



# **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:

8503 CrownFlex Thixotropic Epoxy 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

CrownFlake is a single broadcast decorative flooring system placed at a nominal thickness of 30 mils. It is comprised of a self-priming receiving coat, color flake chips, and top coated with a UV stable polyaspartic. It can be applied directly over Crown Polymers moisture mitigation primer when required. 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
- 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
- Cures to an inert finish, See Crown Polymers Technical Bulletin: 2 VOC Compliance

## **COLORS**





























Creekbed

Chestnut

Coastline

Red Blend

Blue Blend



#### **APPLICATION EQUIPMENT**

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

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 LIMITED TO LONG SLEEVE SHIRTS OR DISPOSIBLE ARI SLEEVES, SAFETY GLASSES, DISPOSIBLE NITRILE GLOVI 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

### 8355 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 A&B-component into bucket at a mix rate of 1A:1B by volume into a clean and mix for 2-3 minutes being sure to scrape sides of the bucket with a stir stick ensuring both components are thoroughly blended

### **8355 COVERAGE RATE**

200 Ft2 / Gal @ 8 mils wet film

# 8355 WORKING TIME

20 Minutes @ 75°F

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

#### 8355 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 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 blended flake to rejection at a rate of 0.15 Lbs/Ft2

Allow coating to dry 4-8 hrs @ 75°F



Reclaim loose flake and scrape floor using rigid floor scraper in two directions, north-south & east-west to flatten ridges and jagged edges

Reclaim residual flake after scraping using push broom and dust pan. Vacuum floor thoroughly

# **8175 MIXING PROCEDURE**



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 hand 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 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. Light Foot Traffic: 8 hours Item Placement: 24 hours Vehicular Traffic: 48 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

## **DISCLAIMER**

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