



An ISO 9001: 2008 Certified Company.



Durafloor - HT

Non metallic, monolithic surface hardening compound

Technical Data Sheet

Uses

Durafloor HT provide a highly abrasion resistant surface to concrete floors by the dry shake on method which ensures that the hardwearing surface bonds monolithically to the base concrete. They are ideally suited for all industrial areas subject to the heaviest traffic, e.g. loading bays, trucking lanes, car parks, workshops, machine shops, ramps and spillways.

Advantages

- ☐ Non metallic - does not rust or stain.
- ☐ Provides a hard, abrasion resistant surface
- ☐ Forms monolithic bond with base concrete
- ☐ Easy and economical to apply

Description

Durafloor HT are quality controlled, factory blended powder which are ready to use on site. They contain special hardwearing aggregates which have been selected for abrasion and wear resistant properties as well as shape and size. These latter considerations, together with the use of high performance workability admixtures, produces a material which is easy to trowel into the surface of fresh, wet concrete. Durafloor HT cures monolithically to provide a dense, non-porous surface which is extremely hardwearing and abrasion resistant. Monolithic cure ensures that problems normally associated with thin 'granolithic' screeds, viz., shrinkage, cracking, etc., are completely overcome. Being non-metallic, Durafloor HT provide a non-slip surface which will never rust and disintegrate.

Test results showed that Durafloor HT improves the abrasion resistance of concrete by 200%

Specification clause

Non metallic surface floor hardener

All concrete floors shall be surfaced or broadcast with Durafloor HT, a non-metallic monolithic surface floor hardening compounds containing rust free, hardwearing aggregates. The aggregates shall have a Moh's hardness of not less than 9 for Durafloor HT

Application Intended Avg. Wear rate (kg/m²) traffic use (IS:1237-1980)

7.0 Heavy <2mm

5.0 Medium >2 <3.5mm

3.0 Light >3.5 <4mm

It is recommended that the floor be marked off into bays of known area. Sufficient material should then be laid out to meet the required spread rates. begin when the base concrete has stiffened

to the point when light foot traffic leaves an imprint of about 3mm. Any bleed water should by now have evaporated. Durafloor HT Standard are applied in two stages. (a) The first application is made using 50% to 70% of the total material. Durafloor HT Standard is evenly broadcast onto the concrete surface. When the material becomes uniformly dark by the absorption of moisture from the concrete this first application can be floated. Wooden floats or, on large areas, the power trowel with disc may be used. It is important, however, that the surface is not over worked. (b) Immediately after floating, the remaining Durafloor HT is sprinkled evenly over the surface. Again moisture is absorbed and the surface can be floated in the same way as before. Final finishing of the floor using a power trowel can be carried out when the floor has stiffened sufficiently so that damage will not be caused.

Timing of Application

The timing of application Durafloor HT is important and critical. If applied too early, bleed or excess water will wash away the cementitious content of the products, thereby making them ineffective. Also denser aggregates sink into the concrete. If the application of Durafloor HT is done too late, there will not be sufficient water/moisture to absorb the material into the concrete. Material forcibly applied and trowelled thus, will cause cracks on the surface later, as there is no water/moisture to hydrate the product.

Bay edges

While applying Durafloor HT at the edges of the concrete floor or, at the end of bays, extra precaution should be taken by way of sprinkling more material and finishing it smoothly with a steel trowel. This is an additional protection particularly to bay edges where the reaction due to heavy or impact is felt more.

Curing

Tests have shown that proper curing of concrete floors treated with products such as Durafloor HT is essential to ensure the physical properties of the floor.



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Ready to use

Durafloor HT is supplied ready to use on site. Cement or aggregates should never be added to Durafloor HT

Coloured floors

When a coloured floor is required, it is strongly recommended that a job site trial area is laid.

Surface treatments

Penetration type surface treatments are recommended to give low porosity and dust proof property.

Limitations

- ☐ For concretes with optimised water cement ratios, Durafloor HT shall not be broadcast in excess of 3 - 4 kg /m². For such applications,
- ☐ Durafloor HT are not advised for broadcast over concrete in subzero temperatures, such as, floorings for cold storages etc.

Storage

Durafloor HT concentrate should be stored in protected, dry areas. When left in original unopened Package, Durafloor HT products will maintain their design performance characteristics for **1 year**.

Packaging and coverage

Durafloor HT is available in 25 kg bags .

Precautions

Durafloor HT products contain chemicals that may cause irritation to the eyes and skin. Goggles, rubber gloves and long sleeves should be worn when working with these products.

TECHNICAL SERVICE

Condura has established itself in various fields on the basis of its dependable technical service. We maintain a well-equipped laboratory for research and quality assurance of all our Products. Our experienced personnel are always on call and readily available for product demonstrations and product performance monitoring.