

# KingBlock<sup>®</sup> MC100

## Block and brick laying cementitious mortar with water resistance

### DESCRIPTION

KingBlock MC100 is a polymer modified, ready to use interior and exterior block adhesive specially designed for use with blocks and bricks.

KingBlock MC100 is composed of a blend of cement, sand, limestone, dry powder additives and selected polymers which when mixed with water produces a thixotropic mortar suitable for fixing all types of blocks and bricks, and to be used on the block walls for filling gaps.

### APPLICATIONS

- ☞ For permanent fixing of all types of blocks and bricks.
- ☞ Can be used internally and externally.
- ☞ Non sag, can be used for vertical and horizontal surfaces.

### ADVANTAGES

- ☞ Water resistant, will not be affected in wet areas.
- ☞ Ready for use, just requires the addition of water.
- ☞ Non sag, good consistency.
- ☞ High bond strength.
- ☞ Suitable for internal and external application.
- ☞ Shrinkage controlled, polymer modified cementitious mortar.
- ☞ Complies with the LEED requirements for VOC and formaldehyde limits.

### STANDARDS

KingBlock MC100 complies with the requirements of:

- ☞ ASTM C387 as Mortar for Unit Masonry, Type M, S and N.
- ☞ ASTM C270 Type M, S, N and O.

### METHOD OF USE

#### Blocks Condition

All used blocks must be checked to be clean and free from oil or any loose materials. It is recommended to wet the used blocks before the application of the adhesive, especially in hot and dry conditions.

### TECHNICAL PROPERTIES @ 25°C. W/P = 0.12:

|   |                               |
|---|-------------------------------|
| Colour:                                 | Grey                          |
| Fresh wet density (mixed):              | 2.05 ± 0.10 g/cm <sup>3</sup> |
| Pot life:                               | 1 - 2 hr                      |
| Compressive strength: ASTM C109/109M-02 | ≥ 20 MPa @ 28 days            |
| Compressive strength: ASTM C476         | ≥ 14 MPa @ 28 days            |
| Flexural strength: ASTM C348            | ≥ 2.5 MPa @ 28 days           |
| Tensile strength: ASTM C307             | ≥ 2 MPa @ 28 days             |
| Maximum aggregate size:                 | 3.0 mm                        |
| Setting time: ASTM C191                 |                               |
| Initial                                 | 6 - 7 hr                      |
| Final                                   | 8 - 9 hr                      |
| Temperature limitations:                | Below 5°C and above 38°C      |

### Mixing

To ensure proper mixing, a mechanically powered mixer or drill fitted with suitable paddle should be used.

3.0 - 3.5 litres (for each 25 kg bags) of clean water should be added to clean container. The powder is then added slowly to the water 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.

### APPLICATION

- ☞ Spread to a uniform thickness of 15 - 25 mm using a trowel.
- ☞ Place blocks firmly over the applied area.
- ☞ Do not apply large areas of adhesives that cannot be covered within the open wet time of the adhesive.

### CURING

The applied areas should be protected from direct sunlight and heavy wind. Curing with water is needed for at least 2 - 3 days after setting.

### CLEANING

All tools should be cleaned immediately after use with fresh clean water.

### PACKAGING

KingBlock MC100 is available in 25 and 50 kg bags.



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## YIELD

Approximately 13.5 litres/25 kg bag.

## 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.

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#### 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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www.kingkrete.com

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