



Dreitop FH Standard

Non-metallic, dry-shake concrete surface hardener for high Abrasion-resistant floor topping in heavy-stress areas

Product Properties

- Ready to use, easy to clean
- Non-metallic and non-rusting, waterproof (for wet rooms and exteriors)
- Durable and maintenance free provides high wear resistance to concrete surfaces
- Withstands almost all type of mechanical stresses such as rolling, sliding, percussion impact, abrasion etc.
- Deicer resistant, easy to clean and resistant to petrol, mineral oil etc.
- Non-skid

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.
- All areas subjected to heavy wear and tear, rolling and impact.

Application Notes

Dreitop FH Standard is a ready to use, non-metallic, floor and surface hardener based on very hard natural aggregates. This is to be applied by dry shake method in 2 operations, on freshly floated concrete or a compensatory mortar topping. The application of **Dreitop FH Standard** 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 Standard is a unique combination of selected cementitious binder modified by polymers (to impart the mix plasticity and high strength) blended with well-graded, cubical, natural hard aggregates. The grading is most critical and ensures maximum possible surface density. When applied **Dreitop FH Standard** 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 advantages of **Dreitop FH Standard** over conventional metallic hardeners are the non-rusting property, which enables its use in wet rooms as well as for outdoor applications. **Dreitop FH Standard** 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.

Advantages

- Highly wear and abrasion resistant toppings which are non-dusting, non slip and antiskid even in cases of oil spillages
- Suitable for interior and exterior applications, is waterproof and is physiologically harmless
- High density and requires minimum maintenance and is suitable for old floors, new floors and repairs
- Imparts increased strength, impact resistance and twice the abrasion resistance compared to normal concrete floor

Instructions for use

Dreitop FH Standard is suitable for application on both 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 Standard.
- Newly cast floor** monolithic construction with Dreitop FH Standard 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 like **Zentrifix AS+Nafufill BB2** or a cement-sand mortar (1:2) mixed with **Nafufill** admixed Water (1:3) slurry. The screed layer itself should be 25-30mm thick and should have aggregates (50% of 0-4mm and 50% of 4-8mm), cement (400kg/m³) and w/c of 0.45 to 0.5. This should be well compacted and **Dreitop FH Standard** can be broadcast after initial set. New concrete floors should be cast in accordance with best concrete practices. The cement content should be at least 300kg/cum and concrete should have a 28-day strength of minimum 30 N/mm². The bleed water should evaporate and after initial set **Dreitop FH Standard** can be broadcast.

Dreitop FH Standard 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 Standard** 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 Standard** 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 Standard** 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. Foot traffic can be allowed after 18 hours and heavy stresses should be allowed after minimum one-week's time. Since the performance of **Dreitop FH Standard** depends upon the application, following precautions as given in section below should be taken:

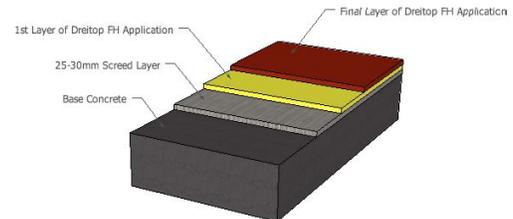


Precautions

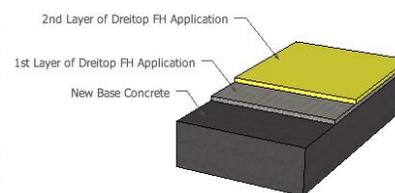
- ❑ **Dreitop FH Standard** application should begin at the time when the base concrete has reached initial set and has stiffened enough to enable light foot traffic and leaves an impression of about 2-3 mm.
- ❑ The bleed and surface water should have been evaporated. Too early application will sink the aggregates and give rise to dusting and too late application will not hydrate the binder of **Dreitop FH Standard** 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 Standard** should be in perpendicular directions in two operations.
- ❑ Since the grading of aggregates in **Dreitop FH Standard** plays an important role in the quality of the material as well as the surface, always use in multiples of full packs. In case of consumption of half or a part bag is called for, empty full bags must be mixed thoroughly and use half contents.
- ❑ Since the grading of aggregates in **Dreitop FH Standard** plays an important role in the quality of material as well as the finish of the surface, always use in multiples of full packs. In case of consumption of part bag is called for, empty the complete bag must be mixed thoroughly and use part of the mixed content.

Diagrams Showing Application of Dreitop FH Standard

1. Application on existing concrete surface with an intermediate screed layer



2. Application on a new concrete base as monolithic construction



Technical Data for Dreitop FH Standard

| Characteristic | Unit | Value | Comments |
|------------------------------|-------------------|-----------|--|
| Consumption (Heavy Traffic) | Kg/m ² | 6 - 9 | For traffic with hard wheels, abrasion, impact, rolling, grinding, sliding of heavy granular goods, heavy foot traffic etc. |
| Consumption (Medium Traffic) | Kg/m ² | 4 - 6 | 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 ² | 2.5 – 3.5 | 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. |

Product Characteristics for Dreitop FH Standard

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|--------------------|--|
| Type of Product | Dry-Shake Floor Hardener |
| Form | Powder |
| Colour | Grey, For colored floors, pigments can be added at site |
| Storage | Like cement, it should be stored in original unopened packing in a dry place away from moisture. Do not stack more than 5 bags on each other, as it is likely to harden under continuous load. |
| Packaging/Delivery | 30 kg Sacks |
| Shelf Life | 6 Months from Packaging Date |
| Disposal | Empty packs completely and dispose off safely to protect our environment |

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 may differ from the data contained in our information sheets, are only binding if given in written form. The accepted engineering rules must be observed at all times. E. & O.E.

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Edition: September 2011