



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 Color Quartz Urethane Cement System is a heavy-duty decorative flooring system with an overall nominal thickness of a 3/16". It is designed to withstand thermal shock, impact, heavy traffic and chemical exposure. The system is comprised of 818 CrownCrete-U SL Urethane Cement, color quartz broadcasted to rejection, 8175 CrownPro clear polyaspartic as a grout coat and secondary application of 8175 CrownPro clear polyaspartic as final topcoat. It is in compliance with SCAQMD air quality standards for Industrial Use Only.

TYPICAL USES

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

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











Blend

Brown Blend

APPLICATION EQUIPMENT

Personal Protective Equipment
Jiffy Mixing Paddle
Slow Speed Drill
Spiked Roller
1/2" V-Notched Squeegee
18"x3/8" Nap Roller Cover
8-12 Mil 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 Ft²/ 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.

All perimeter areas of coating termination shall be masked for protection. Saw cut and key-in all termination points.

SURFACE REPAIR

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

Honor all dynamic (moving) joints, static joints may be filled, use dynamic joints as initiation and termination points during application process where needed.

TEMPERATURE EVALUATION

Ambient and substrate temps should be above $50^{\circ}F$ and a minimum of $5^{\circ}F$ above Dew Point.

Product temps should be between 70-80°F.

Relative Humidity should not exceed 80%. See CrownTech Bulletin 7: Temperature & Relative Humidity

REFER TO SAFETY DATA SHEETS (SDS) FOR SAFETY PRECAUTIONS.

SAFETY PRECAUTIONS MUST BE FOLLOWED DURING STORAGE, HANDLING AND USE.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

SHALL BE WORN AT ALL TIMES INCLUDING BUT NOT LIMITED TO LONG SLEEVE SHIRTS OR DISPOSIBLE ARM SLEEVES, SAFETY GLASSES, DISPOSIBLE NITRILE GLOVES, AND PROPERLY FITTED NIOSH RESPIRATORS

ALL SOURCES OF IGNITION SHOULD BE TURNED OFF AND ENVIRONMENT SHOULD HAVE PROPER AND ADEQUATE VENTILATION DURING APPLICATION AND CURING PROCESS

MIXING AREA SHOULD BE PLACED ON OR IN CLOSE PROXIMITY TO PROJECT. AREA SHOULD BE SECURELY COVERED WITH PLASTIC, CARDBOARD OR TARP. STAGE MATERIALS, TOOLS AND CLEANING SUPPLIES IN MIXING AREA PRIOR TO APPLICATION PROCESS.

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

818 MIXING

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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"

818 WORKING TIME

15 Minutes @ 75°F

Warmer ambient, product and surface temperatures as well as direct airflow will shorten potlife and working time.

818 APPLICATION PROCEDURE



Pour a band of mixed material across the surface roughly 4-6" wide. Use 1/2" V-Notched squeegee to gauge material across surface.

- Maintain wet edge
- \bullet Do not allow more than 10 mins ahead of next mixed batch.
- Always pour next mixed batch onto wet edge.
- Honor all joints and use as termination points as needed



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 colored quartz to rejection into wet coating at a rate of 0.7 Lbs/Ft²

 Quartz will sink into wet coating check for wet/shiny areas and broadcast more quartz as needed
 Allow coating to dry 6-8 hrs @ 75°F



Reclaim loose quartz with a push broom and dust pan. Vacuum all residual quartz and floor thoroughly

Do not mix more material than can be applied in 10 – 15 minutes

8175 MIXING



Pour A & B components into a clean 5 bucket at a mix ratio of 1A:1B by volume



Mix at slow speeds for 2 minutes or until thoroughly homogeneous.

8175 COVERAGE RATE

160 Ft2 / Gal @ 10 mils wet film

8175 WORKING TIME

10-15 Minutes @ 75°F & 50% RH

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
- \bullet Do not allow more than 10 mins ahead of next mixed batch.
- 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 4-6 hrs. Repeat 8175 mixing and application procedures within 12 hours or abrading surface with 100 grit screen will be required. Light Traffic: 24 hours

Heavy Traffic: 72 hours Equipment Traffic: 72 Hours

SLIP RESISTANCE

Skid-Resistance - Field (in situ) Wet Dynamic

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

Coefficient of Friction (DCOF), ANSI A326.3. See Crown Polymers

DISPOSAL

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

MAINTENANCE

during placement and curing time.

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

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