

SHAKE TOP



Shake Top is a preblended dry shake surface hardener for concrete floors. It is manufactured from a synthetic mineral hard aggregate, cement, additives and pigments. When applied correctly, Shake Top produces a very smooth, abrasion resistant, durable coloured floor. Shake Top is ideal for use in warehouses, abattoirs, engineering works, garages, manufacturing works, general industrial buildings, DIY stores, supermarkets and commercial facilities.



HIGH DENSITY SURFACE
VERY HIGH WEAR RESISTANCE
LONG SERVICE LIFE
NON-METALLIC
NON-RUSTING
AESTHETICALLY PLEASING
LOW MAINTENANCE

TECHNICAL INFORMATION:

PRODUCT INFORMATION	
FORM:	Gritty Powder
STANDARD COLOURS:	NR – Natural Cement Grey, Red, Light Grey, Dark Grey, Black
MATERIAL:	Synthetic Mineral Hard Aggregate with cement, additives and pigments
HAZARD INFORMATION:	IRRITANT - Consult Safety Datasheet before use Wear gloves, respiratory protection eye protection and protective clothing.
CLEANING;	Clean tools, equipment, etc. using water. Mechanical means are necessary when the product has set.
PACKAGING:	25kg polythene lined paper sacks
STORAGE CONDITIONS:	Store in sealed containers in dry conditions, protected from extremes of temperature
SHELF LIFE:	12 months in unopened manufacturer's packaging
TYPICAL PROPERTIES	
DENSITY:	~2kg/L
AGGREGATE HARDNESS:	7 – 8 mohs
AGGREGATE CONDUCTIVITY:	12 ms/m
LAYER THICKNESS:	2.5 – 3.0mm
ABRASION RESISTANCE:	Class AR1 typically achievable
APPLICATION INFORMATION	
APPLICATION RATE:	3-5 kg /m ²
APPLICATION TEMPERATURE:	5°C - 30°C

DIRECTIONS FOR USE:

GENERAL

Shake Top is broadcast onto the surface of fresh concrete floor slab at a rate of ~5kg/m². The floor is then finished by mechanical means, e.g. laser screed and powerfloat to provide a dense, level, flat finish as required. Immediately after finishing of the surface has been completed, apply a suitable curing membrane, e.g. Larsen Acraseal. Before work commences, it is recommended that the building is weather tight and free from draughts or crosswinds.

CONCRETE

It is recommended that the concrete should be a minimum of 30 N/mm² and slump class S2-S3. The concrete should not contain air entraining agents or high levels of PFA. Care should be taken to ensure that the concrete is of consistent quality and constant water/cement ratio. It is recommended to use a suitable superplasticiser, e.g. Larsen Chemcrete 100Plus, to achieve workability while maintaining a suitable water/cement ratio. Care should be taken if the concrete contains normal water reducing agents and/or GGBS. These can result in retardation of the concrete, particularly in cold weather, which can cause a late bleed.

APPLICATION

Shake Top can be applied by hand/manual spreader or automatic spreader. Best results are achieved with an automatic spreader in combination with a laser screed and experienced operators. It is important to regularly check the condition of the concrete to ensure the correct timing of each stage and allow the correct finish to be formed.

Manual Application: Shake Top should be applied in two stages at a rate of 3kg/m² for the first stage and 2kg/m² for the second stage. The first application should be spread as soon as the floor can bear the weight of the powerfloat and the bleed water has evaporated or been removed. This application is then worked into the surface with the powerfloat.

Immediately following this, the second application is spread at 90° to the first and again worked in to the surface with the powerfloat. Powerfloating and final finishing can then continue as normal.

Mechanical Application: Shake Top should be spread evenly onto the concrete surface at the rate of 5kg/m² by automatic spreader in one application immediately after screeding has been completed. Powerfloating and finishing can then continue as normal.

Note: Care should be taken to ensure finishing of concrete adjacent to walls, forms, columns and doorways is completed first. Shake Top tends to result in earlier than normal stiffening of the concrete surface.

Curing: As soon as the surface cannot be damaged, apply a suitable curing compound evenly over the whole surface, e.g. Larsen Acraseal. This operation should be carried out as soon as is practical after the final trowelling operation to ensure maximum curing.

COLOUR

Dry-shake floor finishes can provide a uniform coloured finish, however due to the nature of the materials and variability within the concrete slab, some shade variations are to be expected. Dry-shake finishes will never be as uniform as a paint coating. Colour uniformity will continue to improve as the floor dries out and with continued traffic and cleaning. If finish and colour are critical, it is advisable for the client to inspect a similar floor approx. 1 year old to ensure it meets their requirements.

RESTRICTIONS

Current good working practice, British Standards and trade body recommendations must be observed at all times. Specific guidance on Industrial Floors can be found in the Concrete Society's Technical report TR34. Setting times will depend greatly on ambient conditions and mix design. Draughts, cross winds, over-working and rapid drying of the surface can lead to crazing and plastic shrinkage cracking. Air-entrained concrete should never be used for a Shake Top floor. Powerfloating of air entrained concrete can result in delamination and pop-outs. If the surface is finished too soon, particularly in cold weather or with retarded concrete, bleed water can become trapped under the surface. When this water finally evaporates, delamination can occur. Efflorescence and Limebloom are natural phenomenon affecting all cement based materials. Their occurrence is temporary and in no way affects the ultimate performance or durability of the floor. Occurrences can be minimised by always following best practice and avoiding working in particular cold or damp conditions.