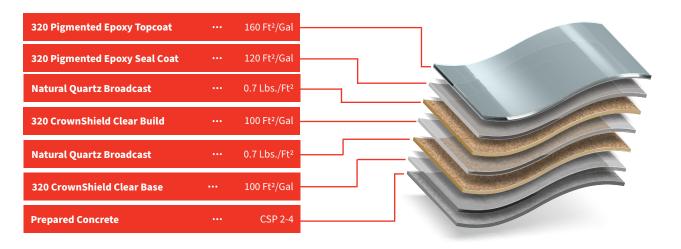


1/8"

Technical System Sheet (TSS)



# **OPTIONAL COMPONENTS**

 Moisture Mitigation Primer : 8303 CrownShield<sup>™</sup> Clear 100 ft²/gal @ 16 mils

 Waterproofing & Crack Suppression Membrane : 8502 CrownFlex Clear 40 ft²/gal @ 40 mils

• Cove Binder : 8503 CrownFlex Thixotropic Epoxy 35 lf/gal @ 6"

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

# **PRODUCT SUBSTITUTIONS**

 Chemical Resistance : Substitute 320 CrownShield<sup>™</sup> with 8320 CrownShield<sup>™</sup>

 Low Viscosity : Substitute 320 CrownShield<sup>™</sup> with 8318 CrownShield<sup>™</sup>

• Novolac : Substitute 320 CrownShield<sup>™</sup> with 7350 AcidShield

\*For complete details refer to each optional components 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

CrownBroadcast Double Broadcast Natural Quartz System is a multi-layered high strength flooring system placed at a nominal thickness of 125 mils (1/8"). It is designed for medium to heavy traffic environments requiring a textured performance flooring system. Comprised of 100% solids pigmented epoxy basecoat with natural quartz broadcasted to rejection followed by secondary clear epoxy application and secondary natural quartz broadcast. It is sealed with a pigmented epoxy grout coat and final topcoat. It is VOC Compliant in all states and provinces in North America.

# 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 School &

 Pharmaceutical & Vivarium Floors

 Garage Floors, Patios & Pooldecks

# 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

Compliance

University Floors

 Cures to an inert finish. See Crown Polymers Technical Bulletin: 2 VOC





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# APPLICATION EQUIPMENT

Personal Protective Equipment Jiffy Mixing Paddle Slow Speed Drill 18"x3/8" Nap Roller Cover 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 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 20 minutes

### **320 BASECOAT MIXING PROCEDURE**



Pre-Mix A-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 A-Components together then separate back into individual containers to ensure even pigmentation.



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



Transfer B-component and A-component at a mix rate of 2A:1B by volume 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 blended

## **320 BASECOAT COVERAGE RATE**

100 Ft² / Gal @ 16 mils wet film

## **320 BASECOAT WORKING TIME**

### 20 Minutes @ 75°F

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

## 320 APPLICATION PROCEDURE



3

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

Epoxy sets quicker in mass, material should not be left in bucket for extended periods of time

- Pour a band of mixed material across the surface roughly 4-6" wide. Use 15-20 mil notched squeegee to gauge material across surface.
  - Maintain wet edge
    Do not allow more than 10 mins ahead of next mixed batch.
  - Always pour next mixed batch onto 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

Broadcast Natural Quartz to rejection into wet coating at a rate of 0.7 lbs/ ft<sup>2</sup>.

Allow coating to dry 6-8 hrs @ 75°F.

Once dry reclaim loose quartz with push broom and vacuum floor thoroughly.

Re-apply buildcoat and secondary broadcast of natural quartz as in previous steps

### **320 SEAL COAT MIXING PROCEDURE**

Pre-Mix A-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 A-Components together then separate back into individual containers to ensure even pigmentation.

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



Transfer B-component and A-component at a mix rate of 2A:1B into a clean 3-gal or 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

## **320 SEAL COAT COVERAGE RATE**

### 120 Ft<sup>2</sup> / Gal @ 13.3 Mils wet film

thoroughly blended

## **320 SEAL COAT WORKING TIME**

### 20 Minutes @ 75°F

## 320 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 flat squeegee to gauge material across surface

- Maintain wet edge
- Do not allow more than 10 mins ahead of next mixed batch

Always pour next mixed batch onto 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 6-8 hours and reapply topcoat in same manner but at rate of 160 ft<sup>2</sup>/ gal within 24 hours or abrading surface with 100 grit screen will be required. Light Traffic: 24 hours

Heavy Traffic: 48 hours Equipment: 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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