



PRODUCT DATA SHEET

FlexKRETE 102

PRODUCT DESCRIPTION:

FlexKrete 102 is an advanced, thermoset vinyl polymer, formulated for early high strength and quick set times. It can normally be opened to traffic in an hour or less, and with FlexTemp additive, within fifteen minutes. FlexKrete can be used in cold weather and freezer rooms, down to 0°F, and still receive traffic after 1-3 hours. Thick cross sections, as well as thin spall areas, are repaired with FlexKrete, and it's adhesion is greater than the strength of the concrete.

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.
- Repair control joints.
- Equipment bases.
- Anchor bolts and posts.
- Level concrete.

CHEMICAL RESISTANCE GUIDE:

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, (resin only) 9.2 lbs per gal.

PACKAGING:

Available in 5 gallon pails & 1 gallon kit, consisting of 1 gal. Flexkrete/catalyst, Flex-Prime, aggregate, mixing pails, all shipped in 5 gal. pail.

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.	500-600 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 (filled)	0%
(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
TXDOT—Tex614-J	350 psi
Hardness-Shore D (ASTM D 2240)	79
VOC:	0
Temperature Limits:	
Continuous:	175° F.
Intermittent:	220° F.
Shelf Life: @77°F, unopened	6 mos.

(For maximum shelf life, store in cool, dry, shaded area in unopened container).

THEORETICAL COVERAGE:

1 Gal. FlexKrete + 4 Gal. #3 Med. Grade 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

One five gallon pail yields approximately 20 gallons of mixed material, or, about 3.3 cu. Ft.
 For broadcast repairs, approx. 50-100 sf per gallon, depending on the type and porosity of the substrate. These figures will also vary depending on the type and size of aggregate used.

SURFACE PREPARATION:

For best, long-term results, a clean, rough concrete surface, free of dirt, oils, curing compounds and other debris should be attained. Scarifying, grinding, chipping, sandblasting, shot-blasting, or other cleaning methods may be required. Any unsound concrete areas should be located with chain or hammer and removed, so that a sound, stable concrete base is established.

VEHICULAR TRAFFIC PATCH:

1. Chip or dry saw-cut a ½” deep vertical shoulder around the area to be repaired so that the FlexKrete will be “keyed” into the concrete.
2. Chip out and remove loose and delaminated material and blow or vacuum clean.
3. Determine amount of FlexPrime needed, and combine parts A&B in equal amounts. Hand mix to a smooth, consistent color.
4. Wet out repair areas by brushing or rolling a very thin coat of FlexPrime onto surfaces and down into all cracks and crevices.
5. Pour into measuring bucket, the amount of FlexKrete needed. With catalyst measuring bottle, loosen chamber lid, squeeze bottle for the proper amount of catalyst, and add to the mix. Power mix for approx. 30 seconds.
6. Measure 3-3½ parts blasting sand for 1 part FlexKrete. (Approx., 1 gallon FlexKrete for 50# bag blast sand). Use less sand for a looser, more self-leveling mix, and more sand for a trowelable material.
7. Using a heavy-duty drill motor and a square mud paddle, mix the sand into the liquid for approximately 1 minute, making sure that the aggregate is thoroughly blended with the resin.
8. Fill void. Screed and/or trowel to final grade. Broom or tine, if needed, then broadcast wet surface with aggregate to remove tack and add increase non-skid.

BREAKS AT JOINTS:

1. If joint is unfilled, place a spacer board in it to retain it’s function.
2. Prep and repair void exactly the same as above, i.e., clean, chip, blow, prime, fill, and sprinkle sand.
3. Immediately after FlexKrete begins to set, tap the end of the spacer board to release it from joint, then fill, if necessary.
4. (OPTION): Same as above, except, instead of using the spacer board, also, clean and fill the joint with FlexKrete. Wait about an hour for it to cure, then saw-cut the joint back to original, and fill with joint filler.

TRAFFIC IN 15 MINUTES:

When mixing FlexKrete, mix in the standard catalyst as usual, then add the appropriate amount of FlexTemp, (as indicated on the measuring bottle), and mix. **DO NOT MIX THE TWO CATALYSTS TOGETHER**—as a thermal reaction will occur. **MIX THE TWO SEPARATELY.** Immediately mix in the aggregate and dump into repair area. Smooth and finish. The set time is dependent upon the ambient, surface, and material temperatures. Varying the amount of FlexTemp can also control how fast it will set, but start with the average amount first.

VERTICAL & OVERHEAD REPAIR:

To repair vertical and overhead areas, clean & prime area as usual; however, FlexPrime needs to tack up so that it is very sticky to the touch. A good test is when a fingerprint can be left from your touch. Otherwise, the patch mix will slip off. It just needs this tackiness to hold on until it cures. To speed this process, and in cold weather, a weed-burner (torch) can be used to warm the concrete just before applying the primer. This can bring about immediate results.

The vertical & overhead mix can vary greatly, depending on what is needed, but a good general mix to start with is: 2 parts fumed silica, 2 parts sand and 1 part FlexKrete. To stiffen the mix and make it lighter, try a 3 -1-1 mix. Some contractors prefer to work with a “dough-like consistency in order to “glove” it in place and strike it off with a trowel. A 6” deep section can be applied in one pass with a small amount of experimentation.

OVERLAYS & LARGER REPAIRS:

In a clean mortar mixer, use 3-3½ parts aggregate to 1 part FlexKrete. As normal, add the FlexKrete then the catalyst, and mix for 30 seconds. While the mixer is still turning, add the aggregate and mix for 2 minutes, or until the mixture is totally blended. Dump the mix into a wheelbarrow and transfer to the repair area. If another batch is needed, immediately add uncatalyzed resin to the mixer and allow it to continue turning (no catalyst). This will keep the drum clean until the crew is ready for another batch to be mixed. A screed is used to bring repair to a perfect grade and to produce a smooth, or rough texture, as desired. The wet surface can also be dressed with a broadcast aggregate, but should be done on each pour, before it begins to set. Mixtures can vary, depending on the temperature. Trial batches may be required to determine the proper mix and additives to meet any traffic requirements.

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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