

### **OPTIONAL COMPONENTS**

- Moisture Mitigation Primer : 8303 CrownShield™ Clear 100 ft²/gal @ 16 mils
- Waterproofing & Crack Suppression Membrane : 8502 CrownFlex Clear 40 ft²/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 gloss 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, 8175 CrownPro Pigmented Polyaspartic grout coat and topcoat. It is SCAQMD Compliant for Industrial Use only.

### **TYPICAL USES**

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

### **BENEFITS**

- Complies with USDA,
  FDA, FSMA. See Crown
  Polymers Technical Bulletin
  Food and Beverage
- Slip Resistance (ADA)
  See Crown Polymers
  Technical Bulletin: 4
  Coefficient of Friction.

Tile Red

- 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 typograhical errors.

Sand Beige Brown Stone

### **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 protion 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 1/2" V-Notched Squeegee 18"x3/8" Nap Roller Cover 8-12 Mil Notched Squeegee 4" Chip Brush

### **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

#### **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

# **818 MIXING PROCEDURE**

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.

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

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 continously 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**

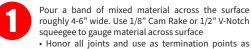
60 Ft2/Kit @ 1/8" Full Broadcast

### **818 WORKING TIME**

15 Minutes @ 75°F

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

### **818 APPLICATION PROCEDURE**



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

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

Broadcast Natural Quartz to rejection into wet coating at a rate of 0.7 lbs/ft2

 Natural Quartz will sink into wet coating: If shiny/wet areas are apparent broadcast more natural quartz

Allow coating to dry 6-8 hours then remove all excess quartz with push broom and vacuum surface thoroughly.

#### **PRIOR TO MIXING 8175 POLYASPARTIC:**

BE SURE ALL PILOT LIGHTS AND SOURCES OF **IGNITION ARE SHUT OFF.** 

RESPIRATORS WITH ORGANIC VAPOR CARTRIDGES ARE RECOMMENDED TO BE WORN AND **ENVIRONMENT SHOULD HAVE PROPER AND** ADEQUATE VENTILATION DURING APPLICATION AND CURING PROCESS

# **8175 MIXING PROCEDURE**

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

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

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 continously mixing for 2-3 minutes being sure to scrape sides of the bucket with a stir stick ensuring both components are thoroughly blended

## **8175 COVERAGE RATE**

160 Ft2 / Kit

### **8175 WORKING TIME**

15 Minutes @ 75°F & 50% RH

Warmer ambient, product and surface temperatures and higher relative humidity will shorten potlife and

### 8175 APPLICATION PROCEDURE

Cut-in stem walls using a 4" chip brush. Do not work edges more than 10 minutes ahead of main body of the floor.

Pour a band of mixed material across the surface roughly 4-6" wide. Use 8-12 mil notched squeegee to gauge material across surface

Maintain wet edge

Do not allow more than 10 mins ahead of next mixed

Always pour next mixed batch on wet edge

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

• Do not overwork material



Allow coating to dry and apply secondary coat in same fashion within 12 hours or abrading surface with 100 grit screen will be required.

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 or contact Crown for additional resources