KingFloor® C500F

Fast setting fiber reinforced cementitious screed.

DESCRIPTION

KingFloor C500F is a pre-bagged blend of cementitious binder, fiber, special additives and polymers which when mixed with well-graded aggregate and water produces a fast drying cementitious screed with improved strength gain performance which can be laid bonded, unbonded or floating on both new and existing concrete substrates.

APPLICATIONS

KingFloor C500F can be applied in bonded, unbonded and floating configurations in several areas of application such as:

- As underlayment before the application of final floor topping such as tiles, stone, carpet, wood or others.
- Floor repairing works where rapid restoration is required.
- Suitable over underfloor heating systems.

ADVANTAGES

- Fast setting screed, allowing for earlier application of floor coverings.
- Can be lightly trafficked after 12 hours of installation.
- Improved strength gain performance.
- Excellent workability characteristics, easy compaction.
- Can be used internally and externally.

STANDARDS

KingFloor C500F meets BS 8204-1 requirements for ISCR test category A and B depending on the mix design.

METHOD OF USE

Substrate preparation

Concrete substrates should be fully cured, reasonably flat and achieve a minimum compressive strength of 25 N/mm². The concrete substrate should be below 75% RH and has less than 4% moisture content.

Surfaces must be free of any dust or loose particles before product application. Use suitable methods like vacuuming or sweeping. For bonded screed, concrete substrate are to be mechanically prepared to remove laitance and achieve a flat surface, grit blasting or surface profiling equipment are preferred.

Acid etching can be used after consulting with KINGKRETE's Technical Department.

If possible, apply the product on a small test area before actual application to check for any problems with the surface preparation.

TECHNICAL PROPERTIES

Colour:	Grey
Compacted dry density:	2.00 ± 0.10 g/cm³
Working time after mixing:	45 min
Light foot traffic:	12 hr
Full traffic:	5 days
Drying time to install ceramic tiles:	24 hr
Drying time to install resilient finishes:	5 days
Mixing ratio with aggregate by volume:	1:3 (ISCR Cat. A) 1:4 (ISCR Cat. B)

PRIMING

For bonded screed, it is necessary to prime the substrate with KingBond SBR bonding slurry prior to the application of the screed (i.e. 1 part KingBond SBR : 1 part water

: 3 parts OPC by volume). The screed mortar should be only applied on tacky priming slurry coat. For more details about priming options and methods consult KINGKRETE's Technical Department.

If the substrate relative humidity exceeds 75%, KingFloor DPM should be used prior to the application of screed, refer to KingFloor DPM's datasheet for more information about the method of application.

MIXING

KingFloor C500F should be mixed in a forced action mixer. Firstly, pre-mix suitable sized aggregate and KingFloor C500F, adding water to give the required semi-dry consistency and thoroughly mixing for around 3 minutes.

Semi-dry consistency is judged as the consistency at which it is possible to make a ball of the material in the hand, which will retain its shape but will not easily yield "free" water when squeezed.

Care should be taken not to overwater the screed as this will increase drying time and lead to surface bleed.

KingFloor® C500F

Fast setting fiber reinforced cementitious screed.

APPLICATIONS

KingFloor C500F should be applied and levelled by tamping with a screed bar and rubbing with a plastic float. A smooth finish achieved by light troweling with a steel trowel. KingFloor C500F should be applied at a thickness of 10 - 75 mm in single application. Greater thickness can be achieved by application of multiple layers. Each layer is to be compacted separately and applied within 30 minutes (at normal conditions) to ensure a monolithic total thickness.

YIELD

MIXING PROPORTIONS (BY VOLUME)

Applied Thickness	1 part KingFloor C500F : 3 parts aggregate	1 part KingFloor C500F : 4 parts aggregate
40 mm	5.8 m²	7.5 m²
50 mm	4.6 m²	6.0 m²
60 mm	3.8 m²	5.0 m²
75 mm	3.1 m²	4.0 m²

PACKAGING

KingFloor C500F is available in 20 kg bags.

CLEANING

All tools should be cleaned immediately after finishing by water.

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 Middle East facility are manufactured under a management system independently certified to conform to the requirements of the quality standards ISO 9001, ISO 14001 and ISO 45001.

* Properties listed are based on laboratory-controlled tests.
® = Registered trademark of the KingKrete-Group in many countries.

Ref: KK-07020-MEA-R01 | Issue: 01.2026

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.

KingKrete Middle East
www.kingkrete.com

Disclaimer: the IAS mark relates to certified management system and not to the product mentioned on this datasheet