

# KingShake® C500

## Emery based non-oxidizing dry shake floor topping.

### DESCRIPTION

KingShake C500 is a non-oxidizing, chemically inert, dry shake floor topping for monolithic floors. The product contains a blend of specially graded emery aggregates, additives and Ordinary Cements.

When trowelled into freshly laid concrete, KingShake C500 produces a dense, tough, abrasion resistant surface suitable for most industrial floors. The product is designed for application either by hand or using automatic spreading equipment.

### APPLICATIONS

- 🔧 Heavy industry.
- 🔧 Parking areas.
- 🔧 Warehouses.
- 🔧 Workshops.
- 🔧 Service stations.
- 🔧 Aircraft hangars.
- 🔧 Loading bays.

### ADVANTAGES

- 🔧 High resistance to wearing and abrasion.
- 🔧 Easy to apply.
- 🔧 Provides monolithic floor.
- 🔧 Non oxidizing floor hardener.
- 🔧 Premixed, ready to use.
- 🔧 Reduces surface dust, and resistant to oil and grease.

### STANDARDS

KingShake C500 complies with EN 13813, Class CT-C70-F10- AR1.

### BASE CONCRETE LIMITATIONS

The following concrete limitations and properties should be considered to obtain hard concrete surface with high abrasion resistance:

- 🔧 The compressive strength is recommended to be higher than 25 MPa.
- 🔧 W/C ratio should be at a minimum required value to achieve fully compacted concrete.
- 🔧 Concrete slump should be kept between 75 mm and 120 mm.
- 🔧 Cement content should be no less than 300 kg/m<sup>3</sup>.
- 🔧 Proper concrete compaction and leveling is a must.
- 🔧 Should free water be present at the surface this should be allowed to evaporate or brushed away before the application of KingShake C500.

### TECHNICAL PROPERTIES

Colour:	Grey, buff, green & brick red
Abrasion resistance: (1000 g, 1000 cycle) ASTM D4060 weight loss using H22 wheel	At least 300-500% improvement, compared to a conventional concrete using Taber abrader machine
Wear resistance Böhme reading:	Class A6
Maximum wear depth: BS EN 13892-4	0.07 mm
Flexural strength: BS EN 13892-2	> 10 MPa
Compressive strength: BS EN 13892-2 (mortar consistency)	> 70 MPa
Hardness:	≥ 8 (Mohs scale)
Aggregates composition:	Aluminum oxide: > 50% Ferric oxide: > 20%
VOC: ASTM D2369	< 1 g/ltr

### METHOD OF USE

- 🔧 The right time to spread the KingShake C500 on concrete surface is when light foot traffic leaves an imprint of about 3 - 6 mm.
- 🔧 Broadcast the KingShake C500 evenly over the surface of the base concrete. Where manual trowelling is involved, application in two stages is recommended.
- 🔧 The first stage should be to apply two thirds of the coverage rate of KingShake C500, and allow the material to absorb moisture from concrete. When a uniform dark colour appears, indicating that the material is wet, KingShake C500 should be trowelled in, either by hand or using a power float (pan fitted with blades). Stage two is to apply the remainder of the coverage rate and to repeat trowelling. For large floor constructions KingShake C500 can be spread and trowelled satisfactorily in one stage by mechanical means.
- 🔧 Care must be taken not to wet the application of KingShake C500 with water addition not to affect the overall quality of the floor.
- 🔧 Proper curing should be maintained and the surface is not to be marred by the curing method.



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## TIMING OF APPLICATION

Timing of KingShake C500 application is critical. Adequate machinery, labor and material should be available to complete the whole area while sufficient concrete moisture is available.

Applying KingShake C500 before or after the proper application time can seriously affect the quality of the concrete floor finish.

## Application Rate

KingShake C500 should be applied at the following rates: Medium & Heavy duty floors 3 - 7 kg per m<sup>2</sup>.

## CLEANING

All tools should be cleaned immediately after finishing by water.

## PACKAGING

KingShake C500 is available in 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.

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## C500-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.

