

## PHYSICAL PROPERTIES

<b>VOC</b>	.....	<5 g/L
<b>SOLIDS CONTENT</b>	.....	100%
<b>VOLUMETRIC MIX RATIO</b>	.....	2A:1B
<b>COVERAGE RATE</b>	.....	300 Lf / gal @ 1/4" x 1/4"
<b>APPLICATION TEMP</b>	.....	50° - 90°F
<b>POTLIFE</b> 1 Gal mass @ 75°F	.....	<b>Standard:</b> 30 Mins  <b>Fast:</b> 15 Mins
<b>DRY TIME</b> @ 75°F	.....	<b>Standard:</b> 8-10 Hours  <b>Fast:</b> 5-7 Hours
<b>RECOAT WINDOW</b>	.....	8-24 Hours
<b>FULL CURE</b>	.....	7 Days
<b>PACKAGING</b>	.....	1.5 Gal Kit 3 Gal Kit

## MECHANICAL PROPERTIES

<b>COMPRESSIVE STRENGTH</b> ASTM D695	.....	2,500 p.s.i
<b>TENSILE STRENGTH</b> ASTM D638	.....	1,000 p.s.i
<b>ELONGATION</b> ASTM D638	.....	60%
<b>ADHESION TO CONCRETE</b> ASTM D7234	.....	>300 p.s.i
<b>SHORE D HARDNESS</b> ASTM D2240	.....	55-60

## CHEMICAL RESISTANCE

Refer to CrownTech Chemical Resistance Guideline Technical Bulletin No. 9

## PRODUCT DESCRIPTION

8504 CrownFlex is a two-component, 100% solids, semi-rigid thixotropic epoxy cove base binder, orange peel coating and a sag-resistant control joint and cracks filler. It features a combination of excellent adhesion and elongation not available in general-purpose epoxy. It is formulated to provide the armoring of concrete joint edges and minimizing the deterioration of concrete joint/crack edge to impact. It is available in standard cure and fast cure. It is used on floors, joints, and cracks subjected to heavy foot traffic, forklift traffic, and chemical attack, specifically food acids. Also, it is used as an epoxy membrane for waterproofing and crack dampening under epoxy coating and flooring systems. It is VOC Compliant in all states and provinces in North America.

- "S" – Standard Cure Hardener is designed for temperatures ranging from 50°F to 80°F (10°C to 27°C).
- "F" – Fast Cure Hardener is designed for temperatures ranging from 40°F to 60°F (4°C to 16°C)

## TYPICAL USES

- |   |  |                                      |                         |
|---|--|--------------------------------------|-------------------------|
| • Aircraft Hangars & Maintenance Floors | • Commercial Bakeries and Kitchens         | • Laboratories and Research Floors   | • School & Universities |
| • Automotive Show Room and Repair Areas | • Hospital and Health Care Facility Floors | • Manufacturing and Warehouse Floors | • Pharmaceutical 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



Clear

## LIMITATIONS

- Higher temperatures will result in shortened working times and faster drying time.
- Use 8303 CrownShield™ Moisture Barrier when MVT exceeds 3 lbs. or 80% RH
- May amber with UV Exposure
- Do not thin

## SHELF LIFE

1 Year from Date of Manufacture provided unopened

## STORAGE

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

## DISCLAIMER

All technical bulletins, installation guidelines, guidelines, recommendations, statements, specifications, and technical data contained herein are based on information and tests. The accuracy and completeness of such tests are not guaranteed and are not to be construed as a warranty, expressed or implied. It is the responsibility of the user to document information and tests to determine the intent of the product for ones' own use. The application, job conditions and user assume all risks and liability resulting from use of the product, We do not suggest or guarantee any hazards listed herein are the only ones, which may exist, Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use of, or inability to use the product. Recommendations or statements, whether in written or verbal, other than those contained herein shall not be binding upon the manufacturer, unless in writing and signed by corporate officer of the manufacturer. Technical and application information is provided for the purpose of establishing a general profile of the material and proper application procedures. Test performance results were obtained in a controlled environment and Crown Polymers makes no claim that these tests or any other tests accurately represent all environments. Not responsible for typographical errors.

## LIMITED WARRANTY

Crown Polymers warrants its products to be free of manufacturing defects and meets all Crown Polymers current published physical properties. Crown Polymers' sole responsibility shall be to replace the portion of any product proved to be defective. There are no other warranties by Crown Polymers of any nature whatsoever expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. Crown Polymers shall not be liable for damages of any sort, including remote or consequential damages resulting from any claimed breach of any warranty expressed or implied. In addition, no warranty or guarantee pertaining to appearance, color, fading, chalking, staining, shrinkage, peeling, normal wear and tear or improper application by applicator will be issued. Damage caused by abuse, neglect and lack of proper maintenance, acts of nature and/or physical movement of substrate or structural defects are also excluded from limited warranty.

## APPLICATION EQUIPMENT

Personal Protective Equipment  
V-Blade  
Putty Knife  
Stainless Steel Trowel

## 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  
DISPOSABLE 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

## MIXING PROCEDURE

**1** Scoop 2 parts A-Component and 1 part  
B-Component using a putty knife

BE SURE NOT TO CROSS CONTAMINATE PUTTY  
KNIVES WHILE SCOOPING

**2** Mix, fold, and blend components with a putty  
knife until homogenous mixture is achieved

## COVERAGE RATE

300 Lf / Gal @ 1/4" x 1/4"

## WORKING TIME

15-20 Minutes @ 75°F (Standard)

FAST VERSION AND WARMER AMBIENT,  
PRODUCT AND SURFACE TEMPERATURES WILL  
SHORTEN POTLIFE AND WORKING TIME.

## APPLICATION PROCEDURE

**1** Use putty knife or stainless steel trowel to press  
mixed material into clean and prepared static  
joint, crack, divot or spall.

BE SURE TO SLIGHTLY OVERFILL REPAIR AREA  
WITH MIXED MATERIAL

**✓** Allow repair material to dry 5-10 hrs prior to  
grinding flush with surface

## 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