

PHYSICAL PROPERTIES

VOLUMETRIC MIX RATIO 2A:1B

COVERAGE RATE

	1/4"	3/8"	1/2"	5/8"	3/4"	7/8"	1"
1/4"	308	205	154	123	102	88	77
3/8"	205	136	102	82	68	58	51
1/2"	154	102	77	61	51	44	38
5/8"	123	82	61	49	41	35	30
3/4"	102	68	51	41	34	29	25
7/8"	88	58	44	36	29	25	22
1"	77	51	38	30	25	22	19

Coverage Rate: Linear Feet per Gallon

APPLICATION TEMP 50°- 90°F

GEL TIME
100g mass @ 75°F 7 ± 2 Minutes

DRY TIME
@ 75°F 60-90 Mins

APPEARANCE Opaque Paste

FULL CURE 3-5 Days

PACKAGING 1.5 Gal Kit

MECHANICAL PROPERTIES

TENSILE STRENGTH
ASTM D412 4,500 p.s.i

ELONGATION
ASTM D412 10%

TEAR STRENGTH
ASTM D624 350 pli

SHORE D HARDNESS
ASTM D2240 78

CHEMICAL RESISTANCE

Refer to CrownTech Chemical Resistance Guideline Technical Bulletin No. 9

PRODUCT DESCRIPTION

CrownCrack 8421 is a two-component, 100% solids, opaque epoxy paste designed for repairing cracks, spalls, and surface defects in concrete prior to the installation of resinous flooring systems. It delivers excellent adhesion, low shrinkage, and high strength, providing a durable and stable substrate for subsequent coatings. Suitable for industrial and commercial applications.

TYPICAL USES

- Filling static cracks in concrete substrates
- Repairing spalls, divots, and surface pitting
- Rebuilding damaged areas prior to resinous flooring installation
- Patching control joints (non-moving) before coating
- Smoothing rough or uneven concrete surfaces
- Prepping floors in industrial, commercial, and institutional environments

BENEFITS

- Excellent adhesion to properly prepared concrete
- Low shrinkage for stable, long-lasting repairs
- High compressive strength for load-bearing areas
- Opaque paste consistency for easy placement and build
- Fills cracks, spalls, and divots effectively

COLORS



Opaque

LIMITATIONS

- Higher temperatures will result in shortened working times and faster drying time.
- May amber with UV Exposure
- Do not thin
- Surface must be dry

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
Mortar Mixing Paddle
Drill
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 psi or less and Relative Humidity of 80% or less. See CrownTech Bulletin 6: Moisture Mitigation Negative Side Moisture Barrier

SURFACE PREPARATION

Allow concrete to cure 28 days before installation. All cracks and divots must be clean and dry prior to installing 7300. If crack is damp, dry with heat torch. If primer is required, use CrownShield™ 8303. Remove all dust from the concrete pores prior to installing 7300. For random crack and spall repairs, each side of the crack should be cut to create a minimum 1/4" deep vertical edge.

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.

DO NOT MIX MORE MATERIAL THAN CAN BE APPLIED IN 5 MINUTES

MIXING

1

Add A&B components at a mix ratio of 2A:1B by volume

2

Mix components for 30-45 seconds ensuring mixture is homogeneous

COVERAGE RATE

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

COVERAGE RATE WILL VARY DEPENDING ON DEPTH AND WIDTH OF CRACK, REFER TO COVERAGE RATE CHART

WORKING TIME

15-20 Minutes @ 75°F

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

APPLICATION STEPS

1

Using putty knife pack repair paste into properly profiled crack/spall and strike excess flat or leave slightly overfilled

✓

Allow coating to dry:
60-90 Mins depending on temperatures
If slightly overfilled, grind flush once dry

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

All guidelines, recommendations, statements, and technical data contained herein are based on information and tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. It is the user's responsibility to satisfy himself, by his own information and test, to determine suitability of the product for his own intended use, application and job situation and user assumes all risk and liability resulting from his use of the product. We do not suggest or guarantee that any product limitations 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 products. Recommendations or statements, whether in writing or oral, other than those contained herein shall not be binding upon the Manufacturer, unless in writing and signed by an authorized corporate officer of 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 Manufacturer makes no claim that these tests or any other tests accurately represent all environments. Manufacturer is not responsible for typographical errors.



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