

# KALMATRON® KF-A

USA Patent 5,728,208

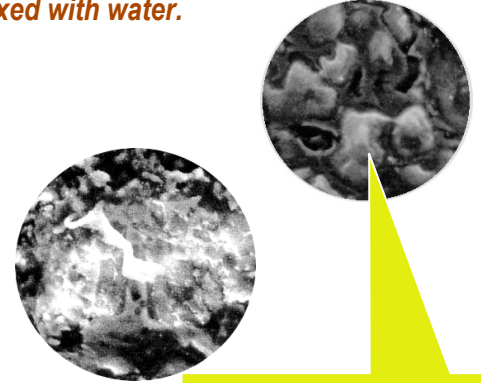
*Which part of the concrete body is the most vulnerable? Are the rocks, the sand, the supplementary materials, or the cement? In the concrete batch none of the ingredients go through a change of phase except the cement itself. Cement transforms from fine dry powder into a cementitious gel when it is mixed with water. cementitious gel during of mixing with water.*

*About 30% of the cement volume turns into the gel. But even the working part hydrates at a depth of 10% from the diameter of a cement grain during the first twelve months. For this reason the concrete structure forming process continues for up to 50 years. Here is the concrete problem.*

For the first time in the history of concrete technology there has been achieved a unique solution to activate cement hydration, that transforms commercial concrete into the High Performance Concrete:

KALMATRON® KF-A, added to concrete, shotcrete, or plaster at 8.5 Lbs/yd<sup>3</sup>+ 17 Lbs/yd<sup>3</sup> eliminates the need for workability enhancers, curing supplements, strength and density gainers, micro-pore blockers, fibers, hydro - vapor isolations, and anti - decay devices.

This technology brings a new economical concept, where KALMATRON® KF-A reduces the cost per square foot of concrete up to 2 times. Our clients say: "We can not afford to work without KALMATRON®."



Portland Cement Type I with particles at 40 µm to 100µm, where is SS = 2300 cm<sup>2</sup>/Gr.



Portland Cement Type I with KF-A contains particles with diameters of 5 µm to 20µm, where is SS = 8000 cm<sup>2</sup>/Gr.

