

STRATUM HARDTOP

Dry shake floor hardener for concrete floors

DESCRIPTION

STRATUM HARDTOP is a pre-mixed and bagged blend of cements, special aggregates & additives, which when power floated onto new concrete gives a smooth, dense, hard wearing surface, that substantially increases abrasion resistance over normal concrete. **STRATUM HARDTOP** is non-metallic, free from chlorides and forms a strong monolithic bond with parent concrete.

USAGES

- Enhancing concrete floor surface properties
- Provide an abrasion resistant concrete floor surface
- Fiber suppression of concrete floors
- Dustproofing of concrete slabs
- Enhance durability of concrete floors

STANDARDS

STRATUM HARDTOP complies with;

- ASTM C944/C944 M-12 for abrasion resistance
- Mineralogical society of America- 7 on Moh's scale of hardness

ADVANTAGES

- Easy application
- High abrasion and impact resistance
- Bonds monolithically to fresh concrete
- No dusting-surface
- Non-oxidizing
- Slip-resistant finish can be obtained
- Provides a hard-dense surface resistant to oils and petroleum-based products
- Economic installation

TECHNICAL DATA

STRATUM HARDTOP	Typical values
Appearance	Grey powder
Compressive Strength @28 days (BS EN196)	70 N/mm ²
pH Value	12 – 13
Hardness (Moh's scale) (BS EN 196:2005)	6 – 5
Abrasion Resistance Improvement (ASTM C779/779 M-12)	250%
Bulk Density	1.5 g/cm ³
Harmfulness to ECC 88/379	No
VOC	25 mg/liter

USAGE INSTRUCTIONS

1. Surface preparation

STRATUM HARDTOP can only be applied to fresh concrete or screeds. For hardening or coating existing concrete, please contact Arkaz office.

High performance concrete is essential to ensure durability of the floor in service. **STRATUM HARDTOP** can't make weak concrete stronger and more durable.

STRATUM HARDTOP is not recommended for use with vacuum dewatered or air entertained concrete.

High water-reducing admixtures such as the **ARCrete** range are highly recommended for use in the concrete to give a consistent, good quality, high strength mix with a minimum cement content of 300 kg/m³ and a maximum water : cement ration 0.55.

Prior to concrete delivery, mark the floor into known areas, calculate sufficient **STRATUM HARDTOP** and arrange materials to be placed adjacent to the area that will be concreted.

2. Priming

Priming is not required for **STRATUM HARDTOP**.

STRATUM HARDTOP	Coverage
Light traffic	3kg/m ²
Medium traffic	5kg/m ²
Heavy traffic	7kg/m ²

3. Application

Once poured and levelled concrete has achieved its plastic state, and bleed water has evaporated, application of **STRATUM HARDTOP** should take place in 2 phases.

First, evenly scatter **STRATUM HARDTOP** onto the concrete surface at a rate of 2-4 kg per m², allowing the residual moisture in the concrete to be absorbed by the floor hardener, hydrating and darkening it in color, once it has become uniformly dark from the absorption of water, it can be floated onto the concrete typically using power floats to ensure good compaction and monolithic surface.

However, it should not be overworked as the final application still has to be applied. Hand trowels can be used to smoothen areas that are inaccessible from the power floats.

Immediately after floating, repeat the application of **STRATUM HARDTOP** at a rate of 1-4 kg per m² dependent on the specification or level of expected traffic, and wait for the hardener to become dark from absorbing moisture.

Again, using power floats to ensure good compaction and monolithic surface with the first application, float the material into the concrete and continue until a dense polished final surface is achieved.

PACKAGING

STRATUM HARDTOP is supplied in 25 kg bag.

HEALTH & SAFETY

Is non-toxic and non-hazardous, if material comes in contact with skin, cleaning with water and soap is recommended.

STORAGE & SHELF LIFE

STRATUM HARDTOP shall be stored in normal conditions away from extreme temperatures, and any source of moisture. Shelf life is 12-months.

TECHNICAL SERVICE

The technical service department of Arkaz is available to assist in the correct and best use of our products, these resources and advice are at your disposal entirely without obligation.

Please contact:
concretedoctor@arkaz.com

LEGAL DISCLAIMER

The information given is based on data and knowledge considered to be true and accurate and is offered for the user's consideration, investigation and verification. Since the conditions of use are beyond our control, we do not warrant the results to be obtained. Please read all statements, recommendations or suggestions in conjunction with our conditions of sale including those limiting warranties and remedies which apply to all goods supplied by us. No statement, recommendation or suggestion is intended for any use which would violate or infringe statutory obligations or any rights belonging to a third party.

These products may be covered by patents or patents pending.



Copyright 2021
Printed in K.S.A. Version 2.0
13-March-2020