

INCREASE THE VALUE OF YOUR PRECAST CONCRETE

With Krystol Internal Membrane™ (KIM®) Concrete Waterproofing Admixture



WATERPROOFING SOLUTIONS FOR PRECAST CONCRETE

KRYSTOL INTERNAL MEMBRANE™ (KIM®)

Krystol Internal Membrane (KIM) is a hydrophilic crystalline admixture used to create permanently waterproof concrete.



KIM lowers the permeability of concrete and gives it an ability to self-seal. By stopping the transmission of water through concrete, the admixture protects against chemical attack and corrosion of reinforcing steel, which enhances durability and longevity of concrete.

Adding KIM to precast concrete adds value by permanently waterproofing the concrete - even after cracks develop - and by increasing longevity of the precast components.

HOW KIM WORKS

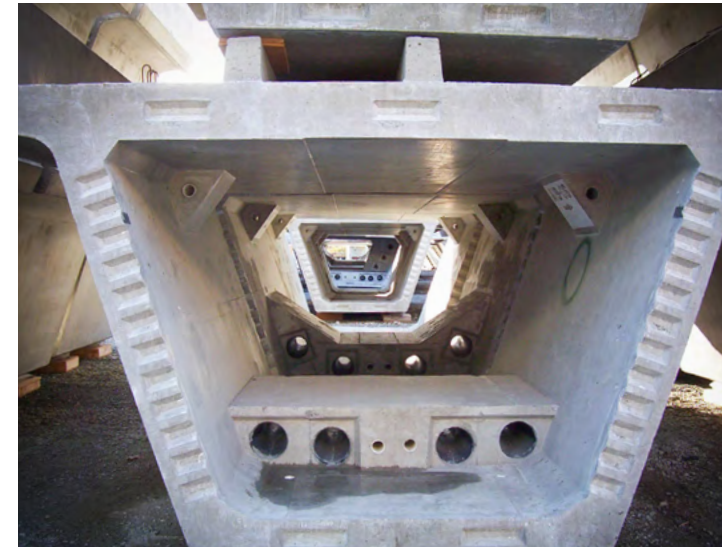
KIM contains self-sealing Krystol® technology. When added to concrete, Krystol chemically reacts with water and un-hydrated cement particles. This reaction forms insoluble needle-shaped crystals that fill capillary pores and micro-cracks in the concrete and block the pathways for water and waterborne contaminants.

Any moisture introduced over the lifespan of the concrete will initiate crystallization, ensuring permanent waterproofing protection.

MANUKAU POLICE HUB TUNNEL, NEW ZEALAND

New Zealand's Manukau Police Hub needed an underground tunnel to connect to the adjacent courthouse. The new tunnel would also include a full basement development with cells to hold the overflow prisoners. It was determined that the tunnel would be built out of fifty precast box culverts with the most sound structural integrity in mind. The construction team recommended that Kryton's Krystol Internal Membrane (KIM) was the best waterproofing choice based on performance and pricing. All fifty of the precast box culvert segments contain KIM, ensuring that they are permanently protected from water ingress from the inside out.

A WORLD OF APPLICATIONS



KIM is recommended for all precast concrete structures where long-term waterproofing and water containment is needed. It is also used to protect concrete from chemical attack and prevent corrosion of reinforcing steel. KIM can add value to:

- Box culverts
- Cable and drain trenches
- Catch basins
- Concrete pipes
- Highway barriers & parking curbs
- Headwalls
- Lawn basins
- Oil interceptor chambers
- Perimeter drains
- Vaults & chambers



ADDED VALUE TO PRECAST CONCRETE

1. **Reduces permeability** – Lowers water penetration by reducing permeability of the concrete by 50-90%, even under extreme hydrostatic pressure.
2. **Self-seals cracks** – KIM activates in the presence of moisture to seal micro-cracks that develop over the life-span of the structure.
3. **Environment-friendly** - Safe for potable water (certified to NSF/ANSI std. 61) and non-toxic.
4. **Protects reinforcing steel** – Prevents the penetration of waterborne contaminants and chloride-laden liquids that cause the corrosion of reinforcing steel.
5. **Reduces shrinkage and cracking** during the plastic and curing stages, increasing quality and longevity of concrete.
6. **Resists freeze-thaw** – Mitigates the effect of expansion and contraction of freezing and thawing within concrete.



KIM IN THE FIELD



"The KIM system is easy to use, requires very little labor and we are responding to municipal requirements that won't allow tar based systems to be put below ground."

**SPS Septic,
Georgia, United States**



"We use it (KIM) in our septic tanks as a precaution to prevent water from penetrating or escaping the tank through any cracks that may occur during the manufacture process or in the future while in the ground from any settling."

**Bode's Precast Septic Tanks,
Washington, United States**



Kryton's global network includes staff in Canada, China, India, Mexico, Singapore, UAE, UK, and USA, as well as Distributors in over 50 countries.

To find a Kryton authorized Distributor near you please visit: www.kryton.com



SMART CONCRETE®

Kryton International Inc.

1645 East Kent Avenue
Vancouver, BC Canada V5P 2S8
Tel: 1.604.324.8280
Fax: 1.604.324.8899
Toll Free (Canada/USA):
1.800.267.8280
Email: info@kryton.com