

BIOCEM SLF

URETHANE CEMENT DECORATIVE FLAKE SYSTEM

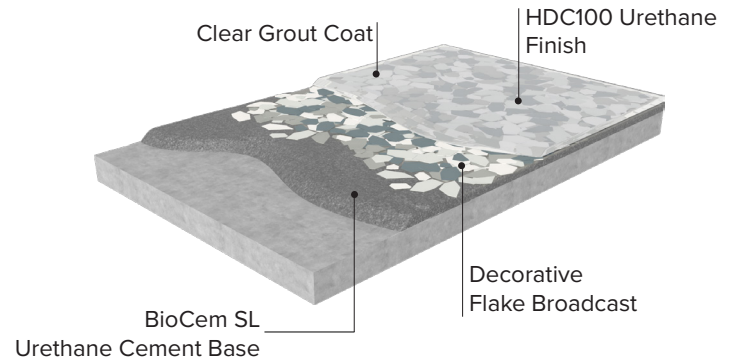
BioCem SLF is a hybrid Urethane Cement / Decorative Flake broadcast system engineered for applications requiring a self-leveling base coat. This system incorporates a 1/8" polyurethane concrete slurry primer, followed by a decorative flake broadcast. The SLF system is grouted with a water-clear and chemical resistant 100% solids epoxy and finished with an aggregate fortified high-wear urethane in either a semigloss or satin finish. Available in an unlimited number of colors and blends, this system can be modified to accommodate varying substrate conditions, installation time-frames, and coefficient of friction (traction) requirements. All materials incorporated within the finished system are 3rd party tested to ensure no harmful VOC or chemical emissions as per the California Department of Public Health CDPH/EHLB/Standard Method Version 1.2, 2017.

Applications

- Veterinary Clinics
- Education
- Healthcare
- Grocery Stores
- Kitchens

Features:

- Resistant to high moisture
- Anti-Microbial
- No harmful emissions
- Superior abrasion resistance
- High Impact Resistance



Colors & Finishes

Available in 16 standard Resinwerks Flake blends with custom colors available to match any environment. The system is available with a semi-gloss or satin finish.

System Components

- 1. Base Coat:** BioCem™ SL Urethane Cement is applied at 1/8". Kit components include 1-gallon of part A, 1-gallon of part B and One 42-lb. filler. Pigment may be added at a rate of 1 pigment pack per kit. Broadcast decorative flake to rejection.
- 2. Grout Coat:** LevelGuard Clear 100% Solids cycloaliphatic epoxy OR Kinetic™ HS or 85 Polyaspartic. Depending on desired texture, the grout coat may be sanded or applied in 2-lifts for a smoother finish.
- 3. Top Coat:** HDC 100 High Traffic Urethane is a durable high-traffic urethane that is fortified with silver-ion anti-microbial pigments. Recommended satin, textured finish.

SURFACE PREPARATION

Ensure substrate to be coated is clean, dry, and in sound condition. All laitance, curing compounds, concrete hardeners, and other surface contaminants must be removed. Prepare concrete in accordance with ASTM D 4259-83. Mechanical Shot Blasting is recommended to achieve a surface profile of ICRI CSP 3-4. Surface to be coated must be completely porous, thoroughly vacuumed, and free of excessive dust & contaminants.

MOISTURE IN CONCRETE

Concrete slabs should be tested prior to application for elevated moisture vapor emission levels. Resinwerks recommends ASTM F2170-19 standard for determining relative humidity in concrete slabs using RH probes. Moisture level results will determine recommended mil thickness for application.

GENERAL SYSTEM PERFORMANCE - SC-100

| TEST TYPE | | RESULT |
|--------------------------------------|------------|----------------------------|
| Compressive Strength | ASTMC 695 | 10,500 PSI |
| Water Absorption | ASTMD 570 | < .1% |
| Impact Resistance | ASTMD 2794 | > 160 |
| Adhesion Pull-Off | ASTMD-4541 | +500 PSI concrete fracture |
| Elongation / Tensile | ASTMD 638 | 2500 psi |
| Flexibility 1/4" cylindrical mandrel | ASTMD 5221 | Pass |
| Hardness / Shore D | ASTMD 2240 | 92 |
| Abrasion Resistance | ASTMD 4060 | 16 mg Loss |

For Professional Use Only

Please reference all product Technical Data and Material Safety Data Sheets prior to use. Mock-ups are strongly recommended to validate appearance and performance prior to use.

BioCem SLF

DE-GREASING OF CONTAMINATED SUBSTRATES

For concrete substrates containing oil or other carbon based contaminants, slabs should be de-greased appropriately using an enzymatic based concrete de-greasing agent. Multiple applications may be required depending on the level of contamination.

TREATMENT OF JOINTS & CRACKS

Prior to installation of any Resinwerks primer, all joints, cracks and other substrate irregularities must be addressed. For more information on specific joint treatment procedures, please reference Resinwerks joint-treatment guidelines.

COVE BASE

For projects requiring a perimeter vertical cove base, please reference Resinwerks cove base installation guidelines or contact your local Resinwerks representative for more information.

COATING APPLICATION

1. Primer: BioCem™ SL Urethane Cement

- **Mixing:** Review BioCem™ SL Product Data Sheet Prior to mixing. Prior to mixing, all products should be properly acclimated to the local ambient room temperature of 50°F(4.4°C)-80°F(29.4°C).
- Pour 1-gal A into a large mixing vessel or hippo mixer. Add pigment and mix for 15-seconds with a slow speed mixing drill. Add 1-gallon Part B and mix for an additional 15-seconds. Slowly add entire contents of 40 lb bag of SL filler to mix. Take special care not to introduce air or create a vortex. Mix for approximately 45-60 seconds or until materials are properly mixed.
- **Application:** Immediately following mixing, spread material with a gauge rake at 1/8" thickness. Lay abutting edges within a minimum of 10-minutes to ensure a uniform transition. by volume for 2-3 minutes using a slow speed jiffy mixer.

2(a). Grout Coat Option 1: LevelGuard™ Clear

- **Mixing:** Thoroughly agitate part A prior to mixing. Mix 2-parts A to 1-Part B by volume for 2-3 minutes using a slow speed jiffy mixer. Make certain that material is properly mixed. Only mix in metal buckets as left-over material can become hot and will melt a plastic bucket. After mixing, get the material out of the bucket and apply material as soon as possible to avoid issues.
- **Application:** Immediately following mixing, pour Vapor Barrier Epoxy onto substrate in a uniform ribbon and spread evenly with a notched squeegee. Apply at a recommended coverage rate of 20-mils or 80 SF/gallon. Immediately back-roll with a non-shedding roller. Use a brush or small roller to cut-in along perimeter walls or any other obstructions.
- For a smoother finish, a second grout coat may be applied to the surface for a smoother finish. The floor may also be

Important:

Inhalation of vapor or mist can cause headache, nausea irritation of nose, throat, and lungs. Avoid breathing vapors, it is strongly recommended that respirators are worn. Prolonged or repeated skin contact can cause slight skin irritation. All epoxies have the potential of causing skin irritations or allergic reactions. Be careful not to get on skin, clothes or in eyes. Gloves are strongly recommended. If splashed in the eye, flush with warm water and contact a physician if blurring persists.

Solvent based products are extremely flammable, extinguish all pilot lights and sources of ignition such as electrical motors. Be sure to have adequate cross ventilation prior to installing.

Resinwerks recommends the use of slip-resistant additives in all coating systems that are subject to heavy foot traffic and especially those within wet or oily environments It is the end-user's responsibility to provide flooring that meets current safety standards and local coefficient of friction requirements. Resinwerks nor any of its distributors are responsible for injury resulting from any slip and fall incident.

Urethane Cement Decorative Flake System

sanded and solvent wiped prior to final topcoat depending on desired final texture.

2(b). Grout Coat Option 2: Kinetic™ HS or 85 Polyaspartic

- **Mixing:** Thoroughly agitate part A prior to mixing. Mix 1-part A to 1-Part B by volume for two minutes using a slow speed jiffy mixer.
- **Application:** Immediately following mixing, pour onto substrate in a uniform ribbon and spread evenly with a notched squeegee. Standard recommended coverage is 150 SF per gallon. Immediately back-roll with a non-shedding roller. Use a brush or small roller to cut-in along perimeter walls or any other obstructions.

3. Top Coat:

- HDC 100 Urethane:
- **Mixing:** Mix complete kit for two minutes using a slow speed jiffy mixer. While mixing pour complete contents of HDC 100 aggregate into mix, taking care to properly suspend all aggregates. For satin finish, thoroughly agitate part B as matting agents may settle over time.
- **Application:** HDC 100 should be applied at about 3-4 mils DFT with a coverage rate of approximately 550 square feet per pigmented kit by pan rolling with a 3/8 nap roller. For proper appearance, dip the roller in the coating and lightly roll out excess in the application tray. Take care to spread the material evenly and immediately back-roll in a perpendicular fashion. Frequently agitate material in both the pan and mixing vessel during application process to keep aggregates properly suspended.



www.resinwerks.com

(720) 484-5160
7205 Gilpin Way, Suite #200
Denver, CO 80229