

PHYSICAL PROPERTIES

VOC	.....	<100 g/L
MIX RATIO	.....	Full Kit
COVERAGE RATE	.....	TopCoat: 250 ft ² /gal 6.4 Mils
APPLICATION TEMP	.....	50° - 90°F
POTLIFE 1 Gal mass @ 75°F	.....	25 Min
DRY TIME @ 75°F	.....	6-18 Hours
RECOAT WINDOW	.....	12-24 Hours
FULL CURE	.....	7 Days
PACKAGING	.....	1.56 Gal Kit

ELECTRICAL TRANSMISSION PROPERTIES

STATIC RANGE 1 million to 1 billion OHMS 1E6 - 1E9	.....	MEETS
CONDUCTIVE RANGE 25,000 - 1,000,000 OHMS 2.5E4 - 1.0E6	.....	MEETS
BODY VOLT GENERATION <15 VOLTS	.....	MEETS
5,000 VOLT CHARGE DISSIPATION TO 0 VOLTS <0.1 SECONDS	MEETS

MECHANICAL PROPERTIES

PENCIL HARDNESS ASTM D3363	2H
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CHEMICAL RESISTANCE

Refer to CrownTech Chemical Resistance Guideline Technical Bulletin No. 9

PRODUCT DESCRIPTION

8603 CrownPro StaticShield Polyurethane is a three component, high performance polyurethane floor coating system that meets ANSI/EST 2020 and ANSI/ESD STM7.1 Standards. It is electrically active within resistance range requirements for static dissipative or conductive flooring systems, which relies upon the epoxy prime coat. It is UV Stable and is VOC compliant in all States and Provinces in North America for Industrial Use Only

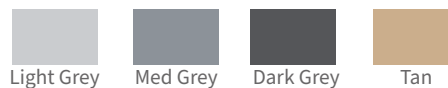
TYPICAL USES

- Military/Aircraft/Aerospace
- Chemical Manufacturing
- Clean Rooms
- Areas containing flammables or explosives
- Data Center
- Packaging Lines
- Electronic Manufacturing & Assembly
- Hazardous Industries
- Pharmaceutical Floors

BENEFITS

- Complies with USDA, FDA, FSMA. See Crown Polymers Technical Bulletin: 3 Food and Beverage Compliance.
- LEED requirements. See Crown Polymers Technical Bulletin: 5 LEED information
- Cures to an inert finish. See Crown Polymers Technical Bulletin: 2 VOC Compliance

COLORS



LIMITATIONS

- Do Not apply direct to concrete or cementitious overlays
- Requires 320 Isolation Primer for Static-Dissipative floor & 8601 as primer for conductive floor
- Color may vary due to batch-to-batch variation, always "box" different batches to avoid it.
- Do Not thin
- Will not bridge cracking

SHELF LIFE

6 Months from Date of Manufacture provided unopened

STORAGE

Store in a dry environment at room temperature and out of direct sunlight.

APPLICATION EQUIPMENT

Personal Protective Equipment
Jiffy Mixing Paddle
Drill
18"x 1/4" Nap Shedless Roller Cover
5-7 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 psi 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 psi but below 25 psi 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

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.

ONLY MIX FULL KITS AND DO NOT MIX MORE MATERIAL THAN CAN BE APPLIED IN 25 MINUTES

MIXING

1 Add pigment to A-Component and 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.

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

3 Transfer A-component and B-component into a clean 5-gal bucket and mix 2-3 minutes being sure to scrape sides of the bucket with a stir stick ensuring both components are thoroughly blended

COVERAGE RATE

**250 Ft² / Gal @ 6.4 mils
(2 COATS REQUIRED)**

COVERAGE RATE MAY VARY DEPENDING ON SUBSTRATE CONDITION AND APPLICATION

WORKING TIME

20-30 Minutes @ 75°F

WARMER AMBIENT, PRODUCT AND SURFACE TEMPERATURES AS WELL AS HIGHER RELATIVE HUMIDITY WILL SHORTEN POTLIFE AND WORKING TIME.

APPLICATION PROCEDURE

1 Cut-in edges using a 4" chip brush. Do not allow wet edges to stand more than 10 minutes ahead of application of main body of floor.

PRODUCT SETS SLOWER IN MASS, MIXED MATERIAL SHOULD BE POURED AS NEEDED

2 Pour a band of mixed material across the surface roughly 6-8" wide. Use 5-7 mil notched squeegee to gauge material across surface

- Maintain wet edge
- Always pour next mixed batch onto wet edge
- Do not apply heavier than recommended coverage rates

3 Back roll the surface with 18" x 1/4" 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 6-18 Hrs @ 75°F
Do not force dry.
Recoat: 12-24 Hours
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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SCAN QR CODE FOR FULL DISCLAIMER AND LIMITED WARRANTY INFORMATION

**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
DISPOSABLE ARM SLEEVES, SAFETY GLASSES,
DISPOSABLE NITRILE GLOVES, AND PROPERLY
FITTED NIOSH RESPIRATORS**