

# KingAdd<sup>®</sup> 25WP

**Powder waterproofing crystalline admixture.**

## DESCRIPTION

KingAdd 25WP is powder waterproofing admixture formulated from selected organic salts and very fine treated silica specially designed to reduce the permeability in all cement based mortars, screeds and concrete. KingAdd 25WP blocks the natural pores in the mix and imparts the hydrophobic properties which reduce moisture permeability.

Unique properties of KingAdd 25WP active organic chemicals reacts with the moisture in fresh concrete and generates non soluble crystal and block the pores during active hydration of cement particle. The concrete admixed with KingAdd 25WP become permanently sealed against water penetration from all sides, which also increases the ultimate strength of concrete.

The advanced waterproofing properties of KingAdd 25WP also protect reinforcement against corrosion, harsh environment and waterborne chemicals like sulfates, acids and chlorides, increasing the durability and life span of concrete.

## APPLICATIONS

KingAdd 25WP is a waterproofing admixture for use in all cement based mortars, screeds and concrete. It is recommended to be used for:

- ☞ Reservoirs.
- ☞ Sewage.
- ☞ Water treatment plants.
- ☞ Underground vaults.
- ☞ Foundations.
- ☞ Swimming pools.
- ☞ Parking structures.
- ☞ Basements.
- ☞ Elevator pits.
- ☞ Traffic tunnels.
- ☞ Below grade pipelines.
- ☞ Bridges.
- ☞ Dams.
- ☞ Highway infrastructure.
- ☞ Precast concrete.
- ☞ Cast-in-Place concrete.
- ☞ Shotcrete.

## TECHNICAL PROPERTIES @ 25°C:

Colour:	White powder
Bulk density:	0.55 ± 0.10 g/cm <sup>3</sup>
Chloride content: EN 934-2	Nil
Air entrainment:	Typically less than 2% additional air is entrained above control mix at normal dosages
Permeability Reduction:	At least 70%
VOC:	0 g/ltr

## ADVANTAGES

- ☞ Improves durability by minimizing penetration of moisture and water based chemicals.
- ☞ No additional water into dry or semi-dry mixes.
- ☞ Reduces efflorescence and pigment leaching from cement mortars.
- ☞ Chloride free.
- ☞ Added into the concrete at time of batching.
- ☞ Resists hydrostatic pressure from all direction, allow concrete to breathe.
- ☞ Can heal static cracks up to 0.5 mm.
- ☞ Active material for the entire life of concrete.
- ☞ Permanently waterproofs concrete.
- ☞ Protection against corrosion.
- ☞ Non toxic.
- ☞ Zero VOC content.
- ☞ Saves construction time and cost by eliminating the need for external membrane as well as reduced labour number.
- ☞ Enhances performance of concrete by reducing permeability by at least 70%.
- ☞ Enhances concrete hydrophobicity and repellency properties.
- ☞ No special addition precautions.
- ☞ Increases ultimate strength of concrete.

## COMPATIBILITY

KingAdd 25WP can be used with all types of Portland cement and cement replacement materials. KingAdd 25WP is compatible with other KINGKRETE admixtures used in the same concrete mix.

If more than one type of admixture is to be used in concrete mix, they must be dispensed to the concrete separately.

# KingAdd® 25WP

## METHOD OF USE

KingAdd 25WP should be added to the mix at the same time as the cement, sand and other aggregates. Do not pre-dissolve in the mixing water.

## DOSAGE

The guidance dosage of KingAdd 25WP ranges from 0.8 - 2 kg per 100 kg of cementitious materials in the mix, including GGBFS, PFA or microsilica.

Representative trials should be conducted to determine the optimum dosage of KingAdd 25WP to meet the performance requirements by using the materials and conditions on actual use.

## EFFECTS OF OVER DOSAGE

KingAdd 25WP over dosage will increase air entrainment which may cause a reduction in the compressive strength.

## POINTS TO BE CONSIDERED IN WATERPROOF CONCRETE

- ⊞ Lower water to cement ratio gives lower permeability concrete.
- ⊞ Good concrete placing and compaction are very important to produce waterproof concrete.
- ⊞ Fresh concrete should be protected against rapid drying and cured properly.
- ⊞ Cold joints must be avoided.

## CLEANING

KingAdd 25WP can be removed immediately by brush. If the spillage is mixed with water, attention should be taken not to leave slippery film.

## PACKAGING

KingAdd 25WP is available in 5, 10 and 25 kg bags.

## STORAGE

Shelf life is 1 year when stored under cover, out of direct sunlight and protected from extremes of temperature.

Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult KingKrete's Technical Services Department.

## HEALTH AND SAFETY

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs. Treat splashes to eyes and skin immediately. If accidentally ingested, seek medical attention. Reseal containers after use. Use in well ventilated areas and avoid inhalation.

## NOTE

Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local KingKrete representative.

KingKrete Inc. reserves the right to have the true cause of any difficulty determined by accepted test methods.

## QUALITY AND CARE

All products originating from KingKrete's manufacturing facilities are manufactured under a management system independently certified to conform to the requirements of the quality standard ISO 9001.

\* Properties listed are based on laboratory-controlled tests.

® = Registered trademark of the KingKrete-Group in many countries.

## AD-25WP-R3-2601

### STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this KingKrete Inc. publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.

### NOTE

Field service where provided does not constitute supervisory responsibility. Suggestions made by KingKrete Inc. either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not KingKrete Inc. are responsible for carrying out procedures appropriate to a specific application.