

Technical Data Sheet

Ref.: Z-Be-HD-14- 010520-02

<p>In Compliance With ASTM & IS norms</p>	<p>Zeorich Base HD is a eco-friendly, high strength, shrinkage less, non-metallic, mineral base concrete floor hardener in powder form used for industrial & commercial floors to create heavy duty floor surface which is resistance to high abrasion, impact, hardness and also improve the compressive strength of final surface. Floors made with Zeorich Base HD are monolithic in nature once they are fully cured.</p>
<p>Main application Floor hardener for fresh concrete, Trimix / VDF concrete & Zeorich Base screed</p>	

Technical advantage of Zeorich Base HD over traditional concrete floor

- A ready to use surface floor hardener in powder form which makes ease of application and completely replaces the use of any other material on fresh concrete to improve the desire surface strength.
- The best compatible system to use along-with Walnut Zeorich Base (floor binder) as overlay heavy duty screed floor.
- Only dry shake of powder in thickness of 2 to 6 mm. (in two coats) makes floor enough hard to be ready for heavy uses.
- Very economical in comparison with other method to improve the surface hardens and abrasion.
- Best in class abrasion resistance certified by external lab. Loss of thickness just < 1.5 mm after abrasion.
- Improves the load bearing capacity significantly of base concrete floor.
- Very heavy duty and provide compressive strength of > 40 Mpa on top surface of concrete.
- Flexural strength of > 6.5 Mpa.
- Homogeneous, smooth and dust proof top surface of concrete.
- Being non-metallic, no rusting on top surface of concrete over the period.
- Low water absorption and porosity compare to traditional concrete surface.
- Maintenance and cleaning of floor become easy in long run.
- Option of having Zeorich Base HD in colour to avoid other colour application on final floor surface.
- Low VOC and suitable for green building.

Suitable areas

- Internal & external fresh concrete floor.
- Internal & external fresh floor made with fresh cement screed, PCC, or any other fresh cement floor casting.
- Floor made with fresh Tremix flooring.
- Floor made with using Walnut Zeorich Base fresh screed.
- Industrial floors, factories.
- Parking lots in commercial, industrial & residential areas.
- Industrial Warehouses, yards, loading bays & workshops.
- Public infrastructure floors such as railways platform, airports, stadium etc.
- Heavy industrial floor such as steel factories, power station etc.
- Other areas of heavy use such as restaurants & museum etc.

Suitable Surface

- Fresh concrete floors.
- Fresh screed made with Zeorich Base or other.
- Fresh IPS, PCC floors.
- Fresh Tremix flooring.
- Other fresh cementitious flooring.

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Product not to be used

- Fresh concrete casting which are deformable or not sound.
- Concrete floors which are having extreme movement.
- Fresh concrete with very low cement ratio.
- On any other cement or non-cement-based floor which are fully dry and already cured.

How to Use



Important tools for application:

- Dry-shake equipment for powder to provide uniform spread across floor.
- Cleaning & other tools such as brush, broom, bucket etc.
- Finishing tools such as trowel, levelling bar, power floater etc.

Cleaning of tools:

- While still the material is fresh, all the tools can be cleaned with normal water. Once material is hardened, the material can be removed only by mechanical means.

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Surface Preparation:

- The fresh concrete cement ratio must be controlled to have best final results of Zeorich Base HD.
- Ensure that fresh concrete is settled and properly levelled.
- The surface of fresh concrete should not have bleeding effect or uneven concrete mass.
- Expansion joint in base concrete must come through out on top surface in order to avoid any kind of expansion crack on top surface.

How to apply:

- Before applying the first coat of Zeorich Base HD, fresh concrete, screed or tremix concrete must be settled, levelled and initial phase of setting (30-45 minute) in normal temperature is lapsed. During winter the initial setting phase can be longer.
- Once concrete surface is ready to have foot impression not more than 2-3 mm. deep, apply the 1st first coat of Zeorich Base HD. Ideally during the 1st coat 50 to 60 percent of product can be applied uniformly and evenly all across floor surface. Once 1st coat application is done, the floor must be troweled to ensure that surface absorb the powder properly. In case power floater is used after 1st coat, it must be light weight and limited to ensure absorption of powder into surface uniformly and base concrete don't get disturbed.
- Once 1st coat is absorbed properly, apply without delay, the second coat of Zeorich Base HD to complete the application.
- Once 2nd coat application is done and troweled as above, the floor must be left to carry out final operation of power floating and to achieve final smooth surface finish.

Curing:

- The curing of fresh concrete, screed, tremix flooring or other cement flooring must be in accordance with requirement and as per the specification of product or standard.

Product & Working Data

- Product appearance : Grey colour powder. Other colour available on request.
- Packing : 20 Kg. moisture proof bag
- Shelf life : 12 months from the date of manufacturing.
- Minimum thickness : 2 mm.
- 1st coat application : Once base concrete is suitable to walk over.
- Interval between 1st & 2nd coat : Immediately after 1st coat is levelled and absorb by base surface.
- Final finish of floor : Manually by troweled or best by suitable power floater.
- Light uses of finished floor : after 24 hours.
- Regular Use of finished floor : Once full strength is achieved of base surface as per standard.
- Full strength of Zeorich Base HD : At 28 days at +23 ° C.
- Application temperature : at + 5° C.
- Coverage : For light duty floors : approx. 2 to 3 kg. / M2
 For medium duty floors : approx. 4 to 5 kg. / M2
 For heavy duty floors : approx. 6 to 7 kg / M2

Technical Performances

In compliance with ASTM and IS norms

Final compressive strength @ 28 th day	> 40 Mpa	ASTM C 109
Flexural strength	> 6.5 N / mm ²	ASTM C 580
Abrasion resistance	< 1.5 mm. loss of surface	IS 1237(Annex G)
Water absorption	< 10 %	IS 1237

(Results are as per ASTM & IS norms testing.)

Walnut exclusive technology



Important instructions

- Apply the Zeorich base HD in two layers for the best results.
- Do not add extra water on top surface while applying Zeorich Base HD. It may reduce the surface strength.
- To have the best results, water ratio of concrete must be maintained. Excessive water ratio may weaken the final results.
- In case using colour Zeorich Base HD, it is possible to have colour variation based on different absorption by surface area and final protection of floor and curing.

Walnut Green Building Index

Walnut range of products are most eco-friendly and most suitable to use in green buildings and in all other buildings. Apart from using best of international raw material for best performance, Walnut procure the major raw material locally to safeguard environment.



- Recycled raw material used.
- VOC (Very low Organic Compounds).
- 100% suitable to recycle after expiry.
- Suitable for all kind of green and normal buildings.

Walnut Quality & Safety Assurance

Products supplied are safe to use by any worker at site. However proper tools and safety measures must be in place for prolong working. The gloves, safety glasses and other protection measure must be followed as per local regulation.



Declaration

All the above information and results are provided based on Walnut internal quality test. Customer must check before using the product about performance and final expected results. Walnut cannot be held responsible for any damage of whatsoever nature at site.

Technical Help

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