

TOPSHIELD

(Dry Shake Floor Surface Hardner)

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DESCRIPTION

A ready to use blend of non-metallic synthetic mineral aggregate, cement and plasticisers which is applied as a dry shake to the surface of wet concrete or screed.

TOPSHIELD will afford the concrete surface necessary and added protection against wear, impact and abrasion, and a high resistance to various industrial chemicals, oils, grease and detergents.

TOPSHIELD is designed to ensure improved durability in applications where the floor is subjected to medium and heavy traffic and where a non –dusting surface is required. It will improve and enhance the in-use performance of all concrete floors.

TYPICAL USES

TOPSHIELD is suitable for use in a wide range of industrial, commercial and institutional flooring applications, as under:

- Workshops
- Garages
- Warehouses
- Factories
- Aircraft Hangars
- Traffic Decking
- Workshops, where tracked vehicles are serviced
- Military installations where tracked vehicles are used
- Power Stations
- Car Parks
- Loading Bays
- Shipyards
- Helicopter Pads
- Car Washes

Chemically Engineered Products

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ADVANTAGES

- Premixed – offering factory controlled quality assurance.
- Applied monolithically to fresh concrete. Quick application and finishing results in considerable time savings
- Ease of application
- Joints can be afforded better protection by addition of extra material at edges of bays.
- Wear abrasion and impact resistance superior to concrete.
- Non-oxidising.
- Slip-resistant.
- High impermeability compared to concrete under the same conditions.
- TOPSHIELD forms and integral part of the floor surface and will not delaminate, peel or wear away.
- Non-dusting.
- For internal and external use.
- Easy to clean and maintain.
- Economic installation.
- Maintenance free, long life performance benefits.

SPECIFICATION COMPLIANCE

- BS 1881 (Compressive Strength)
- ASTM C944 (Abrasion Resistance)
- M.O.H.S. (Hardness)

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TECHNICAL DATA

- Colour: Grey
- Hardness: 7 (MOHS)
- Coverage: See table
- Compressive strength: 70N/mm²
- Chemical Resistance: Motor & mineral oils, mild acids, salt, etc.

PACKING

25 kg bags.

STORAGE & SHELF LIFE

Store in a cool dry place and use within 9 months of date of manufacture.

DIRECTIONS FOR USE

APPLICATION

A well proportioned mix design is essential. The concrete supplier should ensure that cement contents, water cement ratios and slumps are generally in accordance with the following:

- Cement (SRC or OPC): Min 320 Kgs/m³
- Water-cement ratio: Max. 0.50
- Slump: Ideally 75mm
- Strength: Min 30 N/mm²

Concrete should not segregate and bleed or contains more than 3% air.

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If TOPSHIELD is to be applied to a screed, this should have a minimum thickness of 7.5cm. Following placements, concrete should be levelled off with a straightedge (wooden bull float) and then vibrated. The surface is then floated with a wooden float ensuring that it is not closed. Any bleed water should be removed (avoid sponge type absorbents). Thereafter sprinkle TOPSHIELD along edges of bays (approx. 8cm strips) where expansion and contraction joints will be located. Trowel into surface using a wooden float.

TOPSHIELD is ideally applied to a surface which is neither too wet nor dry. Ambient temperatures will dictate when the material is to be applied. Generally in temperatures of 35-45 degree C a waiting period of 30-40 minutes is recommended. This may need to be extended in temperatures of less than 35 degree C.

Using a raised trestle which spans the slab, the material is broadcast by hand onto the wet concrete surface.

The application is carried out in two stages.

- Apply 2/3 of the required material to the concrete ensuring uniform distribution.
- Allow applied material to absorb moisture from the concrete surface. (a uniform darker colour will be apparent).
- Apply the balance of material. Again wait until material has obtained a darker colour before floating with a wooden trowel.
- When surface is firm enough to take the weight of foot traffic, TOPSHIELD should be finished off by means of a power float. A good slip resistant finish can be obtained, but the surface should not be overworked.
- If manual finishing with steel trowels is to be undertaken, this should take place before concrete becomes firm enough to take foot traffic.

CURING

Curing should be carried out immediately after the final trowel ling operation has been completed. This can be achieved by the application of curing compound. Use of curing compound at a rate of 1 ltr per 5 m2 is recommended.

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COVERAGE

| | |
|------------------------|---------------------|
| Light and Medium duty: | 5 kg/m ² |
| Heavy duty: | 7 kg/m ² |

PRECAUTIONS

Dry shake applications should preferably not take place in direct sunlight or when hot winds are blowing. This will avoid premature drying out of the treated surface whilst concrete beneath is still wet, which can often result in tearing of the surface whilst the trowelling arc is in motion.

As with any concrete slab or bay, curing is of paramount importance and should take place immediately upon completion of finishing.

HEALTH & SAFETY PRECAUTIONS

TOPSHIELD has no known health hazard applying to its use and application. Goggles, rubber gloves and boots should be used during application. Contact with the skin should be avoided. Accidental splashes on the skin should be washed off with soap and water. Contact with the eyes should be avoided however should accidental contact occur the eyes should be washed with copious amounts of water and medical treatment sought. If swallowed do not induce vomiting but seek medical aid.

General Note :

This leaflet is a guide for the use of the product concerned. Whilst the information and / or specification given are to the best of our knowledge true, accurate and in accordance with latest technical developments, no warranty is given or implied in connection with any recommendations or suggestions made by us, our representatives, agents or distributors as the conditions of use, method of application and any labour involved are beyond our control.

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