### SYSTEM GUIDE

# BIOCEM<sup>™</sup> URETHANE CEMENT

## FLOORING SYSTEMS









## BIOCEM<sup>™</sup> URETHANE CEMENT

BioCem<sup>™</sup> is a complete line of heavy-duty, thermal shock and chemical resistant urethane cement flooring systems engineered for the most demanding environments. Ideal for food & beverage as well as industrial applications, Bio-Cem<sup>™</sup> polyurethane concrete utilizes the very latest in green-friendly polyurethane and anti-microbial technology.

Bio-Cem<sup>™</sup> is engineered for fast-turn around and may be fortified with antimicrobial silver-ion pigments to help inhibit microbial growth. All systems are compliant with the California Department of Public Health standard method V1.2 and is eligible for LEED credits as per USGBC LEED Version 4/4.1.

Available in multiple versions with available perimeter cove base, slope & patch, and topcoat systems. Bio-Cem<sup>™</sup> forms a seamless impermeable surface that is completely resistant to water as well as a range of harsh chemicals.

#### APPLICATIONS:

- » Breweries
- » Commercial Kitchens
- » Hospital & University Food Preparation Areas
- » Heavy Industrial
- » Food & Beverage Manufacturing

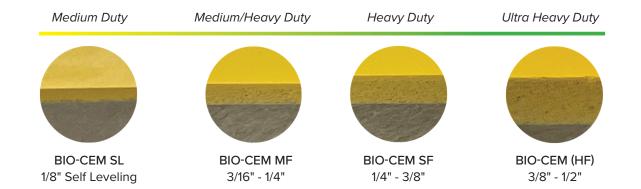


# **FLOORING DESIGN**

Biocem<sup>™</sup> Polyurethane Concrete systems may be constructed in several ways to suit the needs of the application. Applied anywhere from 1/8" to 1/2", these seamless flooring applications may also incorporate an integral perimeter cove base that can be troweled up vertical surfaces, leaving a continuous horizontal to vertical transition.

From completely smooth to highly textured, surfaces may be customized to meet facility coefficient of friction requirements and maintain compliance with municipal regulation Systems may be top-coated with the Bio-Cem<sup>™</sup> Urethane Cement topcoat, Kinetic HS Polyaspartic, or Acid-resistant Novolac Epoxy.





A medium duty, self-leveling polyurethane concrete application that is applied at a thickness of 3/16" and may be broadcast into and top-coated to achieve any number of desired finishes. It withstands moderate thermal shock and provides resistance to impact, and chemical attack.

#### BIOCEM<sup>™</sup> SLB:

**BIOCEM<sup>™</sup> SL** 

BioCem SLB is a self-leveling polyurethane cement application that will achieve a thickness of 3/16". It consists of a base-coat of BioCem™ SL at 1/8" that is broadcast to rejection with specialized quartz aggregate. Once cured, the application is top-coated with either a high-performance BioCem™ TC urethane cement topcoat. UV stable Kinetic™ HS polyaspartic or Chemical Resistant Novolac Epoxy to achieve a thickness of 3/16". SLB provides a lightly textured surface ideal for medium duty applications.

#### BIOCEM<sup>™</sup> SL SMOOTH:

BioCem SL-Smooth is a polyurethane cement application that features a smooth, self-leveling finish. With a finished thickness of 1/8", SL-Smooth consists of a primer of BioCem™ TC followed by an application of BioCem™ SL at 1/8". It provides an ultrasmooth surface ideal for medium duty applications subjected to cart traffic or applications requiring frequent maintenance.

#### BIOCEM<sup>™</sup> SLF:

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.

#### BIOCEM<sup>™</sup> SLQ:

BioCem SLQ is an hybrid decorative quartz flooring application. This system in¬corporates a 1/8" polyurethane concrete slurry primer, followed by a double broadcast quartz. The SLQ system is grouted with a water-clear and chemical resistant 100% solids epoxy or polyaspartic 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 timeframes, and coefficient of friction (traction) requirements.

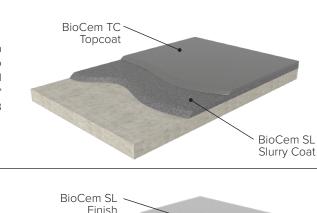
Urethane Topcoat Broadcast Clear Grout Cement SL Base Coat

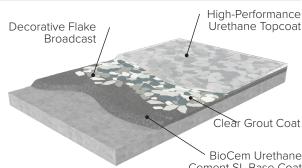
Double Quartz



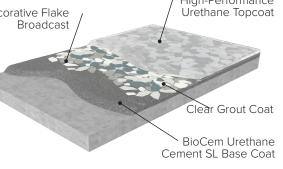
High-Performance

**BioCem TC** Primer











BIOCEM<sup>™</sup> MF BioCem<sup>™</sup> Mono-Floor Slurry (MF) is a heavy-duty monolithic polyurethane concrete application that is applied at a thickness of 3/16" and may be broadcast with sand up to a final thickness of 1/4". Offering superior resistance to impact, thermal shock, and moisture vapor emissions, BioCem MF may be installed with either a BloCem TC topcoat, UV stable Kinetic polyaspartic topcoat or chemical resistant Novolac Epoxy topcoat.

MF is an ideal selection for environments experiencing heavy traffic, and frequent hot water wash downs. Common applications include Food & Beverage Manufacturing, Breweries, and Commercial Kitchens. BioCem MF offers a lightly textured, non-slip surface that is completely seamless and will not break down due to exposure to oleic acids generated from enzymatic cleaners.

# Topcoat Base/Broadcast Coat

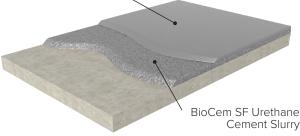


System Name	Thickness	Performance	Applications	Kit Packaging	Kit Coverage	ADA, USDA, FDA, CFIA and OSHA Compliant	Polyaspartic Topcoat Available?
BioCem SLB	1/8" - 3/16"	Medium Duty	Kitchens, Bars, Warehouses, Refrigeration Facilities	2-Gal A/B; filler: 42 lb.	52ft <sup>2</sup>	Yes	Yes
BioCem SL-Smooth	1/8"	Medium Duty	Bakeries, Food Prep Areas, Packaging	2-Gal A/B; filler: 42 lb.	52ft <sup>2</sup>	yes	yes
BioCem SLF	1/8" - 3/16"	Light to Medium Duty	Locker Rooms, Animal Facilities, Manufacturing Areas	Hybrid UC +Epoxy Urethane	52ft <sup>2</sup>	Yes	Yes
BioCem SLQ	1/8" - 3/16"	Medium Duty	Animal Facilities, High- Traffic Walk-Ways, Manufacturing	Hybrid UC +Epoxy Urethane	52ft <sup>2</sup>	Yes	Yes
BioCem MF	1/4"	Medium to Heavy Duty	Commercial Food Manufacturing, Breweries & Distilleries	2-Gal A/B; Filler: 52lb.	42ft <sup>2</sup>	Yes	Yes
BioCem SF	1/4" - 3/16"	Heavy-Duty	Breweries, Pharmaceutical, Food Manufacturing	2-Gal A/B; Filler: 2 x 30lb.	46ft <sup>2</sup>	Yes	Yes
BioCem HF	1/4" - 1/2"	Ultra Heavy-Duty	Meat Processing facilities, Bottling Facilities, Food Manufacturing	2-Gal A/B; Filler: 2 x 52lb.	44ft <sup>2</sup>	Yes	

BioCem SF is a slurry applied polyurethane concrete designed for heavyduty applications. SF is installed at a thickness of 3/16" and broadcasted to a final thickness of 1/2". This environmentally friendly formulation incorporates plant-based raw materials with low-odor and minimal VOCs.

BioCem SF is suitable for environments experiencing significant levels of thermal shock, impact and chemical attack. BioCem SF provides for a lightly textured surface that is resistant to fungi growth as per ASTM Standard G-21.







**BIOCEM<sup>™</sup> SF** 





# **BIOCEM<sup>™</sup> HF**

BioCem<sup>™</sup> HF is a trowel applied monolithic polyurethane concrete designed for ultra-heavy-duty applications experiencing significant levels of thermal shock. HF is commonly installed at a thickness ranging from 1/4" to 1/2" and in some cases thicker depending on thermal shock requirements and traffic severity of the application.

HF floors are exceptionally tough and have many physical properties that exceed those of typical concrete. The finished system is self-sealing and exhibits a textured finish. Floors may be broadcasted with industrial quartz for enhanced texture. The finished surface is resistant to fungi growth as per ASTM Standard G-21.

BioCem HF Self-Sealing Urethane Mortar







#### **ABOUT US**

Resinwerks manufactures sustainable industrial coatings that offer superior performance, quality and value. Supported by a team of veteran resinous flooring professionals, we are committed to delivering the very best products to facility owners and our trusted contractor partners. Our products are manufactured domestically and conveniently shipped direct.

#### SUSTAINABLE PRODUCTS

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Our product line was designed from the ground up to focus on the latest in environmentally conscious resins and additives. In addition, we have largely substituted water for harsh solvents, making our products safer to use and better for our environment. For our clients this means less hazardous emissions and superior long-term performance.

#### SAMPLES, ARCHITECTURAL SUBMITTALS AND OTHER INQUIRIES

Resinwerks is pleased to offer finished completed samples free of charge to existing clients, architects and facility owners/managers. For assistance specifying the correct system for your next project, please contact us at (720) 484-5160 or email us at info@resinwerks.com.

Midwest Manufacturing as well as East Coast and West Coast Distribution Centers for Convenient 1-2 Day shipping Nationwide

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