

BIO-CEM™ ACCUGRADE

POLYURETHANE CONCRETE

TECHNICAL DATA SHEET



SKU: 250-ACCU

BIO-CEM ACCUGRADE is a specially modified polyurethane concrete mortar designed for use as a sloping and patch material for industrial flooring applications. This unique formulation allows for thicker applications ranging from 1/2" to 3" without blistering or cracking. AccuGrade is extremely durable and able to withstand heavy impact, thermal shock and chemical attack. It may be top-coated with any Bio-Cem Urethane Cement or other Resinwerks flooring system to create a seamless and sanitary finish.

USES:

- » Food Manufacturing
- » Bottling Lines
- » Industrial manufacturing
- » Pharmaceutical Facilities
- » Meat Processing
- » Anti-Slip flooring (meets ADA recommendations)

ADVANTAGES:

- » Thermal shock resistant
- » High impact & abrasion resistance
- » Fast return to service
- » Seamless, hygienic finish
- » MVER resistant
- » Low voc, low odor

PACKAGING & SHELF-LIFE

6 cubic foot kit

- » Mix as single kit
- » 5 lbs Part A, 5 lbs Part B, 30 lb part C filler, 40 lb industrial sand
- » *Note: Liquids are different from standard Bio-Cem liquids.
- » Powder pigment (optional)

Shelf-Life:

- » 6-months factory sealed and stored at room temperature.

SUGGESTED APPLICATION:

- » Apply as a patch material over badly damaged substrates
- » Use to slope areas up to 3" thick
- » Trowel or screed applied

ANCILLARY PRODUCTS:

- » Bio-Cem™ AccuGrade may be top-coated with either Bio-Cem polyurethane concrete or other Resinwerks™ coating systems.
- » Industrial sand not included in kit

MATERIAL COVERAGE

PER UNIT	THICKNESS
0.6 Cubic Feet	1/2" to 3"

GENERAL PRODUCT INFORMATION

Colors:	neutral grey
V.O.C.:	5 g/L
Pot-life:	15-20 Minutes @ 72° F
Mix-Ratio:	Mix Full Kit
Cure Schedule:	72° F @ 50% R.H.
To re-coat:	8-12 Hours Minimum 24-Hours Maximum
Light Traffic:	12-Hours
Heavy Traffic:	24-Hours
Clean-up:	Acetone / MEK
Application Temp:	40°F(4.4°C) - 85°F(29.4°C)
Environment:	For Interior Use

GENERAL PRODUCT PERFORMANCE

TEST TYPE	TEST METHOD	RESULT
Service Temperature		-50°F - 200°F
Tensile Strength	ASTM C-307	980 psi
Flammability	ASTM D 635	Self extinguishing
Impact Resistance	ASTM D 4226	> 160 lb
Compressive Strength	ASTMC-579	7,500 PSI
Flexural Strength	ASTM C-580	1900 PSI
Adhesion	ASTMD-4541	500+ PSI concrete fracture
Coefficient of Friction	ASTM-D 2047	>0.6 / pass
Resistance to Fungi Growth	ASTM G-21	1-pass

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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. Concrete must have a minimum surface tensile strength of 300 PSI per ASTM D-4541. Prepare concrete in accordance with ASTM D 4259-83. Mechanical shot blasting or grinding is recommended to achieve a surface profile of ICRI CSP 3-5. Surface to be coated must be completely porous and free of excessive dust & contaminants.

NEW CONCRETE

BioCem AccuGrade can be installed on new concrete greater than 7-days old provided it has reached a minimum of 3,500 PSI to allow for proper surface preparation. Shrinkage or cracking in new slabs may telegraph through final finish.

DE-GREASING OF CONTAMINATED SUBSTRATES

Bio-Cem™ polyurethane concrete should not be applied over contaminated surfaces. All dust and remaining contaminants should be completely removed prior to coating.

TREATMENT OF JOINTS & CRACKS

Prior to installation of Bio-Cem polyurethane concrete, all joints, cracks and other substrate irregularities must be addressed and prepared prior to application. Keyways must be cut at all terminations, joints and drains to a minimum width and depth of 5/16". This is critical to prevent future delaminations. For more information, please consult Resinwerks technical construction drawings.

MIXING INSTRUCTIONS: PROFESSIONAL USE ONLY

- » Prior to mixing, all products should be properly acclimated to the local ambient room temperature of 40°F(4.4°C) - 85°F(29.4°C)
- » It is very important to use a proper electric forced circulation mixing pail and paddle. Avoid the incorporation of excessive air into the mix.
- » Pour pre-mixed part A into a forced circulation mixing pail Mix for 15-seconds.
- » Add pre-mixed part B and mix for an additional 15-seconds
- » Slowly add entire contents of filler to mix. Take special care not to introduce air or create a vortex. Mix for approximately 2-minutes until materials are properly wetted out.
- » Add the 40 lbs of sand to the mix until completely mixed. Sand load rates may vary depending on installer preference.

APPLICATION INSTRUCTIONS

- » Immediately following mixing, spread material with a steel hand trowel or screed onto the floor at a thickness that is

slightly thicker than desired final thickness.

- » Lightly trowel with a steel hand trowel, with all finish trowel strokes in the same direction.
- » Take care not to overwork the mortar.
- » Lay abutting edges within a minimum of 10-minutes to ensure a uniform transition.

LIMITATIONS

- » Do not apply over existing coatings / sealers
- » Do not apply to concrete < 3500 PSI compression strength
- » This product is not recommended for immersion service.
- » Product is not color stable and should be top-coated
- » Do not install on wet concrete
- » Do not apply this product at ambient or floor temperatures below 40°F or over 85°F or if the relative ambient humidity is above 90%.

MAINTENANCE

The long-term performance, appearance, and life expectancy of wear surface products are dependent on an adequate routine maintenance program designed specifically for the installed wear surface. Resinous floor coating systems are nonporous, causing dirt and contaminants to remain on the surface. Recommended maintenance programs consist of frequent and thorough cleaning utilizing a neutral PH cleaner. The frequency of washing will vary depending on floor usage type, traffic and age. Please contact your local Resinwerks technical representative for more information.

NOTES

Thoroughly read all Material Safety Data Sheets prior to use and maintain copies on job-site at all times.

Mock-ups and field test areas are strongly recommended in order to validate performance and appearance related characteristics (including but not limited to color, inherent surface variations, wear, anti dusting, abrasion resistance, chemical resistance, stain resistance, coefficient of friction, etc.) to ensure system performance as specified for the intended use, and to determine approval of the coating system.

Variability in job site conditions (including but not limited to surface preparation, sunlight, humidity, dew point, temperature, etc.) during application of Urethane products may lead to fish-eyes, blistering, pinholes, wrinkling, or out-gassing of air in the concrete and are not product defects.

TECHNICAL ASSISTANCE

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