



# **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

ESD Conductive Mortar System meets ANSI/ESD 2020 and ANSI/ESD STM7.1 Standards and is placed at a nominal thickness of 250 mils (1/4"). It is electrically active within the resistance range of Static Dissipative 25 thousand to 1 million ohms (2.5E4-1E6) resistance range as tested per ANSI/ESD Association ANSI/ESD STM 7.1. It is also available with an optional fluid proofing and crack suppression membrane. It is VOC Compliant in all states and provinces in North America.

# **TYPICAL USES**

Aerospace & AvionicsAutomotive

Maintenance &

Repair

• Bio Technology & Research

• Computer & Data Housing • EV Battery Production

•Chemical Processing & Storage • Flammable & Explosive Areas

• Medical Equipment Semi-Conductor
 Production

### **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**







### APPLICATION EQUIPMENT

Personal Protective Equipment Jiffy Mixing Paddle 1/4" Cam Rake 18"x3/8" Nap Roller Cover 8-12 & 15-20 Mil Notched Squeegee 4" Chip Brush

#### **SURFACE DIAGNOSTICS**

Spike Shoes

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

### **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

#### **814 MIXING**

1

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

### **814 COVERAGE RATE**

30 Ft2/Kit @ 1/4" Full Broadcast

### **814 WORKING TIME**

15 Minutes @ 75°F

Warmer ambient, product and surface temperatures will shorten potlife and working time.

### **814 APPLICATION STEPS**



Pour a band of mixed material across the surface roughly 4-6" wide. Use 1/4" Cam Rake to gauge material across surface



Back roll the surface with 18" spiked 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



Allow coating to dry 6-8 hours. Proceed to next steps within 24 hours or abrading surface with 100 grit screen will be required.

Do not mix more material than can be applied in 20 minutes

### **320 MIXING PROCEDURE**



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 COVERAGE RATE**

200 Ft² / Gal @ 8 mils wet film

# **320 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**

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 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



Allow coating to dry 6-8 hrs @ 75°F. Once Primer is dry apply grounding strips per specification.

### **8601 MIXING**



Pre-mix A-Component and mix using Jiffy mixer and drill at slow speeds for 30 seconds until pigment is uniform.



Add B-Component to the A-Component and mix for 2 minutes.



Add 1 Quart clean water and mix again for 2 minutes being sure to scrape sides of the bucket with a stir stick ensuring both components are thoroughly blended

# 8601 COVERAGE RATE

160 Ft2 / Gal @ 10 mils

### **8601 WORKING TIME**

20-30 Minutes @ 75°F

### **8601 APPLICATION STEPS**



Pour a band of mixed material across the surface. Use 8-12 mil notched squeegee to gauge material across surface and back roll surface perpendicular to your first pass



Allow coating to dry. Apply subsequent Coats: 12-24 Hours

# 8602 MIXING



Premix A component until completely homogenous then add pigment pack and mix until thoroughly blended



Add B component and mix at slow speed for 2 minutes or until thoroughly homogeneous being sure to scrape sides of bucket to ensure all material is thoroughly blended.

#### 8602 COVERAGE RATE

100 Ft2 / Gal @ 16 mils

8602 WORKING TIME

20-30 Minutes @ 75°F

### **8602 APPLICATION STEPS**



Pour a band of mixed material across the surface. Use 15-20 mil notched squeegee to gauge material across surface then back roll entire surface

V

Allow coating to dry. Light Foot Traffic: 12 hours Heavy Foot Traffic: 24 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

#### **DISCLAIMER**

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