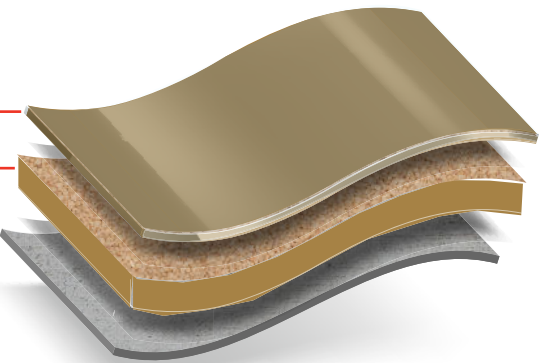


810 CrownCrete-U	...	160 Ft <sup>2</sup> /Kit
818 CrownCrete-U with Full Broadcast	...	60 Ft <sup>2</sup> /Kit
Prepared Concrete	...	CSP 2-4



## OPTIONAL COMPONENTS

- **Moisture Mitigation Primer :**  
8303 CrownShield™ Clear 100 ft<sup>2</sup>/gal @ 16 mils
- **Waterproofing & Crack Suppression Membrane :**  
8502 CrownFlex Clear 40 ft<sup>2</sup>/gal @ 40 mils
- **Cove Binder :**  
811 CrownCrete-U Cove 35 lf/gal @ 6"

\*For complete details refer to each optional components Technical Data Sheet (TDS).

## MECHANICAL PROPERTIES

For complete details refer to each components Technical Data Sheet (TDS)

## CHEMICAL RESISTANCE

Refer to CrownTech Chemical Resistance Guideline Technical Bulletin No. 9

## SYSTEM DESCRIPTION

CrownCrete-U Self-Leveling Urethane Cement System is a heavy-duty matte finish flooring system with an overall nominal thickness of 187 mils (3/16"). It is designed to withstand thermal shock, impact, medium traffic and chemical exposure. It is comprised of 818 CrownCrete-U Self-Leveling Urethane Cement, single broadcast of natural quartz and topcoated with 810 CrownCrete-U Skim Coat. It is VOC Compliant in all states and provinces in North America.

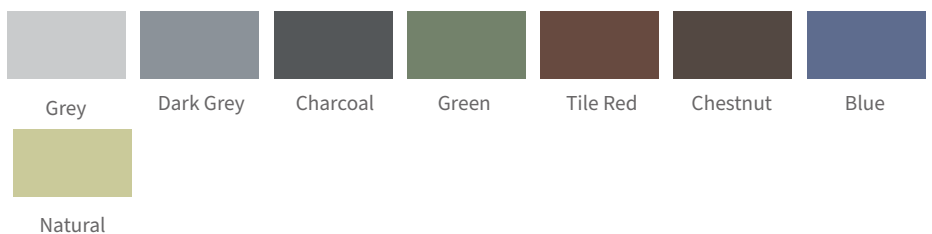
## TYPICAL USES

- Animal Care and Housing
- Commercial Bakeries and Kitchens
- Hospital and Health Care Facility Floors
- Manufacturing Facility Floors
- Pharmaceutical & Vivarium Floors
- Automotive Maintenance & Repair
- Food & Beverage Processing
- Laboratories and Research Floors
- School & University Floors
- Meat & Poultry Processing

## BENEFITS

- Complies with USDA, FDA, FSMA. See Crown Polymers Technical Bulletin: 3 Food and Beverage Compliance.
- Slip Resistance (ADA) See Crown Polymers Technical Bulletin: 4 Coefficient of Friction.
- LEED requirements. See Crown Polymers Technical Bulletin: 5 LEED information
- Cures to an inert finish. See Crown Polymers Technical Bulletin: 2 VOC Compliance

## COLORS



## DISCLAIMER

All technical bulletins, installation guidelines, guidelines, recommendations, statements, specifications, and technical data contained herein are based on information and tests. The accuracy and completeness of such tests are not guaranteed and are not to be construed as a warranty, expressed or implied. It is the responsibility of the user to document information and tests to determine the intent of the product for ones' own use. The application, job conditions and user assume all risks and liability resulting from use of the product, We do not suggest or guarantee any hazards listed herein are the only ones, which may exist, Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use of, or inability to use the product. Recommendations or statements, whether in written or verbal, other than those contained herein shall not be binding upon the manufacturer, unless in writing and signed by corporate officer of the manufacturer. Technical and application information is provided for the purpose of establishing a general profile of the material and proper application procedures. Test performance results were obtained in a controlled environment and Crown Polymers makes no claim that these tests or any other tests accurately represent all environments. Not responsible for typographical errors.

## LIMITED WARRANTY

Crown Polymers warrants its products to be free of manufacturing defects and meets all Crown Polymers current published physical properties. Crown Polymers' sole responsibility shall be to replace the portion of any product proved to be defective. There are no other warranties by Crown Polymers 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 shall not be liable for damages of any sort, including remote or consequential damages resulting from any claimed breach of any warranty expressed or implied. In addition, no warranty or guarantee pertaining to appearance, color, fading, chalking, staining, shrinkage, peeling, normal wear and tear or improper application by applicator will be issued. Damage caused by abuse, neglect and lack of proper maintenance, acts of nature and/or physical movement of substrate or structural defects are also excluded from limited warranty.

## APPLICATION EQUIPMENT

Personal Protective Equipment  
Jiffy Mixing Paddle  
Slow Speed Drill  
18"x3/8" Nap Roller Cover  
1/2" V-Notched Squeegee  
1/8" Notched Squeegee  
4" Chip Brush  
Spike Shoes

## SURFACE DIAGNOSTICS

Concrete must be structurally sound and free of all contaminants and bond breakers. Test concrete compressive strength using a Schmidt or Rebound Hammer to ensure substrate has compressive strength of 3500 psi or higher.

Perform a PH test using concrete PH test strips or meter to ensure substrate PH is between 9-12.

Perform Moisture Test using either Calcium Chloride per ASTM F1869 or In-Situ Relative Humidity Probe per ASTM F2170 to ensure substrate has Moisture Vapor Emission Rate of 3 lbs or less and Relative Humidity of 80% or less.

See CrownTech Bulletin 6: Moisture Mitigation Negative Side Moisture Barrier

If Moisture Vapor Emission Rate is above 3 lbs. but below 25 lbs. and relative humidity is above 80% but below 99% then apply 8303 Moisture Barrier Primer first at 16 mils with a coverage rate of 100 Ft<sup>2</sup>/Gal.

## SURFACE PREPARATION

Use Mohs scratch test to determine concrete hardness for proper diamond bond selection.

Concrete should be mechanically profiled and prepared to produce a Concrete Surface Profile (CSP) level between #2 & #4 per ICRI Guideline no. 310.2R

See CrownTech Bulletin 1: Concrete Surface Preparation

## SURFACE REPAIR

All depressions, divots and cracks should be profiled and free of dust and contaminants. Repair cracks to reduce the ability to see the defect through the coating.

## TEMPERATURE EVALUATION

Ambient and substrate temps should be between 50-90°F and a minimum of 5°F above Dew Point.

Product temps should be between 70-80°F.

Relative Humidity should not exceed 85%.

See CrownTech Bulletin 7: Temperature & Relative Humidity

## REVIEW SAFETY DATA SHEETS FOR PRECAUTIONS

### ENVIRONMENT SHOULD HAVE PROPER AND ADEQUATE VENTILATION DURING APPLICATION AND CURING PROCESS

Do not mix more material than can be applied in 10 minutes

## 818 MIXING PROCEDURE

**1** Pre-Mix B-Component in its respective container using Jiffy mixer and drill at slow speeds for 1 minute until pigment is uniform.

If using multiple batches, it is best to box all B-Components together then separate back into individual containers to ensure even pigmentation.

**2** Pre-Mix A-Component in its respective container using clean Jiffy mixer and drill at slow speeds for 30 seconds or until thoroughly homogeneous.

**3** Transfer A-component and B-component into a clean metal 5-gal bucket and mix for 1 minute then slowly add C-Component gradually while continuously mixing for 2-3 minutes being sure to scrape sides of the bucket with a stir stick ensuring both components are thoroughly blended

## 818 COVERAGE RATE

60 Ft<sup>2</sup>/Kit @ 1/8" Full Broadcast

## 818 WORKING TIME

15 Minutes @ 75°F

Warmer ambient, product and surface temperatures as well as higher relative humidity will shorten potlife and working time.

## 818 APPLICATION PROCEDURE

**1** Pour a band of mixed material across the surface roughly 4-6" wide. Use 1/8" Cam Rake or 1/2" V-Notch squeegee to gauge material across surface

Mixed material sets quicker in mass and should not be left in bucket

**2** Back roll the surface with 18" loop roller by walking into the wet material wearing spike shoes and roll the surface wall to wall with overlap perpendicular to your first pass to release air entrapment

**3** Broadcast natural quartz into wet coating at a rate of 0.7 lbs/ft<sup>2</sup>

**✓** Allow coating to dry 6-8 hours

**1** Once dry reclaim loose quartz with push broom and vacuum.

## 810 MIXING

**1** Pre-Mix B-Component in its respective container using Jiffy mixer and drill at slow speeds for 1 minute until pigment is uniform.

If using multiple batches, it is best to box all B-Components together then separate back into individual containers to ensure even pigmentation.

**2** Pre-Mix A-Component in its respective container using clean Jiffy mixer and drill at slow speeds for 30 seconds or until thoroughly homogeneous.

**3** Transfer A-component and B-component into a clean metal 5-gal bucket and mix for 1 minute then slowly add C-Component gradually while continuously mixing for 2-3 minutes being sure to scrape sides of the bucket with a stir stick ensuring both components are thoroughly blended

## 810 COVERAGE RATE

160 Ft<sup>2</sup> / Kit

## 810 WORKING TIME

15 Minutes @ 75°F

Warmer ambient, product and surface temperatures will shorten potlife and working time.

## 810 APPLICATION STEPS

**1** Pour a band of mixed material across the surface roughly 4-6" wide. Use 1/8" notched squeegee to gauge material across surface

Mixed material sets quicker in mass and should not be left in bucket

**2** Back roll the surface with 18" x 3/8" roller by walking into the wet material wearing spike shoes and roll the surface wall to wall with overlap perpendicular to your first pass to release air entrapment



Allow coating to dry.  
Light Traffic – 24 Hours  
Heavy Traffic – 48 Hours  
Equipment Traffic – 72 Hours

## SLIP RESISTANCE

Skid-Resistance – Field (in situ) Wet Dynamic Coefficient of Friction (DCOF), ANSI A326.3. See Crown Polymers Technical Bulletin: 4 Coefficient of Friction.

## CLEAN-UP

Clean-up mixing station, tools, and equipment as required. Use acetone, a VOC exempt solvent, for cleaning up. Observe all legal, and health, and safety precautions when handling or storing solvents and materials, particularly in confined spaces. Make sure the working areas are well ventilated at all times during placement and curing time.

## DISPOSAL

Dispose of empty packaging and other waste in accordance with federal, state, provinces and local regulations.

## MAINTENANCE

Inspect the installed floor by spot cleaning and spot repairing the damaged or cracked areas. To prolong life of the flooring system, a daily maintenance program is highly recommended to ensure the floor is safe for its intended purposes. See Crown Polymers Technical Bulletin: 8 Care and Maintenance.

## TECHNICAL SUPPORT

For questions, contact a Crown Polymers Representative. Additional Support Documents are available from Crown Polymers, including brochures, application guidelines, videos and more. Visit [Crownpolymers.com](http://Crownpolymers.com) or contact Crown for additional resources