



Dr. Alex Rusinoff, President & Chairman.

236 West Portal Ave. PMB 153,
San Francisco, CA 94127, USA
Phone: 415-385-3290
Fax 415-753-1100
e-mail: KalmatronWorld@aol.com
K100@kalmatron.com

www.kalmatron.com
www.shieldcrete.com
www.blockdegree.com
www.seismicstar.com

K¹⁰⁰® APPLICATION INSTRUCTION

Liquid Admixture K¹⁰⁰® is designed and classified as a Concrete Class Upgrading Admixture for the cement containing mixes such as concrete, mortar, shotcrete, gunite, and grout to complete liquid impermeability compression and tensile strengths, corrosion resistance, and conservation rebar from rusting.

■ BATCH

1. Minimal volume of the concrete/mortar batch is limited by 1CF (~0.03 m³).

■ DOSAGE

1. K¹⁰⁰® is applicable by the volumetric ratios as 0.41 GL/CY (2 OZ/CF), or 2 Liter/m³ of conventional concrete mix.
2. K¹⁰⁰® is applicable by the weight's ratios as 10 OZ per 100 LB of cement or 0.75 Kg per 100 Kg of cement.

■ W/C

1. Keep the water-to-cement ratio variable for the major applications such as:
 - flat works with conventional concrete mixes at 0.455 to 0.489;
 - precast concrete mixes, liquids/gases containing structures at 0.389 to 0.424;
 - plaster, stucco, gunite, and shotcrete mixes at 0.378 to 0.417.

2 OZ/CF
30 mL/0.03 m³
2 L/m³

■ SLUMP

1. Do not apply any other chemicals and supplementary materials.
2. Slump should be at 2 ½" to 2 ¾." This slump provides stable pumpability over 150'.
3. If that batch is still stiff, add 4 oz of water per 1 CY and keep mixing.

■ EXPECTED RESULTS

1. Highest volume of cement hydration completes concrete formation without curing. **No curing required.**
2. Exothermic heat is lower at 30% to 50%. There are no shrinkage cracks and slab's curling. **No fibers required.**
3. Yield of mixed batch is higher by 8% to 14% of cement gel. **No water reducer or plasticizer required.**
4. Water impermeability of plaster at ¾" thick and 2" of concrete thick is 100% respectively. **No isolations required.**
5. Early strengthening at 1st to 3^d days at 25%. **No strength gainers and excessive rebar required.**
6. Highest resistance to chemical and climate corrosions due to complete **hydration of cement grains.**
7. Therefore, K¹⁰⁰® upgrade conventional concrete batch to the **High Performance Concrete.**

■ ESSENTIALS

1. Mixing up to 5 hours keeps concrete batch revived with ~20% slump reduction, but workability will be the same.
2. Applicable in the range of the ambient temperatures at -4°F to 104°F or -22°C to 40°C without isolating measures.
3. Concrete Curing is not required for the most climatic & environmental conditions.
4. Do not place control and trial specimens into the same curing water tank during of lab tests.

■ SAFETY

Operation with K¹⁰⁰® is similar to the cement mixing jobs. Always use rubber gloves like for jobs with cements. In case K¹⁰⁰® is swallowed or gets in contact with the eyes, rinse and wash abundantly with water. K¹⁰⁰® is not hazardous, not flammable, and not explosive for application, transportation, and storage.