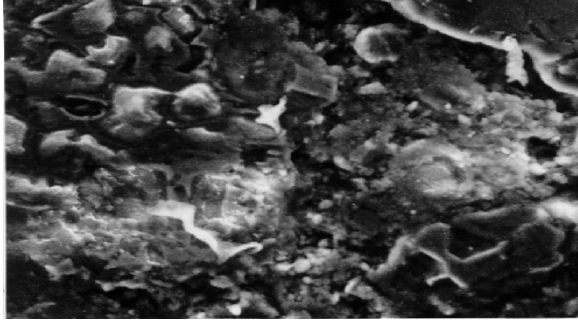


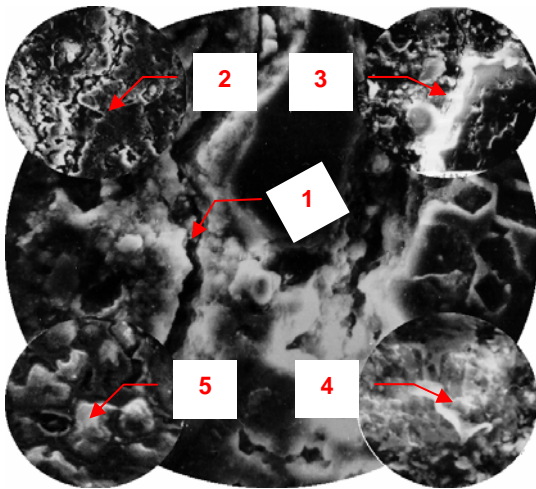


KALMATRON KF-B



Micro-section of concrete specimen made after 28 days of KF-B layer application. Shown (X600) crystalline sprouts of recuperated new-growths:

- Shells looking cement grains
- Funnel-shaped growths
- Tubes-like monolithic crystals



Collage from micro sections of concrete specimens that made after 7th, 14th and 28 days of Kalmatron® KF-B layer application, wherein:

- 1 - crack into concrete after 400°C heat attack
- 2 - osmotic melting of crystalline content after KF-B
- 3 - recrystallization of melted phase with active filling of crack as a free space;
- 4 & 5 - new growths that shaped as a shells, funnels and tubes-like monolithic crystals.

■ DEMO OF KALMATRON® KF-B

- The standard cylinder coated with 3 mm layer of KF-B increases its compressive strength up to 2 times after 28 days.
- Two concrete prisms glued by KF-B breakable on an outside concrete area only.
- Resistance to rupture on KF-B applied area increased over 3 times.
- Impermeability of 5 mm KF-B layer evaluated by 20 At to 40 At hydraulic pressure.

For more information about the effective principles of Kalmatron® see the article of Dr. Alex V. Rusinoff "Physical-chemical properties of the Kalmatron® protective composition"

■ **KALMATRON® KF-B** is a coating on the old, aged, or deteriorated concrete, reinforced concrete and masonry structures. The best to be applied in a damp environment.

By definition, **Kalmatron® KF-B** is a protective composition with penetrating effect into the structure. Provides ion-kation exchange that recuperates unhydrated cement grains with increasing of cementitious gel content and crystalline value.

Improves density, compressive strength, abrasion and chemical resistance, gas and liquid impermeability, freeze-thaw and vapor emission resistance.

Kalmatron® KF-B works from the both negative and positive waterproofing sides. Applicable by the metal trowel in one time.

■ ESSENTIALS OF KALMATRON®KF-B

- **KALMATRON® KF-B** is only known product that works in a severe sewage, acid, and petroleum environments as a continuous coating.
- Preparation on a job site is as simple as mixing of **KF-B** with water in a volume ratio as 3 to 1.
- Applicable by plaster technology doesn't require cleaning of surface, where the great saving is.
- Stops seepage-type leaks by strewing **KF-B** powder on it.
- Premixed with 30% of pea-gravel by weight is the best for trafficable patching of concrete and asphalt roads as well.
- Works as glue for concrete joints or debris of repaired parts.

■ BENEFITS

- **KALMATRON® KF-B** is the only product with guaranteed durability in damp environments, ordered by customers. Computerized mathematical calculations of durability are based on a long term testing of concrete in a different aggressive media. This software is used for forensic researches of collapsed structures.
- Applied on the sacrificial concrete layer provides passivation of rebar under that layer by solid film oxide. Fills up the gap between rebar and concrete around till they adhesive reunion.
- Provides renovation of concrete structures for chemical and petroleum industries that were known as irreparable.
- Welcomed on a retail market for housing and any cities' maintaining needs.
- Sub-manufacturing of KF-B from chemical concentrate is available on any marketplace with minimum expenses.

Features of the Kalmatron® KF-B (3 mm layer)

Appearance	Gray powder
Powder/Solid Density, kg/m ³	1350/2350
Setting time	15 - 85 min
Compressive strength, MPa,	25
Freeze-thaw resistance cycles	F300
Water proof grade of 3 mm layer	W8 - W12
Depth of penetration up to	150 mm
Consumption per square unit	4.8 Kg/m ² or 1 Lb/ft ²