



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).

PRODUCT SUBSTITUTIONS

 Chemical Resistance : Substitute 320 CrownShield[™] with 8320 CrownShield[™]

• Low Viscosity : Substitute 320 CrownShield[™] with 8318 CrownShield[™]

• Novolac : Substitute 320 CrownShield[™] 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

CrownCoat High Build Epoxy System is designed to provide a high-gloss finish that features chemical, impact and abrasion resistance. It is placed at a nominal thickness of 28 mils and meets the Unified Facilities Guide Specification 09 67 23.15 requirements for a 3-layer aircraft hangar flooring system. It is comprised of a primer, build coat and topcoat. 8303 CrownShield™ Moisture Mitigation Primer can be used when required. CrownCoat High Build System is in compliance with SCAQMD for industrial Use Only.

TYPICAL USES

Animal Care and Housing Automotive

Repair

Bakeries and Kitchens Maintenance & 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



847 659 0300

APPLICATION EQUIPMENT

Personal Protective Equipment Jiffy Mixing Paddle Slow Speed Drill 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°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 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 PRIMER MIXING PROCEDURE



Pre-Mix A-Component in its respective container using Jiffy mixer and drill at slow speeds for 30 seconds.

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 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 PRIMER COVERAGE RATE 200 Ft² / Gal @ 8 mils wet film

320 PRIMER WORKING TIME

20 Minutes @ 75°F

320 PRIMER 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.

Epoxy sets quicker in mass, mixed material should not remain 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 primer to dry 6-8 hours.

· Proceed with next steps within 24 hrs or abrading surface with 100 grit screen will be required

320 BUILD COAT MIXING PROCEDURE



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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 BUILD COAT COVERAGE RATE

160 Ft² / Gal @ 10 Mils wet film

320 BUILD COAT WORKING TIME

20 Minutes @ 75°F

320 BUILD COAT APPLICATION PROCEDURE

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



Always pour next mixed batch onto wet edge



Do not overwork material

Allow Coating to dry 6-8 hours

· Proceed to next step within 24 hours or abrading

8175 TOPCOAT 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 pigment packs, 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-component and B-component at a mix rate of 1A: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

8175 TOPCOAT COVERAGE RATE

160 Ft² / Gal @ 10 mils wet film

8175 TOPCOAT WORKING TIME

10-15 Minutes @ 75°F & 50% RH

8175 TOPCOAT APPLICATION PROCEDURE



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

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: 24 hours Item Placement: 48 hours Vehicular/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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surface with 100 grit screen will be required.



