

# KingHard<sup>®</sup> MT50

**Pre-blended metallic dry shake floor topping.**

## DESCRIPTION

KingHard MT50 is a non-oxidizing, chemically inert, metallic dry shake floor topping for monolithic floors. The product contains a blend of specially graded aggregates, additives and Ordinary Cements.

When trowelled into freshly laid concrete, KingHard MT50 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 industries.
- ☞ Power stations.
- ☞ Parking areas.
- ☞ Warehouses.
- ☞ Workshops.
- ☞ Loading bays.
- ☞ Service stations.
- ☞ Aircraft hangars.

## ADVANTAGES

- ☞ Dense surface resistant to oil and grease.
- ☞ High resistance to wear and abrasion.
- ☞ Easy to apply.
- ☞ Non oxidizing floor hardener.
- ☞ Premixed, ready to use.
- ☞ Reduces surface dust.

## 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 KingHard MT50.

## TECHNICAL PROPERTIES

Abrasion resistance:	300 - 500% compared to a conventional concrete
Compressive strength: (wet cure) mortar consistency ASTM C109/109M-02	> 72 MPa @ 7 days > 82 MPa @ 28 days
Bohme reading:	< 5 g/cm <sup>2</sup>
Hardsness	7 (Mohs scale)
Colour:	Grey, buff, green & brick red

## METHOD OF USE

- ☞ The right time to spread the KingHard MT50 on concrete surface is when light foot traffic leaves an imprint of about 3 - 6 mm.
- ☞ Broadcast the KingHard MT50 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 KingHard MT50, and allow the material to absorb moisture from concrete. When a uniform dark colour appears, indicating that the material is wet, KingHard MT50 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 KingHard MT50 can be spread and trowelled satisfactorily in one stage by mechanical means.
- ☞ Care must be taken not to wet the application of KingHard MT50 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.

## TIMING OF APPLICATION

Timing of KingHard MT50 application is critical. Adequate machinery, labor and material should be available to complete the whole area while sufficient concrete moisture is available.

Applying KingHard MT50 before or after the proper application time can seriously affect the quality of the concrete floor finish.

## APPLICATION RATE

KingHard MT50 should be applied at the following



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rates: Medium duty floors 4 - 5 kg per m<sup>2</sup>.  
Heavy duty floors 6 - 7 kg per m<sup>2</sup>.

## CLEANING

All tools should be cleaned immediately after finishing by water.

## PACKAGING

KingHard MT50 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.

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

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