

# KingSeal<sup>®</sup> C50

## Elastomeric acrylic cement mortar sealant.

### DESCRIPTION

KingSeal C50 is a two component polymer modified cementitious tough sealant suitable for sealing joints and cracks in concrete, pre-cast elements, mortars and bricks.

### APPLICATIONS

KingSeal C50 is ideally designed for use in the following applications:

- ☐ Sealing all types of cracks in concrete and masonry.
- ☐ Sealing joints with anticipated movement up to 5%.
- ☐ Sealing joints between pre-cast elements for both horizontal and vertical application.
- ☐ Sealing joints in water retaining structure.

### ADVANTAGES

- ☐ Excellent slump resistant up to 3 cm wide on vertical surfaces.
- ☐ Weather resistance.
- ☐ Can accomodate movement up to 5%.
- ☐ Can be over painted.
- ☐ Non-toxic, suitable for use inside potable water tanks.
- ☐ Bonds to damp concrete.
- ☐ Good impact and tear resistant sealant.

### METHOD OF USE

#### Joint Preparation

- ☐ The joint surfaces must be clean, free from contamination and curing compound.

#### Priming

Prior to applying KingSeal C50, all joints must be dampened with water till a surface saturation dry condition is reached. All excess water should be removed prior to KingSeal C50 application.

Yet to improve bonding, the white liquid polymer can be applied by brush on joint edges, and while still tacky, the mixed KingSeal C50 is applied.

#### Mixing

To ensure proper mixing, a mechanically powered mixer or drill fitted with suitable paddle should be used. The white liquid should be added to a clean container.

### TECHNICAL PROPERTIES

Colour:	Grey
Mixed density:	1.5 ± 0.1 g/cm <sup>3</sup>
Shore A Hardness: ASTM D2240	75 ± 5 @ 28 days
Maximum aggregate size: ASTM E011	0.3 mm
Pot life @ 25°C:	60 - 90 min
Tensile strength: ASTM D412	> 0.95 MPa @ 7 days
Elongation at break: ASTM D412	> 110% @ 7 days
Application temperature:	5 - 35°C
Service temperature:	-20 to 70°C

The full powder bag is then added slowly to liquid while mixing continuously with low speed mixer/drill (400 - 600 rpm). Mixing time should be continued for 3 minutes until a uniform consistency is obtained.

### PLACING AND FINISHING

The mixed mortar shall be applied directly into the damped joints by trowel or putty knife and smoothed to the disred finish.

To enhance bonding of mortar to joint sides, the white liquid polymer can be applied by brush on the joint edges and while still tacky the mixed KingSeal C50 is applied.

### JOINT SIZE SUITABILITY

Joint width:

- ☐ 3 mm minimum.
- ☐ 30 mm maximum.

Joint depth:

- ☐ 3 mm minimum.
- ☐ 15 mm maximum.

### CURING

Curing time varies depending on ambient temperature and relative humidity but normally 7 days should be enough. If KingSeal C50 is subjected to water submersion, then allow for 2 - 3 weeks of curing time.

**Notes:** KingSeal C50 should not be applied to frozen substrates or if ambient temperature is expected to fall below 5°C.

### CLEANING

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All tools should be cleaned immediately after finishing with water. Hardened materials can be cleaned mechanically.

## PACKAGING

KingSeal C50 is available in 15 kg packs (10 litres). (5 kg white liquid and 10 kg powder).

## COVERAGE

(Linear meter per 15 kg pack)

Width/ Depth	6 mm	10 mm	20 mm	30 mm
6 mm	280	167		
10 mm		100	50	
15 mm				22

## 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.

## C50-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

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