

1/2″

CrownTrowel Mortar DB Quartz System

Technical System Sheet (TSS)

8175 Clear Polyaspartic	•••	160 Ft²/Gal
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Color Quartz Broadcast		0.07 lbs/ Ft ²
320 CrownShield™ Clear	•••	100 Ft²/Gal
838 CrownCrete-U w/ Quartz Broadcast	•••	12 Ft²/Kit
Prepared Concrete	•••	CSP 2-4

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

CrownTrowel Urethane Cement Double Broadcast Color Quartz System is a robust flooring system with an overall nominal thickness of 500 mils (1/2) for the most demanding environments. It is designed to withstand thermal shock, impact, heavy traffic and chemical exposure. It is SCAQMD compliant for Industrial Use Only.

TYPICAL USES

 Animal Care and Housing Automotive Maintenance &

Repair

Bakeries and Kitchens Food & Beverage Processing

Commercial

 Hospital and Health Care Facility Floors

 Laboratories and **Research Floors**

 Manufacturing **Facility Floors**

 Pharmaceutical & Vivarium Floors

 School & University 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

Creme Blend



Brown Blend

APPLICATION EOUIPMENT

Personal Protective Equipment Jiffy Mixing Paddle & Mortar Mixer 18"x3/8" Nap Roller Cover 1/2" Cam Rake 8-12 Mil Notched Squeegee 15-20 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 20 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°F and a minimum of 5°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 IMITED TO LONG SLEEVE SHIRTS OR DISPOSIBLE ARM EEVES, SAFETY GLASSES, DISPOSIBLE NITRILE GLOVE LIMITED TO LONG SLEEVE SHIRTS OR DISPOSIBLE SLEEVES, SAFETY GLASSES, DISPOSIBLE NITRILE GL 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 20 minutes

838 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.

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

838 COVERAGE RATE

12 Ft2/Kit @ 3/8"

838 WORKING TIME

15 Minutes @ 75°F

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

838 APPLICATION PROCEDURE

Pour a band of mixed material across the surface, Use 3/8" trowel to gauge material across surface



vacuum.

blended

320 COVERAGE RATE

320 WORKING TIME

20 Minutes @ 75°F

100 Ft² / Gal @ 16 mils wet film

320 APPLICATION PROCEDURE

320 MIXING PROCEDURE

- Do not allow more than 10 mins ahead of next mixed batch.
- · Always pour next mixed batch onto wet edge.
- Honor all joints. Use as termination points as needed

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

Broadcast natural quartz into wet coating at a rate of 0.7 lbs/ ft²

Once dry reclaim loose quartz with push broom and

Pre-Mix A&B Component in respective containers using

Jiffy mixer and drill at slow speeds for 30 seconds.

Transfer B-component and A-component at a mix

rate of 2A:1B into a clean 5-gal bucket and mix for 2-3

minutes being sure to scrape sides of the bucket with

a stir stick ensuring both components are thoroughly

Allow coating to dry 6-8 hours









Allow coating to dry 2-4 hours. 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

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roughly 4-6" wide. Use 8-12 mil notched squeegee to gauge material across surface Maintain wet edge

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





a mix ratio of 1A:1B by volume

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

8175 WORKING TIME

10-15 Minutes @ 75°F & 50% RH **8175 APPLICATION STEPS**



· Do not allow more than 10 mins ahead of next



160 Ft² / Gal @ 10 mils wet film





gauge material across surface 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

Pour a band of mixed material across the surface

roughly 4-6" wide. Use 15-20 mil notched squeegee to

Immediately broadcast color quartz to rejection into wet coating at a rate 0.7 lbs/ft² and allow coating to dry 6-8 hours.

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

8175 MIXING

Pour A & B components into a clean 5 bucket at

8175 COVERAGE RATE