



At the Lab. In the Field.  
By Your Side.

## Instructions for Placers & Finishers

Use of KIM® Admixture

Technical Bulletin #304

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QUESTIONS: 1-800-267-8280 or [www.kryton.com](http://www.kryton.com)

### IMPORTANT

You are making a waterproof membrane out of the concrete/shotcrete. This is different from traditional construction, where the concrete just forms the structure. The KIM concrete you are placing will be the only barrier to water penetration. This means that common defects found in typical concrete cannot be tolerated. Poor consolidation, unplanned cold joints, cracks, penetrations, contaminations, etc. will all result in a leaking structure. To avoid leakage and achieve success you must follow the critical instructions outlined in this document.

### EFFECTS ON PLASTIC CONCRETE

- KIM reduces the water demand for a given slump. For most mixes, you can expect a slump increase of approximately 25mm (one inch).
- KIM retards the initial and final setting times.
- KIM improves the pumpability of concrete.
- KIM entrains air \*

Be aware of the differences in air entrainment between KIM and KIM-HS.

### \* KIM® HS

This specialized version of KIM® is available with reduced air-entrainment properties. KIM-HS is designed for applications where freeze/thaw resistance is not required. Typically, concrete with lower air content will produce higher compressive strength results. KIM will add about 2-5% air entrainment while KIM-HS will increase air content by approximately 1%.

### CONCRETE HANDLING

- If the slump is below specification, add a mid or high range water reducer to achieve the required slump. Only add additional water with the approval of the quality control technician. Record all water additions on the batch ticket and do not exceed the specified water-cement ratio.
- Under some circumstances, you may observe slump loss at 25-40 minutes. This is false set and slump may recover with continued mixing. False set may be avoided by dosing KIM on the project site. Avoid placing KIM during the false set period.

- The addition of water without supervision and approval may void the manufacturer's warranty.

### FINISHING

- Superior consolidation of the concrete is essential to achieve the performance and benefits of KIM.
- KIM treated concrete will typically delay the initial and final setting times of the concrete. Adjust your finishing or stripping schedule accordingly. Evaporation retarder may be needed.
- Alert the site superintendent and/or manufacturer immediately of any concerns.

### CURING

- Proper curing is essential to achieve the performance and benefits of KIM.
- Cure in accordance with ACI 308.1 specifications.
- KIM improves the internal cure of concrete. However, KIM is not a replacement for proper curing procedures. Wet cure the concrete with a fog mist spray, sprinkler or wet burlap for five days. Protect from rain, excessive wind, and sun.
- If a curing compound is used, it must conform to ASTM C309.

### SAFETY

- Before using or handling, read the Material Safety Data Sheet for this product.
- Safety precautions for KIM concrete are no different than for normal concrete.
- KIM powder becomes caustic when mixed with water or perspiration. Take appropriate safety precautions to prevent contact with skin or eyes and to prevent breathing dust.

### NOTE

In cases where concrete loads are accepted that are not conforming to the specifications, record the name of the person authorizing the acceptance and the location of concrete placement.

TECHNICAL BULLETINS