



# Dreitop® FH-Green

**Non-metallic, Pigmented, dry-shake concrete surface hardener for high Abrasion- resistant floor topping.**

## Product Properties

- Non-Metallic, Pigmented, Dry Shake, Non-Rusting concrete Floor Hardener with high abrasion resistance properties
- Durable and maintenance free provides high wear resistance to concrete Surface
- Withstands almost all type of mechanical stresses such as rolling, sliding, percussion impact, abrasion etc
- Deicer resistant and resistant to petrol, mineral oil etc
- Provides Non-Skid surface

## Areas of Application

- Suitable for application in automobile plants, aircraft hangars, foundries, dairies, tanneries, breweries, chemical plants, electrical plants, power plants, food industries, pharmaceutical plants, printing presses, public buildings, metallurgical industry, military and ammunition factory, slaughter houses, steel mills, etc
- Also suitable for toppings & floorings of storage warehouses, loading and unloading bays, civil engineering and hydraulic structures, passage-ways, exhibition halls, stadiums, railway platforms, utility buildings, bunkers and courtyards, traffic use, workshops, shop floors, shipyards, car-ramps, or for any indoor or outdoor floor installations etc

## Application Notes

### General

**Dreitop® FH-Green** is a ready to use, Pigmented, non-metallic, floor and surface hardener based on very hard natural aggregates with suitable Pigmented binders. This is to be applied by dry shake method in 2 operations, on freshly floated concrete or a compensatory mortar topping. **Dreitop® FH-Green** provides wear resistance to concrete surfaces thereby extending the service life of industrial, commercial and residential floors. The floors are rendered tough, wear resistant, dust free, physiologically harmless and above all durable and maintenance free.

**Dreitop® FH-Green** is a unique combination of selected cementitious binder modified by polymers (to impart the mix plasticity and high strength) blended with well-graded, cubical, carborundum based hard aggregates. The grading is most critical and ensures maximum possible surface density. When applied **Dreitop® FH-Green** provides a denser surface with lower permeability coupled with increased wear and impact resistance. It bonds monolithically to the base concrete and is suitable for old or new floorings and surfaces.

The greatest advantage of **Dreitop® FH-Green** over conventional metallic hardeners is the non-rusting property, which enables its use in wet rooms as well as for outdoor applications. **Dreitop® FH-Green** floors are able to withstand almost all types of mechanical stresses such as rolling, sliding, percussion, impact, abrasion etc. and are very economical when compared to alternatives like epoxies and other liquid plastics

### Instruction to Use

**Dreitop® FH-Green** is suitable for application on old floors and new floors. The application varies in both the cases and is shown in Further Instructions/precautions below.

- Existing concrete floors** by using a compensating screed layer between old floor and **Dreitop® FH-Green**.
- Newly cast floor** monolithic construction with **Dreitop® FH-Green** incorporated into Concrete Surface

In the first case, i.e. existing concrete floors, the base concrete should be sound, clean and free from oils and other contaminations to ascertain the proper bonding of the compensating layer, before beginning of the new work. The compensatory screed layer needs to be bonded to the existing surface and can be done using a ready to use polymer mortar. The Screed layer should be 25-30mm thick minimum and should have aggregates 100mm down, with Maximum cement content 400kg/m<sup>3</sup>. This should be well compacted and **Dreitop® FH-Green** can be broadcast after initial set. New concrete floors should be cast in accordance with best concrete practices. The bleed water should evaporate and after initial set **Dreitop® FH-Green** can be Broadcasted.

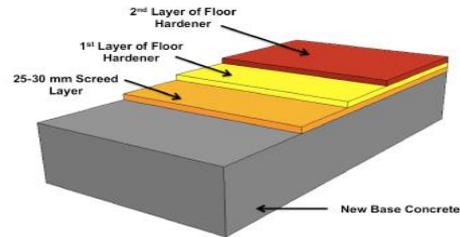
**Dreitop® FH-Green** is a dry shake finish and should be applied in two operations. A fixed area should be marked on the floor and proper quantities of **Dreitop® FH-Green** should be selected as per consumption requirements. The concrete or the compensating screed base should be free from residual bleed water and sufficiently hardened to allow light foot traffic. Half or one-third of the total quantity of **Dreitop® FH-Green** should be evenly dry broadcasted by hand or scoops. Once the material becomes evenly dark by absorption of surface water, it can be floated using wooden or steel trowels, but the surface should not be over-worked. Immediately thereafter the balance quantity of **Dreitop® FH-Green** should be evenly broadcasted in a similar fashion but at right angles to the first application and should be similarly floated. Final finishing can be carried out by normal methods. For best results, vacuum dewatering and power floats should be used. Proper curing should be ensured. Light foot traffic can be allowed after 24 hours and heavy stresses should be allowed after minimum one-weeks' time. Since the performance of **Dreitop® FH-Green** depends upon the application, following precautions as given in section below should be Taken.

## Further Instructions / Precautions

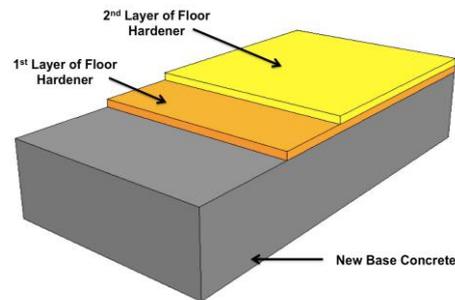
### Precautions

- **Dreitop® FH-Green** application should begin at the time when the base concrete has reached initial set and has stiffened enough to enable light foot traffic and leaves an impression of about 2-3 mm.
- The bleed and surface water should have been evaporated. Too early application will sink the aggregates and give rise to dusting and too late application will not hydrate the binder of **Dreitop® FH-Green** thereby lowering the strengths.
- Curing is absolutely essential and can either be carried out by conventional methods or by using membrane forming curing compounds like **Emcoril**.
- Treat areas adjacent to walls, columns and bay edges first. Broadcasting of **Dreitop® FH-Green** should be in perpendicular directions in two operations.
- Since the grading of aggregates in **Dreitop® FH-Green** plays important role in the quality of the material as well as the surface, always use in multiples of full packs. If in case consumption of half or a part bag is called for, empty full bag, mix thoroughly and use half contents

### Application on old concrete surface with an intermediate Screed Layer



### Application on a new concrete base



## Technical Data for Dreitop® FH-Green

Characteristic	Unit	Value	Comments
Hardness of aggregate used		8 – 9	Moh's Scale Indicator
Abrasion Resistance	mm	Less than 2	As per IS 1237-2012
Consumption (Heavy Traffic)	Kg/m <sup>2</sup>	7	For traffic with hard wheels, abrasion, impact, rolling, grinding, sliding of heavy granular goods, heavy foot traffic etc
Consumption (Medium Traffic)	Kg/m <sup>2</sup>	5	For traffic with medium duty wheels, grinding and sliding of light to medium weight granular goods, heavy pedestrian traffic, light automobiles etc
Consumption (Light Traffic)	Kg/m <sup>2</sup>	3	For traffic with light duty wheels, soft wheels, sliding and rolling of light goods, primarily grinding action, unusual wear and tear, light automobile traffic, heavy pedestrian traffic etc
Curing	Days	>7	As per standard Curing Practice by using water or suitable curing compound.

## Product Characteristics for Dreitop® FH-Green

Type of Product	Non-Metallic Dry-Shake Floor Hardener
Form	Green Powder
Shelf Life	6 Months from date of Manufacture if stored in Unopened Packaging. Protect from Rain, Direct Sunlight, Heat and Frost
Delivery	30 kg sacks
Disposal	Empty packs completely and dispose off carefully to protect our Environment

### Safety Advice

Please Take notice of the safety information and advice given on the packaging labels, safety information sheets and General Application Advice.

**Note:** - The information on this Data Sheet is based on our experiences and correct to the best of our knowledge. It is However, not binding. It has to be adjusted to the individual structure, application purpose and especially to local conditions. Our Data refers to the accepted engineering rules, which have to be observed during application. This provided we are liable for the correctness of this data within the scope of our terms and conditions of sale-delivery-and-service. Recommendations of our employees which differ from the data contained in our information sheets are binding if given in written form. The accepted engineering rules must be observed at all times.

**Edition:** - MC/IND/R0/AUG2020, Some Technical Changes have been made to this print medium. Older editions are invalid and may not be used anymore. If a technically revised new edition is issued, this edition becomes invalid.