

K5 STONEHARD



Hard Wearing, Abrasion Resistant Monolithic Dry Shake Floor Hardener

Description :

K5 STONE HARD is a ready to use blend of a special aggregate and cement which is applied as a dry shake to the surface of fresh concrete or screed. It will provide continuous protection to concrete floors against wear, impact and abrasion and a high resistance to various industrial chemicals, oils, greases, detergents and hydraulic fluids found in the aviation industry.

Uses :

K5 STONE HARD is designed to ensure improved durability in applications where the floor is subjected to medium and heavy traffic and where a nondusting surface is required. It will improve and enhance performance of all concrete floors.

Typical Application :

- Workshops
- Garages
- Warehouses
- Factories
- Aircraft Hangars
- Car Washes
- Power Stations
- Car Parks
- Loading Bays
- Shipyards
- Traffic Decking
- Helicopter Pads

Advantages :

- Quick application and finishing results in considerable time savings
- Ease of application
- Slip-resistant finish can be obtained
- For internal and external use
- Wear, abrasion and impact resistance are superior to normal concrete
- High impermeability compared to concrete under the same conditions
- Monolithic bond with the base concrete
- Non dusty and easy cleaning
- Economical installation
- Maintenance free, long life performance
- Non metallic and iron free does not rust



Typical Properties :

ABRASION RESISTANCE : K-5 STONE HARD has been tested with FUNDITOR ABRASION MACHINE using Silicon Carbide Wheels. The sample was tested for 10,000 revs. at a fixed speed and the amount of wear assessed by measuring the depth of the groove by abrasion wheels at four points around the perimeter. The results shows that K-5 STONE HARD improves the abrasion resistance compared to grano by over 200%.

COMPRESSIVE STRENGTH : The K-5 STONE HARD cubes when tested for compressive strength have typical strength of over 800 kg/cm² at 28 days. Mho's scale hardness between 8 to 9 scale.

Application Instructions :

1.1) **BASE CONCRETE :** The base concrete should have a minimum cement content of 300 kg/m³ with low slump of 40-60mm. To improve the quality of concrete mixes and enable low w/c ratio to be kept, K-CRETE N normal plasticizer may be used at a dosage rate of 150-200ml/50kg of cement.

1.2) **METHOD OF LAYING BASE CONCRETE :** The base concrete must be laid in accordance with good concrete practice either in bays or long strips. Particular care must be taken at the corners and edges of the bays to obtain good compaction and to maintain level for subsequent trowel operations. If too much of free water is seen on the surface, water content in subsequent concrete must be reduced to obviate the presence of free water.

THE TIME OF THE APPLICATION IS VERY IMPORTANT IN ORDER TO DERIVE FULL BENEFITS OF K-5 STONE HARD. If K-5 STONE HARD is applied too early, it will absorb water hard wearing aggregate may sink to the bottom. If application of K-5 STONE HARD is delayed, no moisture from the concrete surface will be available to hydrate K-5 STONE HARD, resulting in poor pitted surface. As a guide, **THE APPLICATION SHOULD BE MADE BETWEEN 1 Hours-1.5 Hour** i.e. when surface water on concrete is **COMPLETELY EVAPORATED.** (When tested with Thumb, it leaves an impression but concrete does not stick to the Thumb). (Separate Application guide is available on request).The application rate is 5 kg/m² of K-5 STONE HARD Powder.

1) The application is made in two stages. First 50% of the required material is broadcast evenly and when the surface darkens with the absorption of water, the surface is floated.

2) The second application is made immediately, by evenly broadcasting the balance 50% material and when the surface has darkened with the absorption of water, the surface is floated. Power floating would be ideal. Floating is recommended with half or full disc. The second troweling is done after the surface has sufficiently stiffened i.e. after two hours after the first troweling, to close any pores and remove any undulations on the surface. Final hand trowelling is recommended to remove any disc marks.

3) **CURING :** After final troweling, as soon as the surface has hardened sufficiently, to prevent damage, it should be covered with a polythene sheet and made air tight by placing sand all round the sheet for a minimum period of 7 days. Alternatively curing by ponding is recommended for a minimum 7 days.

4) **SURFACE SEALING :** If surface sealing is thought to be necessary, two coats of K-FLOORSEAL C epoxy clear floor sealer may be applied for added protection against penetration of oils, grease, water and mild chemicals.

Packing & Coverage :

25 in sealed polythene packs. K-5 STONE HARD is a dry shake Floor Hardener, sprinkling rate 2.5 kg/m² to 12 kg/m².

Shelf Life :

9 months storage life when stored in original unopened container at between 5 °C to 45 °C in a dry and shaded place.

Health & Safety :

K5 STONE HARD is non-hazardous. It should not be swallowed or allowed to come into contact with skin or eyes. Suitable protective goggles and gloves should be worn. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. If swallowed, seek medical attention immediately, do not induce vomiting.



Note :

All information is given in good faith on the results gained from experience and tests. However, all recommendations or suggestions are made without guarantee since we don't have any control on site conditions and its uses.