

## PHYSICAL PROPERTIES

<b>VOC</b>	.....	<5 g/L
<b>SOLIDS CONTENT</b>	.....	100%
<b>VOLUMETRIC MIX RATIO</b>	.....	2A:1B
<b>COVERAGE RATE</b>	.....	4" Height: 65 lf/kit
		6" Height: 45 lf/kit
<b>APPLICATION TEMP</b>	.....	50° - 90°F
<b>POTLIFE</b> 1 Gal mass @ 75°F	.....	15-20 Min
<b>DRY TIME</b> @ 75°F	.....	5-12 Hours
<b>PACKAGING</b>	.....	1.5 Gal Kit 3 Gal Kit

## MECHANICAL PROPERTIES

<b>COMPRESSIVE STRENGTH</b> ASTM C579	.....	11,500 p.s.i
<b>FLEXURAL STRENGTH</b> ASTM C580	.....	9,200 p.s.i
<b>TENSILE STRENGTH</b> ASTM C307	.....	8,800 p.s.i
<b>ELONGATION</b> ASTM D2370	.....	5%
<b>ADHESION TO CONCRETE</b> ASTM D7234	.....	>400 p.s.i
<b>SHORE D HARDNESS</b> ASTM D2240	.....	80
<b>IMPACT RESISTANCE</b> ASTM D2794	.....	>160 in/Lbs
<b>ABRASION RESISTANCE</b> ASTM D4060	.....	51 mg Loss

## CHEMICAL RESISTANCE

Refer to CrownTech Chemical Resistance Guideline Technical Bulletin No. 9

## PRODUCT DESCRIPTION

312 CrownStone Cove is an epoxy system designed as an integral part of the flooring system. 100% solid, non shrink, 3 component polymer mortar. Formulated to be hand-trowel applied at 4" or 6". CrownStone offers a decorative or industrial cove demanding a seamless floor to wall built system

## TYPICAL USES

- Chemical Containment
- Food and Beverage Facilities
- Commerical kitchen coolers and walk-in boxes
- Manufacturing and Warehouse Floors
- Pharmaceutical Floors
- Showers and Restrooms
- Laboratories and Research Floors
- Mechanical Equipment Room 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.
- Do not thin
- May amber with UV Exposure
- Don't use wet aggregate

## SHELF LIFE

1 Year on Liquids and 6 Months on Aggregate 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  
Mortar Mixing Paddle  
Drill  
Margin Trowel  
Stainless Steel Trowel  
Cove Trowel  
Cove Strip

## 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,  
DISPOSABLE 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

- 1** Pre-Mix A-Component in its respective container using Jiffy mixer and drill at slow speeds for 30 seconds.
- 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 metal 5-gal bucket and mix for 1 minute then slowly add 100 lbs of natural or colored quartz per 1.5 gal kit gradually while continuously mixing for 2-3 minutes with mortar mixing paddle being sure to scrape sides of the bucket with a stir stick ensuring both components are thoroughly blended

## COVERAGE RATE

65 Lf / kit @ 4"  
45 Lf / kit @ 6"

## WORKING TIME

15 Minutes @ 75°F


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

## APPLICATION STEPS

- 1** Apply Cove strip at desired height, wet prime surface with mixed 310 resin and use margin trowel to load material at floor/wall junction
  - Do not apply to dry wall or where primer has been allowed to dry

EPOXY SETS FASTER IN MASS, MIXED MATERIAL  
SHOULD NOT REMAIN IN BUCKET

- 2** Use Flat Trowel to pull material up wall and use cove trowel to form cove. Clean and lubricate cove trowel with mineral spirits to smooth cove finish

-  Allow coating to dry 5-12 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](http://Crownpolymers.com) or contact Crown for additional resources