CROSSFIELD PRODUCTS CORP.

TECHNICAL DATA

CPC URETHANE CEMENT FINE

PRODUCT DESCRIPTION

CPC URETHANE CEMENT FINE is a self-leveling urethane cement slurry base coat with a finer grade aggregate, designed for smooth monolithic applications at 1/8-inch thickness

CPC URETHANE CEMENT FINE is used to produce a smooth, single or multiple-coat finish, or used as a broadcast base for a variety of non-slip finishes.

CPC URETHANE CEMENT FINE is a fast curing, low odor, and moisture tolerant coating. It is resistant to a wide range of common process chemicals[1]. It meets the FDA/USDA/CFIA Food Code requirements for food & beverage manufacturing. It naturally resists bacterial, mold and fungus growth.

CPC URETHANE CEMENT FINE is CDPH 1350 approved for VOC emissions indoors.

CPC URETHANE CEMENT FINE may be applied with a variety of aggregates to create any range of slip resistance and compliance.

CPC URETHANE CEMENT FINE is available in factory tinted gray.

PRODUCT FEATURES

- Low Odor During Application
- Smooth or Textured Finishes
- Excellent Chemical Resistance[1]
- Highly Resistant to Abrasion
- Tenacious Bond to Concrete Substrates
- May Be Applied to Green (10 day old) Concrete
- Easily Maintained
- Variety of Slip Resistant Textures Possible

WHERE TO USE

- Food & Beverage Processing
- Wineries, Breweries
- Laboratories
- Hospitals
- Pharmaceutical
- Animal Care Facilities

PHYSICAL PROPERTIES

VOC EPA Method 24	0 g/l
Compressive Strength ASTM C579	6,000 psi
Tensile Strength ASTM C307	1,000 psi
Tensile Elongation ASTM D412	30%
Flexural Strength ASTM C580	2,000 psi
Thermal Coefficient of Linear Expansion ASTM C531	1.4×10^{-5} in/in/°F
Water Absorption MIL-D-3134	0.64%
Flammability ASTM E648	>1.07 watts/cm^2
Hardness, ASTM D2244 Shore D	85 - 90
Adhesion to Concrete ASTM D4541	>350 psi Concrete Fails
Microbial Growth ASTM G21	Pass, Rating
Chemical Resistance	See Chart[1]

PACKAGING

A+B+C components, pre-packaged in complete units. Mix only complete units.

A Component - 5001A

B Component - 5001B

C Component - 5001-35-Gray (Filler-Aggregate)

Broadcast Media

Color Quartz - 5012BC-COLOR

Vinyl Color Flake (1/4") - 5011-40-COLOR

Silica Sand, US 30 Mesh - 5010-50

Sealers

CPC Polyaspartic 5007, Clear or Pigmented, *or*

CPC UC Alypoly 5003 Aliphatic Urethane Cement Sealer, *or*

CPC UC Aropoly 5039 Aromatic Urethane Cement Sealer

CONCRETE MOISTURE

CPC URETHANE CEMENT FINE is recommended to be applied direct to concrete. Rough or porous concrete by be scratch coated with CPC URETHANE CEMENT to smooth and seal surface. No other primer is needed or recommended.

CPC URETHANE CEMENT FINE is exceptionally tolerant of moisture & moisture vapor transmission in otherwise sound concrete substrates.

Refer to the CPC technical data sheet for complete surface preparation and application data.

SURFACE PREPARATION

Concrete substrates should be cured for a minimum of 30 days and have a minimum compressive strength of 3,000 psi. Surfaces must be clean, sound and properly prepared. Suitable preparation methods are recirculating abrasive shot-blasting, and/or diamond abrasive grinding. Remove all surface contamination before preparation. All soil, grease, oil, wax, or curing-agents, must be removed.

Any preparation method should produce a uniform surface profile of minimum CSP-3 (ICRI Guide 03732,) or greater. Acid etching of concrete is unacceptable and will void Manufacturer's warranty.

CPC URETHANE CEMENT FINE may be applied to 10-day old concrete that is cured at a minimum of 70°F (20°C) and is otherwise sound and able to be prepared as described above. Ultimate shrinkage of green concrete substrates may induce stress cracking at a later time.

MIXING

Premeasured Units, Do Not Mix Partial Units.

Premix A (resin) component thoroughly before use. Ensure that pigment is completely dispersed in the A component. Use premeasured unit amount only, do not mix partial units.

Add Part C (Filler powder) to Part A (resin) while mixing with low-speed drill and mixing attachment. Mix for at 1 minute until c blended. Avoid high speed mixing and entraining air bubbles into mixture.

Under mixing agitation, slowly add Part B (Hardener) and blend thoroughly until powder is completely incorporated. Periodically scrape sides and corners to ensure entire unit is fully blended. C component is a reactive portion of the mix and must be completely used.

Immediately distribute the mixed material onto the floor to avoid buildup of exothermic heat.

APPLICATION

Spread mixed material on the floor in a ribbon. Distribute with a non-marking notched squeegee, with appropriate size notches for desired wet film thickness.

Back roll with a plastic spike/spine roller, or for thinner applications, with a steel needle 'porcupine' roller. Clean rollers frequently during application for best results.

Finish all rolling within the open time of the product. Avoid reworking areas that have been finished. Finish roll in one direction to reduce roller marks.

APPLICATION GUIDELINES

	INSTALLATION METHOD	PRODUCT & MIX RATIOS	COVERAGE RATE (APPROXIMATE)
Step 1	Surface Preparation: Minimum Surface Profile ICRI CSP 3		
Step 2	Cut keyways for adhesion to substrate		
Step 3	Apply **CPC URETHANE CEMENT FINE**		
	Apply with gauge rake and spike/needle roller	Mix Ratio 1A : 1B : 1C Working time: 20 minutes Cure time: 6 hours Recoat window: 6 - 48 hours [1]	40 sq. ft./unit @ 3/6-inch 30 sq. ft./unit @ 1/4-inch
Step 4a	Broadcast Silica Sand		
	Broadcast 30 - 40 US Mesh silica to rejection	n/a	0.75 lb. per sq. ft. [1]
Step 4b	Broadcast Color Quartz		
	Broadcast color quartz to rejection	n/a	1.0 lb. per sq. ft [1]
Step 4c	Broadcast Vinyl Mosaic Flake		
	Broadcast color flake to rejection	n/a	0.15 lb. per sq. ft [1]
Step 5	Remove excess aggregate (sweep, vacuum)		
Step 6	Apply Selected Sealer		
Step 6a	Apply **CPC Polyaspartic Sealer (flake & broadcast applications)**		
1st Coat	Squeegee & Back roll @12 mils WFT	Mix Ratio 2A : 1B Work Time: 20 minutes Cure Time: 6 hours Recoat Time: 6-24 hours	133 sq. ft. per gallon
2nd		Mix Ratio 2A : 1B Work Time: 20 minutes Cure Time: 6 hours Recoat Time: 6-24 hours	200 sq. ft. per gallon
Step 6b	Apply **CPC Urethane Cement Sealer**		
	Squeegee & Back roll @ 16 mils	Mix Ratio: 1A : 1B : 1C* Mix A & B - 30 seconds. Add C Powder, mix for 2 minutes. Working Time: 20 minutes Cure time: ~6 hours Recoat time: ~48 hours *Do not split kits, mix whole units only	230 sq. ft. per ***KIT***

[1] Approximate yield, may vary. Allow for overage. May vary by flake size and applied product thickness.

Higher temperatures will reduce working, cure and recoat times. Lower temperatures will extend times.

STORAGE & SHELF LIFE

Liquids (A & B) 12 months from date of manufacture, in original, unopened, factory containers. Powders (Part C) 6 months from date of manufacture. Store between 50ºF - 85ºF (10ºC - 30ºC). Protect from direct sunlight, extreme heat or cold, excessive moisture, and fire hazards. Do not allow liquid components (A & B) to freeze. **Frozen material is unusable and must be disposed up in a responsible manner.**

DISCLAIMER

Results may vary based depending upon mixing methods and equipment, surface texture, concrete substrate, ambient temperature and humidity conditions, application methods & tools. CPC Crossfield Products Corp. assumes no responsibility or liability for any errors or omissions in the content of this document. The information contained is subject to change without notice.

LIMITATIONS

- Application temperature range, ambient, material, & substrate limitation: 55ºF to 85ºF (12.5ºC - 30ºC)
- Relative Humidity range: 20 - 85%
- Protect from moisture and condensation for 24 hours after application, staining, hazing may occur.
- Do not apply to visibly wet substrates.
- Do not allow product to freeze. Product contains water. Freezing will render product unusable. Dispose of product that has been frozen.
- C Component (filler powder) is a fully reactive material and pre-packaged for one mixed unit. Do not reduce or substitute.
- Protect urethane cement substrate from exposure to uncured cementitious materials (mortar, plaster, etc.) Permanent staining may result.
- Do not apply to substrates exhibiting or tested positive for alkali silica reaction (ASR) or near surface alkali reaction (NSAR)
- For professional use by experienced applicators only

WARRANTY STATEMENT

All sales are subject to the Crossfield Terms and Conditions effective on the date the purchase order is received. The Terms and Conditions are incorporated herein in full by this reference. The Terms and Conditions are set forth at www.crossfieldproducts.com and will also be sent by mail or fax to the purchaser upon request. By placing an order, the Buyer acknowledges that it has read and agrees to the provisions of the Terms and Conditions. Crossfield Products Corp. assumes no responsibility or liability for any errors or omissions in the content of this document. The information contained is subject to change without notice.

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