



## Technical Data Sheet

# HARDTOP DM

## Non-metallic Dry Shake Floor Hardener

### Description:

HARDTOP DM is a premixed, blend of cement hydraulic binder, special hard-wearing aggregates and selected additives to provide optimum performance when applied to fresh concrete floors. This blend produces a material which is easy to trowel into the fresh concrete surface. It is applied by dry shake method. Once cured, it provides a dense, non-porous surface which is extremely hard wearing and abrasion resistant. Therefore, HARDTOP DM is used to provide the concrete floors with continuous protection against abrasion, wear, impact and chemical resistance such as oil, grease and detergent.

### Uses:

HARDTOP DM provides a hard surface to concrete toppings in flooring areas where hard abrasion and impact resistant surface is required. It is ideally suited for all industrial areas subjected to heavy traffic such as:

- Car parks
- Warehouses, loading bays.
- Factories, power stations. Desalinations plants
- Shipyards, military establishments, heavy industry
- Airports and other.
- Laboratories

### Advantages:

- Ease of application. Supplied ready to use, no additives required.
- High abrasion and impact resistance.
- Non dusting surface.
- High resistance to petroleum based products.
- For internal and external use.
- Premixed, ready to use offering factory controlled quality assurance.
- Non dusting surface.
- Forms monolithic bond with fresh concrete base.
- Available in a range of colors to improve working environment.
- Non-metallic aggregate, will not rust when wet.

### Instructions for Use:

The base concrete should have a minimum cement content of 300 kg/m<sup>3</sup>. Application of HARDTOP DM should begin without delay when the base concrete has stiffened to the point when light foot traffic leaves an imprint of about 3-6 mm. Any bleed water should now have evaporated, but the concrete should have a wet sheen. HARDTOP DM should be applied at an even application rate between 3-5 kg/m<sup>2</sup>.

It is recommended to apply HARDTOP DM in two stages: First apply the product at an even rate of 2-3 kg/m<sup>2</sup> onto the concrete surface. When the material becomes uniformly dark by the absorption of the moisture in the concrete, the concrete surface can be floated. Immediately after floating, the remaining 1-2 kg/m<sup>2</sup> of HARDTOP DM can be applied evenly over the surface at right angles to the first. Again, when moisture has been absorbed, the surface can be floated in the same way as before. Final finishing of the floor can be carried out when the floor has stiffened sufficiently. Extra care should be taken to heavy wear areas like floor edges by sprinkling extra material of HARDTOP DM at a rate of ½ kg per lm in a strip 100 mm wide along the edge and hand trowel the surface.

Timing of the application, as well as rate of application of HARDTOP DM are important. Care should be taken to ensure adequate labor, machinery and material are available to complete the whole area while sufficient moisture is available. Conversely, the full benefit will not be achieved if the material is applied too early when bleed water is still present. Any addition of water to wet out the surface will undermine the overall quality of the concrete surface.

### Curing:

Proper curing of concrete floors treated with HARDTOP DM is essential to the physical properties of the finished floor. For internal applications, self-curing by covering the treated flooring with polythene sheet taped at the edges would be sufficient.

# HARDTOP DM

## Standards:

- ASTM C779

TECHNICAL PROPERTIES	
Color	Cement grey, brick red, brown, green
Relative Abrasion Resistance (ASTM C779)	
Abrasion @30 min (7D)	0.48 mm
(28D)	0.33 mm
Abrasion @60 min (7D)	1.07 mm
(28D)	0.91 mm
Staining of oil, automotive oil, lubricants	Resistant

\*Values indicated may vary depending on the environment and conditions of the material. Figures given are tested according to standard laboratory conditions.

## Coverage:

Light and medium duty : 4-6 Kg. / m<sup>2</sup>  
Heavy duty : 6-8 Kg. /m<sup>2</sup>

\*Coverage rate is an approximate value, and subject to actual site conditions.

## Packaging:

HARDTOP DM is supplied in 25 KG and 50 KG high quality recyclable bags.

## Storage:

Store in original packing in dry conditions away from direct sunlight and high humidity levels.

## Shelf Life:

HARDTOP DM can be utilized within 12 months of production date if stored in proper conditions in unopened original packing.

## Cleaning:

All equipment should be washed with clean water immediately after use and before the material has hardened. Hardened material can only be removed mechanically.

## Health and Safety:

Avoid contact with eyes and skin. Wear suitable protective clothing such as coveralls, goggles, dust mask and gloves. Use barrier cream. Ensure that there is adequate ventilation. Do not breathe vapour or spray mist.

## FIRST AID:

Eyes: In the event of accidental splashes, flush with warm water and seek medical advice.  
Skin: Wash skin thoroughly with soap and water  
Inhalation: Remove to fresh air, keep patient rested  
Ingestion: Do not induce vomiting. Seek immediate medical attention.

For further safety information, please refer to HARDTOP DM Material Safety Data Sheet.

MATEX Rev.03-0422

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