

CrownCrete™ Seamless Modified Novolac Polymer Concrete Floors

RESINOUS
FLOORING

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DESCRIPTION

CrownCrete™ Product Number 805, a modified novolac polymer concrete resurfacing floor overlays are resistant to abrasion, impact, hot spillages and chemicals common to the food industry. CrownCrete™ is durable enough to endure thermal shock, aggressive high pressure cleaning and scrubbing and is ideal for use wherever a sanitary environment is required.

CrownCrete™ No. 805 MD Self Leveling 1/8 in.

CrownCrete™ No. 805 HD Self Leveling 3/16 - 1/4 in.

CrownCrete™ No. 805 TD Trowel 1/4 - 3/8 in.

YIELD

For coverage rates, refer to the CrownCrete™ Contractor Installation Guideline.

PACKAGING

Pre-package kit contains three-components pre-measured for accurate ratio mixing.

COLOR

Red, gray, cream, green, and charcoal. CrownCrete™ is pigmented at the factory to insure color uniformity. Custom colors are available.

SHELF LIFE

Parts A and B: 1 year when properly stored
Part C: 2 years when properly stored

STORAGE

Store and transport in unopened containers in a clean, dry area where temperatures are between 40 - 100°F (5 to 38°C).

WHERE TO USE

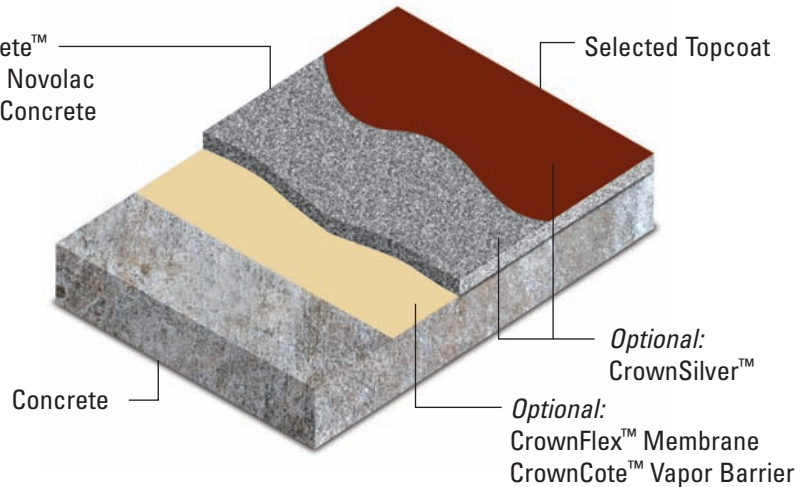
CrownCrete™ floor systems are ideal for use in indoor and outdoor environments including meat, poultry dairy, beverage and pharmaceutical processing plants in addition to processing & packaging facilities, commercial kitchens, freezers, coolers, warehouses and shipping docks.

SUBSTRATE

New and existing concrete floors, for other substrates contact Crown Polymers.

SANITARY COVING CrownCove™ is a precast polymer base molding, specifically designed to create a seamless water & chemical proof connection between the floor and the wall. Available in 4, 6 & 8 inch (100, 150 and 200 mm) heights, with matching pre-formed inside and outside corners. The installed cove maintains a consistent look from start to finish. After installation, the system can be overlaid with CrownCrete™ or coated with a selected Crown coating.

CrownCrete™
Modified Novolac
Polymer Concrete



Features

Hygienic floor

Slip resistant finish

Resistant to soaking

Thermal stability

Temperature service range

Unaffected by freeze/thaw cycles

Chemical resistance

Solvent free and low odor

No priming

Single-lift application

Fast curing

High bond strength

Impact and abrasion resistance

Coefficient of thermal expansion

LEED® Green

Benefits

Easy to clean and maintain.

Exceeds ADA & OSHA standards.

Suitable for areas soaked with blood, oils, fats and grease.

Resists steam or continuous hot-water cleaning.

Stable at -50°F (-46°C) / 428°F (220°C)

Handles wide temperature fluctuations.

Resistant to most chemicals & cleaning agents used in the food industry.

Application: No VOC's & very low odor.

Self-priming of substrate.

1/8 - 1/4 in. Self-Leveling

1/4 - 3/8 in. Trowel Top Coat may be required.

Minimize downtime.

Ready for topcoat in 1 ½ hours.

Return to use in 4-6 hours without topcoat.

Reduces shear and stress at bond line. 100% substrate failure.

Superior to concrete.

Similar to concrete; prevents shear at bond line.

During application & use - sustainable

CrownCrete™ Durable Polymer Concrete

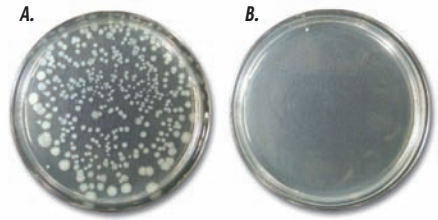
Test Data Property	Self Leveling Results	Trowelable Results	Test Method
Compressive strength , psi (MPa)	6,500 (44.8)	7,000 (48.25)	ASTM C 579
Tensile strength , psi (MPa)	1,200 (8.1)	1,000 (6.7)	ASTM C 307
Coefficient of thermal expansion , in/in/° F (cm/cm/° C)	2.0 x 10 ⁻⁵ (4.0 x 10 ⁻⁵)	1.5 x 10 ⁻⁵ (13.0 x 10 ⁻⁵)	ASTM C 531
Density , lb/ft3 (g/cm3)	123 (1.97)	130 (2.08)	ASTM C 905
Resistance to fungi growth	Passes	Passes	ASTM G 21
Impact resistance	No visible damage or ASTM D 2794 deterioration at minimum 160 in-lb	Same	
Compressive modulus , psi (MPa)	1.6 x 10 ⁵ (1,100)	1.8 x 10 ⁵ (1,238)	ASTM C 469
Flexural strength , psi (MPa)	2,700 (18.6)	1,500 (11.00)	ASTM C 580
Service temperature Short term exposure	-50°F (-46°C) / 428°F (220°C)	Same	
Thermal conductivity , BTU-in/in-ft2 °F (W/mK)	>8 (0.9)	>8 (0.9)	ASTM C 177
Water absorption , %	< 0.1	< 0.1	ASTM C 413
Abrasion resistance , g loss; CS-17 Wheel, 1,000 cycles	0.05	0.04	ASTM D 4060
Resistance to elevated temperatures	No flow or softening	Same	MIL-D-3134
Adhesion , psi (MPa) 100% concrete failure	420 (2.9)	Same	ASTM D 4541
Coefficient of friction , wet & dry recommendations	Passes ADA and OHSA	Same	ASTM D 2047

PERFORMANCE

- **Joints:** The architect, owner and contractor should address joint details before the job starts.
- **Okay Substrates:** CrownCrete™ may be applied directly to concrete or epoxies CrownCote™ Vapor Barrier or CrownFlex™ Membrane.
- **Substrate Cautions:** Do not apply CrownCrete™ to sand-cement or unreinforced overlays, asphalt or bitumen substrates, glazed tile or nonporous brick, tile, magnesite, copper, aluminum, existing coatings, or polyesters for optimal performance.
- **Vapor Barriers:** Use an effective vapor/moisture barrier on or below grade; if not present, consult your Crown Polymers representative for options.
- **Surface Prep:** Substrates must be structurally sound, clean, dry, and free of any foreign contaminants that could inhibit adhesion. Mechanical preparation is recommended.

- **Temperature Range:** Do not apply at temperatures below 40°F (4°C) or above 100°F (38°C) or if the relative humidity is above 85%. Cool temperatures will affect workability.
- **Chemical Exposure:** Do not expose CrownCrete™ to any chemicals until fully cured (24 hours at 70°F (21°C)).
- **Water Exposure:** Keep water off of the overlay for the first 9 hours after application.
- **Low Temperature:** When substrate temperatures fall below 50°F (10°C), curing time could exceed 48 hours to reach full operational strength.
- **Operational Time:** The floor maybe used for pedestrian traffic in 4 hours above 60°F (16°C) and 12 hours at 40°F (50°C). Vehicular traffic may use the floor in 6 hours at 60°F (16°C) or above & 15 hours between 40°F (5°C) and 60°F (16°C). Different topcoats will vary in tackfree time.
- **Limitation:** Do not change aggregate ratios without Crown's written approval.

SAFETY AND HYGIENE



CrownSilver™ Escherichia coli Test Results.

- A.** Control Sample E-Coli 24 hours no treatment.
B. CrownSilver™ E-Coli 24 hours 99.999% control.
 Note: Staphylococcus aureus: Same results.
 For information, see CrownSilver™ MSS.

CHEMICAL RESISTANCE

In accordance with ASTM D1308, 48 hour cure, CrownCrete™ will resist exposure for up to 7 days at 72°F (22°C) for the following chemicals:

- Dilute mineral acids: Hydrochloric < 35%, Phosphoric < 50%, Sulfuric < 30%
- Alkalis: Potassium Hydroxide 50%
- Dilute organic acids: Acetic <30%, Formic, Citric, and Uric
- Fats, oils, and sugars
- Mineral oils, diesel fuel, kerosene, and gasoline
- Most organic solvents: aliphatic and aromatic hydrocarbons and alcohol
- See Chemical Resistant Table for a more comprehensive list.

HEALTH, SAFETY & ENVIRONMENT

Read, understand and follow Material Safety Data Sheets, product labels and literature for all components of this flooring system prior to use. The MSDS can be obtained by searching for them on www.crownpolymers.com, e-mailing your request to info@crownpolymers.com or calling 888/732-1270. Use only as directed. For professional use only. Not for sale to or use by the general public.

PRODUCT CLEAN UP

Uncured: Soap and Warm Water
 Cured: Grind and Chipping

Compliances

USDA compliant for use in federally inspected meat and poultry plants and ADA for slip resistant surfaces. Ministry of Agriculture Canada - Accepted for use in food establishments



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LIMITED WARRANTY Crown Polymers, LLC warrants its products to be free of manufacturing defects, to be of good quality, and that they will meet Crown Polymers current physical published properties when applied in accordance with Crown Polymers written directions and tested in accordance with ACI, ASTM and Crown Polymers Standards. Product proved to be defective will be replaced. There are no other warranties by Crown Polymers, LLC of any nature whatsoever, expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. Crown Polymers, LLC shall not be liable for damages of any sort, including remote or consequential damages, resulting from any claimed breach of any warranty, whether expressed or implied, from any other cause whatsoever. Crown Polymers will not be responsible for use of this product in a manner to infringe on any patent held by others.

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