ESTIMATING QUANTITIES AND ORDER BILL OF MATERIAL**

SQUARE FEET PER UNIT	
SHOCK-CRETE SL	
Fill Coat	75-80 @ 1/16"
Topcoat	40-45 @ 1/8"
Topcoat	30-35 @ 3/16"
SHOCK-CRETE SF	
Topcoat	50 @ 1/8"
20/40 Mesh Sand	1-1 ½ lbs.
Aluminum Oxide	2-2 ½ lbs.
Shock-Crete SL/SF Sealer	150ft. <sup>2</sup> / Gallon

Quantities shown are for estimating purposes only. Actual field usage may vary.

**APPLICATION INSTRUCTIONS**

**SURFACE PREPARATION**

**Concrete:** Concrete must be prepared mechanically to remove surface laitance. Oils, grease or other contaminant must be removed prior to surface preparation. Concrete must be free of curing compounds and form release agents. Surface texture should be similar to 60-80 grit sandpaper or the visual standard, CSP-3 from the International Concrete Repair Institute. The prepared surface should have a nominal tensile strength of 225 PSI per ASTM D-4541.

All concrete substrates must be checked for moisture prior to product application using the Plastic Sheet Test, ASTM D-4263.

Additional surface preparation will be required if a 60-80 grit texture is not achieved and the surface laitance not completely removed with the first mechanical preparation procedure.

## APPLICATION SPECIFICATIONS

Temperature of concrete substrate must be between 41°F and 90°F.

Relative humidity must not exceed 90%.

Substrate temperature must be 5°F above the Dew Point.

Application of **Shock-Crete SL/SF** in direct sunlight may lead to blistering, pinholes, or wrinkling due to outgassing of air in the concrete and high substrate temperatures. Shading or evening application may be required. Consult a Dudick representative.

POT LIFE AND CURE TIME			
	Pot Life	Working Time	Cure Time
50°F	20'	20'	12-16 Hrs
70°F	15'	10'	6-8 Hrs
90°F	8-9'	7'	3-4 Hrs

Do not attempt to store mixed material. Residual material should be properly disposed of at the end of each work period.

**Recoat Time:** Material must be abraded prior to recoating with **Shock-Crete SL** if it has set longer than 48 hours.

## INSTALLATION SPECIFICATIONS

### MIXING EQUIPMENT

**When deciding on mixing equipment, keep in mind that Shock-Crete SL has a 10 minute working time at 70°F.**

A 10-15 gallon rotating drum container is recommended. It is portable and easy to clean. The stationary mixing paddle provides both radial and axial action, scraping both the side and bottom of the container a mortar mixer can be used as long as it contains blades for uniform mixing.

## SHOCK-CRETE SL INSTALLATION

**Mixing Sequence: Component A** should be thoroughly mixed to redisperse any pigments or fillers that may have settled prior to adding **Component B**. Add the premeasured **Component A** to the mixer followed by the addition of the premeasured **Component B** and mix for one minute. Slowly add the aggregate and continue mixing until all of the aggregate has been totally wetted. **DO NOT REDUCE AGGREGATE. MIX FULL UNITS.**

### APPLICATION

**Fill Coat (Optional):** The mixed material is poured onto the floor and spread with a squeegee or steel trowel tightly to fill and cover the concrete surface profile

**The Fill Coat must cure for 24 hours before Topcoat application.**

**Topcoat:** Set the gauge rake to the desired thickness, then pour the mixed material and spread

to the recommended thickness. After spreading the material roll with a spike roller to level and deaerate. **Timing of batches is important so as to avoid cold joints in the floor.**

## SHOCK-CRETE SF INSTALLATION

Use the same mixing sequence, full-coat and topcoat application as for **Shock-Crete SL** and broadcast either 20-40 mesh sand or aluminum oxide into the wet topcoat to complete saturation and allow to cure overnight. Once cured, remove excess sand or aluminum oxide with a broom or leg vacuuming.

**Sealer (Optional):** Use **Shock-Crete SL/SF Sealer** when required.

### CLEANING

Use **S-10 Cleaning Solvent, MEK or Acetone** to clean tools and equipment.

## SHIPPING

Refer to Material Safety Data Sheets.

## STORAGE

**Warning:** All Dudick products classified by DOT with either white, yellow or red labels must not be mixed or stored together as an explosive reaction may occur.

Store all products in a cool, dry area away from open flames, sparks or other hazards.

When stored in their original, unopened containers at 50°F-75°F, **Shock-Crete SL/SF** components have a 12-month shelf life. Storage in direct sunlight or excessive heat will reduce working time and shelf life.

## SAFETY

**M.S.D.S: Material Safety Data Sheets must always be read before using products.** **Shock – Crete SL/SF** toppings are intended for application by experienced, professional personnel. Dudick, Inc. can supply supervision to help determine that the surface has been properly prepared, the ingredients correctly mixed, and the materials properly and safely applied. If **Shock-Crete SL/SF** toppings are to be applied by your own personnel or by a third party contractor, please be sure that they are aware of the following safety precautions:

- Fumes are flammable and heavier than air. Proper ventilation should be maintained to minimize breathing of concentrated fumes.
- Suitable respirators should be used during application.
- Safety glasses, gloves, and suitable protective clothing must be worn at all times during application.
- If contact with hardeners occurs, flush the skin with flowing water. **Shock-Crete SL/SF** liquid can be removed with **S-10 Cleaning**

**Solvent, Acetone, MEK, or lacquer thinner.**

- Keep open flames and sparks away from the area where materials are being mixed and applied.
- If a rash occurs, remove the individual from the work area and seek a physician's care for dermatitis.
- In case of eye contact, flush with water for at least 15 minutes and consult a physician.
- If swallowed, do not induce vomiting; call a physician immediately.
- Exposure to resins and hardeners through direct skin contact and/or inhalation may cause severe dermatitis reactions in some people.

**NOTE:** Dudick, Inc. ("Dudick") warrants all goods of its manufacture to be as represented in its catalogs and that the application of its products by its employees or sub-contractors shall be performed in a workmanlike manner. Dudick's obligation under this warranty shall be the repair to and replacement of any applications which its examination shall disclose to be defective. Dudick makes no warranty concerning the suitability of its product for application to any surface, it being understood that the goods have been selected and the application ordered by the purchaser. DUDICK, INC. MAKES NO WARRANTY, EXPRESS OR IMPLIED, THAT THE GOODS SHALL BE MERCHANTABLE OR THAT THE GOODS ARE FIT FOR ANY PARTICULAR PURPOSE. THE WARRANTY OF REPAIR OR REPLACEMENT SET FORTH HEREIN IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES ARISING BY LAW OR OTHERWISE; AND DUDICK, INC. SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO LOST PROFITS, DOWN TIME, DAMAGES TO PROPERTY OF THE PURCHASER OR OTHER PERSONS, OR DAMAGES FOR

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