

FlexKrete™

Technologies
A div of Protective Products, Inc.

CONCRETE REPAIR

FlexKrete™ 102 Technical Bulletin

GENERIC TYPE:

Advanced, thermoset vinyl polymer.

RECOMMENDED USAGE:

- Repair pot holes and broken concrete.
- Repair spalls in concrete.
- Feather edge, or use full depth.
- Rebuild broken curbs and platforms.
- Restore integrity of distressed concrete.
- Bridge deck repairs and slabs.
- Parking lots.
- Parking decks.
- Floors, docks & ramps.
- Non-skid, coating for floors, steps & walkways.
- Driveway and sidewalk renovation.
- Rebuild stairways.
- Control joints.
- Equipment bases.
- Anchor bolts and posts.
- Level concrete.

CHEMICAL RESISTANCE GUIDE:

(Use FlexKrete 102CR)

EXPOSURE	IMMERSION	SPLASH & SPILL
ACIDS	GOOD	EXCELLENT
ALKALIES	GOOD	EXCELLENT
PETROLEUM	GOOD	GOOD
SALTWATER	EXCELLENT	EXCELLENT
WATER	EXCELLENT	EXCELLENT

NOTE: For specific harsh chemical environments, contact FlexKrete Technologies or your sales rep.

ORDERING INFORMATION:

Shipping Weight:

Wt. Per Gallon @ 77° F. 9 lbs.

PACKAGING:

Available in 5 gallon units.

PHYSICAL DATA:

Solids by wt: approx. (@77° F.)	99%
Solids by vol: approx. (@77° F.)	98%
Specific Gravity @ 77° F.	1.08
Viscosity @ 77° F.	180-250 cps
Flash Point: (ASTM-D-93, Open Cup)	141°F.
Pot Life with 80% aggregate:	
@77°F., approx.	20 min.
@100°F., approx.	12 min.
Pot Life without aggregate:	
@77°F., approx.	13 min.
@100°F., approx.	7 min.
Linear Shrinkage (unfilled)	1.1%
Tensile Modulus (ASTM D 790)	182,000 psi
Tensile Strength (ASTM D 638)	3,530 lb/in ²
Flexural Strength (ASTM D 790)	7,340 lb/in ²
Flexural Modulus (ASTM D 790)	390,000 psi
Elongation % (ASTM D 638)	30%
Water Absorption (ASTM D 570)	0.64%
Compressive Strength	>10,000 psi
Hardness-Shore D (ASTM D 2240)	79
Shelf Life:	6 mos.
VOC:	0

TEMPERATURE LIMITS:

Continuous	175° F.
Intermittent	220° F.
Cures @	35° F.

COVERAGE:

1 Gal. FlexKrete™ + 4 Gal. Sand =

128 sf @ 1/16" Average Thickness

64 sf @ 1/8" Average Thickness

32 sf @ 1/4" Average Thickness

16 sf @ 1/2" Average Thickness

8 sf @ 1" Average Thickness

For roll and broadcast repairs, approx. 50-100 sf per gallon, depending on the type and porosity of the substrate and the size of the aggregate used.

MATERIALS & EQUIPMENT:

1. *FlexKrete*™ 102 in pouring container
2. *FlexKrete*™ catalyst and measuring container.
3. Bagged blast sand. (20-40 mesh (coarse), or for fine feather edging, use 40-60 mesh (fine).
4. One-gallon measuring containers with 1 qt. Increments.
5. 5-gallon (or larger) mixing containers.
6. Brushes and/or rollers to apply the primer coat.
7. Trowels. (MUST BE TOTALLY CLEAN ON BOTTOM SURFACE.)
8. Concrete edgers and tools for installing dummy joints.
9. Heavy-duty drill with 4-6" wide paddle or grout mixer.
10. Electrical generator or available electricity.
11. Acetone for tool clean-up.
12. Container with lid, in which trowels and tools will fit flat on bottom, bathed in 1-2" of acetone, immediately after using.
13. Pumice stone for feather edging and smoothing.
14. Duct tape.
15. Rags and hand cleaner.

SURFACE PREPARATION:

All surfaces should be clean, free of oil, dirt, debris, grease, scale, coatings, contamination and moisture. Any existing asphalt materials should be removed prior to application. NEW CONCRETE should be aged for 28 days and should be clean and free of form release agents, curing agents, waterproofing agents and any other coating. For best results, a clean, rough concrete surface should be exposed. A full-depth repair appearance may be produced by using duct tape to symmetrically tape off the area to be repaired.

MIXING:

Determine how much primer is needed for the defined work, then pour the appropriate amount of *FlexKrete*™ into the measuring container. Add the indicated amount of catalyst, (1.2oz. for 1 gal., 1/2oz. for 1/2 gal., 1/4 oz. for 1 qt., etc.— then mix with the mixer for 30-60 seconds. Apply liberally to the areas with brush and/or roller, making certain that all facets are coated and voids are covered. The slurry may be applied immediately after priming, or time may be allowed to pass, as long as the primed area remains clean—finish on same day.

SLURRY:

A *FlexKrete*™/sand mix ratio should be about 3 1/2—4 parts sand for the best trowelability. **CATALYZE BEFORE ADDING SAND.** Use 20-40 mesh (coarse) blasting sand, or a mixture of 20-40 and 40-60 mesh, (fine) for excellent results. Mix only the amount of material that can be poured and troweled within the setup time. (approx. 15-20 minutes)

DEEP HOLES:

For repairs 2-4" deep or more, small angular gravel mixed with *FlexKrete*™ may be used to fill within 1/2-1" of surface. Then, use the same *FlexKrete*™/sand mix to finish, feather-edging to the duct tape. **DO NOT OVER-TROWEL.** When the material begins to pull, finish or pat smooth with the trowel. Wipe trowel with acetone wet rag for last minute smooth finishes. Install dummy joints, pull duct tape up and allow to cure. Normally, 45-90 minutes are needed for return to full traffic.

CLEANUP:

Immediately drop tools and brushes in acetone for easy cleaning.

These instructions are issued as an aid in determining correct surface preparation, mixing instructions and application. It is assumed that the proper product recommendations have been made. These instructions should be followed closely to obtain the maximum service from the materials. **CAUTION:** Contains flammable materials. Keep away from sparks and open flames during application. In confined areas fresh air supply should be utilized, and all hypersensitive persons should wear gloves or use protective cream. All electrical equipment and installations should be made and grounded in accordance with the National Electrical Code.

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