



# Krystol Mortar Admixture™ (KMA)

(Protection Admixture for Renders/Plasters, Masonry Mortars, and Concrete Masonry Units)

Product Code: K-309

## DESCRIPTION

Krystol Mortar Admixture (KMA) is a chemical admixture in dry powdered form which is specifically formulated to provide long-term protection in rendering/plastering mortar, masonry mortar and concrete masonry units. KMA can often be used in place of externally applied surface sealers to protect against water and waterborne contaminants and can be easily incorporated into the existing mix design and application processes.

KMA contains Kryton's unique and proven Krystol® technology which reacts with cement particles to form millions of needle-like crystals, reducing both permeability and absorption of the mortar by filling the naturally occurring pores and voids in cementitious mortar.

Krystol technology helps to simplify installation and provide superior performance such as its ability to self-seal minor cracks and withstand water under pressure.

## FEATURES

- Enhances durability by resisting salt attacks freeze thaw degradation, corrosion of embedded steel and water penetration
- Minimizes the chance of debonding
- Preserves aesthetics by resisting stains and discoloration caused by efflorescence, mold and mildew, and rust
- Enhances workability for ease of use, improved adhesion and reduced cracking
- Self-seals minor cracking
- Withstands water under pressure such as wind-driven rain

## KEY BENEFITS

- Simplifies installation and shortens the construction cycle
- Eliminates the upfront building and labor costs specific to surface applied sealers
- Delivers a permanent solution that lasts the lifetime of the mortar
- Increases durability, decreasing building maintenance and repair costs
- Improves aesthetics by maintaining the original appearance for lasting attractiveness
- Provides superior performance enhancing your reputation for high quality work

## RECOMMENDED USES

Use KMA to provide permanent protection for:

- Rendering and plastering mortar (including stucco and other thin topping mixes) over concrete masonry walls or other prepared substrates
- Masonry mortar (i.e., mortar that goes between the masonry units)
- Concrete masonry units (i.e., blocks when they are manufactured)



### PHYSICAL PROPERTIES

Appearance	Light, off-white powder
Bulk density (g/cm <sup>3</sup> (lb. /cu. ft.))	0.7 (44)
pH (dissolved in water)	12

### PLASTIC PROPERTIES

#### WATER REDUCTION

##### ASTM C270 Standard Specification for Mortar for Unit Masonry

KMA will reduce water demand for mortar mixtures as compared to a control mixture of equal workability by approximately 5%. Water reduction will typically result in higher compressive strength, reduced shrinking and reduced cracking. Results may vary depending on local mortar ingredients.

### HARDENED PROPERTIES

#### WATER ABSORPTION

##### BS EN 480-5 – Determination of Capillary Absorption

Mortar samples containing KMA (@ 2% cmts) achieved a 50% reduction in water absorption compared to the control.

#### PERMEABILITY

##### DIN 1048: Part 5 – Permeability of Hardened Concrete

Mortar samples containing KMA (@ 2% cmts) were subjected to constant hydrostatic pressure of 0.5 MPa (72.5 psi) for a period of ten days. Samples containing KMA prevented the passage of water with no leakage or dampness.

### APPLICATION

**Detailed application instruction can be found in Application Instruction 6.11 – Protecting Masonry Mortar or Application Instruction 6.21 – Protecting Rendering & Plastering Mortar before using this product.** Dose KMA at 2% by weight of cement. When dosing on the jobsite, measure and add 1 liter (1 quart) of tightly-packed KMA for each 40kg (88 lb.) bag of cement in your mortar mix. Mix well. Reduce water if necessary. It is designed to be used with existing mix design and installation practices. Proper curing is essential to achieve the performance and benefits of KMA.

### LIMITATIONS

KMA is an effective system for rigid structures only and may not resist water for mortar that experiences variable loading or repeated movement. Consult a Kryton representative for project specific recommendations.

### SAFETY

Read the Material Safety Data Sheet (MSDS) for this product. For professional use only. This product becomes caustic when mixed with water or perspiration. Avoid contact with skin or eyes. Avoid breathing dust. Wear long sleeves, safety goggles and impervious gloves. The safety precautions for KMA treated mortar are the same as for regular mortar.



### PACKAGING

- 15 kg (33 lb.) resealable pails

### SHELF LIFE

KMA has a shelf life of 24 months for unopened pails, and 4 months for properly resealed pails.

### WARRANTY

Kryton International Inc. warrants that its products are free from manufacturer's defects and, when applied in accordance with the current specification and application instructions will perform as so stated in its product literature. Because methods and conditions of use are beyond the control of Kryton, no guarantee, expressed or implied can be given as to the results of application. Liability of Kryton shall be limited to replacement of materials proved defective or, at its option, refund of the purchase price of the product.