deckmaster

deckmasterformula

Product Description

Deckmaster Formula is a is a transparent, chemically reactive, water-based sealer that penetrates concrete and masonry building materials, protecting, preserving, and strengthening them permanently by:

The Science behind the product

Over decades now the understanding of the densification process has improved with different densifiers with differing Chemical composition being used. Originally Silicates of Sodium, Magnesium & Potassium were used, each one of these achieved the main requirements of a densifier and each one of these compounds has its own idiosyncrasies, relating to time consuming installation and or must thoroughly irrigate the floor to dispose of the excess product, this can be costly, time consuming, and environmentally challenging. Lower Viscosity and alkaline products such a Lithium based ***Deckmaster Formula*** achieves deeper penetration creating a denser harder bond leaving fewer un-reacted Calcium Hydroxide molecules with a more effective distribution within the concrete.

The Lithium molecule is also smaller making the reaction more consistent. Sodium & Potassium densifiers suffer from irregular reactions within the concrete leaving more unreacted Calcium Hydroxide thus producing an in consistent level of densification. This leaves a higher propensity for water to penetrate the concrete causing ASR (Alkaline Silica Reaction) ***Deckmaster Formula*** doesn't create this potential. Some densifiers deliver higher gloss levels, this is no guarantee of deep consistent penetration and leaving very little un-reacted Calcium Hydroxide. ***Deckmaster Formula Plus,*** by the addition of other specific compounds, has all the benefits of deep consistent densification of ***Deckmaster Formula,*** with a high degree of water repellence.

Deckmaster Formula

Uses

- **Curing Compound**
- **Sealing**
- **Hardening**
- **Dustproofing**

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Features & Benefits

- **Lithium technology to penetrate deeper**
- **No need to wash down during application – no wastewater**
- **Fast drying; trafficable in 2 hours**
- **Easy to apply**
- **Virtually odourless**
- **Excellent dusting and abrasion resistance**
- **Prevents efflorescence caused by ASR**
- **Zero VOC**
- **Can be applied to new or existing concrete**

Technical Data

Physical Properties

- Form: Opalescent, water-based solution
- Total Solids: 14% (+/-5%)
- Active Ingredients: 100% of total solids
- Specific Gravity: 1.05
- pH: approx. 12.0
- Flash Point: N/A
- VOC Content: zero
- Freeze Point: <0°C
- Slip Resistance: Does not change the floor friction coefficient
- Depth Of Surface Penetration: 2-8mm

Preparation of substrate

Inadequate preparation will lead to premature failure. Weak, damaged, and deteriorated concrete should be removed where necessary and repaired. Ensure the surface has no contamination of oils or other substances, including laitance that may prevent penetration of the Deckmaster Formula. On the prepared slab test the performance of the Deckmaster Formula. All slabs differ, and different pours on the same slab can differ. Additionally, concrete placed on different substrates (on-grade versus on deck) from the same pour can differ.

Substrate quality

The surface strength of the base concrete should be tested with any surface laitance removed. The concrete substrate should have a rebound hammer reading in accordance with BS EN 12504-2:2001, Type N of not less than 25 and a surface tensile strength of according to EN 1542 exceeding 1.5 N/mm^2. The substrate should be free from dust, loose material, surface contamination and materials which reduce bond or prevent suction or wetting by the product. To avoid doubt, a test area should be applied, and the bond strength measured according to EN 1542.

Application conditions

General guidance	Products should be stored correctly before use so that their properties are not impaired.
Substrate & ambient temperature	5 – 30 °C
Substrate moisture content	Hygrometer readings up to 98% RH as measured in accordance with BS 8203 can be accommodated.
Dew point	The substrate and uncured floor must be at least 3 °C above the dew point to avoid condensation.

Application methods

Application	The Deckmaster Formula can be applied by low pressure spray, microfibre roller/pad or soft-bristled broom, at the required coverage rate. This will be largely driven by the porosity of the concrete. **Fresh Concrete**: Apply undiluted using a low-pressure sprayer or by spreading evenly with a soft-bristled broom. Do not allow the product to puddle but do ensure that all areas are fully wetted for 20 to 30 mins. After this time allow the surface to dry. **Old Concrete**: Moisten the surface with undiluted product by low-pressure sprayer or microfibre pad / roller. The surface must be kept moist for 20 – 30 minutes but not allowed to puddle. If puddles do form in uneven areas of the floor then use the microfibre applicator to even out this excess. Pay particular attention to steel trowelled surfaces. After the initial 20 to 30 minutes allow the surface to dry.

Unit sizes	20kg – 1000kg IBC
Coverage	9.5 – 11.5 m^2/kg or 10-12m^2 /lt depending on substrate
Drying times	Typically 1-2 hours, dependant on the temperature & relative humidity

Care & maintenance

Good housekeeping is essential and will maintain the service life of the floor. Cleaning should be carried out in accordance with the O&M Manual.

Storage & shelf life

12 months when stored off the ground in un-opened packs in a dry store, under cover between 10 °C and 30 °C out of direct sunlight. Protect from frost.

Limitations

Do not proceed with application if the surface temperature is <3 ºC above the dew point.

Legal notes

The information contained in this document, and all further technical advice given is based on our present knowledge and experience. However, it implies no liability or legal responsibility on our part. In particular, no warranty or guarantee of product performance in the legal sense is intended or implied as the conditions of use and the competence of any labour involved in the application are beyond our control. Properties listed are for guidance purposes only. We reserve the right to make any changes according to technological progress or further developments.

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