8435 CrownCrack

Technical Data Sheet (TDS)

PHYSICAL PROPERTIES

VOLUMETRIC MIX RATIO 1A: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 ..... 30°- 90°F

POTLIFE
1 Gal mass @ 75°F ..... 4 Minutes

DRY TIME
@ 75°F ..... 15 Minutes

FULL CURE ..... 24 Hours

PACKAGING ..... 2 Gal Kit
10 Gal Kit

MECHANICAL PROPERTIES

TENSILE STRENGTH
ASTM D412 ..... 4,500 psi

ELONGATION
ASTM D412 ..... <5%

SHORE D HARDNESS
ASTM D2240 75

CHEMICAL RESISTANCE

Refer to CrownTech Chemical Resistance Guideline Technical Bulletin No. 9

PRODUCT DESCRIPTION

CrownCrack 8435 is a two component, low odor, liquid applied, fast setting polyurethane-alloy concrete repair system designed to repair concrete and masonry substrates. The new surface will protect concrete from weather, corrosion, erosion, freeze/thaw spalling and chemical attack

TYPICAL USES

- Filling and repairing cracks in concrete floors and slabs
- Repairing spalled, chipped, and damaged concrete
- Filling dormant control joints and construction joints
- Patching divots and surface imperfections
- Repairing industrial, commercial, and warehouse flooring
- Restoring concrete surfaces prior to polishing or coating
- Repairing cracks in sidewalks, garages, and parking areas

BENEFITS

- Low viscosity for deep crack penetration
- Fast curing – grindable in approximately 20–30 minutes
- Self-priming for easy application
- Low-odor formulation
- Excellent adhesion to concrete substrates
- Excellent bonding to concrete and masonry
- Ideal for repairing cracks, spalls, and surface defects
- Reduces repair downtime and labor costs

COLORS

Grey

LIMITATIONS

- Higher temperatures will result in shortened working times and faster drying time
- May amber with UV exposure
- Do not thin
- Do not mix more than 8 ounces at a time
- Surface must be dry
- Not for concrete structural repairs or vertical surfaces
- Do not mix more material than can be applied in 4 minutes

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 3/8" Nap Shedless Roller Cover
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 Ft^2/ 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) 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 30°F and below 90°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 DISPOSIBLE 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 4 MINUTES

MIXING

1. 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.

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 at a mix ratio of 1A: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.

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

4 Minutes @ 75°F

WARMER AMBIENT, PRODUCT AND SURFACE TEMPERATURES 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.

2. Pour a band of mixed material across the surface roughly 6-8" wide. Use Notched Squeegee mil notched squeegee to gauge material across surface depending on application
   - 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 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 15 Minutes @ 75°F
Grindable in 20-30 minutes depending on temperatures.
Do not force dry.
Full Cure: 24 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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